

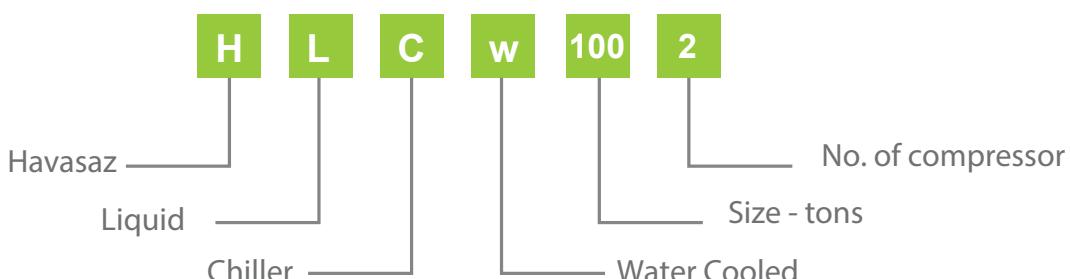


## WATER COOLED CHILLER



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## FEATURES

HAVASAZ HLCW are a series of highly efficient water cooled chillers, fitted with recip. compressors and shell and tube heat exchanger(s).

They can provide chilled water for applications that use central station air handling or terminal units, glycol chilling for ice making and thermal storage applications, and non-reversing heat pump duty. They are designed for inside installation within a plant room. The series comprises a range of sizes from 15 kW to 890 kW and two levels of operating efficiency.

HLCW has a single point electrical power connection onto a disconnect switch for ease of both installation and isolation for servicing.

HLCW water connections are fully accessible and simplified with the use of Victaulic connections for both the evaporator and the condenser.

## Low Operating Costs

HLCW is the first R 22 water-cooled chiller using Recip. Compressors. By combining the latest available technology in recip. compression with HAVASAZ state-of-the-art heatexchanger design,. Additionally, the incorporation of multiple recip. compressors results in high part load efficiencies. Having its compressors always running at full load.

## Minimum Installation Costs

HLCW is also designed to reduce the installation costs to a minimum. With its compact design, HLCW delivers up to 173 kW/m<sup>2</sup> making the most of your available space. Equally important, HLCW can fit through a standard single door with no disassembly required, making it the ideal chiller for both new and retrofit installations.

## Low Sound Operation

HLCW is equipped with ultra quiet scroll compressors, which can be fitted with optional compressor acoustic blankets to further reduce sound levels. Special attention has been paid to HLCW piping design to get the maximum performance with the minimum of vibration.

## Reliability

Every HLCW chiller is fully factory tested before being shipped in order to ensure trouble free installed operation.

HLCW dual refrigerant circuits and multiple scroll compressors provide system standby security.

When reaching a safety threshold, the HLCW controller special load limiting feature will unload the chiller but maintain continuous chilled water production until the situation is back to normal.

## Communication

HLCW has a microprocessor controller with a 40-character display available in 5 languages for easy operation and maintenance.

HLCW has a standard built-in connectivity with BACnet and Modbus for immediate integration into Building Management System.

## Environmental Friendly

HLCW uses refrigerant R 22 with zero Ozone

Depletion Potential and no phase-out date.

Every HLCW chiller is fully pressure and leak tested in the factory in order to reduce the risk of leakage on site.

Above all, HLCW is highly efficient, saves energy and contributes to reduce global warming.

## One Chiller, Many Applications

HLCW has been designed to operate in a very wide range of conditions. It can produce chilled water from +15 °C down to -12 °C while working with condenser water temperatures ranging from +18 °C to +45 °C (HLCW only), process cooling, heat recovery, HLCW is built-in with versatility.

## SPECIFICATION

HAVASZA HLCW , R 22 chillers are designed for water or water-glycol cooling.

They are designed for indoor installation in a plant room. The HLCW unit is completely factory assembled with all interconnecting refrigerant piping and wiring ready for field installation. The unit is pressure tested, evacuated, and fully factory charged with refrigerant R 22 and oil in each of the independent refrigerant circuits. After assembly, an operational test is performed with water flowing through the evaporator and condenser to ensure that each refrigerant circuit operates correctly. galvanized steel coated with baked-on 'Caribbean Blue' powder paint. HLCW chillers are designed and built within an EN ISO 9001 accredited organization and in conformity with the following European Directives:

## Fluorinated Greenhouse Gases

- This equipment contains fluorinated greenhouse gases covered by the Kyoto Protocol.
- The global warming potential of the refrigerant (R 22) used in this unit is 1720.
- The refrigerant quantity is stated in the Physical Data table of this document.
- The fluorinated greenhouse gases in this equipment may not be vented to the atmosphere.
- This equipment should only be serviced by qualified technicians.

## Compressors

The unit has suction-cooled, recip.compressors. High efficiency is achieved through a controlled orbit and the use of advanced recip geometry.

The compressors incorporate a compliant recip. design in both the axial and radial directions.

The compressor motors have integral protection against overloads.

The overload protection will automatically reset. Starting is direct on line, but soft start is availableas an option.

The compressors are switched On and Off by the unit microprocessor to provide capacity control. Each compressor is fitted with a crankcase strap heater. All compressors are mounted on isolator pads to reduce transmission of vibration to the rest of the unit.

## Refrigerant Circuits

Two independent refrigerant circuits are provided on each unit. Each circuit uses copper refrigerant pipe formed on computer controlled bending machines to reduce the number of brazed joints resulting in a reliable and leak resistant system. Liquid line components include: a service valve with charging port, a high absorption removable core filter drier, a solenoid valve, a sight glass with moisture indicator and a thermal or electronic expansion valve.

Liquid lines between the expansion valve and the cooler are covered with flexible, closed-cell insulation. Suction line components include: a pressure relief valve, a pressure transducer and a service valve. Optional isolation ball valves are available.

Suction lines are covered with flexible, closed-cell insulation. Discharge lines include service and isolation (ball) valves, one or two high pressure cutout switches depending on the model, a pressure transducer and a pressure relief valve (HLCW units only).

## Evaporator

The 2-pass dual circuit shell and tube type direct expansion (DX) evaporator has refrigerant in the tubes and chilled liquid flowing through the baffled shell.

The waterside (shell) design working pressure of the cooler is 10.3 barg.

The refrigerant side (tubes) design working pressure is 27.58 barg. The refrigerant side is protected by pressure relief valve(s).

The evaporator shall have water pass baffles fabricated from galvanized steel to resist corrosion. Removable heads are provided for access to internally enhanced, Seamless, Copper tubes. Water vent and drain connections are included. The cooler is insulated with flexible closed-cell foam.

Water connection to the evaporator is via Victaulic grooved connections.

Flange connections are available as an option.

## Condenser (HLCW units only)

The twin-refrigerant circuit water-cooled condenser is cleanable shell and tubes type with seamless externally finned copper tubes rolled into tubes sheets, removable water heads and built-in subcooler. The Waterside (tubes) design working pressure is 10 barg. The refrigerant side (shell) design working pressure is 38.61 bar g. The refrigerant side is protected by pressure relief valve(s). Water connection to the condenser is via Victaulic grooved connections. Flange connections are available as an option.

## Power and Control Panels

All power and controls are contained in a IP54 cabinet with hinged, latched and gasket sealed outer doors.

### The power panel includes:

- A factory mounted non-fused disconnect switch with external, lockable handle to enable connection of the unit power supply. The disconnect switch can be used to isolate the power for servicing.
- Factory mounted compressor contactors and manual motor starters to provide overload and short circuit protection.
- Factory mounted control transformer to convert the unit supply voltage to 220 V - 1 Ø - 50 Hz for the control system.
- Control supply fuses and connections for a remote emergency stop device.

### The control panel includes:

- A Liquid Crystal Display (two display lines of twenty characters per line) with Light Emitting Diode back lighting for easy viewing.
- A Color coded 12-button keypad.
- Customer terminal block for control inputs

and liquid flow switch.

### The microprocessor control includes:

- Automatic control of compressor start/stop, anticoincidence and anti-recycle timers, automatic pump down on shutdown, evaporator pump and unit alarm contacts. Automatic reset to normal chiller operation after power failure.
- Remote water temperature reset via a pulse width modulated (PWM) input signal or up to two steps of demand (load) limiting
- Software is loaded into the microprocessor controller via a SD card, with programmed set points retained in a lithium battery backed real time clock (RTC) memory..

### Programmable set-points:

- Chilled liquid temperature set-point and range
- Remote reset temperature range
- Set daily schedule/holiday for start/stop
- Manual override for servicing
- Low liquid temperature cutout

- Low suction pressure cutout
- High discharge pressure cutout
- Anti-recycle timer (compressor start cycle time)
- Anti-coincident timer (delay compressor starts)
- Return and leaving liquid temperature
- Low leaving liquid temperature cutout setting
- Metric or Imperial data
- Discharge and suction pressure cutout settings
- System discharge and suction pressures
- Anti-recycle timer status for each compressor
- Anti-coincident system start timer condition
- Compressor run status
- No cooling load condition
- Day, date and time
- Daily start/stop times
- Holiday status
- Automatic or manual system lead/lag control
- Lead system definition
- Compressor starts & operating hours (each compressor)
- Run permissive status
- Number of compressors running
- Liquid solenoid valve status
- Load & unload timer status
- Water pump status

## System Safeties:

Cause individual compressors to perform auto shut down and require manual reset in the event of 3 trips in a 90-minute time period:

- High discharge pressure
- Low suction pressure
- High pressure switches
- Motor protector
- Unit Safeties:
  - Are automatic reset and cause compressor to shut down
  - Low leaving chilled liquid temperature
  - Under voltage
  - Loss of liquid flow (through flow switch)

## Alarm Contacts:

- Low leaving chilled liquid temperature
- Low voltage
- Low battery
- High discharge pressure (per system)
- Low suction pressure (per system)

## ACCESSORIES AND OPTIONS

Soft Starters Factory mounted soft starters reduce the inrush current to the last compressor on each refrigerant circuit. They are preset so that no field adjustment is required.

## Power Factor Correction

Factory mounted passive (static) power factor correction capacitors to correct unit compressor power factors to a target of 0.9 (depending on operating conditions).

## Dual Pressure Relief Valves

Two pressure relief valves mounted on a 3-way valve in parallel of which one is operational and the other one assist during maintenance.

## Suction Service Valves

A ball valve is added to each suction line pipework for isolation.

## Victaulic Flange Kit

Victaulic PN10 Flange joint kit supplied loose for field installation. Includes flange and companion flange and all necessary nuts, bolts and gaskets.

## Flow switch

Vapor Proof, paddle-type, 10.3 bar DWP, -29°C to 121°C with 1" NPT connection for upright mounting in horizontal pipe. This flow switch or its equivalent must be supplied with each unit to protect vessels from loss of liquid flow (Field Mounted)

## Differential Pressure Switch

Alternative to the paddle type flow switch. 0-3 bar range with 1/4" NPTE pressure connections (field mounted). Neoprene Pad Isolators Recommended for normal installations (field mounted).

## 25 mm Spring Isolators

Level adjustable, spring and cage type isolators for mounting under the unit base rails (field mounted).

## Electronic Expansion Valve

Factory fitted Electronic Expansion Valve to provide a flexible and reliable range of operation from brine to comfort cooling conditions. Mandatory option for application below -1°C chilled water temperature

## HLCW

Low-pressure liquid refrigerant enters the cooler tubes and is evaporated and superheated by the heat energy absorbed from the chilled liquid passing through the cooler shell. Low-pressure vapor enters the compressors where pressure and superheat are increased. High pressure superheated refrigerant enters the condenser shell where heat is rejected to the condenser water passing through the tubes. The fully condensed and sub-cooled liquid leaves the condenser and enters the expansion valve, where pressure reduction and further cooling takes place. The low-pressure liquid refrigerant then returns to the cooler.

## Chilled Liquid System Condenser Cooling Liquid System

## Connection Types & Sizes

For connection sizes relevant to individual models refer to the physical data tables in this manual Refrigerant Relief Valve Piping

The compressor, cooler and condensers are each protected against internal refrigerant over-pressure and fire by refrigerant relief valves. The pressure relief valve is set at the design pressure of the system and has discharge capacity required by the relevant standard. It is recommended that each valve should be piped to the exterior of the building so that when the valve is activated the release of high pressure gas and liquid cannot be a danger or cause injury. The size of any pipework attached to a relief valve must be of sufficient diameter so as not to cause resistance to the operation of the valve. For critical or complex installations refer to EN13136. Unless otherwise specified by local regulations, the internal diameter depends on the length of pipe required and can be estimated with the following formula:

$$D_5 = 1.447 \times L$$

Where:

D = minimum pipe internal diameter (cm)

L = length of pipe (m).

If relief pipework is common to more than one valve its cross sectional area must be at least the total required by each valve. Valve types should not be

mixed on a common pipe. Precautions should be taken to ensure that the exit of relief valves/vent pipe remain clear of obstructions at all times.

## Condenser Cooling Liquid Systems

For primary cooling of units, condensers are usually piped in conjunction with a cooling tower or a dry cooler, although in some cases they can be cooled by well water.

With liquid cooled units it is necessary to control coolant flow and / or temperature into the condenser to maintain refrigerant pressure as constant as possible to ensure satisfactory operation of the expansion valves.

## Direct Pressure Control (by others)

With YCWL units it is possible, if desired, to control the condenser cooling liquid inlet temperature / flow directly from the unit refrigerant pressure. The refrigerant pressure can either be used to control cooling tower / dry cooler effectiveness by controlling fans or dampers on the tower, or to control condenser flow using a three way bypass valve. The aim is to maintain a stable discharge pressure as low as possible, but at least 4.8 bar above suction pressure. This can be done at a fixed value above the highest expected suction pressure, or by also measuring suction pressure and using differential control. In either case condenser cooling liquid flow and temperature limits must also be observed.

If these methods are not available, or a cooling tower is not the source of cooling water, then a three way valve recirculation system can be used with control based on condenser inlet liquid temperature.

In this case the objective is to maintain the inlet cooling liquid temperature as low as possible, although still observing the minimum limit of 18°C.

## Inlet Temperature Control (by others)

For a cooling tower / dry cooler system, the simplest forms of control are to use fan cycling, fan speed control, or air damper control, with the tower having a thermostat in its sump. This will ensure stable condenser cooling liquid temperature sensing at design conditions and should be adjusted to ensure a condenser cooling liquid entering temperature of not lower than 18°C at lower ambient conditions.

# CONDENSERLESS UNIT REFRIGERANT PIPING

## General

When the unit has been located in its final position, the unit piping may be connected. Normal installation precautions should be observed in order to receive maximum operating efficiencies. All piping design and installation is the responsibility of the user. All filter driers, sight glasses, expansion valves and liquid line solenoid valves are factory installed on each refrigerant circuit. Interconnecting refrigerant piping and refrigerant charge are supplied and installed by others.

## Refrigerant Line Sizing

Refrigerant piping systems must be designed to provide practical line sizes without excessive pressure drops, prevent compressor oil from being "trapped" in the refrigerant piping, and ensure proper flow of liquid refrigerant to the thermal expansion valve. Considerations should be given to:

- 1) Discharge line pressure drop due to refrigerant flow.

2) Discharge line refrigerant velocity for oil return.

3) Liquid line pressure drop due to refrigerant flow.

4) Liquid line pressure drop (or gain) due to vertical rise of the liquid line.

To ensure a solid column of liquid refrigerant to the expansion valve, the total liquid line pressure drop should never exceed 275 kPa.

Refrigerant vapor in the liquid line will measurably reduce valve capacity and poor system performance can be expected.

To allow adequate oil return to the compressor, discharge risers should be sized for a minimum of 5.1 m/s while the system is operating at minimum capacity to ensure oil return up the suction riser.

## Chiller Below Condenser

On a system where the chiller is located below the condenser, the discharge line must be sized for both pressure drop and oil return. In some cases a double discharge riser must be installed to ensure reliable oil return at reduced loads.

## Condenser Below Chiller

When the condenser is located below the chiller, the liquid line must be designed for both friction loss and static head loss due the vertical rise.

The value of static head loss of 11.3 kPa/m must be added to the friction loss pressure drop in addition to all pressure drops due to driers, valves, etc.

## Oil traps

All horizontal discharge lines should be pitched at least 2 cm/m in the direction of the refrigerant flow to aid in the return of oil to the chiller. All discharge lines with a vertical rise exceeding 90 cm should have a "P" trap at the bottom and top of the riser. Discharge lines with a vertical rise exceeding 7.5 m should be trapped every 4.5 m.

## Refrigerant Charge

The chiller is charged and shipped with a

dry nitrogen holding charge. The operating charge for the chiller, remote condenser and refrigerant piping must be weighed in after all refrigerant piping is installed, leak checked, and evacuated. Final adjustment of refrigerant charge should be verified by subcooling values (refer to IOM section on Pre-Startup for checking subcooling).

## ELECTRICAL CONNECTION

The following connection recommendations are intended to ensure safe and satisfactory operation of the unit.

Failure to follow these recommendations could cause harm to persons, or damage to the unit, and may invalidate the warranty. No additional controls (relays, etc.) should be mounted in the control panel.

Power and control wiring not connected to the control panel should not be run through the control panel. If these precautions are not followed it could lead to a risk of electrocution.

In addition, electrical noise could cause malfunctions or damage the unit and its controls.

## Power Wiring

These units are suitable for 380 or 400 V, 3 phase, 50 Hz nominal supplies only.

All electrical wiring should be carried out in accordance with local regulations. Route properly sized cables to the cable entries in the top of the power panel. In accordance with EN 60204 it is the responsibility of the user to install over current protection devices between the supply conductors and the power supply terminals on the unit.

To ensure that no eddy currents are set up in the power panel, the cables forming each 3 phase power supply must enter via the same cable entry.

All sources of supply to the unit must be taken via a common point of isolation (not supplied by JCI).

## Single Point Power Supply Wiring

All models require one field provided 400 V, 3Ø, 50 Hz + PE (Protected Earth) supply to the unit with circuit protection.

Connect the 3 phase supply to the non-fused disconnect switch located in the power panel using M10 lugs Connect the earth wire to the main protective earth terminal located in the power panel.

## Remote Emergency Stop Device

If required, a remote emergency stop device may be wired into the unit. This device should be rated at 16 amps, 220 V, AC-15. The device should be wired into terminals L and 5 in the power panel after removing the factory fitted link.

## Alarm Contacts

Each refrigerant system has a voltage-free normally open contact that will close when control power is applied to the panel, if no fault conditions are present. When a fault occurs which locks a system out, or there is a power failure the contact opens. To obtain a system alarm signal, connect the alarm circuit to terminals 29 and 30 for No. 1 system and terminals 31 and 32 for No. 2 system.

## Flow Switch

A chilled liquid flow switch of suitable type must be connected to terminals 13 and 14 to provide adequate protection against loss of liquid flow.

# SELECTION UNIT

**The tables regulated according to below conditions:**

- Assuming 10°F chilled water temp. drop.
- Assuming 10°F water temp. rise.
- The fouling factor considered 0.0001 m<sup>2</sup>k/w in cooler and condenser coils.

**For conditions other than those listed above, use the chilled water correction factors tabulated below:**

| RANGE °C | FACTORS    |       |            |       |            |       |
|----------|------------|-------|------------|-------|------------|-------|
|          | 0.00025 FF |       | 0.00050 FF |       | 0.00075 FF |       |
|          | CAP.       | KW    | CAP.       | KW    | CAP.       | KW    |
| 5        | 1,006      | 1,002 | 0.987      | 0.996 | 0.969      | 0.991 |
| 8        | 1,013      | 1,004 | 0.994      | 0.999 | 0.974      | 0.993 |
| 10       | 1,018      | 1,006 | 1,000      | 1,000 | 0.982      | 0.995 |
| 12       | 1,023      | 1,007 | 1,005      | 1,002 | 0.985      | 0.997 |
| 15       | 1,030      | 1,009 | 1,013      | 1,005 | 0.997      | 1,000 |

- Low temperature operation:

To avoid damage to the evaporator, working at low temperatures, it is suggested to use glycol mixtures, the freezing points of which are shown. When working temperature approaches the reported freezing points, brine concentration should be increased

| ETHYLENE<br>GLYCPL<br>% WT. | FACTORS |           |      |            | FREEZE<br>POINT (°F) |
|-----------------------------|---------|-----------|------|------------|----------------------|
|                             | TONS    | COMPR. KW | P    | GPM °F/TON |                      |
| 10                          | 0.994   | 0.997     | 1.03 | 24.1       | 26                   |
| 20                          | 0.986   | 0.993     | 1.06 | 24.9       | 16                   |
| 30                          | 0.979   | 0.990     | 1.09 | 25.9       | 5                    |
| 40                          | 0.970   | 0.985     | 1.13 | 27.3       | -10                  |
| 50                          | 0.959   | 0.980     | 1.16 | 29.0       | -32                  |

## • Condenser water ranges

Condenser water flow rates are tabulated for a 10°F range. Refer to the following chart for correction of water flow and capacity multipliers.

| WATER RANGE | WATER FLOW | CAPACITY |
|-------------|------------|----------|
| 7.5         | 1.33       | 1        |
| 15          | 0.66       | 0.99     |
| 20          | 0.5        | 0.99     |
| 25          | 0.39       | 0.98     |
| 30          | 0.33       | 0.98     |

## OPERATION LIMITS

| DESCRIPTION                           | MIN. | MAX. |
|---------------------------------------|------|------|
| LEAVING CHILLED WATER TEMP. (°C)      | 4.6  | 15   |
| WATER TEMP. DIFFERENCE (°C)           | 4    | 6    |
| AMBIENT AIR TEMP. (°C) (COOLING MADE) | -10  | 47   |

## EXAMPLE: Water chilling

### 1- GIVEN

- Capacity =120 Tons
- Leaving chilled water temp. =42 °F
- Chilled water range = 10°F
- Condenser leaving water temp. = 100°F
- Condenser water range = 10°F

### 2- Find:

- Unit size
- Unit capacity
- Compressor kw input
- Cooler / condenser water pressure drop

### 3- Form table 13

Select: HLCW -160-4

130.4 tons

122.4 kw

P.D of cooler = 13.5 ft of water

P.D of condenser = 5.1 ft of water

### 4- calculate compressor kw at 120 tons:

$$\frac{120 \text{ ton}}{130.4 \text{ ton}} \times 122.4 \text{ kw} = 112.6 \text{ AVG. COMPR. KW}$$

## Brine chilling

### 1- GIVEN

- Capacity =68 Tons
- 30% by weight ethylene glycol
- from 55 °F to 45 °F
- Fouling factor = 0.00075

- Condensing temp = 125°F

### 2- Find:

- Unit size
- Unit capacity
- Compressor kw input
- Ethylene glycol GPM
- Cooler pressure drop

### 3- Determine Correction factor

- Correction factor for 0.00075 fouling factor: 0.982 tons factor and 0.995 kw factor.

## Correction factor for ethylene glycol:

0.979 tons factor

0.990 kw factor

25.9 Gal °F / TR factor

From table B :

Select: HLCA-90-3

68.4 tons

77.1 kw

P.D of cooler = 10.3 ft of w .

4- Determine HLCA-90-3 brine cooling

## capacity and compressor kw requirement:

Tons =  $68.4 \times 0.982 \times 0.979 = 65.7$

Comp. kw =  $77.1 \times 0.995 \times 0.990 = 76$

5- Determine average full load compressor kw at 68 tons:

76 kw = 78.6 compressor kw

6 - Determine Ethylene Glycol GPM:

$$GPM = \frac{\text{Tons} \times \text{Gal.}^{\circ}\text{F min}}{\text{ton factor Range}}$$

$$GPM = \frac{68 \times 25.9}{10} = 176$$

7 - Determine cooler pressure drop

From table B: 1.09 pressure drop

From table 13: 10.3 pressure drop factor

Cooler pressure drop=  $10.3 \times 1.09$

= 11.2 ft .of. w

8- HLCA - 90-3 is suitable.





# CAPACITIES WATER COOLED CHILLER CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C

Engineering Specifications-50 Hz (R-22)-bitzer

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |             |
|------------|----------|-------|---------------|--------------|-----------------|-------------|
|            |          |       | GPM           | P.D FT.OF W. | GPM             | P.D FT OF W |
| HLCW-5-1   | 4.36     | 15.34 | 10.47         | 2.2          | 13.09           | 4.5         |
| HLCW-10-1  | 8.73     | 30.7  | 20.96         | 2.8          | 26.19           | 4.5         |
| HLCW-15-1  | 12.12    | 42.6  | 29.08         | 3.0          | 36.35           | 7.9         |
| HLCW-20-1  | 14.22    | 50    | 34.13         | 3.4          | 42.66           | 8.2         |
| HLCW-25-1  | 18.86    | 66.3  | 45.26         | 4.7          | 56.57           | 8.2         |
| HLCW-30-1  | 21.79    | 76.6  | 52.29         | 5.5          | 65.36           | 9.5         |
| HLCW-35-1  | 28.27    | 99.4  | 67.85         | 6.9          | 84.81           | 9.7         |
| HLCW-40-1  | 32.45    | 114.1 | 77.88         | 8.6          | 97.35           | 14.2        |
| HLCW-50-1  | 38.99    | 137.1 | 93.58         | 9.4          | 116.98          | 14.8        |
| HLCW-20-2  | 17.46    | 61.4  | 41.91         | 9.9          | 52.39           | 7.5         |
| HLCW-30-2  | 24.23    | 85.2  | 58.16         | 10.7         | 72.70           | 7.9         |
| HLCW-40-2  | 28.44    | 100   | 68.26         | 9.2          | 85.32           | 8.0         |
| HLCW-50-2  | 37.71    | 132.6 | 90.51         | 14.2         | 113.14          | 14.3        |
| HLCW-60-2  | 43.57    | 153.2 | 104.57        | 13.6         | 130.72          | 8.2         |
| HLCW-70-2  | 56.54    | 198.8 | 135.70        | 13.1         | 169.62          | 9.7         |
| HLCW-80-2  | 64.90    | 228.2 | 155.77        | 12.3         | 194.71          | 9.9         |
| HLCW-100-2 | 77.99    | 274.2 | 187.17        | 12.8         | 233.96          | 10.3        |
| HLCW-60-3  | 42.66    | 150   | 102.39        | 13.3         | 127.99          | 8.4         |
| HLCW-75-3  | 56.57    | 198.9 | 135.77        | 15.4         | 169.71          | 14.2        |
| HLCW-90-3  | 65.36    | 229.8 | 156.86        | 15.4         | 196.08          | 8.2         |
| HLCW-105-3 | 84.81    | 298.2 | 203.55        | 13.4         | 254.44          | 9.8         |
| HLCW-120-3 | 97.35    | 342.3 | 233.65        | 13.6         | 292.06          | 9.9         |
| HLCW-150-3 | 116.98   | 411.3 | 280.75        | 17.1         | 350.94          | 10.2        |
| HLCW-80-4  | 56.88    | 200   | 136.52        | 10.8         | 170.65          | 4.4         |
| HLCW-100-4 | 75.43    | 265.2 | 181.02        | 11.1         | 226.28          | 4.5         |
| HLCW-120-4 | 87.14    | 306.4 | 209.15        | 13.7         | 261.43          | 4.7         |
| HLCW-140-4 | 113.08   | 397.6 | 271.40        | 13.7         | 339.25          | 4.6         |
| HLCW-160-4 | 129.81   | 456.4 | 311.54        | 16.7         | 389.42          | 5.8         |
| HLCW-200-4 | 155.97   | 548.4 | 374.33        | 18.7         | 467.92          | 6.3         |
| HLCW-240-6 | 194.71   | 684.6 | 467.30        | 17.0         | 584.13          | 9.9         |
| HLCW-300-6 | 233.96   | 822.6 | 561.50        | 19.1         | 701.88          | 11.3        |

# CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |             | CONDENSER WATER |             |
|------------|----------|-------|---------------|-------------|-----------------|-------------|
|            |          |       | GPM           | P.D FT OF W | GPM             | P.D FT OF W |
| HLCW-5-1   | 4.55     | 16    | 10.92         | 2.2         | 13.65           | 4.5         |
| HLCW-10-1  | 9.13     | 32.1  | 21.91         | 2.8         | 27.39           | 4.5         |
| HLCW-15-1  | 12.66    | 44.5  | 30.38         | 3.0         | 37.97           | 7.9         |
| HLCW-20-1  | 14.85    | 52.2  | 35.63         | 3.4         | 44.54           | 8.2         |
| HLCW-25-1  | 19.65    | 69.1  | 47.17         | 4.7         | 58.96           | 8.2         |
| HLCW-30-1  | 22.72    | 79.9  | 54.54         | 5.5         | 68.17           | 9.5         |
| HLCW-35-1  | 29.49    | 103.7 | 70.78         | 6.9         | 88.48           | 9.7         |
| HLCW-40-1  | 33.85    | 119   | 81.23         | 8.6         | 101.54          | 14.2        |
| HLCW-50-1  | 40.67    | 143   | 97.61         | 9.4         | 122.01          | 14.8        |
| HLCW-20-2  | 18.26    | 64.2  | 43.82         | 10.8        | 54.78           | 8.4         |
| HLCW-30-2  | 25.31    | 89    | 60.75         | 11.4        | 75.94           | 8.5         |
| HLCW-40-2  | 29.69    | 104.4 | 71.26         | 10.2        | 89.08           | 8.8         |
| HLCW-50-2  | 39.31    | 138.2 | 94.33         | 15.5        | 117.92          | 15.3        |
| HLCW-60-2  | 45.45    | 159.8 | 109.08        | 14.6        | 136.35          | 8.8         |
| HLCW-70-2  | 58.99    | 207.4 | 141.57        | 14.1        | 176.96          | 10.4        |
| HLCW-80-2  | 67.69    | 238   | 162.46        | 13.5        | 203.07          | 10.7        |
| HLCW-100-2 | 81.34    | 286   | 195.22        | 13.7        | 244.03          | 10.9        |
| HLCW-60-3  | 44.54    | 156.6 | 106.89        | 9.2         | 133.62          | 9.2         |
| HLCW-75-3  | 58.96    | 207.3 | 141.50        | 15.2        | 176.88          | 15.2        |
| HLCW-90-3  | 68.17    | 239.7 | 163.62        | 8.7         | 204.52          | 8.7         |
| HLCW-105-3 | 88.48    | 311.1 | 212.35        | 16.8        | 265.44          | 9.2         |
| HLCW-120-3 | 101.54   | 357   | 243.69        | 14.8        | 304.61          | 10.6        |
| HLCW-150-3 | 122.01   | 429   | 292.83        | 17.1        | 366.04          | 12.1        |
| HLCW-80-4  | 59.39    | 208.8 | 142.53        | 11.2        | 178.16          | 4.7         |
| HLCW-100-4 | 78.61    | 276.4 | 188.67        | 11.9        | 235.84          | 4.8         |
| HLCW-120-4 | 90.90    | 319.6 | 218.16        | 14.8        | 272.70          | 5.1         |
| HLCW-140-4 | 117.97   | 414.8 | 283.14        | 14.7        | 353.92          | 4.9         |
| HLCW-160-4 | 135.38   | 476   | 324.91        | 18.3        | 406.14          | 6.4         |
| HLCW-200-4 | 162.68   | 572   | 390.44        | 18.6        | 488.05          | 7.4         |
| HLCW-240-6 | 203.07   | 714   | 487.37        | 17.7        | 609.22          | 10.9        |
| HLCW-300-6 | 244.03   | 858   | 585.67        | 18.3        | 732.08          | 11.5        |

# CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |            | CONDENSER WATER |            |
|------------|----------|-------|---------------|------------|-----------------|------------|
|            |          |       | GPM           | P.D FTOF W | GPM             | P.D FTOF W |
| HLCW-5-1   | 4.66     | 16.37 | 11.17         | 2.2        | 13.97           | 4.5        |
| HLCW-10-1  | 9.33     | 32.8  | 22.39         | 2.8        | 27.99           | 4.5        |
| HLCW-15-1  | 12.97    | 45.6  | 31.13         | 3.0        | 38.91           | 7.9        |
| HLCW-20-1  | 15.19    | 53.4  | 36.45         | 3.4        | 45.56           | 8.2        |
| HLCW-25-1  | 20.11    | 70.7  | 48.26         | 4.7        | 60.32           | 8.2        |
| HLCW-30-1  | 23.24    | 81.7  | 55.77         | 5.5        | 69.71           | 9.5        |
| HLCW-35-1  | 30.18    | 106.1 | 72.42         | 6.9        | 90.53           | 9.7        |
| HLCW-40-1  | 34.64    | 121.8 | 83.14         | 8.6        | 103.92          | 14.2       |
| HLCW-50-1  | 41.61    | 146.3 | 99.86         | 9.4        | 124.83          | 14.8       |
| HLCW-20-2  | 18.66    | 65.6  | 44.78         | 11         | 55.97           | 8.6        |
| HLCW-30-2  | 25.94    | 91.2  | 62.25         | 12.2       | 77.82           | 8.7        |
| HLCW-40-2  | 30.38    | 106.8 | 72.90         | 10.5       | 91.13           | 9.2        |
| HLCW-50-2  | 40.22    | 141.4 | 96.52         | 16.2       | 120.65          | 15.9       |
| HLCW-60-2  | 46.47    | 163.4 | 111.54        | 15.1       | 139.42          | 9.1        |
| HLCW-70-2  | 60.35    | 212.2 | 144.85        | 13.7       | 181.06          | 10.3       |
| HLCW-80-2  | 69.28    | 243.6 | 166.28        | 14.0       | 207.85          | 11.1       |
| HLCW-100-2 | 83.22    | 292.6 | 199.73        | 14.3       | 249.66          | 11.4       |
| HLCW-60-3  | 45.56    | 160.2 | 109.35        | 15.1       | 136.69          | 9.5        |
| HLCW-75-3  | 60.32    | 212.1 | 144.78        | 17.5       | 180.97          | 15.9       |
| HLCW-90-3  | 69.71    | 245.1 | 167.30        | 17.3       | 209.13          | 9.1        |
| HLCW-105-3 | 90.53    | 318.3 | 217.27        | 16.2       | 271.59          | 9.6        |
| HLCW-120-3 | 103.92   | 365.4 | 249.42        | 15.5       | 311.77          | 11.0       |
| HLCW-150-3 | 124.83   | 438.9 | 299.59        | 17.4       | 374.49          | 12.3       |
| HLCW-80-4  | 60.75    | 213.6 | 145.80        | 11.8       | 182.25          | 4.9        |
| HLCW-100-4 | 80.43    | 282.8 | 193.04        | 12.5       | 241.30          | 5.0        |
| HLCW-120-4 | 92.95    | 326.8 | 223.07        | 15.5       | 278.84          | 5.2        |
| HLCW-140-4 | 120.71   | 424.4 | 289.69        | 15.3       | 362.12          | 5.1        |
| HLCW-160-4 | 138.57   | 487.2 | 332.56        | 19.1       | 415.70          | 6.6        |
| HLCW-200-4 | 166.44   | 585.2 | 399.45        | 19.1       | 499.32          | 8.6        |
| HLCW-240-6 | 207.85   | 730.8 | 498.84        | 19.8       | 623.55          | 11.8       |
| HLCW-300-6 | 249.66   | 877.8 | 599.18        | 19.9       | 748.98          | 11.8       |

# CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C

Table-1-leaving Chilled Water Temp.=7,4°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |            | CONDENSER WATER |            |
|------------|----------|-------|---------------|------------|-----------------|------------|
|            |          |       | GPM           | P.D FTOF W | GPM             | P.D FTOF W |
| HLCW-5-1   | 4.69     | 16.5  | 11.26         | 2.2        | 14.08           | 4.5        |
| HLCW-10-1  | 9.41     | 33.1  | 22.59         | 2.8        | 28.24           | 4.5        |
| HLCW-15-1  | 13.05    | 45.9  | 31.33         | 3.0        | 39.16           | 7.9        |
| HLCW-20-1  | 15.30    | 53.8  | 36.72         | 3.4        | 45.90           | 8.2        |
| HLCW-25-1  | 20.28    | 71.3  | 48.67         | 4.7        | 60.84           | 8.2        |
| HLCW-30-1  | 23.44    | 82.4  | 56.25         | 5.5        | 70.31           | 9.5        |
| HLCW-35-1  | 30.40    | 106.9 | 72.97         | 6.9        | 91.21           | 9.7        |
| HLCW-40-1  | 34.90    | 122.7 | 83.75         | 8.6        | 104.69          | 14.2       |
| HLCW-50-1  | 41.92    | 147.4 | 100.61        | 9.4        | 125.77          | 14.8       |
| HLCW-20-2  | 18.83    | 66.2  | 45.19         | 11.23      | 56.48           | 8.7        |
| HLCW-30-2  | 26.11    | 91.8  | 62.66         | 12.5       | 78.33           | 9.2        |
| HLCW-40-2  | 30.60    | 107.6 | 73.45         | 11.1       | 91.81           | 9.6        |
| HLCW-50-2  | 40.56    | 142.6 | 97.34         | 17.2       | 121.67          | 16.7       |
| HLCW-60-2  | 46.87    | 164.8 | 112.49        | 15.8       | 140.61          | 9.3        |
| HLCW-70-2  | 60.81    | 213.8 | 145.94        | 15.3       | 182.42          | 11.1       |
| HLCW-80-2  | 69.80    | 245.4 | 167.51        | 14.7       | 209.39          | 11.4       |
| HLCW-100-2 | 83.85    | 294.8 | 201.23        | 15.3       | 251.54          | 11.6       |
| HLCW-60-3  | 45.90    | 161.4 | 110.17        | 15.8       | 137.71          | 9.9        |
| HLCW-75-3  | 60.84    | 213.9 | 146.01        | 18.5       | 182.51          | 16.4       |
| HLCW-90-3  | 70.31    | 247.2 | 168.74        | 18.1       | 210.92          | 9.4        |
| HLCW-105-3 | 91.21    | 320.7 | 218.91        | 16.4       | 273.63          | 9.1        |
| HLCW-120-3 | 104.69   | 368.1 | 251.26        | 16.1       | 314.08          | 11.3       |
| HLCW-150-3 | 125.77   | 442.2 | 301.84        | 17.4       | 377.30          | 12.5       |
| HLCW-80-4  | 61.21    | 215.2 | 146.89        | 12.5       | 183.62          | 5          |
| HLCW-100-4 | 81.11    | 285.2 | 194.68        | 13.2       | 243.34          | 5.2        |
| HLCW-120-4 | 93.74    | 329.6 | 224.98        | 16.0       | 281.23          | 5.4        |
| HLCW-140-4 | 121.62   | 427.6 | 291.88        | 16.0       | 364.85          | 5.2        |
| HLCW-160-4 | 139.59   | 490.8 | 335.02        | 19.9       | 418.77          | 6.8        |
| HLCW-200-4 | 167.69   | 589.6 | 402.46        | 20         | 503.07          | 8.9        |
| HLCW-240-6 | 209.39   | 736.2 | 502.53        | 20.3       | 628.16          | 11.7       |
| HLCW-300-6 | 251.54   | 884.4 | 603.69        | 20.4       | 754.61          | 11.9       |

# CAPACITIES WATER COOLED CHILLER CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |             | CONDENSER WATER |             |
|------------|----------|-------|---------------|-------------|-----------------|-------------|
|            |          |       | GPM           | P.D FT OF W | GPM             | P.D FT OF W |
| HLCW-5-1   | 4.25     | 14.94 | 10.20         | 2.0         | 12.75           | 4.2         |
| HLCW-10-1  | 8.53     | 30    | 20.48         | 2.5         | 25.60           | 4.3         |
| HLCW-15-1  | 11.83    | 41.6  | 28.40         | 2.8         | 35.49           | 9.1         |
| HLCW-20-1  | 13.91    | 48.9  | 33.38         | 3.2         | 41.72           | 7.5         |
| HLCW-25-1  | 18.43    | 64.8  | 44.23         | 4.3         | 55.29           | 7.9         |
| HLCW-30-1  | 21.33    | 75    | 51.19         | 5.2         | 63.99           | 13.6        |
| HLCW-35-1  | 27.65    | 97.2  | 66.35         | 8.0         | 82.94           | 7.8         |
| HLCW-40-1  | 31.74    | 111.6 | 76.18         | 6.5         | 95.22           | 9.3         |
| HLCW-50-1  | 38.14    | 134.1 | 91.54         | 7.4         | 114.42          | 14.8        |
| HLCW-20-2  | 17.06    | 60    | 40.96         | 9.9         | 51.19           | 7.5         |
| HLCW-30-2  | 23.66    | 83.2  | 56.79         | 10.0        | 70.99           | 7.7         |
| HLCW-40-2  | 27.82    | 97.8  | 66.76         | 8.4         | 83.45           | 7.9         |
| HLCW-50-2  | 36.86    | 129.6 | 88.46         | 13.3        | 110.58          | 13.6        |
| HLCW-60-2  | 42.66    | 150   | 102.39        | 12.4        | 127.99          | 7.8         |
| HLCW-70-2  | 55.29    | 194.4 | 132.70        | 12.2        | 165.87          | 9.4         |
| HLCW-80-2  | 63.48    | 223.2 | 152.35        | 11.4        | 190.44          | 9.4         |
| HLCW-100-2 | 76.28    | 268.2 | 183.07        | 12.8        | 228.84          | 10.3        |
| HLCW-60-3  | 41.72    | 146.7 | 100.14        | 12.4        | 125.17          | 8.0         |
| HLCW-75-3  | 55.29    | 194.4 | 132.70        | 14.3        | 165.87          | 13.5        |
| HLCW-90-3  | 63.99    | 225   | 153.58        | 14.3        | 191.98          | 7.8         |
| HLCW-105-3 | 82.94    | 291.6 | 199.04        | 12.4        | 248.81          | 9.3         |
| HLCW-120-3 | 95.22    | 334.8 | 228.53        | 12.7        | 285.67          | 9.4         |
| HLCW-150-3 | 114.42   | 402.3 | 274.61        | 14.1        | 343.26          | 10.2        |
| HLCW-80-4  | 55.63    | 195.6 | 133.52        | 10          | 166.89          | 4.1         |
| HLCW-100-4 | 73.72    | 259.2 | 176.93        | 10.2        | 221.16          | 4.3         |
| HLCW-120-4 | 85.32    | 300   | 204.78        | 12.7        | 255.97          | 4.5         |
| HLCW-140-4 | 110.58   | 388.8 | 265.39        | 12.7        | 331.74          | 4.4         |
| HLCW-160-4 | 126.96   | 446.4 | 304.71        | 16.6        | 380.89          | 5.6         |
| HLCW-200-4 | 152.56   | 536.4 | 366.14        | 16.9        | 457.68          | 6.3         |
| HLCW-240-6 | 190.44   | 669.6 | 457.06        | 15.0        | 571.33          | 9.4         |
| HLCW-300-6 | 228.84   | 804.6 | 549.22        | 16.1        | 686.52          | 9.6         |

# CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |             | CONDENSER WATER |             |
|------------|----------|-------|---------------|-------------|-----------------|-------------|
|            |          |       | GPM           | P.D FT OF W | G PM            | P.D FT OF W |
| HLCW-5-1   | 4.43     | 15.59 | 10.64         | 2.2         | 13.30           | 4.5         |
| HLCW-10-1  | 8.90     | 31.3  | 21.37         | 3.0         | 26.71           | 9.8         |
| HLCW-15-1  | 12.37    | 43.5  | 29.69         | 3.4         | 37.12           | 8.1         |
| HLCW-20-1  | 14.51    | 51    | 34.81         | 4.7         | 43.52           | 8.5         |
| HLCW-25-1  | 19.23    | 67.6  | 46.14         | 6.6         | 57.68           | 14.5        |
| HLCW-30-1  | 22.24    | 78.2  | 53.38         | 8.6         | 66.72           | 8.3         |
| HLCW-35-1  | 28.84    | 101.4 | 69.22         | 6.9         | 86.52           | 10.1        |
| HLCW-40-1  | 33.11    | 116.4 | 79.45         | 7.0         | 99.32           | 10.2        |
| HLCW-50-1  | 39.79    | 139.9 | 95.49         | 9.4         | 119.37          | 10.4        |
| HLCW-20-2  | 17.80    | 62.6  | 42.73         | 10.8        | 53.41           | 8.4         |
| HLCW-30-2  | 24.74    | 87    | 59.39         | 10.7        | 74.23           | 8.1         |
| HLCW-40-2  | 29.01    | 102   | 69.62         | 9.2         | 87.03           | 8.4         |
| HLCW-50-2  | 38.45    | 135.2 | 92.29         | 14.6        | 115.36          | 14.6        |
| HLCW-60-2  | 44.48    | 156.4 | 106.76        | 13.6        | 133.45          | 8.3         |
| HLCW-70-2  | 57.68    | 202.8 | 138.43        | 13.1        | 173.04          | 9.9         |
| HLCW-80-2  | 66.21    | 232.8 | 158.91        | 12.6        | 198.63          | 10.2        |
| HLCW-100-2 | 79.58    | 279.8 | 190.99        | 13.7        | 238.74          | 10.6        |
| HLCW-60-3  | 43.52    | 153   | 104.44        | 9.2         | 130.55          | 8.7         |
| HLCW-75-3  | 57.68    | 202.8 | 138.43        | 15.2        | 173.04          | 14.5        |
| HLCW-90-3  | 66.72    | 234.6 | 160.14        | 8.7         | 200.17          | 8.3         |
| HLCW-105-3 | 86.52    | 304.2 | 207.65        | 13.4        | 259.56          | 9.8         |
| HLCW-120-3 | 99.32    | 349.2 | 238.36        | 13.8        | 297.95          | 10.2        |
| HLCW-150-3 | 119.37   | 419.7 | 286.48        | 13.9        | 358.11          | 10.4        |
| HLCW-80-4  | 58.02    | 204   | 139.25        | 11.2        | 174.06          | 4.3         |
| HLCW-100-4 | 76.91    | 270.4 | 184.57        | 11.1        | 230.72          | 4.5         |
| HLCW-120-4 | 88.96    | 312.8 | 213.52        | 13.7        | 266.89          | 4.8         |
| HLCW-140-4 | 115.36   | 405.6 | 276.86        | 13.8        | 346.08          | 4.7         |
| HLCW-160-4 | 132.42   | 465.6 | 317.82        | 17.1        | 397.27          | 6.0         |
| HLCW-200-4 | 159.16   | 559.6 | 381.98        | 17.6        | 477.47          | 7.4         |
| HLCW-240-6 | 198.63   | 698.4 | 476.72        | 16.5        | 595.90          | 10.4        |
| HLCW-300-6 | 238.74   | 839.4 | 572.97        | 17.3        | 716.21          | 10.5        |

# CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |             | CONDENSER WATER |             |
|------------|----------|-------|---------------|-------------|-----------------|-------------|
|            |          |       | GPM           | P.D FT OF W | GPM             | P.D FT OF W |
| HLCW-5-1   | 4.54     | 15.96 | 10.89         | 2.2         | 13.62           | 4.7         |
| HLCW-10-1  | 9.13     | 32.1  | 21.91         | 3.1         | 27.39           | 10.1        |
| HLCW-15-1  | 12.66    | 44.5  | 30.38         | 3.6         | 37.97           | 8.4         |
| HLCW-20-1  | 14.85    | 52.2  | 35.63         | 5.0         | 44.54           | 8.8         |
| HLCW-25-1  | 19.68    | 69.2  | 47.24         | 5.8         | 59.04           | 15.1        |
| HLCW-30-1  | 22.75    | 80    | 54.61         | 9.0         | 68.26           | 8.6         |
| HLCW-35-1  | 29.52    | 103.8 | 70.85         | 6.9         | 88.57           | 9.3         |
| HLCW-40-1  | 33.87    | 119.1 | 81.30         | 7.3         | 101.62          | 10.4        |
| HLCW-50-1  | 40.70    | 143.1 | 97.68         | 8.4         | 122.10          | 11.8        |
| HLCW-20-2  | 18.26    | 64.2  | 43.82         | 10.8        | 54.78           | 8.3         |
| HLCW-30-2  | 25.31    | 89    | 60.75         | 11.1        | 75.94           | 8.5         |
| HLCW-40-2  | 29.69    | 104.4 | 71.26         | 9.7         | 89.08           | 8.8         |
| HLCW-50-2  | 39.36    | 138.4 | 94.47         | 15.2        | 118.09          | 15.1        |
| HLCW-60-2  | 45.51    | 160   | 109.22        | 14.1        | 136.52          | 8.6         |
| HLCW-70-2  | 59.04    | 207.6 | 141.71        | 13.7        | 177.13          | 10.3        |
| HLCW-80-2  | 67.75    | 238.2 | 162.59        | 13.1        | 203.24          | 10.6        |
| HLCW-100-2 | 81.40    | 286.2 | 195.36        | 14.7        | 244.20          | 11.2        |
| HLCW-60-3  | 44.54    | 156.6 | 106.89        | 14.1        | 133.62          | 9.4         |
| HLCW-75-3  | 59.04    | 207.6 | 141.71        | 16.3        | 177.13          | 9.1         |
| HLCW-90-3  | 68.26    | 240   | 163.82        | 16.0        | 204.78          | 15.0        |
| HLCW-105-3 | 88.57    | 311.4 | 212.56        | 14.1        | 265.70          | 9           |
| HLCW-120-3 | 101.62   | 357.3 | 243.89        | 14.4        | 304.86          | 10.5        |
| HLCW-150-3 | 122.10   | 429.3 | 293.04        | 16.4        | 366.30          | 9.5         |
| HLCW-80-4  | 59.39    | 208.8 | 142.53        | 10.2        | 178.16          | 6.8         |
| HLCW-100-4 | 78.73    | 276.8 | 188.94        | 11.7        | 236.18          | 4.8         |
| HLCW-120-4 | 91.01    | 320   | 218.43        | 14.2        | 273.04          | 5.0         |
| HLCW-140-4 | 118.09   | 415.2 | 283.41        | 14.3        | 354.27          | 4.8         |
| HLCW-160-4 | 135.49   | 476.4 | 325.19        | 17.7        | 406.48          | 6.2         |
| HLCW-200-4 | 162.80   | 572.4 | 390.72        | 16.4        | 488.40          | 8.6         |
| HLCW-240-6 | 203.24   | 714.6 | 487.78        | 18.1        | 609.73          | 11.0        |
| HLCW-300-6 | 244.20   | 858.6 | 586.08        | 18.6        | 732.59          | 11.6        |

# CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |             | CONDENSER WATER |             |
|------------|----------|-------|---------------|-------------|-----------------|-------------|
|            |          |       | GPM           | P.D FT OF W | GPM             | P.D FT OF W |
| HLCW-5-1   | 4.57     | 16.08 | 10.98         | 2.3         | 13.72           | 4.8         |
| HLCW-10-1  | 9.19     | 32.3  | 22.05         | 3.2         | 27.56           | 10.4        |
| HLCW-15-1  | 12.77    | 44.9  | 30.65         | 3.7         | 38.31           | 8.7         |
| HLCW-20-1  | 14.96    | 52.6  | 35.90         | 5.2         | 44.88           | 9.1         |
| HLCW-25-1  | 19.82    | 69.7  | 47.58         | 6.1         | 59.47           | 15.7        |
| HLCW-30-1  | 22.92    | 80.6  | 55.02         | 9.3         | 68.77           | 8.9         |
| HLCW-35-1  | 29.75    | 104.6 | 71.40         | 6.9         | 89.25           | 9.7         |
| HLCW-40-1  | 34.13    | 120   | 81.91         | 7.6         | 102.39          | 10.8        |
| HLCW-50-1  | 41.01    | 144.2 | 98.43         | 8.8         | 123.04          | 11.9        |
| HLCW-20-2  | 18.37    | 64.6  | 44.10         | 10.6        | 55.12           | 9.0         |
| HLCW-30-2  | 25.54    | 89.8  | 61.30         | 11.8        | 76.62           | 8.7         |
| HLCW-40-2  | 29.92    | 105.2 | 71.81         | 10.2        | 89.76           | 9.2         |
| HLCW-50-2  | 39.65    | 139.4 | 95.15         | 15.9        | 118.94          | 15.9        |
| HLCW-60-2  | 45.85    | 161.2 | 110.03        | 14.6        | 137.54          | 8.9         |
| HLCW-70-2  | 59.50    | 209.2 | 142.80        | 14.3        | 178.50          | 10.7        |
| HLCW-80-2  | 68.26    | 240   | 163.82        | 13.7        | 204.78          | 11.0        |
| HLCW-100-2 | 82.03    | 288.4 | 196.86        | 14.6        | 246.08          | 11.4        |
| HLCW-60-3  | 44.88    | 157.8 | 107.71        | 14.6        | 134.64          | 9.5         |
| HLCW-75-3  | 59.47    | 209.1 | 142.73        | 17.0        | 178.41          | 15.7        |
| HLCW-90-3  | 68.77    | 241.8 | 165.05        | 16.6        | 206.31          | 8.9         |
| HLCW-105-3 | 89.25    | 313.8 | 214.20        | 14.6        | 267.75          | 10.3        |
| HLCW-120-3 | 102.39   | 360   | 245.73        | 15.0        | 307.17          | 10.9        |
| HLCW-150-3 | 123.04   | 432.6 | 295.29        | 15.9        | 369.11          | 11.8        |
| HLCW-80-4  | 59.84    | 210.4 | 143.62        | 12.1        | 179.52          | 4.8         |
| HLCW-100-4 | 79.29    | 278.8 | 190.31        | 12.2        | 237.88          | 4.9         |
| HLCW-120-4 | 91.70    | 322.4 | 220.07        | 14.8        | 275.09          | 5.1         |
| HLCW-140-4 | 119.00   | 418.4 | 285.60        | 14.8        | 357.00          | 5.0         |
| HLCW-160-4 | 136.52   | 480   | 327.65        | 18.5        | 409.56          | 6.5         |
| HLCW-200-4 | 164.05   | 576.8 | 393.72        | 18.6        | 492.15          | 9.4         |
| HLCW-240-6 | 204.78   | 720   | 491.47        | 18.8        | 614.33          | 11.0        |
| HLCW-300-6 | 246.08   | 865.2 | 590.58        | 19.5        | 738.23          | 13.3        |

# CAPACITIES

## WATER COOLED CHILLER

### CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |             | CONDENSER WATER |             |
|------------|----------|-------|---------------|-------------|-----------------|-------------|
|            |          |       | GPM           | P.D FT OF W | GPM             | P.D FT OF W |
| HLCW-5-1   | 4.08     | 14.36 | 9.80          | 1.8         | 12.25           | 4.0         |
| HLCW-10-1  | 8.25     | 29    | 19.80         | 2.6         | 24.74           | 8.8         |
| HLCW-15-1  | 11.43    | 40.2  | 27.44         | 3.0         | 34.30           | 7.2         |
| HLCW-20-1  | 13.42    | 47.2  | 32.22         | 4.0         | 40.27           | 7.5         |
| HLCW-25-1  | 17.80    | 62.6  | 42.73         | 4.8         | 53.41           | 12.9        |
| HLCW-30-1  | 20.62    | 72.5  | 49.49         | 7.3         | 61.86           | 7.4         |
| HLCW-35-1  | 26.71    | 93.9  | 64.10         | 6.9         | 80.12           | 9.7         |
| HLCW-40-1  | 30.66    | 107.8 | 73.58         | 6.0         | 91.98           | 9.0         |
| HLCW-50-1  | 36.89    | 129.7 | 88.53         | 5.9         | 110.67          | 8.6         |
| HLCW-20-2  | 16.50    | 58    | 39.59         | 9.6         | 49.49           | 7.2         |
| HLCW-30-2  | 22.87    | 80.4  | 54.88         | 9.4         | 68.60           | 7.3         |
| HLCW-40-2  | 26.85    | 94.4  | 64.44         | 8.0         | 80.55           | 7.5         |
| HLCW-50-2  | 35.61    | 125.2 | 85.46         | 12.4        | 106.83          | 13.1        |
| HLCW-60-2  | 41.24    | 145   | 98.98         | 11.4        | 123.72          | 7.4         |
| HLCW-70-2  | 53.41    | 187.8 | 128.19        | 11.3        | 160.24          | 8.9         |
| HLCW-80-2  | 61.32    | 215.6 | 147.17        | 10.7        | 183.96          | 9.1         |
| HLCW-100-2 | 73.78    | 259.4 | 177.06        | 10.2        | 221.33          | 9.6         |
| HLCW-60-3  | 40.27    | 141.6 | 96.66         | 11.2        | 120.82          | 7.7         |
| HLCW-75-3  | 53.41    | 187.8 | 128.19        | 13.2        | 160.24          | 13.0        |
| HLCW-90-3  | 61.86    | 217.5 | 148.46        | 13.1        | 185.58          | 7.4         |
| HLCW-105-3 | 80.12    | 281.7 | 192.29        | 11.4        | 240.36          | 8.8         |
| HLCW-120-3 | 91.98    | 323.4 | 220.75        | 11.8        | 275.94          | 9.0         |
| HLCW-150-3 | 110.67   | 389.1 | 265.60        | 12.6        | 332.00          | 9.6         |
| HLCW-80-4  | 53.70    | 188.8 | 128.87        | 9.5         | 161.09          | 3.9         |
| HLCW-100-4 | 71.22    | 250.4 | 170.92        | 9.4         | 213.65          | 4.0         |
| HLCW-120-4 | 82.48    | 290   | 197.95        | 11.7        | 247.44          | 4.3         |
| HLCW-140-4 | 106.83   | 375.6 | 256.38        | 11.8        | 320.48          | 4.2         |
| HLCW-160-4 | 122.64   | 431.2 | 294.33        | 14.5        | 367.92          | 5.4         |
| HLCW-200-4 | 147.55   | 518.8 | 354.13        | 14.8        | 442.66          | 5.2         |
| HLCW-240-6 | 183.96   | 646.8 | 441.50        | 14.0        | 551.88          | 9.4         |
| HLCW-300-6 | 221.33   | 778.2 | 531.19        | 14.8        | 663.99          | 9.5         |

# CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |             | CONDENSER WATER |             |
|------------|----------|-------|---------------|-------------|-----------------|-------------|
|            |          |       | GPM           | P.D FT OF W | GPM             | P.D FT OF W |
| HLCW-5-1   | 4.26     | 14.99 | 10.23         | 1.9         | 12.79           | 4.3         |
| HLCW-10-1  | 8.62     | 30.3  | 20.68         | 2.8         | 25.85           | 9.4         |
| HLCW-15-1  | 11.92    | 41.9  | 28.60         | 3.2         | 35.75           | 7.8         |
| HLCW-20-1  | 14.02    | 49.3  | 33.65         | 4.4         | 42.06           | 8.1         |
| HLCW-25-1  | 18.60    | 65.4  | 44.64         | 5.2         | 55.80           | 13.8        |
| HLCW-30-1  | 21.50    | 75.6  | 51.60         | 7.9         | 64.51           | 7.9         |
| HLCW-35-1  | 27.87    | 98    | 66.89         | 6.9         | 83.62           | 8.4         |
| HLCW-40-1  | 32.00    | 112.5 | 76.79         | 6.6         | 95.99           | 9.7         |
| HLCW-50-1  | 38.48    | 135.3 | 92.35         | 8.4         | 115.44          | 10.6        |
| HLCW-20-2  | 17.24    | 60.6  | 41.37         | 7.5         | 51.71           | 6.4         |
| HLCW-30-2  | 23.83    | 83.8  | 57.20         | 10.0        | 71.50           | 7.9         |
| HLCW-40-2  | 28.04    | 98.6  | 67.30         | 8.7         | 84.13           | 8.1         |
| HLCW-50-2  | 37.20    | 130.8 | 89.28         | 13.3        | 111.60          | 13.8        |
| HLCW-60-2  | 43.00    | 151.2 | 103.21        | 12.4        | 129.01          | 8.0         |
| HLCW-70-2  | 55.75    | 196   | 133.79        | 12.2        | 167.24          | 9.5         |
| HLCW-80-2  | 63.99    | 225   | 153.58        | 11.7        | 191.98          | 9.7         |
| HLCW-100-2 | 76.96    | 270.6 | 184.71        | 10.4        | 230.89          | 10.6        |
| HLCW-60-3  | 42.06    | 147.9 | 100.96        | 12.4        | 126.19          | 8.3         |
| HLCW-75-3  | 55.80    | 196.2 | 133.92        | 14.3        | 167.41          | 13.8        |
| HLCW-90-3  | 64.51    | 226.8 | 154.81        | 14.2        | 193.52          | 7.9         |
| HLCW-105-3 | 83.62    | 294   | 200.68        | 11.4        | 250.85          | 8.8         |
| HLCW-120-3 | 95.99    | 337.5 | 230.38        | 12.8        | 287.97          | 9.7         |
| HLCW-150-3 | 115.44   | 405.9 | 277.06        | 12.1        | 346.33          | 9.8         |
| HLCW-80-4  | 56.09    | 197.2 | 134.61        | 9.3         | 168.26          | 4.2         |
| HLCW-100-4 | 74.40    | 261.6 | 178.57        | 10.2        | 223.21          | 4.4         |
| HLCW-120-4 | 86.01    | 302.4 | 206.42        | 12.6        | 258.02          | 4.6         |
| HLCW-140-4 | 111.49   | 392   | 267.58        | 12.7        | 334.47          | 4.5         |
| HLCW-160-4 | 127.99   | 450   | 307.17        | 15.9        | 383.96          | 5.8         |
| HLCW-200-4 | 153.92   | 541.2 | 369.42        | 14.9        | 461.77          | 6.7         |
| HLCW-240-6 | 191.98   | 675   | 460.75        | 15.3        | 575.94          | 9.9         |
| HLCW-300-6 | 230.89   | 811.8 | 554.13        | 13.9        | 692.66          | 9.6         |

# CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |             | CONDENSER WATER |             |
|------------|----------|-------|---------------|-------------|-----------------|-------------|
|            |          |       | GPM           | P.D FT OF W | GPM             | P.D FT OF W |
| HLCW-5-1   | 4.36     | 15.34 | 10.47         | 2.1         | 13.09           | 4.5         |
| HLCW-10-1  | 8.82     | 31    | 21.16         | 3.0         | 26.45           | 9.7         |
| HLCW-15-1  | 12.20    | 42.9  | 29.28         | 3.4         | 36.60           | 8.1         |
| HLCW-20-1  | 14.33    | 50.4  | 34.40         | 4.6         | 43.00           | 8.4         |
| HLCW-25-1  | 19.03    | 66.9  | 45.67         | 5.4         | 57.08           | 14.4        |
| HLCW-30-1  | 22.01    | 77.4  | 52.83         | 8.3         | 66.04           | 8.2         |
| HLCW-35-1  | 28.53    | 100.3 | 68.46         | 7.8         | 85.58           | 9.7         |
| HLCW-40-1  | 32.76    | 115.2 | 78.63         | 6.9         | 98.29           | 10.1        |
| HLCW-50-1  | 39.36    | 138.4 | 94.47         | 8.4         | 118.09          | 12.6        |
| HLCW-20-2  | 17.63    | 62    | 42.32         | 11.3        | 52.90           | 7.6         |
| HLCW-30-2  | 24.40    | 85.8  | 58.57         | 10.4        | 73.21           | 8.1         |
| HLCW-40-2  | 28.67    | 100.8 | 68.81         | 8.9         | 86.01           | 8.4         |
| HLCW-50-2  | 38.05    | 133.8 | 91.33         | 13.9        | 114.16          | 14.6        |
| HLCW-60-2  | 44.03    | 154.8 | 105.67        | 12.8        | 132.08          | 8.2         |
| HLCW-70-2  | 57.05    | 200.6 | 136.93        | 12.8        | 171.16          | 9.8         |
| HLCW-80-2  | 65.53    | 230.4 | 157.27        | 12.2        | 196.59          | 10.1        |
| HLCW-100-2 | 78.73    | 276.8 | 188.94        | 11.9        | 236.18          | 9.9         |
| HLCW-60-3  | 43.00    | 151.2 | 103.21        | 8.7         | 129.01          | 8.7         |
| HLCW-75-3  | 57.08    | 200.7 | 137.00        | 14.3        | 171.25          | 14.3        |
| HLCW-90-3  | 66.04    | 232.2 | 158.50        | 8.2         | 198.12          | 8.2         |
| HLCW-105-3 | 85.58    | 300.9 | 205.39        | 12.6        | 256.74          | 9.6         |
| HLCW-120-3 | 98.29    | 345.6 | 235.90        | 13.5        | 294.88          | 10.1        |
| HLCW-150-3 | 118.09   | 415.2 | 283.41        | 13.9        | 354.27          | 9.8         |
| HLCW-80-4  | 57.34    | 201.6 | 137.61        | 10.0        | 172.01          | 4.4         |
| HLCW-100-4 | 76.11    | 267.6 | 182.66        | 10.7        | 228.33          | 4.5         |
| HLCW-120-4 | 88.05    | 309.6 | 211.33        | 13.1        | 264.16          | 4.7         |
| HLCW-140-4 | 114.11   | 401.2 | 273.86        | 13.2        | 342.32          | 4.6         |
| HLCW-160-4 | 131.06   | 460.8 | 314.54        | 16.6        | 393.17          | 6.0         |
| HLCW-200-4 | 157.45   | 553.6 | 377.88        | 16.4        | 472.35          | 6.8         |
| HLCW-240-6 | 196.59   | 691.2 | 471.81        | 17.2        | 589.76          | 10.8        |
| HLCW-300-6 | 236.18   | 830.4 | 566.83        | 16.9        | 708.53          | 10.6        |

# CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |             | CONDENSER WATER |             |
|------------|----------|-------|---------------|-------------|-----------------|-------------|
|            |          |       | GPM           | P.D FT OF W | GPM             | P.D FT OF W |
| HLCW-5-1   | 4.40     | 15.46 | 10.55         | 2.3         | 13.19           | 4.8         |
| HLCW-10-1  | 8.87     | 31.2  | 21.30         | 3.2         | 26.62           | 10.4        |
| HLCW-15-1  | 12.32    | 43.3  | 29.56         | 3.7         | 36.95           | 8.7         |
| HLCW-20-1  | 14.45    | 50.8  | 34.68         | 5.2         | 43.34           | 9.1         |
| HLCW-25-1  | 19.17    | 67.4  | 46.01         | 6.1         | 57.51           | 15.7        |
| HLCW-30-1  | 22.18    | 78    | 53.24         | 9.3         | 66.55           | 8.9         |
| HLCW-35-1  | 28.75    | 101.1 | 69.01         | 8.4         | 86.26           | 9.6         |
| HLCW-40-1  | 33.02    | 116.1 | 79.25         | 7.6         | 99.06           | 10.8        |
| HLCW-50-1  | 39.68    | 139.5 | 95.22         | 7.4         | 119.03          | 11.2        |
| HLCW-20-2  | 17.75    | 62.4  | 42.59         | 11.6        | 53.24           | 8.2         |
| HLCW-30-2  | 24.63    | 86.6  | 59.11         | 11.8        | 73.89           | 8.7         |
| HLCW-40-2  | 28.90    | 101.6 | 69.35         | 10.2        | 86.69           | 9.2         |
| HLCW-50-2  | 38.34    | 134.8 | 92.01         | 15.9        | 115.02          | 15.9        |
| HLCW-60-2  | 44.37    | 156   | 106.48        | 14.6        | 133.11          | 8.9         |
| HLCW-70-2  | 57.51    | 202.2 | 138.02        | 14.3        | 172.53          | 10.7        |
| HLCW-80-2  | 66.04    | 232.2 | 158.50        | 13.7        | 198.12          | 11.0        |
| HLCW-100-2 | 79.35    | 279   | 190.44        | 14.1        | 238.05          | 11.6        |
| HLCW-60-3  | 43.34    | 152.4 | 104.03        | 14.6        | 130.03          | 9.5         |
| HLCW-75-3  | 57.51    | 202.2 | 138.02        | 17.0        | 172.53          | 15.7        |
| HLCW-90-3  | 66.55    | 234   | 159.73        | 16.6        | 199.66          | 8.9         |
| HLCW-105-3 | 86.26    | 303.3 | 207.03        | 14.2        | 258.79          | 10.1        |
| HLCW-120-3 | 99.06    | 348.3 | 237.75        | 15.0        | 297.18          | 10.9        |
| HLCW-150-3 | 119.03   | 418.5 | 285.67        | 15.6        | 357.08          | 11.7        |
| HLCW-80-4  | 57.79    | 203.2 | 138.70        | 12.0        | 173.38          | 4.8         |
| HLCW-100-4 | 76.68    | 269.6 | 184.03        | 12.2        | 230.03          | 4.9         |
| HLCW-120-4 | 88.74    | 312   | 212.97        | 14.8        | 266.21          | 5.1         |
| HLCW-140-4 | 115.02   | 404.4 | 276.04        | 13.2        | 345.05          | 4.6         |
| HLCW-160-4 | 132.08   | 464.4 | 317.00        | 16.6        | 396.25          | 6.0         |
| HLCW-200-4 | 158.70   | 558   | 380.89        | 17.0        | 476.11          | 6.8         |
| HLCW-240-6 | 198.12   | 696.6 | 475.49        | 17.6        | 594.37          | 10.8        |
| HLCW-300-6 | 238.05   | 837   | 571.33        | 18.3        | 714.16          | 11.6        |

# CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |             | CONDENSER WATER |             |
|------------|----------|-------|---------------|-------------|-----------------|-------------|
|            |          |       | GPM           | P.D FT OF W | GPM             | P.D FT OF W |
| HLCW-5-1   | 3.92     | 13.78 | 9.41          | 1.6         | 11.76           | 3.8         |
| HLCW-10-1  | 7.94     | 27.9  | 19.04         | 2.5         | 23.81           | 8.4         |
| HLCW-15-1  | 11.01    | 38.7  | 26.42         | 2.7         | 33.02           | 7.0         |
| HLCW-20-1  | 12.94    | 45.5  | 31.06         | 3.7         | 38.82           | 7.1         |
| HLCW-25-1  | 17.18    | 60.4  | 41.23         | 4.4         | 51.54           | 12.3        |
| HLCW-30-1  | 19.91    | 70    | 47.78         | 6.7         | 59.73           | 7.0         |
| HLCW-35-1  | 25.77    | 90.6  | 61.84         | 5.9         | 77.30           | 7.7         |
| HLCW-40-1  | 29.58    | 104   | 70.99         | 5.6         | 88.74           | 8.6         |
| HLCW-50-1  | 35.61    | 125.2 | 85.46         | 5.2         | 106.83          | 9.8         |
| HLCW-20-2  | 15.87    | 55.8  | 38.09         | 9.4         | 47.61           | 7.0         |
| HLCW-30-2  | 22.01    | 77.4  | 52.83         | 8.4         | 66.04           | 7.1         |
| HLCW-40-2  | 25.88    | 91    | 62.12         | 7.3         | 77.65           | 7.2         |
| HLCW-50-2  | 34.36    | 120.8 | 82.46         | 11.3        | 103.07          | 12.3        |
| HLCW-60-2  | 39.82    | 140   | 95.56         | 10.4        | 119.45          | 7.0         |
| HLCW-70-2  | 51.54    | 181.2 | 123.69        | 10.4        | 154.61          | 8.5         |
| HLCW-80-2  | 59.16    | 208   | 141.98        | 10.0        | 177.47          | 8.7         |
| HLCW-100-2 | 71.22    | 250.4 | 170.92        | 9.8         | 213.65          | 8.8         |
| HLCW-60-3  | 38.82    | 136.5 | 93.17         | 10.4        | 116.47          | 7.3         |
| HLCW-75-3  | 51.54    | 181.2 | 123.69        | 12.2        | 154.61          | 12.2        |
| HLCW-90-3  | 59.73    | 210   | 143.34        | 11.9        | 179.18          | 7.0         |
| HLCW-105-3 | 77.30    | 271.8 | 185.53        | 10.4        | 231.91          | 8.4         |
| HLCW-120-3 | 88.74    | 312   | 212.97        | 10.9        | 266.21          | 8.6         |
| HLCW-150-3 | 106.83   | 375.6 | 256.38        | 11.4        | 320.48          | 8.9         |
| HLCW-80-4  | 51.76    | 182   | 124.23        | 10.2        | 155.29          | 3.9         |
| HLCW-100-4 | 68.71    | 241.6 | 164.91        | 8.7         | 206.14          | 3.9         |
| HLCW-120-4 | 79.64    | 280   | 191.13        | 10.6        | 238.91          | 4.1         |
| HLCW-140-4 | 103.07   | 362.4 | 247.37        | 10.8        | 309.22          | 4.0         |
| HLCW-160-4 | 118.32   | 416   | 283.96        | 13.5        | 354.95          | 5.1         |
| HLCW-200-4 | 142.43   | 500.8 | 341.84        | 14.6        | 427.30          | 5.6         |
| HLCW-240-6 | 177.47   | 624   | 425.94        | 12.6        | 532.42          | 8.9         |
| HLCW-300-6 | 213.65   | 751.2 | 512.76        | 14.3        | 640.96          | 9.6         |

# CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |             | CONDENSER WATER |             |
|------------|----------|-------|---------------|-------------|-----------------|-------------|
|            |          |       | GPM           | P.D FT OF W | GPM             | P.D FT OF W |
| HLCW-5-1   | 4.09     | 14.39 | 9.82          | 1.8         | 12.28           | 4.1         |
| HLCW-10-1  | 8.30     | 29.2  | 19.93         | 2.6         | 24.91           | 9.0         |
| HLCW-15-1  | 11.49    | 40.4  | 27.58         | 3.0         | 34.47           | 7.5         |
| HLCW-20-1  | 13.51    | 47.5  | 32.42         | 4.1         | 40.53           | 7.7         |
| HLCW-25-1  | 17.95    | 63.1  | 43.07         | 4.8         | 53.84           | 13.2        |
| HLCW-30-1  | 20.76    | 73    | 49.83         | 7.3         | 62.29           | 7.5         |
| HLCW-35-1  | 26.91    | 94.6  | 64.57         | 6.9         | 80.72           | 9.7         |
| HLCW-40-1  | 30.89    | 108.6 | 74.13         | 6.1         | 92.66           | 9.3         |
| HLCW-50-1  | 37.17    | 130.7 | 89.22         | 6.0         | 111.52          | 9.0         |
| HLCW-20-2  | 16.61    | 58.4  | 39.86         | 9.6         | 49.83           | 7.4         |
| HLCW-30-2  | 22.98    | 80.8  | 55.15         | 9.4         | 68.94           | 7.5         |
| HLCW-40-2  | 27.02    | 95    | 64.85         | 8.0         | 81.06           | 7.7         |
| HLCW-50-2  | 35.89    | 126.2 | 86.14         | 12.4        | 107.68          | 13.3        |
| HLCW-60-2  | 41.52    | 146   | 99.66         | 11.4        | 124.57          | 7.5         |
| HLCW-70-2  | 53.81    | 189.2 | 129.15        | 11.3        | 161.43          | 9.0         |
| HLCW-80-2  | 61.77    | 217.2 | 148.26        | 10.8        | 185.32          | 9.3         |
| HLCW-100-2 | 74.35    | 261.4 | 178.43        | 10.5        | 223.04          | 9.6         |
| HLCW-60-3  | 40.53    | 142.5 | 97.27         | 11.4        | 121.59          | 7.9         |
| HLCW-75-3  | 53.84    | 189.3 | 129.22        | 13.2        | 161.52          | 13.2        |
| HLCW-90-3  | 62.29    | 219   | 149.49        | 12.9        | 186.86          | 7.5         |
| HLCW-105-3 | 80.72    | 283.8 | 193.72        | 11.5        | 242.15          | 8.8         |
| HLCW-120-3 | 92.66    | 325.8 | 222.39        | 12.1        | 277.99          | 9.2         |
| HLCW-150-3 | 111.52   | 392.1 | 267.65        | 12.8        | 334.56          | 9.9         |
| HLCW-80-4  | 54.04    | 190   | 129.69        | 10.1        | 162.12          | 3.9         |
| HLCW-100-4 | 71.79    | 252.4 | 172.29        | 9.4         | 215.36          | 4.1         |
| HLCW-120-4 | 83.05    | 292   | 199.32        | 11.5        | 249.15          | 4.3         |
| HLCW-140-4 | 107.62   | 378.4 | 258.29        | 11.8        | 322.87          | 4.3         |
| HLCW-160-4 | 123.55   | 434.4 | 296.52        | 14.7        | 370.65          | 5.5         |
| HLCW-200-4 | 148.69   | 522.8 | 356.86        | 15.1        | 446.08          | 6.2         |
| HLCW-240-6 | 185.32   | 651.6 | 444.78        | 14.2        | 555.97          | 9.7         |
| HLCW-300-6 | 223.04   | 784.2 | 535.29        | 14.8        | 669.11          | 9.9         |

# CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C

| TABLE-1-LEAVING CHILLED WATER TEMP.=7,2°C |          |       |               |             |                 |             |
|---|----------|-------|---------------|-------------|-----------------|-------------|
| MODEL NO.                                 | CAP TONS | KW    | CHILLED WATER |             | CONDENSER WATER |             |
|   |          |       | GPM           | P.D FT OF W | GPM             | P.D FT OF W |
| HLCW-5-1                                  | 4.19     | 14.73 | 10.05         | 1.9         | 12.57           | 4.2         |
| HLCW-10-1                                 | 8.50     | 29.9  | 20.41         | 2.7         | 25.51           | 9.3         |
| HLCW-15-1                                 | 11.77    | 41.4  | 28.26         | 3.1         | 35.32           | 7.8         |
| HLCW-20-1                                 | 13.82    | 48.6  | 33.17         | 4.2         | 41.47           | 8.0         |
| HLCW-25-1                                 | 18.37    | 64.6  | 44.10         | 5.0         | 55.12           | 13.7        |
| HLCW-30-1                                 | 21.27    | 74.8  | 51.06         | 7.6         | 63.82           | 7.8         |
| HLCW-35-1                                 | 27.56    | 96.9  | 66.14         | 6.9         | 82.68           | 8.7         |
| HLCW-40-1                                 | 31.63    | 111.2 | 75.90         | 6.6         | 94.88           | 9.9         |
| HLCW-50-1                                 | 38.03    | 133.7 | 91.26         | 6.1         | 114.08          | 10.1        |
| HLCW-20-2                                 | 17.01    | 59.8  | 40.82         | 9.9         | 51.02           | 7.6         |
| HLCW-30-2                                 | 23.55    | 82.8  | 56.52         | 9.7         | 70.65           | 7.9         |
| HLCW-40-2                                 | 27.65    | 97.2  | 66.35         | 8.2         | 82.94           | 8.1         |
| HLCW-50-2                                 | 36.75    | 129.2 | 88.19         | 13.0        | 110.24          | 13.8        |
| HLCW-60-2                                 | 42.55    | 149.6 | 102.12        | 11.9        | 127.65          | 7.8         |
| HLCW-70-2                                 | 55.12    | 193.8 | 132.29        | 11.7        | 165.36          | 9.4         |
| HLCW-80-2                                 | 63.25    | 222.4 | 151.81        | 11.7        | 189.76          | 9.9         |
| HLCW-100-2                                | 76.05    | 267.4 | 182.53        | 11.5        | 228.16          | 10.2        |
| HLCW-60-3                                 | 41.47    | 145.8 | 99.52         | 11.9        | 124.40          | 8.2         |
| HLCW-75-3                                 | 55.12    | 193.8 | 132.29        | 13.9        | 165.36          | 13.7        |
| HLCW-90-3                                 | 63.82    | 224.4 | 153.17        | 13.6        | 191.47          | 7.8         |
| HLCW-105-3                                | 82.68    | 290.7 | 198.43        | 11.9        | 248.04          | 9.0         |
| HLCW-120-3                                | 94.88    | 333.6 | 227.71        | 12.8        | 284.64          | 9.9         |
| HLCW-150-3                                | 114.08   | 401.1 | 273.79        | 13.8        | 342.24          | 10.6        |
| HLCW-80-4                                 | 55.29    | 194.4 | 132.70        | 9.8         | 165.87          | 3.9         |
| HLCW-100-4                                | 73.49    | 258.4 | 176.38        | 9.9         | 220.48          | 4.3         |
| HLCW-120-4                                | 85.10    | 299.2 | 204.23        | 12.0        | 255.29          | 4.5         |
| HLCW-140-4                                | 110.24   | 387.6 | 264.57        | 12.3        | 330.72          | 4.4         |
| HLCW-160-4                                | 126.51   | 444.8 | 303.62        | 15.8        | 379.52          | 5.8         |
| HLCW-200-4                                | 152.10   | 534.8 | 365.05        | 16.2        | 456.31          | 6.3         |
| HLCW-240-6                                | 189.76   | 667.2 | 455.43        | 15.5        | 569.28          | 10.2        |
| HLCW-300-6                                | 228.16   | 802.2 | 547.58        | 16.5        | 684.47          | 10.4        |

# CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |             | CONDENSER WATER |             |
|------------|----------|-------|---------------|-------------|-----------------|-------------|
|            |          |       | GPM           | P.D FT OF W | GPM             | P.D FT OF W |
| HLCW-5-1   | 4.22     | 14.85 | 10.14         | 2.0         | 12.67           | 4.4         |
| HLCW-10-1  | 8.56     | 30.1  | 20.55         | 2.8         | 25.68           | 9.6         |
| HLCW-15-1  | 11.86    | 41.7  | 28.46         | 3.3         | 35.58           | 8.1         |
| HLCW-20-1  | 13.94    | 49    | 33.45         | 4.4         | 41.81           | 8.3         |
| HLCW-25-1  | 18.52    | 65.1  | 44.44         | 5.2         | 55.55           | 14.2        |
| HLCW-30-1  | 21.42    | 75.3  | 51.40         | 6.0         | 64.25           | 12.4        |
| HLCW-35-1  | 27.76    | 97.6  | 66.62         | 6.9         | 83.28           | 9.7         |
| HLCW-40-1  | 31.88    | 112.1 | 76.52         | 6.7         | 95.65           | 10.0        |
| HLCW-50-1  | 38.34    | 134.8 | 92.01         | 6.5         | 115.02          | 10.8        |
| HLCW-20-2  | 17.12    | 60.2  | 41.09         | 10.1        | 51.37           | 7.9         |
| HLCW-30-2  | 23.72    | 83.4  | 56.93         | 10.4        | 71.16           | 8.1         |
| HLCW-40-2  | 27.87    | 98    | 66.89         | 8.7         | 83.62           | 8.2         |
| HLCW-50-2  | 37.03    | 130.2 | 88.87         | 13.6        | 111.09          | 14.3        |
| HLCW-60-2  | 42.83    | 150.6 | 102.80        | 12.4        | 128.50          | 8.1         |
| HLCW-70-2  | 55.52    | 195.2 | 133.24        | 12.2        | 166.55          | 9.7         |
| HLCW-80-2  | 63.77    | 224.2 | 153.04        | 11.8        | 191.30          | 10.1        |
| HLCW-100-2 | 76.68    | 269.6 | 184.03        | 11.6        | 230.03          | 10.8        |
| HLCW-60-3  | 41.81    | 147   | 100.34        | 12.4        | 125.43          | 8.6         |
| HLCW-75-3  | 55.55    | 195.3 | 133.31        | 14.5        | 166.64          | 14.3        |
| HLCW-90-3  | 64.25    | 225.9 | 154.20        | 14.2        | 192.75          | 8.1         |
| HLCW-105-3 | 83.28    | 292.8 | 199.86        | 12.4        | 249.83          | 9.2         |
| HLCW-120-3 | 95.65    | 336.3 | 229.56        | 13.1        | 286.95          | 10.0        |
| HLCW-150-3 | 115.02   | 404.4 | 276.04        | 13.9        | 345.05          | 10.8        |
| HLCW-80-4  | 55.75    | 196   | 133.79        | 10.1        | 167.24          | 4.5         |
| HLCW-100-4 | 74.06    | 260.4 | 177.75        | 10.3        | 222.18          | 4.5         |
| HLCW-120-4 | 85.67    | 301.2 | 205.60        | 12.5        | 257.00          | 4.6         |
| HLCW-140-4 | 111.04   | 390.4 | 266.48        | 12.7        | 333.11          | 4.6         |
| HLCW-160-4 | 127.53   | 448.4 | 306.08        | 16.1        | 382.59          | 5.9         |
| HLCW-200-4 | 153.36   | 539.2 | 368.05        | 16.8        | 460.07          | 6.6         |
| HLCW-240-6 | 191.30   | 672.6 | 459.11        | 16.2        | 573.89          | 10.4        |
| HLCW-300-6 | 230.03   | 808.8 | 552.08        | 17.4        | 690.10          | 10.6        |

# CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |            | CONDENSER WATER |            |
|------------|----------|-------|---------------|------------|-----------------|------------|
|            |          |       | GPM           | P.D FTOF W | GPM             | P.D FTOF W |
| HLCW-5-1   | 3.76     | 13.22 | 9.02          | 1.5        | 11.28           | 3.6        |
| HLCW-10-1  | 7.65     | 26.9  | 18.36         | 2.3        | 22.95           | 8.1        |
| HLCW-15-1  | 10.58    | 37.2  | 25.39         | 2.6        | 31.74           | 6.7        |
| HLCW-20-1  | 12.46    | 43.8  | 29.90         | 3.4        | 37.37           | 6.9        |
| HLCW-25-1  | 16.55    | 58.2  | 39.73         | 4.1        | 49.66           | 11.6       |
| HLCW-30-1  | 19.20    | 67.5  | 46.08         | 6.2        | 57.59           | 6.7        |
| HLCW-35-1  | 24.86    | 87.4  | 59.66         | 5.6        | 74.57           | 7.4        |
| HLCW-40-1  | 28.53    | 100.3 | 68.46         | 5.2        | 85.58           | 8.2        |
| HLCW-50-1  | 34.33    | 120.7 | 82.39         | 5.0        | 102.99          | 8.9        |
| HLCW-20-2  | 15.30    | 53.8  | 36.72         | 7.9        | 45.90           | 6.6        |
| HLCW-30-2  | 21.16    | 74.4  | 50.78         | 8.1        | 63.48           | 6.7        |
| HLCW-40-2  | 24.91    | 87.6  | 59.80         | 6.6        | 74.74           | 6.8        |
| HLCW-50-2  | 33.11    | 116.4 | 79.45         | 10.5       | 99.32           | 11.7       |
| HLCW-60-2  | 38.40    | 135   | 92.15         | 9.7        | 115.19          | 6.7        |
| HLCW-70-2  | 49.72    | 174.8 | 119.32        | 9.6        | 149.15          | 8.1        |
| HLCW-80-2  | 57.05    | 200.6 | 136.93        | 9.2        | 171.16          | 8.3        |
| HLCW-100-2 | 68.66    | 241.4 | 164.78        | 9.0        | 205.97          | 8.7        |
| HLCW-60-3  | 37.37    | 131.4 | 89.69         | 9.7        | 112.12          | 7.1        |
| HLCW-75-3  | 49.66    | 174.6 | 119.18        | 11.2       | 148.98          | 11.6       |
| HLCW-90-3  | 57.59    | 202.5 | 138.23        | 11.0       | 172.78          | 6.7        |
| HLCW-105-3 | 74.57    | 262.2 | 178.98        | 9.7        | 223.72          | 7.8        |
| HLCW-120-3 | 85.58    | 300.9 | 205.39        | 10.2       | 256.74          | 8.2        |
| HLCW-150-3 | 102.99   | 362.1 | 247.17        | 10.9       | 308.96          | 8.9        |
| HLCW-80-4  | 49.83    | 175.2 | 119.59        | 7.9        | 149.49          | 3.3        |
| HLCW-100-4 | 66.21    | 232.8 | 158.91        | 8.0        | 198.63          | 3.6        |
| HLCW-120-4 | 76.79    | 270   | 184.30        | 9.8        | 230.38          | 3.9        |
| HLCW-140-4 | 99.43    | 349.6 | 238.63        | 10.0       | 298.29          | 3.8        |
| HLCW-160-4 | 114.11   | 401.2 | 273.86        | 12.5       | 342.32          | 4.9        |
| HLCW-200-4 | 137.32   | 482.8 | 329.56        | 14.3       | 411.95          | 4.8        |
| HLCW-240-6 | 171.16   | 601.8 | 410.78        | 11.9       | 513.48          | 8.8        |
| HLCW-300-6 | 205.97   | 724.2 | 494.33        | 14.6       | 617.92          | 9.6        |

# CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |             | CONDENSER WATER |             |
|------------|----------|-------|---------------|-------------|-----------------|-------------|
|            |          |       | GPM           | P.D FT OF W | GPM             | P.D FT OF W |
| HLCW-5-1   | 3.93     | 13.81 | 9.43          | 1.6         | 11.78           | 3.9         |
| HLCW-10-1  | 7.99     | 28.1  | 19.18         | 2.5         | 23.98           | 8.7         |
| HLCW-15-1  | 11.06    | 38.9  | 26.55         | 2.8         | 33.19           | 7.2         |
| HLCW-20-1  | 13.00    | 45.7  | 31.19         | 3.7         | 38.99           | 7.4         |
| HLCW-25-1  | 17.29    | 60.8  | 41.50         | 4.4         | 51.88           | 12.5        |
| HLCW-30-1  | 20.05    | 70.5  | 48.12         | 6.7         | 60.15           | 7.1         |
| HLCW-35-1  | 25.94    | 91.2  | 62.25         | 6.1         | 77.82           | 8.0         |
| HLCW-40-1  | 29.78    | 104.7 | 71.47         | 5.6         | 89.33           | 8.9         |
| HLCW-50-1  | 35.84    | 126   | 86.01         | 5.4         | 107.51          | 8.8         |
| HLCW-20-2  | 15.98    | 56.2  | 38.36         | 8.9         | 47.95           | 6.8         |
| HLCW-30-2  | 22.13    | 77.8  | 53.11         | 8.7         | 66.38           | 7.3         |
| HLCW-40-2  | 26.00    | 91.4  | 62.39         | 7.3         | 77.99           | 7.3         |
| HLCW-50-2  | 34.58    | 121.6 | 83.00         | 11.3        | 103.75          | 12.6        |
| HLCW-60-2  | 40.10    | 141   | 96.25         | 10.4        | 120.31          | 7.1         |
| HLCW-70-2  | 51.88    | 182.4 | 124.51        | 10.6        | 155.63          | 8.8         |
| HLCW-80-2  | 59.56    | 209.4 | 142.94        | 10.1        | 178.67          | 9.0         |
| HLCW-100-2 | 71.67    | 252   | 172.01        | 11.5        | 215.02          | 9.8         |
| HLCW-60-3  | 38.99    | 137.1 | 93.58         | 10.6        | 116.98          | 7.6         |
| HLCW-75-3  | 51.88    | 182.4 | 124.51        | 12.2        | 155.63          | 12.5        |
| HLCW-90-3  | 60.15    | 211.5 | 144.37        | 11.9        | 180.46          | 7.1         |
| HLCW-105-3 | 77.82    | 273.6 | 186.76        | 10.7        | 233.45          | 8.0         |
| HLCW-120-3 | 89.33    | 314.1 | 214.40        | 11.1        | 268.00          | 9.0         |
| HLCW-150-3 | 107.51   | 378   | 258.02        | 12.2        | 322.53          | 9.8         |
| HLCW-80-4  | 51.99    | 182.8 | 124.78        | 6.8         | 155.97          | 3.8         |
| HLCW-100-4 | 69.17    | 243.2 | 166.01        | 8.7         | 207.51          | 3.9         |
| HLCW-120-4 | 80.20    | 282   | 192.49        | 10.6        | 240.61          | 4.1         |
| HLCW-140-4 | 103.75   | 364.8 | 249.01        | 11.1        | 311.26          | 4.1         |
| HLCW-160-4 | 119.11   | 418.8 | 285.87        | 13.8        | 357.34          | 5.3         |
| HLCW-200-4 | 143.34   | 504   | 344.03        | 15.2        | 430.03          | 5.9         |
| HLCW-240-6 | 178.67   | 628.2 | 428.81        | 13.0        | 536.01          | 9.4         |
| HLCW-300-6 | 215.02   | 756   | 516.04        | 13.6        | 645.05          | 9.6         |

# CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |             | CONDENSER WATER |             |
|------------|----------|-------|---------------|-------------|-----------------|-------------|
|            |          |       | GPM           | P.D FT OF W | GPM             | P.D FT OF W |
| HLCW-5-1   | 4.02     | 14.14 | 9.65          | 1.7         | 12.06           | 4.0         |
| HLCW-10-1  | 8.19     | 28.8  | 19.66         | 2.6         | 24.57           | 9.0         |
| HLCW-15-1  | 11.32    | 39.8  | 27.17         | 2.9         | 33.96           | 7.4         |
| HLCW-20-1  | 13.34    | 46.9  | 32.01         | 3.9         | 40.02           | 7.6         |
| HLCW-25-1  | 17.72    | 62.3  | 42.53         | 4.6         | 53.16           | 13.0        |
| HLCW-30-1  | 20.51    | 72.1  | 49.22         | 6.9         | 61.52           | 7.4         |
| HLCW-35-1  | 26.56    | 93.4  | 63.75         | 6.2         | 79.69           | 8.4         |
| HLCW-40-1  | 30.49    | 107.2 | 73.17         | 5.9         | 91.47           | 9.2         |
| HLCW-50-1  | 36.69    | 129   | 88.05         | 5.1         | 110.07          | 10.0        |
| HLCW-20-2  | 16.38    | 57.6  | 39.32         | 9.8         | 49.15           | 7.2         |
| HLCW-30-2  | 22.64    | 79.6  | 54.33         | 9.0         | 67.92           | 7.5         |
| HLCW-40-2  | 26.68    | 93.8  | 64.03         | 7.5         | 80.03           | 7.5         |
| HLCW-50-2  | 35.44    | 124.6 | 85.05         | 11.9        | 106.31          | 13.1        |
| HLCW-60-2  | 41.01    | 144.2 | 98.43         | 10.8        | 123.04          | 7.4         |
| HLCW-70-2  | 53.13    | 186.8 | 127.51        | 11.0        | 159.39          | 9.0         |
| HLCW-80-2  | 60.98    | 214.4 | 146.35        | 10.5        | 182.94          | 9.2         |
| HLCW-100-2 | 73.38    | 258   | 176.11        | 10.1        | 220.14          | 9.6         |
| HLCW-60-3  | 40.02    | 140.7 | 96.04         | 11.0        | 120.05          | 7.8         |
| HLCW-75-3  | 53.16    | 186.9 | 127.58        | 12.8        | 159.47          | 13.0        |
| HLCW-90-3  | 61.52    | 216.3 | 147.65        | 12.4        | 184.56          | 7.4         |
| HLCW-105-3 | 79.69    | 280.2 | 191.26        | 11.1        | 239.08          | 8.5         |
| HLCW-120-3 | 91.47    | 321.6 | 219.52        | 11.5        | 274.40          | 9.2         |
| HLCW-150-3 | 110.07   | 387   | 264.16        | 12.6        | 330.20          | 9.9         |
| HLCW-80-4  | 53.36    | 187.6 | 128.05        | 8.7         | 160.07          | 3.9         |
| HLCW-100-4 | 70.88    | 249.2 | 170.10        | 9.1         | 212.63          | 4.1         |
| HLCW-120-4 | 82.03    | 288.4 | 196.86        | 11.1        | 246.08          | 4.3         |
| HLCW-140-4 | 106.26   | 373.6 | 255.02        | 11.4        | 318.77          | 4.3         |
| HLCW-160-4 | 121.96   | 428.8 | 292.70        | 14.3        | 365.87          | 5.5         |
| HLCW-200-4 | 146.76   | 516   | 352.22        | 14.8        | 440.27          | 6.4         |
| HLCW-240-6 | 182.94   | 643.2 | 439.04        | 14.1        | 548.81          | 9.8         |
| HLCW-300-6 | 220.14   | 774   | 528.33        | 15.2        | 660.41          | 10.5        |

# CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C

| MODEL NO.  | CAP TONS | KW    | CHILLED WATER |             | CONDENSER WATER |             |
|------------|----------|-------|---------------|-------------|-----------------|-------------|
|            |          |       | GPM           | P.D FT OF W | GPM             | P.D FT OF W |
| HLCW-5-1   | 4.05     | 14.25 | 9.73          | 1.8         | 12.16           | 4.2         |
| HLCW-10-1  | 8.25     | 29    | 19.80         | 2.7         | 24.74           | 9.3         |
| HLCW-15-1  | 11.41    | 40.1  | 27.37         | 3.1         | 34.22           | 7.7         |
| HLCW-20-1  | 13.42    | 47.2  | 32.22         | 4.1         | 40.27           | 7.9         |
| HLCW-25-1  | 17.86    | 62.8  | 42.87         | 4.8         | 53.58           | 13.5        |
| HLCW-30-1  | 20.68    | 72.7  | 49.62         | 7.2         | 62.03           | 7.6         |
| HLCW-35-1  | 26.79    | 94.2  | 64.30         | 6.9         | 80.38           | 8.7         |
| HLCW-40-1  | 30.75    | 108.1 | 73.79         | 6.1         | 92.24           | 9.5         |
| HLCW-50-1  | 36.97    | 130   | 88.74         | 5.4         | 110.92          | 10.8        |
| HLCW-20-2  | 16.50    | 58    | 39.59         | 9.8         | 49.49           | 7.4         |
| HLCW-30-2  | 22.81    | 80.2  | 54.74         | 9.4         | 68.43           | 7.7         |
| HLCW-40-2  | 26.85    | 94.4  | 64.44         | 8.0         | 80.55           | 7.9         |
| HLCW-50-2  | 35.72    | 125.6 | 85.73         | 12.4        | 107.17          | 13.6        |
| HLCW-60-2  | 41.35    | 145.4 | 99.25         | 11.2        | 124.06          | 7.6         |
| HLCW-70-2  | 53.58    | 188.4 | 128.60        | 11.3        | 160.75          | 9.3         |
| HLCW-80-2  | 61.49    | 216.2 | 147.58        | 11.0        | 184.47          | 9.5         |
| HLCW-100-2 | 73.95    | 260   | 177.47        | 12.2        | 221.84          | 9.8         |
| HLCW-60-3  | 40.27    | 141.6 | 96.66         | 11.4        | 120.82          | 8.2         |
| HLCW-75-3  | 53.58    | 188.4 | 128.60        | 13.2        | 160.75          | 13.5        |
| HLCW-90-3  | 62.03    | 218.1 | 148.87        | 12.9        | 186.09          | 7.6         |
| HLCW-105-3 | 80.38    | 282.6 | 192.90        | 11.4        | 241.13          | 8.8         |
| HLCW-120-3 | 92.24    | 324.3 | 221.37        | 12.2        | 276.71          | 9.5         |
| HLCW-150-3 | 110.92   | 390   | 266.21        | 13.8        | 332.76          | 10.6        |
| HLCW-80-4  | 53.70    | 188.8 | 128.87        | 9.2         | 161.09          | 4.0         |
| HLCW-100-4 | 71.44    | 251.2 | 171.47        | 9.5         | 214.33          | 4.2         |
| HLCW-120-4 | 82.71    | 290.8 | 198.50        | 11.4        | 248.12          | 4.4         |
| HLCW-140-4 | 107.17   | 376.8 | 257.20        | 11.8        | 321.50          | 4.4         |
| HLCW-160-4 | 122.98   | 432.4 | 295.15        | 14.8        | 368.94          | 5.7         |
| HLCW-200-4 | 147.90   | 520   | 354.95        | 16.2        | 443.69          | 5.9         |
| HLCW-240-6 | 184.47   | 648.6 | 442.73        | 14.9        | 553.41          | 10.1        |
| HLCW-300-6 | 221.84   | 780   | 532.42        | 16.3        | 665.53          | 10.4        |

# SPECIFICATIONS OF CONDENSER AND EVAPORATOR

| Model                      | HLCW  | HLCW-5-1 | HLCW-10-1 | HLCW-15-1 | HLCW-20-1 | HLCW-25-1 | HLCW-30-1 | HLCW-35-1 | HLCW-40-1 | HLCW-50-1 |
|----------------------------|---|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| cooling capacity           | TR  | 4.36     | 8.82      | 12.2      | 14.33     | 19.03     | 22.01     | 28.53     | 32.76     | 39.36     |
|                            | kW  | 15.35    | 31.05     | 42.94     | 50.44     | 66.99     | 77.48     | 100.43    | 115.32    | 138.55    |
| Compressor                 | Semi-Hermetic Reciprocating Discus 1750 rpm |          |           |           |           |           |           |           |           |           |
| QTY                        | 1   | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         |
| Oil (Polyol Ester) Charg   | USGal                                       | 0.52     | 0.676     | 0.676     | 0.676     | 1.17      | 1.17      | 1.235     | 1.235     | 1.235     |
|                            | Litre                                       | 2        | 2.6       | 2.6       | 2.6       | 4.5       | 4.5       | 4.75      | 4.75      | 4.75      |
| Condenser                  | Condenser shell & tube                      |          |           |           |           |           |           |           |           |           |
| QTY                        | 1   | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         |
| Ref. Circuits              | 1   | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         |
| Water Volume               | GPM   | 13.08    | 26.46     | 36.6      | 42.99     | 57.09     | 66.03     | 85.59     | 98.28     | 118.08    |
|                            | Litre/s                                     | 0.78     | 1.59      | 2.20      | 2.58      | 3.43      | 3.96      | 5.14      | 5.90      | 7.08      |
| Evaporator                 | Direct Expansion shell & tube               |          |           |           |           |           |           |           |           |           |
| QTY                        | 1   | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         |
| Ref. Circuits              | 1   | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         |
| Water Volume               | GPM   | 10.464   | 21.168    | 29.28     | 34.392    | 45.672    | 52.824    | 68.472    | 78.624    | 94.464    |
|                            | Litre/s                                     | 0.63     | 1.27      | 1.76      | 2.06      | 2.74      | 3.17      | 4.11      | 4.72      | 5.67      |
| Refrigerant Charge (R22)   | Lb  | 11       | 22        | 33        | 44        | 55        | 66        | 77        | 88        | 110       |
|                            | Kg  | 5        | 10        | 15        | 20        | 25        | 30        | 35        | 40        | 50        |
| Operating Weight (Approx.) | Lb  | 1210     | 1628      | 1672      | 1760      | 1892      | 2090      | 2530      | 2860      | 2970      |
|                            | Kg  | 550      | 740       | 760       | 800       | 860       | 950       | 1150      | 1300      | 1350      |

| Model                      | HLCW  | HLCW-20-2 | HLCW-30-2 | HLCW-40-2 | HLCW-50-2 | HLCW-60-2 | HLCW-70-2 | HLCW-80-2 | HLCW-100-2 |
|----------------------------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| cooling capacity           | TR  | 17.64     | 24.4      | 42.99     | 38.06     | 44.02     | 57.06     | 65.52     | 78.72      |
|                            | kW  | 62.09     | 85.89     | 151.32    | 133.97    | 154.95    | 200.85    | 230.63    | 277.09     |
| Compressor                 | Semi-Hermetic Reciprocating Discus 1750 rpm |           |           |           |           |           |           |           |            |
| QTY                        | 2   | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2          |
| Oil (Polyol Ester) Charg   | USGal                                       | 0.676     | 0.676     | 0.676     | 1.17      | 1.17      | 1.235     | 1.235     | 1.235      |
|                            | Litre                                       | 2.6       | 2.6       | 2.6       | 4.5       | 4.5       | 4.75      | 4.75      | 4.75       |
| Condenser                  | Condenser shell & tube                      |           |           |           |           |           |           |           |            |
| QTY                        | 2   | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2          |
| Ref. Circuits              | 2   | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2          |
| Water Volume               | GPM   | 52.92     | 73.2      | 128.97    | 114.18    | 132.06    | 171.18    | 196.56    | 236.16     |
|                            | Litre/s                                     | 3.18      | 4.39      | 7.74      | 6.85      | 7.92      | 10.27     | 11.79     | 14.17      |
| Evaporator                 | Direct Expansion shell & tube               |           |           |           |           |           |           |           |            |
| QTY                        | 1   | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1          |
| Ref. Circuits              | 2   | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2          |
| Water Volume               | GPM   | 42.336    | 58.56     | 103.176   | 91.344    | 105.648   | 136.944   | 157.248   | 188.928    |
|                            | Litre/s                                     | 2.54      | 3.51      | 6.19      | 5.48      | 6.34      | 8.22      | 9.43      | 11.34      |
| Refrigerant Charge (R22)   | Lb  | 44        | 66        | 88        | 110       | 132       | 154       | 176       | 220        |
|                            | Kg  | 20        | 30        | 40        | 50        | 60        | 70        | 80        | 100        |
| Operating Weight (Approx.) | Lb  | 1870      | 2200      | 2970      | 2970      | 4004      | 4246      | 4444      | 4840       |
|                            | Kg  | 850       | 1000      | 1350      | 1350      | 1820      | 1930      | 2020      | 2200       |

| Model                      | HLCW  | HLCW-60-3 | HLCW-75-3 | HLCW-90-3 | HLCW-105-3 | HLCW-120-3 | HLCW-150-3 |
|----------------------------|---|-----------|-----------|-----------|------------|------------|------------|
| cooling capacity           | TR  | 42.99     | 57.09     | 66.03     | 85.59      | 98.28      | 118.08     |
|                            | kW  | 151.32    | 200.96    | 232.43    | 301.28     | 345.95     | 415.64     |
| Compressor                 | Semi-Hermetic Reciprocating Discus 1750 rpm |           |           |           |            |            |            |
| QTY                        |   | 3         | 3         | 3         | 3          | 3          | 3          |
| Oil (Polyol Ester) Charg   | USGal                                       | 0.676     | 1.17      | 1.17      | 1.235      | 1.235      | 1.235      |
|                            | Litre                                       | 2.6       | 4.5       | 4.5       | 4.75       | 4.75       | 4.75       |
| Condenser                  | Condenser shell & tube                      |           |           |           |            |            |            |
| QTY                        |   | 3         | 3         | 3         | 3          | 3          | 3          |
| Ref. Circuits              |   | 3         | 3         | 3         | 3          | 3          | 3          |
| Water Volume               | GPM   | 128.97    | 171.27    | 198.09    | 256.77     | 294.84     | 354.24     |
|                            | Litre/s                                     | 7.74      | 10.28     | 11.89     | 15.41      | 17.69      | 21.25      |
| Evaporator                 | Direct Expansion shell & tube               |           |           |           |            |            |            |
| QTY                        |   | 1         | 1         | 1         | 1          | 1          | 1          |
| Ref. Circuits              |   | 3         | 3         | 3         | 3          | 3          | 3          |
| Water Volume               | GPM   | 103.176   | 137.016   | 158.472   | 205.416    | 235.872    | 283.392    |
|                            | Litre/s                                     | 6.19      | 8.22      | 9.51      | 12.32      | 14.15      | 17.00      |
| Refrigerant Charge (R22)   | Lb  | 132       | 165       | 198       | 231        | 264        | 330        |
|                            | Kg  | 60        | 75        | 90        | 105        | 120        | 150        |
| Operating Weight (Approx.) | Lb  | 4004      | 4356      | 4620      | 5390       | 5500       | 5720       |
|                            | Kg  | 1820      | 1980      | 2100      | 2450       | 2500       | 2600       |

| Model                      | HLCW  | HLCW-80-4 | HLCW-100-4 | HLCW-120-4 | HLCW-140-4 | HLCW-160-4 | HLCW-200-4 |
|----------------------------|---|-----------|------------|------------|------------|------------|------------|
| cooling capacity           | TR  | 57.32     | 76.12      | 88.04      | 114.12     | 131.04     | 157.44     |
|                            | kW  | 201.77    | 267.94     | 309.90     | 401.70     | 461.26     | 554.19     |
| Compressor                 | Semi-Hermetic Reciprocating Discus 1750 rpm |           |            |            |            |            |            |
| QTY                        |   | 4         | 4          | 4          | 4          | 4          | 4          |
| Oil (Polyol Ester) Charg   | USGal                                       | 0.676     | 1.17       | 1.17       | 1.235      | 1.235      | 1.235      |
|                            | Litre                                       | 2.6       | 4.5        | 4.5        | 4.75       | 4.75       | 4.75       |
| Condenser                  | Condenser shell & tube                      |           |            |            |            |            |            |
| QTY                        |   | 2         | 2          | 2          | 2          | 2          | 2          |
| Ref. Circuits              |   | 2         | 2          | 2          | 2          | 2          | 2          |
| Water Volume               | GPM   | 171.96    | 228.36     | 264.12     | 342.36     | 393.12     | 472.32     |
|                            | Litre/s                                     | 10.32     | 13.70      | 15.85      | 20.54      | 23.59      | 28.34      |
| Evaporator                 | Direct Expansion shell & tube               |           |            |            |            |            |            |
| QTY                        |   | 1         | 1          | 1          | 1          | 1          | 1          |
| Ref. Circuits              |   | 2         | 2          | 2          | 2          | 2          | 2          |
| Water Volume               | GPM   | 137.568   | 182.688    | 211.296    | 273.888    | 314.496    | 377.856    |
|                            | Litre/s                                     | 8.25      | 10.96      | 12.68      | 16.43      | 18.87      | 22.67      |
| Refrigerant Charge (R22)   | Lb  | 176       | 220        | 264        | 308        | 352        | 440        |
|                            | Kg  | 80        | 100        | 120        | 140        | 160        | 200        |
| Operating Weight (Approx.) | Lb  | 5236      | 5610       | 5940       | 6380       | 6820       | 7260       |
|                            | Kg  | 2380      | 2550       | 2700       | 2900       | 3100       | 3300       |

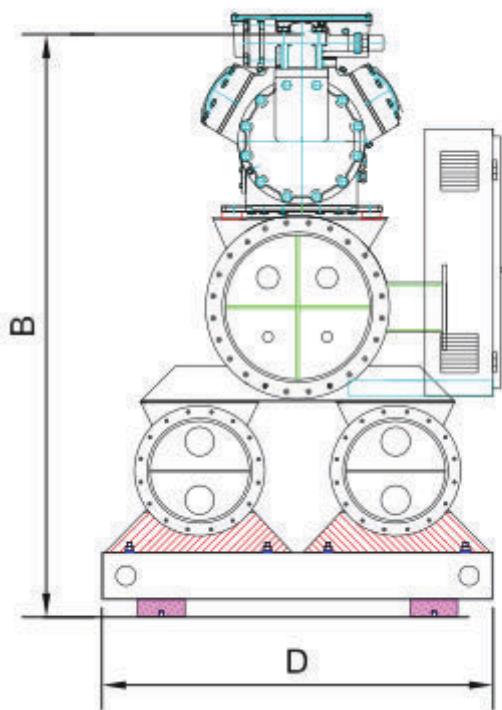
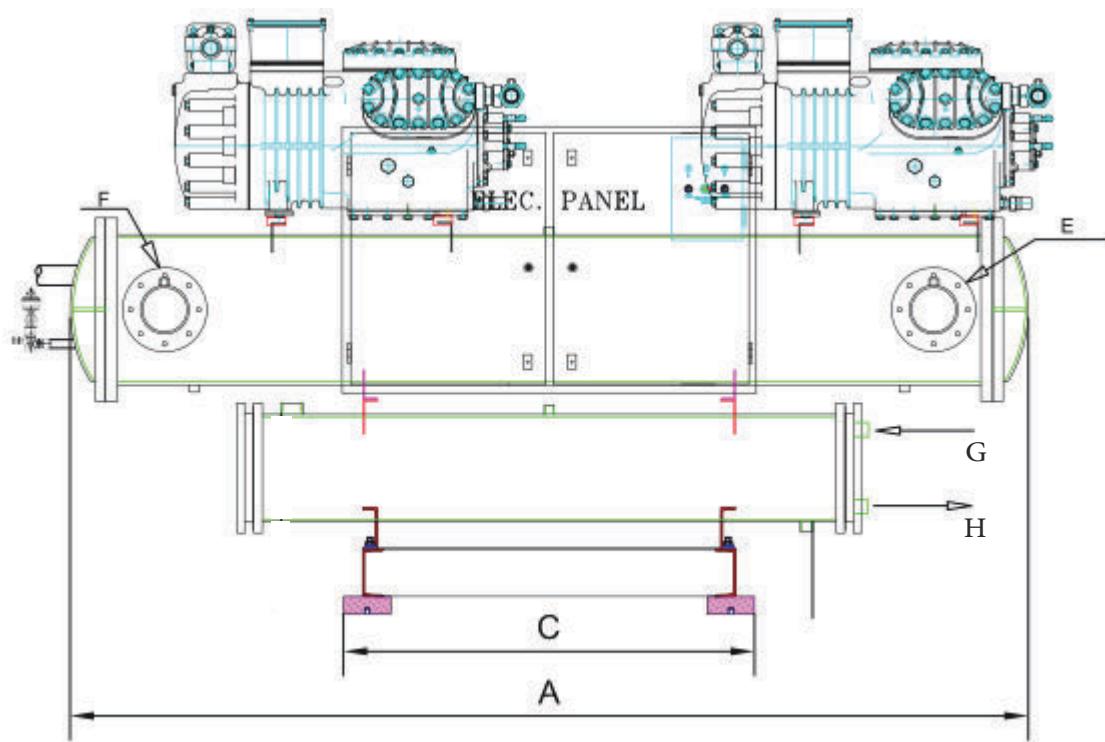
| Model                      | HLCW  | HLCW-240-6 | HLCW-300-6 |
|----------------------------|---|------------|------------|
| cooling capacity           | TR  | 196.56     | 236.16     |
|                            | kW  | 691.89     | 831.28     |
| Compressor                 | Semi-Hermetic Reciprocating Discus 1750 rpm |            |            |
| QTY                        |   | 6          | 6          |
| Oil (Polyol Ester) Charg   | USGal                                       | 1.235      | 1.235      |
|                            | Litre                                       | 4.75       | 4.75       |
| Condenser                  | Condenser shell & tube                      |            |            |
| QTY                        |   | 2          | 2          |
| Ref. Circuits              |   | 2          | 2          |
| Water Volume               | GPM   | 589.68     | 708.48     |
|                            | Litre/s                                     | 35.38      | 42.51      |
| Evaporator                 | Direct Expansion shell & tube               |            |            |
| QTY                        |   | 1          | 1          |
| Ref. Circuits              |   | 2          | 2          |
| Water Volume               | GPM   | 471.744    | 566.784    |
|                            | Litre/s                                     | 28.30      | 34.01      |
| Refrigerant Charge (R22)   | Lb  | 528        | 660        |
|                            | Kg  | 240        | 300        |
| Operating Weight (Approx.) | Lb  | 8580       | 9240       |
|                            | Kg  | 3900       | 4200       |

# ELEGTRICAL DATA

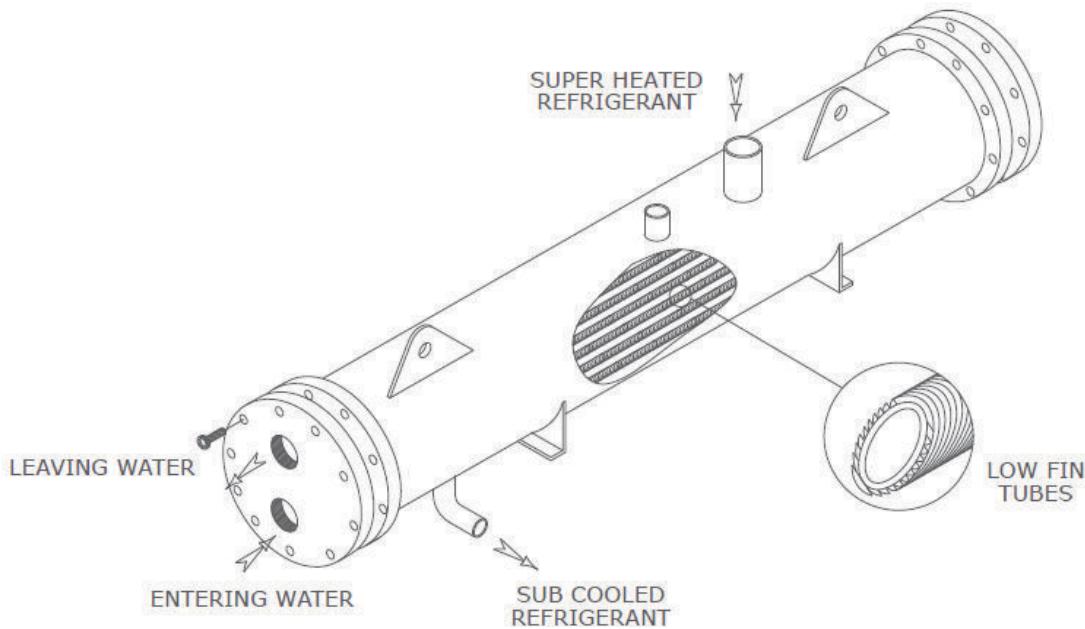
| ELECTRICAL DATA       |                          |           |           |                      |
|-----------------------|--------------------------|-----------|-----------|----------------------|
| Condensing Unit MODEL | Nominal Comp. power (HP) | MRA (Amp) | LRA (Amp) | MAX CONSE POWER (kw) |
| HLCW-5-1              | 5                        | 10.8      | 62.2      | 5.8                  |
| HLCW-10-1             | 10                       | 19.9      | 59        | 12                   |
| HLCW-15-1             | 15                       | 28.2      | 81        | 16                   |
| HLCW-20-1             | 20                       | 33.2      | 97        | 19                   |
| HLCW-25-1             | 25                       | 44        | 125       | 25                   |
| HLCW-30-1             | 30                       | 51.2      | 141       | 28                   |
| HLCW-35-1             | 35                       | 64.4      | 165       | 36                   |
| HLCW-40-1             | 40                       | 73.9      | 219       | 42                   |
| HLCW-50-1             | 50                       | 96.2      | 226       | 51                   |
| HLCW-20-2             | 20                       | 39.8      | 118       | 24                   |
| HLCW-30-2             | 30                       | 56.4      | 162       | 32                   |
| HLCW-40-2             | 40                       | 66.4      | 194       | 38                   |
| HLCW-50-2             | 50                       | 88        | 250       | 50                   |
| HLCW-60-2             | 60                       | 102.4     | 282       | 56                   |
| HLCW-70-2             | 70                       | 128.8     | 330       | 72                   |
| HLCW-80-2             | 80                       | 147.8     | 438       | 84                   |
| HLCW-100-2            | 100                      | 192.4     | 452       | 102                  |
| HLCW-60-3             | 60                       | 99.6      | 291       | 57                   |
| HLCW-75-3             | 75                       | 132       | 375       | 75                   |
| HLCW-90-3             | 90                       | 153.6     | 423       | 84                   |
| HLCW-105-2            | 105                      | 193.2     | 495       | 108                  |
| HLCW-120-2            | 120                      | 221.7     | 657       | 126                  |
| HLCW-150-2            | 150                      | 288.6     | 678       | 153                  |
| HLCW-80-4             | 80                       | 132.8     | 388       | 76                   |
| HLCW-100-4            | 100                      | 176       | 500       | 100                  |
| HLCW-120-4            | 120                      | 204.8     | 564       | 112                  |
| HLCW-140-4            | 140                      | 257.6     | 660       | 144                  |
| HLCW-160-4            | 160                      | 295.6     | 876       | 168                  |
| HLCW-200-4            | 200                      | 384.8     | 904       | 204                  |
| HLCW-240-6            | 240                      | 443.4     | 1314      | 252                  |
| HLCW-300-6            | 300                      | 577.2     | 1356      | 306                  |

# DIMENSIONS OF WATER COOLED CHILLER

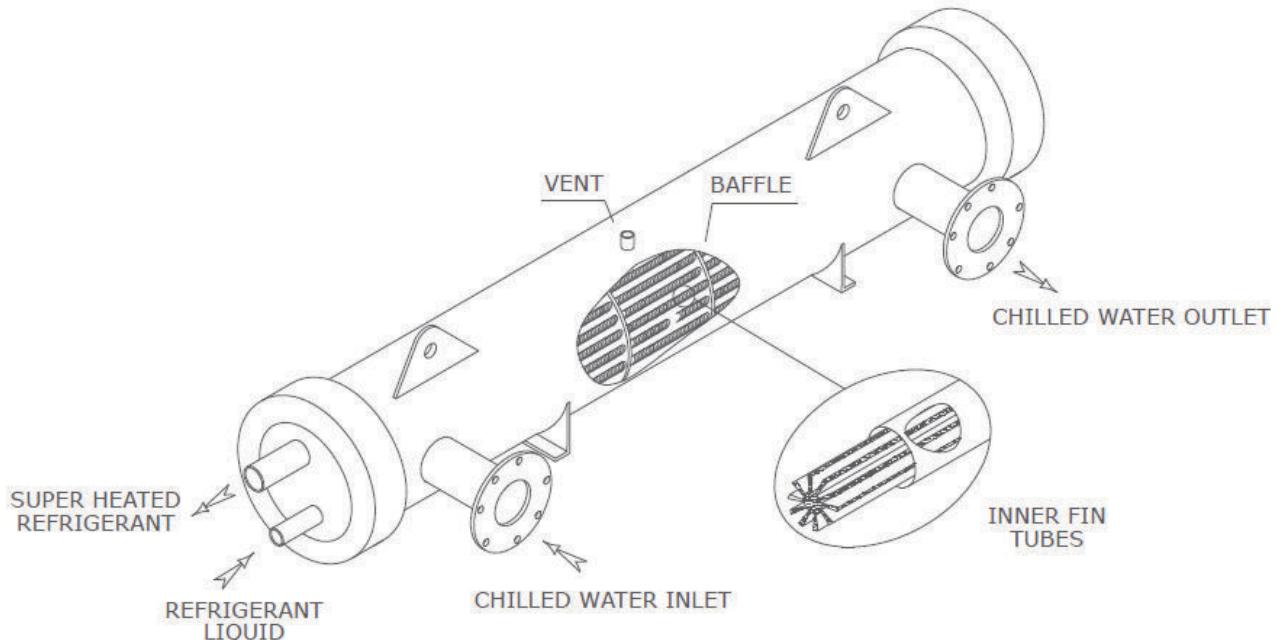
| MODEL HAVASAZ | A (mm) | B (mm) | C (mm) | D (mm) | E(in) | F(in) | G(in)   | H(in)   |
|---------------|--------|--------|--------|--------|-------|-------|---------|---------|
| HLCW-5-1      | 1400   | 1200   | 900    | 600    | 2     | 2     | 1       | 1       |
| HLCW-10-1     | 1500   | 1300   | 1000   | 700    | 2 1/2 | 2 1/2 | 1 1/2   | 1 1/2   |
| HLCW-15-1     | 1500   | 1300   | 1000   | 700    | 2 1/2 | 2 1/2 | 1 1/2   | 1 1/2   |
| HLCW-20-1     | 1500   | 1360   | 1000   | 700    | 2 1/2 | 2 1/2 | 2       | 2       |
| HLCW-25-1     | 2000   | 1350   | 1500   | 800    | 3     | 3     | 2       | 2       |
| HLCW-30-1     | 2000   | 1350   | 1500   | 800    | 3     | 3     | 2       | 2       |
| HLCW-35-1     | 2500   | 1350   | 1500   | 850    | 3     | 3     | 2 1/2   | 2 1/2   |
| HLCW-40-1     | 1500   | 1450   | 1500   | 850    | 3     | 3     | 2 1/2   | 2 1/2   |
| HLCW-50-1     | 1500   | 1450   | 1500   | 850    | 4     | 4     | 3       | 3       |
| HLCW-20-2     | 1500   | 1350   | 1500   | 950    | 2 1/2 | 2 1/2 | 2       | 2       |
| HLCW-30-2     | 2000   | 1350   | 1500   | 950    | 3     | 3     | 1 1/2×2 | 1 1/2×2 |
| HLCW-40-2     | 2500   | 1450   | 1500   | 950    | 3     | 3     | 2×2     | 2×2     |
| HLCW-50-2     | 2500   | 1450   | 1500   | 950    | 3     | 3     | 2×2     | 2×2     |
| HLCW-60-2     | 2500   | 1450   | 1500   | 950    | 4     | 4     | 2×2     | 2×2     |
| HLCW-70-2     | 2500   | 1500   | 1500   | 1050   | 4     | 4     | 2×2     | 2×2     |
| HLCW-80-2     | 2500   | 1500   | 1500   | 1050   | 4     | 4     | 2 1/2×2 | 2 1/2×2 |
| HLCW-100-2    | 3000   | 1500   | 1500   | 1050   | 5     | 5     | 3       | 3       |
| HLCW-60-3     | 3000   | 1450   | 1500   | 1150   | 4     | 4     | 2×2     | 2×2     |
| HLCW-75-3     | 3500   | 1450   | 1500   | 1150   | 4     | 4     | 2×2     | 2×2     |
| HLCW-90-3     | 3500   | 1650   | 1700   | 1150   | 5     | 5     | 2 1/2×2 | 2 1/2×2 |
| HLCW-105-3    | 3000   | 1650   | 1700   | 1150   | 5     | 5     | 2+3     | 2+3     |
| HLCW-120-3    | 3000   | 1700   | 1800   | 1150   | 5     | 5     | 2+3     | 2+3     |
| HLCW-150-3    | 3000   | 1700   | 1800   | 1150   | 6     | 6     | 3×2     | 3×2     |
| HLCW-80-4     | 3500   | 1650   | 1800   | 1150   | 4     | 4     | 3       | 3       |
| HLCW-100-4    | 3500   | 1650   | 1800   | 1150   | 5     | 5     | 2 1/2×2 | 2 1/2×2 |
| HLCW-120-4    | 3500   | 1650   | 1800   | 1150   | 5     | 5     | 2 1/2×2 | 2 1/2×2 |
| HLCW-140-4    | 3500   | 1750   | 1900   | 1200   | 5     | 5     | 3×2     | 3×2     |
| HLCW-160-4    | 4000   | 1750   | 2000   | 1200   | 5     | 5     | 3×2     | 3×2     |
| HLCW-200-4    | 4000   | 1750   | 2000   | 1150   | 6     | 6     | 3×2     | 3×2     |
| HLCW-240-6    | 4000   | 2050   | 4500   | 1250   | 6     | 6     | 3×2     | 3×2     |
| HLCW-300-6    | 6000   | 2150   | 4500   | 1250   | 7     | 7     | 3×3     | 3×3     |



# SHELL & CONDENSER & EVAPORATOR

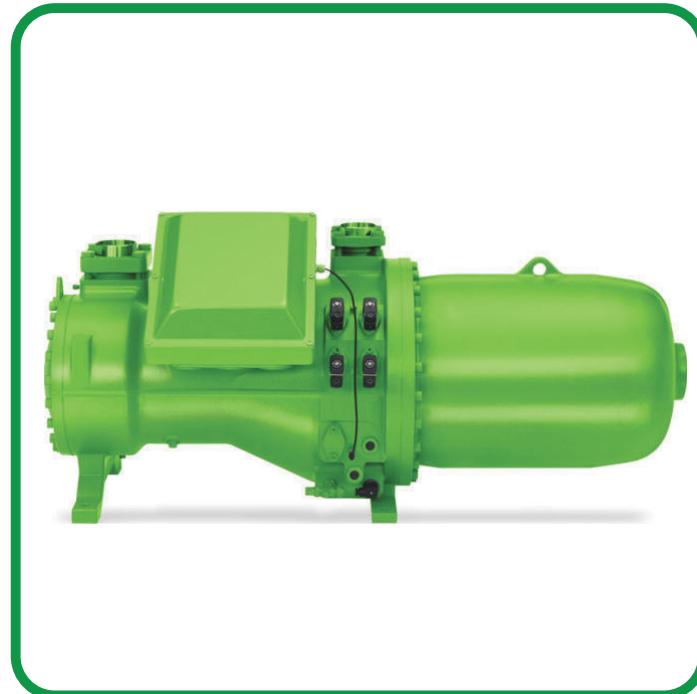


## SHELL & TUBE CONDENSER



## SHELL & TUBE EVAPORATOR

## SCREW



# Engineering Specifications-50 Hz (R-22)-bitzer

| Model                            | HLCW                                | HLCW-50-1 | HLCW-60-1 | HLCW-70-1 | HLCW-80-1 | HLCW-90-1 | HLCW-100-1 |
|----------------------------------|-------------------------------------|-----------|-----------|-----------|-----------|-----------|------------|
| cooling capacity                 | TR                                  | 35.51     | 44.56     | 52.21     | 60.85     | 72.51     | 80.19      |
|                                  | kW                                  | 124.90    | 156.70    | 183.60    | 214.00    | 255.00    | 282.00     |
| Compressor                       | Compact Screw Compressor CSH Series |           |           |           |           |           |            |
| QTY                              |                                     | 1         | 1         | 1         | 1         | 1         | 1          |
| Oil Charge                       | USGal                               | 2.51      | 2.51      | 3.96      | 3.96      | 3.96      | 3.96       |
|                                  | Litre                               | 9.5       | 9.5       | 15        | 15        | 15        | 15         |
| Condenser                        | Condenser shell & tube              |           |           |           |           |           |            |
| QTY                              |                                     | 1         |           |           |           |           |            |
| Ref. Circuits                    |                                     | 1         | 1         | 1         | 1         | 1         | 1          |
| Water Volume                     | GPM                                 | 106.54    | 133.67    | 156.62    | 182.55    | 217.52    | 240.56     |
|                                  | Litre/s                             | 6.72      | 8.43      | 9.88      | 11.52     | 13.72     | 15.18      |
| Evaporator                       | Direct Expansion shell & tube       |           |           |           |           |           |            |
| QTY                              |                                     | 1         |           |           |           |           |            |
| Ref. Circuits                    |                                     | 1         | 1         | 1         | 1         | 1         | 1          |
| Water Volume                     | GPM                                 | 85.24     | 106.94    | 125.29    | 146.04    | 174.02    | 192.44     |
|                                  | Litre/s                             | 5.38      | 6.75      | 7.90      | 9.21      | 10.98     | 12.14      |
| Refrigerant Charge (R22)(Approx) | Lb                                  | 110.2     | 132.2     | 154.3     | 176.3     | 198.4     | 220.4      |
|                                  | Kg                                  | 50        | 60        | 70        | 80        | 90        | 100        |
| Operating Weight (Approx)        | Lb                                  | 2535      | 2755      | 4298      | 4408      | 4628      | 4849       |
|                                  | Kg                                  | 1150      | 1250      | 1950      | 2000      | 2100      | 2200       |

| Model                            | HLCW                                | HLCW-110-1 (336) | HLCW-110-1(315) | HLCW-125-1 | HLCW-140-1 | HLCW-160-1 |   |
|----------------------------------|-------------------------------------|------------------|-----------------|------------|------------|------------|---|
| cooling capacity                 | TR                                  | 91.56            | 87.29           | 99.52      | 115.73     | 129.66     |   |
|                                  | kW                                  | 322.00           | 307.00          | 350.00     | 407.00     | 456.00     |   |
| Compressor                       | Compact Screw Compressor CSH Series |                  |                 |            |            |            |   |
| QTY                              |                                     | 1                | 1               | 1          | 1          | 1          | 1 |
| Oil Charge                       | USGal                               | 3.96             | 5.81            | 5.81       | 5.81       | 5.02       |   |
|                                  | Litre                               | 15               | 22              | 22         | 22         | 19         |   |
| Condenser                        | Condenser shell & tube              |                  |                 |            |            |            |   |
| QTY                              |                                     | 1                |                 |            |            |            |   |
| Ref. Circuits                    |                                     | 1                | 1               | 1          | 1          | 1          | 1 |
| Water Volume                     | GPM                                 | 274.68           | 261.88          | 298.56     | 347.19     | 388.98     |   |
|                                  | Litre/s                             | 17.33            | 16.52           | 18.84      | 21.90      | 24.54      |   |
| Evaporator                       | Direct Expansion shell & tube       |                  |                 |            |            |            |   |
| QTY                              |                                     | 1                |                 |            |            |            |   |
| Ref. Circuits                    |                                     | 1                | 1               | 1          | 1          | 1          | 1 |
| Water Volume                     | GPM                                 | 219.74           | 209.51          | 238.85     | 277.75     | 311.19     |   |
|                                  | Litre/s                             | 13.86            | 13.22           | 15.07      | 17.52      | 19.63      |   |
| Refrigerant Charge (R22)(Approx) | Lb                                  | 242.4            | 242.4           | 275.5      | 308.6      | 352.6      |   |
|                                  | Kg                                  | 110              | 110             | 125        | 140        | 160        |   |
| Operating Weight (Approx)        | Lb                                  | 5069             | 6061            | 6171       | 6392       | 7494       |   |
|                                  | Kg                                  | 2300             | 2750            | 2800       | 2900       | 3400       |   |

| Model                            | HLCW                                | HLCW-100-2 | HLCW-120-2 | HLCW-140-2 | HLCW-160-2 | HLCW-180-2 | HLCW-200-2 |
|----------------------------------|-------------------------------------|------------|------------|------------|------------|------------|------------|
| cooling capacity                 | TR                                  | 71.03      | 89.11      | 104.41     | 121.70     | 145.02     | 160.37     |
|                                  | kW                                  | 249.80     | 313.40     | 367.20     | 428.00     | 510.00     | 564.00     |
| Compressor                       | Compact Screw Compressor CSH Series |            |            |            |            |            |            |
| QTY                              |                                     | 2          | 2          | 2          | 2          | 2          | 2          |
| Oil Charge                       | USGal                               | 5.02       | 5.02       | 7.93       | 7.93       | 7.93       | 7.93       |
|                                  | Litre                               | 19         | 19         | 30         | 30         | 30         | 30         |
| Condenser                        | Condenser shell & tube              |            |            |            |            |            |            |
| QTY                              |                                     | 1          |            |            |            |            |            |
| Ref. Circuits                    |                                     | 2          | 2          | 2          | 2          | 2          | 2          |
| Water Volume                     | GPM                                 | 213.09     | 267.34     | 313.23     | 365.10     | 435.05     | 481.11     |
|                                  | Litre/s                             | 13.44      | 16.87      | 19.76      | 23.03      | 27.45      | 30.35      |
| Evaporator                       | Direct Expansion shell & tube       |            |            |            |            |            |            |
| QTY                              |                                     | 1          |            |            |            |            |            |
| Ref. Circuits                    |                                     | 2          | 2          | 2          | 2          | 2          | 2          |
| Water Volume                     | GPM                                 | 170.47     | 213.87     | 250.59     | 292.08     | 348.04     | 384.89     |
|                                  | Litre/s                             | 10.75      | 13.49      | 15.81      | 18.43      | 21.96      | 24.28      |
| Refrigerant Charge (R22)(Approx) | Lb                                  | 220.4      | 264.5      | 308.6      | 352.6      | 396.7      | 440.8      |
|                                  | Kg                                  | 100        | 120        | 140        | 160        | 180        | 200        |
| Operating Weight (Approx)        | Lb                                  | 5179       | 5730       | 7604       | 7824       | 8045       | 8155       |
|                                  | Kg                                  | 2350       | 2600       | 3450       | 3550       | 3650       | 3700       |

