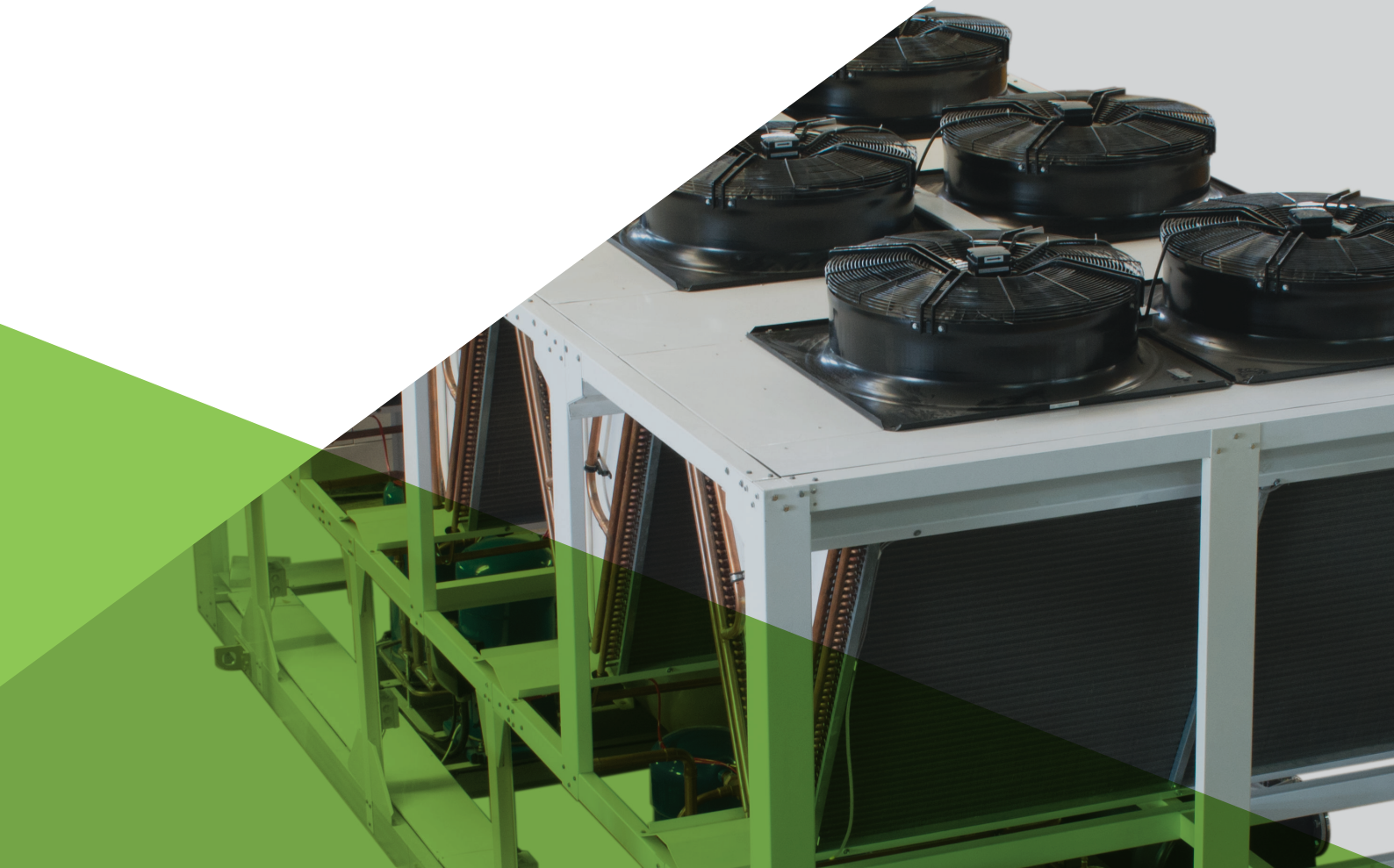
HAVASAZ

Life Is Cool Air Conditioning since 1967

AIR COOLED CHILLER



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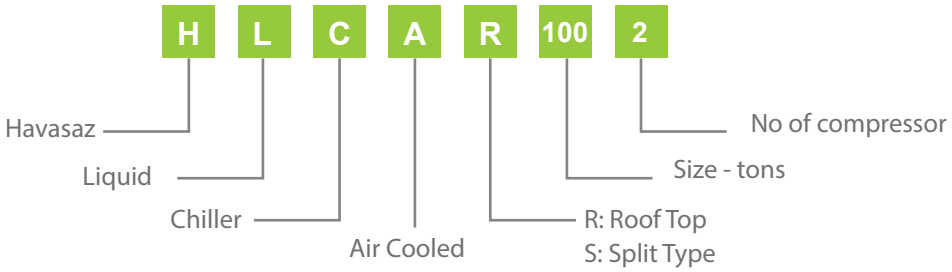


Introduction

HLCA Series Air Cooled Packaged Chillers are the new generation of HAVASAZ chillers.
HLCA Series have quite and low vibration design and are manufactured to meet the requirements of the severe climatic conditions.

HLCA Series Chillers are ideally suited for hotels, high-rise buildings, stores, hospitals and modern cooling applications of modern manufacturing industries and industrial application.
HLCA units are factory assembled, leak tested, evacuated, internally wired. Every unit is fully tested before delivery and is ready for installation.

HLCA Series Chillers are designed and manufactured in accordance with the HAVASAZ Quality Management System, approved to ISO 9001-2000 and rated in accordance with AHRI 550/590.

HLCA Chillers are available in 60 models covering capacity ranges of 4 to 147 TR (14 to 516kW) in 50 Hz.

General Features

Compressors Operation

HLCA chillers are equipped with multiple compressors in order to achieve greater operating flexibility (single compressor just use for small capacities). By cycling individual compressors the system capacity can be modulated with full power savings for the compressors in operation. HAVASAZ used a simply method for reduce starting current. by delay between compressors start.

Wide Operating Range

HLCA chillers are designed, as standard, to operate at a wide range of ambient temperatures from 95°F (35°C), or lower if optional low ambient operation kit is included, to 125°F (52°C)

Main Component Features

Compressors

Compressors used in HLCA series are fully accessible, semi hermetic, reciprocating type, equipped with an oil sight glass, suction and discharge service valves and crankcase heater. These are refrigerant gas cooled and equipped with an oil pressure lubrication system. The oil pump working in either direction is protected by an oil screen. For protection, all compressors are equipped with oil pressure or oil level control oil level control

The compressors are provided with vibration isolator mounting under the compressors skid and therefore, external to HLCA chillers, AVM's may be necessary only for critical applications.

The compressor motors have inherent thermal protection. This is in addition to other standard safety and protection controls.

Condensers

Condenser coils are manufactured from seamless copper tubes mechanically bonded to aluminum fins to ensure optimum heat transfer. All coils are tested against leakage by air pressure of 1.3 operation pressure. according to the ASME standard section 8. All standard coils are2,3 or 4 rows with 10 or 12 FPI, (2.5,2 mm) fin spacing, 3/8" (9.5 mm) O.D. tubes.

Condenser fin materials should be matched with site conditions to inhibit coil corrosion and ensure extended equipment's life.

For different application requirements, other optional condenser fin materials are available:

- Copper fins
- Aluminum fins
- Pre coated Aluminum fins. The pre-coated is hydrophobic polyurethane resin .This option provides substantial corrosion protection beyond standard coil construction.
- Heresite Coil Coating. The heresite is a self-etching high performance modified coat that is specifically designed to coat and protect Aluminum and Copper surfaces. In addition, the coating is ideal for the protection of ferrous and nonferrous materials.

Condensers Fans

Axial, low-noise, water-proof type(IP 54) with safety grid.

Electric motors are directly coupled thus reducing vibrations and whatever trouble of transmission. and they're protected from voltage peaks by magneto-thermic switches installed into the electric panel placed on machine side.

Evaporator

HLCA evaporators are direct expansion, shell and tube, with having 1, 2, 3 and 4 refrigerant circuits. Evaporator shell is made of steel. Tubes of copper fixed to steel end plates. Baffles are provided in the water flow to increase heat transfer efficiency.

Evaporators are provided with drain and vent plugs. Cooler shell is insulated with 0.5", (13mm) thick flexible closed cell insulation, K factor 0.28 Btu. in/ft^2.h.oF (0.04W/m.K). Maximum working pressure of waterside is 145 psig (1000 kPa) and refrigerant side is 239.3 psig (1650 kPa).

Casing/Structure

The unit casing in HLCA series chillers is made of zinc coated galvanized steel sheets conforming to JIS-G 3302 and ASTM A653 which is phosphatized and baked after an electrostatic powder coat of approximately 60 microns. This finish and coating can pass a 1000 hour in 5% salt spray testing at 95°F (35°C) and 95% RH as per ASTM B117. HLCA chillers are assembled on rigid structural galvanized steel painted with electrostatic powder coating. The package is assembled for easy handling during transportation and robust support during installation and operation.

Refrigerant Piping

The refrigeration circuit piping is fabricated from ACR grade copper piping. Each refrigeration circuit includes filter drier, liquid line solenoid valve, thermostatic expansion valve, sight glass, shut off valve.

After fabrication the refrigeration circuit suction line is insulated closed cell pipe insulation.

System Protection

The following system protection controls will automatically act to insure system reliability and protection of the unit.

- Low suction pressure protection.
- High discharge pressure protection.
- Low oil pressure protection.
- High compressor motor winding temperature protection.
- Compressor internal thermal protection.
- Freeze protection.
- Chilled water flow loss protection.
- Time delay between stages.

System Control Philosophy

The unit may be enabled or disabled manually or through the use of an external signal from a building automation system.(if any)
Control is based upon return water temperature. How fast the temperature changes is calculated and capacity decisions are based upon the rate. Capacity is never added if the system is moving toward the temperature target at an acceptable rate. The unit will monitor all control functions and stage the compressor to maintain the required operating capacity.

Optional Features

Alternative Condenser Material

Made of copper tubes and alternative fi n material and/or protective coating.

- Copper Fins specify (CF)
- Pre Coated Aluminum Fins specify (FAP)
- Aluminum Fins with heresite coat Protection specify (FAA)
- Copper Fins with heresite Coat Protection specify (FCA)

IP55 Control Panel (ICP)

Control Panel for special applications to meet IP55 requirements.

Evaporator Casing (ECA/ECG/ECS)

Shell and insulation casing enclosed in a jacket/-casing of aluminum, galvanized or stainless steel as required.

Condenser Coil Guard (CGP)

Coil wire mesh guard, in galvanized and painted finish, for condensers. Recommended on ground level installations where coil needs to be protected against vandalism.

Electronic Expansion Valve (EEV)

To provide energy saving benefits over mechanical thermostatic expansion valve (TXV).

Voltage Monitoring Module (VMM)

To prevent HCLA unit operation in the event of phase loss, phase reversal, and under voltage / over voltage on the incoming line voltage.

Marine Paint (MP)

To provide increased corrosion resistant in coastal environments and off shore locations.

Evaporator Freeze-Up Protection (EFP)

Heating cable with thermostat to prevent evaporator freeze-up where low ambient temperatures below 32°F (0°C) are anticipated without chiller operation.

Ammeter and Phase Selector Switch (AMPI)

To indicate running Amperes on main incomer/incomers of a chiller.

Voltmeter and Selector Switch (VSS)

For incoming line voltage.

Pressure Gauges (SDG)

Suction and discharge and oil pressure indication of each refrigerant circuit.

Note: Some optional items are not applicable, for all sizes/models, consult HAVASAZ.

Capacity Correction & Limits

Range & Flow Limits

Range limit 8°F - 16°F (4.4°C - 8.9°C) except where limited by water flow rate limits for evaporator.

For minimum & maximum water flow rate refer to page 23.

condenser Pressure		Refrigerant
Maximum Working Pressure	psig	300
	kPa	2068
Test Pressure	psig	450
	kPa	3102

Cooler Fouling Factors

• Poor water quality can increase the cooler fouling.

• Higher than standard fouling factors lead to lower capacity and higher input kW from a given chiller size compared to running the same application with better quality water (and lower fouling factors). The fouling factor used to calculate tabulated ratings is 0.00010 ft2F/Btu (0.000018 m2°C/W). As fouling factor is increased, unit capacity decreases and compressor power increases. Corrections to published ratings can be approximated by using the multipliers in the fouling factors table.

FOULING FACTOR (English) (ft^2hrF/Btu)	FOULING FACTOR (SI) (m^2C/W)	CAPACITY MULTIPLIER
0.000	0.000	0.995
0.001	0.000	0.987
0.001	0.000	0.979
0.002	0.000	0.952
for factors less than 0.00025(ft^2hrF/Btu) and 0.000044 (m^2C/W) CAPACITY MULTIPLIER is equal 1 .		

Altitude Correction Factor

Correction factors must be applied to standard ratings at altitudes above 2000 ft (610 m) using the following multipliers:

ALTITUDE (ft)	ALTITUDE (m)	CAPACITY MULTIPLIER	COMPRESSOR POWER MULTIPLIER
2000	610	0.99	1.01
4000	1220	0.98	1.02
6000	1830	0.97	1.03
8000	2440	0.96	1.04
10000	3050	0.95	1.05

Range Correction Factors

Capacity ratings based on 10°F (5.5°C) chilled water range. For other than this range please use correction factor below.

Range		Capacity Multipller	Power Multipller
˚F	˚C		
8	4.4	0.995	0.998
10	5.5	1	1
12	6.7	1.005	1.002
14	7.8	1.01	1.004
16	8.9	1.015	1.006

Fin Material Correction Factors

The unit ratings are based on copper tube and aluminum fins condenser. For alternative condenser material the following factors apply:

Fin Material C.F	AL	CU
	1	1.03

Selection Procedure

HLCA Chillers should be selected with specific Design Considerations, requirements and parameters of the intended application.

Care and good engineering should lead to an efficient and cost effective selection. Instance procedures are shown below:

English Example

Determine HLC unit size and operating conditions required to meet given capacity at given conditions.

Given:

Capacity . . . . . 125 Tons
Leaving Chilled Water Temp (LCWT) . . . . . 46 F
Cooler Water Temp Rise . . . . . 10° F
Condenser Entering Air Temp . . . . . 95 F
Fouling Factor (Cooler) 0.00010
From Table No.9.4
Unit HLCA-160-4
Capacity. . . . . .126.47 Tons
Power Input . . . . . .119.6 kW
Cooler Water Flow . . . . . 294.07 USgpm
Pressure Drop . . . . . 39.4 ft.wg
Refrigerant R-22

SI Example

Determine unit size and operating conditions required to meet given capacity at given conditions.

Given:

Capacity. . . . . 235 kW
Leaving Chilled Water Temp (LCWT) . . . . . 7 C
Cooler Water Temp Rise . . . . . 5.6° C
Condenser Entering Air Temp . . . . . 35 C
Fouling Factor (Cooler) 0.018
From Table No.9.4
Unit HLCA-140-4
Capacity. 236.8kW
Power Input . . . . . 65.36 kW
Cooler Water Flow . . . . . .10.03 L/s
Pressure Drop. . . . . .11.5 m.wg

Installation Mechanical

General

Unobstructed flow of condenser air is essential to maintain chiller capacity and operating efficiency. When determining unit placement, careful consideration must be given to assure a sufficient flow of air across the condenser heat transfer surface. Two detrimental conditions are possible and must be avoided: warm air recirculation and coil starvation. Air recirculation occurs when discharge air from the condenser fans is recycled back to the condenser coil inlet. Coil starvation occurs when free airflow to the condenser is restricted.

Condenser coils and fan discharge must be kept free of snow or other obstructions to permit adequate airflow for satisfactory unit operation. Debris, trash, supplies, etc., should not be allowed to accumulate in the vicinity of the air-cooled chiller. Supply air movement may draw debris into the condenser coil, blocking spaces between coil fins and causing coil starvation.

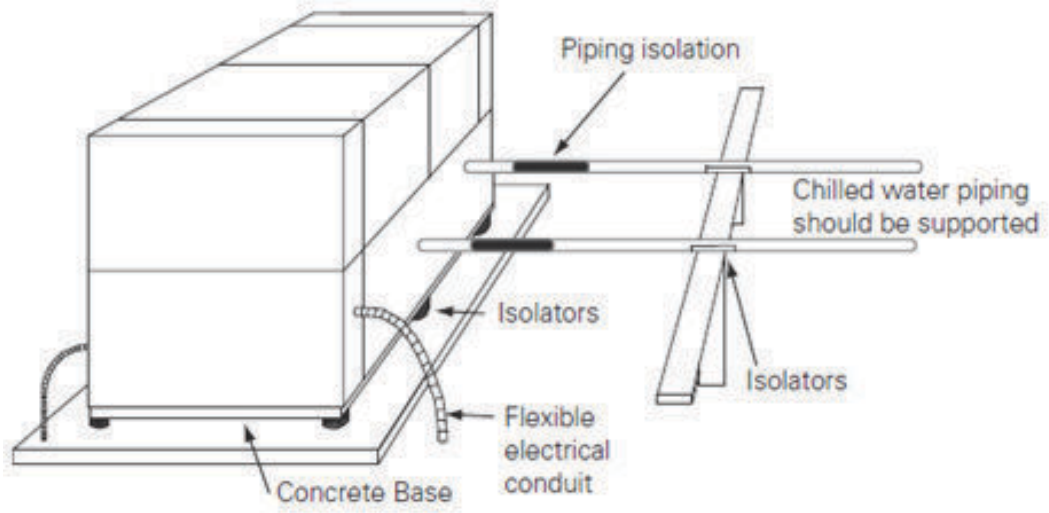
Sound Considerations

- Locate the unit away from sound-sensitive areas.
- Install the optional elastomeric isolators under the Unit.
- Chilled water piping should not be supported by chiller frame.
- Install rubber vibration isolators in all water piping.
- Use flexible electrical conduit.
- Seal all wall penetrations.

Note: Consult an acoustical engineer for critical applications.

Foundation

Provide rigid, non-warping mounting pads or a concrete foundation of sufficient strength and mass to support the applicable operating weight (i.e., including completed piping, and full operating charges of refrigerant, oil and water). See Table No 8,11 for unit operating weights. Once in place, the unit must be level within 1/4" (6.4mm) across the length and width of the unit. The HAVASAZ Company is not responsible for equipment problems resulting from an improperly designed or constructed foundation.



Vibration Isolation

Under certain critical conditions it is recommended that vibration isolators of rubber-in-shear or spring type be installed under the base.

The isolators must be designed for the operating weight of the unit. For operating load points refer to the Dimensional Data.

Correct selection of types of isolators depends upon application and structure. To further reduce the transmission of vibration, it is recommended that flexible water connections suitable for the system pressure be installed on the water inlet connections of the chiller.

For critical applications or locations, services of a noise and vibration expert are recommended.

Water Piping Practices

HAVASAZ suggests abiding by the local authorities' chilled water piping recommendations and practices as they can provide the installer the building and safety codes required for the installation. Water piping should be designed to have a minimum number of bends and horizontal piping levels. Below are the following components it should have:

1. Temperature and pressure gauges in entering and leaving chiller water piping for unit servicing and commissioning.
Pressure gauges must be installed on the same level.

2. Vibration eliminators in entering and leaving chilled water piping to lessen the sound and vibration transmitted to the building.

3. Pipe strainer in the evaporator entering piping to protect the evaporator from water debris and maintain chiller efficiency.

4. Water flow switch in the leaving chilled water piping, wired to the terminals provided in the control panel, to make sure that it has sufficient flow of water in the evaporator. This will prevent the evaporator from freezing up when the water flow is interrupted and avoid compressor slugging on start-up.

5. To isolate the unit from the piping system when servicing or during maintenance, install a shut off valve on the entering and leaving chilled water piping.

6. Expansion Tank provides additional space in the chilled water piping system as temperature rises and furthermore, it maintains a positive pressure within the working limitations of the system.

7. Air Vents at high points in the chilled water system to bleed air from the system.

8. Vapor barrier on the outside of the insulation to avoid condensation in the cold surface of the pipe that may cause damage on the building structure. A thorough leak test should be made before insulating the pipe.

Flush all chilled water piping before making the final connection to the unit. HAVASAZ recommends hiring services of water treatment specialist to determine the type of necessary treatment. Improper or untreated chilled water leads to scaling, erosion, corrosion or algae that can cause inefficient operation and tube damage. HAVASAZ will not be liable for damages caused by improper or untreated chilled water.

Water Loop Volume

In chilled water system, presence of sufficient volume of water in the piping system is crucial to achieve proper operation, unfortunately, some systems will run with less water volume than needed, this will result in inconsistence system operation, and uncontrolled compressor cycling, this condition is called " short water loop". Installing the temperature control sensor in the supply water line (outlet) allows the application, for example a building, to act as a buffer to ensure a sufficient water volume will be in the evaporator loop to achieve stable controls.

If our building for example didn't provide enough water volume to achieve stable controls, a storage tank should be installed to increase the water volume. In a standard air conditioning application, the tank should be sized to attain a 2 minute water loop, and 2.5 – 4 minute water loop for process cooling systems.
Having enough water loop time, hence enough water volume in the evaporator loop will prevent irregular compressor cycling, which means smoother operation.

Unit Sizing

It is strongly recommended to size the chiller for the present load.

Over sizing is cause of increasing power consumption and decrease compressor's life. (Because of more on/off)

Low Ambient Operation

For efficient operation of packaged chiller during intermediate seasons, when temperatures may drop to 50°F (10°C), proper operation is controlled by the following:
Based on the high pressure, MCS cycles the required fans ON
&OFF. If unit operation is envisaged at ambient down to 25°F (-4°C) optional Low Ambient Operation kit should be used (option LAO).
This factory installed arrangement requires control valves, receiver and additional refrigerant charge to build up condensing pressure in condenser coil by flooding refrigerant at low ambient season's operation.

Corrosive Atmosphere

To protect condenser from corrosion in corrosive, saline, dusty and high humid atmosphere, it is recommended to use Pre - Coated Aluminum Fins as the coating offers a high resistance to corrosion and is designed to give maximum performance in severe and highly corrosive environments.
During laboratory testing, pre - coated aluminum passed a 1000 hour, 5% salt spray test at 95°F (35°C) temperature and 95% relative humidity, according to ASTM B - 117.These pre - coated aluminum fi ns are recommended for use in off shore (saline and high humidity) environments, for installations in the desert, refineries, sewage treatment plants and other industrial applications.

Multiple chillers

Where chiller capacities greater than can be supplied by a single HLCA chiller are required, or where standby capability is desired, chillers may be installed in parallel. Units may be of the same or different sizes with this piping arrangement. However, cooler flow rates must be balanced to ensure proper flow to each chiller. Unit software is capable of controlling two parallel units as a single plant by making use of the dual chiller control feature. Refer to the Controls, Start-up, Operation, Service and Troubleshooting guide for further details. The accessory Chiller visor System Manager can be used to ensure proper staging sequence of up to 8 chillers arranged in a parallel configuration. Refer to the accessory Chiller visor System Manager installation instruc-

tions for further details.

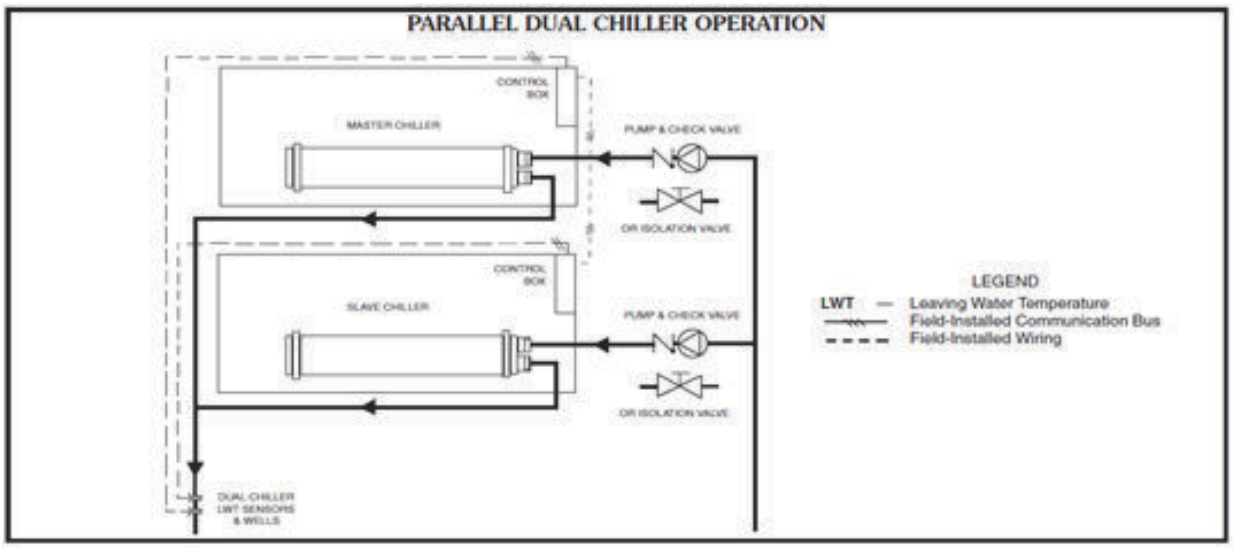
If the dual chiller algorithm is used, and the machines are installed in parallel, an additional chilled water sensor must be installed for each module. For 30RB315-390, where it is understood that these are duplex chillers comprised of 2 chillers to be installed in parallel, two factory-supplied thermistors and wells are shipped in the control box of one of the modules (for other 30RB chiller sizes which will be installed in a parallel piping configuration, a dual chiller accessory kit is available). Install one thermistor and well per chiller in the common leaving water header.

Parallel chiller control with dedicated pumps is recommended.

The chiller must start and stop its own water pump located in its own piping. Check valves are required at the discharge of each pump.

If pumps are not dedicated for each chiller, then isolation valves are required. Each chiller must open and close its own isolation valve through the unit control (the valve must be connected to the pump outputs).

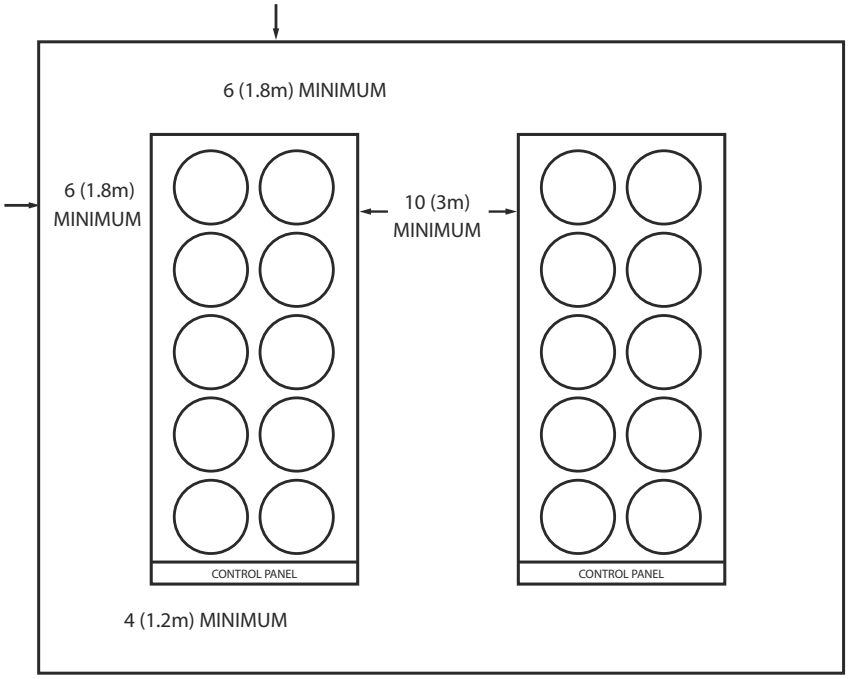
If a series application is required, the master/slave control feature cannot be used.



For chillers with two evaporators, pipes for leaving and entering water, from one evaporator should be joined to the corresponding pipe from the other evaporator, before connecting to the main header of the installation.

Clearances

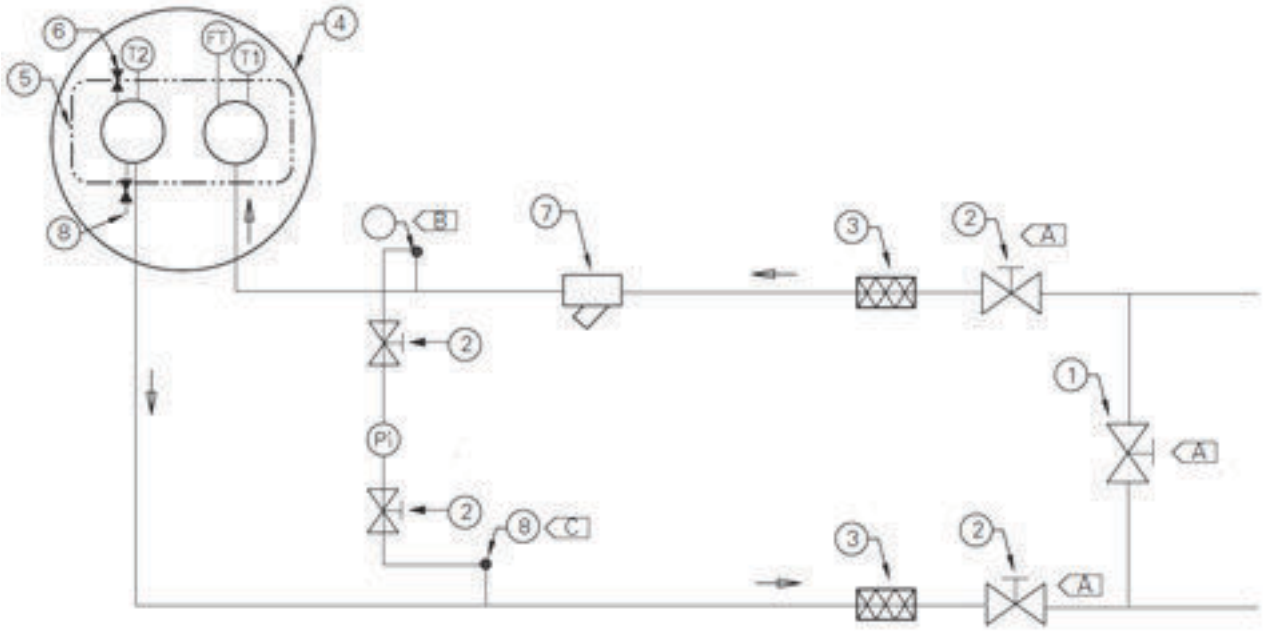
Provide enough space around the unit to allow the installation and maintenance personnel unrestricted access to all service points. See submittal drawings for the unit dimensions, to provide sufficient clearance for the opening of control panel doors and unit service. See
Figure 5, p. 14 for minimum clearances. In all cases, local codes which require additional clearances will take precedence over these recommendations.



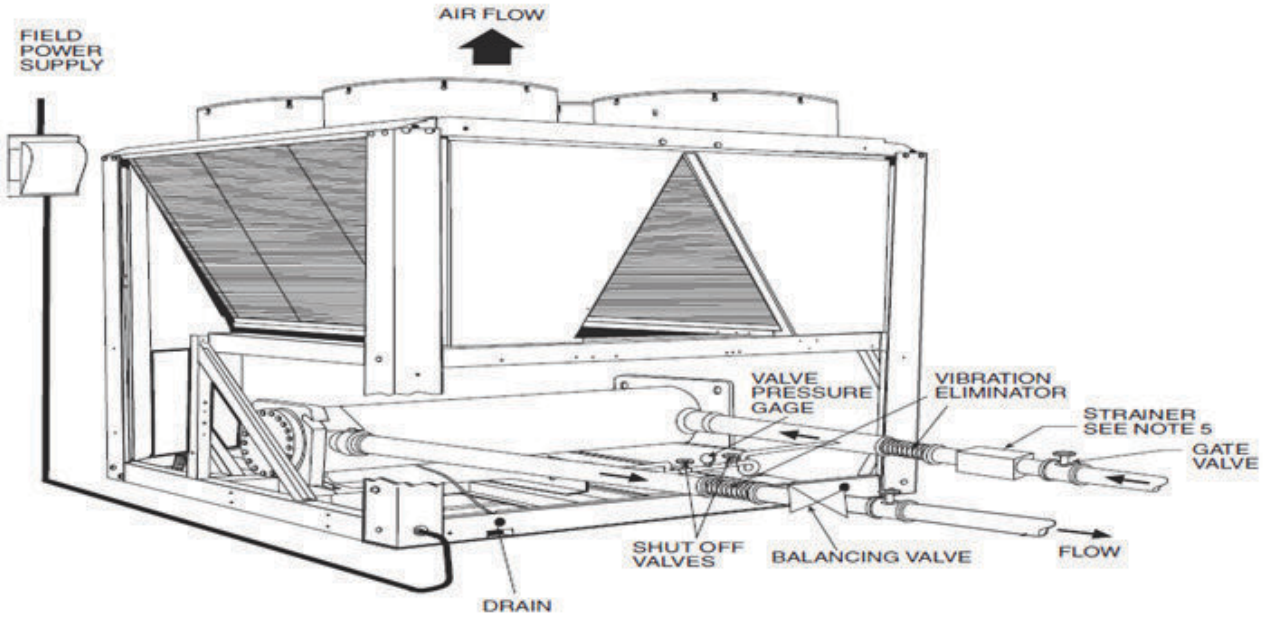
Evaporator Piping

Evaporator water connections are grooved.
Thoroughly flush all water piping to the unit before making the final piping connections to the unit. Components and layout will vary slightly, depending on the location of connections and the water source.
A vent is provided on the top of the evaporator at the chilled water inlet. Be sure to provide additional vents at high points in the piping to bleed air from the chilled water system. Install necessary pressure gauges to monitor the entering and leaving chilled water pressures.

Provide shutoff valves in lines to the gauges to isolate them from the system when they are not in use. Use rubber vibration eliminators to prevent vibration transmission through the water lines.
If desired, install thermometers in the lines to monitor entering and leaving water temperatures. Install a balancing valve in the leaving water line to control water flow balance. Install shutoff valves on both the entering and leaving water lines so that the evaporator can be isolated for service .



Item	Description	Item	Description
1	Bypass Valve	8	Drain
2	Isolation Valve	Pi	Pressure Gauge
3	Vibration Eliminator	FT	Water Flow Switch
4	Evaporator - End View (-2pass)	T1	Evap Water Inlet Temp Sensor
5	Evaporator Waterbox (-2pass)	A	Evap Water Inlet Temp Sensor
6	Vent	B	Vent must be installed at the high point of the line
7	Strainer	C	Drain must be installed at the low point of the line



Entering Chilled Water Piping

- Air vents (to bleed air from system).
- Water pressure gauges with shutoff valves.
- Vibration eliminators.
- Shutoff (isolation) valves. Thermometers (if desired).
- Clean-out tees.
- Pipe strainer.

Entering Chilled Water Piping

- Air vents (to bleed air from system).
- Water pressure gauges with shutoff valves.
- Vibration eliminators.
- Shutoff (isolation) valves.
- Thermometers..
- Balancing valve.

Drains

A 1/2" drain connection is located under outlet end of evaporator water box for drainage during unit servicing. A shutoff valve must be installed on drain line.

Pressure Gauges

Install field-supplied pressure components as shown in

Figure 17, p. 25. Locate pressure gauges or taps in a straight run of pipe; avoid placement near elbows, etc. Be sure to install the gauges at the same elevation on each shell if the shells have opposite-end water connections.

To read manifold pressure gauges, open one valve and close the other (depending upon the reading desired).This eliminates errors resulting from differently calibrated gauges installed at unmatched elevations.

Nomenclature

CF .....Copper Fins specify

FAP.....Pre Coated Aluminum Fins specify

FAA .....Aluminum Fins with Heresite coat Protection specify

FCA ..... Copper Fins with Heresite Coat Protection specify

ICP.....IP55 Control Panel

ECA/ECG/ECS .....Evaporator Casing

CGP .....Condenser Coil Guard

EEV.....Electronic Expansion Valve

VMM.....Voltage Monitoring Module

MP.....Marine Paint

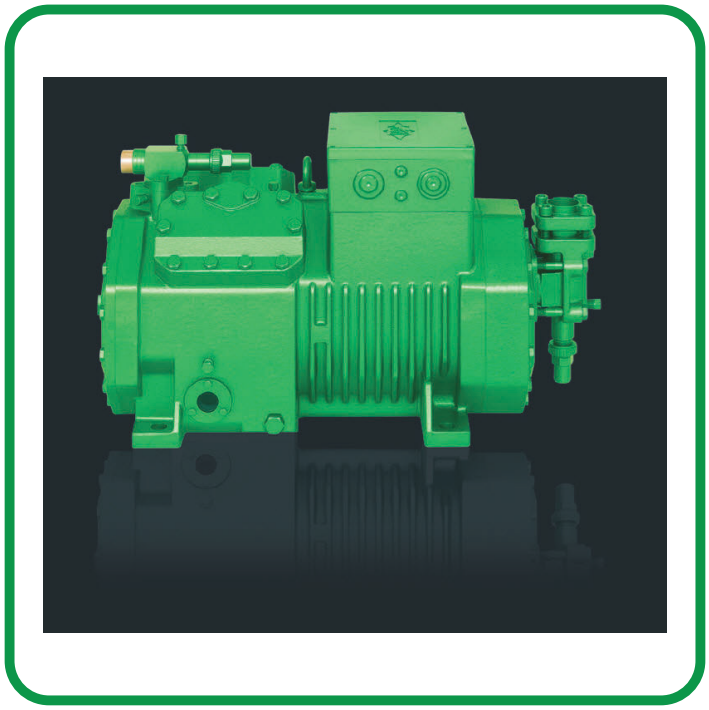
EFP..... Evaporator Freeze-Up Protection

AMPI.....Ammeter and Phase Selector Switch

VSS.....Voltmeter and Selector Switch.

SDG.....Pressure Gauges


REFRIGERANT
134a
30LBS NET WEIGHT 13.6KG
REFRIGERANT
134a



ENGINEERING SPECIFICATIONS-50 HZ (R-134a)-BITZER

Model	HLCA	HLCA-5-1	HLCA-10-1	HLCA-15-1	HLCA-20-1	HLCA-25-1	HLCA-30-1	HLCA-35-1	HLCA-40-1	HLCA-50-1
cooling capacity	TR	2.66	5.18	7.16	8.55	11.45	13.35	16.81	19.48	23.09
	kW	9.37	18.24	25.20	30.10	40.30	47.00	59.20	68.60	81.30
Compressor	Semi-Hermetic Reciprocating Discus 1750 rpm									
QTY		1	1	1	1	1	1	1	1	1
Oil Charge	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 Coil	Air-cooled 2 or 3or 4 rows, copper tubes aluminum fins									
Area	ft^2	14.20	14.20	28.41	28.41	28.41	49.71	49.71	49.71	49.71
	m^2	1.32	1.32	2.64	2.64	2.64	4.62	4.62	4.62	4.62
Condenser Fan (800)	Propeller direct drive 960 rpm									
QTY		1	1	1	1	1	2	2	2	2
Airflow Rate	cfm	13650	13150	13650	13600	13500	27200	26500	26000	25900
	l/s	6415.5	6180.5	6415.5	6392	6345	12784	12455	12220	12173
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected									
Size	kW	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Evaporator	Direct Expansion shell & tube									
QTY	1									
Ref. Circuits		1	1	1	1	1	1	1	1	1
Water Volume	USGal	6.30	12.26	16.93	20.23	27.08	31.58	39.78	46.10	54.63
	Litre	0.40	0.77	1.07	1.27	1.71	1.99	2.44	2.83	3.36
*Refrigerant Charge (R134a) (Approx)	Lb	12.13	24.25	36.38	48.5	60.63	72.75	84.88	97	121.2
	Kg	5.5	11	16.5	22	27.5	33	38.5	44	55
Operating Weight(Approx)	Lb	924	1144	1232	1320	1364	1606	1848	2200	2420
	Kg	420	520	560	600	620	730	840	1000	1100
*According to the enviromental situation this amount could be different.										

Model	HLCA	HLCA-20-2	HLCA-30-2	HLCA-40-2	HLCA-50-2	HLCA-60-2	HLCA-70-2	HLCA-80-2	HLCA-100-2
cooling capacity	TR	1021.00	14.11	16.86	22.57	26.32	33.15	38.42	45.53
	kW	36.48	50.40	60.20	80.60	94.00	118.40	137.20	162.60
Compressor	Semi-Hermetic Reciprocating Discus 1750 rpm								
QTY		2	2	2	2	2	2	2	2
Oil Charge	USGal	1.35	1.352	1.352	2.34	2.34	2.47	2.47	2.47
	Litre	5.2	5.2	5.2	9	9	9.5	9.5	9.5
Condenser Coil	Air-cooled 2 or 3or 4 rows, copper tubes aluminum fins								
Area	ft^2	56.81	56.81	56.81	56.81	99.42	99.42	99.42	149.13
	m^2	5.28	5.28	5.28	5.28	9.24	9.24	9.24	13.86
Condenser Fan (800)	Propeller direct drive 960 rpm								
QTY		2	2	2	2	4	4	4	6
Airflow Rate	cfm	27300	27200	26800	27000	54400	53000	52000	79500
	l/s	12831	12784	12596	12690	25568	24910	24440	37365
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected								
Size	kW	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Evaporator	Direct Expansion shell & tube								
QTY	1								
Ref. Circuits		2	2	2	2	2	2	2	2
Water Volume	USGPM	24.51	33.87	40.45	54.16	63.17	79.56	92.20	109.27
	l/s	1.54	2.13	2.55	3.41	3.98	5.01	5.81	6.88
*Refrigerant Charge (R134a) (Approx)	Lb	48.4	72.6	96.8	121	145.2	169.4	193.6	242
	Kg	22	33	44	55	66	77	88	110
Operating Weight (Approx)	Lb	1540	1716	2310	2398	2530	3594.8	3861	4070
	Kg	700	780	1050	1090	1150	1634	1755	1850
*According to the enviromental situation this amount could be different.									

Model	HLCA	HLCA-60-3	HLCA-75-3	HLCA-90-3	HLCA-105-3	HLCA-120-3	HLCA-150-3
cooling capacity	TR	25.28	33.85	39.48	49.73	57.62	68.29
	kW	88.88	119.02	138.81	174.84	202.61	240.11
Compressor	Semi-Hermetic Reciprocating						
QTY		3	3	3	3	3	3
Oil Charge	USGal	2.028	3.51	3.51	3.705	3.705	3.705
	Litre	7.8	13.5	13.5	14.25	14.25	14.25
Condenser Coil	Air-cooled 2 or 3or 4 rows, copper tubes aluminum fins						
Area	ft^2	85.22	85.22	149.13	149.13	149.13	198.84
	m^2	7.92	7.92	13.86	13.86	13.86	18.48
Condenser Fan (800)							
QTY		3	3	6	6	6	10
Airflow Rate	cfm	40200	40500	82000	81600	78000	132500
	l/s	18894	19035	38540	38352	36660	62275
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected						
Size	kW	1.75	1.75	1.75	1.75	1.75	1.75
Evaporator	Direct Expansion shell & tube						
QTY	1						
Ref. Circuits		3	3	3	3	3	3
Water Volume	USGPM	60.68	81.24	94.75	119.35	138.30	163.90
	l/s	3.82	5.12	5.97	7.52	8.71	10.33
*Refrigerant Charge (R134a)(Approx)	Lb	145.2	181.5	217.8	254.1	290.4	363
	Kg	66	82.5	99	115.5	132	165
Operating Weight (Approx)	Lb	2640	3696	3630	4356	4400	4840
	Kg	1200	1680	1650	1980	2000	2200
*According to the enviromental situation this amount could be different.							

Model	HLCA	HLCA-80-4	HLCA-100-4	HLCA-120-4	HLCA-140-4	HLCA-160-4	HLCA-200-4
cooling capacity	TR	33.94	45.14	52.64	66.30	76.83	91.06
	kW	119.33	158.70	185.08	233.12	270.14	320.15
Compressor	Semi-Hermetic Reciprocating						
QTY		4	4	4	4	4	4
Oil Charge	USGal	2.704	4.68	4.68	4.94	4.94	4.94
	Litre	10.4	18	18	19	19	19
Condenser Coil	Air-cooled 2 or 3or 4 rows, copper tubes aluminum fins						
Area	ft^2	99.42	99.42	149.13	198.84	198.84	248.56
	m^2	9.24	9.24	13.86	18.48	18.48	23.1
Condenser Fan (800)	Propeller direct drive 960 rpm						
QTY		4	4	6	8	8	10
Airflow Rate	cfm	53000	51800	79500	106000	104000	132500
	l/s	24910	24346	37365	49820	48880	62275
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected						
Size	kW	1.75	1.75	1.75	1.75	1.75	1.75
Evaporator	Direct Expansion shell & tube						
QTY	1						
Ref. Circuits		2	2	2	2	2	2
Water Volume	USGPM	80.91	108.32	126.34	159.13	184.40	218.53
	l/s	5.10	6.84	7.96	10.03	11.62	13.77
*Refrigerant Charge (R134a)(Approx)	Lb	193.6	242	290.4	338.8	387.2	484
	Kg	88	110	132	154	176	220
Operating Weight (Approx)	Lb	4180	4554	4840	5170	5280	5500
	Kg	1900	2070	2200	2350	2400	2500
*According to the enviromental situation this amount could be different.							

CAPACITY RATING(50 HZ)-R 134a																							
Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-134a)																					
		95°F (35°C)				104°F (40°C)				113°F (45°C)				122°F (50°C)				125.6°F (52°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-5-1	32.9	2.42	2.65	5.82	0.39	2.23	2.77	5.34	0.42	2.02	2.88	4.86	4.5	1.83	2.96	4.38	0.51	1.75	2.99	4.19	0.39
	0.5	8.66		0.37	1.3	7.95		0.34	1.4	7.23		0.31	1.5	6.52		0.28	1.7	6.24		0.26	1.3
	34.9	2.55	2.69	6.13	0.42	2.34	2.83	5.62	0.45	2.14	2.94	5.13	4.8	1.93	3.03	4.63	0.54	1.85	3.06	4.44	0.42
	1.6	9.12		0.39	1.4	8.37		0.35	1.5	7.63		0.32	1.6	6.89		0.29	1.8	6.6		0.28	1.4
	35.96	2.62	2.72	6.30	0.45	2.41	2.86	5.79	0.48	2.20	2.98	5.28	0.51	1.99	3.07	4.77	0.42	1.90	3.1	4.57	0.45
	2.2	9.37		0.40	1.4	8.61		0.36	1.6	7.85		0.33	1.7	7.1		0.30	1.4	6.8		0.29	1.5
	36.32	2.65	2.73	6.36	0.48	2.43	2.87	5.84	5.1	2.22	2.99	5.33	0.54	2.01	3.08	4.82	4.5	1.92	3.12	4.62	0.48
	2.4	9.46		0.40	1.6	8.69		0.37	1.7	7.93		0.34	1.8	7.17		0.30	1.5	6.87		0.29	1.6
HLCA-10-1	32.9	4.72	4.93	11.33	0.57	4.33	5.16	10.40	0.63	3.95	5.36	9.48	0.69	3.57	5.53	8.56	0.78	3.42	5.59	8.20	6
	0.5	16.86		0.71	1.9	15.48		0.66	2.1	14.1		0.60	2.3	12.74		0.54	2.6	12.2		0.52	2
	34.9	4.97	5.01	11.92	0.6	4.56	5.27	10.95	0.66	4.17	5.48	10.00	0.72	3.77	5.66	9.05	0.81	3.61	5.73	8.67	0.66
	1.6	17.74		0.75	2	16.3		0.69	2.2	14.88		0.63	2.4	13.46		0.57	2.7	12.9		0.55	2.2
	35.96	5.11	5.06	12.26	69	4.70	5.32	11.27	0.75	4.29	5.54	10.29	0.78	3.88	5.73	9.32	0.63	3.72	5.8	8.93	0.69
	2.2	18.24		0.77	2.3	16.77		0.71	2.5	15.31		0.65	2.6	13.87		0.59	2.1	13.29		0.56	2.3
	36.32	5.15	5.07	12.36	0.72	4.74	5.34	11.37	0.78	4.33	5.57	10.39	0.81	3.92	5.76	9.41	0.69	3.76	5.83	9.02	0.72
	2.4	18.4		0.78	2.4	16.92		0.72	2.6	15.46		0.65	2.7	14		0.59	2.3	13.42		0.57	2.4
HLCA-15-1	32.9	6.52	6.81	15.66	0.35	5.96	7.14	14.31	0.72	5.43	7.41	13.04	0.75	4.89	7.62	11.75	0.87	4.68	7.69	11.24	0.66
	0.5	23.3		0.99	2.2	21.3		0.90	2.4	19.4		0.82	2.5	17.48		0.74	2.9	16.72		0.71	2.2
	34.9	6.86	6.94	16.46	0.78	6.30	7.29	15.12	0.81	5.74	7.58	13.78	0.84	5.17	7.82	12.42	0.9	4.95	7.89	11.89	0.69
	1.6	24.5		1.04	2.6	22.5		0.95	2.7	20.5		0.87	2.8	18.48		0.78	3	17.69		0.75	2.3
	35.96	7.06	7	16.93	0.81	6.47	7.37	15.52	0.84	5.91	7.67	14.18	0.87	5.33	7.92	12.80	0.69	5.11	8	12.26	0.75
	2.2	25.2		1.07	2.7	23.1		0.98	2.8	21.1		0.89	2.9	19.05		0.81	2.3	18.24		0.77	2.5
	36.32	7.11	7.02	17.07	0.84	6.55	7.39	15.72	0.87	5.96	7.7	14.31	0.9	5.39	7.96	12.93	0.75	5.16	8.04	12.38	0.78
	2.4	25.4		1.08	2.8	23.4		0.99	2.9	21.3		0.90	3	19.24		0.81	2.5	18.42		0.78	2.6
HLCA-20-1	32.9	7.78	8.15	18.68	0.35	7.17	8.57	17.20	0.96	6.55	8.93	15.72	1.02	5.96	9.23	14.31	1.17	5.71	9.33	13.71	0.87
	0.5	27.8		1.18	3.1	25.6		1.08	3.2	23.4		0.99	3.4	21.3		0.90	3.9	20.4		0.86	2.9
	34.9	8.18	8.29	19.62	1.02	7.56	8.74	18.14	1.05	6.92	9.13	16.60	1.11	6.27	9.46	15.05	1.23	6.02	9.57	14.45	0.96
	1.6	29.2		1.24	3.4	27		1.14	3.5	24.7		1.05	3.7	22.4		0.95	4.1	21.5		0.91	3.2
	35.96	8.43	8.36	20.23	1.05	7.76	8.83	18.61	1.11	7.11	9.24	17.07	1.17	6.47	9.58	15.52	9.6	6.22	9.69	14.92	0.99
	2.2	30.1		1.27	3.5	27.7		1.17	3.7	25.4		1.08	3.9	23.1		0.98	32	22.2		0.94	3.3
	36.32	8.48	8.39	20.36	1.11	7.84	8.86	18.82	1.17	7.17	9.27	17.20	1.23	6.52	9.62	15.66	1.02	6.27	9.74	15.05	1.02
	2.4	30.3		1.28	3.7	28		1.19	3.9	25.6		1.08	4.1	23.3		0.99	3.4	22.4		0.95	3.4
HLCA-25-1	32.9	10.47	10.69	25.13	1.14	9.69	11.29	23.25	1.2	8.88	11.84	21.30	1.2	8.09	12.32	19.42	1.38	7.78	12.5	18.68	0.9
	0.5	37.4		1.58	3.8	34.6		1.46	4	31.7		1.34	4	28.9		1.22	4.6	27.8		1.18	3
	34.9	11.00	10.85	26.41	1.23	10.16	11.49	24.39	1.26	9.35	12.06	22.44	1.32	8.51	12.58	20.43	1.44	8.18	12.77	19.62	1.11
	1.6	39.3		1.66	4.1	36.3		1.54	4.2	33.4		1.41	4.4	30.4		1.29	4.8	29.2		1.24	3.7
	35.96	11.28	10.94	27.08	1.29	10.44	11.59	25.07	1.35	9.60	12.19	23.05	1.38	8.76	12.72	21.03	1.11	8.43	12.91	20.23	1.14
	2.2	40.3		1.71	4.3	37.3		1.58	4.5	34.3		1.45	4.6	31.3		1.33	3.7	30.1		1.27	3.8
	36.32	11.40	10.97	27.35	1.32	10.53	11.63	25.27	1.38	9.69	12.23	23.25	1.44	8.85	12.76	21.24	1.2	8.51	12.96	20.43	1.17
	2.4	40.7		1.72	4.4	37.6		1.59	4.6	34.6		1.46	4.8	31.6		1.34	4	30.4		1.29	3.9
HLCA-30-1	32.9	12.21	12.46	29.30	4.2	11.31	13.13	27.15	3.4	10.39	13.73	24.93	2.6	9.46	14.27	22.71	2.2	9.10	14.47	21.84	1.8
	0.5	43.6		1.85	12.5	40.4		1.71	10.3	37.1		1.57	7.9	33.8		1.43	6.7	32.5		1.38	5.4
	34.9	12.82	12.66	30.78	4.6	11.87	13.36	28.49	3.8	10.92	14	26.21	3	9.97	14.58	23.92	2.6	9.58	14.79	22.98	2.2
	1.6	45.8		1.94	13.7	42.4		1.80	11.4	39		1.65	9	35.6		1.51	7.8	34.2		1.45	6.5
	35.96	13.16	12.77	31.58	4.8	12.18	13.49	29.23	4	11.23	14.14	26.95	3.2	10.25	14.74	24.60	2.8	9.86	14.97	23.65	2.4
	2.2	47		1.99	14.3	43.5		1.84	12	40.1		1.70	9.5	36.6		1.55	8.3	35.2		1.49	7.1
	36.32	13.27	12.8	31.85	5.4	12.29	13.53	29.50	4.6	11.31	14.19	27.15	3.7	10.33	14.8	24.80	3.3	9.94	15.02	23.86	2.9
	2.4	47.4		2.01	16.1	43.9		1.86	13.6	40.4		1.71	11.1	36.9		1.56	9.9	35.5		1.50	8.7
HLCA-35-1	32.9	15.37	15.93	36.89	5.4	14.20	16.8	34.07	6.8	13.02	17.57	31.25	9	11.84	18.22	28.43	10.3	11.37	18.44	27.28	11.8
	0.5	54.9		2.32	16.1	50.7		2.15	21	46.5		1.97	27.1	42.3		1.79	30.9	40.6		1.72	36
	34.9	16.16	16.2	38.77	4.5	14.92	17.13	35.82	5.9	13.72	17.95	32.93	7.8	12.49	18.65	29.97	9.1	11.98	18.89	28.76	10.5
	1.6	57.7		2.44	14.7	53.3		2.26	18	49		2.07	23.6	44.6		1.89	27.5	42.8		1.81	32
	35.96	16.58	16.34	39.78	4.8	15.34	17.31	36.83	5.6	14.08	18.15	33.80	7.3	12.82	18.88	30.78	8.5	12.32	19.14	29.57	9.8
	2.2	59.2		2.51	14.3	54.8		2.32	16.8	50.3		2.13	22	45.8		1.94	25.5	44		1.86	30
	36.32	16.72	16.39	40.12	4.6	15.48	17.36	37.16	5.4	14.22	18.22	34.14	6.2	12.96	18.96	31.11	6.9	12.46	19.22	29.90	8
	2.4	59.7		2.53	13.7	55.3		2.34	14.6	50.8		2.15	18.5	46.3		1.96	21	44.5		1.88	24
HLCA-40-1	32.9	17.84	19.01	42.81	6.6	16.58	20.1	39.78	10.1	15.29	21.1	36.69	15.4	13.97	21.9	33.53	18.4	13.44	22.2	32.26	21.8
	0.5	63.7		2.70	19.7	59.2		2.51	30.2	54.6		2.31	45.9	49.9		2.11	54.9	48		2.03	65.1
	34.9	18.73	19.32	44.96	5.3	17.42	20.5	41.80	8.1	16.07	21.5	38.57	12.7	14.70	22.4	35.28	15.5	14.17	22.7	34.00	18.7
	1.6	66.9		2.83	15.8	62.2		2.63	24.3	57.4		2.43	38.1	52.5		2.22	46.4	50.6		2.14	56
	35.96	19.21	19.49	46.10	4.8	17.86	20.7	42.87	7.3	16.52	21.7	39.65	11.5	15.12	22.7	36.29	14.2	14.56	23	34.94	17.3
	2.2	68.6		2.90	14.3	63.8		2.70	21.7	59		2.50	34.5	54		2.29	42.4	52		2.20	51.7
	36.32	19.38	19.55	46.50	3.8	18.03	20.7	43.28	5.2	16.66	21.8	39.98	8.4	15.26	22.7	36.62	10.5	14.70	23.1	35.28	13.1
	2.4	69.2		2.93	11.5	64.4		2.73	15.5	59.5		2.52	25	54.5		2.31	31.4	52.5		2.22	39.2
HLCA-50-1	32.9	21.14	22.7	50.74	3.1	19.52	23.9	46.84	3	17.89	24.9	42.94	3.2	16.27	25.7	39.04	3.4	15.62	26	37.50	3.7
	0.5	75.5		3.20	9.3	69.7		2.95	9	63.9		2.71	9.6	58.1		2.46	10.2	55.8		2.36	11.1
	34.9	22.20	23.1	53.29	3.3	20.50	24.3	49.19	3	18.79	25.4	45.09	3.1	17.11	26.3	41.06	3.2	16.44	26.6	39.45	3.4
	1.6	79.3		3.36	9.9	73.2		3.10	9	67.1		2.84	9.2	61.1		2.59	9.6	58.7		2.49	10.3
	35.96	22.76	23.3	54.63	3.4	21.06	24.5	50.53	3.1	19.32	25.6	46.37	3	17.58	26.5	42.20	3.1	16.88	26.9	40.52	3.3
	2.2	81.3		3.44	10.3	75.2		3.18	9.2	69		2.92	9	62.8		2.66	9.4	60.3		2.55	9.9
	36.32	22.99	23.4	55.17	4	21.22	24.6	50.94	3.3	19.49	25.7	46.77	3	17.75	26.6	42.60	3	17.05	27	40.92	3.1
	2.4	82.1		3.48	11.9	75.8		3.21	9.9	69.6		2.95	9	63.4		2.68	9	60.9		2.58	9.2