| Model                            | HLCW                                | HLCW-220-2(2*336) | HLCW-220-2(2*315) | HLCW-250-2 | HLCW-280-2 | HLCW-320-2 |  |
|----------------------------------|-------------------------------------|-------------------|-------------------|------------|------------|------------|--|
| cooling capacity                 | TR                                  | 183.12            | 174.59            | 199.04     | 231.46     | 259.32     |  |
|                                  | kW                                  | 644.00            | 614.00            | 700.00     | 814.00     | 912.00     |  |
| Compressor                       | Compact Screw Compressor CSH Series |                   |                   |            |            |            |  |
| QTY                              |                                     | 2                 | 2                 | 2          | 2          | 2          |  |
| Oil Charge                       | USGal                               | 7.93              | 11.62             | 11.62      | 11.62      | 10.04      |  |
|                                  | Litre                               | 30                | 44                | 44         | 44         | 38         |  |
| Condenser                        | Condenser shell & tube              |                   |                   |            |            |            |  |
| QTY                              |                                     | 1                 |                   |            |            |            |  |
| Ref. Circuits                    |                                     | 2                 | 2                 | 2          | 2          | 2          |  |
| Water Volume                     | GPM                                 | 549.35            | 523.76            | 597.12     | 694.37     | 777.97     |  |
|                                  | Litre/s                             | 34.66             | 33.04             | 37.67      | 43.81      | 49.08      |  |
| Evaporator                       | Direct Expansion shell & tube       |                   |                   |            |            |            |  |
| QTY                              |                                     | 1                 |                   |            |            |            |  |
| Ref. Circuits                    |                                     | 2                 | 2                 | 2          | 2          | 2          |  |
| Water Volume                     | GPM                                 | 439.48            | 419.01            | 477.70     | 555.50     | 622.37     |  |
|                                  | Litre/s                             | 27.73             | 26.44             | 30.14      | 35.05      | 39.27      |  |
| Refrigerant Charge (R22)(Approx) | Lb                                  | 484.9             | 484.9             | 551.0      | 617.1      | 705.3      |  |
|                                  | Kg                                  | 220               | 220               | 250        | 280        | 320        |  |
| Operating Weight (Approx)        | Lb                                  | 9367              | 11240             | 11461      | 12563      | 12893      |  |
|                                  | Kg                                  | 4250              | 5100              | 5200       | 5700       | 5850       |  |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-50-1                                      | 33.44    | 117.6 | 80.25         | 8.8          | 100.32          | 10.1         |
| HLCW-60-1                                      | 41.94    | 147.5 | 100.66        | 11.8         | 125.82          | 13.1         |
| HLCW-70-1                                      | 49.19    | 173   | 118.06        | 16.3         | 147.58          | 17.6         |
| HLCW-80-1                                      | 57.44    | 202   | 137.85        | 6.8          | 172.31          | 8.1          |
| HLCW-90-1                                      | 68.53    | 241   | 164.47        | 8.8          | 205.58          | 10.1         |
| HLCW-100-1                                     | 75.64    | 266   | 181.53        | 10.3         | 226.91          | 11.6         |
| HLCW-110-1<br>(336)                            | 86.16    | 303   | 206.78        | 12.5         | 258.47          | 13.8         |
| HLCW-110-1<br>(315)                            | 82.18    | 289   | 197.22        | 11.6         | 246.53          | 12.9         |
| HLCW-125-1                                     | 93.55    | 329   | 224.52        | 6.3          | 280.65          | 7.6          |
| HLCW-140-1                                     | 109.47   | 385   | 262.73        | 7.3          | 328.42          | 8.6          |
| HLCW-160-1                                     | 122.55   | 431   | 294.13        | 9            | 367.66          | 10.7         |
| HLCW-100-2                                     | 66.88    | 235.2 | 160.51        | 9.5          | 200.63          | 11.2         |
| HLCW-120-2                                     | 83.88    | 295   | 201.32        | 11.7         | 251.65          | 13.4         |
| HLCW-140-2                                     | 98.38    | 346   | 236.12        | 14.9         | 295.15          | 16.6         |
| HLCW-160-2                                     | 114.88   | 404   | 275.70        | 17.5         | 344.63          | 19.2         |
| HLCW-180-2                                     | 137.05   | 482   | 328.93        | 6.4          | 411.16          | 8.1          |
| HLCW-200-2                                     | 151.27   | 532   | 363.05        | 7.5          | 453.81          | 9.2          |
| HLCW-220-2<br>(2*336)                          | 172.31   | 606   | 413.55        | 9.6          | 516.94          | 11.3         |
| HLCW-220-2<br>(2*315)                          | 164.35   | 578   | 394.44        | 7.6          | 493.05          | 9.3          |
| HLCW-250-2                                     | 187.10   | 658   | 449.04        | 9.2          | 561.30          | 11.2         |
| HLCW-280-2                                     | 218.95   | 770   | 525.47        | 12.9         | 656.84          | 14.9         |
| HLCW-320-2                                     | 245.11   | 862   | 588.25        | 15.9         | 735.32          | 17.9         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-50-1                                      | 34.78    | 122.3 | 83.46         | 9.1          | 104.33          | 10.3         |
| HLCW-60-1                                      | 43.62    | 153.4 | 104.68        | 12.1         | 130.86          | 13.3         |
| HLCW-70-1                                      | 51.13    | 179.8 | 122.70        | 16.6         | 153.38          | 17.8         |
| HLCW-80-1                                      | 59.71    | 210   | 143.31        | 7.1          | 179.14          | 8.3          |
| HLCW-90-1                                      | 71.09    | 250   | 170.61        | 9.1          | 213.26          | 10.3         |
| HLCW-100-1                                     | 78.48    | 276   | 188.35        | 10.6         | 235.44          | 11.8         |
| HLCW-110-1 (336)                               | 89.57    | 315   | 214.96        | 12.8         | 268.71          | 14           |
| HLCW-110-1 (315)                               | 85.30    | 300   | 204.73        | 11.9         | 255.91          | 13.1         |
| HLCW-125-1                                     | 97.25    | 342   | 233.39        | 6.6          | 291.74          | 7.8          |
| HLCW-140-1                                     | 113.45   | 399   | 272.29        | 7.6          | 340.36          | 9.5          |
| HLCW-160-1                                     | 127.10   | 447   | 305.05        | 9.3          | 381.31          | 11.6         |
| HLCW-100-2                                     | 69.55    | 244.6 | 166.92        | 9.9          | 208.65          | 12.1         |
| HLCW-120-2                                     | 87.24    | 306.8 | 209.37        | 12.1         | 261.71          | 14.3         |
| HLCW-140-2                                     | 102.25   | 359.6 | 245.40        | 15.3         | 306.75          | 17.5         |
| HLCW-160-2                                     | 119.42   | 420   | 286.62        | 17.9         | 358.27          | 20.1         |
| HLCW-180-2                                     | 142.17   | 500   | 341.21        | 6.8          | 426.52          | 9            |
| HLCW-200-2                                     | 156.96   | 552   | 376.70        | 7.9          | 470.88          | 10.1         |
| HLCW-220-2 (2*336)                             | 179.14   | 630   | 429.93        | 10           | 537.41          | 12.2         |
| HLCW-220-2 (2*315)                             | 170.61   | 600   | 409.46        | 8            | 511.82          | 9.8          |
| HLCW-250-2                                     | 194.49   | 684   | 466.78        | 9.6          | 583.48          | 11.7         |
| HLCW-280-2                                     | 226.91   | 798   | 544.58        | 13.3         | 680.72          | 15.4         |
| HLCW-320-2                                     | 254.20   | 894   | 610.09        | 16.3         | 762.61          | 18.4         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-50-1                                      | 35.51    | 124.9 | 85.24         | 9.3          | 106.54          | 10.4         |
| HLCW-60-1                                      | 44.56    | 156.7 | 106.94        | 12.3         | 133.67          | 13.4         |
| HLCW-70-1                                      | 52.21    | 183.6 | 125.29        | 16.8         | 156.62          | 17.9         |
| HLCW-80-1                                      | 60.85    | 214   | 146.04        | 7.3          | 182.55          | 8.4          |
| HLCW-90-1                                      | 72.51    | 255   | 174.02        | 9.3          | 217.52          | 10.4         |
| HLCW-100-1                                     | 80.19    | 282   | 192.44        | 10.8         | 240.56          | 11.9         |
| HLCW-110-1<br>(336)                            | 91.56    | 322   | 219.74        | 13           | 274.68          | 14.2         |
| HLCW-110-1<br>(315)                            | 87.29    | 307   | 209.51        | 12.3         | 261.88          | 13.3         |
| HLCW-125-1                                     | 99.52    | 350   | 238.85        | 7            | 298.56          | 8            |
| HLCW-140-1                                     | 115.73   | 407   | 277.75        | 8            | 347.19          | 9.7          |
| HLCW-160-1                                     | 129.66   | 456   | 311.19        | 9.7          | 388.98          | 11.8         |
| HLCW-100-2                                     | 71.03    | 249.8 | 170.47        | 10.3         | 213.09          | 12.3         |
| HLCW-120-2                                     | 89.11    | 313.4 | 213.87        | 12.5         | 267.34          | 14.5         |
| HLCW-140-2                                     | 104.41   | 367.2 | 250.59        | 15.7         | 313.23          | 17.8         |
| HLCW-160-2                                     | 121.70   | 428   | 292.08        | 18.3         | 365.10          | 20.4         |
| HLCW-180-2                                     | 145.02   | 510   | 348.04        | 7.2          | 435.05          | 9.3          |
| HLCW-200-2                                     | 160.37   | 564   | 384.89        | 8.4          | 481.11          | 10.4         |
| HLCW-220-2<br>(2*336)                          | 183.12   | 644   | 439.48        | 10.5         | 549.35          | 12.5         |
| HLCW-220-2<br>(2*315)                          | 174.59   | 614   | 419.01        | 8.5          | 523.76          | 10.1         |
| HLCW-250-2                                     | 199.04   | 700   | 477.70        | 10.1         | 597.12          | 12           |
| HLCW-280-2                                     | 231.46   | 814   | 555.50        | 13.8         | 694.37          | 15.7         |
| HLCW-320-2                                     | 259.32   | 912   | 622.37        | 16.8         | 777.97          | 18.7         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,4°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-50-1                                      | 35.77    | 125.8 | 85.85         | 9.5          | 107.31          | 10.5         |
| HLCW-60-1                                      | 44.87    | 157.8 | 107.69        | 12.5         | 134.61          | 13.5         |
| HLCW-70-1                                      | 52.58    | 184.9 | 126.18        | 17           | 157.73          | 18           |
| HLCW-80-1                                      | 61.42    | 216   | 147.40        | 7.5          | 184.26          | 8.5          |
| HLCW-90-1                                      | 73.08    | 257   | 175.38        | 9.5          | 219.23          | 10.5         |
| HLCW-100-1                                     | 80.75    | 284   | 193.81        | 11.3         | 242.26          | 12           |
| HLCW-110-1<br>(336)                            | 92.13    | 324   | 221.11        | 13.5         | 276.38          | 14.3         |
| HLCW-110-1<br>(315)                            | 87.86    | 309   | 210.87        | 12.8         | 263.59          | 13.4         |
| HLCW-125-1                                     | 100.09   | 352   | 240.21        | 7.5          | 300.27          | 8.1          |
| HLCW-140-1                                     | 116.30   | 409   | 279.11        | 8.5          | 348.89          | 9.8          |
| HLCW-160-1                                     | 127.96   | 450   | 307.09        | 10.2         | 383.87          | 11.9         |
| HLCW-100-2                                     | 71.54    | 251.6 | 171.70        | 10.8         | 214.62          | 12.4         |
| HLCW-120-2                                     | 89.74    | 315.6 | 215.37        | 13           | 269.22          | 14.6         |
| HLCW-140-2                                     | 105.15   | 369.8 | 252.36        | 16.1         | 315.45          | 17.9         |
| HLCW-160-2                                     | 122.84   | 432   | 294.81        | 18.7         | 368.51          | 20.5         |
| HLCW-180-2                                     | 146.15   | 514   | 350.77        | 7.6          | 438.46          | 9.5          |
| HLCW-200-2                                     | 161.51   | 568   | 387.62        | 8.8          | 484.52          | 10.6         |
| HLCW-220-2<br>(2*336)                          | 184.26   | 648   | 442.21        | 10.9         | 552.77          | 12.7         |
| HLCW-220-2<br>(2*315)                          | 175.73   | 618   | 421.74        | 8.9          | 527.18          | 10.4         |
| HLCW-250-2                                     | 200.18   | 704   | 480.43        | 10.5         | 600.54          | 12.3         |
| HLCW-280-2                                     | 232.59   | 818   | 558.23        | 14.2         | 697.78          | 16           |
| HLCW-320-2                                     | 261.03   | 918   | 626.47        | 17.2         | 783.09          | 19           |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |      |
|--|----------|-------|---------------|--------------|-----------------|--------------|------|
| TABLE-1-LEAVING CHILLED WATER TEMP.= 5,5°C     |          |       |               |              |                 |              |      |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |      |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |      |
| HLCW-50-1                                      | 32.67    | 114.9 | 78.41         | 8.6          | 98.01           | 10           | 9.7  |
| HLCW-60-1                                      | 40.97    | 144.1 | 98.34         | 11.6         | 122.92          | 13           | 12.7 |
| HLCW-70-1                                      | 48.11    | 169.2 | 115.47        | 16.1         | 144.33          | 17.5         | 17.2 |
| HLCW-80-1                                      | 56.04    | 197.1 | 134.51        | 6.6          | 168.13          | 8            | 7.7  |
| HLCW-90-1                                      | 67.11    | 236   | 161.05        | 8.6          | 201.32          | 10           | 9.7  |
| HLCW-100-1                                     | 73.93    | 260   | 177.43        | 10.1         | 221.79          | 11.5         | 11.2 |
| HLCW-110-1 (336)                               | 84.17    | 296   | 202.00        | 12.3         | 252.50          | 13.7         | 13.4 |
| HLCW-110-1 (315)                               | 80.19    | 282   | 192.44        | 11.4         | 240.56          | 12.8         | 12.5 |
| HLCW-125-1                                     | 91.27    | 321   | 219.06        | 6.1          | 273.82          | 7.5          | 7.2  |
| HLCW-140-1                                     | 107.48   | 378   | 257.96        | 7.1          | 322.45          | 9.2          | 8.9  |
| HLCW-160-1                                     | 119.99   | 422   | 287.98        | 8.8          | 359.98          | 11.3         | 11   |
| HLCW-100-2                                     | 65.34    | 229.8 | 156.82        | 9.3          | 196.03          | 11.8         | 11.5 |
| HLCW-120-2                                     | 81.95    | 288.2 | 196.68        | 11.5         | 245.84          | 13.9         | 13.6 |
| HLCW-140-2                                     | 96.22    | 338.4 | 230.93        | 14.7         | 288.67          | 17.1         | 16.8 |
| HLCW-160-2                                     | 112.09   | 394.2 | 269.01        | 17.3         | 336.27          | 19.7         | 19.4 |
| HLCW-180-2                                     | 134.21   | 472   | 322.11        | 6.1          | 402.63          | 8.6          | 8.2  |
| HLCW-200-2                                     | 147.86   | 520   | 354.86        | 7.2          | 443.58          | 9.7          | 9.3  |
| HLCW-220-2 (2*336)                             | 168.33   | 592   | 404.00        | 9.3          | 505.00          | 11.8         | 11.4 |
| HLCW-220-2 (2*315)                             | 160.37   | 564   | 384.89        | 7.1          | 481.11          | 9.4          | 9    |
| HLCW-250-2                                     | 182.55   | 642   | 438.12        | 8.7          | 547.65          | 11.3         | 10.9 |
| HLCW-280-2                                     | 214.96   | 756   | 515.92        | 12.4         | 644.89          | 15           | 14.6 |
| HLCW-320-2                                     | 239.99   | 844   | 575.97        | 15.4         | 719.96          | 18           | 17.6 |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=6,6°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-50-1                                      | 33.98    | 119.5 | 81.55         | 8.9          | 101.94          | 10.2         |
| HLCW-60-1                                      | 42.62    | 149.9 | 102.30        | 11.9         | 127.87          | 13.2         |
| HLCW-70-1                                      | 50.02    | 175.9 | 120.04        | 16.4         | 150.05          | 17.7         |
| HLCW-80-1                                      | 58.29    | 205   | 139.90        | 6.9          | 174.87          | 8.2          |
| HLCW-90-1                                      | 69.66    | 245   | 167.19        | 8.9          | 208.99          | 10.2         |
| HLCW-100-1                                     | 73.65    | 259   | 176.75        | 10.4         | 220.94          | 11.7         |
| HLCW-110-1<br>(336)                            | 87.58    | 308   | 210.19        | 12.6         | 262.73          | 13.9         |
| HLCW-110-1<br>(315)                            | 83.31    | 293   | 199.95        | 11.7         | 249.94          | 13           |
| HLCW-125-1                                     | 94.97    | 334   | 227.93        | 6.4          | 284.91          | 7.7          |
| HLCW-140-1                                     | 111.46   | 392   | 267.51        | 7.4          | 334.39          | 9.4          |
| HLCW-160-1                                     | 124.54   | 438   | 298.90        | 9.1          | 373.63          | 11.5         |
| HLCW-100-2                                     | 67.96    | 239   | 163.10        | 9.6          | 203.88          | 12           |
| HLCW-120-2                                     | 85.25    | 299.8 | 204.59        | 11.8         | 255.74          | 14.1         |
| HLCW-140-2                                     | 100.03   | 351.8 | 240.08        | 15           | 300.10          | 17.3         |
| HLCW-160-2                                     | 116.58   | 410   | 279.80        | 17.6         | 349.74          | 19.9         |
| HLCW-180-2                                     | 139.33   | 490   | 334.39        | 6.4          | 417.99          | 8.8          |
| HLCW-200-2                                     | 147.29   | 518   | 353.50        | 7.5          | 441.87          | 9.9          |
| HLCW-220-2<br>(2*336)                          | 175.16   | 616   | 420.38        | 9.7          | 525.47          | 12           |
| HLCW-220-2<br>(2*315)                          | 166.63   | 586   | 399.90        | 7.5          | 499.88          | 9.7          |
| HLCW-250-2                                     | 189.94   | 668   | 455.86        | 9.1          | 569.83          | 11.6         |
| HLCW-280-2                                     | 222.93   | 784   | 535.02        | 12.8         | 668.78          | 15.3         |
| HLCW-320-2                                     | 249.09   | 876   | 597.81        | 15.8         | 747.26          | 18.3         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,2°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-50-1                                      | 34.72    | 122.1 | 83.32         | 9.1          | 104.16          | 10.3         |
| HLCW-60-1                                      | 43.53    | 153.1 | 104.48        | 12.1         | 130.60          | 13.3         |
| HLCW-70-1                                      | 51.07    | 179.6 | 122.56        | 16.6         | 153.21          | 17.8         |
| HLCW-80-1                                      | 59.43    | 209   | 142.63        | 7.1          | 178.28          | 8.3          |
| HLCW-90-1                                      | 71.09    | 250   | 170.61        | 9.1          | 213.26          | 10.3         |
| HLCW-100-1                                     | 78.48    | 276   | 188.35        | 10.6         | 235.44          | 11.8         |
| HLCW-110-1<br>(336)                            | 89.57    | 315   | 214.96        | 12.8         | 268.71          | 14           |
| HLCW-110-1<br>(315)                            | 85.30    | 300   | 204.73        | 11.9         | 255.91          | 13.1         |
| HLCW-125-1                                     | 97.25    | 342   | 233.39        | 6.6          | 291.74          | 7.8          |
| HLCW-140-1                                     | 113.45   | 399   | 272.29        | 7.7          | 340.36          | 9.5          |
| HLCW-160-1                                     | 127.10   | 447   | 305.05        | 9.4          | 381.31          | 11.7         |
| HLCW-100-2                                     | 69.44    | 244.2 | 166.65        | 9.9          | 208.31          | 12.2         |
| HLCW-120-2                                     | 87.07    | 306.2 | 208.96        | 12.1         | 261.20          | 14.3         |
| HLCW-140-2                                     | 102.14   | 359.2 | 245.13        | 15.3         | 306.41          | 17.5         |
| HLCW-160-2                                     | 118.86   | 418   | 285.25        | 17.9         | 356.57          | 20.1         |
| HLCW-180-2                                     | 142.17   | 500   | 341.21        | 6.7          | 426.52          | 9            |
| HLCW-200-2                                     | 156.96   | 552   | 376.70        | 7.8          | 470.88          | 10.1         |
| HLCW-220-2<br>(2*336)                          | 179.14   | 630   | 429.93        | 10           | 537.41          | 12.2         |
| HLCW-220-2<br>(2*315)                          | 170.61   | 600   | 409.46        | 7.8          | 511.82          | 9.9          |
| HLCW-250-2                                     | 194.49   | 684   | 466.78        | 9.4          | 583.48          | 11.8         |
| HLCW-280-2                                     | 226.91   | 798   | 544.58        | 13.1         | 680.72          | 15.5         |
| HLCW-320-2                                     | 254.20   | 894   | 610.09        | 16.1         | 762.61          | 18.5         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,4°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-50-1                                      | 34.97    | 123   | 83.94         | 9.2          | 104.92          | 10.4         |
| HLCW-60-1                                      | 43.87    | 154.3 | 105.30        | 12.2         | 131.62          | 13.4         |
| HLCW-70-1                                      | 51.44    | 180.9 | 123.45        | 16.7         | 154.31          | 17.9         |
| HLCW-80-1                                      | 60.00    | 211   | 143.99        | 7.2          | 179.99          | 8.4          |
| HLCW-90-1                                      | 71.65    | 252   | 171.97        | 9.2          | 214.96          | 10.4         |
| HLCW-100-1                                     | 79.05    | 278   | 189.71        | 10.7         | 237.14          | 11.9         |
| HLCW-110-1<br>(336)                            | 90.14    | 317   | 216.33        | 12.9         | 270.41          | 14.1         |
| HLCW-110-1<br>(315)                            | 85.87    | 302   | 206.09        | 12           | 257.62          | 13.2         |
| HLCW-125-1                                     | 97.81    | 344   | 234.76        | 6.7          | 293.44          | 7.9          |
| HLCW-140-1                                     | 114.31   | 402   | 274.34        | 7.8          | 342.92          | 9.6          |
| HLCW-160-1                                     | 127.96   | 450   | 307.09        | 9.5          | 383.87          | 11.8         |
| HLCW-100-2                                     | 69.95    | 246   | 167.88        | 10           | 209.85          | 12.3         |
| HLCW-120-2                                     | 87.75    | 308.6 | 210.60        | 12.2         | 263.25          | 14.4         |
| HLCW-140-2                                     | 102.88   | 361.8 | 246.90        | 15.4         | 308.63          | 17.6         |
| HLCW-160-2                                     | 119.99   | 422   | 287.98        | 18           | 359.98          | 20.4         |
| HLCW-180-2                                     | 143.31   | 504   | 343.94        | 6.8          | 429.93          | 9.3          |
| HLCW-200-2                                     | 158.10   | 556   | 379.43        | 7.9          | 474.29          | 10.4         |
| HLCW-220-2<br>(2*336)                          | 180.27   | 634   | 432.66        | 10.2         | 540.82          | 12.5         |
| HLCW-220-2<br>(2*315)                          | 171.74   | 604   | 412.19        | 8            | 515.23          | 10.2         |
| HLCW-250-2                                     | 195.63   | 688   | 469.51        | 9.6          | 586.89          | 12.1         |
| HLCW-280-2                                     | 228.61   | 804   | 548.67        | 13.3         | 685.84          | 15.8         |
| HLCW-320-2                                     | 255.91   | 900   | 614.19        | 16.3         | 767.73          | 18.8         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.= 5,5°C     |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-50-1                                      | 31.68    | 111.4 | 76.02         | 8.4          | 95.03           | 9.7          |
| HLCW-60-1                                      | 39.58    | 139.2 | 94.99         | 11.4         | 118.74          | 12.7         |
| HLCW-70-1                                      | 46.41    | 163.2 | 111.37        | 15.9         | 139.22          | 17.2         |
| HLCW-80-1                                      | 53.97    | 189.8 | 129.52        | 6.4          | 161.91          | 7.7          |
| HLCW-90-1                                      | 64.83    | 228   | 155.59        | 8.4          | 194.49          | 9.7          |
| HLCW-100-1                                     | 71.37    | 251   | 171.29        | 9.9          | 214.11          | 11.2         |
| HLCW-110-1 (336)                               | 81.32    | 286   | 195.17        | 12.1         | 243.97          | 13.4         |
| HLCW-110-1 (315)                               | 77.06    | 271   | 184.94        | 11.2         | 231.17          | 12.5         |
| HLCW-125-1                                     | 87.86    | 309   | 210.87        | 5.9          | 263.59          | 7.2          |
| HLCW-140-1                                     | 104.07   | 366   | 249.77        | 6.9          | 312.21          | 8.9          |
| HLCW-160-1                                     | 116.30   | 409   | 279.11        | 8.6          | 348.89          | 11           |
| HLCW-100-2                                     | 63.07    | 221.8 | 151.36        | 9.1          | 189.20          | 11.5         |
| HLCW-120-2                                     | 79.16    | 278.4 | 189.99        | 11.3         | 237.48          | 13.6         |
| HLCW-140-2                                     | 92.81    | 326.4 | 222.74        | 14.4         | 278.43          | 16.8         |
| HLCW-160-2                                     | 107.94   | 379.6 | 259.05        | 17           | 323.81          | 19.4         |
| HLCW-180-2                                     | 129.66   | 456   | 311.19        | 5.8          | 388.98          | 8.2          |
| HLCW-200-2                                     | 142.74   | 502   | 342.58        | 6.9          | 428.22          | 9.3          |
| HLCW-220-2 (2*336)                             | 162.65   | 572   | 390.35        | 9            | 487.94          | 11.4         |
| HLCW-220-2 (2*315)                             | 154.11   | 542   | 369.88        | 6.8          | 462.34          | 9            |
| HLCW-250-2                                     | 175.73   | 618   | 421.74        | 8.4          | 527.18          | 10.9         |
| HLCW-280-2                                     | 208.14   | 732   | 499.54        | 12.1         | 624.42          | 14.6         |
| HLCW-320-2                                     | 232.59   | 818   | 558.23        | 15.1         | 697.78          | 17.6         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-50-1                                      | 32.81    | 115.4 | 78.75         | 8.5          | 98.44           | 10           |
| HLCW-60-1                                      | 41.17    | 144.8 | 98.82         | 11.5         | 123.52          | 13           |
| HLCW-70-1                                      | 48.28    | 169.8 | 115.88        | 16           | 144.85          | 17.5         |
| HLCW-80-1                                      | 56.13    | 197.4 | 134.71        | 6.5          | 168.39          | 8            |
| HLCW-90-1                                      | 67.39    | 237   | 161.74        | 8.5          | 202.17          | 10           |
| HLCW-100-1                                     | 74.21    | 261   | 178.11        | 10           | 222.64          | 11.5         |
| HLCW-110-1<br>(336)                            | 84.45    | 297   | 202.68        | 12.2         | 253.35          | 13.7         |
| HLCW-110-1<br>(315)                            | 79.90    | 281   | 191.76        | 11.3         | 239.70          | 12.8         |
| HLCW-125-1                                     | 91.56    | 322   | 219.74        | 6            | 274.68          | 7.5          |
| HLCW-140-1                                     | 108.05   | 380   | 259.32        | 7            | 324.15          | 9.2          |
| HLCW-160-1                                     | 120.85   | 425   | 290.03        | 8.7          | 362.54          | 11.3         |
| HLCW-100-2                                     | 65.63    | 230.8 | 157.50        | 9.2          | 196.88          | 11.8         |
| HLCW-120-2                                     | 82.35    | 289.6 | 197.63        | 11.4         | 247.04          | 13.9         |
| HLCW-140-2                                     | 96.56    | 339.6 | 231.75        | 14.5         | 289.69          | 17.1         |
| HLCW-160-2                                     | 112.26   | 394.8 | 269.42        | 17.2         | 336.78          | 19.7         |
| HLCW-180-2                                     | 134.78   | 474   | 323.47        | 6            | 404.34          | 8.5          |
| HLCW-200-2                                     | 148.43   | 522   | 356.23        | 7.1          | 445.28          | 9.6          |
| HLCW-220-2<br>(2*336)                          | 168.90   | 594   | 405.36        | 9.2          | 506.70          | 11.7         |
| HLCW-220-2<br>(2*315)                          | 159.80   | 562   | 383.52        | 7.1          | 479.41          | 9.4          |
| HLCW-250-2                                     | 183.12   | 644   | 439.48        | 8.7          | 549.35          | 11.3         |
| HLCW-280-2                                     | 216.10   | 760   | 518.65        | 12.4         | 648.31          | 15           |
| HLCW-320-2                                     | 241.69   | 850   | 580.06        | 15.4         | 725.08          | 18           |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7.2°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-50-1                                      | 33.55    | 118   | 80.53         | 8.7          | 100.66          | 10.2         |
| HLCW-60-1                                      | 42.08    | 148   | 101.00        | 11.7         | 126.25          | 13.2         |
| HLCW-70-1                                      | 49.33    | 173.5 | 118.40        | 16.2         | 148.00          | 17.7         |
| HLCW-80-1                                      | 57.44    | 202   | 137.85        | 6.7          | 172.31          | 8.2          |
| HLCW-90-1                                      | 68.81    | 242   | 165.15        | 8.7          | 206.43          | 10.2         |
| HLCW-100-1                                     | 75.64    | 266   | 181.53        | 10.2         | 226.91          | 11.7         |
| HLCW-110-1<br>(336)                            | 86.44    | 304   | 207.46        | 12.4         | 259.32          | 13.9         |
| HLCW-110-1<br>(315)                            | 82.18    | 289   | 197.22        | 11.5         | 246.53          | 13           |
| HLCW-125-1                                     | 93.55    | 329   | 224.52        | 6.2          | 280.65          | 7.7          |
| HLCW-140-1                                     | 110.33   | 388   | 264.78        | 7.2          | 330.98          | 9.4          |
| HLCW-160-1                                     | 123.41   | 434   | 296.17        | 8.9          | 370.22          | 11.5         |
| HLCW-100-2                                     | 67.11    | 236   | 161.05        | 9.4          | 201.32          | 12           |
| HLCW-120-2                                     | 84.17    | 296   | 202.00        | 11.6         | 252.50          | 14.1         |
| HLCW-140-2                                     | 98.67    | 347   | 236.80        | 14.7         | 296.00          | 17.3         |
| HLCW-160-2                                     | 114.88   | 404   | 275.70        | 17.4         | 344.63          | 19.9         |
| HLCW-180-2                                     | 137.62   | 484   | 330.30        | 6.2          | 412.87          | 8.7          |
| HLCW-200-2                                     | 151.27   | 532   | 363.05        | 7.4          | 453.81          | 10           |
| HLCW-220-2<br>(2*336)                          | 172.88   | 608   | 414.92        | 9.5          | 518.65          | 12.1         |
| HLCW-220-2<br>(2*315)                          | 164.35   | 578   | 394.44        | 7.4          | 493.05          | 9.8          |
| HLCW-250-2                                     | 187.10   | 658   | 449.04        | 9            | 561.30          | 11.7         |
| HLCW-280-2                                     | 220.65   | 776   | 529.56        | 12.7         | 661.96          | 15.4         |
| HLCW-320-2                                     | 246.81   | 868   | 592.35        | 15.7         | 740.43          | 18.4         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-50-1                                      | 33.78    | 118.8 | 81.07         | 8.8          | 101.34          | 10.3         |
| HLCW-60-1                                      | 42.40    | 149.1 | 101.75        | 11.8         | 127.19          | 13.3         |
| HLCW-70-1                                      | 49.68    | 174.7 | 119.22        | 16.3         | 149.03          | 17.8         |
| HLCW-80-1                                      | 57.72    | 203   | 138.53        | 6.8          | 173.17          | 8.3          |
| HLCW-90-1                                      | 69.10    | 243   | 165.83        | 8.8          | 207.29          | 10.3         |
| HLCW-100-1                                     | 76.20    | 268   | 182.89        | 10.3         | 228.61          | 11.8         |
| HLCW-110-1 (336)                               | 87.01    | 306   | 208.82        | 12.5         | 261.03          | 14           |
| HLCW-110-1 (315)                               | 82.74    | 291   | 198.59        | 11.6         | 248.23          | 13.1         |
| HLCW-125-1                                     | 94.40    | 332   | 226.57        | 6.3          | 283.21          | 7.8          |
| HLCW-140-1                                     | 110.89   | 390   | 266.15        | 7.3          | 332.68          | 9.5          |
| HLCW-160-1                                     | 124.26   | 437   | 298.22        | 9            | 372.78          | 11.6         |
| HLCW-100-2                                     | 67.56    | 237.6 | 162.14        | 9.6          | 202.68          | 12.2         |
| HLCW-120-2                                     | 84.79    | 298.2 | 203.50        | 11.8         | 254.38          | 14.3         |
| HLCW-140-2                                     | 99.35    | 349.4 | 238.44        | 14.9         | 298.05          | 17.5         |
| HLCW-160-2                                     | 115.44   | 406   | 277.07        | 17.6         | 346.33          | 20.1         |
| HLCW-180-2                                     | 138.19   | 486   | 331.66        | 6.4          | 414.58          | 8.9          |
| HLCW-200-2                                     | 152.41   | 536   | 365.78        | 7.6          | 457.23          | 10.2         |
| HLCW-220-2 (2*336)                             | 174.02   | 612   | 417.65        | 9.7          | 522.06          | 12.3         |
| HLCW-220-2 (2*315)                             | 165.49   | 582   | 397.17        | 394.643      | 496.47          | 10           |
| HLCW-250-2                                     | 188.81   | 664   | 453.13        | 449.238      | 566.42          | 11.9         |
| HLCW-280-2                                     | 221.79   | 780   | 532.29        | 529.764      | 665.37          | 15.6         |
| HLCW-320-2                                     | 248.52   | 874   | 596.44        | 592.548      | 745.55          | 18.6         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.= 5,5°C     |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-50-1                                      | 31.53    | 110.9 | 75.68         | 8.2          | 94.60           | 9.6          |
| HLCW-60-1                                      | 38.19    | 134.3 | 91.65         | 11.2         | 114.56          | 12.6         |
| HLCW-70-1                                      | 44.64    | 157   | 107.14        | 15.7         | 133.93          | 17.1         |
| HLCW-80-1                                      | 51.81    | 182.2 | 124.34        | 6.2          | 155.42          | 7.6          |
| HLCW-90-1                                      | 62.56    | 220   | 150.13        | 8.2          | 187.67          | 9.6          |
| HLCW-100-1                                     | 68.81    | 242   | 165.15        | 9.7          | 206.43          | 11.1         |
| HLCW-110-1<br>(336)                            | 78.19    | 275   | 187.67        | 11.9         | 234.58          | 13.3         |
| HLCW-110-1<br>(315)                            | 74.21    | 261   | 178.11        | 11           | 222.64          | 12.4         |
| HLCW-125-1                                     | 84.45    | 297   | 202.68        | 5.7          | 253.35          | 7.1          |
| HLCW-140-1                                     | 100.66   | 354   | 241.58        | 6.7          | 301.97          | 8.8          |
| HLCW-160-1                                     | 112.32   | 395   | 269.56        | 8.4          | 336.95          | 10.9         |
| HLCW-100-2                                     | 63.35    | 222.8 | 152.04        | 8.9          | 190.06          | 11.4         |
| HLCW-120-2                                     | 76.38    | 268.6 | 183.30        | 11.1         | 229.13          | 13.5         |
| HLCW-140-2                                     | 89.28    | 314   | 214.28        | 14.2         | 267.85          | 16.6         |
| HLCW-160-2                                     | 103.62   | 364.4 | 248.68        | 16.8         | 310.85          | 19.2         |
| HLCW-180-2                                     | 125.11   | 440   | 300.27        | 5.6          | 375.34          | 8            |
| HLCW-200-2                                     | 137.62   | 484   | 330.30        | 6.6          | 412.87          | 9.1          |
| HLCW-220-2<br>(2*336)                          | 156.39   | 550   | 375.34        | 8.7          | 469.17          | 11.2         |
| HLCW-220-2<br>(2*315)                          | 148.43   | 522   | 356.23        | 6.5          | 445.28          | 8.7          |
| HLCW-250-2                                     | 168.90   | 594   | 405.36        | 8.1          | 506.70          | 10.6         |
| HLCW-280-2                                     | 201.32   | 708   | 483.16        | 11.8         | 603.95          | 14.3         |
| HLCW-320-2                                     | 224.63   | 790   | 539.12        | 14.8         | 673.90          | 17.3         |

CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C

TABLE-1-LEAVING CHILLED WATER TEMP.=6,6°C

| MODEL NO.             | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|-----------------------|-------------|-------|---------------|-----------------|-----------------|-----------------|
|                       |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-50-1             | 31.68       | 111.4 | 76.02         | 8.4             | 95.03           | 9.7             |
| HLCW-60-1             | 39.75       | 139.8 | 95.40         | 11.4            | 119.25          | 12.7            |
| HLCW-70-1             | 46.46       | 163.4 | 111.51        | 15.9            | 139.39          | 17.2            |
| HLCW-80-1             | 53.91       | 189.6 | 129.39        | 6.4             | 161.74          | 7.7             |
| HLCW-90-1             | 64.83       | 228   | 155.59        | 8.4             | 194.49          | 9.7             |
| HLCW-100-1            | 71.37       | 251   | 171.29        | 9.9             | 214.11          | 11.2            |
| HLCW-110-1<br>(336)   | 81.32       | 286   | 195.17        | 12.1            | 243.97          | 13.4            |
| HLCW-110-1<br>(315)   | 77.34       | 272   | 185.62        | 11.2            | 232.03          | 12.5            |
| HLCW-125-1            | 87.86       | 309   | 210.87        | 5.9             | 263.59          | 7.2             |
| HLCW-140-1            | 104.64      | 368   | 251.13        | 6.9             | 313.92          | 8.9             |
| HLCW-160-1            | 116.87      | 411   | 280.48        | 8.6             | 350.60          | 11              |
| HLCW-100-2            | 63.35       | 222.8 | 152.04        | 9.1             | 190.06          | 11.5            |
| HLCW-120-2            | 79.50       | 279.6 | 190.81        | 11.4            | 238.51          | 13.6            |
| HLCW-140-2            | 92.92       | 326.8 | 223.02        | 14.5            | 278.77          | 16.7            |
| HLCW-160-2            | 107.82      | 379.2 | 258.78        | 17.1            | 323.47          | 19.3            |
| HLCW-180-2            | 129.66      | 456   | 311.19        | 5.9             | 388.98          | 8.2             |
| HLCW-200-2            | 142.74      | 502   | 342.58        | 7               | 428.22          | 9.3             |
| HLCW-220-2<br>(2*336) | 162.65      | 572   | 390.35        | 9.1             | 487.94          | 11.4            |
| HLCW-220-2<br>(2*315) | 154.68      | 544   | 371.24        | 6.9             | 464.05          | 8.9             |
| HLCW-250-2            | 175.73      | 618   | 421.74        | 8.5             | 527.18          | 10.9            |
| HLCW-280-2            | 209.28      | 736   | 502.27        | 12.2            | 627.83          | 14.6            |
| HLCW-320-2            | 233.73      | 822   | 560.96        | 15.2            | 701.19          | 17.6            |

CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C

TABLE-1-LEAVING CHILLED WATER TEMP.=7,2°C

| MODEL NO.             | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|-----------------------|-------------|-------|---------------|-----------------|-----------------|-----------------|
|                       |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-50-1             | 32.39       | 113.9 | 77.73         | 8.5             | 97.16           | 9.9             |
| HLCW-60-1             | 40.63       | 142.9 | 97.52         | 11.5            | 121.90          | 12.9            |
| HLCW-70-1             | 47.49       | 167   | 113.97        | 16              | 142.46          | 17.4            |
| HLCW-80-1             | 55.08       | 193.7 | 132.19        | 6.5             | 165.23          | 7.9             |
| HLCW-90-1             | 66.25       | 233   | 159.01        | 8.5             | 198.76          | 9.9             |
| HLCW-100-1            | 73.08       | 257   | 175.38        | 10              | 219.23          | 11.4            |
| HLCW-110-1<br>(336)   | 83.31       | 293   | 199.95        | 12.2            | 249.94          | 13.6            |
| HLCW-110-1<br>(315)   | 79.05       | 278   | 189.71        | 11.3            | 237.14          | 12.7            |
| HLCW-125-1            | 89.85       | 316   | 215.65        | 6               | 269.56          | 7.4             |
| HLCW-140-1            | 106.63      | 375   | 255.91        | 7               | 319.89          | 9.1             |
| HLCW-160-1            | 119.14      | 419   | 285.94        | 8.7             | 357.42          | 11.2            |
| HLCW-100-2            | 64.77       | 227.8 | 155.46        | 9.2             | 194.32          | 11.7            |
| HLCW-120-2            | 81.27       | 285.8 | 195.04        | 11.5            | 243.80          | 13.8            |
| HLCW-140-2            | 94.97       | 334   | 227.93        | 14.7            | 284.91          | 16.9            |
| HLCW-160-2            | 110.16      | 387.4 | 264.37        | 17.3            | 330.47          | 19.5            |
| HLCW-180-2            | 132.50      | 466   | 318.01        | 6.1             | 397.51          | 9.7             |
| HLCW-200-2            | 146.15      | 514   | 350.77        | 7.2             | 438.46          | 11.8            |
| HLCW-220-2<br>(2*336) | 166.63      | 586   | 399.90        | 9.3             | 499.88          | 11.7            |
| HLCW-220-2<br>(2*315) | 158.10      | 556   | 379.43        | 7.2             | 474.29          | 9.2             |
| HLCW-250-2            | 179.71      | 632   | 431.29        | 8.8             | 539.12          | 11.2            |
| HLCW-280-2            | 213.26      | 750   | 511.82        | 12.5            | 639.78          | 14.9            |
| HLCW-320-2            | 238.28      | 838   | 571.87        | 15.5            | 714.84          | 17.9            |

CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C

TABLE-1-LEAVING CHILLED WATER TEMP.=7,4°C

| MODEL NO.             | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|-----------------------|----------|-------|---------------|--------------|-----------------|--------------|
|                       |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-50-1             | 32.61    | 114.7 | 78.27         | 8.6          | 97.84           | 10           |
| HLCW-60-1             | 40.95    | 144   | 98.27         | 11.6         | 122.84          | 13           |
| HLCW-70-1             | 47.83    | 168.2 | 114.78        | 16.1         | 143.48          | 17.5         |
| HLCW-80-1             | 55.48    | 195.1 | 133.14        | 6.6          | 166.43          | 8            |
| HLCW-90-1             | 66.82    | 235   | 160.37        | 8.6          | 200.46          | 10           |
| HLCW-100-1            | 73.65    | 259   | 176.75        | 10.1         | 220.94          | 11.5         |
| HLCW-110-1<br>(336)   | 83.88    | 295   | 201.32        | 12.3         | 251.65          | 13.7         |
| HLCW-110-1<br>(315)   | 79.62    | 280   | 191.08        | 11.4         | 238.85          | 12.8         |
| HLCW-125-1            | 90.71    | 319   | 217.69        | 6.1          | 272.12          | 7.5          |
| HLCW-140-1            | 107.48   | 378   | 257.96        | 7.2          | 322.45          | 9.2          |
| HLCW-160-1            | 119.99   | 422   | 287.98        | 8.9          | 359.98          | 11.3         |
| HLCW-100-2            | 65.23    | 229.4 | 156.55        | 9.4          | 195.69          | 11.8         |
| HLCW-120-2            | 81.89    | 288   | 196.54        | 11.7         | 245.67          | 13.9         |
| HLCW-140-2            | 95.65    | 336.4 | 229.57        | 14.9         | 286.96          | 17.1         |
| HLCW-160-2            | 110.95   | 390.2 | 266.28        | 17.5         | 332.85          | 19.7         |
| HLCW-180-2            | 133.64   | 470   | 320.74        | 6.3          | 400.93          | 9.9          |
| HLCW-200-2            | 147.29   | 518   | 353.50        | 7.4          | 441.87          | 12           |
| HLCW-220-2<br>(2*336) | 167.76   | 590   | 402.63        | 9.5          | 503.29          | 11.9         |
| HLCW-220-2<br>(2*315) | 159.23   | 560   | 382.16        | 7.4          | 477.70          | 9.4          |
| HLCW-250-2            | 181.41   | 638   | 435.39        | 9            | 544.24          | 11.4         |
| HLCW-280-2            | 214.96   | 756   | 515.92        | 12.7         | 644.89          | 15.1         |
| HLCW-320-2            | 239.99   | 844   | 575.97        | 15.7         | 719.96          | 18.1         |

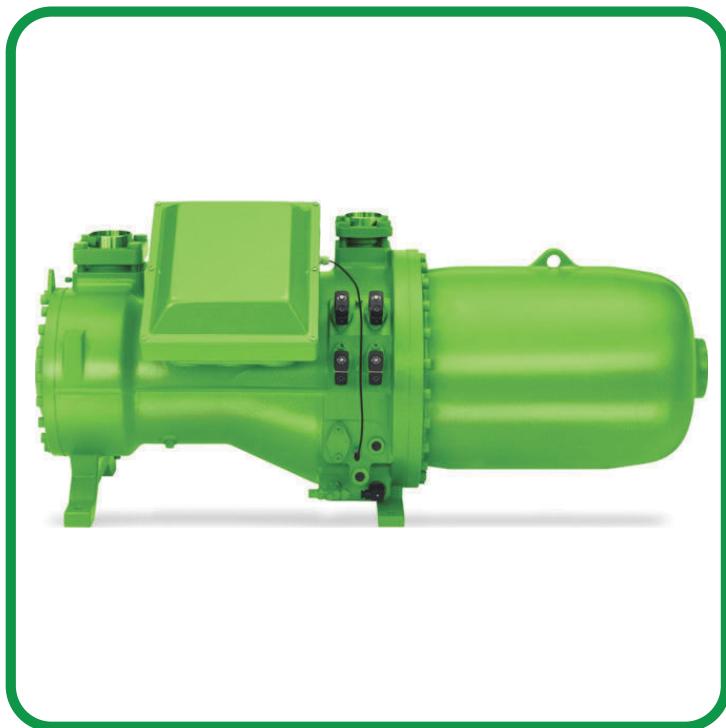
| CONDENSER ENTERING/LEAVING WATER TEMP.=°41/36C |          |       |               |                 |                 |                 |
|--|----------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.= °5,5C     |          |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |          |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-50-1                                      | 29.32    | 103.1 | 70.36         | 7.9             | 87.95           | 9.2             |
| HLCW-60-1                                      | 36.79    | 129.4 | 88.31         | 10.9            | 110.38          | 12.2            |
| HLCW-70-1                                      | 42.77    | 150.4 | 102.64        | 15.4            | 128.30          | 16.7            |
| HLCW-80-1                                      | 49.53    | 174.2 | 118.88        | 5.9             | 148.60          | 7.2             |
| HLCW-90-1                                      | 60.00    | 211   | 143.99        | 7.9             | 179.99          | 9.2             |
| HLCW-100-1                                     | 65.97    | 232   | 158.32        | 9.4             | 197.90          | 10.7            |
| HLCW-110-1<br>(336)                            | 75.07    | 264   | 180.16        | 11.6            | 225.20          | 12.9            |
| HLCW-110-1<br>(315)                            | 71.09    | 250   | 170.61        | 10.7            | 213.26          | 12              |
| HLCW-125-1                                     | 81.04    | 285   | 194.49        | 5.4             | 243.11          | 6.7             |
| HLCW-140-1                                     | 96.96    | 341   | 232.71        | 6.4             | 290.88          | 8.4             |
| HLCW-160-1                                     | 108.05   | 380   | 259.32        | 8.1             | 324.15          | 10.5            |
| HLCW-100-2                                     | 58.63    | 206.2 | 140.72        | 8.6             | 175.90          | 11              |
| HLCW-120-2                                     | 73.59    | 258.8 | 176.61        | 10.8            | 220.77          | 13.1            |
| HLCW-140-2                                     | 85.53    | 300.8 | 205.27        | 13.9            | 256.59          | 16.2            |
| HLCW-160-2                                     | 99.07    | 348.4 | 237.76        | 16.5            | 297.20          | 18.8            |
| HLCW-180-2                                     | 119.99   | 422   | 287.98        | 5.3             | 359.98          | 7.6             |
| HLCW-200-2                                     | 131.94   | 464   | 316.65        | 6.3             | 395.81          | 8.7             |
| HLCW-220-2<br>(336*2)                          | 150.13   | 528   | 360.32        | 8.4             | 450.40          | 10.8            |
| HLCW-220-2<br>(315*2)                          | 142.17   | 500   | 341.21        | 6.1             | 426.52          | 8.2             |
| HLCW-250-2                                     | 162.08   | 570   | 388.98        | 7.7             | 486.23          | 10.1            |
| HLCW-280-2                                     | 193.92   | 682   | 465.42        | 11.4            | 581.77          | 13.8            |
| HLCW-320-2                                     | 216.10   | 760   | 518.65        | 14.4            | 648.31          | 16.8            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=°41/36C |          |       |               |                 |                 |                 |
|--|----------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=°6,6C      |          |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |          |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-50-1                                      | 30.54    | 107.4 | 73.29         | 8.3             | 91.62           | 9.5             |
| HLCW-60-1                                      | 38.33    | 134.8 | 91.99         | 11.3            | 114.99          | 12.5            |
| HLCW-70-1                                      | 44.56    | 156.7 | 106.94        | 15.8            | 133.67          | 17              |
| HLCW-80-1                                      | 51.58    | 181.4 | 123.79        | 6.3             | 154.74          | 7.5             |
| HLCW-90-1                                      | 62.56    | 220   | 150.13        | 8.3             | 187.67          | 9.5             |
| HLCW-100-1                                     | 68.81    | 242   | 165.15        | 9.8             | 206.43          | 11              |
| HLCW-110-1<br>(336)                            | 78.19    | 275   | 187.67        | 12              | 234.58          | 13.2            |
| HLCW-110-1<br>(315)                            | 73.93    | 260   | 177.43        | 11.1            | 221.79          | 12.3            |
| HLCW-125-1                                     | 84.17    | 296   | 202.00        | 5.8             | 252.50          | 7               |
| HLCW-140-1                                     | 100.66   | 354   | 241.58        | 6.8             | 301.97          | 8.7             |
| HLCW-160-1                                     | 112.60   | 396   | 270.24        | 8.5             | 337.80          | 10.8            |
| HLCW-100-2                                     | 61.08    | 214.8 | 146.59        | 9               | 183.23          | 11.3            |
| HLCW-120-2                                     | 76.66    | 269.6 | 183.98        | 11.2            | 229.98          | 13.4            |
| HLCW-140-2                                     | 89.11    | 313.4 | 213.87        | 14.3            | 267.34          | 16.5            |
| HLCW-160-2                                     | 103.16   | 362.8 | 247.58        | 16.9            | 309.48          | 19.1            |
| HLCW-180-2                                     | 125.11   | 440   | 300.27        | 5.7             | 375.34          | 7.9             |
| HLCW-200-2                                     | 137.62   | 484   | 330.30        | 6.7             | 412.87          | 9               |
| HLCW-220-2<br>(336*2)                          | 156.39   | 550   | 375.34        | 8.8             | 469.17          | 11.1            |
| HLCW-220-2<br>(315*2)                          | 147.86   | 520   | 354.86        | 6.3             | 443.58          | 8.6             |
| HLCW-250-2                                     | 168.33   | 592   | 404.00        | 7.9             | 505.00          | 10.5            |
| HLCW-280-2                                     | 201.32   | 708   | 483.16        | 11.6            | 603.95          | 14.2            |
| HLCW-320-2                                     | 225.20   | 792   | 540.48        | 14.6            | 675.60          | 17.2            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=°41/36C |          |       |               |                 |                 |                 |
|--|----------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=°7,2C      |          |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |          |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-50-1                                      | 31.22    | 109.8 | 74.93         | 8.4             | 93.66           | 9.7             |
| HLCW-60-1                                      | 39.21    | 137.9 | 94.11         | 11.4            | 117.63          | 12.7            |
| HLCW-70-1                                      | 45.55    | 160.2 | 109.32        | 15.9            | 136.66          | 17.2            |
| HLCW-80-1                                      | 52.72    | 185.4 | 126.52        | 6.4             | 158.15          | 7.7             |
| HLCW-90-1                                      | 63.69    | 224   | 152.86        | 8.4             | 191.08          | 9.7             |
| HLCW-100-1                                     | 70.23    | 247   | 168.56        | 9.9             | 210.70          | 11.2            |
| HLCW-110-1<br>(336)                            | 79.90    | 281   | 191.76        | 12.1            | 239.70          | 13.4            |
| HLCW-110-1<br>(315)                            | 75.64    | 266   | 181.53        | 11.2            | 226.91          | 12.5            |
| HLCW-125-1                                     | 86.16    | 303   | 206.78        | 5.9             | 258.47          | 7.2             |
| HLCW-140-1                                     | 102.93   | 362   | 247.04        | 6.9             | 308.80          | 8.9             |
| HLCW-160-1                                     | 114.88   | 404   | 275.70        | 8.6             | 344.63          | 11              |
| HLCW-100-2                                     | 62.44    | 219.6 | 149.86        | 9.2             | 187.33          | 11.5            |
| HLCW-120-2                                     | 78.42    | 275.8 | 188.21        | 11.4            | 235.27          | 13.6            |
| HLCW-140-2                                     | 91.10    | 320.4 | 218.65        | 14.5            | 273.31          | 16.7            |
| HLCW-160-2                                     | 105.44   | 370.8 | 253.04        | 17.1            | 316.31          | 19.3            |
| HLCW-180-2                                     | 127.39   | 448   | 305.73        | 5.9             | 382.16          | 8.1             |
| HLCW-200-2                                     | 140.47   | 494   | 337.12        | 6.9             | 421.40          | 9.3             |
| HLCW-220-2<br>(336*2)                          | 159.80   | 562   | 383.52        | 9.1             | 479.41          | 11.4            |
| HLCW-220-2<br>(315*2)                          | 151.27   | 532   | 363.05        | 6.6             | 453.81          | 8.9             |
| HLCW-250-2                                     | 172.31   | 606   | 413.55        | 8.2             | 516.94          | 10.8            |
| HLCW-280-2                                     | 205.87   | 724   | 494.08        | 11.9            | 617.60          | 14.5            |
| HLCW-320-2                                     | 229.75   | 808   | 551.40        | 14.9            | 689.25          | 17.5            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C |          |       |               |                 |                 |                 |
|--|----------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.= 7,4°C     |          |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |          |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-50-1                                      | 31.48    | 110.7 | 75.54         | 8.5             | 94.43           | 9.8             |
| HLCW-60-1                                      | 39.50    | 138.9 | 94.79         | 11.5            | 118.49          | 12.8            |
| HLCW-70-1                                      | 45.89    | 161.4 | 110.14        | 16              | 137.68          | 17.3            |
| HLCW-80-1                                      | 53.09    | 186.7 | 127.41        | 6.5             | 159.26          | 7.8             |
| HLCW-90-1                                      | 64.26    | 226   | 154.23        | 8.5             | 192.79          | 9.8             |
| HLCW-100-1                                     | 70.80    | 249   | 169.92        | 10              | 212.41          | 11.3            |
| HLCW-110-1<br>(336)                            | 80.47    | 283   | 193.13        | 12.2            | 241.41          | 13.5            |
| HLCW-110-1<br>(315)                            | 76.20    | 268   | 182.89        | 11.3            | 228.61          | 12.6            |
| HLCW-125-1                                     | 86.73    | 305   | 208.14        | 6               | 260.18          | 7.3             |
| HLCW-140-1                                     | 103.50   | 364   | 248.40        | 7               | 310.50          | 9               |
| HLCW-160-1                                     | 115.73   | 407   | 277.75        | 8.7             | 347.19          | 11.1            |
| HLCW-100-2                                     | 62.95    | 221.4 | 151.09        | 9.3             | 188.86          | 11.6            |
| HLCW-120-2                                     | 78.99    | 277.8 | 189.58        | 11.5            | 236.97          | 13.7            |
| HLCW-140-2                                     | 91.79    | 322.8 | 220.29        | 14.7            | 275.36          | 16.9            |
| HLCW-160-2                                     | 106.17   | 373.4 | 254.82        | 17.3            | 318.52          | 19.5            |
| HLCW-180-2                                     | 128.52   | 452   | 308.46        | 6.1             | 385.57          | 8.3             |
| HLCW-200-2                                     | 141.60   | 498   | 339.85        | 7.1             | 424.81          | 9.5             |
| HLCW-220-2<br>(2*336)                          | 160.94   | 566   | 386.25        | 9.3             | 482.82          | 11.6            |
| HLCW-220-2<br>(2*315)                          | 152.41   | 536   | 365.78        | 6.8             | 457.23          | 9.2             |
| HLCW-250-2                                     | 173.45   | 610   | 416.28        | 8.5             | 520.35          | 11.1            |
| HLCW-280-2                                     | 207.00   | 728   | 496.81        | 12.2            | 621.01          | 14.8            |
| HLCW-320-2                                     | 231.46   | 814   | 555.50        | 15.2            | 694.37          | 17.8            |

| ELECTRICAL DATA (R-22) |                          |           |                  |                      |
|------------------------|--------------------------|-----------|------------------|----------------------|
| chiller MODEL          | Nominal Comp. power (HP) | MRA (Amp) | LRA (Amp) (D/DD) | MAX CONSE POWER (kw) |
| HLCW-50-1              | 50                       | 58.1      | 218/411          | 52                   |
| HLCW-60-1              | 60                       | 71.4      | 269/508          | 65                   |
| HLCW-70-1              | 70                       | 84.6      | 290/485          | 78                   |
| HLCW-80-1              | 80                       | 95.2      | 350/585          | 88                   |
| HLCW-90-1              | 90                       | 106.4     | 423/686          | 96                   |
| HLCW-100-1             | 100                      | 121.3     | 479/790          | 102                  |
| HLCW-110-1 (336)       | 110                      | 138.7     | 516/887          | 112                  |
| HLCW-110-1 (315)       | 110                      | 130.8     | 520/801          | 112                  |
| HLCW-125-1             | 125                      | 150       | 612/943          | 132                  |
| HLCW-140-1             | 140                      | 180.5     | 665/1023         | 150                  |
| HLCW-160-1             | 160                      | 191.5     | 729/1114         | 160                  |
| HLCW-100-2             | 2*50                     | 116.2     | 2*(218/411)      | 104                  |
| HLCW-120-2             | 2*60                     | 142.8     | 2*(269/508)      | 130                  |
| HLCW-140-2             | 2*70                     | 169.2     | 2*(290/485)      | 156                  |
| HLCW-160-2             | 2*80                     | 190.4     | 2*(350/585)      | 176                  |
| HLCW-180-2             | 2*90                     | 212.8     | 2*(423/686)      | 192                  |
| HLCW-200-2             | 2*100                    | 242.6     | 2*(479/790)      | 204                  |
| HLCW-220-2 (2*336)     | 2*110                    | 277.4     | 2*(516/887)      | 224                  |
| HLCW-220-2 (2*315)     | 2*110                    | 261.6     | 2*(520/801)      | 224                  |
| HLCW-250-2             | 2*125                    | 300       | 2*(612/943)      | 264                  |
| HLCW-280-2             | 2*140                    | 361       | 2*(665/1023)     | 300                  |
| HLCW-320-2             | 2*160                    | 383       | 2*(729/1114)     | 320                  |



## Engineering Specifications-50 Hz (R-134a)-bitzer

| Model                              | HLCW                                | HLCW-35-1 | HLCW-40-1 | HLCW-50-1<br>(137) | HLCW-50-1<br>(195) | HLCW-50-1<br>(197) | HLCW-60-1<br>(170) | HLCW-60-1<br>(220) | HLCW-60-1<br>(227) |
|------------------------------------|-------------------------------------|-----------|-----------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| cooling capacity                   | TR                                  | 24.51     | 30.45     | 24.25              | 35.32              | 34.86              | 30.42              | 39.84              | 40.95              |
|                                    | kW                                  | 86.2      | 107.1     | 85.3               | 124.2              | 122.6              | 107                | 140.1              | 144                |
| Compressor                         | Compact Screw Compressor CSH Series |           |           |                    |                    |                    |                    |                    |                    |
| QTY                                |                                     | 1         | 1         | 1                  | 1                  | 1                  | 1                  | 1                  | 1                  |
| Oil Charge                         | USGal                               | 2.51      | 2.51      | 2.51               | 2.51               | 3.96               | 2.51               | 2.51               | 3.96               |
|                                    | Litre                               | 9.5       | 9.5       | 9.5                | 9.5                | 15                 | 9.5                | 9.5                | 15                 |
| Condenser                          | Condenser shell & tube              |           |           |                    |                    |                    |                    |                    |                    |
| QTY                                |                                     |           |           | 1                  |                    |                    |                    |                    |                    |
| Ref. Circuits                      |                                     | 1         | 1         | 1                  | 1                  | 1                  | 1                  | 1                  | 1                  |
| Water Volume                       | GPM                                 | 73.53     | 91.36     | 72.76              | 105.95             | 104.58             | 91.27              | 119.51             | 122.84             |
|                                    | Litre/s                             | 4.64      | 5.76      | 4.59               | 6.68               | 6.60               | 5.76               | 7.54               | 7.75               |
| Evaporator                         | Direct Expansion shell & tube       |           |           |                    |                    |                    |                    |                    |                    |
| QTY                                |                                     |           |           | 1                  |                    |                    |                    |                    |                    |
| Ref. Circuits                      |                                     | 1         | 1         | 1                  | 1                  | 1                  | 1                  | 1                  | 1                  |
| Water Volume                       | GPM                                 | 58.83     | 73.09     | 58.21              | 84.76              | 83.67              | 73.02              | 95.61              | 98.27              |
|                                    | Litre/s                             | 3.71      | 4.61      | 3.67               | 5.35               | 5.28               | 4.61               | 6.03               | 6.20               |
| Refrigerant Charge (R134a)(Approx) | Lb                                  | 77.1      | 88.2      | 110.2              | 110.2              | 110.2              | 132.2              | 132.2              | 132.2              |
|                                    | Kg                                  | 35        | 40        | 50                 | 50                 | 50                 | 60                 | 60                 | 60                 |
| Operating Weight (Approx)          | Lb                                  | 2535      | 2535      | 2755               | 2865               | 3196               | 2865               | 2975               | 3306               |
|                                    | Kg                                  | 1150      | 1150      | 1250               | 1300               | 1450               | 1300               | 1350               | 1500               |

| Model                              | HLCW                                | HLCW-70-1<br>(197) | HLCW-70-1<br>(258) | HLCW-80-1<br>(227) | HLCW-80-1<br>(295) | HLCW-80-1<br>(315) | HLCW-90-1<br>(258) | HLCW-90-1<br>(336) | HLCW-90-1<br>(359) |
|------------------------------------|-------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| cooling capacity                   | TR                                  | 35.20              | 47.17              | 41.06              | 53.85              | 56.64              | 46.80              | 61.42              | 65.12              |
|                                    | kW                                  | 123.8              | 165.9              | 144.4              | 189.4              | 199.2              | 164.6              | 216                | 229                |
| Compressor                         | Compact Screw Compressor CSH Series |                    |                    |                    |                    |                    |                    |                    |                    |
| QTY                                |                                     | 1                  | 1                  | 1                  | 1                  | 1                  | 1                  | 1                  | 1                  |
| Oil Charge                         | USGal                               | 3.96               | 3.96               | 3.96               | 3.96               | 5.81               | 3.96               | 3.96               | 5.81               |
|                                    | Litre                               | 15                 | 15                 | 15                 | 15                 | 22                 | 15                 | 15                 | 22                 |
| Condenser                          | Condenser shell & tube              |                    |                    |                    |                    |                    |                    |                    |                    |
| QTY                                |                                     |                    |                    | 1                  |                    |                    |                    |                    |                    |
| Ref. Circuits                      |                                     | 1                  | 1                  | 1                  | 1                  | 1                  | 1                  | 1                  | 1                  |
| Water Volume                       | GPM                                 | 105.61             | 141.52             | 123.18             | 161.56             | 169.92             | 140.41             | 184.26             | 195.35             |
|                                    | Litre/s                             | 6.66               | 8.93               | 7.77               | 10.19              | 10.72              | 8.86               | 11.62              | 12.32              |
| Evaporator                         | Direct Expansion shell & tube       |                    |                    |                    |                    |                    |                    |                    |                    |
| QTY                                |                                     |                    |                    | 1                  |                    |                    |                    |                    |                    |
| Ref. Circuits                      |                                     | 1                  | 1                  | 1                  | 1                  | 1                  | 1                  | 1                  | 1                  |
| Water Volume                       | GPM                                 | 84.48              | 113.21             | 98.54              | 129.25             | 135.94             | 112.33             | 147.40             | 156.28             |
|                                    | Litre/s                             | 5.33               | 7.14               | 6.22               | 8.16               | 8.58               | 7.09               | 9.30               | 9.86               |
| Refrigerant Charge (R134a)(Approx) | Lb                                  | 154.3              | 154.3              | 176.3              | 176.3              | 176.3              | 198.4              | 198.4              | 198.4              |
|                                    | Kg                                  | 70                 | 70                 | 80                 | 80                 | 80                 | 90                 | 90                 | 90                 |
| Operating Weight (Approx)          | Lb                                  | 4408               | 4518               | 4628               | 4628               | 5400               | 4849               | 4849               | 5510               |
|                                    | Kg                                  | 2000               | 2050               | 2100               | 2100               | 2450               | 2200               | 2200               | 2500               |

| Model                              | HLCW                                | HLCW-100-1<br>(295) | HLCW-110-1<br>(336) | HLCW-110-1<br>(315) | HLCW-110-1<br>(410) | HLCW-125-1<br>(359) | HLCW-125-1<br>(470) | HLCW-140-1<br>(410) | HLCW140-1<br>(535) |
|------------------------------------|-------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|
| cooling capacity                   | TR                                  | 54.08               | 61.70               | 58.29               | 77.06               | 66.54               | 85.30               | 76.77               | 96.96              |
|                                    | kW                                  | 190.20              | 217.00              | 205.00              | 271.00              | 234.00              | 300.00              | 270.00              | 341.00             |
| Compressor                         | Compact Screw Compressor CSH Series |                     |                     |                     |                     |                     |                     |                     |                    |
| QTY                                |                                     | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                  |
| Oil Charge                         | USGal                               | 3.96                | 3.96                | 5.81                | 5.81                | 5.81                | 5.02                | 5.81                | 5.02               |
|                                    | Litre                               | 15                  | 15                  | 22                  | 22                  | 22                  | 19                  | 22                  | 19                 |
| Condenser                          | Condenser shell & tube              |                     |                     |                     |                     |                     |                     |                     |                    |
| QTY                                |                                     | 1                   |                     |                     |                     |                     |                     |                     |                    |
| Ref. Circuits                      |                                     | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                  |
| Water Volume                       | GPM                                 | 162.25              | 185.11              | 174.87              | 231.17              | 199.61              | 255.91              | 230.32              | 290.88             |
|                                    | Litre/s                             | 10.24               | 11.68               | 11.03               | 14.58               | 12.59               | 16.15               | 14.53               | 18.35              |
| Evaporator                         | Direct Expansion shell & tube       |                     |                     |                     |                     |                     |                     |                     |                    |
| QTY                                |                                     | 1                   |                     |                     |                     |                     |                     |                     |                    |
| Ref. Circuits                      |                                     | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                  |
| Water Volume                       | GPM                                 | 129.80              | 148.09              | 139.90              | 184.94              | 159.69              | 204.73              | 184.26              | 232.71             |
|                                    | Litre/s                             | 8.19                | 9.34                | 8.83                | 11.67               | 10.07               | 12.92               | 11.62               | 14.68              |
| Refrigerant Charge (R134a)(Approx) | Lb                                  | 220.4               | 242.4               | 242.4               | 242.4               | 275.5               | 275.5               | 308.6               | 308.6              |
|                                    | Kg                                  | 100                 | 110                 | 110                 | 110                 | 125                 | 125                 | 140                 | 140                |
| Operating Weight (Approx)          | Lb                                  | 5069                | 5510                | 6171                | 6171                | 6502                | 6502                | 7824                | 7824               |
|                                    | Kg                                  | 2300                | 2500                | 2800                | 2800                | 2950                | 2950                | 3550                | 3550               |

| Model                              | HLCW                                | HLCW-160-1<br>(470) | HLCW-160-1<br>(615) | HLCW-210-1<br>(615) |
|------------------------------------|-------------------------------------|---------------------|---------------------|---------------------|
| cooling capacity                   | TR                                  | 83.31               | 115.16              | 113.74              |
|                                    | kW                                  | 293.00              | 405.00              | 400.00              |
| Compressor                         | Compact Screw Compressor CSH Series |                     |                     |                     |
| QTY                                |                                     | 1                   | 1                   | 1                   |
| Oil Charge                         | USGal                               | 5.02                | 7.93                | 7.93                |
|                                    | Litre                               | 19                  | 30                  | 30                  |
| Condenser                          | Condenser shell & tube              |                     |                     |                     |
| QTY                                |                                     | 1                   |                     |                     |
| Ref. Circuits                      |                                     | 1                   | 1                   | 1                   |
| Water Volume                       | GPM                                 | 249.94              | 345.48              | 341.21              |
|                                    | Litre/s                             | 15.77               | 21.80               | 21.53               |
| Evaporator                         | Direct Expansion shell & tube       |                     |                     |                     |
| QTY                                |                                     | 1                   |                     |                     |
| Ref. Circuits                      |                                     | 1                   | 1                   | 1                   |
| Water Volume                       | GPM                                 | 199.95              | 276.38              | 272.97              |
|                                    | Litre/s                             | 12.61               | 17.44               | 17.22               |
| Refrigerant Charge (R134a)(Approx) | Lb                                  | 352.6               | 352.6               | 462.8               |
|                                    | Kg                                  | 160                 | 160                 | 210                 |
| Operating Weight (Approx)          | Lb                                  | 8155                | 9147                | 9698                |
|                                    | Kg                                  | 3700                | 4150                | 4400                |

| Model                              | HLCW                                | HLCW-70-2 | HLCW-40-80-2 | HLCW-100-2<br>(2*137) | HLCW-100-2<br>(2*195) | HLCW-100-2<br>(2*197) | HLCW-120-2<br>(2*170) | HLCW-<br>120-2<br>(2*220) | HLCW-120-2<br>(2*227) |
|------------------------------------|-------------------------------------|-----------|--------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------------|-----------------------|
| cooling capacity                   | TR                                  | 49.02     | 60.91        | 48.51                 | 70.63                 | 69.72                 | 60.85                 | 79.67                     | 81.89                 |
|                                    | kW                                  | 172.40    | 214.20       | 170.60                | 248.40                | 245.20                | 214.00                | 280.20                    | 288.00                |
| Compressor                         | Compact Screw Compressor CSH Series |           |              |                       |                       |                       |                       |                           |                       |
| QTY                                |                                     | 2         | 2            | 2                     | 2                     | 2                     | 2                     | 2                         | 2                     |
| Oil Charge                         | USGal                               | 5.02      | 5.02         | 5.02                  | 5.02                  | 7.93                  | 5.02                  | 5.02                      | 7.93                  |
|                                    | Litre                               | 19        | 19           | 19                    | 19                    | 30                    | 19                    | 19                        | 30                    |
| Condenser                          | Condenser shell & tube              |           |              |                       |                       |                       |                       |                           |                       |
| QTY                                |                                     | 1         |              |                       |                       |                       |                       |                           |                       |
| Ref. Circuits                      |                                     | 2         | 2            | 2                     | 2                     | 2                     | 2                     | 2                         | 2                     |
| Water Volume                       | GPM                                 | 147.06    | 182.72       | 145.53                | 211.89                | 209.16                | 182.55                | 239.02                    | 245.67                |
|                                    | Litre/s                             | 9.28      | 11.53        | 9.18                  | 13.37                 | 13.20                 | 11.52                 | 15.08                     | 15.50                 |
| Evaporator                         | Direct Expansion shell & tube       |           |              |                       |                       |                       |                       |                           |                       |
| QTY                                |                                     | 1         |              |                       |                       |                       |                       |                           |                       |
| Ref. Circuits                      |                                     | 2         | 2            | 2                     | 2                     | 2                     | 2                     | 2                         | 2                     |
| Water Volume                       | GPM                                 | 117.65    | 146.18       | 116.42                | 169.52                | 167.33                | 146.04                | 191.22                    | 196.54                |
|                                    | Litre/s                             | 7.42      | 9.22         | 7.35                  | 10.69                 | 10.56                 | 9.21                  | 12.06                     | 12.40                 |
| Refrigerant Charge (R134a)(Approx) | Lb                                  | 154.3     | 176.3        | 220.4                 | 220.4                 | 220.4                 | 264.5                 | 264.5                     | 264.5                 |
| Operating Weight (Approx)          | Kg                                  | 70        | 80           | 100                   | 100                   | 100                   | 120                   | 120                       | 120                   |
|                                    | Lb                                  | 4959      | 5069         | 5400                  | 5510                  | 6281                  | 5620                  | 5841                      | 6612                  |
|                                    | Kg                                  | 2250      | 2300         | 2450                  | 2500                  | 2850                  | 2550                  | 2650                      | 3000                  |

| Model                              | HLCW                                | HLCW-140-2<br>(2*197) | HLCW-140-2<br>(2*258) | HLCW-160-2<br>(2*227) | HLCW-160-2<br>(2*295) | HLCW-160-2<br>(2*315) | HLCW-180-2<br>(2*258) | HLCW-<br>180-2<br>(2*336) | HLCW-180-2<br>(2*359) |
|------------------------------------|-------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------------|-----------------------|
| cooling capacity                   | TR                                  | 70.40                 | 94.35                 | 82.12                 | 107.71                | 113.28                | 93.61                 | 122.84                    | 130.23                |
|                                    | kW                                  | 247.60                | 331.80                | 288.80                | 378.80                | 398.40                | 329.20                | 432.00                    | 458.00                |
| Compressor                         | Compact Screw Compressor CSH Series |                       |                       |                       |                       |                       |                       |                           |                       |
| QTY                                |                                     | 2                     | 2                     | 2                     | 2                     | 2                     | 2                     | 2                         | 2                     |
| Oil Charge                         | USGal                               | 7.93                  | 7.93                  | 7.93                  | 7.93                  | 11.62                 | 7.93                  | 7.93                      | 11.62                 |
|                                    | Litre                               | 30                    | 30                    | 30                    | 30                    | 44                    | 30                    | 30                        | 44                    |
| Condenser                          | Condenser shell & tube              |                       |                       |                       |                       |                       |                       |                           |                       |
| QTY                                |                                     | 1                     |                       |                       |                       |                       |                       |                           |                       |
| Ref. Circuits                      |                                     | 2                     | 2                     | 2                     | 2                     | 2                     | 2                     | 2                         | 2                     |
| Water Volume                       | GPM                                 | 211.21                | 283.04                | 246.36                | 323.13                | 339.85                | 280.82                | 368.51                    | 390.69                |
|                                    | Litre/s                             | 13.33                 | 17.86                 | 15.54                 | 20.39                 | 21.44                 | 17.72                 | 23.25                     | 24.65                 |
| Evaporator                         | Direct Expansion shell & tube       |                       |                       |                       |                       |                       |                       |                           |                       |
| QTY                                |                                     | 1                     |                       |                       |                       |                       |                       |                           |                       |
| Ref. Circuits                      |                                     | 2                     | 2                     | 2                     | 2                     | 2                     | 2                     | 2                         | 2                     |
| Water Volume                       | GPM                                 | 168.97                | 226.43                | 197.09                | 258.50                | 271.88                | 224.66                | 294.81                    | 312.55                |
|                                    | Litre/s                             | 10.66                 | 14.29                 | 12.44                 | 16.31                 | 17.16                 | 14.18                 | 18.60                     | 19.72                 |
| Refrigerant Charge (R134a)(Approx) | Lb                                  | 308.6                 | 308.6                 | 352.6                 | 352.6                 | 352.6                 | 396.7                 | 396.7                     | 396.7                 |
| Operating Weight (Approx)          | Kg                                  | 140                   | 140                   | 160                   | 160                   | 160                   | 180                   | 180                       | 180                   |
|                                    | Lb                                  | 7714                  | 7714                  | 7934                  | 7934                  | 9477                  | 8155                  | 8155                      | 9587                  |
|                                    | Kg                                  | 3500                  | 3500                  | 3600                  | 3600                  | 4300                  | 3700                  | 3700                      | 4350                  |