CAPACITY RATING(50 HZ)-R 134a																								
Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-134a)																						
		95°F (35°C)				104°F (40°C)				113°F (45°C)				122°F (50°C)				125.6°F (52°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	Kw	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-20-2	32.9	9.44	9.86	22.66	0.35	8.67	10.32	20.81	0.96	7.90	10.72	18.95	1.02	7.13	11.06	17.12	1.17	6.83	11.18	16.40	0.87
	0.5	33.72		1.43	3.1	30.96		1.31	3.2	28.2		1.19	3.4	25.48		1.08	3.9	24.4		1.03	2.9
	34.9	9.93	10.02	23.84	1.02	9.13	10.54	21.91	1.05	8.33	10.96	20.00	1.11	7.54	11.32	18.09	1.23	7.22	11.46	17.34	0.96
	1.6	35.48		1.50	3.4	32.6		1.38	3.5	29.76		1.26	3.7	26.92		1.14	4.1	25.8		1.09	3.2
	35.96	10.21	10.12	24.51	1.05	9.39	10.64	22.54	1.11	8.57	11.08	20.58	1.17	7.77	11.46	18.64	9.6	7.44	11.6	17.86	0.99
	2.2	36.48		1.54	3.5	33.54		1.42	3.7	30.62		1.30	3.9	27.74		1.17	32	26.58		1.13	3.3
	36.32	10.30	10.14	24.73	1.11	9.48	10.68	22.74	1.17	8.66	11.14	20.78	1.23	7.84	11.52	18.82	1.02	7.52	11.66	18.04	1.02
	2.4	36.8		1.56	3.7	33.84		1.43	3.9	30.92		1.31	4.1	28		1.19	3.4	26.84		1.14	3.4
HLCA-30-2	32.9	13.05	13.62	31.32	4.2	11.93	14.28	28.63	3.4	10.86	14.82	26.07	2.6	9.79	15.24	23.49	2.2	9.36	15.38	22.47	1.8
	0.5	46.6		1.97	12.5	42.6		1.80	10.3	38.8		1.64	7.9	34.96		1.48	6.7	33.44		1.42	5.4
	34.9	13.72	13.88	32.93	4.6	12.60	14.58	30.24	3.8	11.48	15.16	27.55	3	10.63	15.64	25.51	2.6	9.91	15.78	23.78	2.2
	1.6	49		2.07	13.7	45		1.91	11.4	41		1.74	9	37.96		1.61	7.8	35.38		1.50	6.5
	35.96	14.11	14	33.87	4.8	129.36	14.74	310.46	4	11.82	15.34	28.36	3.2	10.67	15.84	25.60	2.8	10.21	16	24.51	2.4
	2.2	50.4		2.13	14.3	462		19.56	12	42.2		1.79	9.5	38.1		1.61	8.3	36.48		1.54	7.1
	36.32	14.22	14.04	34.14	5.4	13.10	14.78	31.45	4.6	11.93	15.4	28.63	3.7	10.77	15.92	25.86	3.3	10.32	16.08	24.76	2.9
	2.4	50.8		2.15	16.1	46.8		1.98	13.6	42.6		1.80	11.1	38.48		1.63	9.9	36.84		1.56	8.7
HLCA-40-2	32.9	15.57	16.30	37.36	6.6	14.34	17.14	34.41	10.1	13.10	17.86	31.45	15.4	11.93	18.46	28.63	18.4	11.42	18.66	27.42	21.8
	0.5	55.6		2.35	19.7	51.2		2.17	30.2	46.8		1.98	45.9	42.6		1.80	54.9	40.8		1.73	65.1
	34.9	16.35	16.58	39.24	5.3	15.12	17.48	36.29	8.1	13.83	18.26	33.20	12.7	12.54	18.92	30.11	15.5	12.04	19.14	28.90	18.7
	1.6	58.4		2.47	15.8	54		2.29	24.3	49.4		2.09	38.1	44.8		1.90	46.4	43		1.82	56
	35.96	16.86	16.72	40.45	4.8	15.51	17.66	37.23	7.3	14.22	18.48	34.14	11.5	12.94	19.16	31.05	14.2	12.43	19.38	29.84	17.3
	2.2	60.2		2.55	14.3	55.4		2.35	21.7	50.8		2.15	34.5	46.2		1.96	42.4	44.4		1.88	51.7
	36.32	16.97	16.78	40.72	3.8	15.68	17.72	37.63	5.2	14.34	18.54	34.41	8.4	13.05	19.24	31.32	10.5	12.54	19.48	30.11	13.1
	2.4	60.6		2.57	11.5	56		2.37	15.5	51.2		2.17	25	46.6		1.97	31.4	44.8		1.90	39.2
HLCA-50-2	32.9	20.94	21.38	50.27	3.1	19.38	22.58	46.50	3	17.75	23.68	42.60	3.2	16.18	24.64	38.84	3.4	15.57	25	37.36	3.7
	0.5	74.8		3.17	9.3	69.2		2.93	9	63.4		2.68	9.6	57.8		2.45	10.2	55.6		2.35	11.1
	34.9	22.01	21.7	52.82	3.3	20.33	22.98	48.79	3	18.70	24.12	44.89	3.1	17.02	25.16	40.86	3.2	16.35	25.54	39.24	3.4
	1.6	78.6		3.33	9.9	72.6		3.07	9	66.8		2.83	9.2	60.8		2.57	9.6	58.4		2.47	10.3
	35.96	22.57	21.88	54.16	3.4	20.89	23.18	50.13	3.1	19.21	24.38	46.10	3	17.53	25.44	42.07	3.1	16.86	25.82	40.45	3.3
	2.2	80.6		3.41	10.3	74.6		3.16	9.2	68.6		2.90	9	62.6		2.65	9.4	60.2		2.55	9.9
	36.32	22.79	21.94	54.70	4	21.06	23.26	50.53	3.3	19.38	24.46	46.50	3	17.70	25.52	42.47	3	17.02	25.92	40.86	3.1
	2.4	81.4		3.45	11.9	75.2		3.18	9.9	69.2		2.93	9	63.2		2.68	9	60.8		2.57	9.2
HLCA-60-2	32.9	24.42	24.92	58.60	9.4	22.62	26.26	54.30	8.1	20.78	27.46	49.86	6.8	18.09	28.54	43.41	6.2	18.20	28.94	43.68	5.7
	0.5	87.2		3.69	28.2	80.8		3.42	24.1	74.2		3.14	20.3	64.6		2.73	18.7	65		2.75	17.1
	34.9	25.65	25.32	61.56	10.2	23.74	26.72	56.99	8.7	21.84	28	52.42	7.4	19.94	29.16	47.85	6.8	19.15	29.58	45.96	6.2
	1.6	91.6		3.88	30.5	84.8		3.59	26.1	78		3.30	22	71.2		3.01	20.2	68.4		2.90	18.4
	35.96	26.32	25.54	63.17	10.7	24.36	26.98	58.46	9.1	22.46	28.28	53.89	7.7	20.50	29.48	49.19	7	19.71	29.94	47.31	6.4
	2.2	94		3.98	31.8	87		3.68	27.2	80.2		3.40	22.9	73.2		3.10	21	70.4		2.98	19.2
	36.32	26.54	25.6	63.71	11.9	24.58	27.06	59.00	10.2	22.62	28.38	54.30	8.6	20.66	29.6	49.59	7.9	19.88	30.04	47.71	7.3
	2.4	94.8		4.01	35.7	87.8		3.72	30.6	80.8		3.42	25.8	73.8		3.12	23.7	71		3.01	217
HLCA-70-2	32.9	30.74	31.86	73.79	3.3	28.39	33.6	68.14	2.8	26.04	35.14	62.50	2.2	23.69	36.44	56.85	2	22.74	36.88	54.57	1.7
	0.5	109.8		4.65	10	101.4		4.29	8.3	93		3.94	6.6	84.6		3.58	5.9	81.2		3.44	5.1
	34.9	32.31	32.4	77.55	3.7	29.85	34.26	71.64	3.1	27.44	35.9	65.86	2.5	24.98	37.3	59.94	2.2	23.74	37.78	56.99	1.9
	1.6	115.4		4.89	10.9	106.6		4.51	9.1	98		4.15	7.4	89.2		3.78	6.6	84.8		3.59	5.8
	35.96	33.15	32.68	79.56	3.8	30.69	34.62	73.65	3.2	28.17	36.3	67.60	2.6	25.37	37.76	60.88	2.3	24.64	38.28	59.14	2.1
	2.2	118.4		5.01	11.4	109.6		4.64	9.6	100.6		4.26	7.7	90.6		3.84	6.9	88		3.73	6.1
	36.32	33.43	32.78	80.24	4.3	30.97	34.72	74.32	3.6	28.45	36.44	68.28	3	25.93	37.92	62.23	2.7	24.92	38.44	59.81	2.4
	2.4	119.4		5.05	12.9	110.6		4.68	10.9	101.6		4.30	9	92.6		3.92	8.1	89		3.77	7.2
HLCA-80-2	32.9	35.67	38.02	85.61	6.3	33.15	40.2	79.56	5.4	30.58	42.2	73.38	4.5	27.89	43.8	66.93	4.2	26.88	44.4	64.51	3.8
	0.5	127.4		5.39	18.8	118.4		5.01	16.1	109.2		4.62	13.6	99.6		4.22	12.5	96		4.06	11.4
	34.9	37.46	38.64	89.91	6.7	34.83	41	83.60	5.7	32.14	43	77.15	4.8	29.40	44.8	70.56	4.4	28.34	45.4	68.01	4.1
	1.6	133.8		5.66	20	124.4		5.27	17.2	114.8		4.86	14.5	105		4.45	13.3	101.2		4.28	12.1
	35.96	38.42	38.98	92.20	6.9	35.73	41.4	85.75	5.9	33.04	43.4	79.30	5	30.24	45.4	72.58	4.6	29.12	46	69.89	4.2
	2.2	137.2		5.81	20.6	127.6		5.40	17.7	118		5.00	14.9	108		4.57	13.7	104		4.40	12.52
	36.32	38.75	39.1	93.00	7.5	36.06	41.4	86.55	6.5	33.32	43.6	79.97	5.5	114.52	45.4	274.85	5	29.40	46.2	70.56	4.6
	2.4	138.4		5.86	22.5	128.8		5.45	19.3	119		5.04	16.4	409		17.32	15	105		4.45	13.8
HLCA-100-2	32.9	42.28	45.40	101.47	9.9	39.03	47.8	93.68	8.4	35.78	49.8	85.88	7.1	32.54	51.4	78.09	6.5	31.25	52	75.00	5.9
	0.5	151		6.39	29.5	139.4		5.90	25.2	127.8		5.41	21.2	116.2		4.92	19.4	111.6		4.72	17.7
	34.9	44.41	46.2	106.58	10.5	40.99	48.6	98.38	9	37.58	50.8	90.18	7.5	34.22	52.6	82.12	6.9	32.87	53.2	78.89	6.3
	1.6	158.6		6.71	31.4	146.4		6.20	26.8	134.2		5.68	22.5	122.2		5.17	20.7	117.4		4.97	18.9
	35.96	45.53	46.6	109.27	10.8	42.03	49	100.87	9.3	38.64	51.2	92.74	7.8	35.17	53	84.40	7.2	33.77	53.8	81.04	6.5
	2.2	162.6		6.88	32.4	150.1		6.35	27.7	138		5.84	23.3	125.6		5.32	21.4	120.6		5.11	19.6
	36.32	45.98	46.8	110.34	11.2	42.45	49.2	101.88	10.2	38.98	51.4	93.54	86	35.50	53.2	85.21	7.9	34.10	54	81.85	7.2
	2.4	164.2		6.95	35.5	151.6		6.42	30.4	139.2		5.89	25.6	126.8		5.37	23.6	121.8		5.16	21.6

CAPACITY RATING(50 HZ)-R 134a																							
Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-134a)																					
		95°F (35°C)				104°F (40°C)				113°F (45°C)				122°F (50°C)				125,6°F (52°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-60-3	32.9	23.35	24.45	56.04	9.4	21.50	25.71	51.61	8.1	19.66	26.79	47.17	6.8	17.89	27.69	42.94	6.2	17.14	27.99	41.13	5.7
	0.5	83.4		3.53	28.2	76.8		3.25	24.1	70.2		2.97	20.3	63.9		2.71	18.7	61.2		2.59	17.1
	34.9	24.53	24.87	58.87	10.2	22.68	26.22	54.43	8.7	20.75	27.39	49.80	7.4	18.82	28.38	45.16	6.8	18.06	28.71	43.34	6.2
	1.6	87.6		3.71	30.5	81		3.43	26.1	74.1		3.14	22	67.2		2.84	20.2	64.5		2.73	18.4
	35.96	25.28	25.08	60.68	10.7	23.27	26.49	55.84	9.1	21.34	27.72	51.21	7.7	19.40	28.74	46.57	7	18.65	29.07	44.76	6.4
	2.2	90.3		3.82	31.8	83.1		3.52	27.2	76.2		3.23	22.9	69.3		2.93	21	66.6		2.82	19.2
	36.32	25.45	25.17	61.08	11.9	23.52	26.58	56.45	10.2	21.50	27.81	51.61	8.6	19.57	28.86	46.97	7.9	18.82	29.22	45.16	7.3
	2.4	90.9		3.85	35.7	84		3.56	30.6	76.8		3.25	25.8	69.9		2.96	23.7	67.2		2.84	217
HLCA-75-3	32.9	31.42	32.07	75.40	4	29.06	33.87	69.75	3.4	26.63	35.52	63.91	2.7	24.28	36.96	58.26	2.4	23.35	37.5	56.04	2.2
	0.5	112.2		4.75	12	103.8		4.39	10	95.1		4.03	8.1	86.7		3.67	7.3	83.4		3.53	6.4
	34.9	33.01	32.55	79.23	4.3	30.49	34.47	73.18	3.6	28.06	36.18	67.33	3	25.54	37.74	61.29	2.7	24.53	38.31	58.87	2.4
	1.6	117.9		4.99	13	108.9		4.61	10.9	100.2		4.24	8.9	91.2		3.86	8	87.6		3.71	7.2
	35.96	33.85	32.82	81.24	4.5	31.33	34.77	75.20	3.8	28.81	36.57	69.15	3.1	26.29	38.16	63.10	2.8	25.28	38.73	60.68	2.5
	2.2	120.9		5.12	13.5	111.9		4.74	11.4	102.9		4.36	9.3	93.9		3.98	8.4	90.3		3.82	7.5
	36.32	34.19	32.91	82.05	5.1	31.58	34.89	75.80	4.3	29.06	36.69	69.75	3.6	26.54	38.28	63.71	3.2	25.54	38.88	61.29	2.9
	2.4	122.1		5.17	15.1	112.8		4.78	12.8	103.8		4.39	10.6	94.8		4.01	9.7	91.2		3.86	8.7
HLCA-90-3	32.9	36.62	37.38	87.90	8.1	33.94	39.39	81.45	6.9	31.16	41.19	74.79	5.8	28.39	42.81	68.14	5.4	27.30	43.41	65.52	4.9
	0.5	130.8		5.54	24.2	121.2		5.13	20.7	111.3		4.71	17.4	101.4		4.29	16	97.5		4.13	14.6
	34.9	38.47	37.98	92.33	8.6	35.62	40.08	85.48	7.4	32.76	42	78.62	6.2	29.90	43.74	71.77	5.7	28.73	44.37	68.95	5.2
	1.6	137.4		5.82	25.7	127.2		5.39	22.1	117		4.95	18.6	106.8		4.52	17.1	102.6		4.34	15.6
	35.96	39.48	38.31	94.75	8.9	36.54	40.47	87.70	7.6	33.68	42.42	80.84	6.4	30.74	44.22	73.79	5.9	29.57	44.91	70.96	5.4
	2.2	141		5.97	26.6	130.5		5.52	22.8	120.3		5.09	19.2	109.8		4.65	17.7	105.6		4.47	16.2
	36.32	39.82	38.4	95.56	9.8	36.88	40.59	88.50	8.4	33.94	42.57	81.45	7.1	31.00	44.4	74.39	6.5	29.82	45.06	71.57	6
	2.4	142.2		6.02	29.1	131.7		5.58	25	121.2		5.13	21.2	110.7		4.69	19.5	106.5		4.51	17.8
HLCA-105-3	32.9	46.12	47.79	110.68	11.1	42.59	50.4	102.21	9.5	39.06	52.71	93.74	7.9	35.53	54.66	85.28	7.3	34.10	55.32	81.85	6.7
	0.5	164.7		6.97	33.2	152.1		6.44	28.3	139.5		5.91	23.7	126.9		5.37	21.8	121.8		5.16	19.9
	34.9	48.47	48.6	116.32	11.8	44.77	51.39	107.45	10.1	41.16	53.85	98.78	8.4	37.46	55.95	89.91	7.7	35.95	56.67	86.28	7.1
	1.6	173.1		7.33	35.2	159.9		6.77	30.1	147		6.22	25.2	133.8		5.66	23.2	128.4		5.44	21.2
	35.96	49.73	49.02	119.35	12.2	46.03	51.93	110.48	10.4	42.25	54.45	101.40	8.7	38.47	56.64	92.33	8	36.96	57.42	88.70	7.3
	2.2	177.6		7.52	36.4	164.4		6.96	31	150.9		6.39	26	137.4		5.82	23.9	132		5.59	21.9
	36.32	50.15	49.17	120.36	13.3	46.45	52.08	111.48	11.4	42.67	54.66	102.41	9.6	38.89	56.88	93.34	8.8	37.38	57.66	89.71	8.1
	2.4	179.1		7.58	39.9	165.9		7.02	34.1	152.4		6.45	28.6	138.9		5.88	26.6	133.5		5.65	24.1
HLCA-120-3	32.9	53.51	57.03	128.42	13.4	49.73	60.3	119.35	15	45.86	63.3	110.07	16.5	41.92	65.7	100.60	17.1	40.32	66.6	96.77	17.5
	0.5	191.1		8.09	39.9	177.6		7.52	45	163.8		6.93	49.3	149.7		6.34	51	144		6.10	52.3
	34.9	56.20	57.96	134.87	12.7	52.25	61.5	125.40	14.4	48.22	64.5	115.72	16	44.10	67.2	105.84	16.7	42.50	68.1	102.01	17.2
	1.6	200.7		8.50	37.9	186.6		7.90	43.2	172.2		7.29	48	157.5		6.67	49.9	151.8		6.43	51.5
	35.96	57.62	58.47	138.30	12.4	53.59	62.1	128.62	14.2	49.56	65.1	118.94	15.8	45.36	68.1	108.86	16.5	43.68	69	104.83	17.1
	2.2	205.8		8.71	37	191.4		8.10	42.3	177		7.49	47.3	162		6.86	49.3	156		6.60	51
	36.32	58.13	58.65	139.51	11.6	54.10	62.1	129.83	13.4	49.98	65.4	119.95	15.2	45.78	68.1	109.87	15.9	44.10	69.3	105.84	16.6
	2.4	207.6		8.79	34.6	193.2		8.18	40.1	178.5		7.56	45.4	163.5		6.92	47.7	157.5		6.67	49.7
HLCA-150-3	32.9	63.42	68.10	152.21	12.4	58.55	71.7	140.52	10.4	53.68	74.7	128.82	8.4	48.80	77.1	117.13	7.5	46.87	78	112.49	6.7
	0.5	226.5		9.59	37	209.1		8.85	31.1	191.7		8.12	25.2	174.3		7.38	22.5	167.4		7.09	19.9
	34.9	66.61	69.3	159.87	13.3	61.49	72.9	147.57	11.2	56.36	76.2	135.27	9.1	51.32	78.9	123.18	8.2	49.31	79.8	118.34	7.3
	1.6	237.9		10.07	39.7	219.6		9.30	33.5	201.3		8.52	27.3	183.3		7.76	24.6	176.1		7.46	21.8
	35.96	68.29	69.9	163.90	13.8	63.17	73.5	151.60	11.6	57.96	76.8	139.10	9.5	52.75	79.5	126.60	8.6	50.65	80.7	121.56	7.7
	2.2	243.9		10.33	41.2	225.6		9.55	34.8	207		8.76	28.5	188.4		7.98	25.7	180.9		7.66	22.9
	36.32	68.96	70.2	165.51	15.5	63.67	73.8	152.81	13.2	58.46	77.1	140.31	10.9	53.26	79.8	127.81	9.9	51.16	81	122.77	8.9
	2.4	246.3		10.43	46.4	227.4		9.63	39.5	208.8		8.84	32.7	190.2		8.05	29.7	182.7		7.73	26.7

CAPACITY RATING(50 HZ)-R 134a																									
Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-134a)																							
		95°F (35°C)				104°F (40°C)				113°F (45°C)				122°F (50°C)				125,6°F (52°C)					
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD		
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg		
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg		
HLCA-80-4	32.9	31.14	32.60	74.73	6.3	28.67	34.28	68.81	5.4	26.21	35.72	62.90	4.5	23.86	36.92	57.25	4.2	22.85	37.32	54.84	3.8		
	0.5	111.2		4.71	18.8	102.4		4.34	16.1	93.6		3.96	13.6	85.2		3.61	12.5	81.6		3.45	11.4		
	34.9	32.70	33.16	78.49	6.7	30.24	34.96	72.58	5.7	27.66	36.52	66.39	4.8	25.09	37.84	60.21	4.4	24.08	38.28	57.79	4.1		
	1.6	116.8		4.94	20	108		4.57	17.2	98.8		4.18	14.5	89.6		3.79	13.3	86		3.64	12.1		
	35.96	33.71	33.44	80.91	6.9	31.02	35.32	74.46	5.9	28.45	36.96	68.28	5	25.87	38.32	62.09	4.6	24.86	38.76	59.67	4.2		
	2.2	120.4		5.10	20.6	110.8		4.69	17.7	101.6		4.30	14.9	92.4		3.91	13.7	88.8		3.76	12.52		
	36.32	33.94	33.56	81.45	7.5	31.36	35.44	75.26	6.5	28.67	37.08	68.81	5.5	26.10	38.48	62.63	5	25.09	38.96	60.21	4.6		
	2.4	121.2		5.13	22.5	112		4.74	19.3	102.4		4.34	16.4	93.2		3.95	15	89.6		3.79	13.8		
HLCA-100-4	32.9	41.89	42.76	100.53	9.9	38.75	45.16	93.00	8.4	35.50	47.36	85.21	7.1	32.37	49.28	77.68	6.5	31.14	50	74.73	5.9		
	0.5	149.6		6.33	29.5	138.4		5.86	25.2	126.8		5.37	21.2	115.6		4.89	19.4	111.2		4.71	17.7		
	34.9	44.02	43.4	105.64	10.5	40.66	45.96	97.57	9	37.41	48.24	89.78	7.5	34.05	50.32	81.72	6.9	32.70	51.08	78.49	6.3		
	1.6	157.2		6.66	31.4	145.2		6.15	26.8	133.6		5.66	22.5	121.6		5.15	20.7	116.8		4.94	18.9		
	35.96	45.14	43.76	108.32	10.8	41.78	46.36	100.26	9.3	38.42	48.76	92.20	7.8	35.06	50.88	84.13	7.2	33.71	51.64	80.91	6.5		
	2.2	161.2		6.84	32.4	149.2		6.32	27.7	137.2		5.81	23.3	125.2		5.30	21.4	120.4		5.10	19.6		
	36.32	45.58	43.88	109.40	11.2	42.11	46.52	101.07	10.2	38.75	48.92	93.00	86	35.39	51.04	84.94	7.9	34.05	51.84	81.72	7.2		
	2.4	162.8		6.89	35.5	150.4		6.37	30.4	138.4		5.86	25.6	126.4		5.35	23.6	121.6		5.15	21.6		
HLCA-120-4	32.9	48.83	49.84	117.20	13.4	45.25	52.52	108.60	15	41.55	54.92	99.72	16.5	37.86	57.08	90.85	17.1	36.40	57.88	87.36	17.5		
	0.5	174.4		7.38	39.9	161.6		6.84	45	148.4		6.28	49.3	135.2		5.72	51	130		5.50	52.3		
	34.9	51.30	50.64	123.11	12.7	47.49	53.44	113.97	14.4	43.68	56	104.83	16	39.87	58.32	95.69	16.7	38.30	59.16	91.93	17.2		
	1.6	183.2		7.76	37.9	169.6		7.18	43.2	156		6.60	48	142.4		6.03	49.9	136.8		5.79	51.5		
	35.96	52.64	51.08	126.34	12.4	48.72	53.96	116.93	14.2	44.91	56.56	107.79	15.8	40.99	58.96	98.38	16.5	39.42	59.88	94.62	17.1		
	2.2	188		7.96	37	174		7.37	42.3	160.4		6.79	47.3	146.4		6.20	49.3	140.8		5.96	51		
	36.32	53.09	51.2	127.41	11.6	49.17	54.12	118.00	13.4	45.25	56.76	108.60	15.2	41.33	59.2	99.19	15.9	39.76	60.08	95.42	16.6		
	2.4	189.6		8.03	34.6	175.6		7.43	40.1	161.6		6.84	45.4	147.6		6.25	47.7	142		6.01	49.7		
HLCA-140-4	32.9	61.49	63.72	147.57	10.2	56.78	67.2	136.28	8.5	52.08	70.28	124.99	6.7	47.38	72.88	113.70	5.9	45.47	73.76	109.13	5.1		
	0.5	219.6		9.30	30.5	202.8		8.59	25.3	186		7.87	20.1	169.2		7.16	17.7	162.4		6.88	15.4		
	34.9	64.62	64.8	155.10	11	59.70	68.52	143.27	9.2	54.88	71.8	131.71	7.4	49.95	74.6	119.88	6.6	47.94	75.56	115.05	5.8		
	1.6	230.8		9.77	33	213.2		9.03	27.6	196		8.30	22.1	178.4		7.55	19.7	171.2		7.25	17.2		
	35.96	66.30	65.36	159.13	11.5	61.38	69.24	147.30	9.6	56.34	72.6	135.21	7.8	51.30	75.52	123.11	6.9	49.28	76.56	118.27	6.1		
	2.2	236.8		10.03	34.4	219.2		9.28	28.8	201.2		8.52	23.2	183.2		7.76	20.7	176		7.45	18.2		
	36.32	66.86	65.56	160.47	13.2	61.94	69.44	148.65	11.1	56.90	72.88	136.55	9.1	51.86	75.84	124.45	8.2	49.84	76.88	119.62	7.3		
	2.4	238.8		10.11	39.4	221.2		9.36	33.3	203.2		8.60	27.2	185.2		7.84	24.5	178		7.54	21.6		
HLCA-160-4	32.9	71.34	76.04	171.23	21.1	66.30	80.4	159.13	19.2	61.15	84.4	146.76	18.3	55.89	87.6	134.13	18	53.76	88.8	129.02	17.9		
	0.5	254.8		10.79	63	236.8		10.03	57.5	218.4		9.25	54.6	199.6		8.45	53.9	192		8.13	53.6		
	34.9	74.93	77.28	179.83	22.3	69.66	82	167.19	19.9	64.29	86	154.29	18.6	58.80	89.6	141.12	18.2	56.67	90.8	136.01	18		
	1.6	267.6		11.33	66.8	248.8		10.53	59.6	229.6		9.72	55.5	210		8.89	54.5	202.4		8.57	53.8		
	35.96	76.83	77.96	184.40	23.1	71.46	82.8	171.49	20.4	66.08	86.8	158.59	18.8	60.48	90.8	145.15	18.3	58.24	92	139.78	18.1		
	2.2	274.4		11.62	69.1	255.2		10.80	60.9	236		9.99	56.1	216		9.14	54.8	208		8.81	54		
	36.32	77.50	78.2	186.01	26.5	72.13	82.8	173.11	22.3	66.64	87.2	159.94	19.8	61.04	90.8	146.50	19	58.80	92.4	141.12	18.5		
	2.4	276.8		11.72	79.1	257.6		10.91	66.8	238		10.08	59.1	218		9.23	56.9	210		8.89	55.3		
HLCA-200-4	32.9	84.56	90.80	202.94	29.7	78.06	95.6	187.35	22.8	71.57	99.6	171.76	18.3	65.07	102.8	156.17	16.9	62.50	104	149.99	15.9		
	0.5	302		12.79	88.6	278.8		11.80	68.3	255.6		10.82	54.7	232.4		9.84	50.5	223.2		9.45	47.4		
	34.9	88.82	92.4	213.16	34	81.98	97.2	196.76	25.8	75.15	101.6	180.36	20.1	68.43	105.2	164.24	18.3	65.74	106.4	157.79	16.9		
	1.6	317.2		13.43	101.7	292.8		12.40	77.1	268.4		11.36	60.1	244.4		10.35	54.6	234.8		9.94	50.4		
	35.96	91.06	93.2	218.53	36.1	84.22	98	202.14	27.2	77.28	102.4	185.47	21	70.34	106	168.81	18.9	67.54	107.6	162.09	17.3		
	2.2	325.2		13.77	107.8	300.8		12.73	81.2	276		11.68	62.6	251.2		10.63	56.6	241.2		10.21	51.8		
	36.32	91.95	93.6	220.68	43	84.90	98.4	203.75	31.8	77.95	102.8	187.08	23.9	71.01	106.4	170.42	21.2	68.21	108	163.70	19		
	2.4	328.4		13.90	128.4	303.2		12.84	95.1	278.4		11.79	71.3	253.6		10.74	63.3	243.6		10.31	56.8		

ENGINEERING SPECIFICATIONS (50 HZ) (R-134a)											
chiller MODEL	no.of circuit	comp.oil charge (dm^3)	condenser coil					condenser fan			
			row	fpi	QTY	total heat rejection (kw)	total face area (m2)	size (mm)	QTY	total air flow rate (cfm)	motor power (kw)
HLCA-5-1	1	2	2	10	1	12.19	1*1.32	800	1	1*13650	1*1,7
HLCA-10-1	1	2.6	4	12	1	23.47	1*1.32	800	1	1*2950	1*1.7
HLCA-15-1	1	2.6	2	12	2	32.42	2*1.32	800	1	1*13250	1*1.7
HLCA-20-1	1	2.6	3	10	2	38.69	2*1.32	800	1	1*13600	1*1.7
HLCA-25-1	1	4.5	4	12	2	51.67	2*1.32	800	1	1*13500	1*1.7
HLCA-30-1	1	4.5	2	12	2	60.2	2*2.31	800	2	2*13600	2*1.7
HLCA-35-1	1	4.75	3	12	2	76.09	2*2.31	800	2	2*13250	2*1.7
HLCA-40-1	1	4.75	4	10	2	88.75	2*2.31	800	2	2*13000	2*1.7
HLCA-50-1	1	4.75	2	10	4	105.5	4*2.31	800	4	4*12950	4*1.7
HLCA-20-2	2	5.2	2	10	4	46.94	4*1.32	800	2	2*13650	2*1.7
HLCA-30-2	2	5.2	2	12	4	64.84	4*1,32	800	2	2*13600	2*1.7
HLCA-40-2	2	5.2	3	10	4	77.38	4*1,32	800	2	2*13400	2*1.7
HLCA-50-2	2	9	4	12	4	103.34	4*1,32	800	2	2*13500	2*1.7
HLCA-60-2	2	9	2	12	4	120.4	4*2.31	800	4	4*13600	4*1.7
HLCA-70-2	2	9.5	3	12	4	152.18	4*2.31	800	4	4*13250	4*1.7
HLCA-80-2	2	9.5	4	10	4	177.5	4*2.31	800	4	4*13000	4*1.7
HLCA-100-2	2	9.5	3	10	6	211	6*2.31	800	6	6*13250	6*1.7
HLCA-60-3	3	7.8	3	10	6	116.07	6*1,32	800	3	3*13400	3*1.7
HLCA-75-3	3	13.5	4	12	6	155.01	6*1,32	800	3	3*13500	3*1.7
HLCA-90-3	3	13.5	2	12	6	180.6	6*2.31	800	6	6*13600	6*1.7
HLCA-105-3	3	14.25	3	10	6	228.27	6*2.31	800	6	6*13250	6*1.7
HLCA-120-3	3	14.25	4	10	6	266.25	6*2.31	800	6	6*13000	6*1.7
HLCA-150-3	3	14.25	3	10	9	316.5	9*2.31	800	9	9*13250	9*1.7
HLCA-80-4	2	10.4	12	10	4	154.76	4*2.31	800	4	4*13250	4*1.7
HLCA-100-4	2	18	3	10	6	206.68	6*2.31	800	6	6*12950	4*1.7
HLCA-120-4	2	18	3	12	6	240.8	6*2.31	800	6	6*13250	6*1.7
HLCA-140-4	2	19	3	12	8	304.36	8*2.31	800	8	8*13250	8*1.7
HLCA-160-4	2	19	4	10	8	355	8*2.31	800	8	8*13000	8*1.7
HLCA-200-4	2	19	3	12	10	422	10*2.31	800	10	10*13250	10*1.7
HLCA-200-4	4	20.8	3	10	12	187.76	12*2.31	800	12	12*13250	12*1.7

ELECTRICAL DATA (R-134a)				
chiller MODEL	Nominal Comp. power (HP)	MRA (Amp)	LRA (Amp)	MAX CONSE POWER (kw)
HLCA-5-1	5	10.8	62.2	5.8
HLCA-10-1	10	19.9	59	12
HLCA-15-1	15	28.2	81	16
HLCA-20-1	20	33.2	97	19
HLCA-25-1	25	44	125	25
HLCA-30-1	30	51.2	141	28
HLCA-35-1	35	64.4	165	36
HLCA-40-1	40	73.9	219	42
HLCA-50-1	50	96.2	226	51
HLCA-30-2	30	56.4	162	32
HLCA-40-2	40	66.4	194	38
HLCA-50-2	50	88	250	50
HLCA-60-2	60	102.4	282	56
HLCA-70-2	70	128.8	330	72
HLCA-80-2	80	147.8	438	84
HLCA-100-2	100	192.4	452	102
HLCA-45-3	45	84.6	243	48
HLCA-60-3	60	99.6	291	57
HLCA-75-3	75	132	375	75
HLCA-90-3	90	153.6	423	84
HLCA-105-2	105	193.2	495	108
HLCA-120-2	120	221.7	657	126
HLCA-150-2	150	288.6	678	153
HLCA-60-4	60	112.8	324	64
HLCA-80-4	80	132.8	388	76
HLCA-100-4	100	176	500	100
HLCA-120-4	120	204.8	564	112
HLCA-140-4	140	257.6	660	144
HLCA-160-4	160	295.6	876	168
HLCA-200-4	200	384.8	904	204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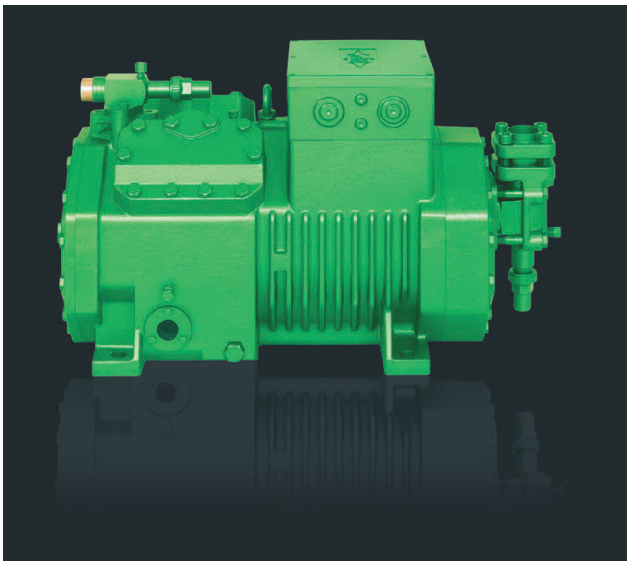


ENGINEERING SPECIFICATIONS-50 HZ (R-22)-BITZER

Model	HLCA	HLCA-5-1	HLCA-10-1	HLCA-15-1	HLCA-20-1	HLCA-25-1	HLCA-30-1	HLCA-35-1	HLCA-40-1	HLCA-50-1
cooling capacity	TR	4.02	8.15	11.28	13.27	17.64	20.44	26.49	30.41	36.57
	kW	14.34	29.1	40.3	47.4	63	73	94.6	108.6	130.6
Compressor	Semi-Hermetic Reciprocating									
QTY		1	1	1	1	1	1	1	1	1
Oil Charge	USGal	0.53	0.69	0.69	0.69	1.19	1.19	1.25	1.25	1.25
	Litre	2	2.6	2.6	2.6	4.5	4.5	4.75	4.75	4.75
Condenser Coil	Air-cooled 2 or 3or 4 rows, copper tubes aluminum fins									
Area	ft^2	28.42	28.42	28.42	49.73	49.73	49.73	99.46	99.46	99.46
	m^2	2.64	2.64	2.64	4.62	4.62	4.62	9.24	9.24	9.24
Condenser Fan (800)	Propeller direct drive 960 rpm									
QTY		1	1	1	2	2	2	4	4	4
Airflow Rate	cfm	8792	13600	13500	27060	26500	25788	54120	53000	53000
	l/s	4167	6418.4	6371.3	12771	12507	12222	25541	25013	25013
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected									
Size	kW	1.19	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube									
QTY	1									
Ref. Circuits		1	1	1	1	1	1	1	1	1
Water Volume	USGal	9.64	19.65	27.08	31.85	42.34	49.06	63.57	72.98	87.76
	Litre	0.61	1.23	1.71	2.01	2.67	3.09	4	4.6	5.53
*Refrigerant Charge (R-22)(Approx)	Lb	12.13	24.25	36.38	48.5	60.63	72.75	84.88	97	121.2
	Kg	5.5	11	16.5	22	27.5	33	38.5	44	55
Operating Weight (Approx)	Lb	880	1144	1232	1320	1364	1606	1848	2200	2420
	Kg	400	520	560	600	620	730	840	1000	1100
*According to the enviromental situationthis amount could be different.										

Model	HLCA	HLCA-20-2	HLCA-30-2	HLCA-40-2	HLCA-50-2	HLCA-60-2	HLCA-70-2	HLCA-80-2	HLCA-100-2
cooling capacity	TR	16.3	22.57	26.54	35.28	40.88	52.98	60.82	73.14
	kW	58.2	80.6	94.8	126	146	189.2	217.2	261.2
Compressor	Semi-Hermetic Reciprocating								
QTY		2	2	2		2	2	2	2
Oil Charge	USGal	13.52	1.352	1.352	2.34	2.34	2.47	2.47	2.47
	Litre	5.2	5.2	5.2	9	9	9.5	9.5	9.5
Condenser Coil	Air-cooled 2 or 3or 4 rows, copper tubes aluminum fins								
Area	ft^2	56.81	56.81	99.42	99.42	99.42	149.13	149.13	198.84
	m^2	5.28	5.28	9.24	9.24	9.24	13.86	13.86	18.48
Condenser Fan (800)	Propeller direct drive 960 rpm								
QTY		2	2	4	4	4	6	6	8
Airflow Rate	cfm	26500	25900	54120	53000	52000	79500	77700	106000
	l/s	12455	12173	25436.4	24910	24440	37365	36519	49820
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected								
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube								
QTY	1								
Ref. Circuits		2	2	2	2	2	2	2	2
Water Volume	USGal	39.11	54.16	63.71	84.67	98.11	127.11	145.96	175.73
	Litre	2.46	3.41	4.01	5.33	6.18	8.01	9.2	11.06
*Refrigerant Charge (R-22)(Approx)	Lb	48.4	72.6	96.8	121	145.2	169.4	193.6	242
	Kg	22	33	44	55	66	77	88	110
Operating Weight (Approx)	Lb	1540	1716	2310	2398	2530	3594.8	3905	4070
	Kg	700	780	1050	1090	1150	1634	1775	1850
*According to the enviromental situationthis amount could be different.									

Model	HLCA	HLCA-60-3	HLCA-75-3	HLCA-90-3	HLCA-105-3	HLCA-120-3	HLCA-150-3
cooling capacity	TR	39.82	52.92	61.32	79.46	91.22	109.7
	kW	142.2	189	219	283.8	325.8	391.8
Compressor	Semi-Hermetic Reciprocating						
QTY		3	3	3	3	3	3
Oil Charge	USGal	2.06	3.57	3.57	3.76	3.76	3.76
	Litre	7.8	13.5	13.5	14.25	14.25	14.25
Condenser Coil	Air-cooled 2 or 3or 4 rows, copper tubes aluminum fins						
Area	ft^2	149.13	149.13	149.13	223.70	223.05	298.27
	m^2	13.86	13.86	13.86	18.48	23.1	27.72
Condenser Fan (800)	Propeller direct drive 960 rpm						
QTY		4	6	6	9	9	12
Airflow Rate	cfm	78000	79500	77365	118744	116504	159000
	l/s	36660	37365	36666	56277	55215	74730
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected						
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube						
QTY	1						
Ref. Circuits		3	3	3	3	3	3
Water Volume	USGPM	95.56	127.01	147.17	190.71	218.94	263.29
	l/s	6.02	8	9.27	12.01	13.79	16.59
*Refrigerant Charge (R-22)(Approx)	Lb	145.2	181.5	217.8	254.1	290.4	363
	Kg	66	82.5	99	115.5	132	165
Operating Weight (Approx)	Lb	2640	3696	3630	4356	4730	4840
	Kg	1200	1680	1650	1980	2150	2200
*According to the enviromental situation this amount could be different.							

Model	HLCA	HLCA-80-4	HLCA-100-4	HLCA-120-4	HLCA-140-4	HLCA-160-4	HLCA-200-4
cooling capacity	TR	53.09	70.56	81.76	105.95	121.63	146.27
	kW	189.6	252	292	378.4	434.4	522.4
Compressor	Semi-Hermetic Reciprocating						
QTY		4	4	4	4	4	4
Oil Charge	USGal	270.4	468	480	494	494	494
	Litre	10.4	18	18.8	19	19	19
Condenser Coil	Air-cooled 2 or 3or 4 rows, copper tubes aluminum fins						
Area	ft^2	149.13	198.84	248.56	298.27	34798	347.98
	m^2	13.86	18.48	18.48	23.1	27.72	32.34
Condenser Fan (800)	Propeller direct drive 960 rpm						
QTY		6	8	8	10	14	14
Airflow Rate	cfm	79500	106000	106000	129500	181300	181300
	l/s	37365	49820	49820	60865	85211	85211
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected						
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube						
QTY	1						
Ref. Circuits		2	2	2	2	2	4
Water Volume	USGPM	127.41	169.34	196.22	254.28	291.92	351.05
	l/s	8.03	10.67	12.36	16.02	18.39	22.12
*Refrigerant Charge (R-22)(Approx)	Lb	193.6	242	290.4	338.8	387.2	484
	Kg	88	110	132	154	176	220
Operating Weight (Approx)	Lb	4180	4554	4840	5170	5280	5500
	Kg	1900	2070	2200	2350	2400	2500
*According to the enviromental situation this amount could be different.							

CAPACITY RATING(50 HZ)-R 22

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-22)											
		95°F (35°C)				104°F (40°C)				113°F (45°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-5-1	42	3.75	4.09	9.00	0.39	3.50	4.36	8.39	0.42	3.25	4.63	7.81	4.5
	5.5	13.4		0.57	1.3	12.49		0.53	1.4	11.62		0.49	1.5
	44	3.92	4.13	9.41	0.42	3.66	4.42	8.78	0.45	3.40	4.7	8.16	4.8
	6.6	14		0.59	1.4	13.06		0.55	1.5	12.15		0.51	1.6
	45	4.02	4.15	9.64	0.45	3.74	4.45	8.98	0.48	3.49	4.73	8.37	0.51
	7.2	14.34		0.61	1.4	13.37		0.57	1.6	12.45		0.53	1.7
	46	4.05	4.16	9.71	0.48	3.77	4.46	9.06	5.1	3.51	4.74	8.43	0.54
	7.4	14.45		0.61	1.6	13.48		0.57	1.7	12.55		0.53	1.8
HLCA-10-1	42	7.62	7.75	18.28	0.57	7.11	8.23	17.07	0.63	6.64	8.68	15.93	0.69
	5.5	27.2		1.15	1.9	25.4		1.08	2.1	23.7		1.00	2.3
	44	7.95	7.84	19.08	0.6	7.45	8.34	17.88	0.66	6.94	8.81	16.67	0.72
	6.6	28.4		1.20	2	26.6		1.13	2.2	24.8		1.05	2.4
	45	8.15	7.89	19.56	69	7.64	8.4	18.35	0.75	7.11	8.89	17.07	0.78
	7.2	29.1		1.23	2.3	27.3		1.16	2.5	25.4		1.08	2.6
	46	8.23	7.9	19.76	0.72	7.70	8.42	18.48	0.78	7.20	8.91	17.27	0.81
	7.4	29.4		1.24	2.4	27.5		1.16	2.6	25.7		1.09	2.7
HLCA-15-1	42	10.56	10.82	25.33	0.35	9.86	11.49	23.65	0.72	9.16	12.11	21.97	0.75
	5.5	37.7		1.60	2.2	35.2		1.49	2.4	32.7		1.38	2.5
	44	11.03	10.96	26.48	0.78	10.30	11.66	24.73	0.81	9.60	12.31	23.05	0.84
	6.6	39.4		1.67	2.6	36.8		1.56	2.7	34.3		1.45	2.8
	45	11.28	11.03	27.08	0.81	10.56	11.75	25.33	0.84	9.86	12.41	23.65	0.87
	7.2	40.3		1.71	2.7	37.7		1.60	2.8	35.2		1.49	2.9
	46	11.40	11.05	27.35	0.84	10.67	11.77	25.60	0.87	9.94	12.45	23.86	0.9
	7.4	40.7		1.72	2.8	38.1		1.61	2.9	35.5		1.50	3
HLCA-20-1	42	12.40	12.67	29.77	0.35	11.62	13.49	27.89	0.96	10.84	14.25	26.01	1.02
	5.5	44.3		1.88	3.1	41.5		1.76	3.2	38.7		1.64	3.4
	44	12.96	12.83	31.11	1.02	12.15	13.68	29.16	1.05	11.34	14.47	27.22	1.11
	6.6	46.3		1.96	3.4	43.4		1.84	3.5	40.5		1.71	3.7
	45	13.27	12.9	31.85	1.05	12.46	13.77	29.90	1.11	11.62	14.59	27.89	1.17
	7.2	47.4		2.01	3.5	44.5		1.88	3.7	41.5		1.76	3.9
	46	13.38	12.93	32.12	1.11	12.54	13.81	30.11	1.17	11.73	14.63	28.16	1.23
	7.4	47.8		2.02	3.7	44.8		1.90	3.9	41.9		1.77	4.1
HLCA-25-1	42	16.52	16.98	39.65	1.14	15.48	18.12	37.16	1.2	14.48	19.21	34.74	1.2
	5.5	59		2.50	3.8	55.3		2.34	4	51.7		2.19	4
	44	17.25	17.18	41.40	1.23	16.18	18.37	38.84	1.26	15.15	19.5	36.36	1.32
	6.6	61.6		2.61	4.1	57.8		2.45	4.2	54.1		2.29	4.4
	45	17.64	17.28	42.34	1.29	16.58	18.49	39.78	1.35	15.51	19.65	37.23	1.38
	7.2	63		2.67	4.3	59.2		2.51	4.5	55.4		2.35	4.6
	46	17.78	17.31	42.67	1.32	16.72	18.54	40.12	1.38	15.62	19.7	37.50	1.44
	7.4	63.5		2.69	4.4	59.7		2.53	4.6	55.8		2.36	4.8
HLCA-30-1	42	19.12	19.54	45.90	4.2	17.98	20.9	43.14	3.4	16.80	22.2	40.32	2.6
	5.5	68.3		2.89	12.5	64.2		2.72	10.3	60		2.54	7.9
	44	19.96	19.76	47.91	4.6	18.76	21.2	45.02	3.8	17.58	22.5	42.20	3
	6.6	71.3		3.02	13.7	67		2.84	11.4	62.8		2.66	9
	45	20.44	19.87	49.06	4.8	19.24	21.3	46.17	4	18.00	22.7	43.21	3.2
	7.2	73		3.09	14.3	68.7		2.91	12	64.3		2.72	9.5
	46	20.61	19.91	49.46	5.4	19.38	21.3	46.50	4.6	18.14	22.7	43.55	3.7
	7.4	73.6		3.12	16.1	69.2		2.93	13.6	64.8		2.74	11.1
HLCA-35-1	42	24.75	25.7	59.40	5.4	23.24	27.4	55.78	6.8	21.70	29.1	52.08	9
	5.5	88.4		3.74	16.1	83		3.51	21	77.5		3.28	27.1
	44	25.87	26	62.09	4.5	24.28	27.8	58.26	5.9	22.71	29.6	54.50	7.8
	6.6	92.4		3.91	14.7	86.7		3.67	18	81.1		3.43	23.6
	45	26.49	26.1	63.57	4.8	24.86	28	59.67	5.6	23.27	29.8	55.84	7.3
	7.2	94.6		4.00	14.3	88.8		3.76	16.8	83.1		3.52	22
	46	26.68	26.2	64.04	4.6	25.06	28.1	60.14	5.4	23.46	29.9	56.31	6.2
	7.4	95.3		4.03	13.7	89.5		3.79	14.6	83.8		3.55	18.5
HLCA-40-1	42	28.42	29.3	68.21	6.6	26.68	31.3	64.04	10.1	24.92	33.2	59.81	15.4
	5.5	101.5		4.30	19.7	95.3		4.03	30.2	89		3.77	45.9
	44	29.68	29.7	71.23	5.3	27.89	31.7	66.93	8.1	26.07	33.7	62.56	12.7
	6.6	106		4.49	15.8	99.6		4.22	24.3	93.1		3.94	38.1
	45	30.41	29.8	72.98	4.8	28.56	31.9	68.54	7.3	26.71	33.9	64.11	11.5
	7.2	108.6		4.60	14.3	102		4.32	21.7	95.4		4.04	34.5
	46	30.63	29.9	73.52	3.8	28.78	32	69.08	5.2	26.94	34	64.65	8.4
	7.4	109.4		4.63	11.5	102.8		4.35	15.5	96.2		4.07	25
HLCA-50-1	42	34.22	35.6	82.12	3.1	32.12	38	77.08	3	30.04	40.3	72.11	3.2
	5.5	122.2		5.17	9.3	114.7		4.86	9	107.3		4.54	9.6
	44	35.73	36	85.75	3.3	33.57	38.5	80.57	3	31.42	40.9	75.40	3.1
	6.6	127.6		5.40	9.9	119.9		5.08	9	112.2		4.75	9.2
	45	36.57	36.2	87.76	3.4	34.38	38.7	82.52	3.1	32.20	41.2	77.28	3
	7.2	130.6		5.53	10.3	122.8		5.20	9.2	115		4.87	9
	46	36.85	36.2	88.44	4	34.64	38.8	83.13	3.3	32.45	41.3	77.88	3
	7.4	131.6		5.57	11.9	123.7		5.24	9.9	115.9		4.91	9

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-22)											
		95°F (35°C)				104°F (40°C)				113°F (45°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-20-2	42	15.23	15.5	36.56	0.35	14.22	16.46	34.14	0.96	13.27	17.36	31.85	1.02
	5.5	54.4		2.30	3.1	50.8		2.15	3.2	47.4		2.01	3.4
	44	15.90	15.68	38.17	1.02	14.90	16.68	35.75	1.05	13.89	17.62	33.33	1.11
	6.6	56.8		2.40	3.4	53.2		2.25	3.5	49.6		2.10	3.7
	45	16.30	15.78	39.11	1.05	15.29	16.8	36.69	1.11	14.22	17.78	34.14	1.17
	7.2	58.2		2.46	3.5	54.6		2.31	3.7	50.8		2.15	3.9
	46	16.46	15.8	39.51	1.11	15.40	16.84	36.96	1.17	14.39	17.82	34.54	1.23
	7.4	58.8		2.49	3.7	55		2.33	3.9	51.4		2.18	4.1
HLCA-30-2	42	21.11	21.64	50.67	4.2	19.71	22.98	47.31	3.4	18.31	24.22	43.95	2.6
	5.5	75.4		3.19	12.5	70.4		2.98	10.3	65.4		2.77	7.9
	44	22.06	21.92	52.95	4.6	20.61	23.32	49.46	3.8	19.21	24.62	46.10	3
	6.6	78.8		3.34	13.7	73.6		3.12	11.4	68.6		2.90	9
	45	22.57	22.06	54.16	4.8	21.11	23.5	50.67	4	19.71	24.82	47.31	3.2
	7.2	80.6		3.41	14.3	75.4		3.19	12	70.4		2.98	9.5
	46	22.79	22.1	54.70	5.4	21.34	23.54	51.21	4.6	19.88	24.9	47.71	3.7
	7.4	81.4		3.45	16.1	76.2		3.23	13.6	71		3.01	11.1
HLCA-40-2	42	24.81	25.34	59.54	6.6	23.24	26.98	55.78	10.1	21.67	28.5	52.01	15.4
	5.5	88.6		3.75	19.7	83		3.51	30.2	77.4		3.28	45.9
	44	25.93	25.66	62.23	5.3	24.30	27.36	58.33	8.1	22.68	28.94	54.43	12.7
	6.6	92.6		3.92	15.8	86.8		3.67	24.3	81		3.43	38.1
	45	26.54	25.8	63.71	4.8	24.92	27.54	59.81	7.3	23.24	29.18	55.78	11.5
	7.2	94.8		4.01	14.3	89		3.77	21.7	83		3.51	34.5
	46	26.77	25.86	64.24	3.8	25.09	27.62	60.21	5.2	23.46	29.26	56.31	8.4
	7.4	95.6		4.05	11.5	89.6		3.79	15.5	83.8		3.55	25
HLCA-50-2	42	33.04	33.96	79.30	3.1	30.97	36.24	74.32	3	28.95	38.42	69.48	3.2
	5.5	118		5.00	9.3	110.6		4.68	9	103.4		4.38	9.6
	44	34.50	34.36	82.79	3.3	32.37	36.74	77.68	3	30.30	39	72.71	3.1
	6.6	123.2		5.22	9.9	115.6		4.89	9	108.2		4.58	9.2
	45	35.28	34.56	84.67	3.4	33.15	36.98	79.56	3.1	31.02	39.3	74.46	3
	7.2	126		5.33	10.3	118.4		5.01	9.2	110.8		4.69	9
	46	35.56	34.62	85.34	4	33.43	37.08	80.24	3.3	31.25	39.4	75.00	3
	7.4	127		5.38	11.9	119.4		5.05	9.9	111.6		4.72	9
HLCA-60-2	42	38.25	39.08	91.80	9.4	35.95	41.8	86.28	8.1	33.60	44.4	80.64	6.8
	5.5	136.6		5.78	28.2	128.4		5.44	24.1	120		5.08	20.3
	44	39.93	39.52	95.83	10.2	37.52	42.4	90.05	8.7	35.17	45	84.40	7.4
	6.6	142.6		6.04	30.5	134		5.67	26.1	125.6		5.32	22
	45	40.88	39.74	98.11	10.7	38.47	42.6	92.33	9.1	36.01	45.4	86.42	7.7
	7.2	146		6.18	31.8	137.4		5.82	27.2	128.6		5.44	22.9
	46	41.22	39.82	98.92	11.9	38.75	42.6	93.00	10.2	36.29	45.4	87.09	8.6
	7.4	147.2		6.23	35.7	138.4		5.86	30.6	129.6		5.49	25.8
HLCA-70-2	42	49.50	51.4	118.81	3.3	46.48	54.8	111.55	2.8	43.40	58.2	104.16	2.2
	5.5	176.8		7.49	10	166		7.03	8.3	155		6.56	6.6
	44	51.74	52	124.19	3.7	48.55	55.6	116.52	3.1	45.42	59.2	109.00	2.5
	6.6	184.8		7.82	10.9	173.4		7.34	9.1	162.2		6.87	7.4
	45	52.98	52.2	127.14	3.8	49.73	56	119.35	3.2	46.54	59.6	111.69	2.6
	7.2	189.2		8.01	11.4	177.6		7.52	9.6	166.2		7.04	7.7
	46	53.37	52.4	128.08	4.3	50.12	56.2	120.29	3.6	46.93	59.8	112.63	3
	7.4	190.6		8.07	12.9	179		7.58	10.9	167.6		7.10	9
HLCA-80-2	42	56.84	58.6	136.42	6.3	53.37	62.6	128.08	5.4	49.84	66.4	119.62	4.5
	5.5	203		8.59	18.8	190.6		8.07	16.1	178		7.54	13.6
	44	59.36	59.4	142.46	6.7	55.78	63.4	133.86	5.7	52.14	67.4	125.13	4.8
	6.6	212		8.98	20	199.2		8.43	17.2	186.2		7.88	14.5
	45	60.82	59.6	145.96	6.9	57.12	63.8	137.09	5.9	53.42	67.8	128.22	5
	7.2	217.2		9.20	20.6	204		8.64	17.7	190.8		8.08	14.9
	46	61.26	59.8	147.03	7.5	57.57	64	138.16	6.5	53.87	68	129.29	5.5
	7.4	218.8		9.26	22.5	205.6		8.70	19.3	192.4		8.15	16.4
HLCA-100-2	42	68.43	71.2	164.24	9.9	64.23	76	154.16	8.4	60.09	80.6	144.21	7.1
	5.5	244.4		10.35	29.5	229.4		9.71	25.2	214.6		9.09	21.2
	44	71.46	72	171.49	10.5	67.14	77	161.15	9	62.83	81.8	150.80	7.5
	6.6	255.2		10.80	31.4	239.8		10.15	26.8	224.4		9.50	22.5
	45	73.14	72.4	175.53	10.8	68.77	77.4	165.04	9.3	64.40	82.4	154.56	7.8
	7.2	261.2		11.06	32.4	245.6		10.40	27.7	230		9.74	23.3
	46	73.70	72.4	176.87	11.2	69.27	77.6	166.25	10.2	64.90	82.6	155.77	86
	7.4	263.2		11.14	35.5	247.4		10.47	30.4	231.8		9.81	25.6