| Model                              | HLCW                                | HLCW-200-2<br>(2*295) | HLCW-220-2<br>(2*336) | HLCW-220-2<br>(2*315) | HLCW-220-2<br>(2*410) | HLCW-250-2<br>(2*359) | HLCW-250-2<br>(2*470) | HLCW-280-2<br>(2*410) | HLCW-280-2<br>(2*535) |
|------------------------------------|-------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| cooling capacity                   | TR                                  | 108.16                | 123.41                | 116.58                | 154.11                | 133.07                | 170.61                | 153.55                | 193.92                |
|                                    | kW                                  | 380.40                | 434.00                | 410.00                | 542.00                | 468.00                | 600.00                | 540.00                | 682.00                |
| Compressor                         | Compact Screw Compressor CSH Series |                       |                       |                       |                       |                       |                       |                       |                       |
| QTY                                |                                     | 2                     | 2                     | 2                     | 2                     | 2                     | 2                     | 2                     | 2                     |
| Oil Charge                         | USGal                               | 7.93                  | 7.93                  | 11.62                 | 11.62                 | 11.62                 | 10.04                 | 11.62                 | 10.04                 |
|                                    | Litre                               | 30                    | 30                    | 44                    | 44                    | 44                    | 38                    | 44                    | 38                    |
| Condenser                          | Condenser shell & tube              |                       |                       |                       |                       |                       |                       |                       |                       |
| QTY                                |                                     |                       |                       |                       |                       | 1                     |                       |                       |                       |
| Ref. Circuits                      |                                     | 2                     | 2                     | 2                     | 2                     | 2                     | 2                     | 2                     | 2                     |
| Water Volume                       | GPM                                 | 324.49                | 370.22                | 349.74                | 462.34                | 399.22                | 511.82                | 460.64                | 581.77                |
|                                    | Litre/s                             | 20.47                 | 23.36                 | 22.07                 | 29.17                 | 25.19                 | 32.29                 | 29.06                 | 36.70                 |
| Evaporator                         | Direct Expansion shell & tube       |                       |                       |                       |                       |                       |                       |                       |                       |
| QTY                                |                                     |                       |                       |                       |                       | 1                     |                       |                       |                       |
| Ref. Circuits                      |                                     | 2                     | 2                     | 2                     | 2                     | 2                     | 2                     | 2                     | 2                     |
| Water Volume                       | GPM                                 | 259.60                | 296.17                | 279.80                | 369.88                | 319.38                | 409.46                | 368.51                | 465.42                |
|                                    | Litre/s                             | 16.38                 | 18.69                 | 17.65                 | 23.34                 | 20.15                 | 25.83                 | 23.25                 | 29.36                 |
| Refrigerant Charge (R134a)(Approx) | Lb                                  | 440.8                 | 484.9                 | 484.9                 | 484.9                 | 551.0                 | 551.0                 | 617.1                 | 617.1                 |
| Operating Weight (Approx)          | Kg                                  | 200                   | 220                   | 220                   | 220                   | 250                   | 250                   | 280                   | 280                   |
|                                    | Lb                                  | 8485                  | 9698                  | 11130                 | 11351                 | 11681                 | 11681                 | 12893                 | 12893                 |
|                                    | Kg                                  | 3850                  | 4400                  | 5050                  | 5150                  | 5300                  | 5300                  | 5850                  | 5850                  |

| Model                              | HLCW                                | HLCW-160-1<br>(2*470) | HLCW-160-1<br>(2*615) | HLCW-210-1<br>(2*615) |
|------------------------------------|-------------------------------------|-----------------------|-----------------------|-----------------------|
| cooling capacity                   | TR                                  | 166.63                | 230.32                | 227.48                |
|                                    | kW                                  | 586.00                | 810.00                | 800.00                |
| Compressor                         | Compact Screw Compressor CSH Series |                       |                       |                       |
| QTY                                |                                     | 2                     | 2                     | 2                     |
| Oil Charge                         | USGal                               | 10.04                 | 15.85                 | 15.85                 |
|                                    | Litre                               | 38                    | 60                    | 60                    |
| Condenser                          | Condenser shell & tube              |                       |                       |                       |
| QTY                                |                                     |                       | 1                     |                       |
| Ref. Circuits                      |                                     | 2                     | 2                     | 2                     |
| Water Volume                       | GPM                                 | 499.88                | 690.96                | 682.43                |
|                                    | Litre/s                             | 31.54                 | 43.59                 | 43.05                 |
| Evaporator                         | Direct Expansion shell & tube       |                       |                       |                       |
| QTY                                |                                     |                       | 1                     |                       |
| Ref. Circuits                      |                                     | 2                     | 2                     | 2                     |
| Water Volume                       | GPM                                 | 399.90                | 552.77                | 545.94                |
|                                    | Litre/s                             | 25.23                 | 34.87                 | 34.44                 |
| Refrigerant Charge (R134a)(Approx) | Lb                                  | 705.3                 | 705.3                 | 925.7                 |
| Operating Weight (Approx)          | Kg                                  | 320                   | 320                   | 420                   |
|                                    | Lb                                  | 13334                 | 15318                 | 16199                 |
|                                    | Kg                                  | 6050                  | 6950                  | 7350                  |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-35-1                                      | 22.86    | 80.4  | 54.87         | 6.2          | 68.58           | 6.6          |
| HLCW-40-1                                      | 28.43    | 100   | 68.24         | 7.3          | 85.30           | 7.7          |
| HLCW-50-1 (139)                                | 22.66    | 79.7  | 54.39         | 6.1          | 67.99           | 6.5          |
| HLCW-50-1 (195)                                | 32.98    | 116   | 79.16         | 8.1          | 98.95           | 8.5          |
| HLCW-50-1 (197)                                | 32.44    | 114.1 | 77.87         | 7.9          | 97.33           | 8.3          |
| HLCW-60-1 (170)                                | 28.43    | 100   | 68.24         | 7.1          | 85.30           | 7.5          |
| HLCW-60-1 (220)                                | 37.22    | 130.9 | 89.33         | 8.5          | 111.66          | 8.9          |
| HLCW-60-1 (227)                                | 38.22    | 134.4 | 91.72         | 8.3          | 114.65          | 8.7          |
| HLCW-70-1 (197)                                | 32.76    | 115.2 | 78.62         | 8            | 98.27           | 8.4          |
| HLCW-70-1 (258)                                | 43.90    | 154.4 | 105.37        | 11.9         | 131.71          | 12.3         |
| HLCW-80-1 (227)                                | 38.22    | 134.4 | 91.72         | 6.7          | 114.65          | 7.1          |
| HLCW-80-1 (295)                                | 50.27    | 176.8 | 120.65        | 8.2          | 150.82          | 8.6          |
| HLCW-80-1 (315)                                | 52.86    | 185.9 | 126.86        | 8.5          | 158.58          | 8.9          |
| HLCW-90-1 (258)                                | 43.65    | 153.5 | 104.75        | 9.2          | 130.94          | 9.6          |
| HLCW-90-1 (336)                                | 57.15    | 201   | 137.17        | 11.7         | 171.46          | 12.1         |
| HLCW-90-1 (359)                                | 60.85    | 214   | 146.04        | 11.7         | 182.55          | 12.1         |
| HLCW-100-1 (295)                               | 50.44    | 177.4 | 121.06        | 10.7         | 151.33          | 11.1         |
| HLCW-110-1 (336)                               | 57.44    | 202   | 137.85        | 11.4         | 172.31          | 11.8         |
| HLCW-110-1 (315)                               | 54.59    | 192   | 131.03        | 11           | 163.78          | 11.4         |
| HLCW-110-1 (410)                               | 71.94    | 253   | 172.65        | 13.3         | 215.82          | 13.7         |
| HLCW-125-1 (359)                               | 62.27    | 219   | 149.45        | 8.3          | 186.81          | 8.7          |
| HLCW-125-1 (470)                               | 79.62    | 280   | 191.08        | 9.7          | 238.85          | 10.1         |
| HLCW-140-1 (410)                               | 71.94    | 253   | 172.65        | 9.4          | 215.82          | 9.8          |
| HLCW-140-1 (535)                               | 90.42    | 318   | 217.01        | 11.1         | 271.27          | 11.5         |
| HLCW-160-1 (470)                               | 77.91    | 274   | 186.99        | 10.3         | 233.73          | 10.7         |
| HLCW-160-1 (615)                               | 107.77   | 379   | 258.64        | 13.3         | 323.30          | 13.7         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-210-1 (615)                               | 106.35   | 374   | 255.23        | 10.3         | 319.04          | 10.7         |
| HLCW-70-2                                      | 45.72    | 160.8 | 109.73        | 12.3         | 137.17          | 12.7         |
| HLCW-80-2                                      | 56.87    | 200   | 136.49        | 14.5         | 170.61          | 14.9         |
| HLCW-100-2 (2*137)                             | 45.32    | 159.4 | 108.78        | 12.1         | 135.97          | 12.5         |
| HLCW-100-2 (2*195)                             | 65.97    | 232   | 158.32        | 16.1         | 197.90          | 16.5         |
| HLCW-100-2 (2*197)                             | 64.89    | 228.2 | 155.73        | 15.7         | 194.66          | 16.1         |
| HLCW-120-2 (2*170)                             | 56.87    | 200   | 136.49        | 14.1         | 170.61          | 14.5         |
| HLCW-120-2 (2*220)                             | 74.44    | 261.8 | 178.66        | 16.9         | 223.32          | 17.3         |
| HLCW-120-2 (2*227)                             | 76.43    | 268.8 | 183.44        | 16.5         | 229.30          | 16.9         |
| HLCW-140-2 (2*197)                             | 65.51    | 230.4 | 157.23        | 15.9         | 196.54          | 16.3         |
| HLCW-140-2 (2*258)                             | 87.81    | 308.8 | 210.73        | 23.7         | 263.42          | 24.1         |
| HLCW-160-2 (2*227)                             | 76.43    | 268.8 | 183.44        | 13.3         | 229.30          | 13.7         |
| HLCW-160-2 (2*295)                             | 100.54   | 353.6 | 241.31        | 16.3         | 301.63          | 16.7         |
| HLCW-160-2 (2*315)                             | 105.72   | 371.8 | 253.73        | 16.9         | 317.16          | 17.3         |
| HLCW-180-2 (2*258)                             | 87.29    | 307   | 209.51        | 18.3         | 261.88          | 18.7         |
| HLCW-180-2 (2*336)                             | 114.31   | 402   | 274.34        | 23.3         | 342.92          | 23.7         |
| HLCW-180-2 (2*359)                             | 121.70   | 428   | 292.08        | 23.3         | 365.10          | 23.7         |
| HLCW-200-2 (2*295)                             | 100.89   | 354.8 | 242.13        | 21.3         | 302.66          | 21.7         |
| HLCW-220-2 (2*336)                             | 114.88   | 404   | 275.70        | 22.5         | 344.63          | 22.9         |
| HLCW-220-2 (2*315)                             | 109.19   | 384   | 262.05        | 21.7         | 327.57          | 22.1         |
| HLCW-220-2 (2*410)                             | 143.88   | 506   | 345.31        | 26.3         | 431.64          | 26.7         |
| HLCW-250-2 (2*359)                             | 124.54   | 438   | 298.90        | 16.3         | 373.63          | 16.7         |
| HLCW-250-2 (2*470)                             | 159.23   | 560   | 382.16        | 19.1         | 477.70          | 19.5         |
| HLCW-280-2 (2*410)                             | 143.88   | 506   | 345.31        | 18.5         | 431.64          | 18.9         |
| HLCW-280-2 (2*535)                             | 180.84   | 636   | 434.02        | 21.9         | 542.53          | 22.3         |
| HLCW-320-2 (2*470)                             | 155.82   | 548   | 373.97        | 20.3         | 467.46          | 20.7         |
| HLCW-320-2 (2*615)                             | 215.53   | 758   | 517.28        | 26.3         | 646.60          | 26.7         |
| HLCW-420-2 (2*615)                             | 212.69   | 748   | 510.46        | 20.3         | 638.07          | 20.7         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-35-1                                      | 23.91    | 84.1  | 57.39         | 6.4          | 71.74           | 6.8          |
| HLCW-40-1                                      | 29.71    | 104.5 | 71.31         | 7.5          | 89.14           | 7.9          |
| HLCW-50-1 (139)                                | 23.69    | 83.3  | 56.85         | 6.3          | 71.06           | 6.7          |
| HLCW-50-1 (195)                                | 34.49    | 121.3 | 82.78         | 8.3          | 103.47          | 8.7          |
| HLCW-50-1 (197)                                | 34.01    | 119.6 | 81.62         | 8.1          | 102.02          | 8.5          |
| HLCW-60-1 (170)                                | 29.71    | 104.5 | 71.31         | 7.3          | 89.14           | 7.7          |
| HLCW-60-1 (220)                                | 38.90    | 136.8 | 93.36         | 8.7          | 116.70          | 9.1          |
| HLCW-60-1 (227)                                | 39.81    | 140   | 95.54         | 8.5          | 119.42          | 8.9          |
| HLCW-70-1 (197)                                | 34.32    | 120.7 | 82.37         | 8.2          | 102.96          | 8.6          |
| HLCW-70-1 (258)                                | 46.01    | 161.8 | 110.42        | 12.1         | 138.02          | 12.5         |
| HLCW-80-1 (227)                                | 40.04    | 140.8 | 96.09         | 6.9          | 120.11          | 7.3          |
| HLCW-80-1 (295)                                | 52.55    | 184.8 | 126.11        | 8.4          | 157.64          | 8.8          |
| HLCW-80-1 (315)                                | 55.28    | 194.4 | 132.66        | 8.7          | 165.83          | 9.1          |
| HLCW-90-1 (258)                                | 45.67    | 160.6 | 109.60        | 9.4          | 137.00          | 9.8          |
| HLCW-90-1 (336)                                | 60.00    | 211   | 143.99        | 11.9         | 179.99          | 12.3         |
| HLCW-90-1 (359)                                | 63.69    | 224   | 152.86        | 11.9         | 191.08          | 12.3         |
| HLCW-100-1 (295)                               | 52.77    | 185.6 | 126.66        | 10.9         | 158.32          | 11.3         |
| HLCW-110-1 (336)                               | 60.28    | 212   | 144.67        | 11.6         | 180.84          | 12           |
| HLCW-110-1 (315)                               | 57.15    | 201   | 137.17        | 11.2         | 171.46          | 11.6         |
| HLCW-110-1 (410)                               | 75.07    | 264   | 180.16        | 13.5         | 225.20          | 13.9         |
| HLCW-125-1 (359)                               | 65.12    | 229   | 156.28        | 8.5          | 195.35          | 8.9          |
| HLCW-125-1 (470)                               | 83.31    | 293   | 199.95        | 9.9          | 249.94          | 10.3         |
| HLCW-140-1 (410)                               | 75.07    | 264   | 180.16        | 9.6          | 225.20          | 10           |
| HLCW-140-1 (535)                               | 94.69    | 333   | 227.25        | 11.3         | 284.06          | 11.7         |
| HLCW-160-1 (470)                               | 81.32    | 286   | 195.17        | 10.5         | 243.97          | 10.9         |
| HLCW-160-1 (615)                               | 112.60   | 396   | 270.24        | 13.5         | 337.80          | 13.9         |
| HLCW-210-1 (615)                               | 111.18   | 391   | 266.83        | 10.5         | 333.54          | 10.9         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-70-2                                      | 47.83    | 168.2 | 114.78        | 12.5         | 143.48          | 12.9         |
| HLCW-80-2                                      | 59.43    | 209   | 142.63        | 14.7         | 178.28          | 15.1         |
| HLCW-100-2 (2*137)                             | 47.37    | 166.6 | 113.69        | 12.3         | 142.12          | 12.7         |
| HLCW-100-2 (2*195)                             | 68.98    | 242.6 | 165.56        | 16.3         | 206.95          | 16.7         |
| HLCW-100-2 (2*197)                             | 68.02    | 239.2 | 163.24        | 15.9         | 204.05          | 16.3         |
| HLCW-120-2 (2*170)                             | 59.43    | 209   | 142.63        | 14.3         | 178.28          | 14.7         |
| HLCW-120-2 (2*220)                             | 77.80    | 273.6 | 186.71        | 17.1         | 233.39          | 17.5         |
| HLCW-120-2 (2*227)                             | 79.62    | 280   | 191.08        | 16.7         | 238.85          | 17.1         |
| HLCW-140-2 (2*197)                             | 68.64    | 241.4 | 164.74        | 16.1         | 205.92          | 16.5         |
| HLCW-140-2 (2*258)                             | 92.01    | 323.6 | 220.83        | 23.9         | 276.04          | 24.3         |
| HLCW-160-2 (2*227)                             | 80.07    | 281.6 | 192.17        | 13.5         | 240.21          | 13.9         |
| HLCW-160-2 (2*295)                             | 105.09   | 369.6 | 252.23        | 16.5         | 315.28          | 16.9         |
| HLCW-160-2 (2*315)                             | 110.55   | 388.8 | 265.33        | 17.1         | 331.66          | 17.5         |
| HLCW-180-2 (2*258)                             | 91.33    | 321.2 | 219.20        | 18.5         | 273.99          | 18.9         |
| HLCW-180-2 (2*336)                             | 119.99   | 422   | 287.98        | 23.5         | 359.98          | 23.9         |
| HLCW-180-2 (2*359)                             | 127.39   | 448   | 305.73        | 23.5         | 382.16          | 23.9         |
| HLCW-200-2 (2*295)                             | 105.55   | 371.2 | 253.32        | 21.5         | 316.65          | 21.9         |
| HLCW-220-2 (2*336)                             | 120.56   | 424   | 289.35        | 22.7         | 361.69          | 23.1         |
| HLCW-220-2 (2*315)                             | 114.31   | 402   | 274.34        | 21.9         | 342.92          | 22.3         |
| HLCW-220-2 (2*410)                             | 150.13   | 528   | 360.32        | 26.5         | 450.40          | 26.9         |
| HLCW-250-2 (2*359)                             | 130.23   | 458   | 312.55        | 16.5         | 390.69          | 16.9         |
| HLCW-250-2 (2*470)                             | 166.63   | 586   | 399.90        | 19.4         | 499.88          | 19.8         |
| HLCW-280-2 (2*410)                             | 150.13   | 528   | 360.32        | 18.8         | 450.40          | 19.2         |
| HLCW-280-2 (2*535)                             | 189.37   | 666   | 454.50        | 22.2         | 568.12          | 22.6         |
| HLCW-320-2 (2*470)                             | 162.65   | 572   | 390.35        | 20.6         | 487.94          | 21           |
| HLCW-320-2 (2*615)                             | 225.20   | 792   | 540.48        | 26.6         | 675.60          | 27           |
| HLCW-420-2 (2*615)                             | 222.36   | 782   | 533.66        | 20.6         | 667.07          | 21           |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-35-1                                      | 24.51    | 86.2  | 58.83         | 6.5          | 73.53           | 6.9          |
| HLCW-40-1                                      | 30.45    | 107.1 | 73.09         | 7.6          | 91.36           | 8            |
| HLCW-50-1 (139)                                | 24.25    | 85.3  | 58.21         | 6.4          | 72.76           | 6.8          |
| HLCW-50-1 (195)                                | 35.32    | 124.2 | 84.76         | 8.4          | 105.95          | 8.8          |
| HLCW-50-1 (197)                                | 34.86    | 122.6 | 83.67         | 8.2          | 104.58          | 8.6          |
| HLCW-60-1 (170)                                | 30.42    | 107   | 73.02         | 7.4          | 91.27           | 7.8          |
| HLCW-60-1 (220)                                | 39.84    | 140.1 | 95.61         | 8.8          | 119.51          | 9.2          |
| HLCW-60-1 (227)                                | 40.95    | 144   | 98.27         | 8.6          | 122.84          | 9            |
| HLCW-70-1 (197)                                | 35.20    | 123.8 | 84.48         | 8.3          | 105.61          | 8.7          |
| HLCW-70-1 (258)                                | 47.17    | 165.9 | 113.21        | 12.2         | 141.52          | 12.6         |
| HLCW-80-1 (227)                                | 41.06    | 144.4 | 98.54         | 7            | 123.18          | 7.4          |
| HLCW-80-1 (295)                                | 53.85    | 189.4 | 129.25        | 8.5          | 161.56          | 8.9          |
| HLCW-80-1 (315)                                | 56.64    | 199.2 | 135.94        | 8.8          | 169.92          | 9.2          |
| HLCW-90-1 (258)                                | 46.80    | 164.6 | 112.33        | 9.5          | 140.41          | 9.9          |
| HLCW-90-1 (336)                                | 61.42    | 216   | 147.40        | 12           | 184.26          | 12.4         |
| HLCW-90-1 (359)                                | 65.12    | 229   | 156.28        | 12           | 195.35          | 12.5         |
| HLCW-100-1 (295)                               | 54.08    | 190.2 | 129.80        | 11           | 162.25          | 11.5         |
| HLCW-110-1 (336)                               | 61.70    | 217   | 148.09        | 11.7         | 185.11          | 12.2         |
| HLCW-110-1 (315)                               | 58.29    | 205   | 139.90        | 11.3         | 174.87          | 11.8         |
| HLCW-110-1 (410)                               | 77.06    | 271   | 184.94        | 13.6         | 231.17          | 14.1         |
| HLCW-125-1 (359)                               | 66.54    | 234   | 159.69        | 8.6          | 199.61          | 9.1          |
| HLCW-125-1 (470)                               | 85.30    | 300   | 204.73        | 10           | 255.91          | 10.5         |
| HLCW-140-1 (410)                               | 76.77    | 270   | 184.26        | 9.7          | 230.32          | 10.2         |
| HLCW-140-1 (535)                               | 96.96    | 341   | 232.71        | 11.4         | 290.88          | 11.9         |
| HLCW-160-1 (470)                               | 83.31    | 293   | 199.95        | 10.6         | 249.94          | 11.1         |
| HLCW-160-1 (615)                               | 115.16   | 405   | 276.38        | 13.6         | 345.48          | 14.1         |
| HLCW-210-1 (615)                               | 113.74   | 400   | 272.97        | 10.6         | 341.21          | 11.1         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,2°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-70-2                                      | 49.02    | 172.4 | 117.65        | 12.6         | 147.06          | 13.1         |
| HLCW-80-2                                      | 60.91    | 214.2 | 146.18        | 14.8         | 182.72          | 15.3         |
| HLCW-100-2 (2*137)                             | 48.51    | 170.6 | 116.42        | 12.4         | 145.53          | 12.9         |
| HLCW-100-2 (2*195)                             | 70.63    | 248.4 | 169.52        | 16.4         | 211.89          | 16.9         |
| HLCW-100-2 (2*197)                             | 69.72    | 245.2 | 167.33        | 16           | 209.16          | 16.5         |
| HLCW-120-2 (2*170)                             | 60.85    | 214   | 146.04        | 14.4         | 182.55          | 14.9         |
| HLCW-120-2 (2*220)                             | 79.67    | 280.2 | 191.22        | 17.2         | 239.02          | 17.7         |
| HLCW-120-2 (2*227)                             | 81.89    | 288   | 196.54        | 16.8         | 245.67          | 17.3         |
| HLCW-140-2 (2*197)                             | 70.40    | 247.6 | 168.97        | 16.2         | 211.21          | 16.7         |
| HLCW-140-2 (2*258)                             | 94.35    | 331.8 | 226.43        | 24           | 283.04          | 24.5         |
| HLCW-160-2 (2*227)                             | 82.12    | 288.8 | 197.09        | 13.6         | 246.36          | 14.1         |
| HLCW-160-2 (2*295)                             | 107.71   | 378.8 | 258.50        | 16.6         | 323.13          | 17.1         |
| HLCW-160-2 (2*315)                             | 113.28   | 398.4 | 271.88        | 17.2         | 339.85          | 17.7         |
| HLCW-180-2 (2*258)                             | 93.61    | 329.2 | 224.66        | 18.6         | 280.82          | 19.1         |
| HLCW-180-2 (2*336)                             | 122.84   | 432   | 294.81        | 23.6         | 368.51          | 24.1         |
| HLCW-180-2 (2*359)                             | 130.23   | 458   | 312.55        | 23.6         | 390.69          | 24.1         |
| HLCW-200-2 (2*295)                             | 108.16   | 380.4 | 259.60        | 21.6         | 324.49          | 22.1         |
| HLCW-220-2 (2*336)                             | 123.41   | 434   | 296.17        | 22.8         | 370.22          | 23.3         |
| HLCW-220-2 (2*315)                             | 116.58   | 410   | 279.80        | 22           | 349.74          | 22.5         |
| HLCW-220-2 (2*410)                             | 154.11   | 542   | 369.88        | 26.6         | 462.34          | 27.1         |
| HLCW-250-2 (2*359)                             | 133.07   | 468   | 319.38        | 16.6         | 399.22          | 17.1         |
| HLCW-250-2 (2*470)                             | 170.61   | 600   | 409.46        | 19.5         | 511.82          | 20           |
| HLCW-280-2 (2*410)                             | 153.55   | 540   | 368.51        | 18.9         | 460.64          | 19.4         |
| HLCW-280-2 (2*535)                             | 193.92   | 682   | 465.42        | 22.3         | 581.77          | 22.8         |
| HLCW-320-2 (2*470)                             | 166.63   | 586   | 399.90        | 20.7         | 499.88          | 21.2         |
| HLCW-320-2 (2*615)                             | 230.32   | 810   | 552.77        | 26.7         | 690.96          | 27.2         |
| HLCW-420-2 (2*615)                             | 227.48   | 800   | 545.94        | 20.7         | 682.43          | 21.2         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-35-1                                      | 24.71    | 86.9  | 59.30         | 6.6          | 74.13           | 7            |
| HLCW-40-1                                      | 30.68    | 107.9 | 73.63         | 7.7          | 92.04           | 8.1          |
| HLCW-50-1 (139)                                | 24.45    | 86    | 58.69         | 6.5          | 73.36           | 6.9          |
| HLCW-50-1 (195)                                | 35.60    | 125.2 | 85.44         | 8.5          | 106.80          | 8.9          |
| HLCW-50-1 (197)                                | 35.17    | 123.7 | 84.42         | 8.3          | 105.52          | 8.7          |
| HLCW-60-1 (170)                                | 30.68    | 107.9 | 73.63         | 7.5          | 92.04           | 7.9          |
| HLCW-60-1 (220)                                | 40.18    | 141.3 | 96.43         | 8.9          | 120.53          | 9.3          |
| HLCW-60-1 (227)                                | 41.40    | 145.6 | 99.36         | 8.7          | 124.20          | 9.1          |
| HLCW-70-1 (197)                                | 35.49    | 124.8 | 85.17         | 8.4          | 106.46          | 8.8          |
| HLCW-70-1 (258)                                | 47.57    | 167.3 | 114.17        | 12.3         | 142.71          | 12.7         |
| HLCW-80-1 (227)                                | 41.40    | 145.6 | 99.36         | 7.1          | 124.20          | 7.5          |
| HLCW-80-1 (295)                                | 54.28    | 190.9 | 130.28        | 8.6          | 162.84          | 9            |
| HLCW-80-1 (315)                                | 57.15    | 201   | 137.17        | 8.9          | 171.46          | 9.3          |
| HLCW-90-1 (258)                                | 47.20    | 166   | 113.28        | 9.6          | 141.60          | 10           |
| HLCW-90-1 (336)                                | 61.70    | 217   | 148.09        | 12.1         | 185.11          | 12.5         |
| HLCW-90-1 (359)                                | 65.68    | 231   | 157.64        | 12.1         | 197.05          | 12.6         |
| HLCW-100-1 (295)                               | 54.51    | 191.7 | 130.82        | 11.1         | 163.53          | 11.6         |
| HLCW-110-1 (336)                               | 62.27    | 219   | 149.45        | 11.8         | 186.81          | 12.3         |
| HLCW-110-1 (315)                               | 58.86    | 207   | 141.26        | 11.4         | 176.58          | 11.9         |
| HLCW-110-1 (410)                               | 77.63    | 273   | 186.30        | 13.7         | 232.88          | 14.2         |
| HLCW-125-1 (359)                               | 67.11    | 236   | 161.05        | 8.7          | 201.32          | 9.2          |
| HLCW-125-1 (470)                               | 85.87    | 302   | 206.09        | 10.1         | 257.62          | 10.6         |
| HLCW-140-1 (410)                               | 77.34    | 272   | 185.62        | 9.8          | 232.03          | 10.3         |
| HLCW-140-1 (535)                               | 97.81    | 344   | 234.76        | 11.5         | 293.44          | 12           |
| HLCW-160-1 (470)                               | 84.17    | 296   | 202.00        | 10.7         | 252.50          | 11.2         |
| HLCW-160-1 (615)                               | 116.30   | 409   | 279.11        | 13.7         | 348.89          | 14.2         |
| HLCW-210-1 (615)                               | 114.88   | 404   | 275.70        | 10.7         | 344.63          | 11.2         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-70-2                                      | 49.42    | 173.8 | 118.61        | 12.7         | 148.26          | 13.2         |
| HLCW-80-2                                      | 61.36    | 215.8 | 147.27        | 14.9         | 184.08          | 15.4         |
| HLCW-100-2 (2*137)                             | 48.91    | 172   | 117.38        | 12.5         | 146.72          | 13           |
| HLCW-100-2 (2*195)                             | 71.20    | 250.4 | 170.88        | 16.5         | 213.60          | 17           |
| HLCW-100-2 (2*197)                             | 70.35    | 247.4 | 168.83        | 16.1         | 211.04          | 16.6         |
| HLCW-120-2 (2*170)                             | 61.36    | 215.8 | 147.27        | 14.5         | 184.08          | 15           |
| HLCW-120-2 (2*220)                             | 80.36    | 282.6 | 192.85        | 17.3         | 241.07          | 17.8         |
| HLCW-120-2 (2*227)                             | 82.80    | 291.2 | 198.72        | 16.9         | 248.40          | 17.4         |
| HLCW-140-2 (2*197)                             | 70.97    | 249.6 | 170.33        | 16.3         | 212.92          | 16.8         |
| HLCW-140-2 (2*258)                             | 95.14    | 334.6 | 228.34        | 24.1         | 285.43          | 24.6         |
| HLCW-160-2 (2*227)                             | 82.80    | 291.2 | 198.72        | 13.7         | 248.40          | 14.2         |
| HLCW-160-2 (2*295)                             | 108.56   | 381.8 | 260.55        | 16.7         | 325.69          | 17.2         |
| HLCW-160-2 (2*315)                             | 114.31   | 402   | 274.34        | 17.3         | 342.92          | 17.8         |
| HLCW-180-2 (2*258)                             | 94.40    | 332   | 226.57        | 18.7         | 283.21          | 19.2         |
| HLCW-180-2 (2*336)                             | 123.41   | 434   | 296.17        | 23.7         | 370.22          | 24.2         |
| HLCW-180-2 (2*359)                             | 131.37   | 462   | 315.28        | 23.7         | 394.10          | 24.2         |
| HLCW-200-2 (2*295)                             | 109.02   | 383.4 | 261.64        | 21.7         | 327.05          | 22.2         |
| HLCW-220-2 (2*336)                             | 124.54   | 438   | 298.90        | 22.9         | 373.63          | 23.4         |
| HLCW-220-2 (2*315)                             | 117.72   | 414   | 282.53        | 22.1         | 353.16          | 22.6         |
| HLCW-220-2 (2*410)                             | 155.25   | 546   | 372.61        | 26.7         | 465.76          | 27.3         |
| HLCW-250-2 (2*359)                             | 134.21   | 472   | 322.11        | 16.7         | 402.63          | 17.3         |
| HLCW-250-2 (2*470)                             | 171.74   | 604   | 412.19        | 19.7         | 515.23          | 20.2         |
| HLCW-280-2 (2*410)                             | 154.68   | 544   | 371.24        | 19.1         | 464.05          | 19.6         |
| HLCW-280-2 (2*535)                             | 195.63   | 688   | 469.51        | 22.5         | 586.89          | 23           |
| HLCW-320-2 (2*470)                             | 168.33   | 592   | 404.00        | 20.9         | 505.00          | 21.4         |
| HLCW-320-2 (2*615)                             | 232.59   | 818   | 558.23        | 26.9         | 697.78          | 27.4         |
| HLCW-420-2 (2*615)                             | 229.75   | 808   | 551.40        | 20.9         | 689.25          | 21.4         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-35-1                                      | 22.35    | 78.6  | 53.64         | 6.1          | 67.05           | 6.5          |
| HLCW-40-1                                      | 27.78    | 97.7  | 66.67         | 7.2          | 83.34           | 7.6          |
| HLCW-50-1 (139)                                | 22.15    | 77.9  | 53.16         | 6            | 66.45           | 6.4          |
| HLCW-50-1 (195)                                | 32.22    | 113.3 | 77.32         | 8            | 96.65           | 8.4          |
| HLCW-50-1 (197)                                | 31.68    | 111.4 | 76.02         | 7.8          | 95.03           | 8.2          |
| HLCW-60-1 (170)                                | 27.81    | 97.8  | 66.74         | 7            | 83.43           | 7.4          |
| HLCW-60-1 (220)                                | 36.37    | 127.9 | 87.28         | 8.4          | 109.10          | 8.8          |
| HLCW-60-1 (227)                                | 37.31    | 131.2 | 89.53         | 8.2          | 111.92          | 8.6          |
| HLCW-70-1 (197)                                | 31.99    | 112.5 | 76.77         | 7.9          | 95.97           | 8.3          |
| HLCW-70-1 (258)                                | 42.85    | 150.7 | 102.84        | 11.8         | 128.55          | 12.2         |
| HLCW-80-1 (227)                                | 37.39    | 131.5 | 89.74         | 6.6          | 112.17          | 7            |
| HLCW-80-1 (295)                                | 49.22    | 173.1 | 118.13        | 8.1          | 147.66          | 8.5          |
| HLCW-80-1 (315)                                | 51.69    | 181.8 | 124.07        | 8.4          | 155.08          | 8.8          |
| HLCW-90-1 (258)                                | 42.65    | 150   | 102.36        | 9.1          | 127.96          | 9.5          |
| HLCW-90-1 (336)                                | 56.07    | 197.2 | 134.57        | 11.6         | 168.22          | 12           |
| HLCW-90-1 (359)                                | 59.43    | 209   | 142.63        | 11.6         | 178.28          | 12           |
| HLCW-100-1 (295)                               | 49.39    | 173.7 | 118.54        | 10.6         | 148.17          | 11           |
| HLCW-110-1 (336)                               | 56.33    | 198.1 | 135.19        | 11.3         | 168.99          | 11.7         |
| HLCW-110-1 (315)                               | 53.40    | 187.8 | 128.16        | 10.9         | 160.20          | 11.3         |
| HLCW-110-1 (410)                               | 70.23    | 247   | 168.56        | 13.2         | 210.70          | 13.6         |
| HLCW-125-1 (359)                               | 60.85    | 214   | 146.04        | 8.2          | 182.55          | 8.6          |
| HLCW-125-1 (470)                               | 77.63    | 273   | 186.30        | 9.6          | 232.88          | 10           |
| HLCW-140-1 (410)                               | 70.23    | 247   | 168.56        | 9.3          | 210.70          | 9.7          |
| HLCW-140-1 (535)                               | 88.43    | 311   | 212.24        | 11           | 265.29          | 11.4         |
| HLCW-160-1 (470)                               | 75.92    | 267   | 182.21        | 10.2         | 227.76          | 10.6         |
| HLCW-160-1 (615)                               | 105.21   | 370   | 252.50        | 13.2         | 315.62          | 13.6         |
| HLCW-210-1 (615)                               | 104.07   | 366   | 249.77        | 10.2         | 312.21          | 10.6         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-70-2                                      | 44.70    | 157.2 | 107.28        | 12.2         | 134.10          | 12.6         |
| HLCW-80-2                                      | 55.56    | 195.4 | 133.35        | 14.4         | 166.68          | 14.8         |
| HLCW-100-2 (2*137)                             | 44.30    | 155.8 | 106.32        | 12           | 132.90          | 12.4         |
| HLCW-100-2 (2*195)                             | 64.43    | 226.6 | 154.64        | 16           | 193.30          | 16.4         |
| HLCW-100-2 (2*197)                             | 63.35    | 222.8 | 152.04        | 15.6         | 190.06          | 16           |
| HLCW-120-2 (2*170)                             | 55.62    | 195.6 | 133.48        | 14           | 166.85          | 14.4         |
| HLCW-120-2 (2*220)                             | 72.74    | 255.8 | 174.57        | 16.8         | 218.21          | 17.1         |
| HLCW-120-2 (2*227)                             | 74.61    | 262.4 | 179.07        | 16.4         | 223.84          | 16.7         |
| HLCW-140-2 (2*197)                             | 63.98    | 225   | 153.55        | 15.8         | 191.93          | 16.1         |
| HLCW-140-2 (2*258)                             | 85.70    | 301.4 | 205.68        | 23.6         | 257.10          | 23.9         |
| HLCW-160-2 (2*227)                             | 74.78    | 263   | 179.48        | 13.1         | 224.35          | 13.5         |
| HLCW-160-2 (2*295)                             | 98.44    | 346.2 | 236.26        | 16.1         | 295.32          | 16.5         |
| HLCW-160-2 (2*315)                             | 103.39   | 363.6 | 248.13        | 16.7         | 310.16          | 17.1         |
| HLCW-180-2 (2*258)                             | 85.30    | 300   | 204.73        | 18.1         | 255.91          | 18.5         |
| HLCW-180-2 (2*336)                             | 112.15   | 394.4 | 269.15        | 23.1         | 336.44          | 23.5         |
| HLCW-180-2 (2*359)                             | 118.86   | 418   | 285.25        | 23.1         | 356.57          | 23.5         |
| HLCW-200-2 (2*295)                             | 98.78    | 347.4 | 237.08        | 21.1         | 296.34          | 21.5         |
| HLCW-220-2 (2*336)                             | 112.66   | 396.2 | 270.38        | 22.3         | 337.97          | 22.7         |
| HLCW-220-2 (2*315)                             | 106.80   | 375.6 | 256.32        | 21.5         | 320.40          | 21.9         |
| HLCW-220-2 (2*410)                             | 140.47   | 494   | 337.12        | 26.1         | 421.40          | 26.5         |
| HLCW-250-2 (2*359)                             | 121.70   | 428   | 292.08        | 16.1         | 365.10          | 16.5         |
| HLCW-250-2 (2*470)                             | 155.25   | 546   | 372.61        | 18.9         | 465.76          | 19.3         |
| HLCW-280-2 (2*410)                             | 140.47   | 494   | 337.12        | 18.3         | 421.40          | 18.7         |
| HLCW-280-2 (2*535)                             | 176.86   | 622   | 424.47        | 21.7         | 530.59          | 22.1         |
| HLCW-320-2 (2*470)                             | 151.84   | 534   | 364.42        | 20.1         | 455.52          | 20.5         |
| HLCW-320-2 (2*615)                             | 210.42   | 740   | 505.00        | 26.1         | 631.25          | 26.5         |
| HLCW-420-2 (2*615)                             | 208.14   | 732   | 499.54        | 20.1         | 624.42          | 20.5         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=6,6°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-35-1                                      | 23.37    | 82.2  | 56.10         | 6.30         | 70.12           | 6.7          |
| HLCW-40-1                                      | 29.06    | 102.2 | 69.74         | 7.40         | 87.18           | 7.8          |
| HLCW-50-1 (139)                                | 23.15    | 81.4  | 55.55         | 6.20         | 69.44           | 6.6          |
| HLCW-50-1 (195)                                | 33.69    | 118.5 | 80.87         | 8.20         | 101.08          | 8.6          |
| HLCW-50-1 (197)                                | 33.18    | 116.7 | 79.64         | 8.00         | 99.55           | 8.4          |
| HLCW-60-1 (170)                                | 29.06    | 102.2 | 69.74         | 7.20         | 87.18           | 7.6          |
| HLCW-60-1 (220)                                | 38.02    | 133.7 | 91.24         | 8.60         | 114.05          | 9            |
| HLCW-60-1 (227)                                | 39.10    | 137.5 | 93.83         | 8.40         | 117.29          | 8.8          |
| HLCW-70-1 (197)                                | 33.52    | 117.9 | 80.46         | 8.10         | 100.57          | 8.5          |
| HLCW-70-1 (258)                                | 44.90    | 157.9 | 107.76        | 12.00        | 134.69          | 12.4         |
| HLCW-80-1 (227)                                | 39.04    | 137.3 | 93.70         | 6.80         | 117.12          | 7.2          |
| HLCW-80-1 (295)                                | 51.49    | 181.1 | 123.59        | 8.30         | 154.48          | 8.7          |
| HLCW-80-1 (315)                                | 54.08    | 190.2 | 129.80        | 8.60         | 162.25          | 9            |
| HLCW-90-1 (258)                                | 44.64    | 157   | 107.14        | 9.30         | 133.93          | 9.7          |
| HLCW-90-1 (336)                                | 58.58    | 206   | 140.58        | 11.80        | 175.73          | 12.2         |
| HLCW-90-1 (359)                                | 62.27    | 219   | 149.45        | 11.80        | 186.81          | 12.2         |
| HLCW-100-1 (295)                               | 51.67    | 181.7 | 124.00        | 10.80        | 155.00          | 11.2         |
| HLCW-110-1 (336)                               | 58.86    | 207   | 141.26        | 11.50        | 176.58          | 11.9         |
| HLCW-110-1 (315)                               | 55.79    | 196.2 | 133.89        | 11.10        | 167.37          | 11.5         |
| HLCW-110-1 (410)                               | 73.65    | 259   | 176.75        | 13.40        | 220.94          | 13.8         |
| HLCW-125-1 (359)                               | 63.69    | 224   | 152.86        | 8.40         | 191.08          | 8.8          |
| HLCW-125-1 (470)                               | 81.32    | 286   | 195.17        | 9.80         | 243.97          | 10.2         |
| HLCW-140-1 (410)                               | 73.36    | 258   | 176.07        | 9.50         | 220.08          | 9.9          |
| HLCW-140-1 (535)                               | 92.70    | 326   | 222.47        | 11.20        | 278.09          | 11.6         |
| HLCW-160-1 (470)                               | 79.62    | 280   | 191.08        | 10.40        | 238.85          | 10.8         |
| HLCW-160-1 (615)                               | 110.04   | 387   | 264.10        | 13.40        | 330.12          | 13.8         |
| HLCW-210-1 (615)                               | 108.90   | 383   | 261.37        | 10.40        | 326.71          | 10.8         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=6,6°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-70-2                                      | 46.75    | 164.4 | 112.19        | 12.40        | 140.24          | 12.8         |
| HLCW-80-2                                      | 58.12    | 204.4 | 139.49        | 14.60        | 174.36          | 15           |
| HLCW-100-2 (2*137)                             | 46.29    | 162.8 | 111.10        | 12.20        | 138.87          | 12.6         |
| HLCW-100-2 (2*195)                             | 67.39    | 237   | 161.74        | 16.20        | 202.17          | 16.6         |
| HLCW-100-2 (2*197)                             | 66.37    | 233.4 | 159.28        | 15.80        | 199.10          | 16.2         |
| HLCW-120-2 (2*170)                             | 58.12    | 204.4 | 139.49        | 14.20        | 174.36          | 14.6         |
| HLCW-120-2 (2*220)                             | 76.03    | 267.4 | 182.48        | 17.00        | 228.10          | 17.3         |
| HLCW-120-2 (2*227)                             | 78.19    | 275   | 187.67        | 16.60        | 234.58          | 16.9         |
| HLCW-140-2 (2*197)                             | 67.05    | 235.8 | 160.92        | 16.00        | 201.15          | 16.3         |
| HLCW-140-2 (2*258)                             | 89.80    | 315.8 | 215.51        | 23.80        | 269.39          | 24.1         |
| HLCW-160-2 (2*227)                             | 78.08    | 274.6 | 187.39        | 13.30        | 234.24          | 13.7         |
| HLCW-160-2 (2*295)                             | 102.99   | 362.2 | 247.18        | 16.30        | 308.97          | 16.7         |
| HLCW-160-2 (2*315)                             | 108.16   | 380.4 | 259.60        | 16.90        | 324.49          | 17.3         |
| HLCW-180-2 (2*258)                             | 89.28    | 314   | 214.28        | 18.30        | 267.85          | 18.7         |
| HLCW-180-2 (2*336)                             | 117.15   | 412   | 281.16        | 23.30        | 351.45          | 23.7         |
| HLCW-180-2 (2*359)                             | 124.54   | 438   | 298.90        | 23.30        | 373.63          | 23.7         |
| HLCW-200-2 (2*295)                             | 103.33   | 363.4 | 247.99        | 21.30        | 309.99          | 21.7         |
| HLCW-220-2 (2*336)                             | 117.72   | 414   | 282.53        | 22.50        | 353.16          | 22.9         |
| HLCW-220-2 (2*315)                             | 111.58   | 392.4 | 267.78        | 21.70        | 334.73          | 22.1         |
| HLCW-220-2 (2*410)                             | 147.29   | 518   | 353.50        | 26.30        | 441.87          | 26.7         |
| HLCW-250-2 (2*359)                             | 127.39   | 448   | 305.73        | 16.30        | 382.16          | 16.7         |
| HLCW-250-2 (2*470)                             | 162.65   | 572   | 390.35        | 19.10        | 487.94          | 19.5         |
| HLCW-280-2 (2*410)                             | 146.72   | 516   | 352.13        | 18.50        | 440.17          | 18.9         |
| HLCW-280-2 (2*535)                             | 185.39   | 652   | 444.94        | 21.90        | 556.18          | 22.3         |
| HLCW-320-2 (2*470)                             | 159.23   | 560   | 382.16        | 20.30        | 477.70          | 20.7         |
| HLCW-320-2 (2*615)                             | 220.08   | 774   | 528.20        | 26.30        | 660.25          | 26.7         |
| HLCW-420-2 (2*615)                             | 217.81   | 766   | 522.74        | 20.30        | 653.42          | 20.7         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-35-1                                      | 23.97    | 84.3  | 57.53         | 6.50         | 71.91           | 6.8          |
| HLCW-40-1                                      | 29.77    | 104.7 | 71.45         | 7.60         | 89.31           | 7.9          |
| HLCW-50-1 (139)                                | 23.71    | 83.4  | 56.91         | 6.40         | 71.14           | 6.7          |
| HLCW-50-1 (195)                                | 34.52    | 121.4 | 82.85         | 8.40         | 103.56          | 8.7          |
| HLCW-50-1 (197)                                | 34.04    | 119.7 | 81.69         | 8.20         | 102.11          | 8.5          |
| HLCW-60-1 (170)                                | 29.77    | 104.7 | 71.45         | 7.40         | 89.31           | 7.7          |
| HLCW-60-1 (220)                                | 38.96    | 137   | 93.49         | 8.80         | 116.87          | 9.1          |
| HLCW-60-1 (227)                                | 40.09    | 141   | 96.22         | 8.60         | 120.28          | 8.9          |
| HLCW-70-1 (197)                                | 34.41    | 121   | 82.57         | 8.30         | 103.22          | 8.6          |
| HLCW-70-1 (258)                                | 46.06    | 162   | 110.55        | 12.20        | 138.19          | 12.5         |
| HLCW-80-1 (227)                                | 40.06    | 140.9 | 96.15         | 7.00         | 120.19          | 7.3          |
| HLCW-80-1 (295)                                | 52.77    | 185.6 | 126.66        | 8.50         | 158.32          | 8.8          |
| HLCW-80-1 (315)                                | 55.42    | 194.9 | 133.01        | 8.80         | 166.26          | 9.1          |
| HLCW-90-1 (258)                                | 45.78    | 161   | 109.87        | 9.50         | 137.34          | 9.8          |
| HLCW-90-1 (336)                                | 60.00    | 211   | 143.99        | 12.00        | 179.99          | 12.3         |
| HLCW-90-1 (359)                                | 63.98    | 225   | 153.55        | 12.00        | 191.93          | 12.3         |
| HLCW-100-1 (295)                               | 52.95    | 186.2 | 127.07        | 11.00        | 158.84          | 11.3         |
| HLCW-110-1 (336)                               | 60.28    | 212   | 144.67        | 11.70        | 180.84          | 12           |
| HLCW-110-1 (315)                               | 57.15    | 201   | 137.17        | 11.30        | 171.46          | 11.6         |
| HLCW-110-1 (410)                               | 75.35    | 265   | 180.84        | 13.60        | 226.05          | 13.9         |
| HLCW-125-1 (359)                               | 65.12    | 229   | 156.28        | 8.60         | 195.35          | 8.9          |
| HLCW-125-1 (470)                               | 83.31    | 293   | 199.95        | 10.00        | 249.94          | 10.3         |
| HLCW-140-1 (410)                               | 75.07    | 264   | 180.16        | 9.70         | 225.20          | 10           |
| HLCW-140-1 (535)                               | 94.97    | 334   | 227.93        | 11.40        | 284.91          | 11.7         |
| HLCW-160-1 (470)                               | 81.61    | 287   | 195.86        | 10.60        | 244.82          | 10.9         |
| HLCW-160-1 (615)                               | 112.88   | 397   | 270.92        | 13.60        | 338.65          | 13.9         |
| HLCW-210-1 (615)                               | 111.46   | 392   | 267.51        | 10.60        | 334.39          | 10.9         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,2°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-70-2                                      | 47.94    | 168.6 | 115.06        | 12.60        | 143.82          | 12.9         |
| HLCW-80-2                                      | 59.54    | 209.4 | 142.90        | 14.80        | 178.63          | 15.1         |
| HLCW-100-2 (2*137)                             | 47.43    | 166.8 | 113.83        | 12.40        | 142.29          | 12.7         |
| HLCW-100-2 (2*195)                             | 69.04    | 242.8 | 165.69        | 16.40        | 207.12          | 16.7         |
| HLCW-100-2 (2*197)                             | 68.07    | 239.4 | 163.37        | 16.00        | 204.22          | 16.3         |
| HLCW-120-2 (2*170)                             | 59.54    | 209.4 | 142.90        | 14.40        | 178.63          | 14.7         |
| HLCW-120-2 (2*220)                             | 77.91    | 274   | 186.99        | 17.20        | 233.73          | 17.4         |
| HLCW-120-2 (2*227)                             | 80.19    | 282   | 192.44        | 16.80        | 240.56          | 17           |
| HLCW-140-2 (2*197)                             | 68.81    | 242   | 165.15        | 16.20        | 206.43          | 16.4         |
| HLCW-140-2 (2*258)                             | 92.13    | 324   | 221.11        | 24.00        | 276.38          | 24.2         |
| HLCW-160-2 (2*227)                             | 80.13    | 281.8 | 192.31        | 13.50        | 240.39          | 13.8         |
| HLCW-160-2 (2*295)                             | 105.55   | 371.2 | 253.32        | 16.50        | 316.65          | 16.8         |
| HLCW-160-2 (2*315)                             | 110.84   | 389.8 | 266.01        | 17.10        | 332.51          | 17.4         |
| HLCW-180-2 (2*258)                             | 91.56    | 322   | 219.74        | 18.50        | 274.68          | 18.8         |
| HLCW-180-2 (2*336)                             | 119.99   | 422   | 287.98        | 23.50        | 359.98          | 23.8         |
| HLCW-180-2 (2*359)                             | 127.96   | 450   | 307.09        | 23.50        | 383.87          | 23.8         |
| HLCW-200-2 (2*295)                             | 105.89   | 372.4 | 254.14        | 21.50        | 317.67          | 21.8         |
| HLCW-220-2 (2*336)                             | 120.56   | 424   | 289.35        | 22.70        | 361.69          | 23           |
| HLCW-220-2 (2*315)                             | 114.31   | 402   | 274.34        | 21.90        | 342.92          | 22.2         |
| HLCW-220-2 (2*410)                             | 150.70   | 530   | 361.69        | 26.50        | 452.11          | 26.8         |
| HLCW-250-2 (2*359)                             | 130.23   | 458   | 312.55        | 16.50        | 390.69          | 16.8         |
| HLCW-250-2 (2*470)                             | 166.63   | 586   | 399.90        | 19.30        | 499.88          | 19.6         |
| HLCW-280-2 (2*410)                             | 150.13   | 528   | 360.32        | 18.70        | 450.40          | 19           |
| HLCW-280-2 (2*535)                             | 189.94   | 668   | 455.86        | 22.10        | 569.83          | 22.4         |
| HLCW-320-2 (2*470)                             | 163.21   | 574   | 391.71        | 20.50        | 489.64          | 20.8         |
| HLCW-320-2 (2*615)                             | 225.77   | 794   | 541.85        | 26.50        | 677.31          | 26.8         |
| HLCW-420-2 (2*615)                             | 222.93   | 784   | 535.02        | 20.50        | 668.78          | 20.8         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-35-1                                      | 24.14       | 84.9  | 57.94         | 72.01           | 72.42           | 6.9             |
| HLCW-40-1                                      | 30.11       | 105.9 | 72.27         | 89.41           | 90.34           | 8               |
| HLCW-50-1<br>(139)                             | 23.91       | 84.1  | 57.39         | 71.24           | 71.74           | 6.8             |
| HLCW-50-1<br>(195)                             | 34.80       | 122.4 | 83.53         | 103.66          | 104.41          | 8.8             |
| HLCW-50-1<br>(197)                             | 34.32       | 120.7 | 82.37         | 102.21          | 102.96          | 8.6             |
| HLCW-60-1<br>(170)                             | 30.00       | 105.5 | 72.00         | 89.41           | 90.00           | 7.8             |
| HLCW-60-1<br>(220)                             | 39.27       | 138.1 | 94.24         | 116.97          | 117.80          | 9.2             |
| HLCW-60-1<br>(227)                             | 40.43       | 142.2 | 97.04         | 120.38          | 121.30          | 9               |
| HLCW-70-1<br>(197)                             | 34.69       | 122   | 83.26         | 103.32          | 104.07          | 8.7             |
| HLCW-70-1<br>(258)                             | 46.46       | 163.4 | 111.51        | 138.29          | 139.39          | 12.6            |
| HLCW-80-1<br>(227)                             | 40.41       | 142.1 | 96.97         | 120.29          | 121.22          | 7.4             |
| HLCW-80-1<br>(295)                             | 53.20       | 187.1 | 127.68        | 158.42          | 159.60          | 8.9             |
| HLCW-80-1<br>(315)                             | 55.87       | 196.5 | 134.10        | 166.36          | 167.62          | 9.2             |
| HLCW-90-1<br>(258)                             | 46.15       | 162.3 | 110.76        | 137.44          | 138.45          | 9.9             |
| HLCW-90-1<br>(336)                             | 60.57       | 213   | 145.36        | 180.09          | 181.70          | 12.4            |
| HLCW-90-1<br>(359)                             | 64.26       | 226   | 154.23        | 192.03          | 192.79          | 12.4            |
| HLCW-100-1<br>(295)                            | 53.37       | 187.7 | 128.09        | 158.94          | 160.11          | 11.4            |
| HLCW-110-1<br>(336)                            | 60.85       | 214   | 146.04        | 12.00           | 182.55          | 12.1            |
| HLCW-110-1<br>(315)                            | 57.72       | 203   | 138.53        | 11.60           | 173.17          | 11.7            |
| HLCW-110-1<br>(410)                            | 75.92       | 267   | 182.21        | 13.90           | 227.76          | 14              |
| HLCW-125-1<br>(359)                            | 65.68       | 231   | 157.64        | 8.90            | 197.05          | 9               |
| HLCW-125-1<br>(470)                            | 83.88       | 295   | 201.32        | 10.30           | 251.65          | 10.4            |
| HLCW-140-1<br>(410)                            | 75.64       | 266   | 181.53        | 10.00           | 226.91          | 10.1            |
| HLCW-140-1<br>(535)                            | 95.54       | 336   | 229.30        | 11.70           | 286.62          | 11.9            |
| HLCW-160-1<br>(470)                            | 82.18       | 289   | 197.22        | 10.90           | 246.53          | 11.1            |
| HLCW-160-1<br>(615)                            | 113.74      | 400   | 272.97        | 13.90           | 341.21          | 14.1            |
| HLCW-210-1<br>(615)                            | 112.32      | 395   | 269.56        | 10.90           | 336.95          | 11.1            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-70-2                                      | 48.28    | 169.8 | 115.88        | 12.90        | 144.85          | 13.1         |
| HLCW-80-2                                      | 60.22    | 211.8 | 144.54        | 15.10        | 180.67          | 15.3         |
| HLCW-100-2 (2*137)                             | 47.83    | 168.2 | 114.78        | 12.70        | 143.48          | 12.9         |
| HLCW-100-2 (2*195)                             | 69.61    | 244.8 | 167.06        | 16.70        | 208.82          | 16.9         |
| HLCW-100-2 (2*197)                             | 68.64    | 241.4 | 164.74        | 16.30        | 205.92          | 16.5         |
| HLCW-120-2 (2*170)                             | 60.00    | 211   | 143.99        | 14.70        | 179.99          | 14.9         |
| HLCW-120-2 (2*220)                             | 78.54    | 276.2 | 188.49        | 17.50        | 235.61          | 17.6         |
| HLCW-120-2 (2*227)                             | 80.87    | 284.4 | 194.08        | 17.10        | 242.60          | 17.2         |
| HLCW-140-2 (2*197)                             | 69.38    | 244   | 166.51        | 16.50        | 208.14          | 16.6         |
| HLCW-140-2 (2*258)                             | 92.92    | 326.8 | 223.02        | 24.30        | 278.77          | 24.4         |
| HLCW-160-2 (2*227)                             | 80.81    | 284.2 | 193.95        | 13.80        | 242.43          | 14           |
| HLCW-160-2 (2*295)                             | 106.40   | 374.2 | 255.36        | 16.80        | 319.21          | 17           |
| HLCW-160-2 (2*315)                             | 111.75   | 393   | 268.19        | 17.40        | 335.24          | 17.6         |
| HLCW-180-2 (2*258)                             | 92.30    | 324.6 | 221.52        | 18.80        | 276.90          | 19           |
| HLCW-180-2 (2*336)                             | 121.13   | 426   | 290.71        | 23.80        | 363.39          | 24           |
| HLCW-180-2 (2*359)                             | 128.52   | 452   | 308.46        | 23.80        | 385.57          | 24           |
| HLCW-200-2 (2*295)                             | 106.74   | 375.4 | 256.18        | 21.80        | 320.23          | 22           |
| HLCW-220-2 (2*336)                             | 121.70   | 428   | 292.08        | 23.00        | 365.10          | 23.2         |
| HLCW-220-2 (2*315)                             | 115.44   | 406   | 277.07        | 22.20        | 346.33          | 22.4         |
| HLCW-220-2 (2*410)                             | 151.84   | 534   | 364.42        | 26.80        | 455.52          | 27           |
| HLCW-250-2 (2*359)                             | 131.37   | 462   | 315.28        | 16.80        | 394.10          | 17           |
| HLCW-250-2 (2*470)                             | 167.76   | 590   | 402.63        | 19.60        | 503.29          | 19.8         |
| HLCW-280-2 (2*410)                             | 151.27   | 532   | 363.05        | 19.00        | 453.81          | 19.2         |
| HLCW-280-2 (2*535)                             | 191.08   | 672   | 458.59        | 22.40        | 573.24          | 22.6         |
| HLCW-320-2 (2*470)                             | 164.35   | 578   | 394.44        | 20.80        | 493.05          | 21           |
| HLCW-320-2 (2*615)                             | 227.48   | 800   | 545.94        | 26.80        | 682.43          | 27           |
| HLCW-420-2 (2*615)                             | 224.63   | 790   | 539.12        | 20.80        | 673.90          | 21           |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-35-1                                      | 21.47    | 75.5  | 51.52         | 5.9          | 64.40           | 6.3          |
| HLCW-40-1                                      | 26.79    | 94.2  | 64.28         | 7            | 80.36           | 7.4          |
| HLCW-50-1 (139)                                | 21.35    | 75.1  | 51.25         | 5.8          | 64.06           | 6.2          |
| HLCW-50-1 (195)                                | 31.05    | 109.2 | 74.52         | 7.8          | 93.15           | 8.2          |
| HLCW-50-1 (197)                                | 30.45    | 107.1 | 73.09         | 7.6          | 91.36           | 8            |
| HLCW-60-1 (170)                                | 26.81    | 94.3  | 64.35         | 6.8          | 80.44           | 7.2          |
| HLCW-60-1 (220)                                | 35.03    | 123.2 | 84.08         | 8.2          | 105.09          | 8.6          |
| HLCW-60-1 (227)                                | 35.86    | 126.1 | 86.05         | 8            | 107.57          | 8.4          |
| HLCW-70-1 (197)                                | 30.79    | 108.3 | 73.91         | 7.7          | 92.38           | 8.1          |
| HLCW-70-1 (258)                                | 41.20    | 144.9 | 98.88         | 11.6         | 123.60          | 12           |
| HLCW-80-1 (227)                                | 35.80    | 125.9 | 85.92         | 6.4          | 107.40          | 6.8          |
| HLCW-80-1 (295)                                | 47.60    | 167.4 | 114.24        | 7.9          | 142.80          | 8.3          |
| HLCW-80-1 (315)                                | 49.93    | 175.6 | 119.83        | 8.2          | 149.79          | 8.6          |
| HLCW-90-1 (258)                                | 41.12    | 144.6 | 98.68         | 8.9          | 123.35          | 9.3          |
| HLCW-90-1 (336)                                | 54.20    | 190.6 | 130.07        | 11.4         | 162.59          | 11.8         |
| HLCW-90-1 (359)                                | 57.44    | 202   | 137.85        | 11.4         | 172.31          | 11.8         |
| HLCW-100-1 (295)                               | 47.71    | 167.8 | 114.51        | 10.4         | 143.14          | 10.8         |
| HLCW-110-1 (336)                               | 54.40    | 191.3 | 130.55        | 11.1         | 163.19          | 11.5         |
| HLCW-110-1 (315)                               | 51.55    | 181.3 | 123.72        | 10.7         | 154.66          | 11.1         |
| HLCW-110-1 (410)                               | 67.96    | 239   | 163.10        | 13           | 203.88          | 13.4         |
| HLCW-125-1 (359)                               | 58.86    | 207   | 141.26        | 8            | 176.58          | 8.4          |
| HLCW-125-1 (470)                               | 75.07    | 264   | 180.16        | 9.4          | 225.20          | 9.8          |
| HLCW-140-1 (410)                               | 67.67    | 238   | 162.42        | 9.1          | 203.02          | 9.5          |
| HLCW-140-1 (535)                               | 85.30    | 300   | 204.73        | 10.8         | 255.91          | 11.2         |
| HLCW-160-1 (470)                               | 73.36    | 258   | 176.07        | 10           | 220.08          | 10.4         |
| HLCW-160-1 (615)                               | 101.51   | 357   | 243.63        | 13           | 304.53          | 13.4         |
| HLCW-210-1 (615)                               | 100.66   | 354   | 241.58        | 10           | 301.97          | 10.4         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-70-2                                      | 42.94    | 151   | 103.05        | 12           | 128.81          | 12.4         |
| HLCW-80-2                                      | 53.57    | 188.4 | 128.57        | 14.2         | 160.71          | 14.6         |
| HLCW-100-2 (2*137)                             | 42.71    | 150.2 | 102.50        | 11.8         | 128.13          | 12.2         |
| HLCW-100-2 (2*195)                             | 62.10    | 218.4 | 149.04        | 15.8         | 186.30          | 16.2         |
| HLCW-100-2 (2*197)                             | 60.91    | 214.2 | 146.18        | 15.4         | 182.72          | 15.7         |
| HLCW-120-2 (2*170)                             | 53.63    | 188.6 | 128.71        | 13.8         | 160.88          | 14.1         |
| HLCW-120-2 (2*220)                             | 70.06    | 246.4 | 168.15        | 16.6         | 210.19          | 16.8         |
| HLCW-120-2 (2*227)                             | 71.71    | 252.2 | 172.11        | 16.2         | 215.14          | 16.4         |
| HLCW-140-2 (2*197)                             | 61.59    | 216.6 | 147.81        | 15.6         | 184.77          | 15.8         |
| HLCW-140-2 (2*258)                             | 82.40    | 289.8 | 197.77        | 23.4         | 247.21          | 23.6         |
| HLCW-160-2 (2*227)                             | 71.60    | 251.8 | 171.84        | 12.9         | 214.79          | 13.2         |
| HLCW-160-2 (2*295)                             | 95.20    | 334.8 | 228.48        | 15.9         | 285.60          | 16.2         |
| HLCW-160-2 (2*315)                             | 99.86    | 351.2 | 239.67        | 16.4         | 299.59          | 16.8         |
| HLCW-180-2 (2*258)                             | 82.23    | 289.2 | 197.36        | 17.8         | 246.70          | 18.2         |
| HLCW-180-2 (2*336)                             | 108.39   | 381.2 | 260.14        | 22.8         | 325.18          | 23.2         |
| HLCW-180-2 (2*359)                             | 114.88   | 404   | 275.70        | 22.8         | 344.63          | 23.2         |
| HLCW-200-2 (2*295)                             | 95.43    | 335.6 | 229.02        | 20.8         | 286.28          | 21.2         |
| HLCW-220-2 (2*336)                             | 108.79   | 382.6 | 261.10        | 22           | 326.37          | 22.4         |
| HLCW-220-2 (2*315)                             | 103.10   | 362.6 | 247.45        | 21.2         | 309.31          | 21.6         |
| HLCW-220-2 (2*410)                             | 135.92   | 478   | 326.20        | 25.8         | 407.75          | 26.2         |
| HLCW-250-2 (2*359)                             | 117.72   | 414   | 282.53        | 15.8         | 353.16          | 16.2         |
| HLCW-250-2 (2*470)                             | 150.13   | 528   | 360.32        | 18.6         | 450.40          | 19           |
| HLCW-280-2 (2*410)                             | 135.35   | 476   | 324.84        | 18           | 406.04          | 18.4         |
| HLCW-280-2 (2*535)                             | 170.61   | 600   | 409.46        | 21.4         | 511.82          | 21.8         |
| HLCW-320-2 (2*470)                             | 146.72   | 516   | 352.13        | 19.8         | 440.17          | 20.2         |
| HLCW-320-2 (2*615)                             | 203.02   | 714   | 487.25        | 25.8         | 609.07          | 26.2         |
| HLCW-420-2 (2*615)                             | 201.32   | 708   | 483.16        | 19.8         | 603.95          | 20.2         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-35-1                                      | 22.55       | 79.3  | 54.12         | 6.1             | 67.65           | 6.5             |
| HLCW-40-1                                      | 28.04       | 98.6  | 67.29         | 7.2             | 84.11           | 7.6             |
| HLCW-50-1<br>(139)                             | 22.35       | 78.6  | 53.64         | 6               | 67.05           | 6.4             |
| HLCW-50-1<br>(195)                             | 32.47       | 114.2 | 77.93         | 8               | 97.42           | 8.4             |
| HLCW-50-1<br>(197)                             | 31.93       | 112.3 | 76.64         | 7.8             | 95.80           | 8.2             |
| HLCW-60-1<br>(170)                             | 28.04       | 98.6  | 67.29         | 7               | 84.11           | 7.4             |
| HLCW-60-1<br>(220)                             | 36.65       | 128.9 | 87.96         | 8.4             | 109.96          | 8.8             |
| HLCW-60-1<br>(227)                             | 37.62       | 132.3 | 90.29         | 8.2             | 112.86          | 8.6             |
| HLCW-70-1<br>(197)                             | 32.30       | 113.6 | 77.52         | 7.9             | 96.90           | 8.3             |
| HLCW-70-1<br>(258)                             | 43.22       | 152   | 103.73        | 11.8            | 129.66          | 12.2            |
| HLCW-80-1<br>(227)                             | 37.53       | 132   | 90.08         | 6.6             | 112.60          | 7               |
| HLCW-80-1<br>(295)                             | 49.82       | 175.2 | 119.56        | 8.1             | 149.45          | 8.5             |
| HLCW-80-1<br>(315)                             | 52.26       | 183.8 | 125.43        | 8.4             | 156.79          | 8.8             |
| HLCW-90-1<br>(258)                             | 42.94       | 151   | 103.05        | 9.1             | 128.81          | 9.5             |
| HLCW-90-1<br>(336)                             | 56.73       | 199.5 | 136.14        | 11.6            | 170.18          | 12              |
| HLCW-90-1<br>(359)                             | 60.28       | 212   | 144.67        | 11.6            | 180.84          | 12              |
| HLCW-100-1<br>(295)                            | 49.93       | 175.6 | 119.83        | 10.6            | 149.79          | 11              |
| HLCW-110-1<br>(336)                            | 56.87       | 200   | 136.49        | 11.3            | 170.61          | 11.7            |
| HLCW-110-1<br>(315)                            | 53.88       | 189.5 | 129.32        | 10.9            | 161.65          | 11.3            |
| HLCW-110-1<br>(410)                            | 71.09       | 250   | 170.61        | 13.2            | 213.26          | 13.6            |
| HLCW-125-1<br>(359)                            | 61.42       | 216   | 147.40        | 8.2             | 184.26          | 8.6             |
| HLCW-125-1<br>(470)                            | 78.48       | 276   | 188.35        | 9.6             | 235.44          | 10              |
| HLCW-140-1<br>(410)                            | 70.80       | 249   | 169.92        | 9.3             | 212.41          | 9.7             |
| HLCW-140-1<br>(535)                            | 89.28       | 314   | 214.28        | 11              | 267.85          | 11.4            |
| HLCW-160-1<br>(470)                            | 76.77       | 270   | 184.26        | 10.2            | 230.32          | 10.6            |
| HLCW-160-1<br>(615)                            | 106.06      | 373   | 254.55        | 13.2            | 318.18          | 13.6            |
| HLCW-210-1<br>(615)                            | 105.21      | 370   | 252.50        | 10.2            | 315.62          | 10.6            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-70-2                                      | 45.10       | 158.6 | 108.23        | 12.2            | 135.29          | 12.6            |
| HLCW-80-2                                      | 56.07       | 197.2 | 134.57        | 14.4            | 168.22          | 14.8            |
| HLCW-100-2<br>(2*137)                          | 44.70       | 157.2 | 107.28        | 12              | 134.10          | 12.4            |
| HLCW-100-2<br>(2*195)                          | 64.94       | 228.4 | 155.87        | 16              | 194.83          | 16.4            |
| HLCW-100-2<br>(2*197)                          | 63.86       | 224.6 | 153.27        | 15.6            | 191.59          | 15.9            |
| HLCW-120-2<br>(2*170)                          | 56.07       | 197.2 | 134.57        | 14              | 168.22          | 14.3            |
| HLCW-120-2<br>(2*220)                          | 73.30       | 257.8 | 175.93        | 16.8            | 219.91          | 17              |
| HLCW-120-2<br>(2*227)                          | 75.24       | 264.6 | 180.57        | 16.4            | 225.71          | 16.6            |
| HLCW-140-2<br>(2*197)                          | 64.60       | 227.2 | 155.05        | 15.8            | 193.81          | 16              |
| HLCW-140-2<br>(2*258)                          | 86.44       | 304   | 207.46        | 23.6            | 259.32          | 23.8            |
| HLCW-160-2<br>(2*227)                          | 75.07       | 264   | 180.16        | 13.1            | 225.20          | 13.4            |
| HLCW-160-2<br>(2*295)                          | 99.63       | 350.4 | 239.12        | 16.1            | 298.90          | 16.4            |
| HLCW-160-2<br>(2*315)                          | 104.53      | 367.6 | 250.86        | 16.6            | 313.58          | 17              |
| HLCW-180-2<br>(2*258)                          | 85.87       | 302   | 206.09        | 18              | 257.62          | 18.4            |
| HLCW-180-2<br>(2*336)                          | 113.45      | 399   | 272.29        | 23              | 340.36          | 23.4            |
| HLCW-180-2<br>(2*359)                          | 120.56      | 424   | 289.35        | 23              | 361.69          | 23.4            |
| HLCW-200-2<br>(2*295)                          | 99.86       | 351.2 | 239.67        | 21.1            | 299.59          | 21.4            |
| HLCW-220-2<br>(2*336)                          | 113.74      | 400   | 272.97        | 22.3            | 341.21          | 22.6            |
| HLCW-220-2<br>(2*315)                          | 107.77      | 379   | 258.64        | 21.5            | 323.30          | 21.8            |
| HLCW-220-2<br>(2*410)                          | 142.17      | 500   | 341.21        | 26.1            | 426.52          | 26.5            |
| HLCW-250-2<br>(2*359)                          | 122.84      | 432   | 294.81        | 16.1            | 368.51          | 16.5            |
| HLCW-250-2<br>(2*470)                          | 156.96      | 552   | 376.70        | 18.9            | 470.88          | 19.3            |
| HLCW-280-2<br>(2*410)                          | 141.60      | 498   | 339.85        | 18.3            | 424.81          | 18.7            |
| HLCW-280-2<br>(2*535)                          | 178.57      | 628   | 428.56        | 21.7            | 535.71          | 22.1            |
| HLCW-320-2<br>(2*470)                          | 153.55      | 540   | 368.51        | 20.1            | 460.64          | 20.5            |
| HLCW-320-2<br>(2*615)                          | 212.12      | 746   | 509.09        | 26.1            | 636.36          | 26.5            |
| HLCW-420-2<br>(2*615)                          | 210.42      | 740   | 505.00        | 20.1            | 631.25          | 20.5            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |          |            |               |              |                 |              |
|--|----------|------------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW         | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |            | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-35-1                                      | 23.12    | 81.3       | 55.48         | 6.2          | 69.35           | 6.6          |
| HLCW-40-1                                      | 28.72    | 101        | 68.93         | 7.3          | 86.16           | 7.7          |
| HLCW-50-1 (139)                                | 22.89    | 80.5       | 54.94         | 6.1          | 68.67           | 6.5          |
| HLCW-50-1 (195)                                | 33.27    | 117        | 79.84         | 8.1          | 99.81           | 8.5          |
| HLCW-50-1 (197)                                | 32.76    | 115.2      | 78.62         | 7.9          | 98.27           | 8.3          |
| HLCW-60-1 (170)                                | 28.72    | 101        | 68.93         | 7.1          | 86.16           | 7.5          |
| HLCW-60-1 (220)                                | 37.53    | 132        | 90.08         | 8.5          | 112.60          | 8.9          |
| <b>HLCW-60-1 (227)</b>                         | 38.59    | 135.7      | 92.61         | 8.3          | 115.76          | 8.7          |
| HLCW-70-1 (197)                                | 33.13    | 116.5      | 79.50         | 8            | 99.38           | 8.4          |
| <b>HLCW-70-1 (258)</b>                         | 44.33    | 155.9      | 106.39        | 11.9         | 132.99          | 12.4         |
| <b>HLCW-80-1 (227)</b>                         | 38.50    | 135.4      | 92.40         | 6.7          | 115.50          | 7.2          |
| HLCW-80-1 (295)                                | 51.04    | 179.5      | 122.50        | 8.2          | 153.12          | 8.7          |
| HLCW-80-1 (315)                                | 53.57    | 188.4      | 128.57        | 8.5          | 160.71          | 9            |
| <b>HLCW-90-1 (258)</b>                         | 44.16    | 155.3      | 105.98        | 9.2          | 132.48          | 9.7          |
| HLCW-90-1 (336)                                | 58.01    | 204        | 139.22        | 11.7         | 174.02          | 12.2         |
| HLCW-90-1 (359)                                | 61.70    | 217        | 148.09        | 11.7         | 185.11          | 12.2         |
| HLCW-100-1 (295)                               | 51.18    | 180        | 122.84        | 10.7         | 153.55          | 11.2         |
| HLCW-110-1 (336)                               | 58.29    | 205        | 139.90        | 11.4         | 174.87          | 11.9         |
| HLCW-110-1 (315)                               | 55.19    | 194.1      | 132.46        | 11           | 165.57          | 11.5         |
| HLCW-110-1 (410)                               | 72.79    | <b>256</b> | 174.70        | 13.3         | 218.38          | 13.8         |
| HLCW-125-1 (359)                               | 62.84    | 221        | 150.82        | 8.3          | 188.52          | 8.8          |
| HLCW-125-1 (470)                               | 80.47    | 283        | 193.13        | 9.7          | 241.41          | 10.2         |
| HLCW-140-1 (410)                               | 72.51    | 255        | 174.02        | 9.4          | 217.52          | 9.9          |
| HLCW-140-1 (535)                               | 91.56    | 322        | 219.74        | 11.1         | 274.68          | 11.6         |
| HLCW-160-1 (470)                               | 78.76    | 277        | 189.03        | 10.3         | 236.29          | 10.8         |
| HLCW-160-1 (615)                               | 108.90   | 383        | 261.37        | 13.3         | 326.71          | 13.8         |
| HLCW-210-1 (615)                               | 107.77   | 379        | 258.64        | 10.3         | 323.30          | 10.8         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-70-2                                      | 46.23    | 162.6 | 110.96        | 12.3         | 138.70          | 12.8         |
| HLCW-80-2                                      | 57.44    | 202   | 137.85        | 14.5         | 172.31          | 15           |
| HLCW-100-2 (2*137)                             | 45.78    | 161   | 109.87        | 12.2         | 137.34          | 12.6         |
| HLCW-100-2 (2*195)                             | 66.54    | 234   | 159.69        | 16.2         | 199.61          | 16.6         |
| HLCW-100-2 (2*197)                             | 65.51    | 230.4 | 157.23        | 15.8         | 196.54          | 16.1         |
| HLCW-120-2 (2*170)                             | 57.44    | 202   | 137.85        | 14.2         | 172.31          | 14.5         |
| HLCW-120-2 (2*220)                             | 75.07    | 264   | 180.16        | 17           | 225.20          | 17.2         |
| HLCW-120-2 (2*227)                             | 77.17    | 271.4 | 185.21        | 16.6         | 231.51          | 16.8         |
| HLCW-140-2 (2*197)                             | 66.25    | 233   | 159.01        | 16           | 198.76          | 16.2         |
| HLCW-140-2 (2*258)                             | 88.66    | 311.8 | 212.78        | 23.8         | 265.98          | 24           |
| HLCW-160-2 (2*227)                             | 77.00    | 270.8 | 184.80        | 13.3         | 231.00          | 13.6         |
| HLCW-160-2 (2*295)                             | 102.08   | 359   | 244.99        | 16.3         | 306.24          | 16.6         |
| HLCW-160-2 (2*315)                             | 107.14   | 376.8 | 257.14        | 16.8         | 321.42          | 17.2         |
| HLCW-180-2 (2*258)                             | 88.32    | 310.6 | 211.96        | 18.2         | 264.95          | 18.6         |
| HLCW-180-2 (2*336)                             | 116.01   | 408   | 278.43        | 23.2         | 348.04          | 23.6         |
| HLCW-180-2 (2*359)                             | 123.41   | 434   | 296.17        | 23.2         | 370.22          | 23.6         |
| HLCW-200-2 (2*295)                             | 102.36   | 360   | 245.67        | 21.3         | 307.09          | 21.6         |
| HLCW-220-2 (2*336)                             | 116.58   | 410   | 279.80        | 22.5         | 349.74          | 22.8         |
| HLCW-220-2 (2*315)                             | 110.38   | 388.2 | 264.92        | 21.7         | 331.15          | 22           |
| HLCW-220-2 (2*410)                             | 145.58   | 512   | 349.40        | 26.3         | 436.75          | 26.7         |
| HLCW-250-2 (2*359)                             | 125.68   | 442   | 301.63        | 16.3         | 377.04          | 16.7         |
| HLCW-250-2 (2*470)                             | 160.94   | 566   | 386.25        | 19.1         | 482.82          | 19.5         |
| HLCW-280-2 (2*410)                             | 145.02   | 510   | 348.04        | 18.5         | 435.05          | 18.9         |
| HLCW-280-2 (2*535)                             | 183.12   | 644   | 439.48        | 21.9         | 549.35          | 22.3         |
| HLCW-320-2 (2*470)                             | 157.53   | 554   | 378.07        | 20.3         | 472.58          | 20.7         |
| HLCW-320-2 (2*615)                             | 217.81   | 766   | 522.74        | 26.3         | 653.42          | 26.7         |
| HLCW-420-2 (2*615)                             | 215.53   | 758   | 517.28        | 20.3         | 646.60          | 20.7         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |             |       |               |                  |                 |                  |
|--|-------------|-------|---------------|------------------|-----------------|------------------|
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                  | CONDENSER WATER |                  |
|  |             |       | G.P.M.        | P.D.<br>FT.OF W. | G.P.M.          | P.D.<br>FT.OF W. |
| HLCW-35-1                                      | 23.29       | 81.9  | 55.89         | 6.3              | 69.86           | 6.7              |
| HLCW-40-1                                      | 28.95       | 101.8 | 69.47         | 7.4              | 86.84           | 7.8              |
| HLCW-50-1<br>(139)                             | 23.09       | 81.2  | 55.41         | 6.2              | 69.27           | 6.6              |
| HLCW-50-1<br>(195)                             | 33.55       | 118   | 80.53         | 8.2              | 100.66          | 8.6              |
| HLCW-50-1<br>(197)                             | 33.04       | 116.2 | 79.30         | 8                | 99.12           | 8.4              |
| HLCW-60-1<br>(170)                             | 28.95       | 101.8 | 69.47         | 7.2              | 86.84           | 7.6              |
| HLCW-60-1<br>(220)                             | 37.85       | 133.1 | 90.83         | 8.6              | 113.54          | 9                |
| HLCW-60-1<br>(227)                             | 38.93       | 136.9 | 93.42         | 8.4              | 116.78          | 8.8              |
| HLCW-70-1<br>(197)                             | 33.41       | 117.5 | 80.19         | 8.1              | 100.23          | 8.5              |
| HLCW-70-1<br>(258)                             | 44.73       | 157.3 | 107.35        | 12               | 134.18          | 12.5             |
| HLCW-80-1<br>(227)                             | 38.84       | 136.6 | 93.22         | 6.8              | 116.52          | 7.3              |
| HLCW-80-1<br>(295)                             | 51.47       | 181   | 123.52        | 8.3              | 154.40          | 8.8              |
| HLCW-80-1<br>(315)                             | 54.00       | 189.9 | 129.59        | 8.6              | 161.99          | 9.1              |
| HLCW-90-1<br>(258)                             | 44.53       | 156.6 | 106.87        | 9.3              | 133.59          | 9.8              |
| HLCW-90-1<br>(336)                             | 58.58       | 206   | 140.58        | 11.8             | 175.73          | 12.3             |
| HLCW-90-1<br>(359)                             | 62.27       | 219   | 149.45        | 11.8             | 186.81          | 12.3             |
| HLCW-100-1<br>(295)                            | 51.61       | 181.5 | 123.86        | 10.8             | 154.83          | 11.3             |
| HLCW-110-1<br>(336)                            | 58.86       | 207   | 141.26        | 11.5             | 176.58          | 12               |
| HLCW-110-1<br>(315)                            | 55.65       | 195.7 | 133.55        | 11.1             | 166.94          | 11.6             |
| HLCW-110-1<br>(410)                            | 73.36       | 258   | 176.07        | 13.4             | 220.08          | 13.9             |
| HLCW-125-1<br>(359)                            | 63.41       | 223   | 152.18        | 8.4              | 190.23          | 8.9              |
| HLCW-125-1<br>(470)                            | 81.04       | 285   | 194.49        | 9.8              | 243.11          | 10.3             |
| HLCW-140-1<br>(410)                            | 73.08       | 257   | 175.38        | 9.5              | 219.23          | 10               |
| HLCW-140-1<br>(535)                            | 92.41       | 325   | 221.79        | 11.2             | 277.24          | 11.8             |
| HLCW-160-1<br>(470)                            | 79.33       | 279   | 190.40        | 10.4             | 238.00          | 11               |
| HLCW-160-1<br>(615)                            | 109.76      | 386   | 263.42        | 13.4             | 329.27          | 14               |
| HLCW-210-1<br>(615)                            | 108.62      | 382   | 260.69        | 10.4             | 325.86          | 11               |
| HLCW-70-2                                      | 46.58       | 163.8 | 111.78        | 12.4             | 139.73          | 13               |
| HLCW-80-2                                      | 57.89       | 203.6 | 138.94        | 14.6             | 173.68          | 15.2             |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-100-2 (2*137)                             | 46.18    | 162.4 | 110.83        | 12.4         | 138.53          | 12.8         |
| HLCW-100-2 (2*195)                             | 67.11    | 236   | 161.05        | 16.4         | 201.32          | 16.8         |
| HLCW-100-2 (2*197)                             | 66.08    | 232.4 | 158.60        | 16           | 198.25          | 16.3         |
| HLCW-120-2 (2*170)                             | 57.89    | 203.6 | 138.94        | 14.4         | 173.68          | 14.7         |
| HLCW-120-2 (2*220)                             | 75.69    | 266.2 | 181.66        | 17.2         | 227.08          | 17.4         |
| HLCW-120-2 (2*227)                             | 77.85    | 273.8 | 186.85        | 16.8         | 233.56          | 17           |
| HLCW-140-2 (2*197)                             | 66.82    | 235   | 160.37        | 16.2         | 200.46          | 16.4         |
| HLCW-140-2 (2*258)                             | 89.45    | 314.6 | 214.69        | 24           | 268.36          | 24.2         |
| HLCW-160-2 (2*227)                             | 77.68    | 273.2 | 186.44        | 13.5         | 233.05          | 13.8         |
| HLCW-160-2 (2*295)                             | 102.93   | 362   | 247.04        | 16.5         | 308.80          | 16.8         |
| HLCW-160-2 (2*315)                             | 107.99   | 379.8 | 259.19        | 17           | 323.98          | 17.4         |
| HLCW-180-2 (2*258)                             | 89.06    | 313.2 | 213.74        | 18.4         | 267.17          | 18.8         |
| HLCW-180-2 (2*336)                             | 117.15   | 412   | 281.16        | 23.4         | 351.45          | 23.8         |
| HLCW-180-2 (2*359)                             | 124.54   | 438   | 298.90        | 23.4         | 373.63          | 23.8         |
| HLCW-200-2 (2*295)                             | 103.22   | 363   | 247.72        | 21.5         | 309.65          | 21.8         |
| HLCW-220-2 (2*336)                             | 117.72   | 414   | 282.53        | 22.7         | 353.16          | 23           |
| HLCW-220-2 (2*315)                             | 111.29   | 391.4 | 267.10        | 21.9         | 333.88          | 22.2         |
| HLCW-220-2 (2*410)                             | 146.72   | 516   | 352.13        | 26.5         | 440.17          | 26.9         |
| HLCW-250-2 (2*359)                             | 126.82   | 446   | 304.36        | 16.5         | 380.45          | 16.9         |
| HLCW-250-2 (2*470)                             | 162.08   | 570   | 388.98        | 19.3         | 486.23          | 19.7         |
| HLCW-280-2 (2*410)                             | 146.15   | 514   | 350.77        | 18.7         | 438.46          | 19.1         |
| HLCW-280-2 (2*535)                             | 184.82   | 650   | 443.58        | 22.1         | 554.47          | 22.5         |
| HLCW-320-2 (2*470)                             | 158.66   | 558   | 380.79        | 20.5         | 475.99          | 20.9         |
| HLCW-320-2 (2*615)                             | 219.51   | 772   | 526.83        | 26.5         | 658.54          | 26.9         |
| HLCW-420-2 (2*615)                             | 217.24   | 764   | 521.37        | 20.5         | 651.72          | 20.9         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-35-1                                      | 20.67    | 72.7  | 49.61         | 5.7          | 62.02           | 6.1          |
| HLCW-40-1                                      | 25.76    | 90.6  | 61.83         | 6.8          | 77.28           | 7.2          |
| HLCW-50-1 (139)                                | 20.56    | 72.3  | 49.34         | 5.6          | 61.67           | 6            |
| HLCW-50-1 (195)                                | 29.83    | 104.9 | 71.59         | 7.6          | 89.48           | 8            |
| HLCW-50-1 (197)                                | 29.17    | 102.6 | 70.02         | 7.4          | 87.52           | 7.8          |
| HLCW-60-1 (170)                                | 25.79    | 90.7  | 61.90         | 6.6          | 77.37           | 7            |
| HLCW-60-1 (220)                                | 33.64    | 118.3 | 80.73         | 8            | 100.91          | 8.4          |
| HLCW-60-1 (227)                                | 34.38    | 120.9 | 82.51         | 7.8          | 103.13          | 8.2          |
| HLCW-70-1 (197)                                | 29.54    | 103.9 | 70.90         | 7.5          | 88.63           | 7.9          |
| HLCW-70-1 (258)                                | 39.50    | 138.9 | 94.79         | 11.4         | 118.49          | 11.8         |
| HLCW-80-1 (227)                                | 34.29    | 120.6 | 82.30         | 6.2          | 102.88          | 6.6          |
| HLCW-80-1 (295)                                | 45.86    | 161.3 | 110.08        | 7.7          | 137.59          | 8.1          |
| HLCW-80-1 (315)                                | 48.08    | 169.1 | 115.40        | 8            | 144.25          | 8.4          |
| HLCW-90-1 (258)                                | 39.55    | 139.1 | 94.93         | 8.7          | 118.66          | 9.1          |
| HLCW-90-1 (336)                                | 52.23    | 183.7 | 125.36        | 11.2         | 156.70          | 11.6         |
| HLCW-90-1 (359)                                | 55.42    | 194.9 | 133.01        | 11.2         | 166.26          | 11.6         |
| HLCW-100-1 (295)                               | 46.01    | 161.8 | 110.42        | 10.2         | 138.02          | 10.6         |
| HLCW-110-1 (336)                               | 52.40    | 184.3 | 125.77        | 10.9         | 157.21          | 11.3         |
| HLCW-110-1 (315)                               | 49.65    | 174.6 | 119.15        | 10.5         | 148.94          | 10.9         |
| HLCW-110-1 (410)                               | 65.40    | 230   | 156.96        | 12.8         | 196.20          | 13.2         |
| HLCW-125-1 (359)                               | 56.58    | 199   | 135.80        | 7.8          | 169.75          | 8.2          |
| HLCW-125-1 (470)                               | 72.22    | 254   | 173.34        | 9.2          | 216.67          | 9.6          |
| HLCW-140-1 (410)                               | 65.40    | 230   | 156.96        | 8.9          | 196.20          | 9.3          |
| HLCW-140-1 (535)                               | 82.18    | 289   | 197.22        | 10.6         | 246.53          | 11           |
| HLCW-160-1 (470)                               | 70.52    | 248   | 169.24        | 9.8          | 211.55          | 10.2         |
| HLCW-160-1 (615)                               | 97.53    | 343   | 234.07        | 12.8         | 292.59          | 13.2         |
| HLCW-210-1 (615)                               | 96.68    | 340   | 232.03        | 9.8          | 290.03          | 10.2         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-70-2                                      | 41.34    | 145.4 | 99.23         | 11.8         | 124.03          | 12.2         |
| HLCW-80-2                                      | 51.52    | 181.2 | 123.66        | 14           | 154.57          | 14.4         |
| HLCW-100-2 (2*137)                             | 41.12    | 144.6 | 98.68         | 11.6         | 123.35          | 12           |
| HLCW-100-2 (2*195)                             | 59.66    | 209.8 | 143.17        | 15.6         | 178.97          | 16           |
| HLCW-100-2 (2*197)                             | 58.35    | 205.2 | 140.03        | 15.2         | 175.04          | 15.5         |
| HLCW-120-2 (2*170)                             | 51.58    | 181.4 | 123.79        | 13.6         | 154.74          | 13.9         |
| HLCW-120-2 (2*220)                             | 67.28    | 236.6 | 161.46        | 16.4         | 201.83          | 16.6         |
| HLCW-120-2 (2*227)                             | 68.75    | 241.8 | 165.01        | 16           | 206.26          | 16.2         |
| HLCW-140-2 (2*197)                             | 59.09    | 207.8 | 141.81        | 15.4         | 177.26          | 15.6         |
| HLCW-140-2 (2*258)                             | 78.99    | 277.8 | 189.58        | 23.2         | 236.97          | 23.4         |
| HLCW-160-2 (2*227)                             | 68.58    | 241.2 | 164.60        | 12.7         | 205.75          | 13           |
| HLCW-160-2 (2*295)                             | 91.73    | 322.6 | 220.15        | 15.7         | 275.19          | 16           |
| HLCW-160-2 (2*315)                             | 96.17    | 338.2 | 230.80        | 16.2         | 288.50          | 16.6         |
| HLCW-180-2 (2*258)                             | 79.10    | 278.2 | 189.85        | 17.6         | 237.31          | 18           |
| HLCW-180-2 (2*336)                             | 104.47   | 367.4 | 250.72        | 22.6         | 313.41          | 23           |
| HLCW-180-2 (2*359)                             | 110.84   | 389.8 | 266.01        | 22.6         | 332.51          | 23           |
| HLCW-200-2 (2*295)                             | 92.01    | 323.6 | 220.83        | 20.6         | 276.04          | 21           |
| HLCW-220-2 (2*336)                             | 104.81   | 368.6 | 251.54        | 21.8         | 314.43          | 22.2         |
| HLCW-220-2 (2*315)                             | 99.29    | 349.2 | 238.30        | 21           | 297.88          | 21.4         |
| HLCW-220-2 (2*410)                             | 130.80   | 460   | 313.92        | 25.6         | 392.40          | 26           |
| HLCW-250-2 (2*359)                             | 113.17   | 398   | 271.61        | 15.6         | 339.51          | 16           |
| HLCW-250-2 (2*470)                             | 144.45   | 508   | 346.67        | 18.4         | 433.34          | 18.8         |
| HLCW-280-2 (2*410)                             | 130.80   | 460   | 313.92        | 17.8         | 392.40          | 18.2         |
| HLCW-280-2 (2*535)                             | 164.35   | 578   | 394.44        | 21.2         | 493.05          | 21.6         |
| HLCW-320-2 (2*470)                             | 141.04   | 496   | 338.48        | 19.6         | 423.11          | 20           |
| HLCW-320-2 (2*615)                             | 195.06   | 686   | 468.15        | 25.6         | 585.18          | 26           |
| HLCW-420-2 (2*615)                             | 193.35   | 680   | 464.05        | 19.6         | 580.06          | 20           |

| CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-35-1                                      | 21.67       | 76.2  | 52.00         | 5.8             | 65.00           | 6.3             |
| HLCW-40-1                                      | 26.96       | 94.8  | 64.69         | 6.9             | 80.87           | 7.4             |
| HLCW-50-1<br>(139)                             | 21.50       | 75.6  | 51.59         | 5.7             | 64.49           | 6.2             |
| HLCW-50-1<br>(195)                             | 31.22       | 109.8 | 74.93         | 7.7             | 93.66           | 8.2             |
| HLCW-50-1<br>(197)                             | 30.62       | 107.7 | 73.50         | 7.5             | 91.87           | 8               |
| HLCW-60-1<br>(170)                             | 26.98       | 94.9  | 64.76         | 6.7             | 80.95           | 7.2             |
| HLCW-60-1<br>(220)                             | 35.20       | 123.8 | 84.48         | 8.1             | 105.61          | 8.6             |
| HLCW-60-1<br>(227)                             | 36.08       | 126.9 | 86.60         | 7.9             | 108.25          | 8.4             |
| HLCW-70-1<br>(197)                             | 30.99       | 109   | 74.38         | 7.6             | 92.98           | 8.1             |
| HLCW-70-1<br>(258)                             | 41.46       | 145.8 | 99.50         | 11.5            | 124.37          | 12              |
| HLCW-80-1<br>(227)                             | 35.97       | 126.5 | 86.33         | 6.3             | 107.91          | 6.8             |
| HLCW-80-1<br>(295)                             | 48.03       | 168.9 | 115.26        | 7.8             | 144.08          | 8.3             |
| HLCW-80-1<br>(315)                             | 50.39       | 177.2 | 120.93        | 8.1             | 151.16          | 8.6             |
| HLCW-90-1<br>(258)                             | 41.43       | 145.7 | 99.43         | 8.8             | 124.29          | 9.3             |
| HLCW-90-1<br>(336)                             | 54.71       | 192.4 | 131.30        | 11.3            | 164.12          | 11.8            |
| HLCW-90-1<br>(359)                             | 58.01       | 204   | 139.22        | 11.3            | 174.02          | 11.8            |
| HLCW-100-1<br>(295)                            | 48.14       | 169.3 | 115.54        | 10.3            | 144.42          | 10.8            |
| HLCW-110-1<br>(336)                            | 54.88       | 193   | 131.71        | 11              | 164.64          | 11.5            |
| HLCW-110-1<br>(315)                            | 51.92       | 182.6 | 124.61        | 10.6            | 155.76          | 11.1            |
| HLCW-110-1<br>(410)                            | 68.53       | 241   | 164.47        | 12.9            | 205.58          | 13.4            |
| HLCW-125-1<br>(359)                            | 59.14       | 208   | 141.95        | 7.9             | 177.43          | 8.4             |
| HLCW-125-1<br>(470)                            | 75.64       | 266   | 181.53        | 9.3             | 226.91          | 9.8             |
| HLCW-140-1<br>(410)                            | 68.24       | 240   | 163.78        | 9               | 204.73          | 9.5             |
| HLCW-140-1<br>(535)                            | 85.87       | 302   | 206.09        | 10.7            | 257.62          | 11.2            |
| HLCW-160-1<br>(470)                            | 73.93       | 260   | 177.43        | 9.9             | 221.79          | 10.4            |
| HLCW-160-1<br>(615)                            | 102.08      | 359   | 244.99        | 12.9            | 306.24          | 13.4            |
| HLCW-210-1<br>(615)                            | 101.23      | 356   | 242.94        | 9.9             | 303.68          | 10.4            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=6,6°C      |             |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-70-2                                      | 43.33       | 152.4 | 104.00        | 11.9            | 130.00          | 12.4            |
| HLCW-80-2                                      | 53.91       | 189.6 | 129.39        | 14.1            | 161.74          | 14.6            |
| HLCW-100-2<br>(2*137)                          | 42.99       | 151.2 | 103.18        | 11.7            | 128.98          | 12.2            |
| HLCW-100-2<br>(2*195)                          | 62.44       | 219.6 | 149.86        | 15.7            | 187.33          | 16.2            |
| HLCW-100-2<br>(2*197)                          | 61.25       | 215.4 | 146.99        | 15.3            | 183.74          | 15.7            |
| HLCW-120-2<br>(2*170)                          | 53.97       | 189.8 | 129.52        | 13.7            | 161.91          | 14.1            |
| HLCW-120-2<br>(2*220)                          | 70.40       | 247.6 | 168.97        | 16.5            | 211.21          | 16.8            |
| HLCW-120-2<br>(2*227)                          | 72.17       | 253.8 | 173.20        | 16.1            | 216.50          | 16.4            |
| HLCW-140-2<br>(2*197)                          | 61.99       | 218   | 148.77        | 15.5            | 185.96          | 15.8            |
| HLCW-140-2<br>(2*258)                          | 82.92       | 291.6 | 199.00        | 23.3            | 248.75          | 23.6            |
| HLCW-160-2<br>(2*227)                          | 71.94       | 253   | 172.65        | 12.8            | 215.82          | 13.2            |
| HLCW-160-2<br>(2*295)                          | 96.05       | 337.8 | 230.52        | 15.8            | 288.16          | 16.2            |
| HLCW-160-2<br>(2*315)                          | 100.77      | 354.4 | 241.85        | 16.3            | 302.32          | 16.8            |
| HLCW-180-2<br>(2*258)                          | 82.86       | 291.4 | 198.86        | 17.7            | 248.57          | 18.2            |
| HLCW-180-2<br>(2*336)                          | 109.42      | 384.8 | 262.60        | 22.7            | 328.25          | 23.2            |
| HLCW-180-2<br>(2*359)                          | 116.01      | 408   | 278.43        | 22.7            | 348.04          | 23.2            |
| HLCW-200-2<br>(2*295)                          | 96.28       | 338.6 | 231.07        | 20.7            | 288.84          | 21.2            |
| HLCW-220-2<br>(2*336)                          | 109.76      | 386   | 263.42        | 21.9            | 329.27          | 22.4            |
| HLCW-220-2<br>(2*315)                          | 103.84      | 365.2 | 249.22        | 21.1            | 311.53          | 21.6            |
| HLCW-220-2<br>(2*410)                          | 137.05      | 482   | 328.93        | 25.7            | 411.16          | 26.2            |
| HLCW-250-2<br>(2*359)                          | 118.29      | 416   | 283.89        | 15.7            | 354.86          | 16.2            |
| HLCW-250-2<br>(2*470)                          | 151.27      | 532   | 363.05        | 18.5            | 453.81          | 19              |
| HLCW-280-2<br>(2*410)                          | 136.49      | 480   | 327.57        | 18              | 409.46          | 18.4            |
| HLCW-280-2<br>(2*535)                          | 171.74      | 604   | 412.19        | 21.4            | 515.23          | 21.8            |
| HLCW-320-2<br>(2*470)                          | 147.86      | 520   | 354.86        | 19.8            | 443.58          | 20.2            |
| HLCW-320-2<br>(2*615)                          | 204.16      | 718   | 489.98        | 25.8            | 612.48          | 26.2            |
| HLCW-420-2<br>(2*615)                          | 202.45      | 712   | 485.89        | 19.8            | 607.36          | 20.2            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-35-1                                      | 22.21    | 78.1  | 53.30         | 5.9          | 66.62           | 6.4          |
| HLCW-40-1                                      | 27.64    | 97.2  | 66.33         | 7            | 82.92           | 7.5          |
| HLCW-50-1 (139)                                | 22.04    | 77.5  | 52.89         | 5.8          | 66.11           | 6.3          |
| HLCW-50-1 (195)                                | 31.99    | 112.5 | 76.77         | 7.8          | 95.97           | 8.3          |
| HLCW-50-1 (197)                                | 31.42    | 110.5 | 75.41         | 7.6          | 94.26           | 8.1          |
| HLCW-60-1 (170)                                | 27.67    | 97.3  | 66.40         | 6.8          | 83.00           | 7.3          |
| HLCW-60-1 (220)                                | 36.08    | 126.9 | 86.60         | 8.2          | 108.25          | 8.7          |
| HLCW-60-1 (227)                                | 37.02    | 130.2 | 88.85         | 8            | 111.07          | 8.5          |
| HLCW-70-1 (197)                                | 31.82    | 111.9 | 76.36         | 7.7          | 95.45           | 8.2          |
| HLCW-70-1 (258)                                | 42.54    | 149.6 | 102.09        | 11.6         | 127.61          | 12.1         |
| HLCW-80-1 (227)                                | 36.91    | 129.8 | 88.58         | 6.4          | 110.72          | 6.9          |
| HLCW-80-1 (295)                                | 49.25    | 173.2 | 118.20        | 7.9          | 147.75          | 8.4          |
| HLCW-80-1 (315)                                | 51.64    | 181.6 | 123.93        | 8.2          | 154.91          | 8.7          |
| HLCW-90-1 (258)                                | 42.51    | 149.5 | 102.02        | 8.9          | 127.53          | 9.4          |
| HLCW-90-1 (336)                                | 56.07    | 197.2 | 134.57        | 11.4         | 168.22          | 11.9         |
| HLCW-90-1 (359)                                | 59.43    | 209   | 142.63        | 11.4         | 178.28          | 11.9         |
| HLCW-100-1 (295)                               | 49.36    | 173.6 | 118.47        | 10.4         | 148.09          | 10.9         |
| HLCW-110-1 (336)                               | 56.24    | 197.8 | 134.98        | 11.1         | 168.73          | 11.6         |
| HLCW-110-1 (315)                               | 53.20    | 187.1 | 127.68        | 10.7         | 159.60          | 11.2         |
| HLCW-110-1 (410)                               | 70.23    | 247   | 168.56        | 13           | 210.70          | 13.5         |
| HLCW-125-1 (359)                               | 60.57    | 213   | 145.36        | 8            | 181.70          | 8.5          |
| HLCW-125-1 (470)                               | 77.34    | 272   | 185.62        | 9.4          | 232.03          | 9.9          |
| HLCW-140-1 (410)                               | 69.95    | 246   | 167.88        | 9.1          | 209.85          | 9.6          |
| HLCW-140-1 (535)                               | 88.15    | 310   | 211.55        | 10.8         | 264.44          | 11.3         |
| HLCW-160-1 (470)                               | 75.64    | 266   | 181.53        | 10           | 226.91          | 10.5         |
| HLCW-160-1 (615)                               | 104.64   | 368   | 251.13        | 13           | 313.92          | 13.5         |
| HLCW-210-1 (615)                               | 101.23   | 356   | 242.94        | 10           | 303.68          | 10.5         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C |             |       |               |                  |                 |                  |
|--|-------------|-------|---------------|------------------|-----------------|------------------|
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                  | CONDENSER WATER |                  |
|  |             |       | G.P.M.        | P.D.<br>FT.OF W. | G.P.M.          | P.D.<br>FT.OF W. |
| HLCW-70-2                                      | 44.41       | 156.2 | 106.60        | 12               | 133.24          | 12.5             |
| HLCW-80-2                                      | 55.28       | 194.4 | 132.66        | 14.2             | 165.83          | 14.7             |
| HLCW-100-2<br>(2*137)                          | 44.07       | 155   | 105.78        | 11.8             | 132.22          | 12.3             |
| HLCW-100-2<br>(2*195)                          | 63.98       | 225   | 153.55        | 15.8             | 191.93          | 16.3             |
| HLCW-100-2<br>(2*197)                          | 62.84       | 221   | 150.82        | 15.4             | 188.52          | 15.8             |
| HLCW-120-2<br>(2*170)                          | 55.33       | 194.6 | 132.80        | 13.8             | 166.00          | 14.2             |
| HLCW-120-2<br>(2*220)                          | 72.17       | 253.8 | 173.20        | 16.6             | 216.50          | 16.9             |
| HLCW-120-2<br>(2*227)                          | 74.04       | 260.4 | 177.70        | 16.2             | 222.13          | 16.5             |
| HLCW-140-2<br>(2*197)                          | 63.64       | 223.8 | 152.73        | 15.6             | 190.91          | 15.9             |
| HLCW-140-2<br>(2*258)                          | 85.08       | 299.2 | 204.18        | 23.4             | 255.23          | 23.7             |
| HLCW-160-2<br>(2*227)                          | 73.82       | 259.6 | 177.16        | 12.9             | 221.45          | 13.3             |
| HLCW-160-2<br>(2*295)                          | 98.50       | 346.4 | 236.39        | 15.9             | 295.49          | 16.3             |
| HLCW-160-2<br>(2*315)                          | 103.27      | 363.2 | 247.86        | 16.4             | 309.82          | 16.9             |
| HLCW-180-2<br>(2*258)                          | 85.02       | 299   | 204.05        | 17.8             | 255.06          | 18.3             |
| HLCW-180-2<br>(2*336)                          | 112.15      | 394.4 | 269.15        | 22.8             | 336.44          | 23.3             |
| HLCW-180-2<br>(2*359)                          | 118.86      | 418   | 285.25        | 22.8             | 356.57          | 23.3             |
| HLCW-200-2<br>(2*295)                          | 98.72       | 347.2 | 236.94        | 20.8             | 296.17          | 21.3             |
| HLCW-220-2<br>(2*336)                          | 112.49      | 395.6 | 269.97        | 22               | 337.46          | 22.5             |
| HLCW-220-2<br>(2*315)                          | 106.40      | 374.2 | 255.36        | 21.2             | 319.21          | 21.7             |
| HLCW-220-2<br>(2*410)                          | 140.47      | 494   | 337.12        | 25.8             | 421.40          | 26.3             |
| HLCW-250-2<br>(2*359)                          | 121.13      | 426   | 290.71        | 15.8             | 363.39          | 16.3             |
| HLCW-250-2<br>(2*470)                          | 154.68      | 544   | 371.24        | 18.6             | 464.05          | 19.1             |
| HLCW-280-2<br>(2*410)                          | 139.90      | 492   | 335.75        | 18.1             | 419.69          | 18.5             |
| HLCW-280-2<br>(2*535)                          | 176.29      | 620   | 423.11        | 21.5             | 528.88          | 21.9             |
| HLCW-320-2<br>(2*470)                          | 151.27      | 532   | 363.05        | 19.9             | 453.81          | 20.3             |
| HLCW-320-2<br>(2*615)                          | 209.28      | 736   | 502.27        | 25.9             | 627.83          | 26.3             |
| HLCW-420-2<br>(2*615)                          | 202.45      | 712   | 485.89        | 19.9             | 607.36          | 20.3             |

| CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-35-1                                      | 22.41    | 78.8  | 53.78         | 6            | 67.22           | 6.5          |
| HLCW-40-1                                      | 27.87    | 98    | 66.88         | 7.1          | 83.60           | 7.6          |
| HLCW-50-1 (139)                                | 22.21    | 78.1  | 53.30         | 5.9          | 66.62           | 6.4          |
| HLCW-50-1 (195)                                | 32.24    | 113.4 | 77.39         | 7.9          | 96.73           | 8.4          |
| HLCW-50-1 (197)                                | 31.70    | 111.5 | 76.09         | 7.7          | 95.11           | 8.2          |
| HLCW-60-1 (170)                                | 27.87    | 98    | 66.88         | 6.9          | 83.60           | 7.4          |
| HLCW-60-1 (220)                                | 36.40    | 128   | 87.35         | 8.3          | 109.19          | 8.8          |
| HLCW-60-1 (227)                                | 37.33    | 131.3 | 89.60         | 8.1          | 112.00          | 8.6          |
| HLCW-70-1 (197)                                | 32.10    | 112.9 | 77.05         | 7.8          | 96.31           | 8.3          |
| HLCW-70-1 (258)                                | 42.91    | 150.9 | 102.98        | 11.7         | 128.72          | 12.2         |
| HLCW-80-1 (227)                                | 37.22    | 130.9 | 89.33         | 6.5          | 111.66          | 7            |
| HLCW-80-1 (295)                                | 49.65    | 174.6 | 119.15        | 8            | 148.94          | 8.5          |
| HLCW-80-1 (315)                                | 52.09    | 183.2 | 125.02        | 8.3          | 156.28          | 8.8          |
| HLCW-90-1 (258)                                | 42.85    | 150.7 | 102.84        | 9            | 128.55          | 9.5          |
| HLCW-90-1 (336)                                | 56.56    | 198.9 | 135.73        | 11.5         | 169.67          | 12           |
| HLCW-90-1 (359)                                | 60.00    | 211   | 143.99        | 11.5         | 179.99          | 12           |
| HLCW-100-1 (295)                               | 49.76    | 175   | 119.42        | 10.5         | 149.28          | 11           |
| HLCW-110-1 (336)                               | 56.73    | 199.5 | 136.14        | 11.2         | 170.18          | 11.7         |
| HLCW-110-1 (315)                               | 53.63    | 188.6 | 128.71        | 10.8         | 160.88          | 11.3         |
| HLCW-110-1 (410)                               | 70.80    | 249   | 169.92        | 13.1         | 212.41          | 13.6         |
| HLCW-125-1 (359)                               | 61.13    | 215   | 146.72        | 8.1          | 183.40          | 8.6          |
| HLCW-125-1 (470)                               | 78.19    | 275   | 187.67        | 9.5          | 234.58          | 10           |
| HLCW-140-1 (410)                               | 70.52    | 248   | 169.24        | 9.2          | 211.55          | 9.7          |
| HLCW-140-1 (535)                               | 89.00    | 313   | 213.60        | 10.9         | 267.00          | 11.4         |
| HLCW-160-1 (470)                               | 76.49    | 269   | 183.57        | 10.1         | 229.47          | 10.6         |
| HLCW-160-1 (615)                               | 105.49   | 371   | 253.18        | 13.1         | 316.48          | 13.6         |
| HLCW-210-1 (615)                               | 104.64   | 368   | 251.13        | 10.1         | 313.92          | 10.6         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,4°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-70-2                                      | 44.81    | 157.6 | 107.55        | 12.1         | 134.44          | 12.6         |
| HLCW-80-2                                      | 55.73    | 196   | 133.76        | 14.3         | 167.19          | 14.8         |
| HLCW-100-2 (2*137)                             | 44.41    | 156.2 | 106.60        | 11.9         | 133.24          | 12.4         |
| HLCW-100-2 (2*195)                             | 64.49    | 226.8 | 154.77        | 15.9         | 193.47          | 16.4         |
| HLCW-100-2 (2*197)                             | 63.41    | 223   | 152.18        | 15.5         | 190.23          | 15.9         |
| HLCW-120-2 (2*170)                             | 55.73    | 196   | 133.76        | 13.9         | 167.19          | 14.3         |
| HLCW-120-2 (2*220)                             | 72.79    | 256   | 174.70        | 16.7         | 218.38          | 17           |
| HLCW-120-2 (2*227)                             | 74.67    | 262.6 | 179.21        | 16.3         | 224.01          | 16.6         |
| HLCW-140-2 (2*197)                             | 64.21    | 225.8 | 154.09        | 15.7         | 192.62          | 16           |
| HLCW-140-2 (2*258)                             | 85.82    | 301.8 | 205.96        | 23.5         | 257.45          | 23.8         |
| HLCW-160-2 (2*227)                             | 74.44    | 261.8 | 178.66        | 13           | 223.32          | 13.4         |
| HLCW-160-2 (2*295)                             | 99.29    | 349.2 | 238.30        | 16           | 297.88          | 16.4         |
| HLCW-160-2 (2*315)                             | 104.18   | 366.4 | 250.04        | 16.5         | 312.55          | 17           |
| HLCW-180-2 (2*258)                             | 85.70    | 301.4 | 205.68        | 17.9         | 257.10          | 18.4         |
| HLCW-180-2 (2*336)                             | 113.11   | 397.8 | 271.47        | 22.9         | 339.34          | 23.4         |
| HLCW-180-2 (2*359)                             | 119.99   | 422   | 287.98        | 22.9         | 359.98          | 23.4         |
| HLCW-200-2 (2*295)                             | 99.52    | 350   | 238.85        | 20.9         | 298.56          | 21.4         |
| HLCW-220-2 (2*336)                             | 113.45   | 399   | 272.29        | 22.1         | 340.36          | 22.6         |
| HLCW-220-2 (2*315)                             | 107.25   | 377.2 | 257.41        | 21.3         | 321.76          | 21.8         |
| HLCW-220-2 (2*410)                             | 141.60   | 498   | 339.85        | 25.9         | 424.81          | 26.4         |
| HLCW-250-2 (2*359)                             | 122.27   | 430   | 293.44        | 15.9         | 366.81          | 16.4         |
| HLCW-250-2 (2*470)                             | 156.39   | 550   | 375.34        | 18.7         | 469.17          | 19.2         |
| HLCW-280-2 (2*410)                             | 141.04   | 496   | 338.48        | 18.2         | 423.11          | 18.6         |
| HLCW-280-2 (2*535)                             | 178.00   | 626   | 427.20        | 21.6         | 534.00          | 22           |
| HLCW-320-2 (2*470)                             | 152.98   | 538   | 367.15        | 20           | 458.93          | 20.4         |
| HLCW-320-2 (2*615)                             | 210.98   | 742   | 506.36        | 26           | 632.95          | 26.4         |
| HLCW-420-2 (2*615)                             | 209.28   | 736   | 502.27        | 20           | 627.83          | 20.4         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-35-1                                      | 19.79       | 69.6  | 47.50         | 5.5             | 59.37           | 5.9             |
| HLCW-40-1                                      | 24.71       | 86.9  | 59.30         | 6.6             | 74.13           | 7               |
| HLCW-50-1<br>(139)                             | 19.71       | 69.3  | 47.29         | 5.4             | 59.12           | 5.8             |
| HLCW-50-1<br>(195)                             | 28.58       | 100.5 | 68.58         | 7.4             | 85.73           | 7.8             |
| HLCW-50-1<br>(197)                             | 27.87       | 98    | 66.88         | 7.2             | 83.60           | 7.6             |
| HLCW-60-1<br>(170)                             | 24.71       | 86.9  | 59.30         | 6.4             | 74.13           | 6.8             |
| HLCW-60-1<br>(220)                             | 32.22       | 113.3 | 77.32         | 7.8             | 96.65           | 8.2             |
| HLCW-60-1<br>(227)                             | 32.84       | 115.5 | 78.82         | 7.6             | 98.53           | 8               |
| HLCW-70-1<br>(197)                             | 28.26       | 99.4  | 67.83         | 7.3             | 84.79           | 7.7             |
| HLCW-70-1<br>(258)                             | 37.76       | 132.8 | 90.63         | 11.2            | 113.28          | 11.6            |
| HLCW-80-1<br>(227)                             | 32.70       | 115   | 78.48         | 6               | 98.10           | 6.4             |
| HLCW-80-1<br>(295)                             | 44.05       | 154.9 | 105.71        | 7.5             | 132.14          | 7.9             |
| HLCW-80-1<br>(315)                             | 46.21       | 162.5 | 110.89        | 7.8             | 138.62          | 8.2             |
| HLCW-90-1<br>(258)                             | 37.90       | 133.3 | 90.97         | 8.5             | 113.71          | 8.9             |
| HLCW-90-1<br>(336)                             | 50.16       | 176.4 | 120.38        | 11              | 150.48          | 11.4            |
| HLCW-90-1<br>(359)                             | 53.31       | 187.5 | 127.96        | 11              | 159.94          | 11.4            |
| HLCW-100-1<br>(295)                            | 44.22       | 155.5 | 106.12        | 10              | 132.65          | 10.4            |
| HLCW-110-1<br>(336)                            | 50.36       | 177.1 | 120.86        | 10.7            | 151.07          | 11.1            |
| HLCW-110-1<br>(315)                            | 47.68       | 167.7 | 114.44        | 10.3            | 143.05          | 10.7            |
| HLCW-110-1<br>(410)                            | 62.84       | 221   | 150.82        | 12.6            | 188.52          | 13              |
| HLCW-125-1<br>(359)                            | 54.37       | 191.2 | 130.48        | 7.6             | 163.10          | 8               |
| HLCW-125-1<br>(470)                            | 69.38       | 244   | 166.51        | 9               | 208.14          | 9.4             |
| HLCW-140-1<br>(410)                            | 62.84       | 221   | 150.82        | 8.7             | 188.52          | 9.1             |
| HLCW-140-1<br>(535)                            | 78.76       | 277   | 189.03        | 10.4            | 236.29          | 10.8            |
| HLCW-160-1<br>(470)                            | 67.67       | 238   | 162.42        | 9.6             | 203.02          | 10              |
| HLCW-160-1<br>(615)                            | 93.55       | 329   | 224.52        | 12.6            | 280.65          | 13              |
| HLCW-210-1<br>(615)                            | 92.98       | 327   | 223.15        | 9.6             | 278.94          | 10              |

| CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-70-2                                      | 39.58       | 139.2 | 94.99         | 11.6            | 118.74          | 12              |
| HLCW-80-2                                      | 49.42       | 173.8 | 118.61        | 13.8            | 148.26          | 14.2            |
| HLCW-100-2<br>(2*137)                          | 39.41       | 138.6 | 94.58         | 11.4            | 118.23          | 11.8            |
| HLCW-100-2<br>(2*195)                          | 57.15       | 201   | 137.17        | 15.4            | 171.46          | 15.8            |
| HLCW-100-2<br>(2*197)                          | 55.73       | 196   | 133.76        | 15              | 167.19          | 15.3            |
| HLCW-120-2<br>(2*170)                          | 49.42       | 173.8 | 118.61        | 13.4            | 148.26          | 13.7            |
| HLCW-120-2<br>(2*220)                          | 64.43       | 226.6 | 154.64        | 16.2            | 193.30          | 16.4            |
| HLCW-120-2<br>(2*227)                          | 65.68       | 231   | 157.64        | 15.8            | 197.05          | 16              |
| HLCW-140-2<br>(2*197)                          | 56.53       | 198.8 | 135.67        | 15.2            | 169.58          | 15.4            |
| HLCW-140-2<br>(2*258)                          | 75.52       | 265.6 | 181.25        | 23              | 226.57          | 23.2            |
| HLCW-160-2<br>(2*227)                          | 65.40       | 230   | 156.96        | 12.5            | 196.20          | 12.8            |
| HLCW-160-2<br>(2*295)                          | 88.09       | 309.8 | 211.42        | 15.5            | 264.27          | 15.8            |
| HLCW-160-2<br>(2*315)                          | 92.41       | 325   | 221.79        | 16              | 277.24          | 16.4            |
| HLCW-180-2<br>(2*258)                          | 75.81       | 266.6 | 181.94        | 17.4            | 227.42          | 17.8            |
| HLCW-180-2<br>(2*336)                          | 100.32      | 352.8 | 240.76        | 22.4            | 300.95          | 22.8            |
| HLCW-180-2<br>(2*359)                          | 106.63      | 375   | 255.91        | 22.4            | 319.89          | 22.8            |
| HLCW-200-2<br>(2*295)                          | 88.43       | 311   | 212.24        | 20.4            | 265.29          | 20.8            |
| HLCW-220-2<br>(2*336)                          | 100.71      | 354.2 | 241.72        | 21.6            | 302.14          | 22              |
| HLCW-220-2<br>(2*315)                          | 95.37       | 335.4 | 228.89        | 20.8            | 286.11          | 21.2            |
| HLCW-220-2<br>(2*410)                          | 125.68      | 442   | 301.63        | 25.4            | 377.04          | 25.8            |
| HLCW-250-2<br>(2*359)                          | 108.73      | 382.4 | 260.96        | 15.4            | 326.20          | 15.8            |
| HLCW-250-2<br>(2*470)                          | 138.76      | 488   | 333.02        | 18.2            | 416.28          | 18.6            |
| HLCW-280-2<br>(2*410)                          | 125.68      | 442   | 301.63        | 17.6            | 377.04          | 18              |
| HLCW-280-2<br>(2*535)                          | 157.53      | 554   | 378.07        | 21              | 472.58          | 21.4            |
| HLCW-320-2<br>(2*470)                          | 135.35      | 476   | 324.84        | 19.4            | 406.04          | 19.8            |
| HLCW-320-2<br>(2*615)                          | 187.10      | 658   | 449.04        | 25.4            | 561.30          | 25.8            |
| HLCW-420-2<br>(2*615)                          | 185.96      | 654   | 446.31        | 19.4            | 557.88          | 19.8            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-35-1                                      | 20.76    | 73    | 49.82         | 5.6          | 62.27           | 6            |
| HLCW-40-1                                      | 25.88    | 91    | 62.10         | 6.7          | 77.63           | 7.1          |
| HLCW-50-1 (139)                                | 20.64    | 72.6  | 49.54         | 5.5          | 61.93           | 5.9          |
| HLCW-50-1 (195)                                | 29.91    | 105.2 | 71.79         | 7.5          | 89.74           | 7.9          |
| HLCW-50-1 (197)                                | 29.26    | 102.9 | 70.22         | 7.3          | 87.78           | 7.7          |
| HLCW-60-1 (170)                                | 25.90    | 91.1  | 62.17         | 6.5          | 77.71           | 6.9          |
| HLCW-60-1 (220)                                | 33.75    | 118.7 | 81.00         | 7.9          | 101.26          | 8.3          |
| HLCW-60-1 (227)                                | 34.49    | 121.3 | 82.78         | 7.7          | 103.47          | 8.1          |
| HLCW-70-1 (197)                                | 29.66    | 104.3 | 71.18         | 7.4          | 88.97           | 7.8          |
| HLCW-70-1 (258)                                | 39.64    | 139.4 | 95.13         | 11.3         | 118.91          | 11.7         |
| HLCW-80-1 (227)                                | 34.35    | 120.8 | 82.44         | 6.1          | 103.05          | 6.5          |
| HLCW-80-1 (295)                                | 46.15    | 162.3 | 110.76        | 7.6          | 138.45          | 8            |
| HLCW-80-1 (315)                                | 48.45    | 170.4 | 116.29        | 7.9          | 145.36          | 8.3          |
| HLCW-90-1 (258)                                | 39.75    | 139.8 | 95.40         | 8.6          | 119.25          | 9            |
| HLCW-90-1 (336)                                | 52.55    | 184.8 | 126.11        | 11.1         | 157.64          | 11.5         |
| HLCW-90-1 (359)                                | 55.82    | 196.3 | 133.96        | 11.1         | 167.45          | 11.5         |
| HLCW-100-1 (295)                               | 46.32    | 162.9 | 111.17        | 10.1         | 138.96          | 10.5         |
| HLCW-110-1 (336)                               | 52.75    | 185.5 | 126.59        | 10.8         | 158.24          | 11.2         |
| HLCW-110-1 (315)                               | 49.90    | 175.5 | 119.77        | 10.4         | 149.71          | 10.8         |
| HLCW-110-1 (410)                               | 65.68    | 231   | 157.64        | 12.7         | 197.05          | 13.1         |
| HLCW-125-1 (359)                               | 56.87    | 200   | 136.49        | 7.7          | 170.61          | 8.1          |
| HLCW-125-1 (470)                               | 72.51    | 255   | 174.02        | 9.1          | 217.52          | 9.5          |
| HLCW-140-1 (410)                               | 65.68    | 231   | 157.64        | 8.8          | 197.05          | 9.2          |
| HLCW-140-1 (535)                               | 82.46    | 290   | 197.90        | 10.5         | 247.38          | 10.9         |
| HLCW-160-1 (470)                               | 71.09    | 250   | 170.61        | 9.7          | 213.26          | 10.1         |
| HLCW-160-1 (615)                               | 98.10    | 345   | 235.44        | 12.7         | 294.30          | 13.1         |
| HLCW-210-1 (615)                               | 97.25    | 342   | 233.39        | 9.7          | 291.74          | 10.1         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-70-2                                      | 41.51    | 146   | 99.63         | 11.7         | 124.54          | 12.1         |
| HLCW-80-2                                      | 51.75    | 182   | 124.20        | 13.9         | 155.25          | 14.3         |
| HLCW-100-2 (2*137)                             | 41.29    | 145.2 | 99.09         | 11.5         | 123.86          | 11.9         |
| HLCW-100-2 (2*195)                             | 59.83    | 210.4 | 143.58        | 15.5         | 179.48          | 15.9         |
| HLCW-100-2 (2*197)                             | 58.52    | 205.8 | 140.44        | 15.1         | 175.55          | 15.4         |
| HLCW-120-2 (2*170)                             | 51.81    | 182.2 | 124.34        | 13.5         | 155.42          | 13.8         |
| HLCW-120-2 (2*220)                             | 67.50    | 237.4 | 162.01        | 16.3         | 202.51          | 16.5         |
| HLCW-120-2 (2*227)                             | 68.98    | 242.6 | 165.56        | 15.9         | 206.95          | 16.1         |
| HLCW-140-2 (2*197)                             | 59.31    | 208.6 | 142.35        | 15.3         | 177.94          | 15.5         |
| HLCW-140-2 (2*258)                             | 79.28    | 278.8 | 190.26        | 23.1         | 237.83          | 23.3         |
| HLCW-160-2 (2*227)                             | 68.70    | 241.6 | 164.87        | 12.6         | 206.09          | 12.9         |
| HLCW-160-2 (2*295)                             | 92.30    | 324.6 | 221.52        | 15.6         | 276.90          | 15.9         |
| HLCW-160-2 (2*315)                             | 96.90    | 340.8 | 232.57        | 16.1         | 290.71          | 16.5         |
| HLCW-180-2 (2*258)                             | 79.50    | 279.6 | 190.81        | 17.5         | 238.51          | 17.9         |
| HLCW-180-2 (2*336)                             | 105.09   | 369.6 | 252.23        | 22.5         | 315.28          | 22.9         |
| HLCW-180-2 (2*359)                             | 111.63   | 392.6 | 267.92        | 22.5         | 334.90          | 22.9         |
| HLCW-200-2 (2*295)                             | 92.64    | 325.8 | 222.34        | 20.5         | 277.92          | 20.9         |
| HLCW-220-2 (2*336)                             | 105.49   | 371   | 253.18        | 21.7         | 316.48          | 22.1         |
| HLCW-220-2 (2*315)                             | 99.81    | 351   | 239.53        | 20.9         | 299.42          | 21.3         |
| HLCW-220-2 (2*410)                             | 131.37   | 462   | 315.28        | 25.5         | 394.10          | 25.9         |
| HLCW-250-2 (2*359)                             | 113.74   | 400   | 272.97        | 15.5         | 341.21          | 15.9         |
| HLCW-250-2 (2*470)                             | 145.02   | 510   | 348.04        | 18.3         | 435.05          | 18.7         |
| HLCW-280-2 (2*410)                             | 131.37   | 462   | 315.28        | 17.7         | 394.10          | 18.1         |
| HLCW-280-2 (2*535)                             | 164.92   | 580   | 395.81        | 21.1         | 494.76          | 21.5         |
| HLCW-320-2 (2*470)                             | 142.17   | 500   | 341.21        | 19.5         | 426.52          | 19.9         |
| HLCW-320-2 (2*615)                             | 196.20   | 690   | 470.88        | 25.5         | 588.59          | 25.9         |
| HLCW-420-2 (2*615)                             | 194.49   | 684   | 466.78        | 19.5         | 583.48          | 19.9         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-35-1                                      | 21.30       | 74.9  | 51.11         | 5.8             | 63.89           | 6.10            |
| HLCW-40-1                                      | 26.53       | 93.3  | 63.67         | 6.9             | 79.59           | 7.20            |
| HLCW-50-1<br>(139)                             | 21.16       | 74.4  | 50.77         | 5.7             | 63.47           | 6.00            |
| HLCW-50-1<br>(195)                             | 30.68       | 107.9 | 73.63         | 7.7             | 92.04           | 8.00            |
| HLCW-50-1<br>(197)                             | 30.03       | 105.6 | 72.06         | 7.5             | 90.08           | 7.80            |
| HLCW-60-1<br>(170)                             | 26.53       | 93.3  | 63.67         | 6.7             | 79.59           | 7.00            |
| HLCW-60-1<br>(220)                             | 34.60       | 121.7 | 83.05         | 8.1             | 103.81          | 8.40            |
| HLCW-60-1<br>(227)                             | 35.40       | 124.5 | 84.96         | 7.9             | 106.20          | 8.20            |
| HLCW-70-1<br>(197)                             | 30.45       | 107.1 | 73.09         | 7.6             | 91.36           | 7.90            |
| HLCW-70-1<br>(258)                             | 40.69       | 143.1 | 97.66         | 11.5            | 122.07          | 11.80           |
| HLCW-80-1<br>(227)                             | 35.26       | 124   | 84.62         | 6.3             | 105.78          | 6.60            |
| HLCW-80-1<br>(295)                             | 47.32       | 166.4 | 113.56        | 7.8             | 141.95          | 8.10            |
| HLCW-80-1<br>(315)                             | 49.68       | 174.7 | 119.22        | 8.1             | 149.03          | 8.40            |
| HLCW-90-1<br>(258)                             | 40.78       | 143.4 | 97.86         | 8.8             | 122.33          | 9.10            |
| HLCW-90-1<br>(336)                             | 53.91       | 189.6 | 129.39        | 11.3            | 161.74          | 11.60           |
| HLCW-90-1<br>(359)                             | 57.15       | 201   | 137.17        | 11.3            | 171.46          | 11.60           |
| HLCW-100-1<br>(295)                            | 47.49       | 167   | 113.97        | 10.3            | 142.46          | 10.60           |
| HLCW-110-1<br>(336)                            | 54.08       | 190.2 | 129.80        | 11              | 162.25          | 11.30           |
| HLCW-110-1<br>(315)                            | 51.13       | 179.8 | 122.70        | 10.6            | 153.38          | 10.90           |
| HLCW-110-1<br>(410)                            | 67.39       | 237   | 161.74        | 12.9            | 202.17          | 13.20           |
| HLCW-125-1<br>(359)                            | 58.29       | 205   | 139.90        | 7.9             | 174.87          | 8.20            |
| HLCW-125-1<br>(470)                            | 74.50       | 262   | 178.80        | 9.3             | 223.50          | 9.60            |
| HLCW-140-1<br>(410)                            | 67.39       | 237   | 161.74        | 9               | 202.17          | 9.30            |
| HLCW-140-1<br>(535)                            | 84.73       | 298   | 203.36        | 10.7            | 254.20          | 11.00           |
| HLCW-160-1<br>(470)                            | 72.79       | 256   | 174.70        | 9.9             | 218.38          | 10.20           |
| HLCW-160-1<br>(615)                            | 100.37      | 353   | 240.90        | 12.9            | 301.12          | 13.20           |
| HLCW-210-1<br>(615)                            | 99.81       | 351   | 239.53        | 9.9             | 299.42          | 10.20           |

| CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-70-2                                      | 42.59       | 149.8 | 102.23        | 11.9            | 127.78          | 12.20           |
| HLCW-80-2                                      | 53.06       | 186.6 | 127.34        | 14.1            | 159.18          | 14.40           |
| HLCW-100-2<br>(2*137)                          | 42.31       | 148.8 | 101.55        | 11.7            | 126.93          | 12.00           |
| HLCW-100-2<br>(2*195)                          | 61.36       | 215.8 | 147.27        | 15.7            | 184.08          | 16.00           |
| HLCW-100-2<br>(2*197)                          | 60.05       | 211.2 | 144.13        | 15.3            | 180.16          | 15.50           |
| HLCW-120-2<br>(2*170)                          | 53.06       | 186.6 | 127.34        | 13.7            | 159.18          | 13.90           |
| HLCW-120-2<br>(2*220)                          | 69.21       | 243.4 | 166.10        | 16.5            | 207.63          | 16.60           |
| HLCW-120-2<br>(2*227)                          | 70.80       | 249   | 169.92        | 16.1            | 212.41          | 16.20           |
| HLCW-140-2<br>(2*197)                          | 60.91       | 214.2 | 146.18        | 15.5            | 182.72          | 15.60           |
| HLCW-140-2<br>(2*258)                          | 81.38       | 286.2 | 195.31        | 23.3            | 244.14          | 23.40           |
| HLCW-160-2<br>(2*227)                          | 70.52       | 248   | 169.24        | 12.8            | 211.55          | 13.00           |
| HLCW-160-2<br>(2*295)                          | 94.63       | 332.8 | 227.11        | 15.8            | 283.89          | 16.00           |
| HLCW-160-2<br>(2*315)                          | 99.35       | 349.4 | 238.44        | 16.3            | 298.05          | 16.60           |
| HLCW-180-2<br>(2*258)                          | 81.55       | 286.8 | 195.72        | 17.7            | 244.65          | 18.00           |
| HLCW-180-2<br>(2*336)                          | 107.82      | 379.2 | 258.78        | 22.7            | 323.47          | 23.00           |
| HLCW-180-2<br>(2*359)                          | 114.31      | 402   | 274.34        | 22.7            | 342.92          | 23.00           |
| HLCW-200-2<br>(2*295)                          | 94.97       | 334   | 227.93        | 20.7            | 284.91          | 21.00           |
| HLCW-220-2<br>(2*336)                          | 108.16      | 380.4 | 259.60        | 21.9            | 324.49          | 22.20           |
| HLCW-220-2<br>(2*315)                          | 102.25      | 359.6 | 245.40        | 21.1            | 306.75          | 21.40           |
| HLCW-220-2<br>(2*410)                          | 134.78      | 474   | 323.47        | 25.7            | 404.34          | 26.00           |
| HLCW-250-2<br>(2*359)                          | 116.58      | 410   | 279.80        | 15.7            | 349.74          | 16.00           |
| HLCW-250-2<br>(2*470)                          | 149.00      | 524   | 357.59        | 18.5            | 446.99          | 18.80           |
| HLCW-280-2<br>(2*410)                          | 134.78      | 474   | 323.47        | 17.9            | 404.34          | 18.20           |
| HLCW-280-2<br>(2*535)                          | 169.47      | 596   | 406.73        | 21.3            | 508.41          | 21.60           |
| HLCW-320-2<br>(2*470)                          | 145.58      | 512   | 349.40        | 19.7            | 436.75          | 20.00           |
| HLCW-320-2<br>(2*615)                          | 200.75      | 706   | 481.79        | 25.7            | 602.24          | 26.00           |
| HLCW-420-2<br>(2*615)                          | 199.61      | 702   | 479.06        | 19.7            | 598.83          | 20.00           |

| CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-35-1                                      | 21.47    | 75.5  | 51.52         | 5.9          | 64.40           | 6.20         |
| HLCW-40-1                                      | 26.76    | 94.1  | 64.22         | 7            | 80.27           | 7.30         |
| HLCW-50-1 (139)                                | 21.33    | 75    | 51.18         | 5.8          | 63.98           | 6.10         |
| HLCW-50-1 (195)                                | 30.94    | 108.8 | 74.25         | 7.8          | 92.81           | 8.10         |
| HLCW-50-1 (197)                                | 30.31    | 106.6 | 72.75         | 7.6          | 90.93           | 7.90         |
| HLCW-60-1 (170)                                | 26.76    | 94.1  | 64.22         | 6.8          | 80.27           | 7.10         |
| HLCW-60-1 (220)                                | 34.89    | 122.7 | 83.73         | 8.2          | 104.67          | 8.50         |
| HLCW-60-1 (227)                                | 35.71    | 125.6 | 85.71         | 8            | 107.14          | 8.30         |
| HLCW-70-1 (197)                                | 30.71    | 108   | 73.70         | 7.7          | 92.13           | 8.00         |
| HLCW-70-1 (258)                                | 41.03    | 144.3 | 98.47         | 11.6         | 123.09          | 11.90        |
| HLCW-80-1 (227)                                | 35.54    | 125   | 85.30         | 6.4          | 106.63          | 6.70         |
| HLCW-80-1 (295)                                | 47.71    | 167.8 | 114.51        | 7.9          | 143.14          | 8.20         |
| HLCW-80-1 (315)                                | 50.10    | 176.2 | 120.24        | 8.2          | 150.30          | 8.50         |
| HLCW-90-1 (258)                                | 41.12    | 144.6 | 98.68         | 8.9          | 123.35          | 9.20         |
| HLCW-90-1 (336)                                | 54.37    | 191.2 | 130.48        | 11.4         | 163.10          | 11.70        |
| HLCW-90-1 (359)                                | 57.72    | 203   | 138.53        | 11.4         | 173.17          | 11.70        |
| HLCW-100-1 (295)                               | 47.88    | 168.4 | 114.92        | 10.4         | 143.65          | 10.70        |
| HLCW-110-1 (336)                               | 54.54    | 191.8 | 130.89        | 11.1         | 163.61          | 11.40        |
| HLCW-110-1 (315)                               | 51.55    | 181.3 | 123.72        | 10.7         | 154.66          | 11.00        |
| HLCW-110-1 (410)                               | 67.96    | 239   | 163.10        | 13           | 203.88          | 13.30        |
| HLCW-125-1 (359)                               | 58.86    | 207   | 141.26        | 8            | 176.58          | 8.30         |
| HLCW-125-1 (470)                               | 75.07    | 264   | 180.16        | 9.4          | 225.20          | 9.70         |
| HLCW-140-1 (410)                               | 67.96    | 239   | 163.10        | 9.1          | 203.88          | 9.40         |
| HLCW-140-1 (535)                               | 85.30    | 300   | 204.73        | 10.8         | 255.91          | 11.10        |
| HLCW-160-1 (470)                               | 73.36    | 258   | 176.07        | 10           | 220.08          | 10.30        |
| HLCW-160-1 (615)                               | 101.23   | 356   | 242.94        | 13           | 303.68          | 13.30        |
| HLCW-210-1 (615)                               | 100.37   | 353   | 240.90        | 10           | 301.12          | 10.30        |

| CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,4°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-70-2                                      | 42.94    | 151   | 103.05        | 12           | 128.81          | 12.30        |
| HLCW-80-2                                      | 53.51    | 188.2 | 128.43        | 14.2         | 160.54          | 14.50        |
| HLCW-100-2 (2*137)                             | 42.65    | 150   | 102.36        | 11.8         | 127.96          | 12.10        |
| HLCW-100-2 (2*195)                             | 61.87    | 217.6 | 148.50        | 15.8         | 185.62          | 16.10        |
| HLCW-100-2 (2*197)                             | 60.62    | 213.2 | 145.49        | 15.4         | 181.87          | 15.60        |
| HLCW-120-2 (2*170)                             | 53.51    | 188.2 | 128.43        | 13.8         | 160.54          | 14.00        |
| HLCW-120-2 (2*220)                             | 69.78    | 245.4 | 167.47        | 16.6         | 209.33          | 16.70        |
| HLCW-120-2 (2*227)                             | 71.43    | 251.2 | 171.43        | 16.2         | 214.28          | 16.30        |
| HLCW-140-2 (2*197)                             | 61.42    | 216   | 147.40        | 15.6         | 184.26          | 15.70        |
| HLCW-140-2 (2*258)                             | 82.06    | 288.6 | 196.95        | 23.4         | 246.19          | 23.50        |
| HLCW-160-2 (2*227)                             | 71.09    | 250   | 170.61        | 12.9         | 213.26          | 13.10        |
| HLCW-160-2 (2*295)                             | 95.43    | 335.6 | 229.02        | 15.9         | 286.28          | 16.10        |
| HLCW-160-2 (2*315)                             | 100.20   | 352.4 | 240.49        | 16.4         | 300.61          | 16.70        |
| HLCW-180-2 (2*258)                             | 82.23    | 289.2 | 197.36        | 17.8         | 246.70          | 18.10        |
| HLCW-180-2 (2*336)                             | 108.73   | 382.4 | 260.96        | 22.8         | 326.20          | 23.10        |
| HLCW-180-2 (2*359)                             | 115.44   | 406   | 277.07        | 22.8         | 346.33          | 23.10        |
| HLCW-200-2 (2*295)                             | 95.77    | 336.8 | 229.84        | 20.8         | 287.30          | 21.10        |
| HLCW-220-2 (2*336)                             | 109.07   | 383.6 | 261.78        | 22           | 327.22          | 22.30        |
| HLCW-220-2 (2*315)                             | 103.10   | 362.6 | 247.45        | 21.2         | 309.31          | 21.50        |
| HLCW-220-2 (2*410)                             | 135.92   | 478   | 326.20        | 25.8         | 407.75          | 26.10        |
| HLCW-250-2 (2*359)                             | 117.72   | 414   | 282.53        | 15.8         | 353.16          | 16.10        |
| HLCW-250-2 (2*470)                             | 150.13   | 528   | 360.32        | 18.6         | 450.40          | 18.90        |
| HLCW-280-2 (2*410)                             | 135.92   | 478   | 326.20        | 18           | 407.75          | 18.30        |
| HLCW-280-2 (2*535)                             | 170.61   | 600   | 409.46        | 21.4         | 511.82          | 21.70        |
| HLCW-320-2 (2*470)                             | 146.72   | 516   | 352.13        | 19.8         | 440.17          | 20.10        |
| HLCW-320-2 (2*615)                             | 202.45   | 712   | 485.89        | 25.8         | 607.36          | 26.10        |
| HLCW-420-2 (2*615)                             | 200.75   | 706   | 481.79        | 19.8         | 602.24          | 20.10        |

| ELECTRICAL DATA (R-134a) |                          |           |                  |                      |
|--------------------------|--------------------------|-----------|------------------|----------------------|
| chiller MODEL            | Nominal Comp. power (HP) | MRA (Amp) | LRA (Amp) (D/DD) | MAX CONSE POWER (kw) |
| HLCW-35-1                | 35                       | 39.5      | 153/305          | 34                   |
| HLCW-40-1                | 40                       | 46.7      | 182/338          | 41                   |
| HLCW-50-1 (139)          | 50                       | 41.3      | 218/411          | 52                   |
| HLCW-50-1 (195)          | 50                       | 51.9      | 218/411          | 51                   |
| HLCW-50-1 (197)          | 50                       | 53.9      | 206/355          | 52                   |
| HLCW-60-1 (170)          | 60                       | 50.7      | 269/508          | 65                   |
| HLCW-60-1 (220)          | 60                       | 59        | 269/508          | 56                   |
| HLCW-60-1 (227)          | 60                       | 62.6      | 267/449          | 65                   |
| HLCW-70-1 (197)          | 70                       | 57.8      | 290/485          | 78                   |
| HLCW-70-1 (258)          | 70                       | 70.5      | 290/485          | 78                   |
| HLCW-80-1 (227)          | 80                       | 64.1      | 350/585          | 88                   |
| HLCW-80-1 (295)          | 80                       | 79.3      | 350/585          | 88                   |
| HLCW-80-1 (315)          | 80                       | 78.5      | 394/606          | 88                   |
| HLCW-90-1 (258)          | 90                       | 70.3      | 423/686          | 96                   |
| HLCW-90-1 (336)          | 90                       | 86.9      | 423/686          | 96                   |
| HLCW-90-1 (359)          | 90                       | 91.7      | 439/675          | 96                   |
| HLCW-100-1 (295)         | 100                      | 80.8      | 479/790          | 102                  |
| HLCW-110-1 (336)         | 110                      | 92.3      | 516/887          | 112                  |
| HLCW-110-1 (315)         | 110                      | 89.2      | 520/801          | 112                  |
| HLCW-110-1 (410)         | 110                      | 109.1     | 520/801          | 110                  |
| HLCW-125-1 (359)         | 125                      | 103.1     | 612/943          | 132                  |
| HLCW-125-1 (470)         | 125                      | 124       | 612/943          | 120                  |
| HLCW-140-1 (410)         | 140                      | 116       | 665/1023         | 150                  |
| HLCW-140-1 (535)         | 140                      | 139.8     | 665/1023         | 131                  |
| HLCW-160-1 (470)         | 160                      | 124.3     | 729/1114         | 160                  |
| HLCW-160-1 (615)         | 160                      | 158.5     | 436/1364         | 155                  |
| HLCW-210-1 (615)         | 180                      | 153.6     | 757/1181         | 186                  |
| HLCW-70-2                | 2*35                     | 79        | 2*(153/305)      | 68                   |

| ELECTRICAL DATA (R-134a) |                          |           |                  |                      |
|--------------------------|--------------------------|-----------|------------------|----------------------|
| chiller MODEL            | Nominal Comp. power (HP) | MRA (Amp) | LRA (Amp) (D/DD) | MAX CONSE POWER (kw) |
| HLCW-80-2                | 2*40                     | 93.4      | 2*(182/338)      | 82                   |
| HLCW-100-2 (2*137)       | 2*50                     | 82.6      | 2*(218/411)      | 104                  |
| HLCW-100-2 (2*195)       | 2*50                     | 103.8     | 2*(218/411)      | 102                  |
| HLCW-100-2 (2*197))      | 2*50                     | 107.8     | 2*(206/355)      | 104                  |
| HLCW-120-2 (2*170)       | 2*60                     | 101.4     | 2*(269/508)      | 130                  |
| HLCW-120-2 (2*220)       | 2*60                     | 118       | 2*(269/508)      | 112                  |
| HLCW-120-2 (2*227)       | 2*60                     | 125.2     | 2*(267/449)      | 130                  |
| HLCW-140-2 (2*197)       | 2*70                     | 115.6     | 2*(290/485)      | 156                  |
| HLCW-140-2 (2*258)       | 2*70                     | 141       | 2*(290/485)      | 156                  |
| HLCW-160-2 (2*227)       | 2*80                     | 128.2     | 2*(350/585)      | 176                  |
| HLCW-160-2 (2*295)       | 2*80                     | 158.6     | 2*(350/585)      | 176                  |
| HLCW-160-2 (2*315)       | 2*80                     | 157       | 2*(394/606)      | 176                  |
| HLCW-180-2 (2*258)       | 2*90                     | 140.6     | 2*(423/686)      | 192                  |
| HLCW-180-2 (2*258)       | 2*90                     | 173.8     | 2*(423/686)      | 192                  |
| HLCW-180-2 (2*359)       | 2*90                     | 183.4     | 2*(439/675)      | 192                  |
| HLCW-200-2 (2*295)       | 2*100                    | 161.6     | 2*(479/790)      | 204                  |
| HLCW-220-2 (2*336)       | 2*110                    | 184.6     | 2*(516/887)      | 224                  |
| HLCW-220-2 (2*315)       | 2*110                    | 178.4     | 2*(520/801)      | 224                  |
| HLCW-220-2 (2*410)       | 2*110                    | 218.2     | 2*(520/801)      | 220                  |
| HLCW-250-2 (2*359)       | 2*125                    | 206.2     | 2*(612/943)      | 264                  |
| HLCW-250-2 (2*470)       | 2*125                    | 248       | 2*(612/943)      | 240                  |
| HLCW-280-2 (2*410)       | 2*140                    | 232       | 2*(665/1023)     | 300                  |
| HLCW-280-2 (2*535)       | 2*140                    | 279.6     | 2*(665/1023)     | 262                  |
| HLCW-320-2 (2*470)       | 2*160                    | 248.6     | 2*(729/1114)     | 320                  |
| HLCW-320-2 (2*615)       | 2*160                    | 317       | 2*(436/1364)     | 310                  |
| HLCW-360-2 CSH8593-180Y  | 2*180                    | 307.2     | 2*(757/1181)     | 372                  |
| HLCW-420-2 CSH9563-210Y  | 2*210                    | 334.8     | 2*(586/1853)     | 492                  |