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-22)											
		95°F (35°C)				104°F (40°C)				113°F (45°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-60-3	42	37.21	38.01	89.31	9.4	34.86	40.47	83.66	8.1	32.51	42.75	78.02	6.8
	5.5	132.9		5.63	28.2	124.5		5.27	24.1	116.1		4.92	20.3
	44	38.89	38.49	93.34	10.2	36.46	41.04	87.49	8.7	34.02	43.41	81.65	7.4
	6.6	138.9		5.88	30.5	130.2		5.51	26.1	121.5		5.14	22
	45	39.82	38.7	95.56	10.7	37.38	41.31	89.71	9.1	34.86	43.77	83.66	7.7
	7.2	142.2		6.02	31.8	133.5		5.65	27.2	124.5		5.27	22.9
	46	40.15	38.79	96.36	11.9	37.63	41.43	90.32	10.2	35.20	43.89	84.47	8.6
	7.4	143.4		6.07	35.7	134.4		5.69	30.6	125.7		5.32	25.8
HLCA-75-3	42	49.56	50.94	118.94	4	46.45	54.36	111.48	3.4	43.43	57.63	104.23	2.7
	5.5	177		7.49	12	165.9		7.02	10	155.1		6.57	8.1
	44	51.74	51.54	124.19	4.3	48.55	55.11	116.52	3.6	45.44	58.5	109.07	3
	6.6	184.8		7.82	13	173.4		7.34	10.9	162.3		6.87	8.9
	45	52.92	51.84	127.01	4.5	49.73	55.47	119.35	3.8	46.54	58.95	111.69	3.1
	7.2	189		8.00	13.5	177.6		7.52	11.4	166.2		7.04	9.3
	46	53.34	51.93	128.02	5.1	50.15	55.62	120.36	4.3	46.87	59.1	112.49	3.6
	7.4	190.5		8.07	15.1	179.1		7.58	12.8	167.4		7.09	10.6
HLCA-90-3	42	57.37	58.62	137.69	8.1	53.93	62.7	129.43	6.9	50.40	66.6	120.96	5.8
	5.5	204.9		8.67	24.2	192.6		8.15	20.7	180		7.62	17.4
	44	59.89	59.28	143.74	8.6	56.28	63.6	135.07	7.4	52.75	67.5	126.60	6.2
	6.6	213.9		9.06	25.7	201		8.51	22.1	188.4		7.98	18.6
	45	61.32	59.61	147.17	8.9	57.71	63.9	138.50	7.6	54.01	68.1	129.63	6.4
	7.2	219		9.27	26.6	206.1		8.73	22.8	192.9		8.17	19.2
	46	61.82	59.73	148.38	9.8	58.13	63.9	139.51	8.4	54.43	68.1	130.64	7.1
	7.4	220.8		9.35	29.1	207.6		8.79	25	194.4		8.23	21.2
HLCA-105-3	42	74.26	77.1	178.21	11.1	69.72	82.2	167.33	9.5	65.10	87.3	156.24	7.9
	5.5	265.2		11.23	33.2	249		10.54	28.3	232.5		9.84	23.7
	44	77.62	78	186.28	11.8	72.83	83.4	174.79	10.1	68.12	88.8	163.50	8.4
	6.6	277.2		11.74	35.2	260.1		11.01	30.1	243.3		10.30	25.2
	45	79.46	78.3	190.71	12.2	74.59	84	179.02	10.4	69.80	89.4	167.53	8.7
	7.2	283.8		12.01	36.4	266.4		11.28	31	249.3		10.55	26
	46	80.05	78.6	192.12	13.3	75.18	84.3	180.43	11.4	70.39	89.7	168.94	9.6
	7.4	285.9		12.10	39.9	268.5		11.37	34.1	251.4		10.64	28.6
HLCA-120-3	42	85.26	87.9	204.62	13.4	80.05	93.9	192.12	15	74.76	99.6	179.42	16.5
	5.5	304.5		12.89	39.9	285.9		12.10	45	267		11.30	49.3
	44	89.04	89.1	213.70	12.7	83.66	95.1	200.79	14.4	78.20	101.1	187.69	16
	6.6	318		13.46	37.9	298.8		12.65	43.2	279.3		11.82	48
	45	91.22	89.4	218.94	12.4	85.68	95.7	205.63	14.2	80.14	101.7	192.33	15.8
	7.2	325.8		13.79	37	306		12.95	42.3	286.2		12.12	47.3
	46	91.90	89.7	220.55	11.6	86.35	96	207.24	13.4	80.81	102	193.94	15.2
	7.4	328.2		13.89	34.6	308.4		13.06	40.1	288.6		12.22	45.4
HLCA-150-3	42	102.65	106.8	246.36	12.4	96.35	114	231.24	10.4	90.13	120.9	216.32	8.4
	5.5	366.6		15.52	37	344.1		14.57	31.1	321.9		13.63	25.2
	44	107.18	108	257.24	13.3	100.72	115.5	241.72	11.2	94.25	122.7	226.20	9.1
	6.6	382.8		16.21	39.7	359.7		15.23	33.5	336.6		14.25	27.3
	45	109.70	108.6	263.29	13.8	103.15	116.1	247.56	11.6	96.60	123.6	231.84	9.5
	7.2	391.8		16.59	41.2	368.4		15.60	34.8	345		14.61	28.5
	46	110.54	108.6	265.31	15.5	103.91	116.4	249.38	13.2	97.36	123.9	233.65	10.9
	7.4	394.8		16.71	46.4	371.1		15.71	39.5	347.7		14.72	32.7

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-22)											
		95°F (35°C)				104°F (40°C)				113°F (45°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-80-4	42	49.62	50.68	119.08	6.3	46.48	53.96	111.55	5.4	43.34	57	104.03	4.5
	5.5	177.2		7.50	18.8	166		7.03	16.1	154.8		6.55	13.6
	44	51.86	51.32	124.45	6.7	48.61	54.72	116.66	5.7	45.36	57.88	108.86	4.8
	6.6	185.2		7.84	20	173.6		7.35	17.2	162		6.86	14.5
	45	53.09	51.6	127.41	6.9	49.84	55.08	119.62	5.9	46.48	58.36	111.55	5
	7.2	189.6		8.03	20.6	178		7.54	17.7	166		7.03	14.9
	46	53.54	51.72	128.49	7.5	50.18	55.24	120.42	6.5	46.93	58.52	112.63	5.5
	7.4	191.2		8.09	22.5	179.2		7.59	19.3	167.6		7.10	16.4
HLCA-100-4	42	66.08	67.92	158.59	9.9	61.94	72.48	148.65	8.4	57.90	76.84	138.97	7.1
	5.5	236		9.99	29.5	221.2		9.36	25.2	206.8		8.76	21.2
	44	68.99	68.72	165.58	10.5	64.74	73.48	155.37	9	60.59	78	145.42	7.5
	6.6	246.4		10.43	31.4	231.2		9.79	26.8	216.4		9.16	22.5
	45	70.56	69.12	169.34	10.8	66.30	73.96	159.13	9.3	62.05	78.6	148.92	7.8
	7.2	252		10.67	32.4	236.8		10.03	27.7	221.6		9.38	23.3
	46	71.12	69.24	170.69	11.2	66.86	74.16	160.47	10.2	62.50	78.8	149.99	86
	7.4	254		10.75	35.5	238.8		10.11	30.4	223.2		9.45	25.6
HLCA-120-4	42	76.50	78.16	183.59	13.4	71.90	83.6	172.57	15	67.20	88.8	161.28	16.5
	5.5	273.2		11.57	39.9	256.8		10.87	45	240		10.16	49.3
	44	79.86	79.04	191.65	12.7	75.04	84.8	180.10	14.4	70.34	90	168.81	16
	6.6	285.2		12.07	37.9	268		11.35	43.2	251.2		10.63	48
	45	81.76	79.48	196.22	12.4	76.94	85.2	184.67	14.2	72.02	90.8	172.84	15.8
	7.2	292		12.36	37	274.8		11.63	42.3	257.2		10.89	47.3
	46	82.43	79.64	197.84	11.6	77.50	85.2	186.01	13.4	72.58	90.8	174.18	15.2
	7.4	294.4		12.46	34.6	276.8		11.72	40.1	259.2		10.97	45.4
HLCA-140-4	42	99.01	102.8	237.62	10.2	92.96	109.6	223.10	8.5	86.80	116.4	208.32	6.7
	5.5	353.6		14.97	30.5	332		14.06	25.3	310		13.12	20.1
	44	103.49	104	248.37	11	97.10	111.2	233.05	9.2	90.83	118.4	218.00	7.4
	6.6	369.6		15.65	33	346.8		14.68	27.6	324.4		13.73	22.1
	45	105.95	104.4	254.28	11.5	99.46	112	238.69	9.6	93.07	119.2	223.37	7.8
	7.2	378.4		16.02	34.4	355.2		15.04	28.8	332.4		14.07	23.2
	46	106.74	104.8	256.17	13.2	100.24	112.4	240.58	11.1	93.86	119.6	225.25	9.1
	7.4	381.2		16.14	39.4	358		15.16	33.3	335.2		14.19	27.2
HLCA-160-4	42	113.68	117.2	272.83	21.1	106.74	125.2	256.17	19.2	99.68	132.8	239.23	18.3
	5.5	406		17.19	63	381.2		16.14	57.5	356		15.07	54.6
	44	118.72	118.8	284.93	22.3	111.55	126.8	267.72	19.9	104.27	134.8	250.25	18.6
	6.6	424		17.95	66.8	398.4		16.87	59.6	372.4		15.77	55.5
	45	121.63	119.2	291.92	23.1	114.24	127.6	274.18	20.4	106.85	135.6	256.44	18.8
	7.2	434.4		18.39	69.1	408		17.27	60.9	381.6		16.16	56.1
	46	122.53	119.6	294.07	26.5	115.14	128	276.33	22.3	107.74	136	258.59	19.8
	7.4	437.6		18.53	79.1	411.2		17.41	66.8	384.8		16.29	59.1
HLCA-200-4	42	136.86	142.4	328.47	29.7	128.46	152	308.31	22.8	120.18	161.2	288.42	18.3
	5.5	488.8		20.69	88.6	458.8		19.42	68.3	429.2		18.17	54.7
	44	142.91	144	342.99	34	134.29	154	322.29	25.8	125.66	163.6	301.59	20.1
	6.6	510.4		21.61	101.7	479.6		20.30	77.1	448.8		19.00	60.1
	45	146.27	144.8	351.05	36.1	137.54	154.8	330.09	27.2	128.80	164.8	309.12	21
	7.2	522.4		22.12	107.8	491.2		20.80	81.2	460		19.47	62.6
	46	147.39	144.8	353.74	43	138.54	155.2	332.51	31.8	129.81	165.2	311.54	23.9
	7.4	526.4		22.29	128.4	494.8		20.95	95.1	463.6		19.63	71.3

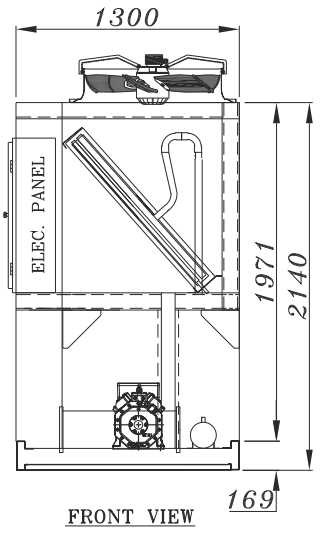
ENGINEERING SPECIFICATIONS (50 HZ) (R-22)											
chiller MODEL	no.of circuit	comp.oil charge (dm^3)	condenser coil					condenser fan			
			row	fpi	QTY	total heat rejection (kw)	total face area (m2)	size (mm)	QTY	total air flow rate (cfm)	motor power (kw)
HLCA-5-1	1	2	2	12	1	18.61	1*1.32	800	1	1*8830	1*1,19
HLCA-10-1	1	2.6	3	10	2	37.3	2*1.32	800	1	1*13600	1*1.7
HLCA-15-1	1	2.6	4	12	2	51.75	2*1.32	800	1	1*13500	1*1.7
HLCA-20-1	1	2.6	2	12	2	60.73	2*2.31	800	2	2*13530	2*1.7
HLCA-25-1	1	4.5	3	12	2	80.85	2*2.31	800	2	2*13250	2*1.7
HLCA-30-1	1	4.5	4	12	2	93.51	2*2.31	800	2	2*12950	2*1.7
HLCA-35-1	1	4.75	2	12	4	121.5	4*2.31	800	4	4*13530	4*1.7
HLCA-40-1	1	4.75	3	10	4	139.3	4*2.31	800	4	4*13250	4*1.7
HLCA-50-1	1	4.75	3	12	4	167.8	4*2.31	800	4	4*13250	4*1.7
HLCA-20-2	2	5.2	3	10	4	74.6	4*1.32	800	2	2*13250	2*1.7
HLCA-30-2	2	5.2	4	12	4	103.5	4*1,32	800	2	2*13400	2*1.7
HLCA-40-2	2	5.2	2	12	4	121.46	4*2.31	800	4	4*13530	4*1.7
HLCA-50-2	2	9	3	12	4	161.7	4*2.31	800	4	4*13250	4*1.7
HLCA-60-2	2	9	4	12	4	187.02	4*2.31	800	4	4*13000	4*1.7
HLCA-70-2	2	9.5	3	12	6	243	6*2.31	800	6	6*13250	6*1.7
HLCA-80-2	2	9.5	4	12	6	278.6	6*2.31	800	6	6*12950	6*1.7
HLCA-100-2	2	9.5	3	12	8	335.6	8*2.31	800	8	8*13250	8*1.7
HLCA-60-3	3	7.8	2	12	6	182.19	6*2.31	800	6	6*13000	6*1.7
HLCA-75-3	3	13.5	3	12	6	242.55	6*2.31	800	6	6*13250	6*1.7
HLCA-90-3	3	13.5	4	12	6	280.53	6*2.31	800	6	6*13000	6*1.7
HLCA-105-3	3	14.25	4	12	9	364.5	9*2.31	800	9	8*13000	9
HLCA-120-3	3	14.25	3	10	9	417.9	9*2.31	800	9	10*13250	9
HLCA-150-3	3	14.25	3	12	12	503.4	12*2.31	800	12	12*13250	12*1.7
HLCA-80-4	2	10.4	3	12	6	242.92	6*2.31	800	6	6*13250	6*1.7
HLCA-100-4	2	18	3	12	8	323.4	8*2.31	800	8	8*13250	8*1.7
HLCA-120-4	2	18	4	12	8	374.04	8*2.31	800	8	8*12950	8*1.7
HLCA-140-4	2	19	4	12	10	486	10*2.31	800	10	10*12950	10*1.7
HLCA-160-4	2	19	4	12	12	557.2	12*2.31	800	12	12*12950	12*1.7
HLCA-200-4	2	19	4	12	14	671.2	14*2.31	800	14	14*12950	14*1.7
HLCA-200-4	4	19	3	12	16	671.2	16*2.31	800	16	16*12950	16*1.7

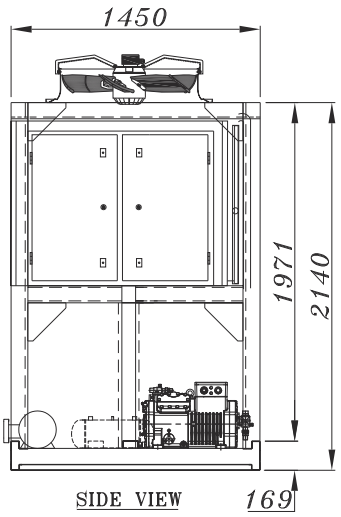
ELECTRICAL DATA				
chiller MODEL	Nominal Comp. power (HP)	MRA (Amp)	LRA (Amp)	MAX CONSE POWER (kw)
HLCA-5-1	5	10.8	62.2	5.8
HLCA-10-1	10	19.9	59	12
HLCA-15-1	15	28.2	81	16
HLCA-20-1	20	33.2	97	19
HLCA-25-1	25	44	125	25
HLCA-30-1	30	51.2	141	28
HLCA-35-1	35	64.4	165	36
HLCA-40-1	40	73.9	219	42
HLCA-50-1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

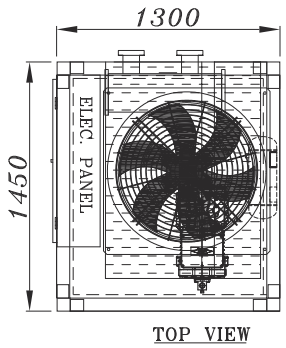
Dimensions(R-134)-BITZER

HCUA-5-1

HCUA-10-1



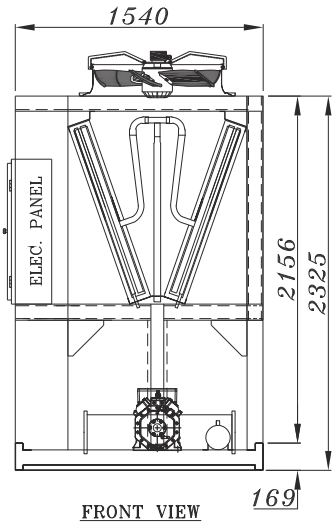


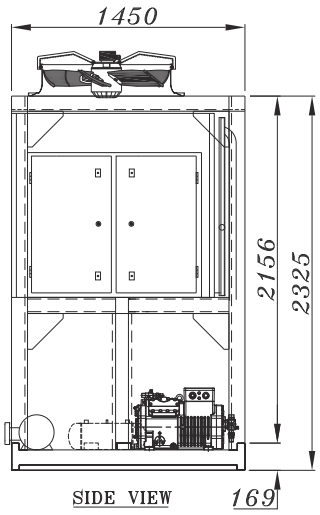


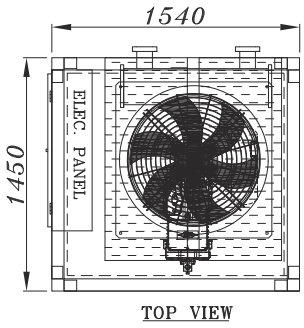
HLCA-20-1

HLCA-25-1

HLCA-15-1



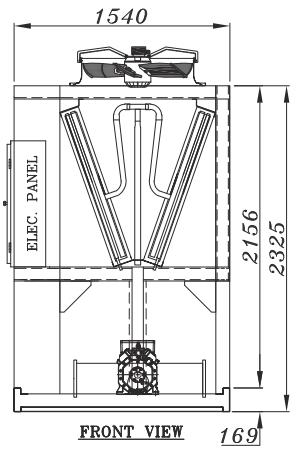


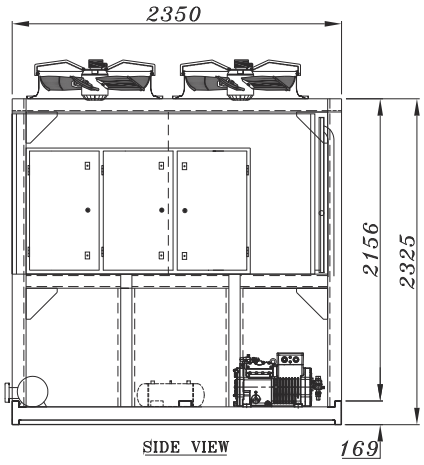


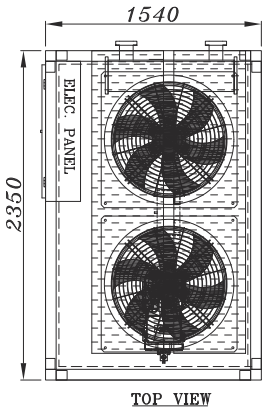
HLCA-30-1

HLCA-40-1

HLCA-35-1





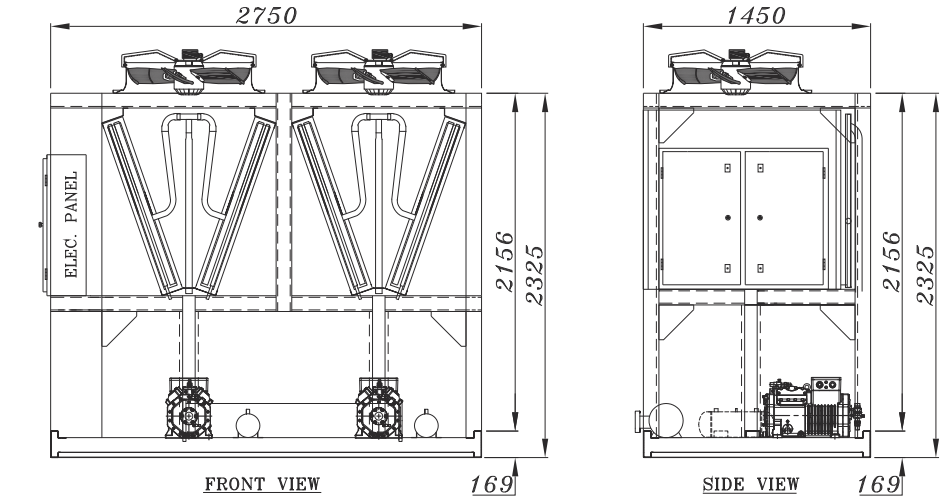


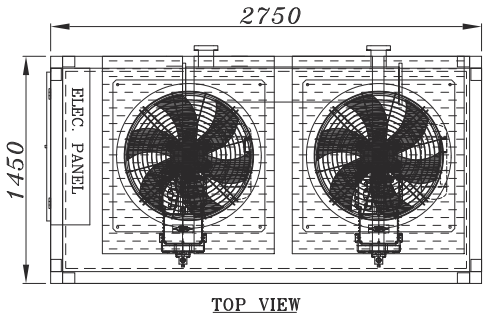
HLCA-20-2

HLCA-30-2

HLCA-40-2

HLCA-50-2



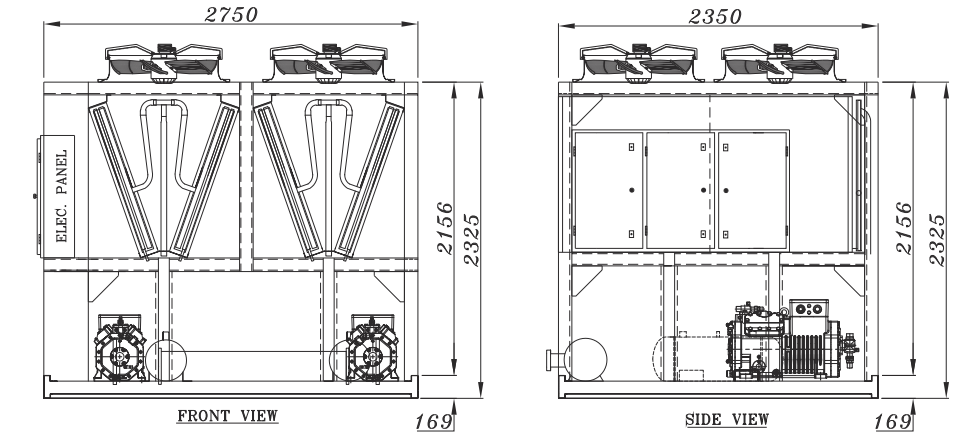


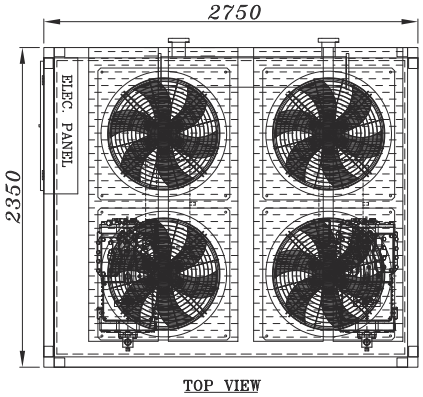
HLCA-50-1

HLCA-60-2

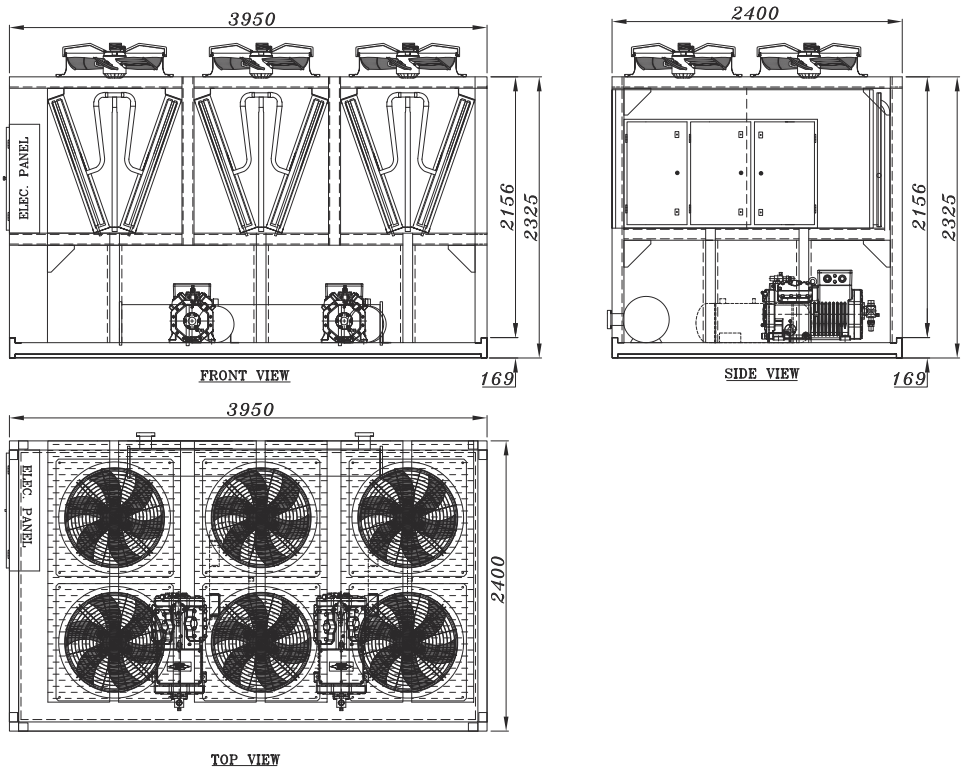
HLCA-70-2

HLCA-80-2



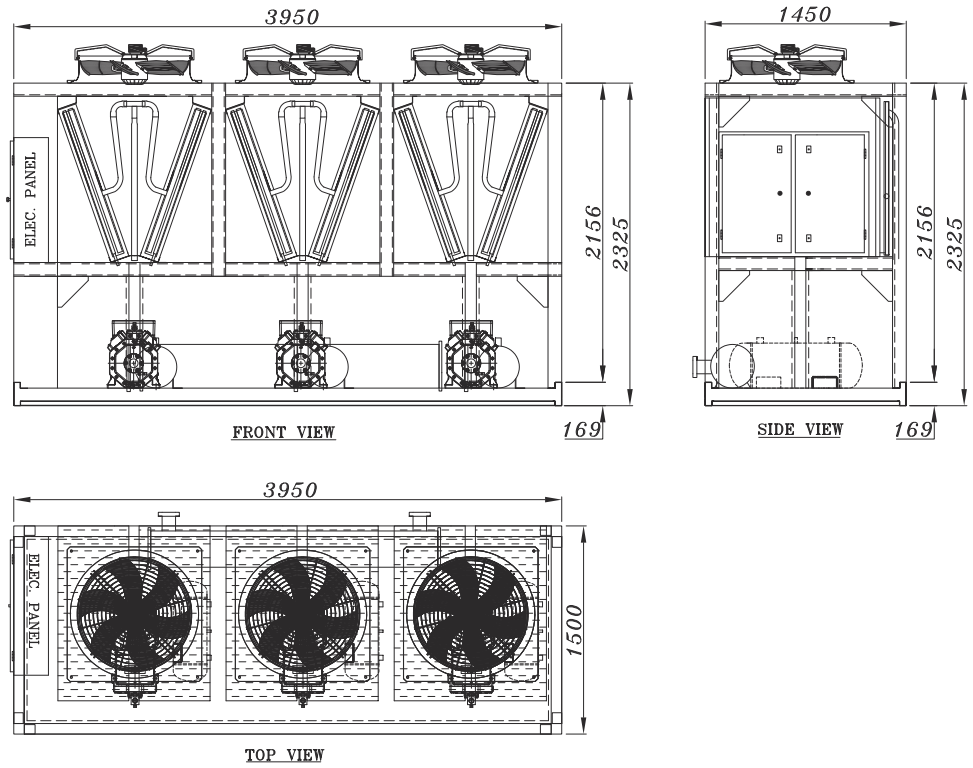


HLCA-100-2



HLCA-60-3

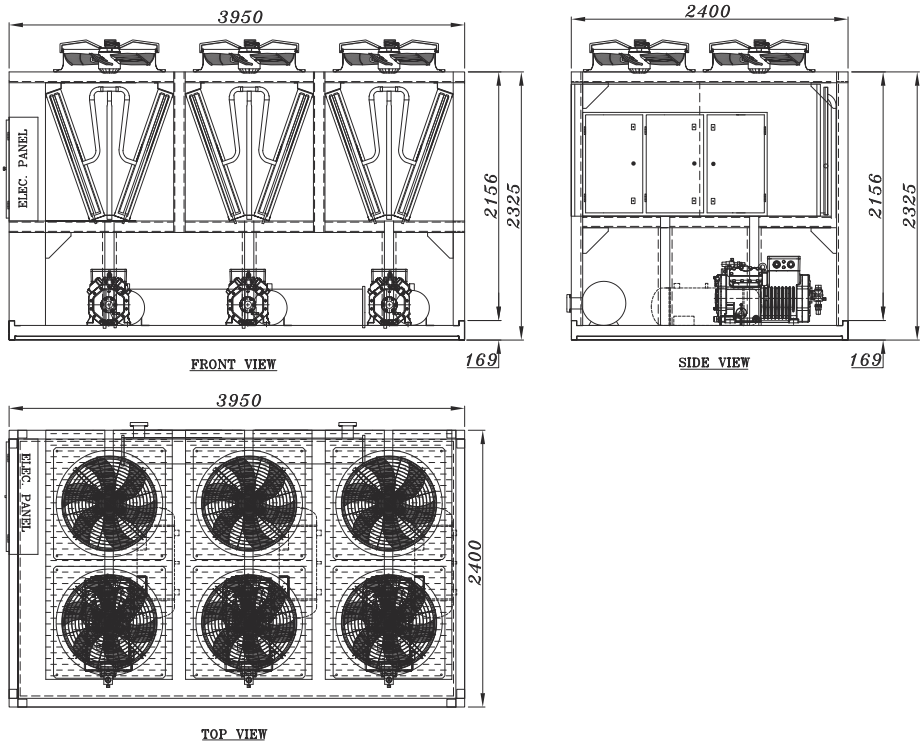
HLCA-75-3



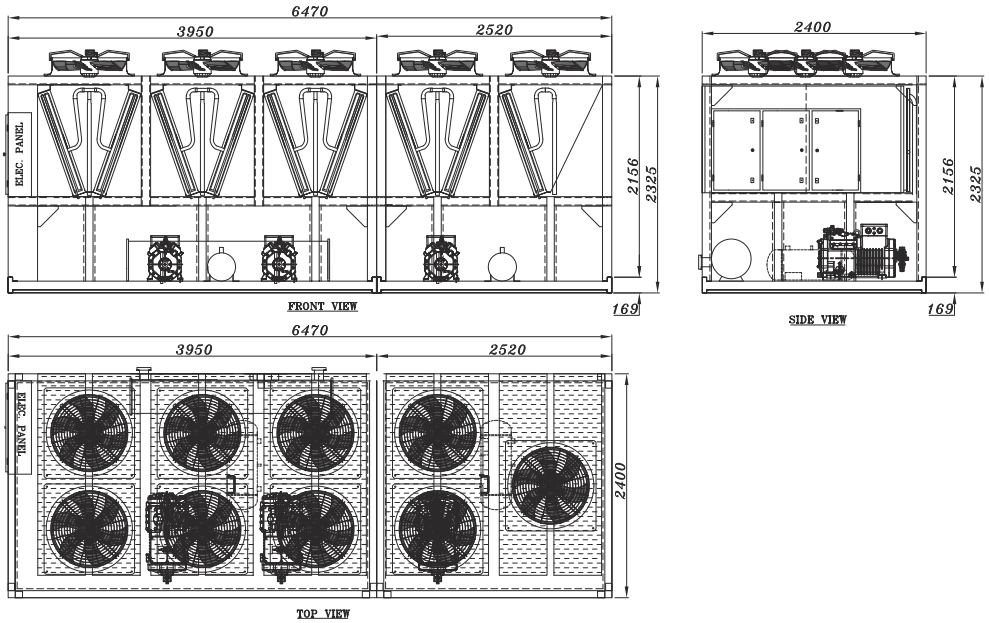
HLCA-90-3

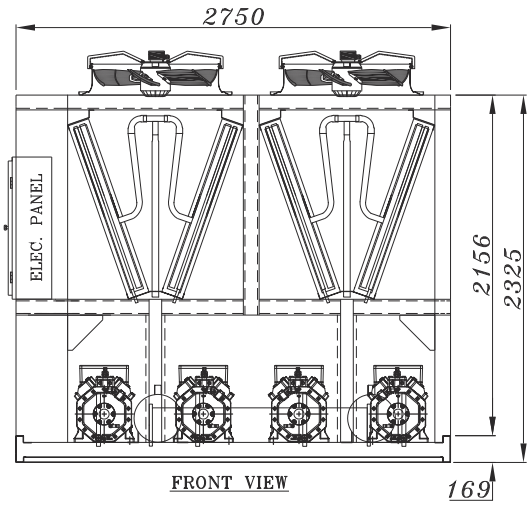
HLCA-105-3

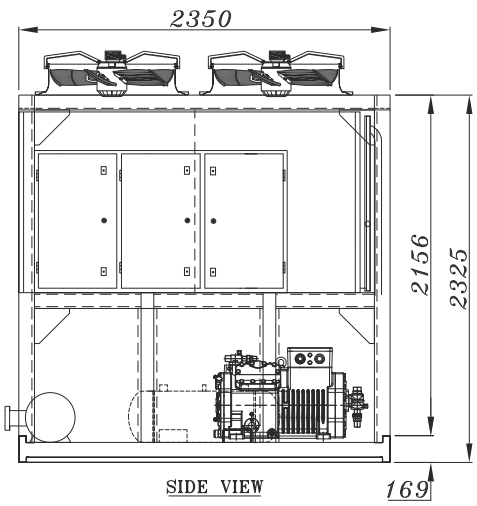
HLCA-120-3

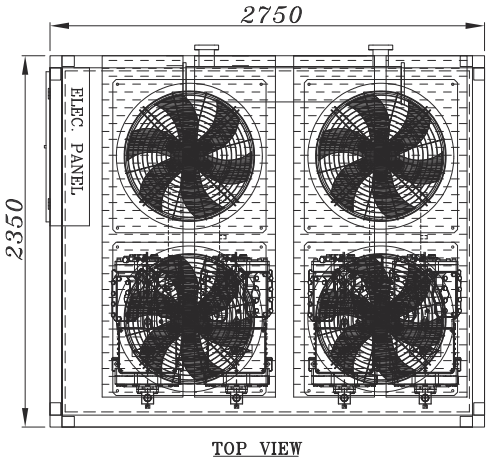


HLCA-150-3

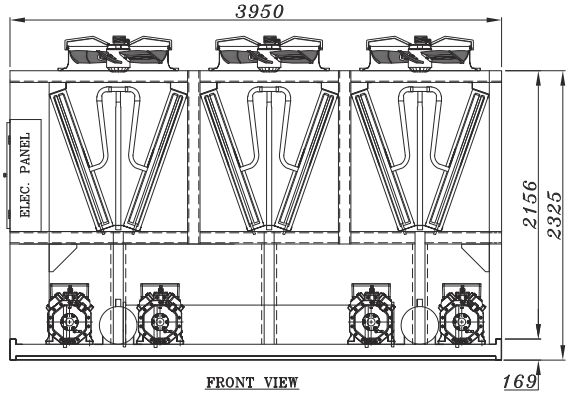


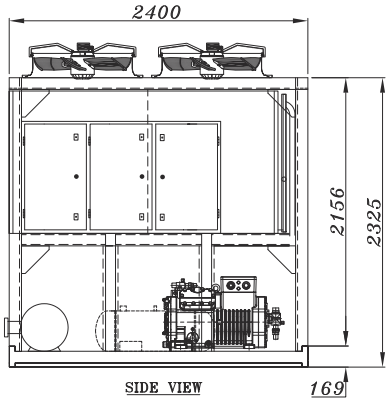


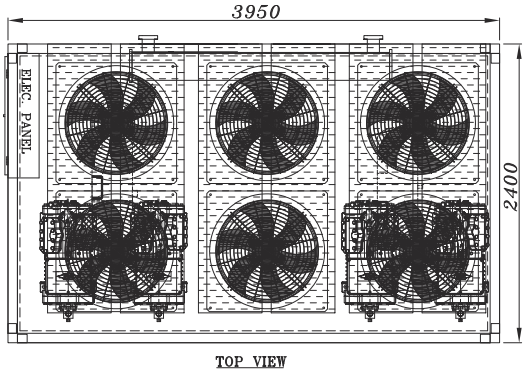




HLCA-80-4

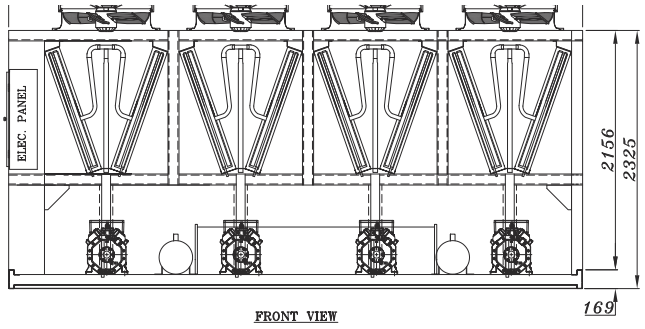




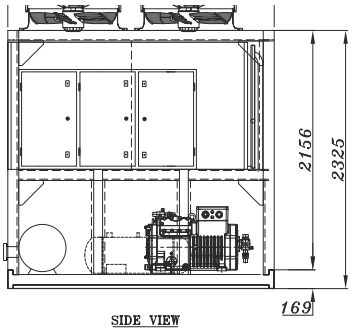


HLCA-100-4

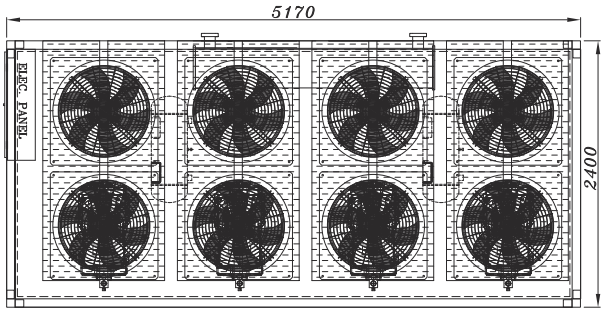
HLCA-120-4



FRONT VIEW

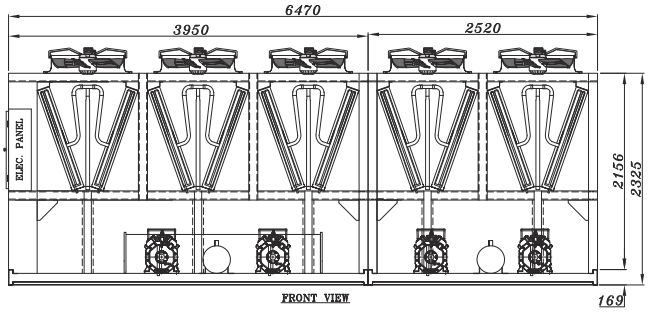


SIDE VIEW

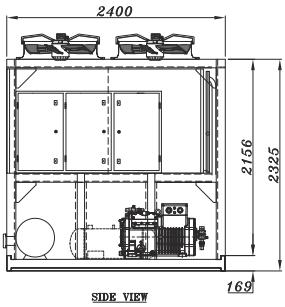


TOP VIEW

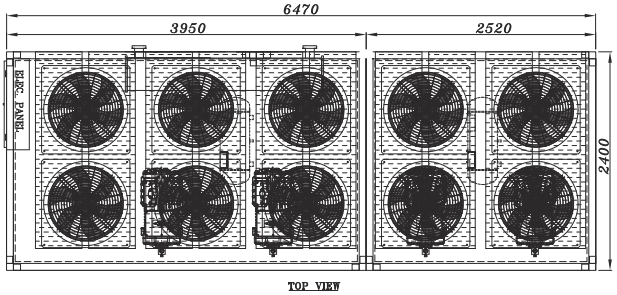
HLCA-140-4
HLCA-160-4



FRONT VIEW

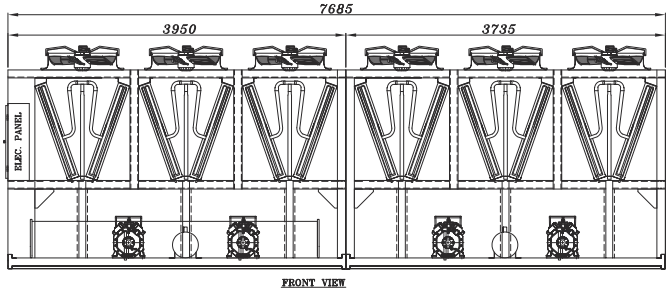


SIDE VIEW

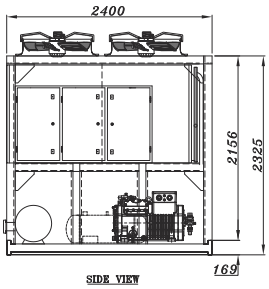


TOP VIEW

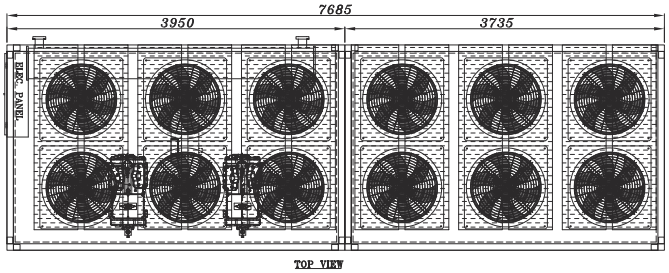
HCUA-200-4
(2 CIRCUIT)



FRONT VIEW



SIDE VIEW

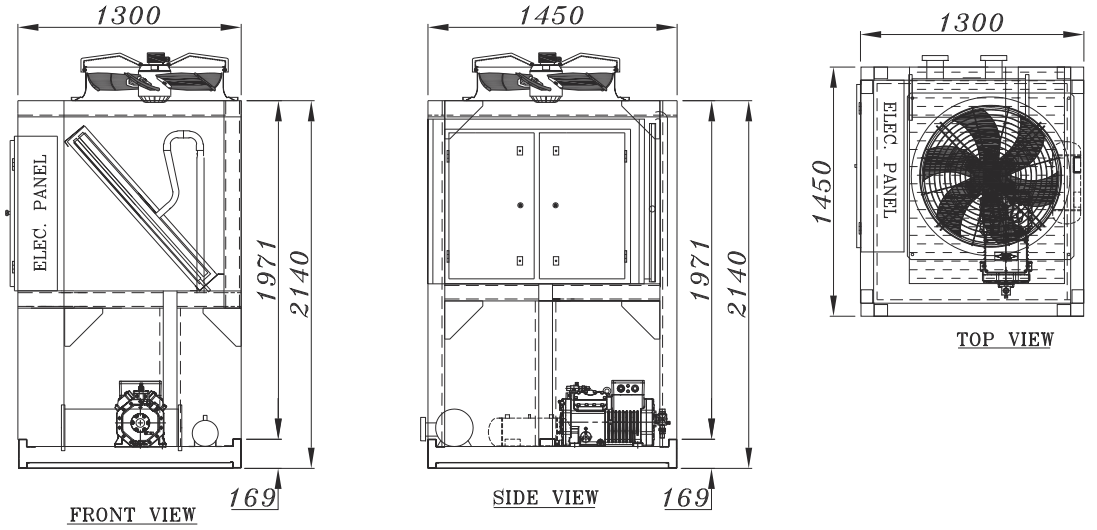


TOP VIEW

HCUA-200-4
(4 CIRCUIT)