## SCROLL



## Engineering Specifications-50 Hz (R-134a)-copeland

| Model                              | HLCW                          | HLCW-5-1 | HLCW-6-1 | HLCW-7-1 | HCLA-8-1 | HLCW-9-1 | HLCW-10-1 |
|------------------------------------|-------------------------------|----------|----------|----------|----------|----------|-----------|
| cooling capacity                   | TR                            | 2.77     | 3.34     | 3.70     | 4.45     | 4.99     | 5.83      |
|                                    | kW                            | 9.75     | 11.75    | 13       | 15.65    | 17.55    | 20.5      |
| Compressor                         | Copeland Scroll               |          |          |          |          |          |           |
| QTY                                | 1                             | 1        | 1        | 1        | 1        | 1        | 1         |
| Oil Charge                         | USGal                         | 0.45     | 0.48     | 0.48     | 0.71     | 0.90     | 0.90      |
|                                    | Litre                         | 1.7      | 1.8      | 1.8      | 2.7      | 3.4      | 3.4       |
| Condenser                          | Condenser shell & tube        |          |          |          |          |          |           |
| QTY                                | 1                             |          |          |          |          |          |           |
| Ref. Circuits                      | 1                             | 1        | 1        | 1        | 1        | 1        | 1         |
| Water Volume                       | GPM                           | 8.32     | 10.02    | 11.09    | 13.35    | 14.97    | 17.49     |
|                                    | Litre/s                       | 0.52     | 0.63     | 0.70     | 0.84     | 0.94     | 1.10      |
| Evaporator                         | Direct Expansion shell & tube |          |          |          |          |          |           |
| QTY                                | 1                             |          |          |          |          |          |           |
| Ref. Circuits                      | 1                             | 1        | 1        | 1        | 1        | 1        | 1         |
| Water Volume                       | GPM                           | 6.65     | 8.02     | 8.87     | 10.68    | 11.98    | 13.99     |
|                                    | Litre/s                       | 0.42     | 0.51     | 0.56     | 0.67     | 0.76     | 0.88      |
| Refrigerant Charge (R134a)(Approx) | Lb                            | 11.0     | 13.2     | 15.4     | 17.6     | 19.8     | 22.0      |
|                                    | Kg                            | 5        | 6        | 7        | 8        | 9        | 10        |
| Operating Weight (Approx)          | Lb                            | 771      | 771      | 771      | 771      | 771      | 992       |
|                                    | Kg                            | 350      | 350      | 350      | 350      | 350      | 450       |

| Model                              | HLCW                          | HLCW-12-1 | HLCW-13-1 | HLCW-15-1 | HLCW-20-1 | HLCW-25-1 | HLCW-30-1 |
|------------------------------------|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| cooling capacity                   | TR                            | 6.74      | 7.19      | 8.62      | 11.09     | 13.71     | 17.23     |
|                                    | kW                            | 23.7      | 25.3      | 30.3      | 39        | 48.2      | 60.6      |
| Compressor                         | Copeland Scroll               |           |           |           |           |           |           |
| QTY                                | 1                             | 1         | 1         | 1         | 1         | 1         | 1         |
| Oil Charge                         | USGal                         | 0.90      | 0.90      | 1.03      | 1.24      | 1.80      | 1.66      |
|                                    | Litre                         | 3.4       | 3.4       | 3.9       | 4.7       | 6.8       | 6.3       |
| Condenser                          | Condenser shell & tube        |           |           |           |           |           |           |
| QTY                                | 1                             |           |           |           |           |           |           |
| Ref. Circuits                      | 1                             | 1         | 1         | 1         | 1         | 1         | 1         |
| Water Volume                       | GPM                           | 20.22     | 21.58     | 25.85     | 33.27     | 41.12     | 51.69     |
|                                    | Litre/s                       | 1.28      | 1.36      | 1.63      | 2.10      | 2.59      | 3.26      |
| Evaporator                         | Direct Expansion shell & tube |           |           |           |           |           |           |
| QTY                                | 1                             |           |           |           |           |           |           |
| Ref. Circuits                      | 1                             | 1         | 1         | 1         | 1         | 1         | 1         |
| Water Volume                       | GPM                           | 16.17     | 17.27     | 20.68     | 26.61     | 32.89     | 41.36     |
|                                    | Litre/s                       | 1.02      | 1.09      | 1.30      | 1.68      | 2.08      | 2.61      |
| Refrigerant Charge (R134a)(Approx) | Lb                            | 26.4      | 28.7      | 33.1      | 44.1      | 55.1      | 66.1      |
|                                    | Kg                            | 12        | 13        | 15        | 20        | 25        | 30        |
| Operating Weight (Approx)          | Lb                            | 991.8     | 991.8     | 1102      | 1653      | 1653      | 1763.2    |
|                                    | Kg                            | 450       | 450       | 500       | 750       | 750       | 800       |

| Model                              | HLCW                          | HLCW-10-2 | HLCW-12-2 | HLCW-14-2 | HCLA-16-2 | HLCW-18-2 | HLCW-20-2 |
|------------------------------------|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| cooling capacity                   | TR                            | 5.54      | 6.68      | 7.39      | 8.90      | 9.98      | 11.66     |
|                                    | kW                            | 19.5      | 23.5      | 26        | 31.3      | 35.1      | 41        |
| Compressor                         | Copeland Scroll               |           |           |           |           |           |           |
| QTY                                | 2                             | 2         | 2         | 2         | 2         | 2         | 2         |
| Oil Charge                         | USGal                         | 0.90      | 0.95      | 0.95      | 1.43      | 1.80      | 1.80      |
|                                    | Litre                         | 3.4       | 3.6       | 3.6       | 5.4       | 6.8       | 6.8       |
| Condenser                          | Condenser shell & tube        |           |           |           |           |           |           |
| QTY                                | 1                             |           |           |           |           |           |           |
| Ref. Circuits                      | 2                             | 2         | 2         | 2         | 2         | 2         | 2         |
| Water Volume                       | GPM                           | 33.27     | 40.09     | 44.36     | 53.40     | 59.88     | 69.95     |
|                                    | Litre/s                       | 2.10      | 2.53      | 2.80      | 3.37      | 3.78      | 4.41      |
| Evaporator                         | Direct Expansion shell & tube |           |           |           |           |           |           |
| QTY                                | 1                             |           |           |           |           |           |           |
| Ref. Circuits                      | 2                             | 2         | 2         | 2         | 2         | 2         | 2         |
| Water Volume                       | GPM                           | 26.61     | 32.07     | 35.49     | 42.72     | 47.91     | 55.96     |
|                                    | Litre/s                       | 1.68      | 2.02      | 2.24      | 2.70      | 3.02      | 3.53      |
| Refrigerant Charge (R134a)(Approx) | Lb                            | 22.0      | 26.4      | 30.9      | 35.3      | 39.7      | 44.1      |
|                                    | Kg                            | 10        | 12        | 14        | 16        | 18        | 20        |
| Operating Weight (Approx)          | Lb                            | 1322      | 1322      | 1322      | 1433      | 1433      | 1433      |
|                                    | Kg                            | 600       | 600       | 600       | 650       | 650       | 650       |

| Model                              | HLCW                          | HLCW-24-2 | HLCW-26-2 | HLCW-30-2 | HLCW-40-2 | HLCW-50-2 | HLCW-60-2 |
|------------------------------------|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| cooling capacity                   | TR                            | 13.48     | 14.39     | 17.23     | 22.18     | 27.41     | 34.46     |
|                                    | kW                            | 47.4      | 50.6      | 60.6      | 78        | 96.4      | 121.2     |
| Compressor                         | Copeland Scroll               |           |           |           |           |           |           |
| QTY                                | 2                             | 2         | 2         | 2         | 2         | 2         | 2         |
| Oil Charge                         | USGal                         | 1.80      | 1.80      | 2.06      | 2.48      | 3.59      | 3.33      |
|                                    | Litre                         | 6.8       | 6.8       | 7.8       | 9.4       | 13.6      | 12.6      |
| Condenser                          | Condenser shell & tube        |           |           |           |           |           |           |
| QTY                                | 1                             |           |           |           |           |           |           |
| Ref. Circuits                      | 2                             | 2         | 2         | 2         | 2         | 2         | 2         |
| Water Volume                       | GPM                           | 40.43     | 43.16     | 51.69     | 66.54     | 82.23     | 103.39    |
|                                    | Litre/s                       | 2.55      | 2.72      | 3.26      | 4.20      | 5.19      | 6.52      |
| Evaporator                         | Direct Expansion shell & tube |           |           |           |           |           |           |
| QTY                                | 1                             |           |           |           |           |           |           |
| Ref. Circuits                      | 2                             | 2         | 2         | 2         | 2         | 2         | 2         |
| Water Volume                       | GPM                           | 32.35     | 34.53     | 41.36     | 53.23     | 65.79     | 82.71     |
|                                    | Litre/s                       | 2.04      | 2.18      | 2.61      | 3.36      | 4.15      | 5.22      |
| Refrigerant Charge (R134a)(Approx) | Lb                            | 52.9      | 57.3      | 66.1      | 88.2      | 110.2     | 132.2     |
|                                    | Kg                            | 24        | 26        | 30        | 40        | 50        | 60        |
| Operating Weight (Approx)          | Lb                            | 1433      | 1543      | 1763      | 2094      | 2094      | 2424      |
|                                    | Kg                            | 650       | 700       | 800       | 950       | 950       | 1100      |

| Model                              | HLCW                          | HLCW-20-4 | HLCW-24-4 | HLCW-28-4 | HCLA-32-4 | HLCW-36-4 | HLCW-40-4 |
|------------------------------------|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| cooling capacity                   | TR                            | 11.09     | 13.36     | 14.79     | 17.80     | 19.96     | 23.32     |
|                                    | kW                            | 39        | 47        | 52        | 62.6      | 70.2      | 82        |
| Compressor                         | Copeland Scroll               |           |           |           |           |           |           |
| QTY                                | 4                             | 4         | 4         | 4         | 4         | 4         | 4         |
| Oil Charge                         | USGal                         | 1.80      | 1.90      | 1.90      | 2.85      | 3.59      | 3.59      |
|                                    | Litre                         | 6.8       | 7.2       | 7.2       | 10.8      | 13.6      | 13.6      |
| Condenser                          | Condenser shell & tube        |           |           |           |           |           |           |
| QTY                                | 1                             |           |           |           |           |           |           |
| Ref. Circuits                      | 2                             | 2         | 2         | 2         | 2         | 2         | 2         |
| Water Volume                       | GPM                           | 33.27     | 40.09     | 44.36     | 53.40     | 59.88     | 69.95     |
|                                    | Litre/s                       | 2.10      | 2.53      | 2.80      | 3.37      | 3.78      | 4.41      |
| Evaporator                         | Direct Expansion shell & tube |           |           |           |           |           |           |
| QTY                                | 1                             |           |           |           |           |           |           |
| Ref. Circuits                      | 2                             | 2         | 2         | 2         | 2         | 2         | 2         |
| Water Volume                       | GPM                           | 26.61     | 32.07     | 35.49     | 42.72     | 47.91     | 55.96     |
|                                    | Litre/s                       | 1.68      | 2.02      | 2.24      | 2.70      | 3.02      | 3.53      |
| Refrigerant Charge (R134a)(Approx) | Lb                            | 22.0      | 26.4      | 30.9      | 35.3      | 39.7      | 44.1      |
|                                    | Kg                            | 10        | 12        | 14        | 16        | 18        | 20        |
| Operating Weight (Approx)          | Lb                            | 1873      | 1873      | 1984      | 1984      | 2094      | 2094      |
|                                    | Kg                            | 850       | 850       | 900       | 900       | 950       | 950       |

| Model                              | HLCW                          | HLCW-48-4 | HLCW-52-4 | HLCW-60-4 | HLCW-80-4 | HLCW-100-4 | HLCW-120-4 |
|------------------------------------|-------------------------------|-----------|-----------|-----------|-----------|------------|------------|
| cooling capacity                   | TR                            | 13.48     | 14.39     | 17.23     | 22.18     | 27.41      | 34.46      |
|                                    | kW                            | 47.4      | 50.6      | 60.6      | 78        | 96.4       | 121.2      |
| Compressor                         | Copeland Scroll               |           |           |           |           |            |            |
| QTY                                | 4                             | 4         | 4         | 4         | 4         | 4          | 4          |
| Oil Charge                         | USGal                         | 3.59      | 3.59      | 4.12      | 4.97      | 7.19       | 6.66       |
|                                    | Litre                         | 13.6      | 13.6      | 15.6      | 18.8      | 27.2       | 25.2       |
| Condenser                          | Condenser shell & tube        |           |           |           |           |            |            |
| QTY                                | 1                             |           |           |           |           |            |            |
| Ref. Circuits                      | 2                             | 2         | 2         | 2         | 2         | 2          | 2          |
| Water Volume                       | GPM                           | 40.43     | 43.16     | 51.69     | 66.54     | 82.23      | 103.39     |
|                                    | Litre/s                       | 2.55      | 2.72      | 3.26      | 4.20      | 5.19       | 6.52       |
| Evaporator                         | Direct Expansion shell & tube |           |           |           |           |            |            |
| QTY                                | 1                             |           |           |           |           |            |            |
| Ref. Circuits                      | 2                             | 2         | 2         | 2         | 2         | 2          | 2          |
| Water Volume                       | GPM                           | 32.35     | 34.53     | 41.36     | 53.23     | 65.79      | 82.71      |
|                                    | Litre/s                       | 2.04      | 2.18      | 2.61      | 3.36      | 4.15       | 5.22       |
| Refrigerant Charge (R134a)(Approx) | Lb                            | 105.8     | 114.6     | 132.2     | 176.3     | 220.4      | 264.5      |
|                                    | Kg                            | 48        | 52        | 60        | 80        | 100        | 120        |
| Operating Weight (Approx)          | Lb                            | 2204      | 2204      | 2314      | 3086      | 3637       | 3747       |
|                                    | Kg                            | 1000      | 1000      | 1050      | 1400      | 1650       | 1700       |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.= 5,5°C     |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 2.58     | 9.09  | 6.20          | 0.5          | 7.75            | 0.7          |
| HLCW-6-1                                       | 3.11     | 10.95 | 7.47          | 0.6          | 9.34            | 0.8          |
| HLCW-7-1                                       | 3.45     | 12.15 | 8.29          | 0.6          | 10.36           | 0.8          |
| HCLA-8-1                                       | 4.15     | 14.6  | 9.96          | 0.6          | 12.45           | 0.8          |
| HLCW-9-1                                       | 4.65     | 16.35 | 11.16         | 0.6          | 13.95           | 0.9          |
| HLCW-10-1                                      | 5.46     | 19.2  | 13.10         | 0.8          | 16.38           | 1            |
| HLCW-12-1                                      | 6.31     | 22.2  | 15.15         | 0.8          | 18.94           | 1.1          |
| HLCW-13-1                                      | 6.80     | 23.9  | 16.31         | 0.9          | 20.39           | 1.2          |
| HLCW-15-1                                      | 8.10     | 28.5  | 19.45         | 1.6          | 24.31           | 1.9          |
| HLCW-20-1                                      | 10.35    | 36.4  | 24.84         | 2.3          | 31.05           | 2.6          |
| HLCW-25-1                                      | 12.80    | 45    | 30.71         | 3.6          | 38.39           | 3.9          |
| HLCW-30-1                                      | 16.12    | 56.7  | 38.69         | 6.1          | 48.37           | 6.4          |
| HLCW-10-2                                      | 5.17     | 18.18 | 12.41         | 0.7          | 15.51           | 1            |
| HLCW-12-2                                      | 6.23     | 21.9  | 14.95         | 0.8          | 18.68           | 1.1          |
| HLCW-14-2                                      | 6.91     | 24.3  | 16.58         | 1.1          | 20.73           | 1.4          |
| HCLA-16-2                                      | 8.30     | 29.2  | 19.93         | 1.6          | 24.91           | 1.9          |
| HLCW-18-2                                      | 9.30     | 32.7  | 22.32         | 2            | 27.89           | 2.4          |
| HLCW-20-2                                      | 10.92    | 38.4  | 26.21         | 2.5          | 32.76           | 2.8          |
| HLCW-24-2                                      | 12.62    | 44.4  | 30.30         | 3.3          | 37.87           | 3.6          |
| HLCW-26-2                                      | 13.59    | 47.8  | 32.62         | 3.7          | 40.78           | 4            |
| HLCW-30-2                                      | 16.21    | 57    | 38.90         | 6            | 48.62           | 6.3          |
| HLCW-40-2                                      | 20.70    | 72.8  | 49.68         | 10.2         | 62.10           | 10.5         |
| HLCW-50-2                                      | 25.59    | 90    | 61.42         | 12.7         | 76.77           | 13           |
| HLCW-60-2                                      | 32.24    | 113.4 | 77.39         | 18.2         | 96.73           | 18.5         |
| HLCW-20-4                                      | 10.34    | 36.36 | 24.81         | 2.7          | 31.02           | 3            |
| HLCW-24-4                                      | 12.45    | 43.8  | 29.89         | 3.3          | 37.36           | 3.6          |
| HLCW-28-4                                      | 13.82    | 48.6  | 33.17         | 4.7          | 41.46           | 5            |
| HCLA-32-4                                      | 16.61    | 58.4  | 39.85         | 6.1          | 49.82           | 6.7          |
| HLCW-36-4                                      | 18.60    | 65.4  | 44.63         | 6.7          | 55.79           | 7.3          |
| HLCW-40-4                                      | 21.84    | 76.8  | 52.41         | 9.1          | 65.51           | 9.7          |
| HLCW-48-4                                      | 25.25    | 88.8  | 60.60         | 12.1         | 75.75           | 12.7         |
| HLCW-52-4                                      | 27.18    | 95.6  | 65.24         | 13           | 81.55           | 13.6         |
| HLCW-60-4                                      | 32.42    | 114   | 77.80         | 18.7         | 97.25           | 19.3         |
| HLCW-80-4                                      | 41.40    | 145.6 | 99.36         | 19.5         | 124.20          | 20.1         |
| HLCW-100-4                                     | 51.18    | 180   | 122.84        | 19.7         | 153.55          | 20.3         |
| HLCW-120-4                                     | 64.49    | 226.8 | 154.77        | 20.7         | 193.47          | 21.3         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=6,6°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 2.70     | 9.51  | 6.49          | 0.6          | 8.11            | 0.8          |
| HLCW-6-1                                       | 3.26     | 11.45 | 7.81          | 0.7          | 9.77            | 0.9          |
| HLCW-7-1                                       | 3.61     | 12.7  | 8.67          | 0.7          | 10.83           | 0.9          |
| HCLA-8-1                                       | 4.34     | 15.25 | 10.41         | 0.7          | 13.01           | 0.9          |
| HLCW-9-1                                       | 4.86     | 17.1  | 11.67         | 0.7          | 14.59           | 1            |
| HLCW-10-1                                      | 5.72     | 20.1  | 13.72         | 0.9          | 17.15           | 1.1          |
| HLCW-12-1                                      | 6.57     | 23.1  | 15.76         | 0.9          | 19.71           | 1.2          |
| HLCW-13-1                                      | 7.05     | 24.8  | 16.92         | 1            | 21.16           | 1.3          |
| HLCW-15-1                                      | 8.42     | 29.6  | 20.20         | 1.7          | 25.25           | 2            |
| HLCW-20-1                                      | 10.83    | 38.1  | 26.00         | 2.4          | 32.50           | 2.7          |
| HLCW-25-1                                      | 13.39    | 47.1  | 32.14         | 3.7          | 40.18           | 4            |
| HLCW-30-1                                      | 16.83    | 59.2  | 40.40         | 6.2          | 50.50           | 6.5          |
| HLCW-10-2                                      | 5.41     | 19.02 | 12.98         | 0.8          | 16.22           | 1.1          |
| HLCW-12-2                                      | 6.51     | 22.9  | 15.63         | 0.9          | 19.53           | 1.2          |
| HLCW-14-2                                      | 7.22     | 25.4  | 17.33         | 1.2          | 21.67           | 1.5          |
| HCLA-16-2                                      | 8.67     | 30.5  | 20.81         | 1.7          | 26.02           | 2            |
| HLCW-18-2                                      | 9.72     | 34.2  | 23.34         | 2.1          | 29.17           | 2.5          |
| HLCW-20-2                                      | 11.43    | 40.2  | 27.43         | 2.6          | 34.29           | 2.9          |
| HLCW-24-2                                      | 13.14    | 46.2  | 31.53         | 3.4          | 39.41           | 3.7          |
| HLCW-26-2                                      | 14.10    | 49.6  | 33.85         | 3.8          | 42.31           | 4.1          |
| HLCW-30-2                                      | 16.83    | 59.2  | 40.40         | 6.1          | 50.50           | 6.4          |
| HLCW-40-2                                      | 21.67    | 76.2  | 52.00         | 10.3         | 65.00           | 10.6         |
| HLCW-50-2                                      | 26.79    | 94.2  | 64.28         | 12.8         | 80.36           | 13.1         |
| HLCW-60-2                                      | 33.67    | 118.4 | 80.80         | 18.3         | 101.00          | 18.6         |
| HLCW-20-4                                      | 10.82    | 38.04 | 25.96         | 2.8          | 32.45           | 3.1          |
| HLCW-24-4                                      | 13.02    | 45.8  | 31.26         | 3.4          | 39.07           | 3.7          |
| HLCW-28-4                                      | 14.44    | 50.8  | 34.67         | 4.8          | 43.33           | 5.1          |
| HCLA-32-4                                      | 17.35    | 61    | 41.63         | 6.2          | 52.04           | 6.8          |
| HLCW-36-4                                      | 19.45    | 68.4  | 46.68         | 6.8          | 58.35           | 7.4          |
| HLCW-40-4                                      | 22.86    | 80.4  | 54.87         | 9.2          | 68.58           | 9.8          |
| HLCW-48-4                                      | 26.27    | 92.4  | 63.06         | 12.2         | 78.82           | 12.8         |
| HLCW-52-4                                      | 28.21    | 99.2  | 67.70         | 13.1         | 84.62           | 13.7         |
| HLCW-60-4                                      | 33.67    | 118.4 | 80.80         | 18.8         | 101.00          | 19.4         |
| HLCW-80-4                                      | 43.33    | 152.4 | 104.00        | 19.6         | 130.00          | 20.2         |
| HLCW-100-4                                     | 53.57    | 188.4 | 128.57        | 19.8         | 160.71          | 20.4         |
| HLCW-120-4                                     | 67.33    | 236.8 | 161.60        | 20.8         | 202.00          | 21.4         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 2.77     | 9.75  | 6.65          | 0.7          | 8.32            | 1            |
| HLCW-6-1                                       | 3.34     | 11.75 | 8.02          | 0.8          | 10.02           | 1.1          |
| HLCW-7-1                                       | 3.70     | 13    | 8.87          | 0.8          | 11.09           | 1.1          |
| HCLA-8-1                                       | 4.45     | 15.65 | 10.68         | 0.8          | 13.35           | 1            |
| HLCW-9-1                                       | 4.99     | 17.55 | 11.98         | 0.8          | 14.97           | 1.1          |
| HLCW-10-1                                      | 5.83     | 20.5  | 13.99         | 1            | 17.49           | 1.1          |
| HLCW-12-1                                      | 6.71     | 23.6  | 16.11         | 1            | 20.13           | 1.1          |
| HLCW-13-1                                      | 7.19     | 25.3  | 17.27         | 1.1          | 21.58           | 1.2          |
| HLCW-15-1                                      | 8.62     | 30.3  | 20.68         | 1.8          | 25.85           | 1.3          |
| HLCW-20-1                                      | 11.09    | 39    | 26.61         | 2.5          | 33.27           | 1.4          |
| HLCW-25-1                                      | 13.71    | 48.2  | 32.89         | 3.8          | 41.12           | 1.5          |
| HLCW-30-1                                      | 17.23    | 60.6  | 41.36         | 6.3          | 51.69           | 2.2          |
| HLCW-10-2                                      | 5.54     | 19.5  | 13.31         | 0.9          | 16.63           | 2.9          |
| HLCW-12-2                                      | 6.68     | 23.5  | 16.04         | 1            | 20.05           | 4.2          |
| HLCW-14-2                                      | 7.39     | 26    | 17.74         | 1.3          | 22.18           | 6.7          |
| HCLA-16-2                                      | 8.90     | 31.3  | 21.36         | 1.8          | 26.70           | 1.3          |
| HLCW-18-2                                      | 9.98     | 35.1  | 23.95         | 2.2          | 29.94           | 1.4          |
| HLCW-20-2                                      | 11.66    | 41    | 27.98         | 2.7          | 34.97           | 1.7          |
| HLCW-24-2                                      | 13.42    | 47.2  | 32.21         | 3.5          | 40.26           | 2.2          |
| HLCW-26-2                                      | 14.39    | 50.6  | 34.53         | 3.9          | 43.16           | 2.7          |
| HLCW-30-2                                      | 17.23    | 60.6  | 41.36         | 6.2          | 51.69           | 3.1          |
| HLCW-40-2                                      | 22.18    | 78    | 53.23         | 10.4         | 66.54           | 3.9          |
| HLCW-50-2                                      | 27.41    | 96.4  | 65.79         | 12.9         | 82.23           | 4.3          |
| HLCW-60-2                                      | 34.46    | 121.2 | 82.71         | 18.4         | 103.39          | 6.6          |
| HLCW-20-4                                      | 11.09    | 39    | 26.61         | 2.9          | 33.27           | 10.8         |
| HLCW-24-4                                      | 13.36    | 47    | 32.07         | 3.5          | 40.09           | 13.3         |
| HLCW-28-4                                      | 14.79    | 52    | 35.49         | 4.9          | 44.36           | 18.8         |
| HCLA-32-4                                      | 17.80    | 62.6  | 42.72         | 6.3          | 53.40           | 3.3          |
| HLCW-36-4                                      | 19.96    | 70.2  | 47.91         | 6.9          | 59.88           | 3.9          |
| HLCW-40-4                                      | 23.32    | 82    | 55.96         | 9.3          | 69.95           | 5.3          |
| HLCW-48-4                                      | 26.84    | 94.4  | 64.42         | 12.3         | 80.53           | 7            |
| HLCW-52-4                                      | 28.78    | 101.2 | 69.06         | 13.2         | 86.33           | 7.6          |
| HLCW-60-4                                      | 34.46    | 121.2 | 82.71         | 18.9         | 103.39          | 10           |
| HLCW-80-4                                      | 44.36    | 156   | 106.46        | 19.7         | 133.07          | 13           |
| HLCW-100-4                                     | 54.82    | 192.8 | 131.57        | 19.9         | 164.47          | 13.9         |
| HLCW-120-4                                     | 68.93    | 242.4 | 165.42        | 20.9         | 206.78          | 19.6         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,4°C      |             |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-5-1                                       | 2.80        | 9.83  | 6.71          | 0.8             | 8.39            | 1.1             |
| HLCW-6-1                                       | 3.36        | 11.8  | 8.05          | 0.9             | 10.07           | 1.2             |
| HLCW-7-1                                       | 3.72        | 13.1  | 8.94          | 0.9             | 11.17           | 1.2             |
| HCLA-8-1                                       | 4.48        | 15.75 | 10.75         | 0.9             | 13.44           | 1.1             |
| HLCW-9-1                                       | 5.03        | 17.7  | 12.08         | 0.9             | 15.10           | 1.2             |
| HLCW-10-1                                      | 5.89        | 20.7  | 14.13         | 1.1             | 17.66           | 1.2             |
| HLCW-12-1                                      | 6.74        | 23.7  | 16.17         | 1.1             | 20.22           | 1.2             |
| HLCW-13-1                                      | 7.25        | 25.5  | 17.40         | 1.2             | 21.75           | 1.3             |
| HLCW-15-1                                      | 8.67        | 30.5  | 20.81         | 1.9             | 26.02           | 1.4             |
| HLCW-20-1                                      | 11.17       | 39.3  | 26.82         | 2.6             | 33.52           | 1.5             |
| HLCW-25-1                                      | 13.82       | 48.6  | 33.17         | 3.9             | 41.46           | 1.6             |
| HLCW-30-1                                      | 17.37       | 61.1  | 41.70         | 6.4             | 52.12           | 2.3             |
| HLCW-10-2                                      | 5.59        | 19.66 | 13.42         | 1               | 16.77           | 3               |
| HLCW-12-2                                      | 6.71        | 23.6  | 16.11         | 1.1             | 20.13           | 4.3             |
| HLCW-14-2                                      | 7.45        | 26.2  | 17.88         | 1.4             | 22.35           | 6.8             |
| HCLA-16-2                                      | 8.96        | 31.5  | 21.50         | 1.9             | 26.87           | 1.4             |
| HLCW-18-2                                      | 10.07       | 35.4  | 24.16         | 2.3             | 30.20           | 1.5             |
| HLCW-20-2                                      | 11.77       | 41.4  | 28.25         | 2.8             | 35.32           | 1.8             |
| HLCW-24-2                                      | 13.48       | 47.4  | 32.35         | 3.6             | 40.43           | 2.3             |
| HLCW-26-2                                      | 14.50       | 51    | 34.80         | 4               | 43.50           | 2.8             |
| HLCW-30-2                                      | 17.35       | 61    | 41.63         | 6.3             | 52.04           | 3.2             |
| HLCW-40-2                                      | 22.35       | 78.6  | 53.64         | 10.5            | 67.05           | 4               |
| HLCW-50-2                                      | 27.64       | 97.2  | 66.33         | 13              | 82.92           | 4.4             |
| HLCW-60-2                                      | 34.75       | 122.2 | 83.39         | 18.5            | 104.24          | 6.7             |
| HLCW-20-4                                      | 11.18       | 39.32 | 26.83         | 3               | 33.54           | 10.9            |
| HLCW-24-4                                      | 13.42       | 47.2  | 32.21         | 3.6             | 40.26           | 13.4            |
| HLCW-28-4                                      | 14.90       | 52.4  | 35.76         | 5               | 44.70           | 18.9            |
| HCLA-32-4                                      | 17.91       | 63    | 42.99         | 6.4             | 53.74           | 3.4             |
| HLCW-36-4                                      | 20.13       | 70.8  | 48.32         | 7               | 60.39           | 4               |
| HLCW-40-4                                      | 23.54       | 82.8  | 56.51         | 9.4             | 70.63           | 5.4             |
| HLCW-48-4                                      | 26.96       | 94.8  | 64.69         | 12.4            | 80.87           | 7.1             |
| HLCW-52-4                                      | 29.00       | 102   | 69.61         | 13.3            | 87.01           | 7.7             |
| HLCW-60-4                                      | 34.69       | 122   | 83.26         | 19              | 104.07          | 10.1            |
| HLCW-80-4                                      | 44.70       | 157.2 | 107.28        | 19.8            | 134.10          | 13.1            |
| HLCW-100-4                                     | 55.28       | 194.4 | 132.66        | 20              | 165.83          | 14              |
| HLCW-120-4                                     | 69.49       | 244.4 | 166.79        | 21              | 208.48          | 19.7            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.= 5,5°C     |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 2.53     | 8.91  | 6.08          | 0.5          | 7.60            | 0.7          |
| HLCW-6-1                                       | 3.04     | 10.7  | 7.30          | 0.6          | 9.13            | 0.8          |
| HLCW-7-1                                       | 3.38     | 11.9  | 8.12          | 0.6          | 10.15           | 0.8          |
| HCLA-8-1                                       | 4.07     | 14.3  | 9.76          | 0.6          | 12.20           | 0.8          |
| HLCW-9-1                                       | 4.55     | 16    | 10.92         | 0.6          | 13.65           | 0.9          |
| HLCW-10-1                                      | 5.33     | 18.75 | 12.80         | 0.8          | 15.99           | 1            |
| HLCW-12-1                                      | 6.20     | 21.8  | 14.88         | 0.8          | 18.60           | 1            |
| HLCW-13-1                                      | 6.65     | 23.4  | 15.97         | 0.9          | 19.96           | 1.1          |
| HLCW-15-1                                      | 7.93     | 27.9  | 19.04         | 1.6          | 23.80           | 1.8          |
| HLCW-20-1                                      | 10.15    | 35.7  | 24.36         | 2.3          | 30.45           | 2.5          |
| HLCW-25-1                                      | 12.54    | 44.1  | 30.10         | 3.6          | 37.62           | 3.8          |
| HLCW-30-1                                      | 15.84    | 55.7  | 38.01         | 6.1          | 47.51           | 6.3          |
| HLCW-10-2                                      | 5.07     | 17.82 | 12.16         | 0.7          | 15.20           | 0.9          |
| HLCW-12-2                                      | 6.08     | 21.4  | 14.60         | 0.8          | 18.25           | 1            |
| HLCW-14-2                                      | 6.77     | 23.8  | 16.24         | 1.1          | 20.30           | 1.3          |
| HCLA-16-2                                      | 8.13     | 28.6  | 19.52         | 1.6          | 24.40           | 1.7          |
| HLCW-18-2                                      | 9.10     | 32    | 21.84         | 1.9          | 27.30           | 2.2          |
| HLCW-20-2                                      | 10.66    | 37.5  | 25.59         | 2.4          | 31.99           | 2.6          |
| HLCW-24-2                                      | 12.40    | 43.6  | 29.75         | 3.2          | 37.19           | 3.4          |
| HLCW-26-2                                      | 13.31    | 46.8  | 31.94         | 3.6          | 39.92           | 3.8          |
| HLCW-30-2                                      | 15.87    | 55.8  | 38.08         | 5.9          | 47.60           | 6.1          |
| HLCW-40-2                                      | 20.30    | 71.4  | 48.73         | 10.1         | 60.91           | 10.3         |
| HLCW-50-2                                      | 25.08    | 88.2  | 60.19         | 12.6         | 75.24           | 12.8         |
| HLCW-60-2                                      | 31.68    | 111.4 | 76.02         | 18.1         | 95.03           | 18.3         |
| HLCW-20-4                                      | 10.13    | 35.64 | 24.32         | 2.6          | 30.40           | 2.8          |
| HLCW-24-4                                      | 12.17    | 42.8  | 29.21         | 3.2          | 36.51           | 3.4          |
| HLCW-28-4                                      | 13.53    | 47.6  | 32.48         | 4.6          | 40.60           | 4.8          |
| HCLA-32-4                                      | 16.26    | 57.2  | 39.03         | 6            | 48.79           | 6.5          |
| HLCW-36-4                                      | 18.20    | 64    | 43.68         | 6.5          | 54.59           | 7.1          |
| HLCW-40-4                                      | 21.33    | 75    | 51.18         | 8.8          | 63.98           | 9.5          |
| HLCW-48-4                                      | 24.79    | 87.2  | 59.51         | 11.8         | 74.38           | 12.5         |
| HLCW-52-4                                      | 26.61    | 93.6  | 63.88         | 12.7         | 79.84           | 13.4         |
| HLCW-60-4                                      | 31.73    | 111.6 | 76.16         | 18.4         | 95.20           | 19.1         |
| HLCW-80-4                                      | 40.60    | 142.8 | 97.45         | 19.2         | 121.81          | 19.9         |
| HLCW-100-4                                     | 50.16    | 176.4 | 120.38        | 19.4         | 150.48          | 20.1         |
| HLCW-120-4                                     | 63.35    | 222.8 | 152.04        | 20.4         | 190.06          | 21.1         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=6,6°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 2.65     | 9.32  | 6.36          | 0.7          | 7.95            | 0.8          |
| HLCW-6-1                                       | 3.18     | 11.2  | 7.64          | 0.8          | 9.55            | 0.9          |
| HLCW-7-1                                       | 3.54     | 12.45 | 8.50          | 0.8          | 10.62           | 0.9          |
| HCLA-8-1                                       | 4.25     | 14.95 | 10.20         | 0.8          | 12.75           | 0.9          |
| HLCW-9-1                                       | 4.76     | 16.75 | 11.43         | 0.8          | 14.29           | 1            |
| HLCW-10-1                                      | 5.57     | 19.6  | 13.38         | 1            | 16.72           | 1.1          |
| HLCW-12-1                                      | 6.45     | 22.7  | 15.49         | 1            | 19.36           | 1.1          |
| HLCW-13-1                                      | 6.94     | 24.4  | 16.65         | 1.1          | 20.81           | 1.2          |
| HLCW-15-1                                      | 8.27     | 29.1  | 19.86         | 1.8          | 24.82           | 1.9          |
| HLCW-20-1                                      | 10.61    | 37.3  | 25.45         | 2.5          | 31.82           | 2.6          |
| HLCW-25-1                                      | 13.11    | 46.1  | 31.46         | 3.8          | 39.32           | 3.9          |
| HLCW-30-1                                      | 16.52    | 58.1  | 39.65         | 6.3          | 49.56           | 6.4          |
| HLCW-10-2                                      | 5.30     | 18.64 | 12.72         | 0.9          | 15.90           | 1            |
| HLCW-12-2                                      | 6.37     | 22.4  | 15.29         | 1            | 19.11           | 1.1          |
| HLCW-14-2                                      | 7.08     | 24.9  | 16.99         | 1.3          | 21.24           | 1.4          |
| HCLA-16-2                                      | 8.50     | 29.9  | 20.40         | 1.8          | 25.51           | 1.8          |
| HLCW-18-2                                      | 9.53     | 33.5  | 22.86         | 2.1          | 28.58           | 2.3          |
| HLCW-20-2                                      | 11.15    | 39.2  | 26.75         | 2.6          | 33.44           | 2.7          |
| HLCW-24-2                                      | 12.91    | 45.4  | 30.98         | 3.4          | 38.73           | 3.5          |
| HLCW-26-2                                      | 13.88    | 48.8  | 33.30         | 3.8          | 41.63           | 3.9          |
| HLCW-30-2                                      | 16.55    | 58.2  | 39.72         | 6.1          | 49.65           | 6.2          |
| HLCW-40-2                                      | 21.21    | 74.6  | 50.91         | 10.3         | 63.64           | 10.4         |
| HLCW-50-2                                      | 26.22    | 92.2  | 62.92         | 12.8         | 78.65           | 12.9         |
| HLCW-60-2                                      | 33.04    | 116.2 | 79.30         | 18.3         | 99.12           | 18.4         |
| HLCW-20-4                                      | 10.60    | 37.28 | 25.44         | 2.8          | 31.80           | 2.9          |
| HLCW-24-4                                      | 12.74    | 44.8  | 30.57         | 3.4          | 38.22           | 3.5          |
| HLCW-28-4                                      | 14.16    | 49.8  | 33.98         | 4.8          | 42.48           | 4.9          |
| HCLA-32-4                                      | 17.00    | 59.8  | 40.81         | 6.2          | 51.01           | 6.6          |
| HLCW-36-4                                      | 19.05    | 67    | 45.72         | 6.7          | 57.15           | 7.2          |
| HLCW-40-4                                      | 22.29    | 78.4  | 53.50         | 9            | 66.88           | 9.6          |
| HLCW-48-4                                      | 25.82    | 90.8  | 61.96         | 12           | 77.46           | 12.6         |
| HLCW-52-4                                      | 27.75    | 97.6  | 66.60         | 12.9         | 83.26           | 13.5         |
| HLCW-60-4                                      | 33.10    | 116.4 | 79.43         | 18.6         | 99.29           | 19.2         |
| HLCW-80-4                                      | 42.42    | 149.2 | 101.82        | 19.4         | 127.27          | 20           |
| HLCW-100-4                                     | 52.43    | 184.4 | 125.84        | 19.6         | 157.30          | 20.2         |
| HLCW-120-4                                     | 66.08    | 232.4 | 158.60        | 20.6         | 198.25          | 21.2         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 2.72     | 9.55  | 6.52          | 0.8          | 8.15            | 0.9          |
| HLCW-6-1                                       | 3.26     | 11.45 | 7.81          | 0.9          | 9.77            | 1            |
| HLCW-7-1                                       | 3.63     | 12.75 | 8.70          | 0.9          | 10.88           | 1            |
| HCLA-8-1                                       | 4.35     | 15.3  | 10.44         | 0.9          | 13.05           | 1            |
| HLCW-9-1                                       | 4.88     | 17.15 | 11.70         | 0.9          | 14.63           | 1.1          |
| HLCW-10-1                                      | 5.72     | 20.1  | 13.72         | 1.1          | 17.15           | 1.2          |
| HLCW-12-1                                      | 6.60     | 23.2  | 15.83         | 1.1          | 19.79           | 1.2          |
| HLCW-13-1                                      | 7.08     | 24.9  | 16.99         | 1.2          | 21.24           | 1.3          |
| HLCW-15-1                                      | 8.45     | 29.7  | 6.10          | 1.9          | 25.34           | 2            |
| HLCW-20-1                                      | 10.86    | 38.2  | 26.07         | 2.6          | 32.59           | 2.7          |
| HLCW-25-1                                      | 13.45    | 47.3  | 32.28         | 3.9          | 40.35           | 4            |
| HLCW-30-1                                      | 16.92    | 59.5  | 40.60         | 6.4          | 50.76           | 6.5          |
| HLCW-10-2                                      | 5.43     | 19.1  | 13.03         | 1            | 16.29           | 1.1          |
| HLCW-12-2                                      | 6.51     | 22.9  | 15.63         | 1.1          | 19.53           | 1.2          |
| HLCW-14-2                                      | 7.25     | 25.5  | 17.40         | 1.4          | 21.75           | 1.5          |
| HCLA-16-2                                      | 8.70     | 30.6  | 20.88         | 1.9          | 26.10           | 1.9          |
| HLCW-18-2                                      | 9.75     | 34.3  | 23.41         | 2.2          | 29.26           | 2.4          |
| HLCW-20-2                                      | 11.43    | 40.2  | 27.43         | 2.7          | 34.29           | 2.8          |
| HLCW-24-2                                      | 13.19    | 46.4  | 31.66         | 3.5          | 39.58           | 3.6          |
| HLCW-26-2                                      | 14.16    | 49.8  | 33.98         | 3.9          | 42.48           | 4            |
| HLCW-30-2                                      | 16.89    | 59.4  | 40.54         | 6.2          | 50.67           | 6.3          |
| HLCW-40-2                                      | 21.72    | 76.4  | 52.14         | 10.4         | 65.17           | 10.5         |
| HLCW-50-2                                      | 26.90    | 94.6  | 64.56         | 12.9         | 80.70           | 13           |
| HLCW-60-2                                      | 33.84    | 119   | 81.21         | 18.4         | 101.51          | 18.5         |
| HLCW-20-4                                      | 10.86    | 38.2  | 26.07         | 2.9          | 32.59           | 3            |
| HLCW-24-4                                      | 13.02    | 45.8  | 31.26         | 3.5          | 39.07           | 3.6          |
| HLCW-28-4                                      | 14.50    | 51    | 34.80         | 4.9          | 43.50           | 5            |
| HCLA-32-4                                      | 17.40    | 61.2  | 41.76         | 6.3          | 52.21           | 6.7          |
| HLCW-36-4                                      | 19.51    | 68.6  | 46.81         | 6.8          | 58.52           | 7.3          |
| HLCW-40-4                                      | 22.86    | 80.4  | 54.87         | 9.1          | 68.58           | 9.7          |
| HLCW-48-4                                      | 26.39    | 92.8  | 63.33         | 12.1         | 79.16           | 12.7         |
| HLCW-52-4                                      | 28.32    | 99.6  | 67.97         | 13           | 84.96           | 13.6         |
| HLCW-60-4                                      | 33.78    | 118.8 | 81.07         | 18.7         | 101.34          | 19.3         |
| HLCW-80-4                                      | 43.45    | 152.8 | 104.27        | 19.5         | 130.34          | 20.1         |
| HLCW-100-4                                     | 53.80    | 189.2 | 129.12        | 19.7         | 161.39          | 20.3         |
| HLCW-120-4                                     | 67.67    | 238   | 162.42        | 20.7         | 203.02          | 21.3         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,4°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 2.74     | 9.63  | 6.57          | 0.9          | 8.21            | 1            |
| HLCW-6-1                                       | 3.28     | 11.55 | 7.88          | 1            | 9.85            | 1.1          |
| HLCW-7-1                                       | 3.65     | 12.85 | 8.77          | 1            | 10.96           | 1.1          |
| HCLA-8-1                                       | 4.38     | 15.4  | 10.51         | 1            | 13.14           | 1.1          |
| HLCW-9-1                                       | 4.92     | 17.3  | 11.81         | 1            | 14.76           | 1.2          |
| HLCW-10-1                                      | 5.77     | 20.3  | 13.85         | 1.2          | 17.32           | 1.3          |
| HLCW-12-1                                      | 6.63     | 23.3  | 15.90         | 1.2          | 19.88           | 1.3          |
| HLCW-13-1                                      | 7.11     | 25    | 17.06         | 1.3          | 21.33           | 1.4          |
| HLCW-15-1                                      | 8.50     | 29.9  | 20.40         | 2            | 25.51           | 2.1          |
| HLCW-20-1                                      | 10.95    | 38.5  | 26.27         | 2.7          | 32.84           | 2.8          |
| HLCW-25-1                                      | 13.53    | 47.6  | 32.48         | 4            | 40.60           | 4.1          |
| HLCW-30-1                                      | 17.06    | 60    | 40.95         | 6.5          | 51.18           | 6.6          |
| HLCW-10-2                                      | 5.48     | 19.26 | 13.14         | 1.1          | 16.43           | 1.2          |
| HLCW-12-2                                      | 6.57     | 23.1  | 15.76         | 1.2          | 19.71           | 1.3          |
| HLCW-14-2                                      | 7.31     | 25.7  | 17.54         | 1.5          | 21.92           | 1.6          |
| HCLA-16-2                                      | 8.76     | 30.8  | 21.02         | 2            | 26.27           | 2            |
| HLCW-18-2                                      | 9.84     | 34.6  | 23.61         | 2.3          | 29.52           | 2.5          |
| HLCW-20-2                                      | 11.54    | 40.6  | 27.71         | 2.8          | 34.63           | 2.9          |
| HLCW-24-2                                      | 13.25    | 46.6  | 31.80         | 3.6          | 39.75           | 3.7          |
| HLCW-26-2                                      | 14.22    | 50    | 34.12         | 4            | 42.65           | 4.1          |
| HLCW-30-2                                      | 17.00    | 59.8  | 40.81         | 6.3          | 51.01           | 6.4          |
| HLCW-40-2                                      | 21.89    | 77    | 52.55         | 10.5         | 65.68           | 10.6         |
| HLCW-50-2                                      | 27.07    | 95.2  | 64.97         | 13           | 81.21           | 13.1         |
| HLCW-60-2                                      | 34.12    | 120   | 81.89         | 18.5         | 102.36          | 18.6         |
| HLCW-20-4                                      | 10.95    | 38.52 | 26.29         | 3            | 32.86           | 3.1          |
| HLCW-24-4                                      | 13.14    | 46.2  | 31.53         | 3.6          | 39.41           | 3.7          |
| HLCW-28-4                                      | 14.62    | 51.4  | 35.08         | 5            | 43.85           | 5.1          |
| HCLA-32-4                                      | 17.52    | 61.6  | 42.04         | 6.4          | 52.55           | 6.8          |
| HLCW-36-4                                      | 19.68    | 69.2  | 47.22         | 6.9          | 59.03           | 7.4          |
| HLCW-40-4                                      | 23.09    | 81.2  | 55.41         | 9.2          | 69.27           | 9.8          |
| HLCW-48-4                                      | 26.50    | 93.2  | 63.60         | 12.2         | 79.50           | 12.8         |
| HLCW-52-4                                      | 28.43    | 100   | 68.24         | 13.1         | 85.30           | 13.7         |
| HLCW-60-4                                      | 34.01    | 119.6 | 81.62         | 18.8         | 102.02          | 19.4         |
| HLCW-80-4                                      | 43.79    | 154   | 105.09        | 19.6         | 131.37          | 20.2         |
| HLCW-100-4                                     | 54.14    | 190.4 | 129.93        | 19.8         | 162.42          | 20.4         |
| HLCW-120-4                                     | 68.24    | 240   | 163.78        | 20.8         | 204.73          | 21.4         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=5,5°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 2.45     | 8.63  | 5.89          | 0.5          | 7.36            | 0.6          |
| HLCW-6-1                                       | 2.94     | 10.35 | 7.06          | 0.6          | 8.83            | 0.7          |
| HLCW-7-1                                       | 3.27     | 11.5  | 7.85          | 0.6          | 9.81            | 0.7          |
| HCLA-8-1                                       | 3.92     | 13.8  | 9.42          | 0.6          | 11.77           | 0.7          |
| HLCW-9-1                                       | 4.39     | 15.45 | 10.54         | 0.6          | 13.18           | 0.8          |
| HLCW-10-1                                      | 5.15     | 18.1  | 12.35         | 0.8          | 15.44           | 0.9          |
| HLCW-12-1                                      | 6.03     | 21.2  | 14.47         | 0.8          | 18.08           | 0.9          |
| HLCW-13-1                                      | 6.48     | 22.8  | 15.56         | 0.9          | 19.45           | 1            |
| HLCW-15-1                                      | 7.71     | 27.1  | 18.49         | 1.6          | 23.12           | 1.7          |
| HLCW-20-1                                      | 9.84     | 34.6  | 23.61         | 2.3          | 29.52           | 2.4          |
| HLCW-25-1                                      | 12.17    | 42.8  | 29.21         | 3.6          | 36.51           | 3.7          |
| HLCW-30-1                                      | 15.35    | 54    | 36.85         | 6.1          | 46.06           | 6.2          |
| HLCW-10-2                                      | 4.91     | 17.26 | 11.78         | 0.7          | 14.72           | 0.8          |
| HLCW-12-2                                      | 5.89     | 20.7  | 14.13         | 0.7          | 17.66           | 0.9          |
| HLCW-14-2                                      | 6.54     | 23    | 15.70         | 1            | 19.62           | 1.2          |
| HCLA-16-2                                      | 7.85     | 27.6  | 18.84         | 1.5          | 23.54           | 1.6          |
| HLCW-18-2                                      | 8.79     | 30.9  | 21.09         | 1.8          | 26.36           | 2            |
| HLCW-20-2                                      | 10.29    | 36.2  | 24.70         | 2.3          | 30.88           | 2.4          |
| HLCW-24-2                                      | 12.06    | 42.4  | 28.93         | 3.1          | 36.17           | 3.2          |
| HLCW-26-2                                      | 12.97    | 45.6  | 31.12         | 3.5          | 38.90           | 3.6          |
| HLCW-30-2                                      | 15.41    | 54.2  | 36.99         | 5.8          | 46.23           | 5.9          |
| HLCW-40-2                                      | 19.68    | 69.2  | 47.22         | 10           | 59.03           | 10.1         |
| HLCW-50-2                                      | 24.34    | 85.6  | 58.42         | 12.5         | 73.02           | 12.6         |
| HLCW-60-2                                      | 30.71    | 108   | 73.70         | 18           | 92.13           | 18.1         |
| HLCW-20-4                                      | 9.82     | 34.52 | 23.56         | 2.5          | 29.45           | 2.6          |
| HLCW-24-4                                      | 11.77    | 41.4  | 28.25         | 3.1          | 35.32           | 3.2          |
| HLCW-28-4                                      | 13.08    | 46    | 31.39         | 4.4          | 39.24           | 4.6          |
| HCLA-32-4                                      | 15.70    | 55.2  | 37.67         | 5.8          | 47.09           | 6.3          |
| HLCW-36-4                                      | 17.57    | 61.8  | 42.17         | 6.3          | 52.72           | 6.9          |
| HLCW-40-4                                      | 20.59    | 72.4  | 49.41         | 8.6          | 61.76           | 9.3          |
| HLCW-48-4                                      | 24.11    | 84.8  | 57.87         | 11.6         | 72.34           | 12.3         |
| HLCW-52-4                                      | 25.93    | 91.2  | 62.24         | 12.5         | 77.80           | 12.1         |
| HLCW-60-4                                      | 30.82    | 108.4 | 73.98         | 18.2         | 92.47           | 18.9         |
| HLCW-80-4                                      | 39.35    | 138.4 | 94.45         | 19           | 118.06          | 19.7         |
| HLCW-100-4                                     | 48.68    | 171.2 | 116.83        | 19.2         | 146.04          | 19.9         |
| HLCW-120-4                                     | 61.42    | 216   | 147.40        | 20.2         | 184.26          | 20.9         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=6,6°C      |             |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-5-1                                       | 2.57        | 9.03  | 6.16          | 0.7             | 7.70            | 0.7             |
| HLCW-6-1                                       | 3.07        | 10.8  | 7.37          | 0.8             | 9.21            | 0.8             |
| HLCW-7-1                                       | 3.43        | 12.05 | 8.22          | 0.8             | 10.28           | 0.8             |
| HCLA-8-1                                       | 4.09        | 14.4  | 9.83          | 0.8             | 12.28           | 0.8             |
| HLCW-9-1                                       | 4.59        | 16.15 | 11.02         | 0.8             | 13.78           | 0.9             |
| HLCW-10-1                                      | 5.39        | 18.95 | 12.93         | 1               | 16.17           | 1               |
| HLCW-12-1                                      | 6.26        | 22    | 15.01         | 1               | 18.77           | 1               |
| HLCW-13-1                                      | 6.74        | 23.7  | 16.17         | 1.1             | 20.22           | 1.1             |
| HLCW-15-1                                      | 8.02        | 28.2  | 19.24         | 1.8             | 24.06           | 1.8             |
| HLCW-20-1                                      | 10.29       | 36.2  | 24.70         | 2.5             | 30.88           | 2.5             |
| HLCW-25-1                                      | 12.71       | 44.7  | 30.50         | 3.8             | 38.13           | 3.8             |
| HLCW-30-1                                      | 16.07       | 56.5  | 38.56         | 6.3             | 48.20           | 6.3             |
| HLCW-10-2                                      | 5.14        | 18.06 | 12.32         | 0.9             | 15.41           | 0.9             |
| HLCW-12-2                                      | 6.14        | 21.6  | 14.74         | 0.9             | 18.43           | 1               |
| HLCW-14-2                                      | 6.85        | 24.1  | 16.45         | 1.2             | 20.56           | 1.3             |
| HCLA-16-2                                      | 8.19        | 28.8  | 19.65         | 1.7             | 24.57           | 1.7             |
| HLCW-18-2                                      | 9.18        | 32.3  | 22.04         | 2               | 27.55           | 2.1             |
| HLCW-20-2                                      | 10.78       | 37.9  | 25.86         | 2.5             | 32.33           | 2.5             |
| HLCW-24-2                                      | 12.51       | 44    | 30.03         | 3.3             | 37.53           | 3.3             |
| HLCW-26-2                                      | 13.48       | 47.4  | 32.35         | 3.7             | 40.43           | 3.7             |
| HLCW-30-2                                      | 16.04       | 56.4  | 38.49         | 6               | 48.11           | 6               |
| HLCW-40-2                                      | 20.59       | 72.4  | 49.41         | 10.2            | 61.76           | 10.2            |
| HLCW-50-2                                      | 25.42       | 89.4  | 61.01         | 12.7            | 76.26           | 12.7            |
| HLCW-60-2                                      | 32.13       | 113   | 77.11         | 18.2            | 96.39           | 18.2            |
| HLCW-20-4                                      | 10.27       | 36.12 | 24.65         | 2.7             | 30.81           | 2.7             |
| HLCW-24-4                                      | 12.28       | 43.2  | 29.48         | 3.3             | 36.85           | 3.3             |
| HLCW-28-4                                      | 13.71       | 48.2  | 32.89         | 4.6             | 41.12           | 4.7             |
| HCLA-32-4                                      | 16.38       | 57.6  | 39.31         | 6               | 49.13           | 6.4             |
| HLCW-36-4                                      | 18.37       | 64.6  | 44.08         | 6.5             | 55.11           | 7               |
| HLCW-40-4                                      | 21.55       | 75.8  | 51.73         | 8.8             | 64.66           | 9.4             |
| HLCW-48-4                                      | 25.02       | 88    | 60.05         | 11.8            | 75.07           | 12.4            |
| HLCW-52-4                                      | 26.96       | 94.8  | 64.69         | 12.7            | 80.87           | 13.3            |
| HLCW-60-4                                      | 32.07       | 112.8 | 76.98         | 18.4            | 96.22           | 19              |
| HLCW-80-4                                      | 41.17       | 144.8 | 98.82         | 19.2            | 123.52          | 19.8            |
| HLCW-100-4                                     | 50.84       | 178.8 | 122.02        | 19.4            | 152.52          | 20              |
| HLCW-120-4                                     | 64.26       | 226   | 154.23        | 20.4            | 192.79          | 21              |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7.2°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 2.63     | 9.26  | 6.32          | 0.8          | 7.90            | 0.9          |
| HLCW-6-1                                       | 3.16     | 11.1  | 7.57          | 0.9          | 9.47            | 1            |
| HLCW-7-1                                       | 3.51     | 12.35 | 8.43          | 0.9          | 10.53           | 1            |
| HCLA-8-1                                       | 4.19     | 14.75 | 10.07         | 0.9          | 12.58           | 1            |
| HLCW-9-1                                       | 4.71     | 16.55 | 11.29         | 0.9          | 14.12           | 1.1          |
| HLCW-10-1                                      | 5.52     | 19.4  | 13.24         | 1.1          | 16.55           | 1.2          |
| HLCW-12-1                                      | 6.40     | 22.5  | 15.35         | 1.1          | 19.19           | 1.2          |
| HLCW-13-1                                      | 6.88     | 24.2  | 16.51         | 1.2          | 20.64           | 1.3          |
| HLCW-15-1                                      | 8.19     | 28.8  | 19.65         | 1.9          | 24.57           | 2            |
| HLCW-20-1                                      | 10.55    | 37.1  | 25.32         | 2.6          | 31.65           | 2.7          |
| HLCW-25-1                                      | 13.02    | 45.8  | 31.26         | 3.9          | 39.07           | 4            |
| HLCW-30-1                                      | 16.44    | 57.8  | 39.44         | 6.4          | 49.31           | 6.5          |
| HLCW-10-2                                      | 5.27     | 18.52 | 12.64         | 1            | 15.80           | 1.1          |
| HLCW-12-2                                      | 6.31     | 22.2  | 15.15         | 1            | 18.94           | 1.2          |
| HLCW-14-2                                      | 7.02     | 24.7  | 16.86         | 1.3          | 21.07           | 1.5          |
| HCLA-16-2                                      | 8.39     | 29.5  | 20.13         | 1.8          | 25.16           | 1.9          |
| HLCW-18-2                                      | 9.41     | 33.1  | 22.59         | 2.1          | 28.24           | 2.3          |
| HLCW-20-2                                      | 11.03    | 38.8  | 26.48         | 2.6          | 33.10           | 2.7          |
| HLCW-24-2                                      | 12.80    | 45    | 30.71         | 3.4          | 38.39           | 3.5          |
| HLCW-26-2                                      | 13.76    | 48.4  | 33.03         | 3.8          | 41.29           | 3.9          |
| HLCW-30-2                                      | 16.38    | 57.6  | 39.31         | 6.1          | 49.13           | 6.2          |
| HLCW-40-2                                      | 21.10    | 74.2  | 50.64         | 10.3         | 63.30           | 10.4         |
| HLCW-50-2                                      | 26.05    | 91.6  | 62.51         | 12.8         | 78.14           | 12.9         |
| HLCW-60-2                                      | 32.87    | 115.6 | 78.89         | 18.3         | 98.61           | 18.4         |
| HLCW-20-4                                      | 10.53    | 37.04 | 25.28         | 2.8          | 31.60           | 2.9          |
| HLCW-24-4                                      | 12.62    | 44.4  | 30.30         | 3.4          | 37.87           | 3.5          |
| HLCW-28-4                                      | 14.05    | 49.4  | 33.71         | 4.7          | 42.14           | 4.9          |
| HCLA-32-4                                      | 16.78    | 59    | 40.26         | 6.1          | 50.33           | 6.6          |
| HLCW-36-4                                      | 18.82    | 66.2  | 45.18         | 6.6          | 56.47           | 7.2          |
| HLCW-40-4                                      | 22.07    | 77.6  | 52.96         | 8.9          | 66.20           | 9.6          |
| HLCW-48-4                                      | 25.59    | 90    | 61.42         | 11.9         | 76.77           | 12.6         |
| HLCW-52-4                                      | 27.52    | 96.8  | 66.06         | 12.8         | 82.57           | 13.5         |
| HLCW-60-4                                      | 32.76    | 115.2 | 78.62         | 18.5         | 98.27           | 19.2         |
| HLCW-80-4                                      | 42.20    | 148.4 | 101.27        | 19.3         | 126.59          | 20           |
| HLCW-100-4                                     | 52.09    | 183.2 | 125.02        | 19.5         | 156.28          | 20.2         |
| HLCW-120-4                                     | 65.74    | 231.2 | 157.78        | 20.5         | 197.22          | 21.2         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,4°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 2.65     | 9.33  | 6.37          | 0.9          | 7.96            | 1.1          |
| HLCW-6-1                                       | 3.17     | 11.15 | 7.61          | 1            | 9.51            | 1.2          |
| HLCW-7-1                                       | 3.54     | 12.45 | 8.50          | 1            | 10.62           | 1.2          |
| HCLA-8-1                                       | 4.24     | 14.9  | 10.17         | 1            | 12.71           | 1.2          |
| HLCW-9-1                                       | 4.75     | 16.7  | 11.40         | 1            | 14.25           | 1.3          |
| HLCW-10-1                                      | 5.56     | 19.55 | 13.34         | 1.2          | 16.68           | 1.4          |
| HLCW-12-1                                      | 6.43     | 22.6  | 15.42         | 1.2          | 19.28           | 1.4          |
| HLCW-13-1                                      | 6.91     | 24.3  | 16.58         | 1.3          | 20.73           | 1.5          |
| HLCW-15-1                                      | 8.25     | 29    | 19.79         | 2            | 24.74           | 2.2          |
| HLCW-20-1                                      | 10.63    | 37.4  | 25.52         | 2.7          | 31.90           | 2.9          |
| HLCW-25-1                                      | 13.14    | 46.2  | 31.53         | 4            | 39.41           | 4.2          |
| HLCW-30-1                                      | 16.58    | 58.3  | 39.79         | 6.5          | 49.73           | 6.7          |
| HLCW-10-2                                      | 5.31     | 18.66 | 12.73         | 1.1          | 15.92           | 1.3          |
| HLCW-12-2                                      | 6.34     | 22.3  | 15.22         | 1.1          | 19.02           | 1.4          |
| HLCW-14-2                                      | 7.08     | 24.9  | 16.99         | 1.4          | 21.24           | 1.7          |
| HCLA-16-2                                      | 8.47     | 29.8  | 20.34         | 1.9          | 25.42           | 2.1          |
| HLCW-18-2                                      | 9.50     | 33.4  | 22.79         | 2.2          | 28.49           | 2.5          |
| HLCW-20-2                                      | 11.12    | 39.1  | 26.68         | 2.7          | 33.35           | 2.9          |
| HLCW-24-2                                      | 12.85    | 45.2  | 30.85         | 3.5          | 38.56           | 3.7          |
| HLCW-26-2                                      | 13.82    | 48.6  | 33.17         | 3.9          | 41.46           | 4.1          |
| HLCW-30-2                                      | 16.49    | 58    | 39.58         | 6.2          | 49.48           | 6.4          |
| HLCW-40-2                                      | 21.27    | 74.8  | 51.05         | 10.4         | 63.81           | 10.6         |
| HLCW-50-2                                      | 26.27    | 92.4  | 63.06         | 12.9         | 78.82           | 13.1         |
| HLCW-60-2                                      | 33.15    | 116.6 | 79.57         | 18.4         | 99.46           | 18.6         |
| HLCW-20-4                                      | 10.61    | 37.32 | 25.47         | 2.9          | 31.84           | 3.1          |
| HLCW-24-4                                      | 12.68    | 44.6  | 30.44         | 3.5          | 38.05           | 3.7          |
| HLCW-28-4                                      | 14.16    | 49.8  | 33.98         | 4.8          | 42.48           | 5.1          |
| HCLA-32-4                                      | 16.95    | 59.6  | 40.67         | 6.2          | 50.84           | 6.8          |
| HLCW-36-4                                      | 18.99    | 66.8  | 45.59         | 6.7          | 56.98           | 7.4          |
| HLCW-40-4                                      | 22.24    | 78.2  | 53.37         | 9            | 66.71           | 9.8          |
| HLCW-48-4                                      | 25.70    | 90.4  | 61.69         | 12           | 77.11           | 12.8         |
| HLCW-52-4                                      | 27.64    | 97.2  | 66.33         | 12.9         | 82.92           | 13.7         |
| HLCW-60-4                                      | 32.98    | 116   | 79.16         | 18.6         | 98.95           | 19.4         |
| HLCW-80-4                                      | 42.54    | 149.6 | 102.09        | 19.4         | 127.61          | 20.2         |
| HLCW-100-4                                     | 52.55    | 184.8 | 126.11        | 19.6         | 157.64          | 20.4         |
| HLCW-120-4                                     | 66.31    | 233.2 | 159.14        | 20.6         | 198.93          | 21.4         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C |          |       |               |                 |                 |                 |
|--|----------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.= 5,5°C     |          |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |          |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-5-1                                       | 2.37     | 8.35  | 5.70          | 0.4             | 7.12            | 0.5             |
| HLCW-6-1                                       | 2.83     | 9.95  | 6.79          | 0.5             | 8.49            | 0.6             |
| HLCW-7-1                                       | 3.17     | 11.15 | 7.61          | 0.5             | 9.51            | 0.6             |
| HCLA-8-1                                       | 3.78     | 13.3  | 9.08          | 0.5             | 11.35           | 0.6             |
| HLCW-9-1                                       | 4.24     | 14.9  | 10.17         | 0.5             | 12.71           | 0.7             |
| HLCW-10-1                                      | 4.95     | 17.4  | 11.87         | 0.7             | 14.84           | 0.8             |
| HLCW-12-1                                      | 5.83     | 20.5  | 13.99         | 0.7             | 17.49           | 0.8             |
| HLCW-13-1                                      | 6.26     | 22    | 15.01         | 0.8             | 18.77           | 0.9             |
| HLCW-15-1                                      | 7.45     | 26.2  | 17.88         | 1.5             | 22.35           | 1.6             |
| HLCW-20-1                                      | 9.53     | 33.5  | 22.86         | 2.2             | 28.58           | 2.3             |
| HLCW-25-1                                      | 11.77    | 41.4  | 28.25         | 3.5             | 35.32           | 3.6             |
| HLCW-30-1                                      | 14.90    | 52.4  | 35.76         | 6               | 44.70           | 6.1             |
| HLCW-10-2                                      | 4.75     | 16.7  | 11.40         | 0.6             | 14.25           | 0.7             |
| HLCW-12-2                                      | 5.66     | 19.9  | 13.58         | 0.6             | 16.98           | 0.8             |
| HLCW-14-2                                      | 6.34     | 22.3  | 15.22         | 0.9             | 19.02           | 1.1             |
| HCLA-16-2                                      | 7.56     | 26.6  | 18.15         | 1.4             | 22.69           | 1.5             |
| HLCW-18-2                                      | 8.47     | 29.8  | 20.34         | 1.7             | 25.42           | 1.9             |
| HLCW-20-2                                      | 9.90     | 34.8  | 23.75         | 2.2             | 29.69           | 2.3             |
| HLCW-24-2                                      | 11.66    | 41    | 27.98         | 3               | 34.97           | 3.1             |
| HLCW-26-2                                      | 12.51    | 44    | 30.03         | 3.4             | 37.53           | 3.5             |
| HLCW-30-2                                      | 14.90    | 52.4  | 35.76         | 5.7             | 44.70           | 5.8             |
| HLCW-40-2                                      | 19.05    | 67    | 45.72         | 9.9             | 57.15           | 10              |
| HLCW-50-2                                      | 23.54    | 82.8  | 56.51         | 12.4            | 70.63           | 12.5            |
| HLCW-60-2                                      | 29.80    | 104.8 | 71.52         | 17.9            | 89.40           | 18              |
| HLCW-20-4                                      | 9.50     | 33.4  | 22.79         | 2.4             | 28.49           | 2.5             |
| HLCW-24-4                                      | 11.32    | 39.8  | 27.16         | 3               | 33.95           | 3.1             |
| HLCW-28-4                                      | 12.68    | 44.6  | 30.44         | 4.3             | 38.05           | 4.5             |
| HCLA-32-4                                      | 15.13    | 53.2  | 36.31         | 5.7             | 45.38           | 6.2             |
| HLCW-36-4                                      | 16.95    | 59.6  | 40.67         | 6.2             | 50.84           | 6.7             |
| HLCW-40-4                                      | 19.79    | 69.6  | 47.50         | 8.5             | 59.37           | 9.1             |
| HLCW-48-4                                      | 23.32    | 82    | 55.96         | 11.5            | 69.95           | 12.1            |
| HLCW-52-4                                      | 25.02    | 88    | 60.05         | 12.4            | 75.07           | 13              |
| HLCW-60-4                                      | 29.80    | 104.8 | 71.52         | 18.1            | 89.40           | 18.7            |
| HLCW-80-4                                      | 38.10    | 134   | 91.45         | 18.9            | 114.31          | 19.5            |
| HLCW-100-4                                     | 47.09    | 165.6 | 113.01        | 19.1            | 141.26          | 19.7            |
| HLCW-120-4                                     | 59.60    | 209.6 | 143.04        | 20.1            | 178.80          | 20.7            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C |          |       |               |                 |                 |                 |
|--|----------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=6,6°C      |          |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |          |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-5-1                                       | 2.49     | 8.74  | 5.96          | 0.5             | 7.46            | 0.7             |
| HLCW-6-1                                       | 2.96     | 10.4  | 7.10          | 0.6             | 8.87            | 0.8             |
| HLCW-7-1                                       | 3.31     | 11.65 | 7.95          | 0.6             | 9.94            | 0.8             |
| HCLA-8-1                                       | 3.95     | 13.9  | 9.49          | 0.6             | 11.86           | 0.8             |
| HLCW-9-1                                       | 4.44     | 15.6  | 10.65         | 0.6             | 13.31           | 0.9             |
| HLCW-10-1                                      | 5.19     | 18.25 | 12.45         | 0.8             | 15.57           | 1               |
| HLCW-12-1                                      | 6.06     | 21.3  | 14.54         | 0.8             | 18.17           | 1               |
| HLCW-13-1                                      | 6.51     | 22.9  | 15.63         | 0.9             | 19.53           | 1.1             |
| HLCW-15-1                                      | 7.76     | 27.3  | 18.63         | 1.6             | 23.29           | 1.8             |
| HLCW-20-1                                      | 9.95     | 35    | 23.88         | 2.3             | 29.86           | 2.5             |
| HLCW-25-1                                      | 12.31    | 43.3  | 29.55         | 3.6             | 36.94           | 3.8             |
| HLCW-30-1                                      | 15.58    | 54.8  | 37.40         | 6.1             | 46.75           | 6.3             |
| HLCW-10-2                                      | 4.97     | 17.48 | 11.93         | 0.7             | 14.91           | 0.9             |
| HLCW-12-2                                      | 5.91     | 20.8  | 14.19         | 0.7             | 17.74           | 1               |
| HLCW-14-2                                      | 6.63     | 23.3  | 15.90         | 1               | 19.88           | 1.3             |
| HCLA-16-2                                      | 7.90     | 27.8  | 18.97         | 1.5             | 23.71           | 1.7             |
| HLCW-18-2                                      | 8.87     | 31.2  | 21.29         | 1.8             | 26.61           | 2.1             |
| HLCW-20-2                                      | 10.38    | 36.5  | 24.91         | 2.3             | 31.14           | 2.5             |
| HLCW-24-2                                      | 12.11    | 42.6  | 29.07         | 3.1             | 36.34           | 3.3             |
| HLCW-26-2                                      | 13.02    | 45.8  | 31.26         | 3.5             | 39.07           | 3.7             |
| HLCW-30-2                                      | 15.53    | 54.6  | 37.26         | 5.8             | 46.58           | 6               |
| HLCW-40-2                                      | 19.90    | 70    | 47.77         | 10              | 59.71           | 10.2            |
| HLCW-50-2                                      | 24.62    | 86.6  | 59.10         | 12.5            | 73.87           | 12.7            |
| HLCW-60-2                                      | 31.16    | 109.6 | 74.79         | 18              | 93.49           | 18.2            |
| HLCW-20-4                                      | 9.94     | 34.96 | 23.86         | 2.5             | 29.82           | 2.7             |
| HLCW-24-4                                      | 11.83    | 41.6  | 28.39         | 3.1             | 35.49           | 3.3             |
| HLCW-28-4                                      | 13.25    | 46.6  | 31.80         | 4.4             | 39.75           | 4.7             |
| HCLA-32-4                                      | 15.81    | 55.6  | 37.94         | 5.8             | 47.43           | 6.4             |
| HLCW-36-4                                      | 17.74    | 62.4  | 42.58         | 6.3             | 53.23           | 6.9             |
| HLCW-40-4                                      | 20.76    | 73    | 49.82         | 8.6             | 62.27           | 9.3             |
| HLCW-48-4                                      | 24.23    | 85.2  | 58.14         | 11.6            | 72.68           | 12.3            |
| HLCW-52-4                                      | 26.05    | 91.6  | 62.51         | 12.5            | 78.14           | 13.2            |
| HLCW-60-4                                      | 31.05    | 109.2 | 74.52         | 18.2            | 93.15           | 18.9            |
| HLCW-80-4                                      | 39.81    | 140   | 95.54         | 19              | 119.42          | 19.7            |
| HLCW-100-4                                     | 49.25    | 173.2 | 118.20        | 19.2            | 147.75          | 19.9            |
| HLCW-120-4                                     | 62.33    | 219.2 | 149.59        | 20.2            | 186.99          | 20.9            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C |          |       |               |                 |                 |                 |
|--|----------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,2°C      |          |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |          |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-5-1                                       | 2.55     | 8.96  | 6.11          | 0.6             | 7.64            | 0.8             |
| HLCW-6-1                                       | 3.04     | 10.7  | 7.30          | 0.7             | 9.13            | 0.9             |
| HLCW-7-1                                       | 3.40     | 11.95 | 8.16          | 0.7             | 10.19           | 0.9             |
| HCLA-8-1                                       | 4.05     | 14.25 | 9.72          | 0.7             | 12.16           | 0.9             |
| HLCW-9-1                                       | 4.55     | 16    | 10.92         | 0.7             | 13.65           | 1               |
| HLCW-10-1                                      | 5.32     | 18.7  | 12.76         | 0.9             | 15.95           | 1.1             |
| HLCW-12-1                                      | 6.20     | 21.8  | 14.88         | 0.9             | 18.60           | 1.1             |
| HLCW-13-1                                      | 6.65     | 23.4  | 15.97         | 1               | 19.96           | 1.2             |
| HLCW-15-1                                      | 7.93     | 27.9  | 19.04         | 1.7             | 23.80           | 1.9             |
| HLCW-20-1                                      | 10.21    | 35.9  | 24.50         | 2.4             | 30.62           | 2.6             |
| HLCW-25-1                                      | 12.62    | 44.4  | 30.30         | 3.7             | 37.87           | 3.9             |
| HLCW-30-1                                      | 15.95    | 56.1  | 38.28         | 6.2             | 47.86           | 6.4             |
| HLCW-10-2                                      | 5.10     | 17.92 | 12.23         | 0.8             | 15.29           | 1               |
| HLCW-12-2                                      | 6.08     | 21.4  | 14.60         | 0.8             | 18.25           | 1.1             |
| HLCW-14-2                                      | 6.80     | 23.9  | 16.31         | 1.1             | 20.39           | 1.4             |
| HCLA-16-2                                      | 8.10     | 28.5  | 19.45         | 1.6             | 24.31           | 1.8             |
| HLCW-18-2                                      | 9.10     | 32    | 21.84         | 1.9             | 27.30           | 2.2             |
| HLCW-20-2                                      | 10.63    | 37.4  | 25.52         | 2.4             | 31.90           | 2.6             |
| HLCW-24-2                                      | 12.40    | 43.6  | 29.75         | 3.2             | 37.19           | 3.4             |
| HLCW-26-2                                      | 13.31    | 46.8  | 31.94         | 3.6             | 39.92           | 3.8             |
| HLCW-30-2                                      | 15.87    | 55.8  | 38.08         | 5.9             | 47.60           | 6.1             |
| HLCW-40-2                                      | 20.42    | 71.8  | 49.00         | 10.1            | 61.25           | 10.3            |
| HLCW-50-2                                      | 25.25    | 88.8  | 60.60         | 12.6            | 75.75           | 12.8            |
| HLCW-60-2                                      | 31.90    | 112.2 | 76.57         | 18.1            | 95.71           | 18.3            |
| HLCW-20-4                                      | 10.19    | 35.84 | 24.46         | 2.6             | 30.57           | 2.8             |
| HLCW-24-4                                      | 12.17    | 42.8  | 29.21         | 3.2             | 36.51           | 3.4             |
| HLCW-28-4                                      | 13.59    | 47.8  | 32.62         | 4.5             | 40.78           | 4.8             |
| HCLA-32-4                                      | 16.21    | 57    | 38.90         | 5.9             | 48.62           | 6.5             |
| HLCW-36-4                                      | 18.20    | 64    | 43.68         | 6.4             | 54.59           | 7               |
| HLCW-40-4                                      | 21.27    | 74.8  | 51.05         | 8.7             | 63.81           | 9.4             |
| HLCW-48-4                                      | 24.79    | 87.2  | 59.51         | 11.7            | 74.38           | 12.4            |
| HLCW-52-4                                      | 26.61    | 93.6  | 63.88         | 12.6            | 79.84           | 13.3            |
| HLCW-60-4                                      | 31.73    | 111.6 | 76.16         | 18.3            | 95.20           | 19              |
| HLCW-80-4                                      | 40.83    | 143.6 | 98.00         | 19.1            | 122.50          | 19.8            |
| HLCW-100-4                                     | 50.50    | 177.6 | 121.20        | 19.3            | 151.50          | 20              |
| HLCW-120-4                                     | 63.81    | 224.4 | 153.14        | 20.3            | 191.42          | 21              |

| CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C |          |       |               |                 |                 |                 |
|--|----------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,4°C      |          |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |          |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-5-1                                       | 2.57     | 9.04  | 6.17          | 0.7             | 7.71            | 0.9             |
| HLCW-6-1                                       | 3.07     | 10.8  | 7.37          | 0.8             | 9.21            | 1               |
| HLCW-7- 1                                      | 3.43     | 12.05 | 8.22          | 0.8             | 10.28           | 1               |
| HCLA-8-1                                       | 4.08     | 14.35 | 9.79          | 0.8             | 12.24           | 1               |
| HLCW-9-1                                       | 4.58     | 16.1  | 10.99         | 0.8             | 13.73           | 1.1             |
| HLCW-10-1                                      | 5.36     | 18.85 | 12.86         | 1               | 16.08           | 1.2             |
| HLCW-12-1                                      | 6.23     | 21.9  | 14.95         | 1               | 18.68           | 1.2             |
| HLCW-13-1                                      | 6.71     | 23.6  | 16.11         | 1.1             | 20.13           | 1.3             |
| HLCW-15-1                                      | 7.99     | 28.1  | 19.18         | 1.8             | 23.97           | 2               |
| HLCW-20-1                                      | 10.29    | 36.2  | 24.70         | 2.5             | 30.88           | 2.7             |
| HLCW-25-1                                      | 12.71    | 44.7  | 30.50         | 3.8             | 38.13           | 4               |
| HLCW-30-1                                      | 16.07    | 56.5  | 38.56         | 6.3             | 48.20           | 6.5             |
| HLCW-10-2                                      | 5.14     | 18.08 | 12.34         | 0.9             | 15.42           | 1.1             |
| HLCW-12-2                                      | 6.14     | 21.6  | 14.74         | 0.9             | 18.43           | 1.2             |
| HLCW-14-2                                      | 6.85     | 24.1  | 16.45         | 1.2             | 20.56           | 1.5             |
| HCLA-16-2                                      | 8.16     | 28.7  | 19.59         | 1.7             | 24.48           | 1.9             |
| HLCW-18-2                                      | 9.16     | 32.2  | 21.97         | 2               | 27.47           | 2.3             |
| HLCW-20-2                                      | 10.72    | 37.7  | 25.73         | 2.5             | 32.16           | 2.7             |
| HLCW-24-2                                      | 12.45    | 43.8  | 29.89         | 3.3             | 37.36           | 3.5             |
| HLCW-26-2                                      | 13.42    | 47.2  | 32.21         | 3.7             | 40.26           | 3.9             |
| HLCW-30-2                                      | 15.98    | 56.2  | 38.35         | 6               | 47.94           | 6.2             |
| HLCW-40-2                                      | 20.59    | 72.4  | 49.41         | 10.2            | 61.76           | 10.4            |
| HLCW-50-2                                      | 25.42    | 89.4  | 61.01         | 12.7            | 76.26           | 12.9            |
| HLCW-60-2                                      | 32.13    | 113   | 77.11         | 18.2            | 96.39           | 18.4            |
| HLCW-20-4                                      | 10.28    | 36.16 | 24.68         | 2.7             | 30.85           | 2.9             |
| HLCW-24-4                                      | 12.28    | 43.2  | 29.48         | 3.3             | 36.85           | 3.5             |
| HLCW-28-4                                      | 13.71    | 48.2  | 32.89         | 4.6             | 41.12           | 4.9             |
| HCLA-32-4                                      | 16.32    | 57.4  | 39.17         | 6               | 48.96           | 6.6             |
| HLCW-36-4                                      | 18.31    | 64.4  | 43.95         | 6.5             | 54.94           | 7.1             |
| HLCW-40-4                                      | 21.44    | 75.4  | 51.46         | 8.8             | 64.32           | 9.5             |
| HLCW-48-4                                      | 24.91    | 87.6  | 59.78         | 11.8            | 74.73           | 12.5            |
| HLCW-52-4                                      | 26.84    | 94.4  | 64.42         | 12.7            | 80.53           | 13.4            |
| HLCW-60-4                                      | 31.96    | 112.4 | 76.70         | 18.4            | 95.88           | 19.1            |
| HLCW-80-4                                      | 41.17    | 144.8 | 98.82         | 19.2            | 123.52          | 19.9            |
| HLCW-100-4                                     | 50.84    | 178.8 | 122.02        | 19.4            | 152.52          | 20.1            |
| HLCW-120-4                                     | 64.26    | 226   | 154.23        | 20.4            | 192.79          | 21.1            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.= 5,5°C     |             |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-5-1                                       | 2.29        | 8.07  | 5.51          | 0.4             | 6.88            | 0.5             |
| HLCW-6-1                                       | 2.72        | 9.57  | 6.53          | 0.5             | 8.16            | 0.6             |
| HLCW-7-1                                       | 3.06        | 10.75 | 7.34          | 0.5             | 9.17            | 0.6             |
| HCLA-8-1                                       | 3.63        | 12.75 | 8.70          | 0.5             | 10.88           | 0.6             |
| HLCW-9-1                                       | 4.07        | 14.3  | 9.76          | 0.5             | 12.20           | 0.7             |
| HLCW-10-1                                      | 4.76        | 16.75 | 11.43         | 0.7             | 14.29           | 0.8             |
| HLCW-12-1                                      | 5.62        | 19.75 | 13.48         | 0.7             | 16.85           | 0.8             |
| HLCW-13-1                                      | 6.03        | 21.2  | 14.47         | 0.8             | 18.08           | 0.9             |
| HLCW-15-1                                      | 7.19        | 25.3  | 17.27         | 1.5             | 21.58           | 1.6             |
| HLCW-20-1                                      | 9.18        | 32.3  | 22.04         | 2.2             | 27.55           | 2.3             |
| HLCW-25-1                                      | 11.37       | 40    | 27.30         | 3.5             | 34.12           | 3.6             |
| HLCW-30-1                                      | 14.42       | 50.7  | 34.60         | 6               | 43.25           | 6.1             |
| HLCW-10-2                                      | 4.59        | 16.14 | 11.01         | 0.6             | 13.77           | 0.7             |
| HLCW-12-2                                      | 5.44        | 19.14 | 13.06         | 0.5             | 16.33           | 0.8             |
| HLCW-14-2                                      | 6.11        | 21.5  | 14.67         | 0.8             | 18.34           | 1.1             |
| HCLA-16-2                                      | 7.25        | 25.5  | 17.40         | 1.3             | 21.75           | 1.4             |
| HLCW-18-2                                      | 8.13        | 28.6  | 19.52         | 1.6             | 24.40           | 1.8             |
| HLCW-20-2                                      | 9.53        | 33.5  | 22.86         | 2.1             | 28.58           | 2.2             |
| HLCW-24-2                                      | 11.23       | 39.5  | 26.96         | 2.9             | 33.69           | 3               |
| HLCW-26-2                                      | 12.06       | 42.4  | 28.93         | 3.3             | 36.17           | 3.4             |
| HLCW-30-2                                      | 14.39       | 50.6  | 34.53         | 5.6             | 43.16           | 5.7             |
| HLCW-40-2                                      | 18.37       | 64.6  | 44.08         | 9.8             | 55.11           | 9.9             |
| HLCW-50-2                                      | 22.75       | 80    | 54.59         | 12.3            | 68.24           | 12.4            |
| HLCW-60-2                                      | 28.83       | 101.4 | 69.20         | 17.8            | 86.50           | 17.9            |
| HLCW-20-4                                      | 9.18        | 32.28 | 22.03         | 2.3             | 27.54           | 2.4             |
| HLCW-24-4                                      | 10.88       | 38.28 | 26.12         | 2.9             | 32.65           | 3               |
| HLCW-28-4                                      | 12.23       | 43    | 29.34         | 4.2             | 36.68           | 4.4             |
| HCLA-32-4                                      | 14.50       | 51    | 34.80         | 5.6             | 43.50           | 6.1             |
| HLCW-36-4                                      | 16.26       | 57.2  | 39.03         | 6.1             | 48.79           | 6.6             |
| HLCW-40-4                                      | 19.05       | 67    | 45.72         | 8.4             | 57.15           | 9               |
| HLCW-48-4                                      | 22.46       | 79    | 53.91         | 11.4            | 67.39           | 12              |
| HLCW-52-4                                      | 24.11       | 84.8  | 57.87         | 12.3            | 72.34           | 12.9            |
| HLCW-60-4                                      | 28.78       | 101.2 | 69.06         | 18              | 86.33           | 18.6            |
| HLCW-80-4                                      | 36.74       | 129.2 | 88.17         | 18.8            | 110.21          | 19.4            |
| HLCW-100-4                                     | 45.50       | 160   | 109.19        | 19              | 136.49          | 19.6            |
| HLCW-120-4                                     | 57.67       | 202.8 | 138.40        | 20              | 173.00          | 20.6            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=6,6°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 2.40     | 8.45  | 5.77          | 0.6          | 7.21            | 0.6          |
| HLCW-6-1                                       | 2.86     | 10.05 | 6.86          | 0.7          | 8.57            | 0.7          |
| HLCW-7-1                                       | 3.20     | 11.25 | 7.68          | 0.7          | 9.60            | 0.7          |
| HCLA-8-1                                       | 3.80     | 13.35 | 9.11          | 0.7          | 11.39           | 0.7          |
| HLCW-9-1                                       | 4.27     | 15    | 10.24         | 0.7          | 12.80           | 0.8          |
| HLCW-10-1                                      | 4.99     | 17.55 | 11.98         | 0.9          | 14.97           | 0.9          |
| HLCW-12-1                                      | 5.83     | 20.5  | 13.99         | 0.9          | 17.49           | 0.9          |
| HLCW-13-1                                      | 6.28     | 22.1  | 15.08         | 1            | 18.85           | 1            |
| HLCW-15-1                                      | 7.51     | 26.4  | 18.02         | 1.7          | 22.52           | 1.7          |
| HLCW-20-1                                      | 9.61     | 33.8  | 23.07         | 2.4          | 28.83           | 2.4          |
| HLCW-25-1                                      | 11.91    | 41.9  | 28.59         | 3.7          | 35.74           | 3.7          |
| HLCW-30-1                                      | 15.07    | 53    | 36.17         | 6.2          | 45.21           | 6.2          |
| HLCW-10-2                                      | 4.81     | 16.9  | 11.53         | 0.8          | 14.42           | 0.8          |
| HLCW-12-2                                      | 5.72     | 20.1  | 13.72         | 0.7          | 17.15           | 0.9          |
| HLCW-14-2                                      | 6.40     | 22.5  | 15.35         | 1            | 19.19           | 1.2          |
| HCLA-16-2                                      | 7.59     | 26.7  | 18.22         | 1.5          | 22.78           | 1.5          |
| HLCW-18-2                                      | 8.53     | 30    | 20.47         | 1.8          | 25.59           | 1.9          |
| HLCW-20-2                                      | 9.98     | 35.1  | 23.95         | 2.3          | 29.94           | 2.3          |
| HLCW-24-2                                      | 11.66    | 41    | 27.98         | 3.1          | 34.97           | 3.1          |
| HLCW-26-2                                      | 12.57    | 44.2  | 30.16         | 3.5          | 37.70           | 3.5          |
| HLCW-30-2                                      | 15.01    | 52.8  | 36.03         | 5.8          | 45.04           | 5.8          |
| HLCW-40-2                                      | 19.22    | 67.6  | 46.13         | 10           | 57.67           | 10           |
| HLCW-50-2                                      | 23.83    | 83.8  | 57.19         | 12.5         | 71.48           | 12.5         |
| HLCW-60-2                                      | 30.14    | 106   | 72.34         | 18           | 90.42           | 18           |
| HLCW-20-4                                      | 9.61     | 33.8  | 23.07         | 2.5          | 28.83           | 2.5          |
| HLCW-24-4                                      | 11.43    | 40.2  | 27.43         | 3.1          | 34.29           | 3.1          |
| HLCW-28-4                                      | 12.80    | 45    | 30.71         | 4.4          | 38.39           | 4.5          |
| HCLA-32-4                                      | 15.18    | 53.4  | 36.44         | 5.8          | 45.55           | 6.2          |
| HLCW-36-4                                      | 17.06    | 60    | 40.95         | 6.3          | 51.18           | 6.7          |
| HLCW-40-4                                      | 19.96    | 70.2  | 47.91         | 8.6          | 59.88           | 9.1          |
| HLCW-48-4                                      | 23.32    | 82    | 55.96         | 11.6         | 69.95           | 12.1         |
| HLCW-52-4                                      | 25.14    | 88.4  | 60.33         | 12.5         | 75.41           | 13           |
| HLCW-60-4                                      | 30.03    | 105.6 | 72.06         | 18.2         | 90.08           | 18.7         |
| HLCW-80-4                                      | 38.44    | 135.2 | 92.26         | 19           | 115.33          | 19.5         |
| HLCW-100-4                                     | 47.66    | 167.6 | 114.37        | 19.2         | 142.97          | 19.7         |
| HLCW-120-4                                     | 60.28    | 212   | 144.67        | 20.2         | 180.84          | 20.7         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,2°C      |             |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-5-1                                       | 2.46        | 8.66  | 5.91          | 0.7             | 7.39            | 0.7             |
| HLCW-6-1                                       | 2.93        | 10.3  | 7.03          | 0.8             | 8.79            | 0.8             |
| HLCW-7-1                                       | 3.28        | 11.55 | 7.88          | 0.8             | 9.85            | 0.8             |
| HCLA-8-1                                       | 3.90        | 13.7  | 9.35          | 0.8             | 11.69           | 0.8             |
| HLCW-9-1                                       | 4.36        | 15.35 | 10.48         | 0.8             | 13.09           | 0.9             |
| HLCW-10-1                                      | 5.12        | 18    | 12.28         | 1               | 15.35           | 1               |
| HLCW-12-1                                      | 5.97        | 21    | 14.33         | 1               | 17.91           | 1               |
| HLCW-13-1                                      | 6.43        | 22.6  | 15.42         | 1.1             | 19.28           | 1.1             |
| HLCW-15-1                                      | 7.68        | 27    | 18.43         | 1.8             | 23.03           | 1.8             |
| HLCW-20-1                                      | 9.87        | 34.7  | 23.68         | 2.5             | 29.60           | 2.5             |
| HLCW-25-1                                      | 12.20       | 42.9  | 29.28         | 3.8             | 36.60           | 3.8             |
| HLCW-30-1                                      | 15.44       | 54.3  | 37.06         | 6.3             | 46.32           | 6.3             |
| HLCW-10-2                                      | 4.92        | 17.32 | 11.82         | 0.9             | 14.77           | 0.9             |
| HLCW-12-2                                      | 5.86        | 20.6  | 14.06         | 0.8             | 17.57           | 1               |
| HLCW-14-2                                      | 6.57        | 23.1  | 15.76         | 1.1             | 19.71           | 1.3             |
| HCLA-16-2                                      | 7.79        | 27.4  | 18.70         | 1.6             | 23.37           | 1.6             |
| HLCW-18-2                                      | 8.73        | 30.7  | 20.95         | 1.9             | 26.19           | 2               |
| HLCW-20-2                                      | 10.24       | 36    | 24.57         | 2.4             | 30.71           | 2.4             |
| HLCW-24-2                                      | 11.94       | 42    | 28.66         | 3.2             | 35.83           | 3.2             |
| HLCW-26-2                                      | 12.85       | 45.2  | 30.85         | 3.6             | 38.56           | 3.6             |
| HLCW-30-2                                      | 15.35       | 54    | 36.85         | 5.9             | 46.06           | 5.9             |
| HLCW-40-2                                      | 19.73       | 69.4  | 47.36         | 10.1            | 59.20           | 10.1            |
| HLCW-50-2                                      | 24.40       | 85.8  | 58.55         | 12.6            | 73.19           | 12.6            |
| HLCW-60-2                                      | 30.88       | 108.6 | 74.11         | 18.1            | 92.64           | 18.1            |
| HLCW-20-4                                      | 9.85        | 34.64 | 23.64         | 2.6             | 29.55           | 2.6             |
| HLCW-24-4                                      | 11.72       | 41.2  | 28.12         | 3.2             | 35.15           | 3.2             |
| HLCW-28-4                                      | 13.14       | 46.2  | 31.53         | 4.5             | 39.41           | 4.6             |
| HCLA-32-4                                      | 15.58       | 54.8  | 37.40         | 5.9             | 46.75           | 6.3             |
| HLCW-36-4                                      | 17.46       | 61.4  | 41.90         | 6.4             | 52.38           | 6.8             |
| HLCW-40-4                                      | 20.47       | 72    | 49.13         | 8.7             | 61.42           | 9.2             |
| HLCW-48-4                                      | 23.88       | 84    | 57.32         | 11.7            | 71.65           | 12.2            |
| HLCW-52-4                                      | 25.70       | 90.4  | 61.69         | 12.6            | 77.11           | 13.1            |
| HLCW-60-4                                      | 30.71       | 108   | 73.70         | 18.3            | 92.13           | 18.8            |
| HLCW-80-4                                      | 39.47       | 138.8 | 94.72         | 19.1            | 118.40          | 19.6            |
| HLCW-100-4                                     | 48.79       | 171.6 | 117.10        | 19.3            | 146.38          | 19.8            |
| HLCW-120-4                                     | 61.76       | 217.2 | 148.22        | 20.3            | 185.28          | 20.8            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,4°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 2.48     | 8.73  | 5.96          | 0.8          | 7.45            | 0.9          |
| HLCW-6-1                                       | 2.94     | 10.35 | 7.06          | 0.9          | 8.83            | 1            |
| HLCW-7-1                                       | 3.31     | 11.65 | 7.95          | 0.9          | 9.94            | 1            |
| HCLA-8-1                                       | 3.92     | 13.8  | 9.42          | 0.9          | 11.77           | 1            |
| HLCW-9-1                                       | 4.41     | 15.5  | 10.58         | 0.9          | 13.22           | 1.1          |
| HLCW-10-1                                      | 5.16     | 18.15 | 12.39         | 1.1          | 15.48           | 1.2          |
| HLCW-12-1                                      | 6.00     | 21.1  | 14.40         | 1.1          | 18.00           | 1.2          |
| HLCW-13-1                                      | 6.48     | 22.8  | 15.56         | 1.2          | 19.45           | 1.3          |
| HLCW-15-1                                      | 7.73     | 27.2  | 18.56         | 1.9          | 23.20           | 2            |
| HLCW-20-1                                      | 9.92     | 34.9  | 23.82         | 2.6          | 29.77           | 2.7          |
| HLCW-25-1                                      | 12.31    | 43.3  | 29.55         | 3.9          | 36.94           | 4            |
| HLCW-30-1                                      | 15.55    | 54.7  | 37.33         | 6.4          | 46.66           | 6.5          |
| HLCW-10-2                                      | 4.96     | 17.46 | 11.92         | 1            | 14.89           | 1.1          |
| HLCW-12-2                                      | 5.89     | 20.7  | 14.13         | 0.9          | 17.66           | 1.2          |
| HLCW-14-2                                      | 6.63     | 23.3  | 15.90         | 1.2          | 19.88           | 1.5          |
| HCLA-16-2                                      | 7.85     | 27.6  | 18.84         | 1.7          | 23.54           | 1.8          |
| HLCW-18-2                                      | 8.81     | 31    | 21.16         | 2            | 26.44           | 2.2          |
| HLCW-20-2                                      | 10.32    | 36.3  | 24.77         | 2.5          | 30.97           | 2.6          |
| HLCW-24-2                                      | 12.00    | 42.2  | 28.80         | 3.3          | 36.00           | 3.4          |
| HLCW-26-2                                      | 12.97    | 45.6  | 31.12         | 3.7          | 38.90           | 3.8          |
| HLCW-30-2                                      | 15.47    | 54.4  | 37.12         | 6            | 46.41           | 6.1          |
| HLCW-40-2                                      | 19.85    | 69.8  | 47.63         | 10.2         | 59.54           | 10.3         |
| HLCW-50-2                                      | 24.62    | 86.6  | 59.10         | 12.7         | 73.87           | 12.8         |
| HLCW-60-2                                      | 31.11    | 109.4 | 74.66         | 18.2         | 93.32           | 18.3         |
| HLCW-20-4                                      | 9.93     | 34.92 | 23.83         | 2.7          | 29.79           | 2.8          |
| HLCW-24-4                                      | 11.77    | 41.4  | 28.25         | 3.3          | 35.32           | 3.4          |
| HLCW-28-4                                      | 13.25    | 46.6  | 31.80         | 4.6          | 39.75           | 4.8          |
| HCLA-32-4                                      | 15.70    | 55.2  | 37.67         | 6            | 47.09           | 6.5          |
| HLCW-36-4                                      | 17.63    | 62    | 42.31         | 6.5          | 52.89           | 7            |
| HLCW-40-4                                      | 20.64    | 72.6  | 49.54         | 8.8          | 61.93           | 9.4          |
| HLCW-48-4                                      | 24.00    | 84.4  | 57.60         | 11.8         | 72.00           | 12.4         |
| HLCW-52-4                                      | 25.93    | 91.2  | 62.24         | 12.7         | 77.80           | 13.3         |
| HLCW-60-4                                      | 30.94    | 108.8 | 74.25         | 18.4         | 92.81           | 19           |
| HLCW-80-4                                      | 39.69    | 139.6 | 95.27         | 19.2         | 119.08          | 19.8         |
| HLCW-100-4                                     | 49.25    | 173.2 | 118.20        | 19.4         | 147.75          | 20           |
| HLCW-120-4                                     | 62.21    | 218.8 | 149.32        | 20.4         | 186.64          | 21           |

| ELECTRICAL DATA (R-134a) |                          |           |           |                       |
|--------------------------|--------------------------|-----------|-----------|-----------------------|
| chiller MODEL            | Nominal Comp. power (HP) | MRA (Amp) | LRA (Amp) | RATE CONSE POWER (kw) |
| HLCW-5-1                 | 5                        | 5.67      | 65.5      | 2.4                   |
| HLCW-6-1                 | 6                        | 5.98      | 74        | 2.5                   |
| HLCW-7-1                 | 7                        | 7.85      | 101       | 3.3                   |
| HCLA-8-1                 | 8                        | 9.69      | 95        | 4.0                   |
| HLCW-9-1                 | 9                        | 10.57     | 111       | 5.0                   |
| HLCW-10-1                | 10                       | 11.8      | 118       | 5.6                   |
| HLCW-12-1                | 12                       | 11.05     | 118       | 5.2                   |
| HLCW-13-1                | 13                       | 12.85     | 140       | 6.0                   |
| HLCW-15-1                | 15                       | 17.22     | 174       | 8.1                   |
| HLCW-20-1                | 20                       | 20.21     | 225       | 9.5                   |
| HLCW-25-1                | 25                       | 25.29     | 272       | 11.9                  |
| HLCW-30-1                | 30                       | 31.66     | 310       | 14.9                  |
| HLCW-10-2                | 2*5                      | 11.34     | 131       | 5.3                   |
| HLCW-12-2                | 2*6                      | 11.96     | 148       | 5.6                   |
| HLCW-14-2                | 2*7                      | 15.7      | 202       | 7.4                   |
| HCLA-16-2                | 2*8                      | 19.38     | 190       | 9.1                   |
| HLCW-18-2                | 2*9                      | 21.14     | 222       | 9.9                   |
| HLCW-20-2                | 2*10                     | 23.6      | 236       | 11.1                  |
| HLCW-24-2                | 2*12                     | 22.1      | 236       | 10.4                  |
| HLCW-26-2                | 2*13                     | 25.7      | 280       | 12.1                  |
| HLCW-30-2                | 2*15                     | 34.44     | 348       | 16.2                  |
| HLCW-40-2                | 2*40                     | 40.42     | 450       | 19.0                  |
| HLCW-50-2                | 2*25                     | 50.58     | 544       | 23.8                  |
| HLCW-60-2                | 2*30                     | 63.32     | 620       | 29.8                  |
| HLCW-20-4                | 4*5                      | 22.68     | 262       | 10.7                  |
| HLCW-24-4                | 4*6                      | 23.92     | 296       | 11.3                  |
| HLCW-28-4                | 4*7                      | 31.4      | 404       | 14.8                  |
| HCLA-32-4                | 4*8                      | 38.76     | 380       | 18.2                  |
| HLCW-36-4                | 4*9                      | 42.28     | 444       | 19.9                  |
| HLCW-40-4                | 4*10                     | 47.2      | 472       | 22.2                  |
| HLCW-48-4                | 4*12                     | 44.2      | 472       | 20.8                  |
| HLCW-52-4                | 4*13                     | 51.4      | 560       | 24.2                  |
| HLCW-60-4                | 4*15                     | 68.88     | 696       | 32.4                  |
| HLCW-80-4                | 4*20                     | 80.84     | 900       | 38.0                  |
| HLCW-100-4               | 4*25                     | 101.16    | 1088      | 47.6                  |
| HLCW-120-4               | 4*30                     | 126.64    | 1240      | 59.6                  |



## Engineering Specifications-50 Hz (R-22)-copeland

| Model                            | HLCW                          | HLCW-5-1 | HLCW-6-1 | HLCW-7-1 | HLCW-8-1 | HLCW-9-1 | HLCW-10-1 |
|----------------------------------|-------------------------------|----------|----------|----------|----------|----------|-----------|
| cooling capacity                 | TR                            | 4.14     | 5.00     | 5.62     | 6.60     | 7.45     | 8.79      |
|                                  | kW                            | 14.55    | 17.6     | 19.75    | 23.2     | 26.2     | 30.9      |
| Compressor                       | Copeland Scroll               |          |          |          |          |          |           |
| QTY                              |                               | 1        | 1        | 1        | 1        | 1        | 1         |
| Oil Charge                       | USGal                         | 0.45     | 0.48     | 0.48     | 0.71     | 0.90     | 0.90      |
|                                  | Litre                         | 1.7      | 1.8      | 1.8      | 2.7      | 3.4      | 3.4       |
| Condenser                        | Condenser shell & tube        |          |          |          |          |          |           |
| QTY                              |                               |          |          | 1        |          |          |           |
| Ref. Circuits                    |                               | 1        | 1        | 1        | 1        | 1        | 1         |
| Water Volume                     | GPM                           | 12.41    | 15.01    | 16.85    | 19.79    | 22.35    | 26.36     |
|                                  | Litre/s                       | 0.78     | 0.95     | 1.06     | 1.25     | 1.41     | 1.66      |
| Evaporator                       | Direct Expansion shell & tube |          |          |          |          |          |           |
| QTY                              |                               |          |          | 1        |          |          |           |
| Ref. Circuits                    |                               | 1        | 1        | 1        | 1        | 1        | 1         |
| Water Volume                     | GPM                           | 9.93     | 12.01    | 13.48    | 15.83    | 17.88    | 21.09     |
|                                  | Litre/s                       | 0.63     | 0.76     | 0.85     | 1.00     | 1.13     | 1.33      |
| Refrigerant Charge (R22)(Approx) | Lb                            | 11.0     | 13.2     | 15.4     | 17.6     | 19.8     | 22.0      |
|                                  | Kg                            | 5        | 6        | 7        | 8        | 9        | 10        |
| Operating Weight (Approx)        | Lb                            | 771      | 771      | 771      | 771      | 771      | 992       |
|                                  | Kg                            | 350      | 350      | 350      | 350      | 350      | 450       |

| Model                            | HLCW                          | HLCW-12-1 | HLCW-13-1 | HLCW-15-1 | HLCW-20-1 | HLCW-25-1 | HLCW-30-1 |
|----------------------------------|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| cooling capacity                 | TR                            | 10.09     | 10.92     | 13.25     | 16.72     | 20.76     | 25.65     |
|                                  | kW                            | 35.5      | 38.4      | 46.6      | 58.8      | 73        | 90.2      |
| Compressor                       | Copeland Scroll               |           |           |           |           |           |           |
| QTY                              |                               | 1         | 1         | 1         | 1         | 1         | 1         |
| Oil Charge                       | USGal                         | 0.90      | 0.90      | 1.03      | 1.24      | 1.80      | 1.66      |
|                                  | Litre                         | 3.4       | 3.4       | 3.9       | 4.7       | 6.8       | 6.3       |
| Condenser                        | Condenser shell & tube        |           |           |           |           |           |           |
| QTY                              |                               |           |           | 1         |           |           |           |
| Ref. Circuits                    |                               | 1         | 1         | 1         | 1         | 1         | 1         |
| Water Volume                     | GPM                           | 30.28     | 32.76     | 39.75     | 50.16     | 62.27     | 76.94     |
|                                  | Litre/s                       | 1.91      | 2.07      | 2.51      | 3.16      | 3.93      | 4.85      |
| Evaporator                       | Direct Expansion shell & tube |           |           |           |           |           |           |
| QTY                              |                               |           |           | 1         |           |           |           |
| Ref. Circuits                    |                               | 1         | 1         | 1         | 1         | 1         | 1         |
| Water Volume                     | GPM                           | 24.23     | 26.21     | 31.80     | 40.13     | 49.82     | 61.56     |
|                                  | Litre/s                       | 1.53      | 1.65      | 2.01      | 2.53      | 3.14      | 3.88      |
| Refrigerant Charge (R22)(Approx) | Lb                            | 26.4      | 28.7      | 33.1      | 44.1      | 55.1      | 66.1      |
|                                  | Kg                            | 12        | 13        | 15        | 20        | 25        | 30        |
| Operating Weight (Approx)        | Lb                            | 991.8     | 991.8     | 1102      | 1653      | 1653      | 1763.2    |
|                                  | Kg                            | 450       | 450       | 500       | 750       | 750       | 800       |

| Model                            | HLCW                          | HLCW-10-2 | HLCW-12-2 | HLCW-14-2 | HLCW-16-2 | HLCW-18-2 | HLCW-20-2 |
|----------------------------------|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| cooling capacity                 | TR                            | 8.27      | 10.01     | 11.23     | 13.19     | 14.90     | 17.57     |
|                                  | kW                            | 29.10     | 35.20     | 39.50     | 46.40     | 52.40     | 61.80     |
| Compressor                       | Copeland Scroll               |           |           |           |           |           |           |
| QTY                              |                               | 2         | 2         | 2         | 2         | 2         | 2         |
| Oil Charge                       | USGal                         | 0.90      | 0.95      | 0.95      | 1.43      | 1.80      | 1.80      |
|                                  | Litre                         | 3.4       | 3.6       | 3.6       | 5.4       | 6.8       | 6.8       |
| Condenser                        | Condenser shell & tube        |           |           |           |           |           |           |
| QTY                              |                               |           |           | 1         |           |           |           |
| Ref. Circuits                    |                               | 2         | 2         | 2         | 2         | 2         | 2         |
| Water Volume                     | GPM                           | 24.82     | 30.03     | 33.69     | 39.58     | 44.70     | 52.72     |
|                                  | Litre/s                       | 1.57      | 1.89      | 2.13      | 2.50      | 2.82      | 3.33      |
| Evaporator                       | Direct Expansion shell & tube |           |           |           |           |           |           |
| QTY                              |                               |           |           | 1         |           |           |           |
| Ref. Circuits                    |                               | 2         | 2         | 2         | 2         | 2         | 2         |
| Water Volume                     | GPM                           | 19.86     | 24.02     | 26.96     | 31.66     | 35.76     | 42.17     |
|                                  | Litre/s                       | 1.25      | 1.52      | 1.70      | 2.00      | 2.26      | 2.66      |
| Refrigerant Charge (R22)(Approx) | Lb                            | 22.0      | 26.4      | 30.9      | 35.3      | 39.7      | 44.1      |
|                                  | Kg                            | 10.0      | 12.0      | 14.0      | 16.0      | 18.0      | 20.0      |
| Operating Weight (Approx)        | Lb                            | 1322      | 1322      | 1322      | 1433      | 1433      | 1433      |
|                                  | Kg                            | 600       | 600       | 600       | 650       | 650       | 650       |

| Model                            | HLCW                          | HLCW-24-2 | HLCW-26-2 | HLCW-30-2 | HLCW-40-2 | HLCW-50-2 | HLCW-60-2 |
|----------------------------------|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| cooling capacity                 | TR                            | 20.19     | 21.84     | 26.50     | 33.44     | 41.51     | 51.30     |
|                                  | kW                            | 71.00     | 76.80     | 93.20     | 117.60    | 146.00    | 180.40    |
| Compressor                       | Copeland Scroll               |           |           |           |           |           |           |
| QTY                              |                               | 2         | 2         | 2         | 2         | 2         | 2         |
| Oil Charge                       | USGal                         | 1.80      | 1.80      | 2.06      | 2.48      | 3.59      | 3.33      |
|                                  | Litre                         | 6.8       | 6.8       | 7.8       | 9.4       | 13.6      | 12.6      |
| Condenser                        | Condenser shell & tube        |           |           |           |           |           |           |
| QTY                              |                               |           |           | 1         |           |           |           |
| Ref. Circuits                    |                               | 2         | 2         | 2         | 2         | 2         | 2         |
| Water Volume                     | GPM                           | 60.57     | 65.51     | 79.50     | 100.32    | 124.54    | 153.89    |
|                                  | Litre/s                       | 3.82      | 4.13      | 5.02      | 6.33      | 7.86      | 9.71      |
| Evaporator                       | Direct Expansion shell & tube |           |           |           |           |           |           |
| QTY                              |                               |           |           | 1         |           |           |           |
| Ref. Circuits                    |                               | 2         | 2         | 2         | 2         | 2         | 2         |
| Water Volume                     | GPM                           | 48.45     | 52.41     | 63.60     | 80.25     | 99.63     | 123.11    |
|                                  | Litre/s                       | 3.06      | 3.31      | 4.01      | 5.06      | 6.29      | 7.77      |
| Refrigerant Charge (R22)(Approx) | Lb                            | 52.9      | 57.3      | 66.1      | 88.2      | 110.2     | 132.2     |
|                                  | Kg                            | 24        | 26        | 30        | 40        | 50        | 60        |
| Operating Weight (Approx)        | Lb                            | 1433      | 1543      | 1763      | 2094      | 2094      | 2424      |
|                                  | Kg                            | 650       | 700       | 800       | 950       | 950       | 1100      |

| Model                            | HLCW    | HLCW-20-4                     | HLCW-24-4 | HLCW-28-4 | HLCW-32-4 | HLCW-36-4 | HLCW-40-4 |
|----------------------------------|---------|-------------------------------|-----------|-----------|-----------|-----------|-----------|
| cooling capacity                 | TR      | 16.55                         | 20.02     | 22.46     | 26.39     | 29.80     | 35.15     |
|                                  | kW      | 58.20                         | 70.40     | 79.00     | 92.80     | 104.80    | 123.60    |
| Compressor                       |         | Copeland Scroll               |           |           |           |           |           |
| QTY                              |         | 4                             | 4         | 4         | 4         | 4         | 4         |
| Oil Charge                       | USGal   | 1.80                          | 1.90      | 1.90      | 2.85      | 3.59      | 3.59      |
|                                  | Litre   | 6.8                           | 7.2       | 7.2       | 10.8      | 13.6      | 13.6      |
| Condenser                        |         | Condenser shell & tube        |           |           |           |           |           |
| QTY                              |         | 1                             |           |           |           |           |           |
| Ref. Circuits                    |         | 2                             | 2         | 2         | 2         | 2         | 2         |
| Water Volume                     | GPM     | 49.65                         | 60.05     | 67.39     | 79.16     | 89.40     | 105.44    |
|                                  | Litre/s | 3.13                          | 3.79      | 4.25      | 4.99      | 5.64      | 6.65      |
| Evaporator                       |         | Direct Expansion shell & tube |           |           |           |           |           |
| QTY                              |         | 1                             |           |           |           |           |           |
| Ref. Circuits                    |         | 2                             | 2         | 2         | 2         | 2         | 2         |
| Water Volume                     | GPM     | 39.72                         | 48.04     | 53.91     | 63.33     | 71.52     | 84.35     |
|                                  | Litre/s | 2.51                          | 3.03      | 3.40      | 4.00      | 4.51      | 5.32      |
| Refrigerant Charge (R22)(Approx) | Lb      | 44.08                         | 52.90     | 61.71     | 70.53     | 79.34     | 88.16     |
|                                  | Kg      | 20.00                         | 24.00     | 28.00     | 32.00     | 36.00     | 40.00     |
| Operating Weight (Approx)        | Lb      | 1873                          | 1873      | 1984      | 1984      | 2094      | 2094      |
|                                  | Kg      | 850                           | 850       | 900       | 900       | 950       | 950       |