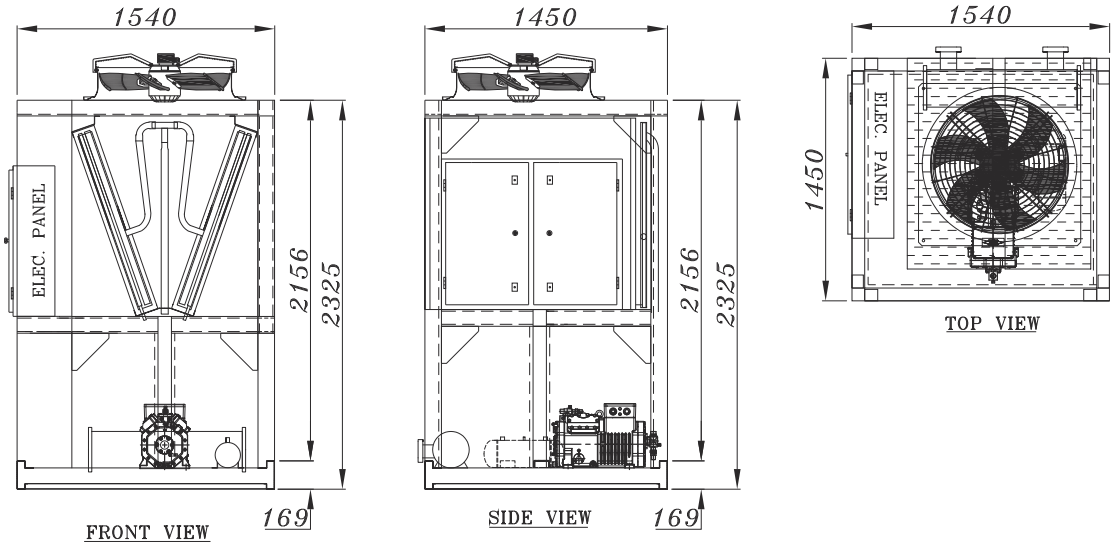
Dimensions(R-22)-BITZER

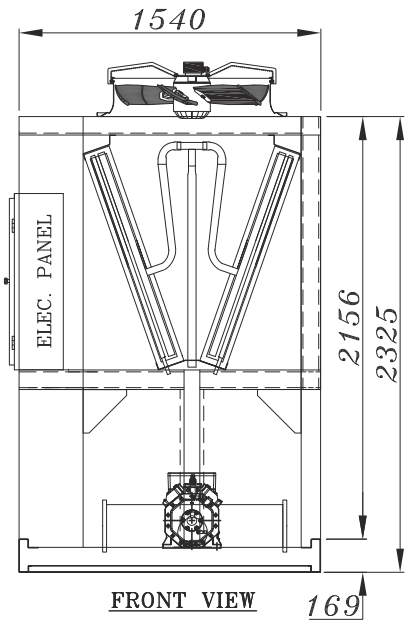
HCUA-5-1



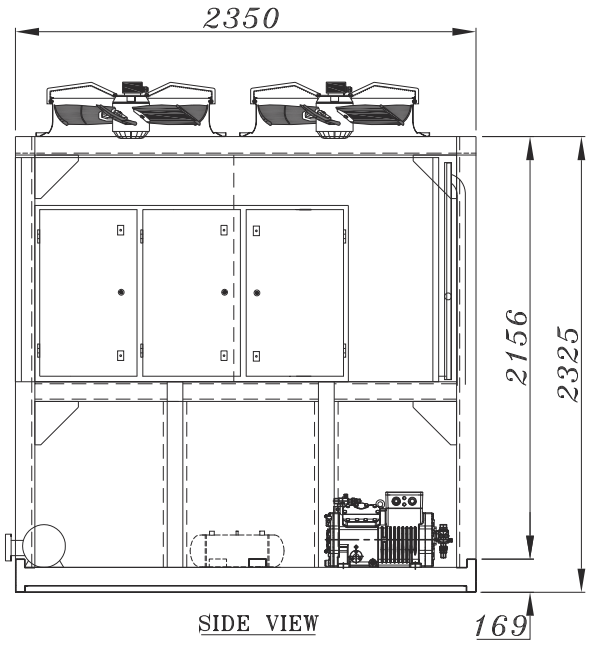
HLCA-10-1

HLCA-15-1

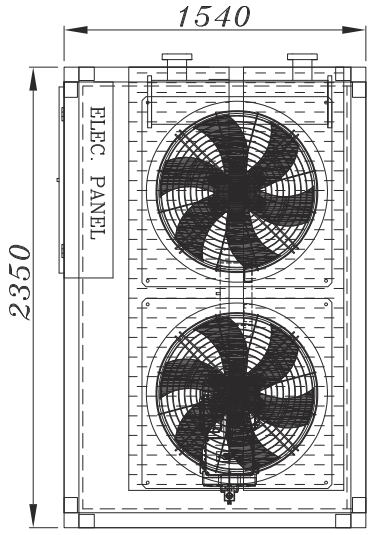




FRONT VIEW



SIDE VIEW



TOP VIEW

HLCA-20-1

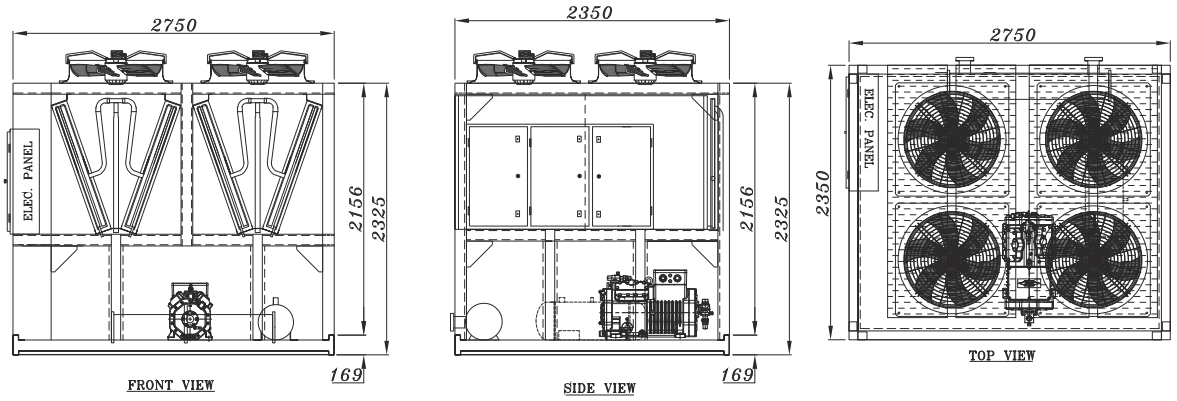
HLCA-25-1

HLCA-30-1

HLCA-35-1

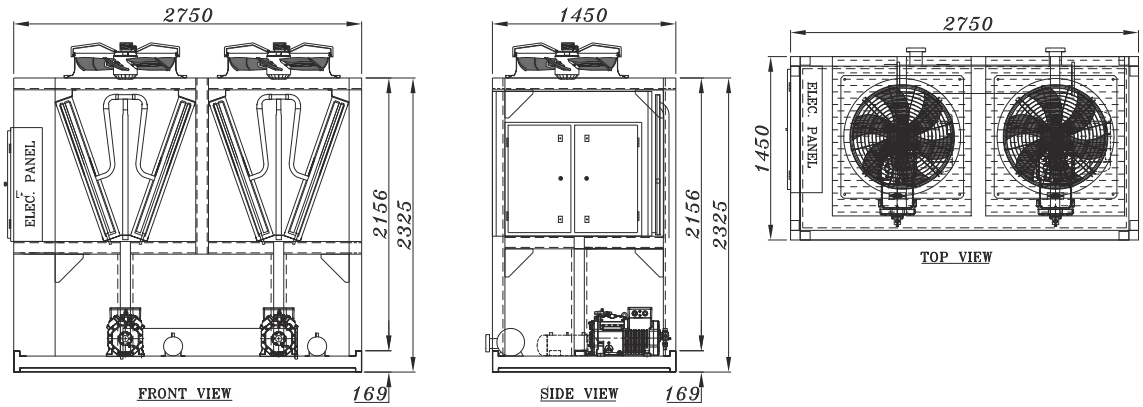
HLCA-40-1

HLCA-50-1



HLCA-20-2

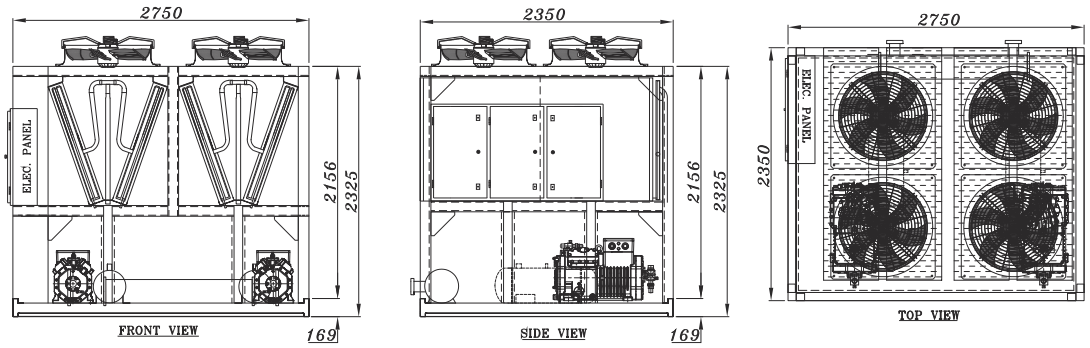
HLCA-30-2

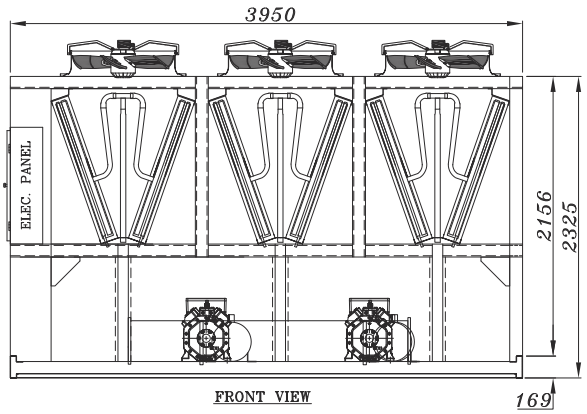


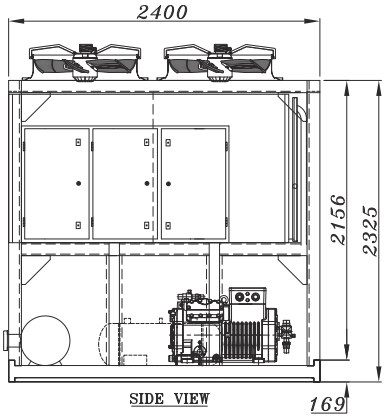
HLCA-40-2

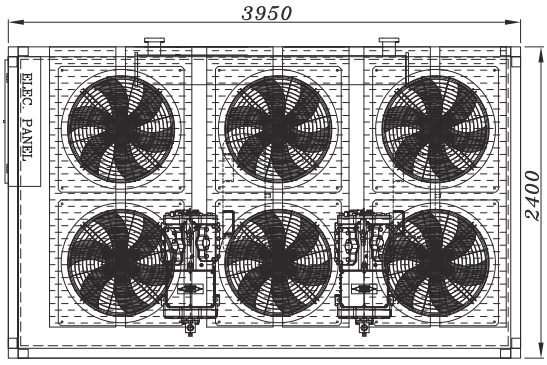
HLCA-50-2

HLCA-60-2



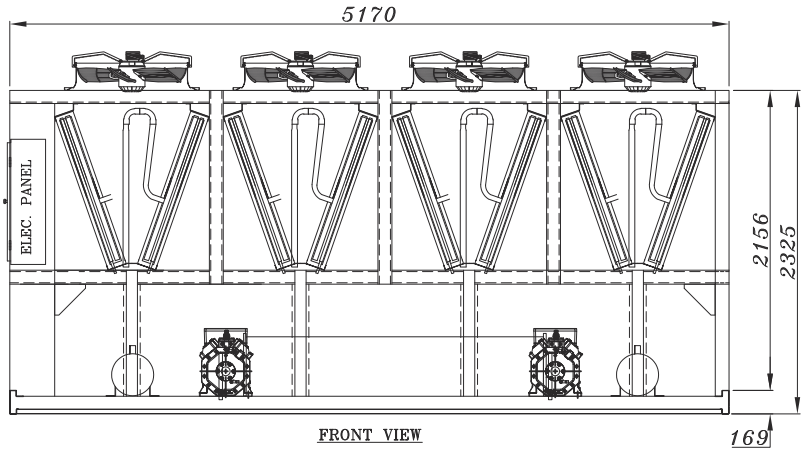


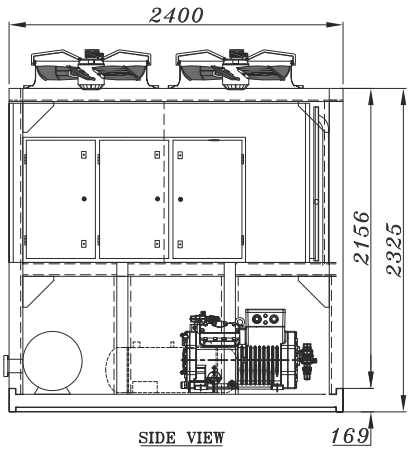


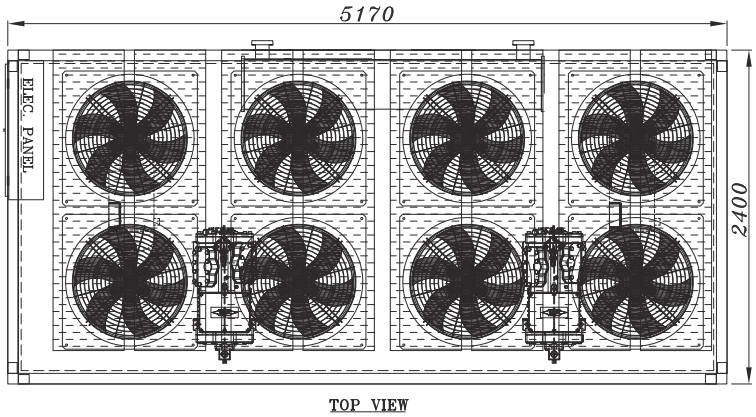


HLCA-70-2

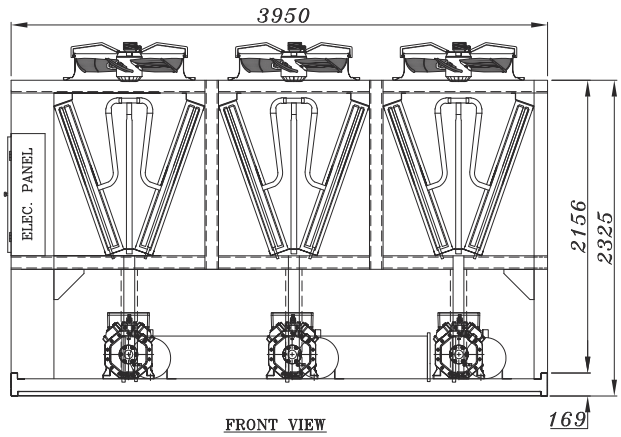
HLCA-80-2



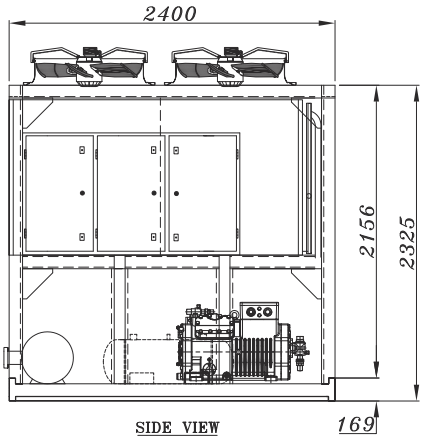




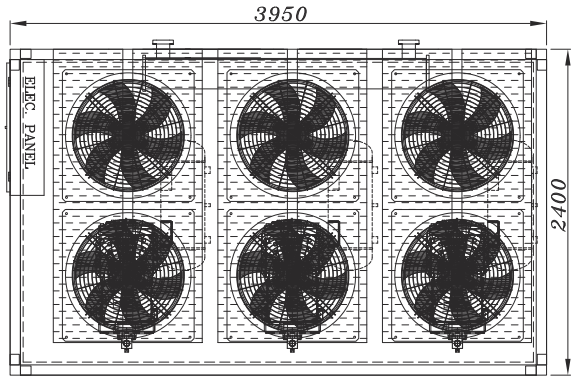
HLCA-100-2



FRONT VIEW



SIDE VIEW

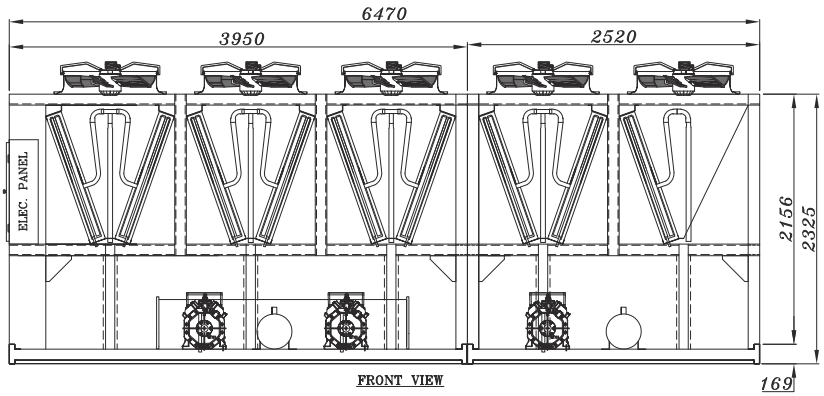


TOP VIEW

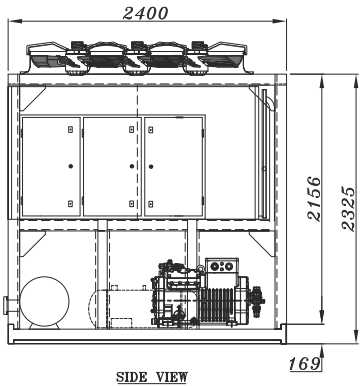
HLCA-60-3

HLCA-75-3

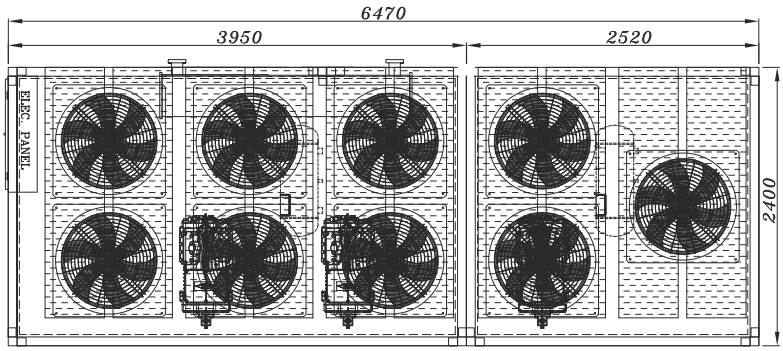
HLCA-90-3



FRONT VIEW



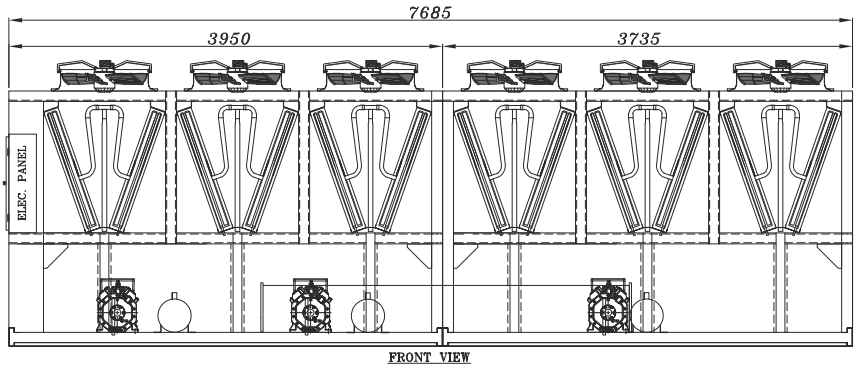
SIDE VIEW



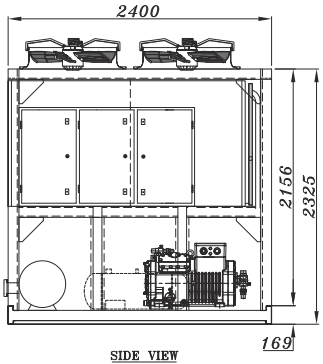
TOP VIEW

HLCA-105-3

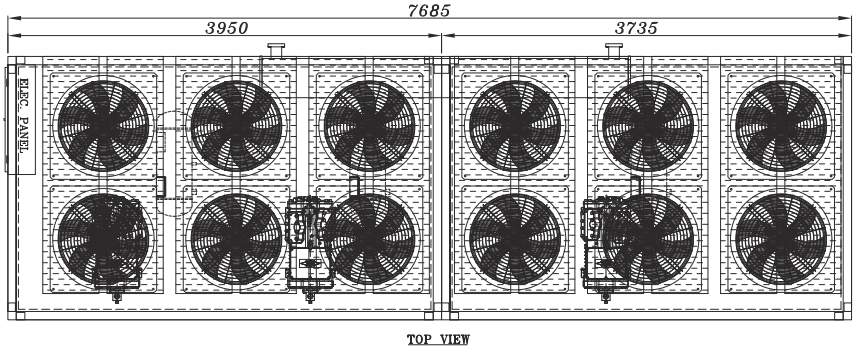
HLCA-120-3



FRONT VIEW

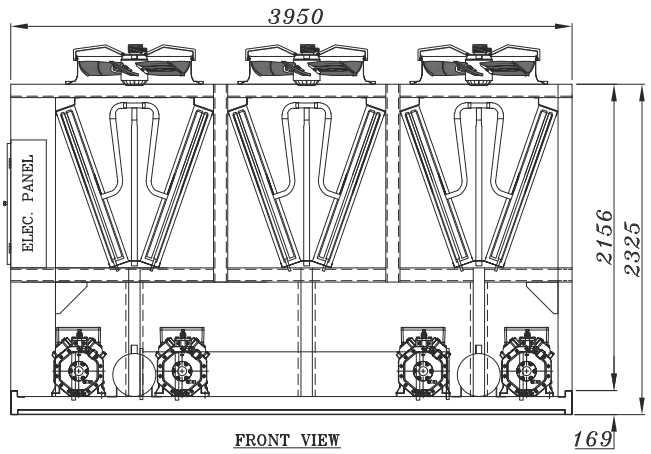


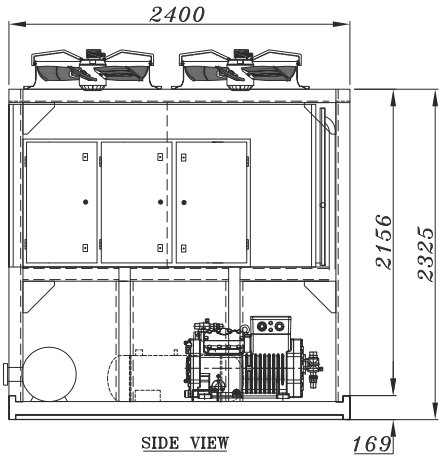
SIDE VIEW

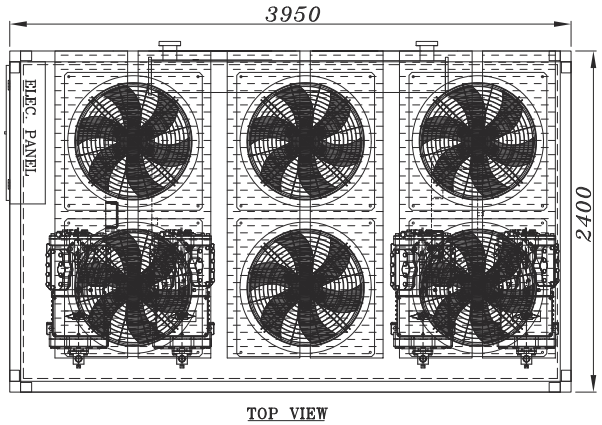


TOP VIEW

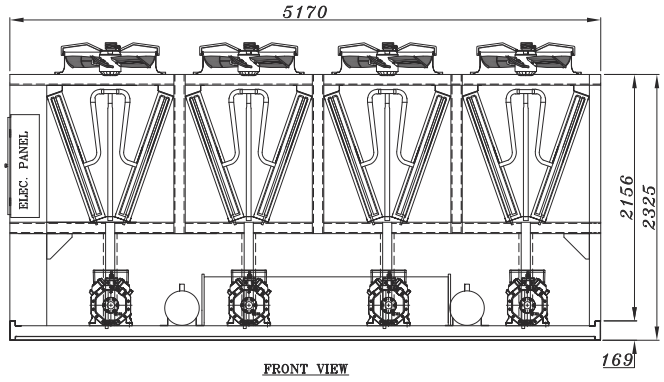
HLCA-150-3

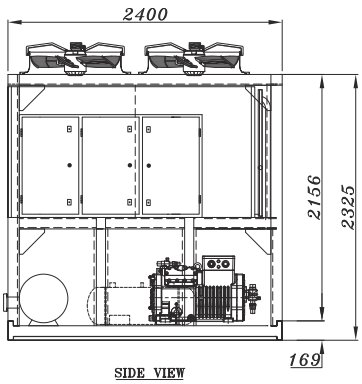


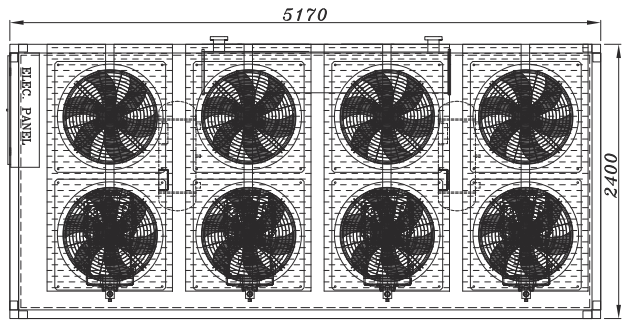




HLCA-80-4

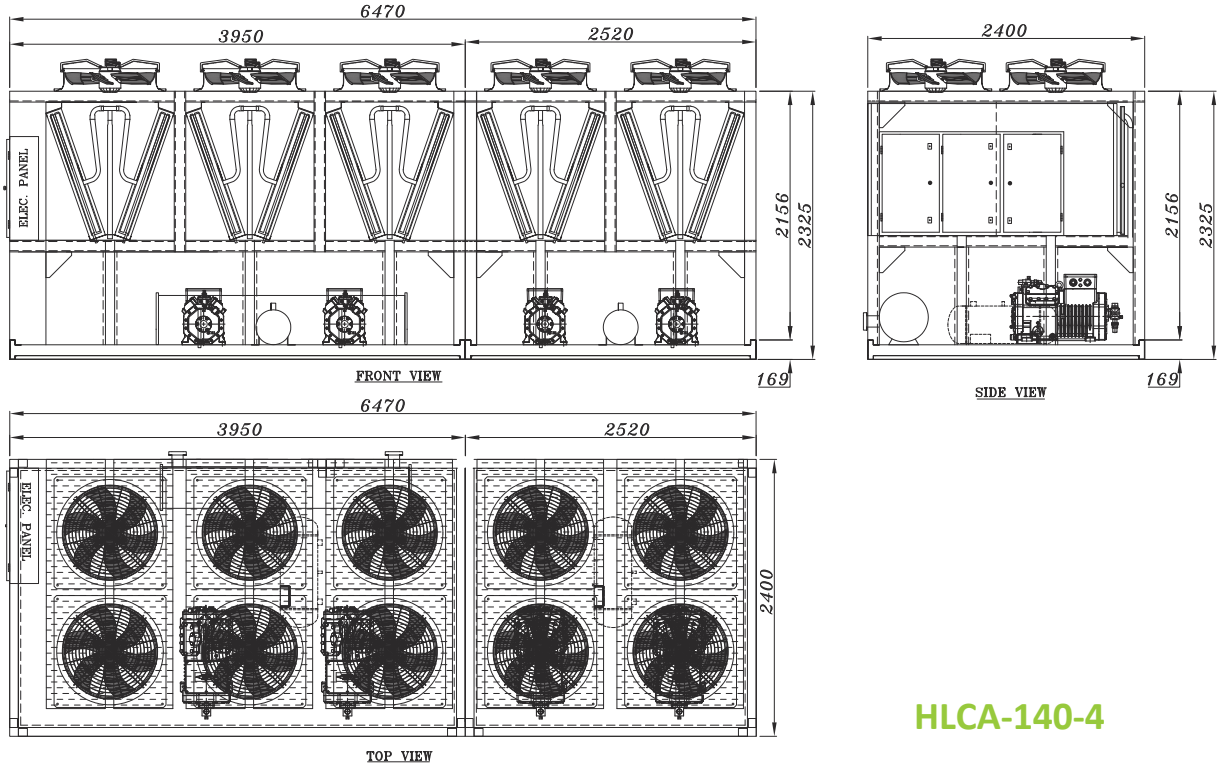




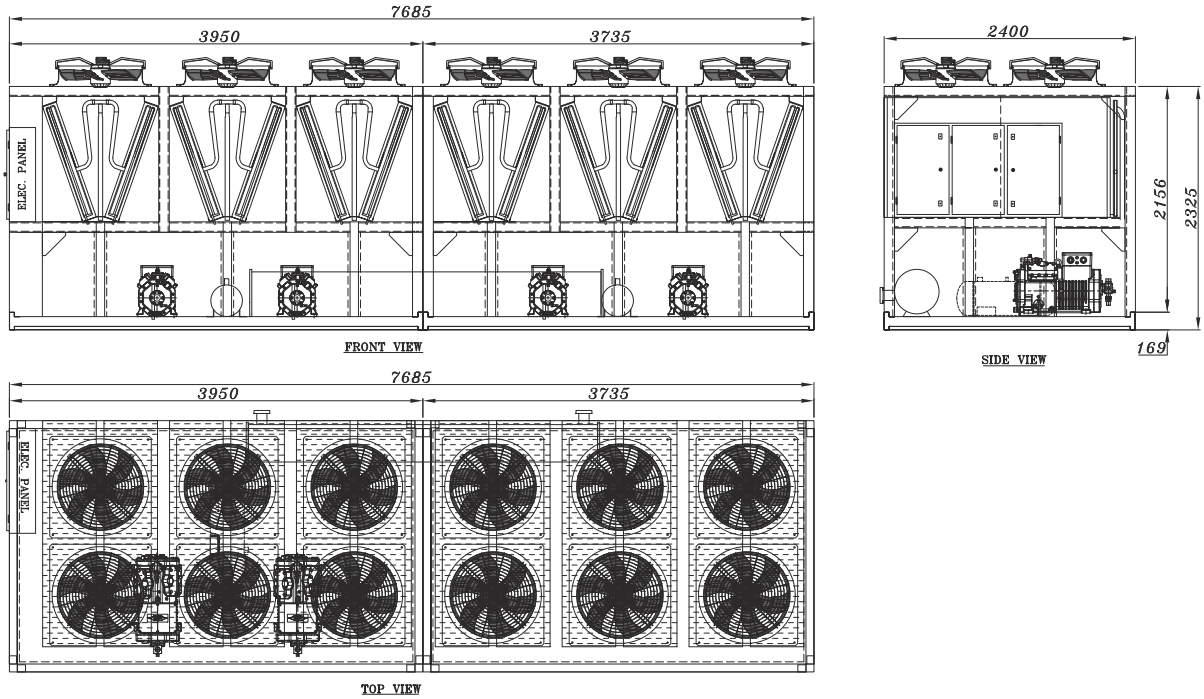


HLCA-100-4

HLCA-120-4



HLCA-140-4



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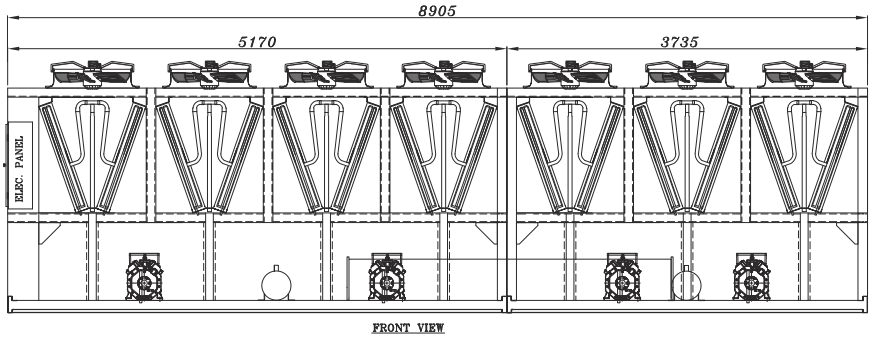
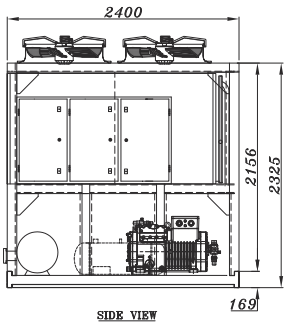
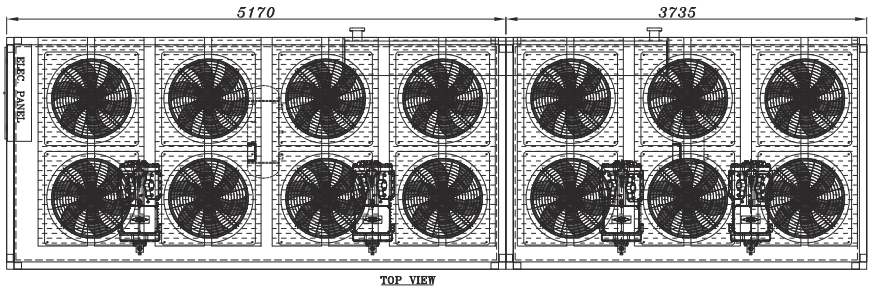
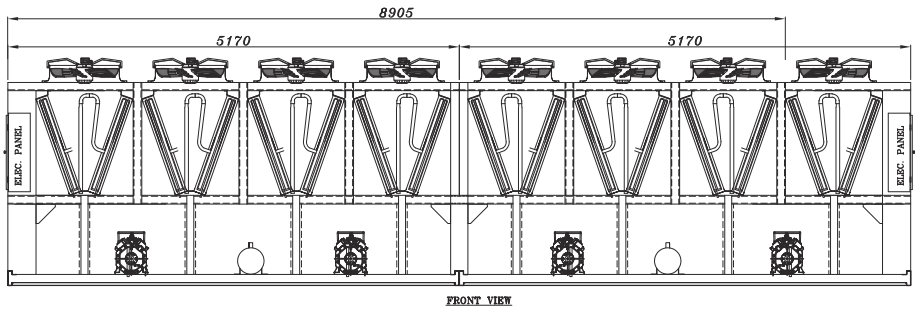


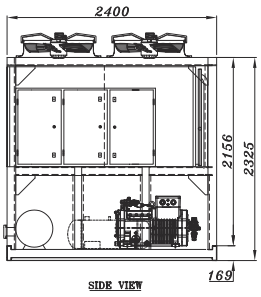


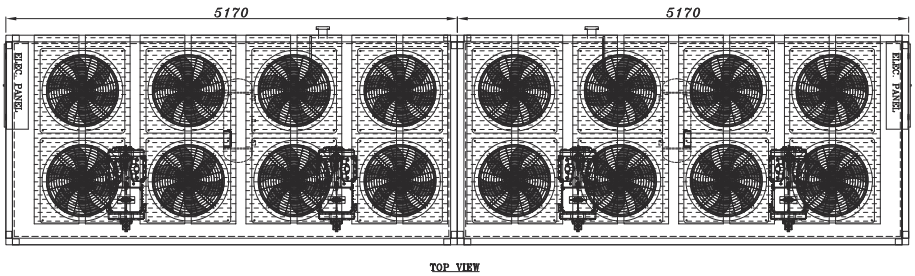


HLCA-200-4

(2 CIRCUIT)







HLCA-200-4(4CIRCUIT)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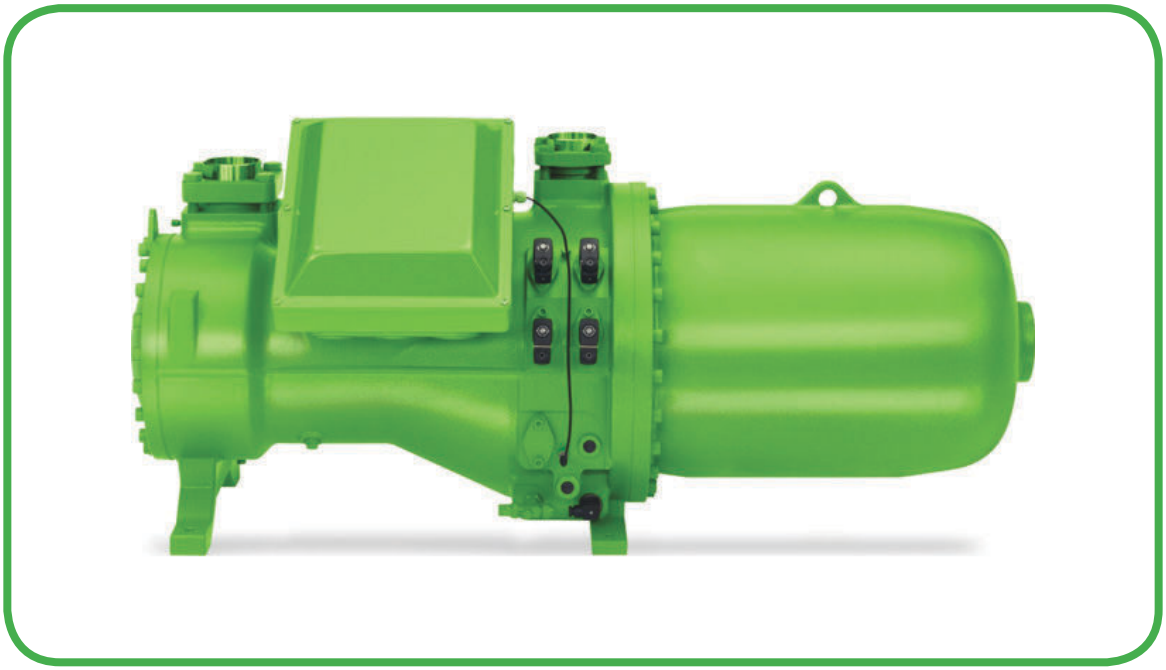


ENGINEERING SPECIFICATIONS-50 HZ (R-22)-BITZER

Model	HLCA	HLCA-50-1	HLCA-60-1	HLCA-70-1	HLCA-80-1	HLCA- 90-1	HLCA-100-1
cooling capacity	TR	31.62	39.67	46.21	53.51	64.55	71.09
	kW	111.20	139.50	162.50	188.20	227.00	250.00
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 Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins						
Area	ft^2	99.42	99.42	149.13	149.13	149.13	198.84
	m^2	9.24	9.24	13.86	13.86	13.86	18.48
Condenser Fan (800)	Propeller direct drive 885 rpm						
QTY		4	4	6	6	6	8
Airflow Rate	cfm	51577	51577	77365	75606	73846	10077
	l/s	24444	24444	36666	35832	34998	4776
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected						
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube						
QTY	1						
Ref. Circuits		1	1	1	1	1	1
Water Volume	GPM	75.89	95.20	110.89	128.43	154.91	170.61
	Litre/s	4.79	6.01	7.00	8.10	9.77	10.76
Refrigerant Charge (R22)(Approx)	Lb	121.2	145.5	169.7	194.0	218.2	242.4
	Kg	55	66	77	88	99	110
Operating Weight (Approx)	Lb	4408	4739	6612	6943	7383	7934
	Kg	2000	2150	3000	3150	3350	3600