| Model                            | HLCW    | HLCW-48-4                     | HLCW-52-4 | HLCW-60-4 | HLCW-80-4 | HLCW-100-4 | HLCW-120-4 |
|----------------------------------|---------|-------------------------------|-----------|-----------|-----------|------------|------------|
| cooling capacity                 | TR      | 40.38                         | 43.68     | 53.00     | 66.88     | 83.03      | 102.59     |
|                                  | kW      | 142.00                        | 153.60    | 186.40    | 235.20    | 292.00     | 360.80     |
| Compressor                       |         | Copeland Scroll               |           |           |           |            |            |
| QTY                              |         | 4                             | 4         | 4         | 4         | 4          | 4          |
| Oil Charge                       | USGal   | 3.59                          | 3.59      | 4.12      | 4.97      | 7.19       | 6.66       |
|                                  | Litre   | 13.6                          | 13.6      | 15.6      | 18.8      | 27.2       | 25.2       |
| Condenser                        |         | Condenser shell & tube        |           |           |           |            |            |
| QTY                              |         | 1                             |           |           |           |            |            |
| Ref. Circuits                    |         | 2                             | 2         | 2         | 2         | 2          | 2          |
| Water Volume                     | GPM     | 121.13                        | 131.03    | 159.01    | 200.63    | 249.09     | 307.78     |
|                                  | Litre/s | 7.64                          | 8.27      | 10.03     | 12.66     | 15.71      | 19.42      |
| Evaporator                       |         | Direct Expansion shell & tube |           |           |           |            |            |
| QTY                              |         | 1                             |           |           |           |            |            |
| Ref. Circuits                    |         | 2                             | 2         | 2         | 2         | 2          | 2          |
| Water Volume                     | GPM     | 96.90                         | 104.82    | 127.20    | 160.51    | 199.27     | 246.22     |
|                                  | Litre/s | 6.11                          | 6.61      | 8.03      | 10.13     | 12.57      | 15.53      |
| Refrigerant Charge (R22)(Approx) | Lb      | 105.79                        | 114.61    | 132.24    | 176.32    | 220.40     | 264.48     |
|                                  | Kg      | 48.00                         | 52.00     | 60.00     | 80.00     | 100.00     | 120.00     |
| Operating Weight (Approx)        | Lb      | 2204                          | 2204      | 2314      | 3086      | 3637       | 3747       |
|                                  | Kg      | 1000                          | 1000      | 1050      | 1400      | 1650       | 1700       |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.= 5,5°C     |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 3.88     | 13.65 | 9.32          | 0.6          | 11.64           | 0.9          |
| HLCW-6-1                                       | 4.72     | 16.6  | 11.33         | 0.7          | 14.16           | 1            |
| HLCW-7-1                                       | 5.29     | 18.6  | 12.69         | 0.7          | 15.87           | 1            |
| HCLW-8-1                                       | 6.20     | 21.8  | 14.88         | 0.7          | 18.60           | 1            |
| HLCW-9-1                                       | 7.02     | 24.7  | 16.86         | 0.8          | 21.07           | 1.1          |
| HLCW-10-1                                      | 8.27     | 29.1  | 19.86         | 0.9          | 24.82           | 1.2          |
| HLCW-12-1                                      | 9.53     | 33.5  | 22.86         | 1            | 28.58           | 1.3          |
| HLCW-13-1                                      | 10.29    | 36.2  | 24.70         | 1.1          | 30.88           | 1.4          |
| HLCW-15-1                                      | 12.20    | 42.9  | 29.28         | 1.8          | 36.60           | 2.1          |
| HLCW-20-1                                      | 15.75    | 55.4  | 37.81         | 2.5          | 47.26           | 2.8          |
| HLCW-25-1                                      | 19.62    | 69    | 47.09         | 3.8          | 58.86           | 4.1          |
| HLCW-30-1                                      | 24.20    | 85.1  | 58.07         | 6.3          | 72.59           | 6.6          |
| HLCW-10-2                                      | 7.76     | 27.3  | 18.63         | 0.9          | 23.29           | 1.2          |
| HLCW-12-2                                      | 9.44     | 33.2  | 22.66         | 1            | 28.32           | 1.3          |
| HLCW-14-2                                      | 10.58    | 37.2  | 25.39         | 1.3          | 31.73           | 1.6          |
| HCLW-16-2                                      | 12.40    | 43.6  | 29.75         | 1.8          | 37.19           | 2.1          |
| HLCW-18-2                                      | 14.05    | 49.4  | 33.71         | 2.3          | 42.14           | 2.6          |
| HLCW-20-2                                      | 16.55    | 58.2  | 39.72         | 2.8          | 49.65           | 3.1          |
| HLCW-24-2                                      | 19.05    | 67    | 45.72         | 3.6          | 57.15           | 3.9          |
| HLCW-26-2                                      | 20.59    | 72.4  | 49.41         | 4            | 61.76           | 4.3          |
| HLCW-30-2                                      | 24.40    | 85.8  | 58.55         | 6.3          | 73.19           | 6.6          |
| HLCW-40-2                                      | 31.51    | 110.8 | 75.61         | 10.5         | 94.52           | 10.8         |
| HLCW-50-2                                      | 39.24    | 138   | 94.18         | 13           | 117.72          | 13.3         |
| HLCW-60-2                                      | 48.40    | 170.2 | 116.15        | 18.5         | 145.19          | 18.8         |
| HLCW-20-4                                      | 15.53    | 54.6  | 37.26         | 3            | 46.58           | 3.3          |
| HLCW-24-4                                      | 18.88    | 66.4  | 45.31         | 3.6          | 56.64           | 3.9          |
| HLCW-28-4                                      | 21.16    | 74.4  | 50.77         | 5            | 63.47           | 5.3          |
| HCLW-32-4                                      | 24.79    | 87.2  | 59.51         | 6.4          | 74.38           | 7            |
| HLCW-36-4                                      | 28.09    | 98.8  | 67.42         | 7            | 84.28           | 7.6          |
| HLCW-40-4                                      | 33.10    | 116.4 | 79.43         | 9.4          | 99.29           | 10           |
| HLCW-48-4                                      | 38.10    | 134   | 91.45         | 12.4         | 114.31          | 13           |
| HLCW-52-4                                      | 41.17    | 144.8 | 98.82         | 13.3         | 123.52          | 13.9         |
| HLCW-60-4                                      | 48.79    | 171.6 | 117.10        | 19           | 146.38          | 19.6         |
| HLCW-80-4                                      | 63.01    | 221.6 | 151.23        | 19.8         | 189.03          | 20.4         |
| HLCW-100-4                                     | 78.48    | 276   | 188.35        | 20           | 235.44          | 20.6         |
| HLCW-120-4                                     | 96.79    | 340.4 | 232.30        | 21           | 290.37          | 21.6         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=6,6°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 4.04     | 14.2  | 9.69          | 0.7          | 12.11           | 1            |
| HLCW-6-1                                       | 4.90     | 17.25 | 11.77         | 0.8          | 14.71           | 1.1          |
| HLCW-7-1                                       | 5.50     | 19.35 | 13.20         | 0.8          | 16.51           | 1.1          |
| HCLW-8-1                                       | 6.45     | 22.7  | 15.49         | 0.8          | 19.36           | 1.1          |
| HLCW-9-1                                       | 7.31     | 25.7  | 17.54         | 0.9          | 21.92           | 1.2          |
| HLCW-10-1                                      | 8.59     | 30.2  | 20.61         | 1            | 25.76           | 1.3          |
| HLCW-12-1                                      | 9.90     | 34.8  | 23.75         | 1.1          | 29.69           | 1.4          |
| HLCW-13-1                                      | 10.69    | 37.6  | 25.66         | 1.2          | 32.07           | 1.5          |
| HLCW-15-1                                      | 12.68    | 44.6  | 30.44         | 1.9          | 38.05           | 2.2          |
| HLCW-20-1                                      | 16.38    | 57.6  | 39.31         | 2.6          | 49.13           | 2.9          |
| HLCW-25-1                                      | 20.42    | 71.8  | 49.00         | 3.9          | 61.25           | 4.2          |
| HLCW-30-1                                      | 25.14    | 88.4  | 60.33         | 6.4          | 75.41           | 6.7          |
| HLCW-10-2                                      | 8.08     | 28.4  | 19.38         | 1            | 24.23           | 1.3          |
| HLCW-12-2                                      | 9.81     | 34.5  | 23.54         | 1.1          | 29.43           | 1.4          |
| HLCW-14-2                                      | 11.00    | 38.7  | 26.41         | 1.4          | 33.01           | 1.7          |
| HCLW-16-2                                      | 12.91    | 45.4  | 30.98         | 1.9          | 38.73           | 2.2          |
| HLCW-18-2                                      | 14.62    | 51.4  | 35.08         | 2.4          | 43.85           | 2.7          |
| HLCW-20-2                                      | 17.17    | 60.4  | 41.22         | 2.9          | 51.52           | 3.2          |
| HLCW-24-2                                      | 19.79    | 69.6  | 47.50         | 3.7          | 59.37           | 4            |
| HLCW-26-2                                      | 21.38    | 75.2  | 51.32         | 4.1          | 64.15           | 4.4          |
| HLCW-30-2                                      | 25.36    | 89.2  | 60.87         | 6.5          | 76.09           | 6.7          |
| HLCW-40-2                                      | 32.76    | 115.2 | 78.62         | 10.7         | 98.27           | 10.9         |
| HLCW-50-2                                      | 40.83    | 143.6 | 98.00         | 13.2         | 122.50          | 13.4         |
| HLCW-60-2                                      | 50.27    | 176.8 | 120.65        | 18.7         | 150.82          | 18.9         |
| HLCW-20-4                                      | 16.15    | 56.8  | 38.76         | 3.2          | 48.45           | 3.4          |
| HLCW-24-4                                      | 19.62    | 69    | 47.09         | 3.8          | 58.86           | 3.9          |
| HLCW-28-4                                      | 22.01    | 77.4  | 52.82         | 5.2          | 66.02           | 5.5          |
| HCLW-32-4                                      | 25.82    | 90.8  | 61.96         | 6.6          | 77.46           | 7.2          |
| HLCW-36-4                                      | 29.23    | 102.8 | 70.15         | 7.2          | 87.69           | 7.8          |
| HLCW-40-4                                      | 34.35    | 120.8 | 82.44         | 9.6          | 103.05          | 10.2         |
| HLCW-48-4                                      | 39.58    | 139.2 | 94.99         | 12.6         | 118.74          | 13.2         |
| HLCW-52-4                                      | 42.77    | 150.4 | 102.64        | 13.5         | 128.30          | 14.1         |
| HLCW-60-4                                      | 50.73    | 178.4 | 121.75        | 19.2         | 152.18          | 19.8         |
| HLCW-80-4                                      | 65.51    | 230.4 | 157.23        | 20           | 196.54          | 20.6         |
| HLCW-100-4                                     | 81.66    | 287.2 | 195.99        | 20.2         | 244.99          | 20.8         |
| HLCW-120-4                                     | 100.54   | 353.6 | 241.31        | 21.2         | 301.63          | 21.8         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,2°C      |             |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-5-1                                       | 4.14        | 14.55 | 9.93          | 0.8             | 12.41           | 1.2             |
| HLCW-6-1                                       | 5.00        | 17.6  | 12.01         | 0.9             | 15.01           | 1.3             |
| HLCW-7-1                                       | 5.62        | 19.75 | 13.48         | 0.9             | 16.85           | 1.3             |
| HLCW-8-1                                       | 6.60        | 23.2  | 15.83         | 0.9             | 19.79           | 1.3             |
| HLCW-9-1                                       | 7.45        | 26.2  | 17.88         | 1               | 22.35           | 1.4             |
| HLCW-10-1                                      | 8.79        | 30.9  | 21.09         | 1.1             | 26.36           | 1.5             |
| HLCW-12-1                                      | 10.09       | 35.5  | 24.23         | 1.2             | 30.28           | 1.6             |
| HLCW-13-1                                      | 10.92       | 38.4  | 26.21         | 1.3             | 32.76           | 1.7             |
| HLCW-15-1                                      | 13.05       | 46.6  | 31.32         | 2               | 39.15           | 2.4             |
| HLCW-20-1                                      | 16.72       | 58.8  | 40.13         | 2.7             | 50.16           | 3.1             |
| HLCW-25-1                                      | 20.76       | 73    | 49.82         | 4               | 62.27           | 4.4             |
| HLCW-30-1                                      | 25.65       | 90.2  | 61.56         | 6.5             | 76.94           | 6.9             |
| HLCW-10-2                                      | 8.27        | 29.1  | 19.86         | 1.1             | 24.82           | 1.5             |
| HLCW-12-2                                      | 10.01       | 35.2  | 24.02         | 1.2             | 30.03           | 1.6             |
| HLCW-14-2                                      | 11.23       | 39.5  | 26.96         | 1.5             | 33.69           | 1.9             |
| HLCW-16-2                                      | 13.19       | 46.4  | 31.66         | 2               | 39.58           | 2.4             |
| HLCW-18-2                                      | 14.90       | 52.4  | 35.76         | 2.5             | 44.70           | 2.9             |
| HLCW-20-2                                      | 17.57       | 61.8  | 42.17         | 3               | 52.72           | 3.4             |
| HLCW-24-2                                      | 20.19       | 71    | 48.45         | 3.8             | 60.57           | 4.2             |
| HLCW-26-2                                      | 21.84       | 76.8  | 52.41         | 4.2             | 65.51           | 4.6             |
| HLCW-30-2                                      | 26.50       | 93.2  | 63.60         | 6.6             | 79.50           | 6.9             |
| HLCW-40-2                                      | 33.44       | 117.6 | 80.25         | 10.8            | 100.32          | 11.1            |
| HLCW-50-2                                      | 41.51       | 146   | 99.63         | 13.3            | 124.54          | 13.6            |
| HLCW-60-2                                      | 51.30       | 180.4 | 123.11        | 18.8            | 153.89          | 19.1            |
| HLCW-20-4                                      | 16.55       | 58.2  | 39.72         | 3.3             | 49.65           | 3.6             |
| HLCW-24-4                                      | 20.02       | 70.4  | 48.04         | 3.9             | 60.05           | 4.1             |
| HLCW-28-4                                      | 22.46       | 79    | 53.91         | 5.3             | 67.39           | 5.7             |
| HLCW-32-4                                      | 26.39       | 92.8  | 63.33         | 6.7             | 79.16           | 7.4             |
| HLCW-36-4                                      | 29.80       | 104.8 | 71.52         | 7.3             | 89.40           | 8               |
| HLCW-40-4                                      | 35.15       | 123.6 | 84.35         | 9.7             | 105.44          | 10.4            |
| HLCW-48-4                                      | 40.38       | 142   | 96.90         | 12.7            | 121.13          | 13.4            |
| HLCW-52-4                                      | 43.68       | 153.6 | 104.82        | 13.6            | 131.03          | 14.4            |
| HLCW-60-4                                      | 53.00       | 186.4 | 127.20        | 19.3            | 159.01          | 20.1            |
| HLCW-80-4                                      | 66.88       | 235.2 | 160.51        | 20.1            | 200.63          | 20.9            |
| HLCW-100-4                                     | 83.03       | 292   | 199.27        | 20.3            | 249.09          | 21.1            |
| HLCW-120-4                                     | 102.59      | 360.8 | 246.22        | 21.3            | 307.78          | 22.1            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=25/30°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 4.17     | 14.65 | 10.00         | 0.9          | 12.50           | 1.3          |
| HLCW-6-1                                       | 5.05     | 17.75 | 12.11         | 1            | 15.14           | 1.4          |
| HLCW-7-1                                       | 5.64     | 19.85 | 13.55         | 1            | 16.93           | 1.4          |
| HCLW-8-1                                       | 6.65     | 23.4  | 15.97         | 1            | 19.96           | 1.4          |
| HLCW-9-1                                       | 7.51     | 26.4  | 18.02         | 1.1          | 22.52           | 1.5          |
| HLCW-10-1                                      | 8.84     | 31.1  | 21.22         | 1.2          | 26.53           | 1.6          |
| HLCW-12-1                                      | 10.15    | 35.7  | 24.36         | 1.3          | 30.45           | 1.7          |
| HLCW-13-1                                      | 10.98    | 38.6  | 26.34         | 1.4          | 32.93           | 1.8          |
| HLCW-15-1                                      | 13.25    | 45.9  | 31.80         | 2.1          | 39.75           | 2.5          |
| HLCW-20-1                                      | 16.86    | 59.3  | 40.47         | 2.8          | 50.58           | 3.2          |
| HLCW-25-1                                      | 21.01    | 73.9  | 50.43         | 4.1          | 63.04           | 4.5          |
| HLCW-30-1                                      | 25.82    | 90.8  | 61.96         | 6.6          | 77.46           | 7            |
| HLCW-10-2                                      | 8.33     | 29.3  | 20.00         | 1.2          | 24.99           | 1.6          |
| HLCW-12-2                                      | 10.09    | 35.5  | 24.23         | 1.3          | 30.28           | 1.7          |
| HLCW-14-2                                      | 11.29    | 39.7  | 27.09         | 1.6          | 33.87           | 2            |
| HCLW-16-2                                      | 13.31    | 46.8  | 31.94         | 2.1          | 39.92           | 2.5          |
| HLCW-18-2                                      | 15.01    | 52.8  | 36.03         | 2.6          | 45.04           | 3            |
| HLCW-20-2                                      | 17.69    | 62.2  | 42.45         | 3.1          | 53.06           | 3.5          |
| HLCW-24-2                                      | 20.30    | 71.4  | 48.73         | 3.9          | 60.91           | 4.3          |
| HLCW-26-2                                      | 21.95    | 77.2  | 52.68         | 4.3          | 65.85           | 4.7          |
| HLCW-30-2                                      | 26.10    | 91.8  | 62.65         | 6.7          | 78.31           | 7            |
| HLCW-40-2                                      | 33.72    | 118.6 | 80.94         | 10.9         | 101.17          | 11.2         |
| HLCW-50-2                                      | 42.03    | 147.8 | 100.86        | 13.4         | 126.08          | 13.7         |
| HLCW-60-2                                      | 51.64    | 181.6 | 123.93        | 18.9         | 154.91          | 19.2         |
| HLCW-20-4                                      | 16.66    | 58.6  | 39.99         | 3.4          | 49.99           | 3.7          |
| HLCW-24-4                                      | 20.19    | 71    | 48.45         | 4            | 60.57           | 4.2          |
| HLCW-28-4                                      | 22.58    | 79.4  | 54.18         | 5.4          | 67.73           | 5.8          |
| HCLW-32-4                                      | 26.61    | 93.6  | 63.88         | 6.8          | 79.84           | 7.5          |
| HLCW-36-4                                      | 30.03    | 105.6 | 72.06         | 7.4          | 90.08           | 8.1          |
| HLCW-40-4                                      | 35.37    | 124.4 | 84.89         | 9.8          | 106.12          | 10.5         |
| HLCW-48-4                                      | 40.60    | 142.8 | 97.45         | 12.8         | 121.81          | 13.5         |
| HLCW-52-4                                      | 43.90    | 154.4 | 105.37        | 13.7         | 131.71          | 14.5         |
| HLCW-60-4                                      | 52.21    | 183.6 | 125.29        | 19.4         | 156.62          | 20.2         |
| HLCW-80-4                                      | 67.45    | 237.2 | 161.87        | 20.2         | 202.34          | 21           |
| HLCW-100-4                                     | 84.05    | 295.6 | 201.73        | 20.4         | 252.16          | 21.2         |
| HLCW-120-4                                     | 103.27   | 363.2 | 247.86        | 21.4         | 309.82          | 22.2         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.= 5,5°C     |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 3.81     | 13.4  | 9.14          | 0.5          | 11.43           | 0.8          |
| HLCW-6-1                                       | 4.63     | 16.3  | 11.12         | 0.6          | 13.90           | 0.9          |
| HLCW-7-1                                       | 5.20     | 18.3  | 12.49         | 0.6          | 15.61           | 0.9          |
| HCLW-8-1                                       | 6.08     | 21.4  | 14.60         | 0.6          | 18.25           | 0.9          |
| HLCW-9-1                                       | 6.91     | 24.3  | 16.58         | 0.7          | 20.73           | 1            |
| HLCW-10-1                                      | 8.13     | 28.6  | 19.52         | 0.8          | 24.40           | 1.1          |
| HLCW-12-1                                      | 9.35     | 32.9  | 22.45         | 0.9          | 28.06           | 1.2          |
| HLCW-13-1                                      | 10.09    | 35.5  | 24.23         | 1            | 30.28           | 1.3          |
| HLCW-15-1                                      | 11.97    | 42.1  | 28.73         | 1.7          | 35.91           | 2            |
| HLCW-20-1                                      | 15.47    | 54.4  | 37.12         | 2.4          | 46.41           | 2.7          |
| HLCW-25-1                                      | 19.28    | 67.8  | 46.27         | 3.7          | 57.84           | 4            |
| HLCW-30-1                                      | 23.83    | 83.8  | 57.19         | 6.2          | 71.48           | 6.5          |
| HLCW-10-2                                      | 7.62     | 26.8  | 18.29         | 0.8          | 22.86           | 1.1          |
| HLCW-12-2                                      | 9.27     | 32.6  | 22.25         | 0.9          | 27.81           | 1.2          |
| HLCW-14-2                                      | 10.41    | 36.6  | 24.98         | 1.2          | 31.22           | 1.5          |
| HCLW-16-2                                      | 12.17    | 42.8  | 29.21         | 1.7          | 36.51           | 2            |
| HLCW-18-2                                      | 13.82    | 48.6  | 33.17         | 2.2          | 41.46           | 2.5          |
| HLCW-20-2                                      | 16.26    | 57.2  | 39.03         | 2.7          | 48.79           | 3            |
| HLCW-24-2                                      | 18.71    | 65.8  | 44.90         | 3.5          | 56.13           | 3.8          |
| HLCW-26-2                                      | 20.19    | 71    | 48.45         | 3.9          | 60.57           | 4.1          |
| HLCW-30-2                                      | 23.94    | 84.2  | 57.46         | 6.2          | 71.83           | 6.2          |
| HLCW-40-2                                      | 30.94    | 108.8 | 74.25         | 10.4         | 92.81           | 10.4         |
| HLCW-50-2                                      | 38.56    | 135.6 | 92.54         | 12.9         | 115.67          | 12.9         |
| HLCW-60-2                                      | 47.66    | 167.6 | 114.37        | 18.4         | 142.97          | 18.4         |
| HLCW-20-4                                      | 15.24    | 53.6  | 36.58         | 2.9          | 45.72           | 2.9          |
| HLCW-24-4                                      | 18.54    | 65.2  | 44.49         | 3.5          | 55.62           | 3.5          |
| HLCW-28-4                                      | 20.81    | 73.2  | 49.95         | 4.7          | 62.44           | 4.9          |
| HCLW-32-4                                      | 24.34    | 85.6  | 58.42         | 6.1          | 73.02           | 6.3          |
| HLCW-36-4                                      | 27.64    | 97.2  | 66.33         | 6.7          | 82.92           | 7.2          |
| HLCW-40-4                                      | 32.53    | 114.4 | 78.07         | 9.1          | 97.59           | 9.6          |
| HLCW-48-4                                      | 37.42    | 131.6 | 89.81         | 12.1         | 112.26          | 12.6         |
| HLCW-52-4                                      | 40.38    | 142   | 96.90         | 12.4         | 121.13          | 13.5         |
| HLCW-60-4                                      | 47.88    | 168.4 | 114.92        | 18.1         | 143.65          | 19.2         |
| HLCW-80-4                                      | 61.87    | 217.6 | 148.50        | 18.9         | 185.62          | 20           |
| HLCW-100-4                                     | 77.11    | 271.2 | 185.07        | 19.1         | 231.34          | 20.2         |
| HLCW-120-4                                     | 95.31    | 335.2 | 228.75        | 20.1         | 285.94          | 21.2         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 3.97     | 13.95 | 9.52          | 0.6          | 11.90           | 0.9          |
| HLCW-6-1                                       | 4.82     | 16.95 | 11.57         | 0.7          | 14.46           | 1            |
| HLCW-7-1                                       | 5.42     | 19.05 | 13.00         | 0.7          | 16.25           | 1            |
| HCLW-8-1                                       | 6.34     | 22.3  | 15.22         | 0.7          | 19.02           | 1            |
| HLCW-9-1                                       | 7.17     | 25.2  | 17.20         | 0.8          | 21.50           | 1.1          |
| HLCW-10-1                                      | 8.45     | 29.7  | 20.27         | 0.9          | 25.34           | 1.2          |
| HLCW-12-1                                      | 9.67     | 34    | 23.20         | 1            | 29.00           | 1.3          |
| HLCW-13-1                                      | 10.49    | 36.9  | 25.18         | 1.1          | 31.48           | 1.4          |
| HLCW-15-1                                      | 12.45    | 43.8  | 29.89         | 1.8          | 37.36           | 2.1          |
| HLCW-20-1                                      | 16.09    | 56.6  | 38.63         | 2.5          | 48.28           | 2.8          |
| HLCW-25-1                                      | 20.07    | 70.6  | 48.18         | 3.8          | 60.22           | 4.1          |
| HLCW-30-1                                      | 24.74    | 87    | 59.37         | 6.3          | 74.21           | 6.6          |
| HLCW-10-2                                      | 7.93     | 27.9  | 19.04         | 0.9          | 23.80           | 1.2          |
| HLCW-12-2                                      | 9.64     | 33.9  | 23.13         | 1            | 28.92           | 1.3          |
| HLCW-14-2                                      | 10.83    | 38.1  | 26.00         | 1.3          | 32.50           | 1.6          |
| HCLW-16-2                                      | 12.68    | 44.6  | 30.44         | 1.8          | 38.05           | 2.1          |
| HLCW-18-2                                      | 14.33    | 50.4  | 34.39         | 2.3          | 42.99           | 2.6          |
| HLCW-20-2                                      | 16.89    | 59.4  | 40.54         | 2.8          | 50.67           | 3.1          |
| HLCW-24-2                                      | 19.34    | 68    | 46.41         | 3.6          | 58.01           | 3.9          |
| HLCW-26-2                                      | 20.98    | 73.8  | 50.36         | 4            | 62.95           | 4.2          |
| HLCW-30-2                                      | 24.91    | 87.6  | 59.78         | 6.4          | 74.73           | 6.3          |
| HLCW-40-2                                      | 32.19    | 113.2 | 77.25         | 10.6         | 96.56           | 10.5         |
| HLCW-50-2                                      | 40.15    | 141.2 | 96.36         | 13.1         | 120.45          | 13           |
| HLCW-60-2                                      | 49.48    | 174   | 118.74        | 18.6         | 148.43          | 18.5         |
| HLCW-20-4                                      | 15.87    | 55.8  | 38.08         | 3.1          | 47.60           | 3            |
| HLCW-24-4                                      | 19.28    | 67.8  | 46.27         | 3.7          | 57.84           | 3.6          |
| HLCW-28-4                                      | 21.67    | 76.2  | 52.00         | 4.9          | 65.00           | 5.1          |
| HCLW-32-4                                      | 25.36    | 89.2  | 60.87         | 6.3          | 76.09           | 6.5          |
| HLCW-36-4                                      | 28.66    | 100.8 | 68.79         | 6.9          | 85.99           | 7.4          |
| HLCW-40-4                                      | 33.78    | 118.8 | 81.07         | 9.3          | 101.34          | 9.8          |
| HLCW-48-4                                      | 38.67    | 136   | 92.81         | 12.5         | 116.01          | 12.8         |
| HLCW-52-4                                      | 41.97    | 147.6 | 100.73        | 12.8         | 125.91          | 13.7         |
| HLCW-60-4                                      | 49.82    | 175.2 | 119.56        | 18.5         | 149.45          | 19.4         |
| HLCW-80-4                                      | 64.38    | 226.4 | 154.50        | 19.3         | 193.13          | 20.2         |
| HLCW-100-4                                     | 80.30    | 282.4 | 192.72        | 19.5         | 240.90          | 20.4         |
| HLCW-120-4                                     | 98.95    | 348   | 237.48        | 20.5         | 296.86          | 21.4         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,2°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 4.05     | 14.25 | 9.72          | 0.7          | 12.16           | 1            |
| HLCW-6-1                                       | 4.92     | 17.3  | 11.81         | 0.8          | 14.76           | 1.1          |
| HLCW-7-1                                       | 5.53     | 19.45 | 13.27         | 0.8          | 16.59           | 1.1          |
| HCLW-8-1                                       | 6.48     | 22.8  | 15.56         | 0.8          | 19.45           | 1.1          |
| HLCW-9-1                                       | 7.34     | 25.8  | 17.61         | 0.9          | 22.01           | 1.2          |
| HLCW-10-1                                      | 8.62     | 30.3  | 20.68         | 1            | 25.85           | 1.3          |
| HLCW-12-1                                      | 9.92     | 34.9  | 23.82         | 1.1          | 29.77           | 1.4          |
| HLCW-13-1                                      | 10.72    | 37.7  | 25.73         | 1.2          | 32.16           | 1.5          |
| HLCW-15-1                                      | 12.71    | 44.7  | 30.50         | 1.9          | 38.13           | 2.2          |
| HLCW-20-1                                      | 16.44    | 57.8  | 39.44         | 2.6          | 49.31           | 2.9          |
| HLCW-25-1                                      | 20.53    | 72.2  | 49.27         | 3.9          | 61.59           | 4.2          |
| HLCW-30-1                                      | 25.25    | 88.8  | 60.60         | 6.4          | 75.75           | 6.7          |
| HLCW-10-2                                      | 8.10     | 28.5  | 19.45         | 1            | 24.31           | 1.3          |
| HLCW-12-2                                      | 9.84     | 34.6  | 23.61         | 1.1          | 29.52           | 1.4          |
| HLCW-14-2                                      | 11.06    | 38.9  | 26.55         | 1.4          | 33.18           | 1.7          |
| HCLW-16-2                                      | 12.97    | 45.6  | 31.12         | 1.9          | 38.90           | 2.2          |
| HLCW-18-2                                      | 14.67    | 51.6  | 35.21         | 2.4          | 44.02           | 2.7          |
| HLCW-20-2                                      | 17.23    | 60.6  | 41.36         | 2.9          | 51.69           | 3.2          |
| HLCW-24-2                                      | 19.85    | 69.8  | 47.63         | 3.7          | 59.54           | 4            |
| HLCW-26-2                                      | 21.44    | 75.4  | 51.46         | 4.1          | 64.32           | 4.3          |
| HLCW-30-2                                      | 25.42    | 89.4  | 61.01         | 6.5          | 76.26           | 6.4          |
| HLCW-40-2                                      | 32.87    | 115.6 | 78.89         | 10.7         | 98.61           | 10.6         |
| HLCW-50-2                                      | 41.06    | 144.4 | 98.54         | 13.3         | 123.18          | 13.1         |
| HLCW-60-2                                      | 50.50    | 177.6 | 121.20        | 18.8         | 151.50          | 18.6         |
| HLCW-20-4                                      | 16.21    | 57    | 38.90         | 3.3          | 48.62           | 3.1          |
| HLCW-24-4                                      | 19.68    | 69.2  | 47.22         | 3.9          | 59.03           | 3.7          |
| HLCW-28-4                                      | 22.12    | 77.8  | 53.09         | 5.1          | 66.37           | 5.2          |
| HCLW-32-4                                      | 25.93    | 91.2  | 62.24         | 6.5          | 77.80           | 6.6          |
| HLCW-36-4                                      | 29.34    | 103.2 | 70.43         | 7.1          | 88.03           | 7.5          |
| HLCW-40-4                                      | 34.46    | 121.2 | 82.71         | 9.5          | 103.39          | 9.9          |
| HLCW-48-4                                      | 39.69    | 139.6 | 95.27         | 12.7         | 119.08          | 12.9         |
| HLCW-52-4                                      | 42.88    | 150.8 | 102.91        | 13           | 128.64          | 13.8         |
| HLCW-60-4                                      | 50.84    | 178.8 | 122.02        | 18.7         | 152.52          | 19.5         |
| HLCW-80-4                                      | 65.74    | 231.2 | 157.78        | 19.5         | 197.22          | 20.3         |
| HLCW-100-4                                     | 82.12    | 288.8 | 197.09        | 19.7         | 246.36          | 20.5         |
| HLCW-120-4                                     | 101.00   | 355.2 | 242.40        | 20.7         | 303.00          | 21.5         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=27/32°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,4°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 4.08     | 14.35 | 9.79          | 0.8          | 12.24           | 1.2          |
| HLCW-6-1                                       | 4.96     | 17.45 | 11.91         | 0.9          | 14.89           | 1.3          |
| HLCW-7-1                                       | 5.56     | 19.55 | 13.34         | 0.9          | 16.68           | 1.3          |
| HCLW-8-1                                       | 6.54     | 23    | 15.70         | 0.9          | 19.62           | 1.3          |
| HLCW-9-1                                       | 7.36     | 25.9  | 17.67         | 1            | 22.09           | 1.4          |
| HLCW-10-1                                      | 8.67     | 30.5  | 20.81         | 1.1          | 26.02           | 1.5          |
| HLCW-12-1                                      | 9.98     | 35.1  | 23.95         | 1.2          | 29.94           | 1.6          |
| HLCW-13-1                                      | 10.81    | 38    | 25.93         | 1.3          | 32.42           | 1.7          |
| HLCW-15-1                                      | 12.82    | 45.1  | 30.78         | 2            | 38.47           | 2.4          |
| HLCW-20-1                                      | 16.55    | 58.2  | 39.72         | 2.7          | 49.65           | 3.1          |
| HLCW-25-1                                      | 20.67    | 72.7  | 49.61         | 4            | 62.02           | 4.4          |
| HLCW-30-1                                      | 25.42    | 89.4  | 61.01         | 6.5          | 76.26           | 6.9          |
| HLCW-10-2                                      | 8.16     | 28.7  | 19.59         | 1.1          | 24.48           | 1.5          |
| HLCW-12-2                                      | 9.92     | 34.9  | 23.82         | 1.2          | 29.77           | 1.6          |
| HLCW-14-2                                      | 11.12    | 39.1  | 26.68         | 1.5          | 33.35           | 1.9          |
| HCLW-16-2                                      | 13.08    | 46    | 31.39         | 2            | 39.24           | 2.4          |
| HLCW-18-2                                      | 14.73    | 51.8  | 35.35         | 2.5          | 44.19           | 2.9          |
| HLCW-20-2                                      | 17.35    | 61    | 41.63         | 3            | 52.04           | 3.4          |
| HLCW-24-2                                      | 19.96    | 70.2  | 47.91         | 3.8          | 59.88           | 4.2          |
| HLCW-26-2                                      | 21.61    | 76    | 51.86         | 4.2          | 64.83           | 4.5          |
| HLCW-30-2                                      | 25.65    | 90.2  | 61.56         | 6.6          | 76.94           | 6.6          |
| HLCW-40-2                                      | 33.10    | 116.4 | 79.43         | 10.8         | 99.29           | 10.8         |
| HLCW-50-2                                      | 41.34    | 145.4 | 99.23         | 13.4         | 124.03          | 13.3         |
| HLCW-60-2                                      | 50.84    | 178.8 | 122.02        | 18.9         | 152.52          | 18.8         |
| HLCW-20-4                                      | 16.32    | 57.4  | 39.17         | 3.5          | 48.96           | 3.3          |
| HLCW-24-4                                      | 19.85    | 69.8  | 47.63         | 4.1          | 59.54           | 3.9          |
| HLCW-28-4                                      | 22.24    | 78.2  | 53.37         | 5.3          | 66.71           | 5.4          |
| HCLW-32-4                                      | 26.16    | 92    | 62.78         | 6.7          | 78.48           | 6.8          |
| HLCW-36-4                                      | 29.46    | 103.6 | 70.70         | 7.3          | 88.37           | 7.7          |
| HLCW-40-4                                      | 34.69    | 122   | 83.26         | 9.7          | 104.07          | 10.1         |
| HLCW-48-4                                      | 39.92    | 140.4 | 95.81         | 12.9         | 119.77          | 13.1         |
| HLCW-52-4                                      | 43.22    | 152   | 103.73        | 13.2         | 129.66          | 14           |
| HLCW-60-4                                      | 51.30    | 180.4 | 123.11        | 18.9         | 153.89          | 19.7         |
| HLCW-80-4                                      | 66.20    | 232.8 | 158.87        | 19.7         | 198.59          | 20.5         |
| HLCW-100-4                                     | 82.69    | 290.8 | 198.45        | 19.9         | 248.06          | 20.7         |
| HLCW-120-4                                     | 101.68   | 357.6 | 244.04        | 20.9         | 305.05          | 21.7         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.= 5,5°C     |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 3.68     | 12.95 | 8.84          | 0.5          | 11.05           | 0.7          |
| HLCW-6-1                                       | 4.51     | 15.85 | 10.82         | 0.6          | 13.52           | 0.8          |
| HLCW-7-1                                       | 5.06     | 17.8  | 12.15         | 0.6          | 15.18           | 0.8          |
| HCLW-8-1                                       | 5.91     | 20.8  | 14.19         | 0.6          | 17.74           | 0.8          |
| HLCW-9-1                                       | 6.71     | 23.6  | 16.11         | 0.7          | 20.13           | 0.9          |
| HLCW-10-1                                      | 7.90     | 27.8  | 18.97         | 0.8          | 23.71           | 1            |
| HLCW-12-1                                      | 9.10     | 32    | 21.84         | 0.9          | 27.30           | 1.1          |
| HLCW-13-1                                      | 9.81     | 34.5  | 23.54         | 1            | 29.43           | 1.2          |
| HLCW-15-1                                      | 11.60    | 40.8  | 27.84         | 1.7          | 34.80           | 1.9          |
| HLCW-20-1                                      | 15.07    | 53    | 36.17         | 2.4          | 45.21           | 2.6          |
| HLCW-25-1                                      | 18.74    | 65.9  | 44.97         | 3.6          | 56.22           | 3.9          |
| HLCW-30-1                                      | 23.26    | 81.8  | 55.82         | 6.1          | 69.78           | 6.4          |
| HLCW-10-2                                      | 7.36     | 25.9  | 17.67         | 0.7          | 22.09           | 0.9          |
| HLCW-12-2                                      | 9.01     | 31.7  | 21.63         | 0.8          | 27.04           | 1            |
| HLCW-14-2                                      | 10.12    | 35.6  | 24.29         | 1.1          | 30.37           | 1.3          |
| HCLW-16-2                                      | 11.83    | 41.6  | 28.39         | 1.6          | 35.49           | 1.8          |
| HLCW-18-2                                      | 13.42    | 47.2  | 32.21         | 2.1          | 40.26           | 2.3          |
| HLCW-20-2                                      | 15.81    | 55.6  | 37.94         | 2.6          | 47.43           | 2.8          |
| HLCW-24-2                                      | 18.20    | 64    | 43.68         | 3.4          | 54.59           | 3.6          |
| HLCW-26-2                                      | 19.62    | 69    | 47.09         | 3.8          | 58.86           | 3.9          |
| HLCW-30-2                                      | 23.20    | 81.6  | 55.69         | 6.1          | 69.61           | 6            |
| HLCW-40-2                                      | 30.14    | 106   | 72.34         | 10.3         | 90.42           | 10.2         |
| HLCW-50-2                                      | 37.48    | 131.8 | 89.94         | 12.8         | 112.43          | 12.6         |
| HLCW-60-2                                      | 46.52    | 163.6 | 111.65        | 18.3         | 139.56          | 18.3         |
| HLCW-20-4                                      | 14.73    | 51.8  | 35.35         | 2.8          | 44.19           | 2.8          |
| HLCW-24-4                                      | 18.03    | 63.4  | 43.27         | 3.2          | 54.08           | 3.4          |
| HLCW-28-4                                      | 20.25    | 71.2  | 48.59         | 4.4          | 60.74           | 4.6          |
| HCLW-32-4                                      | 23.66    | 83.2  | 56.78         | 5.8          | 70.97           | 6            |
| HLCW-36-4                                      | 26.84    | 94.4  | 64.42         | 6.4          | 80.53           | 6.6          |
| HLCW-40-4                                      | 31.62    | 111.2 | 75.89         | 8.8          | 94.86           | 9            |
| HLCW-48-4                                      | 36.40    | 128   | 87.35         | 11.8         | 109.19          | 12           |
| HLCW-52-4                                      | 39.24    | 138   | 94.18         | 12.1         | 117.72          | 12.3         |
| HLCW-60-4                                      | 46.41    | 163.2 | 111.37        | 17.8         | 139.22          | 18           |
| HLCW-80-4                                      | 60.28    | 212   | 144.67        | 18.6         | 180.84          | 18.8         |
| HLCW-100-4                                     | 74.95    | 263.6 | 179.89        | 18.8         | 224.86          | 19           |
| HLCW-120-4                                     | 93.04    | 327.2 | 223.29        | 19.8         | 279.11          | 20           |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=6,6°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 3.84     | 13.5  | 9.21          | 0.7          | 11.52           | 0.8          |
| HLCW-6-1                                       | 4.69     | 16.5  | 11.26         | 0.8          | 14.08           | 0.9          |
| HLCW-7-1                                       | 5.27     | 18.55 | 12.66         | 0.8          | 15.82           | 0.9          |
| HCLW-8-1                                       | 6.17     | 21.7  | 14.81         | 0.8          | 18.51           | 0.9          |
| HLCW-9-1                                       | 6.97     | 24.5  | 16.72         | 0.9          | 20.90           | 1            |
| HLCW-10-1                                      | 8.22     | 28.9  | 19.72         | 1            | 24.65           | 1.1          |
| HLCW-12-1                                      | 9.44     | 33.2  | 22.66         | 1.1          | 28.32           | 1.2          |
| HLCW-13-1                                      | 10.21    | 35.9  | 24.50         | 1.2          | 30.62           | 1.3          |
| HLCW-15-1                                      | 12.08    | 42.5  | 29.00         | 1.9          | 36.25           | 2            |
| HLCW-20-1                                      | 15.64    | 55    | 37.53         | 2.6          | 46.92           | 2.7          |
| HLCW-25-1                                      | 19.53    | 68.7  | 46.88         | 3.8          | 58.60           | 4            |
| HLCW-30-1                                      | 24.14    | 84.9  | 57.94         | 6.3          | 72.42           | 6.5          |
| HLCW-10-2                                      | 7.68     | 27    | 18.43         | 0.9          | 23.03           | 1            |
| HLCW-12-2                                      | 9.38     | 33    | 22.52         | 1            | 28.15           | 1.1          |
| HLCW-14-2                                      | 10.55    | 37.1  | 25.32         | 1.3          | 31.65           | 1.4          |
| HCLW-16-2                                      | 12.34    | 43.4  | 29.62         | 1.8          | 37.02           | 1.9          |
| HLCW-18-2                                      | 13.93    | 49    | 33.44         | 2.3          | 41.80           | 2.4          |
| HLCW-20-2                                      | 16.44    | 57.8  | 39.44         | 2.8          | 49.31           | 2.9          |
| HLCW-24-2                                      | 18.88    | 66.4  | 45.31         | 3.6          | 56.64           | 3.7          |
| HLCW-26-2                                      | 20.42    | 71.8  | 49.00         | 4            | 61.25           | 4            |
| HLCW-30-2                                      | 24.17    | 85    | 58.01         | 6.3          | 72.51           | 6.1          |
| HLCW-40-2                                      | 31.28    | 110   | 75.07         | 10.5         | 93.83           | 10.3         |
| HLCW-50-2                                      | 39.07    | 137.4 | 93.77         | 13           | 117.21          | 12.7         |
| HLCW-60-2                                      | 48.28    | 169.8 | 115.88        | 18.5         | 144.85          | 18.4         |
| HLCW-20-4                                      | 15.35    | 54    | 36.85         | 3            | 46.06           | 2.9          |
| HLCW-24-4                                      | 18.77    | 66    | 45.04         | 3.4          | 56.30           | 3.5          |
| HLCW-28-4                                      | 21.10    | 74.2  | 50.64         | 4.6          | 63.30           | 4.7          |
| HCLW-32-4                                      | 24.68    | 86.8  | 59.23         | 6            | 74.04           | 6.1          |
| HLCW-36-4                                      | 27.87    | 98    | 66.88         | 6.6          | 83.60           | 6.7          |
| HLCW-40-4                                      | 32.87    | 115.6 | 78.89         | 9            | 98.61           | 9.1          |
| HLCW-48-4                                      | 37.76    | 132.8 | 90.63         | 12           | 113.28          | 12.1         |
| HLCW-52-4                                      | 40.83    | 143.6 | 98.00         | 12.3         | 122.50          | 12.4         |
| HLCW-60-4                                      | 48.34    | 170   | 116.01        | 18           | 145.02          | 18.1         |
| HLCW-80-4                                      | 62.56    | 220   | 150.13        | 18.8         | 187.67          | 18.9         |
| HLCW-100-4                                     | 78.14    | 274.8 | 187.53        | 19           | 234.41          | 19.1         |
| HLCW-120-4                                     | 96.56    | 339.6 | 231.75        | 20           | 289.69          | 20.1         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,2°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 3.94     | 13.85 | 9.45          | 0.8          | 11.81           | 0.9          |
| HLCW-6-1                                       | 4.79     | 16.85 | 11.50         | 0.9          | 14.37           | 1            |
| HLCW-7-1                                       | 5.39     | 18.95 | 12.93         | 0.9          | 16.17           | 1            |
| HCLW-8-1                                       | 6.31     | 22.2  | 15.15         | 0.9          | 18.94           | 1            |
| HLCW-9-1                                       | 7.14     | 25.1  | 17.13         | 1            | 21.41           | 1.1          |
| HLCW-10-1                                      | 8.39     | 29.5  | 20.13         | 1.1          | 25.16           | 1.2          |
| HLCW-12-1                                      | 9.64     | 33.9  | 23.13         | 1.2          | 28.92           | 1.3          |
| HLCW-13-1                                      | 10.44    | 36.7  | 25.05         | 1.3          | 31.31           | 1.4          |
| HLCW-15-1                                      | 12.37    | 43.5  | 29.69         | 2            | 37.11           | 2.1          |
| HLCW-20-1                                      | 16.01    | 56.3  | 38.42         | 2.7          | 48.03           | 2.8          |
| HLCW-25-1                                      | 19.96    | 70.2  | 47.91         | 3.9          | 59.88           | 4.1          |
| HLCW-30-1                                      | 24.65    | 86.7  | 59.17         | 6.4          | 73.96           | 6.6          |
| HLCW-10-2                                      | 7.88     | 27.7  | 18.90         | 1            | 23.63           | 1.1          |
| HLCW-12-2                                      | 9.58     | 33.7  | 23.00         | 1.1          | 28.75           | 1.2          |
| HLCW-14-2                                      | 10.78    | 37.9  | 25.86         | 1.4          | 32.33           | 1.5          |
| HCLW-16-2                                      | 12.62    | 44.4  | 30.30         | 1.9          | 37.87           | 2            |
| HLCW-18-2                                      | 14.27    | 50.2  | 34.26         | 2.4          | 42.82           | 2.5          |
| HLCW-20-2                                      | 16.78    | 59    | 40.26         | 2.9          | 50.33           | 3            |
| HLCW-24-2                                      | 19.28    | 67.8  | 46.27         | 3.7          | 57.84           | 3.8          |
| HLCW-26-2                                      | 20.87    | 73.4  | 50.09         | 4.1          | 62.61           | 4.1          |
| HLCW-30-2                                      | 24.74    | 87    | 59.37         | 6.4          | 74.21           | 6.2          |
| HLCW-40-2                                      | 32.02    | 112.6 | 76.84         | 10.6         | 96.05           | 10.4         |
| HLCW-50-2                                      | 39.92    | 140.4 | 95.81         | 13.1         | 119.77          | 12.8         |
| HLCW-60-2                                      | 49.31    | 173.4 | 118.33        | 18.6         | 147.92          | 18.5         |
| HLCW-20-4                                      | 15.75    | 55.4  | 37.81         | 3.1          | 47.26           | 3            |
| HLCW-24-4                                      | 19.16    | 67.4  | 46.00         | 3.5          | 57.49           | 3.6          |
| HLCW-28-4                                      | 21.55    | 75.8  | 51.73         | 4.7          | 64.66           | 4.8          |
| HCLW-32-4                                      | 25.25    | 88.8  | 60.60         | 6.1          | 75.75           | 6.2          |
| HLCW-36-4                                      | 28.55    | 100.4 | 68.52         | 6.7          | 85.64           | 6.8          |
| HLCW-40-4                                      | 33.55    | 118   | 80.53         | 9.1          | 100.66          | 9.2          |
| HLCW-48-4                                      | 38.56    | 135.6 | 92.54         | 12.1         | 115.67          | 12.2         |
| HLCW-52-4                                      | 41.74    | 146.8 | 100.18        | 12.4         | 125.23          | 12.5         |
| HLCW-60-4                                      | 49.48    | 174   | 118.74        | 18.1         | 148.43          | 18.2         |
| HLCW-80-4                                      | 64.03    | 225.2 | 153.68        | 18.9         | 192.10          | 19           |
| HLCW-100-4                                     | 79.84    | 280.8 | 191.63        | 19.1         | 239.53          | 19.2         |
| HLCW-120-4                                     | 98.61    | 346.8 | 236.67        | 20.1         | 295.83          | 20.2         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=30/35°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,4°C      |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 3.97     | 13.95 | 9.52          | 0.9          | 11.90           | 1            |
| HLCW-6-1                                       | 4.82     | 16.95 | 11.57         | 1            | 14.46           | 1.1          |
| HLCW-7-1                                       | 5.42     | 19.05 | 13.00         | 1            | 16.25           | 1.1          |
| HCLW-8-1                                       | 6.34     | 22.3  | 15.22         | 1            | 19.02           | 1.1          |
| HLCW-9-1                                       | 7.17     | 25.2  | 17.20         | 1.1          | 21.50           | 1.2          |
| HLCW-10-1                                      | 8.45     | 29.7  | 20.27         | 1.2          | 25.34           | 1.3          |
| HLCW-12-1                                      | 9.72     | 34.2  | 23.34         | 1.3          | 29.17           | 1.4          |
| HLCW-13-1                                      | 10.49    | 36.9  | 25.18         | 1.4          | 31.48           | 1.5          |
| HLCW-15-1                                      | 12.45    | 43.8  | 29.89         | 2.1          | 37.36           | 2.2          |
| HLCW-20-1                                      | 16.12    | 56.7  | 38.69         | 2.8          | 48.37           | 2.9          |
| HLCW-25-1                                      | 20.10    | 70.7  | 48.25         | 4            | 60.31           | 4.2          |
| HLCW-30-1                                      | 24.82    | 87.3  | 59.58         | 6.5          | 74.47           | 6.7          |
| HLCW-10-2                                      | 7.93     | 27.9  | 19.04         | 1.1          | 23.80           | 1.2          |
| HLCW-12-2                                      | 9.64     | 33.9  | 23.13         | 1.2          | 28.92           | 1.3          |
| HLCW-14-2                                      | 10.83    | 38.1  | 26.00         | 1.5          | 32.50           | 1.6          |
| HCLW-16-2                                      | 12.68    | 44.6  | 30.44         | 2            | 38.05           | 2.1          |
| HLCW-18-2                                      | 14.33    | 50.4  | 34.39         | 2.5          | 42.99           | 2.6          |
| HLCW-20-2                                      | 16.89    | 59.4  | 40.54         | 3            | 50.67           | 3.1          |
| HLCW-24-2                                      | 19.45    | 68.4  | 46.68         | 3.8          | 58.35           | 3.9          |
| HLCW-26-2                                      | 20.98    | 73.8  | 50.36         | 4.2          | 62.95           | 4.2          |
| HLCW-30-2                                      | 24.91    | 87.6  | 59.78         | 6.5          | 74.73           | 6.3          |
| HLCW-40-2                                      | 32.24    | 113.4 | 77.39         | 10.7         | 96.73           | 10.5         |
| HLCW-50-2                                      | 40.21    | 141.4 | 96.50         | 13.2         | 120.62          | 13           |
| HLCW-60-2                                      | 49.65    | 174.6 | 119.15        | 18.7         | 148.94          | 18.7         |
| HLCW-20-4                                      | 15.87    | 55.8  | 38.08         | 3.2          | 47.60           | 3.2          |
| HLCW-24-4                                      | 19.28    | 67.8  | 46.27         | 3.6          | 57.84           | 3.8          |
| HLCW-28-4                                      | 21.67    | 76.2  | 52.00         | 4.8          | 65.00           | 5            |
| HCLW-32-4                                      | 25.36    | 89.2  | 60.87         | 6.2          | 76.09           | 6.4          |
| HLCW-36-4                                      | 28.66    | 100.8 | 68.79         | 6.8          | 85.99           | 7            |
| HLCW-40-4                                      | 33.78    | 118.8 | 81.07         | 9.2          | 101.34          | 9.4          |
| HLCW-48-4                                      | 38.90    | 136.8 | 93.36         | 12.2         | 116.70          | 12.4         |
| HLCW-52-4                                      | 41.97    | 147.6 | 100.73        | 12.5         | 125.91          | 12.7         |
| HLCW-60-4                                      | 49.82    | 175.2 | 119.56        | 18.2         | 149.45          | 18.4         |
| HLCW-80-4                                      | 64.49    | 226.8 | 154.77        | 19           | 193.47          | 19.2         |
| HLCW-100-4                                     | 80.41    | 282.8 | 192.99        | 19.2         | 241.24          | 19.4         |
| HLCW-120-4                                     | 99.29    | 349.2 | 238.30        | 20.2         | 297.88          | 20.4         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.= 5,5°C     |          |       |               |              |                 |              |
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 3.57     | 12.55 | 8.56          | 0.5          | 10.71           | 0.6          |
| HLCW-6-1                                       | 4.38     | 15.4  | 10.51         | 0.6          | 13.14           | 0.7          |
| HLCW-7-1                                       | 4.92     | 17.3  | 11.81         | 0.6          | 14.76           | 0.7          |
| HCLW-8-1                                       | 5.74     | 20.2  | 13.79         | 0.6          | 17.23           | 0.7          |
| HLCW-9-1                                       | 6.51     | 22.9  | 15.63         | 0.7          | 19.53           | 0.8          |
| HLCW-10-1                                      | 7.68     | 27    | 18.43         | 0.8          | 23.03           | 0.9          |
| HLCW-12-1                                      | 8.81     | 31    | 21.16         | 0.9          | 26.44           | 1            |
| HLCW-13-1                                      | 9.50     | 33.4  | 22.79         | 1            | 28.49           | 1.1          |
| HLCW-15-1                                      | 11.23    | 39.5  | 26.96         | 1.7          | 33.69           | 1.8          |
| HLCW-20-1                                      | 14.67    | 51.6  | 35.21         | 2.4          | 44.02           | 2.5          |
| HLCW-25-1                                      | 18.17    | 63.9  | 43.61         | 3.5          | 54.51           | 3.8          |
| HLCW-30-1                                      | 22.63    | 79.6  | 54.32         | 6            | 67.90           | 6.3          |
| HLCW-10-2                                      | 7.14     | 25.1  | 17.13         | 0.6          | 21.41           | 0.8          |
| HLCW-12-2                                      | 8.76     | 30.8  | 21.02         | 0.7          | 26.27           | 0.9          |
| HLCW-14-2                                      | 9.84     | 34.6  | 23.61         | 1            | 29.52           | 1.2          |
| HCLW-16-2                                      | 11.49    | 40.4  | 27.57         | 1.5          | 34.46           | 1.7          |
| HLCW-18-2                                      | 13.02    | 45.8  | 31.26         | 2            | 39.07           | 2.2          |
| HLCW-20-2                                      | 15.35    | 54    | 36.85         | 2.5          | 46.06           | 2.7          |
| HLCW-24-2                                      | 17.63    | 62    | 42.31         | 3.3          | 52.89           | 3.5          |
| HLCW-26-2                                      | 18.99    | 66.8  | 45.59         | 3.7          | 56.98           | 3.8          |
| HLCW-30-2                                      | 22.46    | 79    | 53.91         | 5.9          | 67.39           | 5.9          |
| HLCW-40-2                                      | 29.34    | 103.2 | 70.43         | 10.1         | 88.03           | 10.1         |
| HLCW-50-2                                      | 36.34    | 127.8 | 87.21         | 12.6         | 109.02          | 12.5         |
| HLCW-60-2                                      | 45.27    | 159.2 | 108.64        | 18.1         | 135.80          | 18.2         |
| HLCW-20-4                                      | 14.27    | 50.2  | 34.26         | 2.6          | 42.82           | 2.7          |
| HLCW-24-4                                      | 17.52    | 61.6  | 42.04         | 3            | 52.55           | 3.3          |
| HLCW-28-4                                      | 19.68    | 69.2  | 47.22         | 4.2          | 59.03           | 4.5          |
| HCLW-32-4                                      | 22.98    | 80.8  | 55.14         | 5.6          | 68.93           | 5.9          |
| HLCW-36-4                                      | 26.05    | 91.6  | 62.51         | 6.2          | 78.14           | 6.4          |
| HLCW-40-4                                      | 30.71    | 108   | 73.70         | 8.6          | 92.13           | 8.6          |
| HLCW-48-4                                      | 35.26    | 124   | 84.62         | 11.6         | 105.78          | 11.6         |
| HLCW-52-4                                      | 37.99    | 133.6 | 91.17         | 11.9         | 113.97          | 11.9         |
| HLCW-60-4                                      | 44.93    | 158   | 107.82        | 17.6         | 134.78          | 17.6         |
| HLCW-80-4                                      | 58.69    | 206.4 | 140.85        | 18.4         | 176.07          | 18.4         |
| HLCW-100-4                                     | 72.68    | 255.6 | 174.43        | 18.6         | 218.04          | 18.6         |
| HLCW-120-4                                     | 90.54    | 318.4 | 217.29        | 19.6         | 271.61          | 19.6         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=6,6°C      |             |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-5-1                                       | 3.72        | 13.1  | 8.94          | 0.6             | 11.17           | 0.7             |
| HLCW-6-1                                       | 4.55        | 16    | 10.92         | 0.7             | 13.65           | 0.8             |
| HLCW-7-1                                       | 5.12        | 18    | 12.28         | 0.7             | 15.35           | 0.8             |
| HCLW-8-1                                       | 5.97        | 21    | 14.33         | 0.7             | 17.91           | 0.8             |
| HLCW-9-1                                       | 6.80        | 23.9  | 16.31         | 0.8             | 20.39           | 0.9             |
| HLCW-10-1                                      | 7.99        | 28.1  | 19.18         | 0.9             | 23.97           | 1               |
| HLCW-12-1                                      | 9.16        | 32.2  | 21.97         | 1               | 27.47           | 1.1             |
| HLCW-13-1                                      | 9.90        | 34.8  | 23.75         | 1.1             | 29.69           | 1.2             |
| HLCW-15-1                                      | 11.72       | 41.2  | 28.12         | 1.8             | 35.15           | 1.9             |
| HLCW-20-1                                      | 15.58       | 54.8  | 37.40         | 2.5             | 46.75           | 2.6             |
| HLCW-25-1                                      | 18.94       | 66.6  | 45.45         | 3.6             | 56.81           | 3.9             |
| HLCW-30-1                                      | 23.52       | 82.7  | 56.44         | 6.1             | 70.55           | 6.4             |
| HLCW-10-2                                      | 7.45        | 26.2  | 17.88         | 0.7             | 22.35           | 0.9             |
| HLCW-12-2                                      | 9.10        | 32    | 21.84         | 0.8             | 27.30           | 1               |
| HLCW-14-2                                      | 10.24       | 36    | 24.57         | 1.1             | 30.71           | 1.3             |
| HCLW-16-2                                      | 11.94       | 42    | 28.66         | 1.6             | 35.83           | 1.8             |
| HLCW-18-2                                      | 13.59       | 47.8  | 32.62         | 2.1             | 40.78           | 2.3             |
| HLCW-20-2                                      | 15.98       | 56.2  | 38.35         | 2.6             | 47.94           | 2.8             |
| HLCW-24-2                                      | 18.31       | 64.4  | 43.95         | 3.4             | 54.94           | 3.6             |
| HLCW-26-2                                      | 19.79       | 69.6  | 47.50         | 3.8             | 59.37           | 3.9             |
| HLCW-30-2                                      | 23.43       | 82.4  | 56.23         | 6               | 70.29           | 6               |
| HLCW-40-2                                      | 31.16       | 109.6 | 74.79         | 10.2            | 93.49           | 10.2            |
| HLCW-50-2                                      | 37.87       | 133.2 | 90.90         | 12.7            | 113.62          | 12.6            |
| HLCW-60-2                                      | 47.03       | 165.4 | 112.87        | 18.2            | 141.09          | 18.3            |
| HLCW-20-4                                      | 14.90       | 52.4  | 35.76         | 2.7             | 44.70           | 2.8             |
| HLCW-24-4                                      | 18.20       | 64    | 43.68         | 3.1             | 54.59           | 3.4             |
| HLCW-28-4                                      | 20.47       | 72    | 49.13         | 4.3             | 61.42           | 4.6             |
| HCLW-32-4                                      | 23.88       | 84    | 57.32         | 5.7             | 71.65           | 6               |
| HLCW-36-4                                      | 27.18       | 95.6  | 65.24         | 6.3             | 81.55           | 6.5             |
| HLCW-40-4                                      | 31.96       | 112.4 | 76.70         | 8.7             | 95.88           | 8.7             |
| HLCW-48-4                                      | 36.62       | 128.8 | 87.90         | 11.7            | 109.87          | 11.7            |
| HLCW-52-4                                      | 39.58       | 139.2 | 94.99         | 12              | 118.74          | 12              |
| HLCW-60-4                                      | 46.86       | 164.8 | 112.46        | 17.7            | 140.58          | 17.7            |
| HLCW-80-4                                      | 62.33       | 219.2 | 149.59        | 18.5            | 186.99          | 18.5            |
| HLCW-100-4                                     | 75.75       | 266.4 | 181.80        | 18.7            | 227.25          | 18.7            |
| HLCW-120-4                                     | 94.06       | 330.8 | 225.75        | 19.7            | 282.18          | 19.7            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,2°C      |             |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-5-1                                       | 3.81        | 13.4  | 9.14          | 0.7             | 11.43           | 0.9             |
| HLCW-6-1                                       | 4.65        | 16.35 | 11.16         | 0.8             | 13.95           | 1               |
| HLCW-7-1                                       | 5.23        | 18.4  | 12.56         | 0.8             | 15.70           | 1               |
| HCLW-8-1                                       | 6.11        | 21.5  | 14.67         | 0.8             | 18.34           | 1               |
| HLCW-9-1                                       | 6.94        | 24.4  | 16.65         | 0.9             | 20.81           | 1.1             |
| HLCW-10-1                                      | 8.16        | 28.7  | 19.59         | 1               | 24.48           | 1.2             |
| HLCW-12-1                                      | 9.35        | 32.9  | 22.45         | 1.1             | 28.06           | 1.3             |
| HLCW-13-1                                      | 10.12       | 35.6  | 24.29         | 1.2             | 30.37           | 1.4             |
| HLCW-15-1                                      | 11.97       | 42.1  | 28.73         | 1.9             | 35.91           | 2.1             |
| HLCW-20-1                                      | 15.24       | 53.6  | 36.58         | 2.6             | 45.72           | 2.8             |
| HLCW-25-1                                      | 19.36       | 68.1  | 46.47         | 3.7             | 58.09           | 4.1             |
| HLCW-30-1                                      | 24.00       | 84.4  | 57.60         | 6.2             | 72.00           | 6.6             |
| HLCW-10-2                                      | 7.62        | 26.8  | 18.29         | 0.8             | 22.86           | 1.1             |
| HLCW-12-2                                      | 9.30        | 32.7  | 22.32         | 0.9             | 27.89           | 1.2             |
| HLCW-14-2                                      | 10.46       | 36.8  | 25.11         | 1.2             | 31.39           | 1.5             |
| HCLW-16-2                                      | 12.23       | 43    | 29.34         | 1.7             | 36.68           | 2               |
| HLCW-18-2                                      | 13.88       | 48.8  | 33.30         | 2.2             | 41.63           | 2.5             |
| HLCW-20-2                                      | 16.32       | 57.4  | 39.17         | 2.7             | 48.96           | 3               |
| HLCW-24-2                                      | 18.71       | 65.8  | 44.90         | 3.5             | 56.13           | 3.8             |
| HLCW-26-2                                      | 20.25       | 71.2  | 48.59         | 3.9             | 60.74           | 4.1             |
| HLCW-30-2                                      | 23.94       | 84.2  | 57.46         | 6.1             | 71.83           | 6.2             |
| HLCW-40-2                                      | 30.48       | 107.2 | 73.16         | 10.3            | 91.45           | 10.4            |
| HLCW-50-2                                      | 38.73       | 136.2 | 92.95         | 12.8            | 116.18          | 12.8            |
| HLCW-60-2                                      | 48.00       | 168.8 | 115.19        | 18.3            | 143.99          | 18.5            |
| HLCW-20-4                                      | 15.24       | 53.6  | 36.58         | 2.8             | 45.72           | 3               |
| HLCW-24-4                                      | 18.60       | 65.4  | 44.63         | 3.2             | 55.79           | 3.6             |
| HLCW-28-4                                      | 20.93       | 73.6  | 50.23         | 4.4             | 62.78           | 4.8             |
| HCLW-32-4                                      | 24.45       | 86    | 58.69         | 5.8             | 73.36           | 6.2             |
| HLCW-36-4                                      | 27.75       | 97.6  | 66.60         | 6.4             | 83.26           | 6.7             |
| HLCW-40-4                                      | 32.64       | 114.8 | 78.34         | 8.8             | 97.93           | 8.9             |
| HLCW-48-4                                      | 37.42       | 131.6 | 89.81         | 11.8            | 112.26          | 11.9            |
| HLCW-52-4                                      | 40.49       | 142.4 | 97.18         | 12.1            | 121.47          | 12.2            |
| HLCW-60-4                                      | 47.88       | 168.4 | 114.92        | 17.8            | 143.65          | 17.9            |
| HLCW-80-4                                      | 60.96       | 214.4 | 146.31        | 18.6            | 182.89          | 18.7            |
| HLCW-100-4                                     | 77.46       | 272.4 | 185.89        | 18.8            | 232.37          | 18.9            |
| HLCW-120-4                                     | 95.99       | 337.6 | 230.39        | 19.8            | 287.98          | 19.9            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=33/38°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 3.84     | 13.5  | 9.21          | 0.8          | 11.52           | 1            |
| HLCW-6-1                                       | 4.68     | 16.45 | 11.23         | 0.9          | 14.03           | 1.1          |
| HLCW-7-1                                       | 5.27     | 18.55 | 12.66         | 0.9          | 15.82           | 1.1          |
| HCLW-8-1                                       | 6.17     | 21.7  | 14.81         | 0.9          | 18.51           | 1.1          |
| HLCW-9-1                                       | 6.97     | 24.5  | 16.72         | 1            | 20.90           | 1.2          |
| HLCW-10-1                                      | 8.22     | 28.9  | 19.72         | 1.1          | 24.65           | 1.3          |
| HLCW-12-1                                      | 9.41     | 33.1  | 22.59         | 1.2          | 28.24           | 1.4          |
| HLCW-13-1                                      | 10.18    | 35.8  | 24.43         | 1.3          | 30.54           | 1.5          |
| HLCW-15-1                                      | 12.06    | 42.4  | 28.93         | 2            | 36.17           | 2.2          |
| HLCW-20-1                                      | 15.70    | 55.2  | 37.67         | 2.7          | 47.09           | 2.9          |
| HLCW-25-1                                      | 19.51    | 68.6  | 46.81         | 3.8          | 58.52           | 4.2          |
| HLCW-30-1                                      | 24.17    | 85    | 58.01         | 6.4          | 72.51           | 6.7          |
| HLCW-10-2                                      | 7.68     | 27    | 18.43         | 1            | 23.03           | 1.2          |
| HLCW-12-2                                      | 9.35     | 32.9  | 22.45         | 1.1          | 28.06           | 1.3          |
| HLCW-14-2                                      | 10.55    | 37.1  | 25.32         | 1.4          | 31.65           | 1.6          |
| HCLW-16-2                                      | 12.34    | 43.4  | 29.62         | 1.9          | 37.02           | 2.1          |
| HLCW-18-2                                      | 13.93    | 49    | 33.44         | 2.4          | 41.80           | 2.6          |
| HLCW-20-2                                      | 16.44    | 57.8  | 39.44         | 2.9          | 49.31           | 3.1          |
| HLCW-24-2                                      | 18.82    | 66.2  | 45.18         | 3.7          | 56.47           | 3.9          |
| HLCW-26-2                                      | 20.36    | 71.6  | 48.86         | 4.1          | 61.08           | 4.2          |
| HLCW-30-2                                      | 24.11    | 84.8  | 57.87         | 6.3          | 72.34           | 6.3          |
| HLCW-40-2                                      | 31.39    | 110.4 | 75.34         | 10.5         | 94.18           | 10.5         |
| HLCW-50-2                                      | 39.01    | 137.2 | 93.63         | 13           | 117.04          | 12.9         |
| HLCW-60-2                                      | 48.34    | 170   | 116.01        | 18.5         | 145.02          | 18.6         |
| HLCW-20-4                                      | 15.35    | 54    | 36.85         | 3            | 46.06           | 3.1          |
| HLCW-24-4                                      | 18.71    | 65.8  | 44.90         | 3.4          | 56.13           | 3.7          |
| HLCW-28-4                                      | 21.10    | 74.2  | 50.64         | 4.6          | 63.30           | 4.9          |
| HCLW-32-4                                      | 24.68    | 86.8  | 59.23         | 6            | 74.04           | 6.3          |
| HLCW-36-4                                      | 27.87    | 98    | 66.88         | 6.6          | 83.60           | 6.8          |
| HLCW-40-4                                      | 32.87    | 115.6 | 78.89         | 9            | 98.61           | 9            |
| HLCW-48-4                                      | 37.65    | 132.4 | 90.35         | 12           | 112.94          | 12           |
| HLCW-52-4                                      | 40.72    | 143.2 | 97.72         | 12.3         | 122.15          | 12.3         |
| HLCW-60-4                                      | 48.22    | 169.6 | 115.74        | 18           | 144.67          | 18           |
| HLCW-80-4                                      | 62.78    | 220.8 | 150.68        | 18.8         | 188.35          | 18.8         |
| HLCW-100-4                                     | 78.02    | 274.4 | 187.26        | 19           | 234.07          | 19           |
| HLCW-120-4                                     | 96.68    | 340   | 232.03        | 20           | 290.03          | 20           |

| CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.= 5,5°C     |             |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-5-1                                       | 3.44        | 12.1  | 8.26          | 0.5             | 10.32           | 0.6             |
| HLCW-6-1                                       | 4.24        | 14.9  | 10.17         | 0.6             | 12.71           | 0.7             |
| HLCW-7-1                                       | 4.76        | 16.75 | 11.43         | 0.6             | 14.29           | 0.7             |
| HCLW-8-1                                       | 5.54        | 19.5  | 13.31         | 0.6             | 16.63           | 0.7             |
| HLCW-9-1                                       | 6.31        | 22.2  | 15.15         | 0.7             | 18.94           | 0.8             |
| HLCW-10-1                                      | 7.45        | 26.2  | 17.88         | 0.8             | 22.35           | 0.9             |
| HLCW-12-1                                      | 8.50        | 29.9  | 20.40         | 0.9             | 25.51           | 1               |
| HLCW-13-1                                      | 9.18        | 32.3  | 22.04         | 1               | 27.55           | 1.1             |
| HLCW-15-1                                      | 10.83       | 38.1  | 26.00         | 1.7             | 32.50           | 1.8             |
| HLCW-20-1                                      | 14.22       | 50    | 34.12         | 2.4             | 42.65           | 2.5             |
| HLCW-25-1                                      | 17.57       | 61.8  | 42.17         | 3.5             | 52.72           | 3.8             |
| HLCW-30-1                                      | 21.98       | 77.3  | 52.75         | 5.9             | 65.94           | 6.3             |
| HLCW-10-2                                      | 6.88        | 24.2  | 16.51         | 0.5             | 20.64           | 0.8             |
| HLCW-12-2                                      | 8.47        | 29.8  | 20.34         | 0.6             | 25.42           | 0.9             |
| HLCW-14-2                                      | 9.53        | 33.5  | 22.86         | 0.9             | 28.58           | 1.2             |
| HCLW-16-2                                      | 11.09       | 39    | 26.61         | 1.4             | 33.27           | 1.6             |
| HLCW-18-2                                      | 12.62       | 44.4  | 30.30         | 1.9             | 37.87           | 2.1             |
| HLCW-20-2                                      | 14.90       | 52.4  | 35.76         | 2.4             | 44.70           | 2.6             |
| HLCW-24-2                                      | 17.00       | 59.8  | 40.81         | 3.2             | 51.01           | 3.4             |
| HLCW-26-2                                      | 18.37       | 64.6  | 44.08         | 3.6             | 55.11           | 3.7             |
| HLCW-30-2                                      | 21.67       | 76.2  | 52.00         | 5.8             | 65.00           | 5.8             |
| HLCW-40-2                                      | 28.43       | 100   | 68.24         | 10              | 85.30           | 10              |
| HLCW-50-2                                      | 35.15       | 123.6 | 84.35         | 12.5            | 105.44          | 12.4            |
| HLCW-60-2                                      | 43.96       | 154.6 | 105.50        | 18              | 131.88          | 18.1            |
| HLCW-20-4                                      | 13.76       | 48.4  | 33.03         | 2.5             | 41.29           | 2.6             |
| HLCW-24-4                                      | 16.95       | 59.6  | 40.67         | 2.9             | 50.84           | 3.2             |
| HLCW-28-4                                      | 19.05       | 67    | 45.72         | 4.1             | 57.15           | 4.4             |
| HCLW-32-4                                      | 22.18       | 78    | 53.23         | 5.5             | 66.54           | 5.8             |
| HLCW-36-4                                      | 25.25       | 88.8  | 60.60         | 6.1             | 75.75           | 6.3             |
| HLCW-40-4                                      | 29.80       | 104.8 | 71.52         | 8.5             | 89.40           | 8.5             |
| HLCW-48-4                                      | 34.01       | 119.6 | 81.62         | 11.5            | 102.02          | 11.5            |
| HLCW-52-4                                      | 36.74       | 129.2 | 88.17         | 11.7            | 110.21          | 11.8            |
| HLCW-60-4                                      | 43.33       | 152.4 | 104.00        | 17.4            | 130.00          | 17.5            |
| HLCW-80-4                                      | 56.87       | 200   | 136.49        | 18.2            | 170.61          | 18.3            |
| HLCW-100-4                                     | 70.29       | 247.2 | 168.70        | 18.4            | 210.87          | 18.5            |
| HLCW-120-4                                     | 87.92       | 309.2 | 211.01        | 19.4            | 263.76          | 19.5            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 3.60     | 12.65 | 8.63          | 0.7          | 10.79           | 0.8          |
| HLCW-6-1                                       | 4.41     | 15.5  | 10.58         | 0.8          | 13.22           | 0.9          |
| HLCW-7-1                                       | 4.96     | 17.45 | 11.91         | 0.8          | 14.89           | 0.9          |
| HCLW-8-1                                       | 5.77     | 20.3  | 13.85         | 0.8          | 17.32           | 0.9          |
| HLCW-9-1                                       | 6.57     | 23.1  | 15.76         | 0.9          | 19.71           | 1            |
| HLCW-10-1                                      | 7.73     | 27.2  | 18.56         | 1            | 23.20           | 1.1          |
| HLCW-12-1                                      | 8.84     | 31.1  | 21.22         | 1.1          | 26.53           | 1.2          |
| HLCW-13-1                                      | 9.55     | 33.6  | 22.93         | 1.2          | 28.66           | 1.3          |
| HLCW-15-1                                      | 11.32    | 39.8  | 27.16         | 1.9          | 33.95           | 2            |
| HLCW-20-1                                      | 14.81    | 52.1  | 35.55         | 2.6          | 44.44           | 2.7          |
| HLCW-25-1                                      | 18.34    | 64.5  | 44.02         | 3.7          | 55.02           | 4            |
| HLCW-30-1                                      | 22.86    | 80.4  | 54.87         | 6.1          | 68.58           | 6.5          |
| HLCW-10-2                                      | 7.19     | 25.3  | 17.27         | 0.7          | 21.58           | 1            |
| HLCW-12-2                                      | 8.81     | 31    | 21.16         | 0.8          | 26.44           | 1.1          |
| HLCW-14-2                                      | 9.92     | 34.9  | 23.82         | 1.1          | 29.77           | 1.4          |
| HCLW-16-2                                      | 11.54    | 40.6  | 27.71         | 1.6          | 34.63           | 1.8          |
| HLCW-18-2                                      | 13.14    | 46.2  | 31.53         | 2.1          | 39.41           | 2.3          |
| HLCW-20-2                                      | 15.47    | 54.4  | 37.12         | 2.6          | 46.41           | 2.8          |
| HLCW-24-2                                      | 17.69    | 62.2  | 42.45         | 3.4          | 53.06           | 3.6          |
| HLCW-26-2                                      | 19.11    | 67.2  | 45.86         | 3.8          | 57.32           | 3.9          |
| HLCW-30-2                                      | 22.63    | 79.6  | 54.32         | 6            | 67.90           | 6            |
| HLCW-40-2                                      | 29.63    | 104.2 | 71.11         | 10.2         | 88.89           | 10.2         |
| HLCW-50-2                                      | 36.68    | 129   | 88.03         | 12.7         | 110.04          | 12.6         |
| HLCW-60-2                                      | 45.72    | 160.8 | 109.73        | 18.2         | 137.17          | 18.3         |
| HLCW-20-4                                      | 14.39    | 50.6  | 34.53         | 2.7          | 43.16           | 2.8          |
| HLCW-24-4                                      | 17.63    | 62    | 42.31         | 3.1          | 52.89           | 3.4          |
| HLCW-28-4                                      | 19.85    | 69.8  | 47.63         | 4.3          | 59.54           | 4.6          |
| HCLW-32-4                                      | 23.09    | 81.2  | 55.41         | 5.7          | 69.27           | 6            |
| HLCW-36-4                                      | 26.27    | 92.4  | 63.06         | 6.3          | 78.82           | 6.5          |
| HLCW-40-4                                      | 30.94    | 108.8 | 74.25         | 8.7          | 92.81           | 8.7          |
| HLCW-48-4                                      | 35.37    | 124.4 | 84.89         | 11.7         | 106.12          | 11.7         |
| HLCW-52-4                                      | 38.22    | 134.4 | 91.72         | 11.9         | 114.65          | 12           |
| HLCW-60-4                                      | 45.27    | 159.2 | 108.64        | 17.6         | 135.80          | 17.7         |
| HLCW-80-4                                      | 59.26    | 208.4 | 142.22        | 18.4         | 177.77          | 18.5         |
| HLCW-100-4                                     | 73.36    | 258   | 176.07        | 18.6         | 220.08          | 18.7         |
| HLCW-120-4                                     | 91.45    | 321.6 | 219.47        | 19.6         | 274.34          | 19.7         |

| CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C |             |       |               |                 |                 |                 |
|--|-------------|-------|---------------|-----------------|-----------------|-----------------|
| TABLE-1-LEAVING CHILLED WATER TEMP.=7,2°C      |             |       |               |                 |                 |                 |
| MODEL NO.                                      | CAP<br>TONS | KW    | CHILLED WATER |                 | CONDENSER WATER |                 |
|  |             |       | G.P.M.        | P.D<br>FT.OF W. | G.P.M.          | P.D<br>FT.OF W. |
| HLCW-5-1                                       | 3.67        | 12.9  | 8.80          | 0.8             | 11.00           | 1.7             |
| HLCW-6-1                                       | 4.49        | 15.8  | 10.78         | 0.9             | 13.48           | 1.8             |
| HLCW-7-1                                       | 5.08        | 17.85 | 12.18         | 0.9             | 15.23           | 1.8             |
| HCLW-8-1                                       | 5.91        | 20.8  | 14.19         | 0.9             | 17.74           | 1.8             |
| HLCW-9-1                                       | 6.71        | 23.6  | 16.11         | 1               | 20.13           | 1.9             |
| HLCW-10-1                                      | 7.90        | 27.8  | 18.97         | 1.1             | 23.71           | 2               |
| HLCW-12-1                                      | 9.04        | 31.8  | 21.70         | 1.2             | 27.13           | 2.1             |
| HLCW-13-1                                      | 9.78        | 34.4  | 23.48         | 1.3             | 29.34           | 2.2             |
| HLCW-15-1                                      | 11.57       | 40.7  | 27.77         | 2               | 34.72           | 2.9             |
| HLCW-20-1                                      | 15.13       | 53.2  | 36.31         | 2.7             | 45.38           | 3.6             |
| HLCW-25-1                                      | 18.77       | 66    | 45.04         | 3.8             | 56.30           | 4.9             |
| HLCW-30-1                                      | 23.34       | 82.1  | 56.03         | 6.2             | 70.03           | 7.4             |
| HLCW-10-2                                      | 7.34        | 25.8  | 17.61         | 0.8             | 22.01           | 1.9             |
| HLCW-12-2                                      | 8.99        | 31.6  | 21.56         | 0.9             | 26.96           | 2               |
| HLCW-14-2                                      | 10.15       | 35.7  | 24.36         | 1.2             | 30.45           | 2.3             |
| HCLW-16-2                                      | 11.83       | 41.6  | 28.39         | 1.7             | 35.49           | 2.7             |
| HLCW-18-2                                      | 13.42       | 47.2  | 32.21         | 2.2             | 40.26           | 3.2             |
| HLCW-20-2                                      | 15.81       | 55.6  | 37.94         | 2.7             | 47.43           | 3.7             |
| HLCW-24-2                                      | 18.08       | 63.6  | 43.40         | 3.5             | 54.25           | 4.5             |
| HLCW-26-2                                      | 19.56       | 68.8  | 46.95         | 3.9             | 58.69           | 4.8             |
| HLCW-30-2                                      | 23.15       | 81.4  | 55.55         | 6.1             | 69.44           | 6.9             |
| HLCW-40-2                                      | 30.25       | 106.4 | 72.61         | 10.3            | 90.76           | 11.1            |
| HLCW-50-2                                      | 37.53       | 132   | 90.08         | 12.8            | 112.60          | 13.5            |
| HLCW-60-2                                      | 46.69       | 164.2 | 112.05        | 18.3            | 140.07          | 19.2            |
| HLCW-20-4                                      | 14.67       | 51.6  | 35.21         | 2.8             | 44.02           | 3.7             |
| HLCW-24-4                                      | 17.97       | 63.2  | 43.13         | 3.2             | 53.91           | 4.3             |
| HLCW-28-4                                      | 20.30       | 71.4  | 48.73         | 4.4             | 60.91           | 5.5             |
| HCLW-32-4                                      | 23.66       | 83.2  | 56.78         | 5.8             | 70.97           | 6.9             |
| HLCW-36-4                                      | 26.84       | 94.4  | 64.42         | 6.4             | 80.53           | 7.4             |
| HLCW-40-4                                      | 31.62       | 111.2 | 75.89         | 8.8             | 94.86           | 9.6             |
| HLCW-48-4                                      | 36.17       | 127.2 | 86.80         | 11.8            | 108.51          | 12.6            |
| HLCW-52-4                                      | 39.13       | 137.6 | 93.90         | 12              | 117.38          | 12.9            |
| HLCW-60-4                                      | 46.29       | 162.8 | 111.10        | 17.7            | 138.87          | 18.6            |
| HLCW-80-4                                      | 60.51       | 212.8 | 145.22        | 18.5            | 181.53          | 19.4            |
| HLCW-100-4                                     | 75.07       | 264   | 180.16        | 18.7            | 225.20          | 19.6            |
| HLCW-120-4                                     | 93.38       | 328.4 | 224.11        | 19.7            | 280.14          | 20.6            |

| CONDENSER ENTERING/LEAVING WATER TEMP.=36/41°C |          |       |               |              |                 |              |
|--|----------|-------|---------------|--------------|-----------------|--------------|
| MODEL NO.                                      | CAP TONS | KW    | CHILLED WATER |              | CONDENSER WATER |              |
|  |          |       | G.P.M.        | P.D FT.OF W. | G.P.M.          | P.D FT.OF W. |
| HLCW-5-1                                       | 3.70     | 13    | 8.87          | 0.9          | 11.09           | 1.8          |
| HLCW-6-1                                       | 4.54     | 15.95 | 10.88         | 1            | 13.61           | 1.9          |
| HLCW-7-1                                       | 5.10     | 17.95 | 12.25         | 1            | 15.31           | 1.9          |
| HLCW-8-1                                       | 5.97     | 21    | 14.33         | 1            | 17.91           | 1.9          |
| HLCW-9-1                                       | 6.77     | 23.8  | 16.24         | 1.1          | 20.30           | 2            |
| HLCW-10-1                                      | 7.96     | 28    | 19.11         | 1.2          | 23.88           | 2.1          |
| HLCW-12-1                                      | 9.10     | 32    | 21.84         | 1.3          | 27.30           | 2.2          |
| HLCW-13-1                                      | 9.84     | 34.6  | 23.61         | 1.4          | 29.52           | 2.3          |
| HLCW-15-1                                      | 11.66    | 41    | 27.98         | 2.1          | 34.97           | 3            |
| HLCW-20-1                                      | 15.24    | 53.6  | 36.58         | 2.8          | 45.72           | 3.7          |
| HLCW-25-1                                      | 18.91    | 66.5  | 45.38         | 3.9          | 56.73           | 5            |
| HLCW-30-1                                      | 23.52    | 82.7  | 56.44         | 6.3          | 70.55           | 7.5          |
| HLCW-10-2                                      | 7.39     | 26    | 17.74         | 0.9          | 22.18           | 2            |
| HLCW-12-2                                      | 9.07     | 31.9  | 21.77         | 1            | 27.21           | 2.1          |
| HLCW-14-2                                      | 10.21    | 35.9  | 24.50         | 1.3          | 30.62           | 2.4          |
| HLCW-16-2                                      | 11.94    | 42    | 28.66         | 1.8          | 35.83           | 2.8          |
| HLCW-18-2                                      | 13.53    | 47.6  | 32.48         | 2.3          | 40.60           | 3.3          |
| HLCW-20-2                                      | 15.92    | 56    | 38.22         | 2.8          | 47.77           | 3.8          |
| HLCW-24-2                                      | 18.20    | 64    | 43.68         | 3.6          | 54.59           | 4.6          |
| HLCW-26-2                                      | 19.68    | 69.2  | 47.22         | 4            | 59.03           | 4.9          |
| HLCW-30-2                                      | 23.32    | 82    | 55.96         | 6.2          | 69.95           | 7            |
| HLCW-40-2                                      | 30.48    | 107.2 | 73.16         | 10.4         | 91.45           | 11.2         |
| HLCW-50-2                                      | 37.82    | 133   | 90.76         | 12.9         | 113.45          | 13.6         |
| HLCW-60-2                                      | 47.03    | 165.4 | 112.87        | 18.4         | 141.09          | 19.3         |
| HLCW-20-4                                      | 14.79    | 52    | 35.49         | 2.9          | 44.36           | 3.8          |
| HLCW-24-4                                      | 18.14    | 63.8  | 43.54         | 3.3          | 54.42           | 4.4          |
| HLCW-28-4                                      | 20.42    | 71.8  | 49.00         | 4.5          | 61.25           | 5.6          |
| HLCW-32-4                                      | 23.88    | 84    | 57.32         | 5.9          | 71.65           | 7            |
| HLCW-36-4                                      | 27.07    | 95.2  | 64.97         | 6.5          | 81.21           | 7.5          |
| HLCW-40-4                                      | 31.85    | 112   | 76.43         | 8.9          | 95.54           | 9.7          |
| HLCW-48-4                                      | 36.40    | 128   | 87.35         | 11.9         | 109.19          | 12.7         |
| HLCW-52-4                                      | 39.35    | 138.4 | 94.45         | 12.1         | 118.06          | 13           |
| HLCW-60-4                                      | 46.63    | 164   | 111.92        | 17.8         | 139.90          | 18.7         |
| HLCW-80-4                                      | 60.96    | 214.4 | 146.31        | 18.6         | 182.89          | 19.5         |
| HLCW-100-4                                     | 75.64    | 266   | 181.53        | 18.8         | 226.91          | 19.7         |
| HLCW-120-4                                     | 94.06    | 330.8 | 225.75        | 19.8         | 282.18          | 20.7         |

| ELECTRICAL DATA (R-22) |                          |           |           |                       |
|------------------------|--------------------------|-----------|-----------|-----------------------|
| chiller MODEL          | Nominal Comp. power (HP) | MRA (Amp) | LRA (Amp) | RATE CONSE POWER (kw) |
| HLCW-5-1               | 5                        | 7.34      | 65.5      | 3.0                   |
| HLCW-6-1               | 6                        | 7.93      | 74        | 3.3                   |
| HLCW-7-1               | 7                        | 9.64      | 101       | 4.0                   |
| HCLW-8-1               | 8                        | 10.8      | 95        | 4.5                   |
| HLCW-9-1               | 9                        | 11.86     | 111       | 4.2                   |
| HLCW-10-1              | 10                       | 13.71     | 118       | 4.7                   |
| HLCW-12-1              | 12                       | 15.04     | 118       | 5.6                   |
| HLCW-13-1              | 13                       | 17.36     | 140       | 6.1                   |
| HLCW-15-1              | 15                       | 22.58     | 174       | 7.1                   |
| HLCW-20-1              | 20                       | 25.66     | 225       | 9.4                   |
| HLCW-25-1              | 25                       | 33.07     | 272       | 11.8                  |
| HLCW-30-1              | 30                       | 39.44     | 310       | 14.1                  |
| HLCW-10-2              | 2*5                      | 14.68     | 131       | 6.9                   |
| HLCW-12-2              | 2*6                      | 15.86     | 148       | 7.5                   |
| HLCW-14-2              | 2*7                      | 19.28     | 202       | 9.1                   |
| HCLW-16-2              | 2*8                      | 21.6      | 190       | 10.2                  |
| HLCW-18-2              | 2*9                      | 23.72     | 222       | 11.2                  |
| HLCW-20-2              | 2*10                     | 27.42     | 236       | 12.9                  |
| HLCW-24-2              | 2*12                     | 30.08     | 236       | 14.2                  |
| HLCW-26-2              | 2*13                     | 34.72     | 280       | 16.3                  |
| HLCW-30-2              | 2*15                     | 45.16     | 348       | 21.3                  |
| HLCW-40-2              | 2*40                     | 51.32     | 450       | 24.1                  |
| HLCW-50-2              | 2*25                     | 66.14     | 544       | 31.1                  |
| HLCW-60-2              | 2*30                     | 78.88     | 620       | 37.1                  |
| HLCW-20-4              | 4*5                      | 29.36     | 262       | 13.8                  |
| HLCW-24-4              | 4*6                      | 31.72     | 296       | 14.9                  |
| HLCW-28-4              | 4*7                      | 38.56     | 404       | 18.1                  |
| HCLW-32-4              | 4*8                      | 43.2      | 380       | 20.3                  |
| HLCW-36-4              | 4*9                      | 47.44     | 444       | 22.3                  |
| HLCW-40-4              | 4*10                     | 54.84     | 472       | 25.8                  |
| HLCW-48-4              | 4*12                     | 60.16     | 472       | 28.3                  |
| HLCW-52-4              | 4*13                     | 69.44     | 560       | 32.7                  |
| HLCW-60-4              | 4*15                     | 90.32     | 696       | 42.5                  |
| HLCW-80-4              | 4*20                     | 102.64    | 900       | 48.3                  |
| HLCW-100-4             | 4*25                     | 132.28    | 1088      | 62.2                  |
| HLCW-120-4             | 4*30                     | 157.76    | 1240      | 74.2                  |





شرکت هواساز همیشه سعی بر آن دارد با استفاده از قطعات و متریال مرغوب نیاز مشتریان خود را برآورده سازد که در ذیل به معرفی برخی از مشارکت کنندگان در تامین قطعات این شرکت می پردازیم : مرغوب ترین قطعات و اجزاء :

انواع کویل های Cu/Cu , Cu/hydrophilic Al Heresite Coating  
کمپرسورهای Scroll , Screw , Reciprocating از نوع Frasscold,bitzer,copeland , Carrier,refcomp  
مبدل های Danfoss مارک Compact Plate Heat Exchanger مارک Shell & Tube مارک رادیران و



دفتر فروش : تهران - خیابان شهید بهشتی - خیابان سرافراز - پلاک ۵۵ - مجتمع دریای نور

تلفن : ۸۸۷۵۴۹۱۰ فکس : ۸۸۷۵۴۹۱۱

کارخانه : کیلومتر ۱۹ جاده قدیم کرج - منطقه صنعتی اسماعیل آباد - خیابان اول - پلاک ۶

تلفن : ۴۶۸۱۹۶۵-۷۵ فکس : ۴۶۸۴۲۲۹۲