Model	HLCA	HLCA-110-1 (336)	HLCA-110-1 (315)	HLCA-125-1	HLCA-140-1	HLCA-160-1
cooling capacity	TR	81.04	76.77	87.58	104.07	116.30
	kW	285.00	270.00	308.00	366.00	409.00
Compressor	Compact Screw Compressor CSH Series					
QTY		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 Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins					
Area	ft^2	198.84	198.84	198.84	248.56	298.27
	m^2	18.48	18.48	18.48	23.1	27.72
Condenser Fan (800)	Propeller direct drive 885 rpm					
QTY		8	8	8	10	12
Airflow Rate	cfm	98461	103154	98461	123083	154731
	l/s	46664	48888	46664	58333	73332
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected					
Size	kW	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube					
QTY	1					
Ref. Circuits		1	1	1	1	1
Water Volume	GPM	194.49	184.26	210.19	249.77	279.11
	Litre/s	12.27	11.62	13.26	15.76	17.61
Refrigerant Charge (R22)(Approx)	Lb	266.7	266.7	303.1	339.4	387.9
	Kg	121	121	137.5	154	176
Operating Weight (Approx)	Lb	8485	9147	9477	10800	12783
	Kg	3850	4150	4300	4900	5800

Model	HLCA	HLCA-100-2	HLCA-120-2	HLCA-140-2	HLCA-160-2	HLCA-180-2	HLCA-200-2
cooling capacity	TR	63.24	79.33	92.41	107.03	129.09	142.17
	kW	222.40	279.00	325.00	376.40	454.00	500.00
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 Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins						
Area	ft^2	149.13	198.84	248.56	248.56	298.27	347.98
	m^2	13.86	18.48	23.1	23.1	27.72	32.34
Condenser Fan (800)	Propeller direct drive885rpm						
QTY		6	8	10	10	12	14
Airflow Rate	cfm	73846	103154	126013	123083	147692	172307
	l/s	34998	48888	59722	58333	69996	81662
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected						
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube						
QTY	1						
Ref. Circuits		2	2	2	2	2	2
Water Volume	GPM	151.77	190.40	221.79	256.87	309.82	341.21
	Litre/s	9.58	12.01	13.99	16.21	19.55	21.53
Refrigerant Charge (R22)(Approx)	Lb	242.4	290.9	339.4	387.9	436.4	484.9
	Kg	110	132	154	176	198	220
Operating Weight (Approx)	Lb	8045	9257	12122	12783	14106	14767
	Kg	3650	4200	5500	5800	6400	6700

Model	HLCA	HLCA-220-2 (2*336)	HLCA-220-2 (2*315)	HLCA-250-2	HLCA-280-2	HLCA-320-2
cooling capacity	TR	162.08	153.55	175.16	208.14	232.59
	kW	570.00	540.00	616.00	732.00	818.00
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 Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins					
Area	ft^2	397.69	347.98	397.69	497.11	546.82
	m^2	36.96	32.34	36.96	46.2	50.82
Condenser Fan (800)	Propeller direct drive 885 rpm					
QTY		16	14	16	20	22
Airflow Rate	cfm	196922	172307	196922	246153	270768
	l/s	93328	81662	93328	116660	128326
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected					
Size	kW	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube					
QTY	2					
Ref. Circuits		2	2	2	2	2
Water Volume	GPM	388.98	368.51	420.38	499.54	558.23
	Litre/s	24.54	23.25	26.52	31.52	35.22
Refrigerant Charge (R22)(Approx)	Lb	533.4	533.4	606.1	678.8	775.8
	Kg	242	242	275	308	352
Operating Weight (Approx)	Lb	16750	17301	18624	21599	22811
	Kg	7600	7850	8450	9800	10350

CAPACITY RATING(50 HZ)-R 22

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-22)											
		95°F (35°C)				104°F (40°C)				113°F (45°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-50-1	41.9	29.69	32.5	71.25	2.59	27.84	35.7	66.81	2.53	26.70	37.8	64.08	2.47
	5.5	104.4		4.49	8.50	97.9		4.22	8.3	93.9		4.04	8.1
	43.88	30.94	32.8	74.25	2.74	29.03	36.1	69.68	2.68	27.87	38.3	66.88	2.62
	6.6	108.8		4.68	9.00	102.1		4.40	8.8	98		4.22	8.6
	44.96	31.62	33	75.89	2.77	29.69	36.3	71.25	2.71	28.52	38.5	68.45	2.65
	7.2	111.2		4.79	9.10	104.4		4.49	8.9	100.3		4.32	8.7
	45.32	31.85	33	76.43	2.83	29.91	36.4	71.79	2.77	28.75	38.6	68.99	2.71
	7.4	112		4.82	9.30	105.2		4.53	9.1	101.1		4.35	8.9
HLCA-60-1	41.9	37.25	40.3	89.40	3.51	34.95	44.3	83.87	3.44	33.52	47	80.46	3.38
	5.5	131		5.64	11.50	122.9		5.29	11.3	117.9		5.08	11.1
	43.88	38.81	40.7	93.15	3.69	36.42	44.8	87.42	3.63	34.97	47.5	83.94	3.57
	6.6	136.5		5.88	12.10	128.1		5.52	11.9	123		5.30	11.7
	44.96	39.67	40.9	95.20	3.78	37.28	45	89.47	3.72	35.80	47.8	85.92	3.66
	7.2	139.5		6.01	12.40	131.1		5.64	12.2	125.9		5.42	12
	45.32	39.98	41	95.95	3.84	37.56	45.1	90.15	3.78	36.08	47.9	86.60	3.72
	7.4	140.6		6.05	12.60	132.1		5.69	12.4	126.9		5.46	12.2
HLCA-70-1	41.9	43.42	48.7	104.21	4.88	40.12	53.6	96.29	4.82	37.99	56.8	91.17	4.75
	5.5	152.7		6.57	16.00	141.1		6.07	15.8	133.6		5.75	15.6
	43.88	45.21	49.1	108.51	5.21	41.83	54	100.39	5.15	39.67	57.2	95.20	5.09
	6.6	159		6.85	17.10	147.1		6.33	16.9	139.5		6.01	16.7
	44.96	46.21	49.3	110.89	5.33	42.79	54.2	102.71	5.27	40.60	57.4	97.45	5.21
	7.2	162.5		7.00	17.50	150.5		6.48	17.3	142.8		6.15	17.1
	45.32	46.55	49.4	111.71	5.43	43.11	54.3	103.46	5.36	40.92	57.5	98.20	5.30
	7.4	163.7		7.05	17.80	151.6		6.53	17.6	143.9		6.20	17.4
HLCA-80-1	41.9	50.30	54.9	120.72	1.98	46.32	60.1	111.17	1.92	43.79	63.6	105.09	1.86
	5.5	176.9		7.62	6.50	162.9		7.01	6.3	154		6.63	6.1
	43.88	52.35	55.3	125.63	2.13	48.28	60.5	115.88	2.07	45.69	64	109.67	2.01
	6.6	184.1		7.93	7.00	169.8		7.31	6.8	160.7		6.92	6.6
	44.96	53.51	55.6	128.43	2.23	49.39	60.8	118.54	2.16	46.75	64.2	112.19	2.10
	7.2	188.2		8.10	7.30	173.7		7.48	7.1	164.4		7.08	6.9
	45.32	53.91	55.6	129.39	2.26	49.76	60.9	119.42	2.19	47.12	64.3	113.08	2.13
	7.4	189.6		8.16	7.40	175		7.53	7.2	165.7		7.13	7
HLCA-90-1	41.9	60.85	63.3	146.04	2.59	56.56	69.5	135.73	2.53	53.77	73.6	129.05	2.47
	5.5	214		9.21	8.50	198.9		8.56	8.3	189.1		8.14	8.1
	43.88	63.41	63.8	152.18	2.74	58.86	70	141.26	2.68	56.02	74.1	134.44	2.62
	6.6	223		9.60	9.00	207		8.91	8.8	197		8.48	8.6
	44.96	64.55	64	154.91	2.83	60.28	70.2	144.67	2.77	57.15	74.3	137.17	2.71
	7.2	227		9.77	9.30	212		9.13	9.1	201		8.65	8.9
	45.32	65.12	64.1	156.28	2.90	60.57	70.3	145.36	2.83	57.72	74.4	138.53	2.77
	7.4	229		9.86	9.50	213		9.17	9.3	203		8.74	9.1
HLCA-100-1	41.9	66.82	72.5	160.37	3.05	62.27	79.8	149.45	2.99	59.43	84.8	142.63	2.93
	5.5	235		10.12	10.00	219		9.43	9.8	209		9.00	9.6
	43.88	69.66	73	167.19	3.20	64.83	80.2	155.59	3.14	61.99	85.1	148.77	3.08
	6.6	245		10.55	10.50	228		9.82	10.3	218		9.39	10.1
	44.96	71.09	73.2	170.61	3.35	66.54	80.4	159.69	3.29	63.41	85.3	152.18	3.23
	7.2	250		10.76	11.00	234		10.07	10.8	223		9.60	10.6
	45.32	71.65	73.3	171.97	3.41	66.82	80.4	160.37	3.35	63.98	85.4	153.55	3.29
	7.4	252		10.85	11.20	235		10.12	11	225		9.69	10.8

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-22)											
		95°F (35°C)				104°F (40°C)				113°F (45°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-110-1 (336)	41.9	76.20	82.7	182.89	3.72	70.80	91	169.92	3.66	67.67	96.7	162.42	3.60
	5.5	268		11.54	12.20	249		10.72	12	238		10.25	11.8
	43.88	79.33	83.2	190.40	3.81	73.93	91.4	177.43	3.75	70.52	97.1	169.24	3.69
	6.6	279		12.01	12.50	260		11.19	12.3	248		10.68	12.1
	44.96	81.04	83.5	194.49	3.90	75.64	91.6	181.53	3.84	72.22	97.3	173.34	3.78
	7.2	285		12.27	12.80	266		11.45	12.6	254		10.94	12.4
	45.32	81.61	83.6	195.86	3.96	76.20	91.7	182.89	3.90	72.79	97.3	174.70	3.84
	7.4	287		12.36	13.00	268		11.54	12.8	256		11.02	12.6
HLCA-110-1 (315)	41.9	71.94	75.8	172.65	3.44	66.54	83.9	159.69	3.38	63.41	89.5	152.18	3.32
	5.5	253		10.89	11.30	234		10.07	11.1	223		9.60	10.9
	43.88	75.07	76.3	180.16	3.57	69.38	84.4	166.51	3.51	65.97	90	158.32	3.44
	6.6	264		11.37	11.70	244		10.51	11.5	232		9.99	11.3
	44.96	76.77	76.6	184.26	3.75	71.09	84.7	170.61	3.69	67.67	90.2	162.42	3.63
	7.2	270		11.62	12.30	250		10.76	12.1	238		10.25	11.9
	45.32	77.34	76.7	185.62	3.81	71.65	84.8	171.97	3.75	68.24	90.3	163.78	3.69
	7.4	272		11.71	12.50	252		10.85	12.3	240		10.33	12.1
HLCA-125-1	41.9	82.18	86.3	197.22	1.83	75.92	95.6	182.21	1.77	72.22	102	173.34	1.71
	5.5	289		12.44	6.00	267		11.50	5.8	254		10.94	5.6
	43.88	85.59	87	205.41	1.95	79.33	96.2	190.40	1.89	75.35	102.5	180.84	1.83
	6.6	301		12.96	6.40	279		12.01	6.2	265		11.41	6
	44.96	87.58	87.3	210.19	2.04	81.04	96.5	194.49	1.98	77.06	102.8	184.94	1.92
	7.2	308		13.26	6.70	285		12.27	6.5	271		11.67	6.3
	45.32	88.15	87.4	211.55	2.07	81.61	96.6	195.86	2.01	77.63	102.9	186.30	1.95
	7.4	310		13.35	6.80	287		12.36	6.6	273		11.75	6.4
HLCA-140-1	41.9	98.10	105.5	235.44	2.13	91.27	115	219.06	2.07	98.10	105.5	235.44	2.01
	5.5	345		14.85	7.00	321		13.82	6.8	345		14.85	6.6
	43.88	102.08	106.4	244.99	2.23	94.97	115.9	227.93	2.16	102.08	106.4	244.99	2.10
	6.6	359		15.46	7.30	334		14.38	7.1	359		15.46	6.9
	44.96	104.07	106.9	249.77	2.38	96.96	116.3	232.71	2.32	104.07	106.9	249.77	2.26
	7.2	366		15.76	7.80	341		14.68	7.6	366		15.76	7.4
	45.32	104.92	107	251.82	2.44	97.81	116.5	234.76	2.38	104.92	107	251.82	2.32
	7.4	369		15.89	8.00	344		14.81	7.8	369		15.89	7.6
HLCA-160-1	41.9	109.47	112.2	262.73	2.65	101.80	122.8	244.31	2.59	96.68	129.8	232.03	2.53
	5.5	385		16.58	8.70	358		15.41	8.5	340		14.64	8.3
	43.88	114.02	113.3	273.65	2.80	106.06	123.9	254.55	2.74	100.94	130.9	242.26	2.68
	6.6	401		17.26	9.20	373		16.06	9	355		15.28	8.8
	44.96	116.30	113.9	279.11	2.90	108.62	124.5	260.69	2.83	103.50	131.5	0.96	2.77
	7.2	409		17.61	9.50	382		16.45	9.3	364		0.06	9.1
	45.32	117.15	114.1	281.16	2.96	109.47	124.7	262.73	2.90	104.07	131.7	249.77	2.83
	7.4	412		17.74	9.70	385		16.58	9.5	366		15.76	9.3

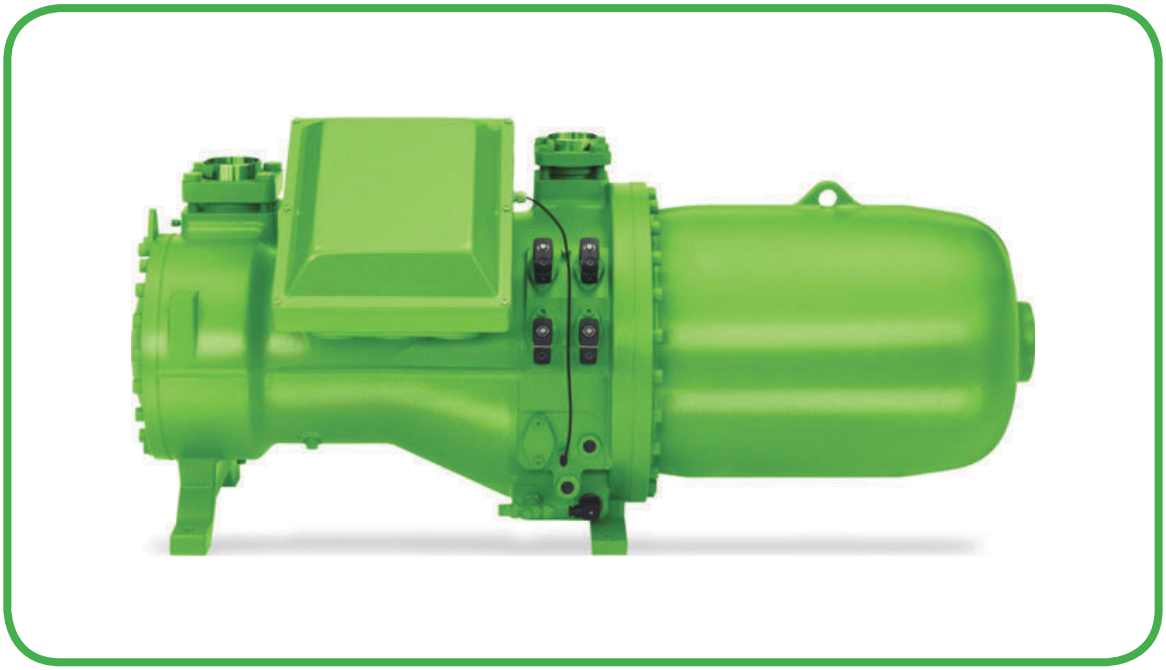
Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-22)											
		95°F (35°C)				104°F (40°C)				113°F (45°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-100-2	41.9	59.37	65	142.49	2.80	55.67	71.4	133.62	2.71	53.40	75.6	128.16	2.65
	5.5	208.8		8.99	9.20	195.8		8.43	8.90	187.8		8.09	8.70
	43.88	61.87	65.6	148.50	3.05	58.06	72.2	139.35	2.96	55.73	76.6	133.76	2.90
	6.6	217.6		9.37	10.00	204.2		8.79	9.70	196		8.44	9.50
	44.96	63.24	66	151.77	3.20	59.37	72.6	142.49	3.11	57.04	77	136.90	3.05
	7.2	222.4		9.58	10.50	208.8		8.99	10.20	200.6		8.64	10.00
	45.32	63.69	66	152.86	3.26	59.83	72.8	143.58	3.17	57.49	77.2	137.99	3.11
	7.4	224		9.64	10.70	210.4		9.06	10.40	202.2		8.71	10.20
HLCA-120-2	41.9	74.50	80.6	178.80	3.47	69.89	88.6	167.74	3.38	67.05	94	160.92	3.32
	5.5	262		11.28	11.40	245.8		10.58	11.10	235.8		10.15	10.90
	43.88	77.63	81.4	186.30	3.66	72.85	89.6	174.84	3.57	69.95	95	167.88	3.51
	6.6	273		11.75	12.00	256.2		11.03	11.70	246		10.59	11.50
	44.96	79.33	81.8	190.40	3.84	74.56	90	178.93	3.75	71.60	95.6	171.84	3.69
	7.2	279		12.01	12.60	262.2		11.29	12.30	251.8		10.84	12.10
	45.32	79.96	82	191.90	3.96	75.12	90.2	180.30	3.87	72.17	95.8	173.20	3.81
	7.4	281.2		12.11	13.00	264.2		11.37	12.70	253.8		10.93	12.50
HLCA-140-2	41.9	86.84	97.4	208.41	4.42	80.24	107.2	192.58	4.33	75.98	113.6	182.34	4.27
	5.5	305.4		13.15	14.50	282.2		12.15	14.20	267.2		11.50	14.00
	43.88	90.42	98.2	217.01	4.63	83.65	108	200.77	4.51	79.33	114.4	190.40	4.45
	6.6	318		13.69	15.20	294.2		12.67	14.80	279		12.01	14.60
	44.96	92.41	98.6	221.79	4.82	85.59	108.4	205.41	4.69	81.21	114.8	194.90	4.63
	7.2	325		13.99	15.80	301		12.96	15.40	285.6		12.30	15.20
	45.32	93.09	98.8	223.43	4.88	86.21	108.6	206.91	4.75	81.83	115	196.40	4.69
	7.4	327.4		14.10	16.00	303.2		13.05	15.60	287.8		12.39	15.40
HLCA-160-2 ~~HLCA-80-1~~	41.9	100.60	109.8	241.44	5.21	92.64	120.2	222.34	5.09	87.58	127.2	210.19	5.03
	5.5	353.8		15.23	17.10	325.8		14.03	16.70	308		13.26	16.50
	43.88	104.70	110.6	251.27	5.49	96.56	121	231.75	5.36	91.39	128	219.33	5.30
	6.6	368.2		15.85	18.00	339.6		14.62	17.60	321.4		13.84	17.40
	44.96	107.03	111.2	256.87	5.61	98.78	121.6	237.08	5.49	93.49	128.4	224.38	5.43
	7.2	376.4		16.21	18.40	347.4		14.96	18.00	328.8		14.16	17.80
	45.32	107.82	111.2	258.78	5.67	99.52	121.8	238.85	5.55	94.23	128.6	226.16	5.49
	7.4	379.2		16.33	18.60	350		15.07	18.20	331.4		14.27	18.00
HLCA-180-2	41.9	121.70	126.6	292.08	1.83	113.11	139	271.47	1.71	107.54	147.2	258.09	1.65
	5.5	428		18.43	6.00	397.8		17.13	5.60	378.2		16.28	5.40
	43.88	126.82	127.6	304.36	1.98	117.72	140	282.53	1.86	112.03	148.2	268.88	1.80
	6.6	446		19.20	6.50	414		17.82	6.10	394		16.96	5.90
	44.96	129.09	128	309.82	2.01	120.56	140.4	289.35	1.89	114.31	148.6	274.34	1.83
	7.2	454		19.55	6.60	424		18.26	6.20	402		17.31	6.00
	45.32	130.23	128.2	312.55	2.10	121.13	140.6	290.71	1.98	115.44	148.8	277.07	1.92
	7.4	458		19.72	6.90	426		18.34	6.50	406		17.48	6.30
HLCA-200-2	41.9	133.64	145	320.74	2.16	124.54	159.6	298.90	2.04	118.86	169.6	285.25	1.98
	5.5	470		20.24	7.10	438		18.86	6.70	418		18.00	6.50
	43.88	139.33	146	334.39	2.38	129.66	160.4	311.19	2.26	123.97	170.2	297.54	2.19
	6.6	490		21.10	7.80	456		19.63	7.40	436		18.77	7.20
	44.96	142.17	146.4	341.21	2.47	133.07	160.8	319.38	2.35	126.82	170.6	304.36	2.29
	7.2	500		21.53	8.10	468		20.15	7.70	446		19.20	7.50
	45.32	143.31	146.6	343.94	2.56	133.64	160.8	320.74	2.44	127.96	170.8	307.09	2.38
	7.4	504		21.70	8.40	470		20.24	8.00	450		19.37	7.80

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-22)											
		95°F (35°C)				104°F (40°C)				113°F (45°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-220-2 (2*336)	41.9	152.41	165.4	365.78	2.80	141.60	182	339.85	2.68	135.35	193.4	324.84	2.62
	5.5	536		23.08	9.20	498		21.44	8.80	476		20.49	8.60
	43.88	158.66	166.4	380.79	3.05	147.86	182.8	354.86	2.93	141.04	194.2	338.48	2.87
	6.6	558		24.02	10.00	520		22.39	9.60	496		21.35	9.40
	44.96	162.08	167	388.98	3.57	151.27	183.2	363.05	3.41	144.45	194.6	346.67	3.35
	7.2	570		24.54	11.70	532		22.90	11.20	508		21.87	11.00
	45.32	163.21	167.2	391.71	3.66	152.41	183.4	365.78	3.51	145.58	194.6	349.40	3.44
	7.4	574		24.71	12.00	536		23.08	11.50	512		22.04	11.30
HLCA-220-2 (2*315)	41.9	143.88	151.6	345.31	2.19	133.07	167.8	319.38	2.04	126.82	179	304.36	1.98
	5.5	506		21.79	7.20	468		20.15	6.70	446		19.20	6.50
	43.88	150.13	152.6	360.32	2.29	138.76	168.8	333.02	2.13	131.94	180	316.65	2.07
	6.6	528		22.73	7.50	488		21.01	7.00	464		19.98	6.80
	44.96	153.55	153.2	368.51	2.44	142.17	169.4	341.21	2.29	135.35	180.4	324.84	2.23
	7.2	540		23.25	8.00	500		21.53	7.50	476		20.49	7.30
	45.32	154.68	153.4	371.24	2.50	143.31	169.6	343.94	2.35	136.49	180.6	327.57	2.29
	7.4	544		23.42	8.20	504		21.70	7.70	480		20.67	7.50
HLCA-250-2 / HLCA-125-1	41.9	164.35	172.6	394.44	2.68	151.84	191.2	364.42	2.53	144.45	204	346.67	2.47
	5.5	578		24.89	8.80	534		22.99	8.30	508		21.87	8.10
	43.88	171.18	174	410.82	2.90	158.66	192.4	380.79	2.74	150.70	205	361.69	2.68
	6.6	602		25.92	9.50	558		24.02	9.00	530		22.82	8.80
	44.96	175.16	174.6	420.38	3.05	162.08	193	388.98	2.90	154.11	205.6	369.88	2.83
	7.2	616		26.52	10.00	570		24.54	9.50	542		23.34	9.30
	45.32	176.29	174.8	423.11	3.11	163.21	193.2	391.71	2.96	155.25	205.8	372.61	2.83
	7.4	620		26.69	10.20	574		24.71	9.70	546		23.51	9.30
HLCA-280-2	41.9	196.20	211	470.88	3.81	182.55	230	438.12	3.66	196.20	211	470.88	3.54
	5.5	690		29.71	12.50	642		27.64	12.00	690		29.71	11.60
	43.88	204.16	212.8	489.98	3.96	189.94	231.8	455.86	3.81	204.16	212.8	489.98	3.69
	6.6	718		30.91	13.00	668		28.76	12.50	718		30.91	12.10
	44.96	208.14	213.8	499.54	4.24	193.92	232.6	465.42	4.08	208.14	213.8	499.54	3.96
	7.2	732		31.52	13.90	682		29.36	13.40	732		31.52	13.00
	45.32	209.85	214	503.63	4.39	195.63	233	469.51	4.24	209.85	214	503.63	4.11
	7.4	738		31.77	14.40	688		29.62	13.90	738		31.77	13.50
HLCA-320-2	41.9	218.95	224.4	525.47	4.72	203.59	245.6	488.62	4.57	193.35	259.6	464.05	4.45
	5.5	770		33.15	15.50	716		30.83	15.00	680		29.28	14.60
	43.88	228.04	226.6	547.31	4.88	212.12	247.8	509.09	4.72	201.88	261.8	484.52	4.60
	6.6	802		34.53	16.00	746		32.12	15.50	710		30.57	15.10
	44.96	232.59	227.8	558.23	5.00	217.24	249	521.37	4.85	207.00	263	1.93	4.72
	7.2	818		35.22	16.40	764		32.89	15.90	728		0.12	15.50
	45.32	234.30	228.2	562.32	5.12	218.95	249.4	525.47	4.97	208.14	263.4	499.54	4.85
	7.4	824		35.48	16.80	770		33.15	16.30	732		31.52	15.90

ENGINEERING SPECIFICATIONS (50 HZ) (R-22)											
chiller MODEL	no.of cir-cuit	comp.oil charge (dm^3)	condenser coil					condenser fan			
			row	fpi	QTY	total heat rejection (kw)	total face area (m2)	size (mm)	QTY	total air flow rate (cfm)	motor power (kw)
HLCA-50-1	1	9.5	3	10	4	143.2	4*2.31	800	4	4*12948	4*1.7
HLCA-60-1	1	9.5	4	10	4	179.3	4*2.31	800	4	4*12948	4*1.7
HLCA-70-1	1	15	3	10	6	210	6*2.31	800	6	6*12948	6*1.7
HLCA-80-1	1	15	3	12	6	242	6*2.31	800	6	6*12654	6*1.7
HLCA-90-1	1	15	4	12	6	289	6*2.31	800	6	6*12360	6*1.7
HLCA-100-1	1	15	3	12	8	321	8*2.31	800	8	8*12654	8*1.7
HLCA-110-1 (336)	1	15	4	12	8	366	8*2.31	800	8	8*12360	8*1.7
HLCA-110-1 (315)	1	22	4	10	8	344	8*2.31	800	8	8*12948	8*1.7
HLCA-125-1	1	22	4	12	8	392	8*2.31	800	8	8*12360	8*1.7
HLCA-140-1	1	22	4	12	10	470	10*2.31	800	10	10*12360	10*1.7
HLCA-160-1	1	19	4	10	12	520	12*2.31	800	12	12*12948	12*1.7
HLCA-100-2	2	19	4	12	6	286.4	6*2.31	800	6	6*12360	6*1.7
HLCA-120-2	2	19	4	10	8	358.6	8*2.31	800	8	8*12948	8*1.7
HLCA-140-2	2	30	3	12	10	420	10*2.31	800	10	10*12654	10*1.7
HLCA-160-2	2	30	4	12	10	484	10*2.31	800	10	10*12360	10*1.7
HLCA-180-2	2	30	4	12	12	578	12*2.31	800	12	12*12360	12*1.7
HLCA-200-2	2	30	4	12	14	642	14*2.31	800	14	14*12360	14*1.7
HLCA-220-2 (2*336)	2	30	4	12	16	732	16*2.31	800	16	16*12360	16*1.7
HLCA-220-2 (2*315)	2	44	4	12	14	688	14*2.31	800	14	14*12360	14*1.7
HLCA-250-2	2	44	4	12	16	784	16*2.31	800	16	16*12360	16*1.7
HLCA-280-2	2	44	4	12	20	940	20*2.31	800	20	20*12360	20*1.7
HLCA-320-2	2	38	4	12	22	1040	22*2.31	800	22	22*12360	22*1.7

ELECTRICAL DATA (R-22)				
chiller MODEL	Nominal Comp. power (HP)	MRA (Amp)	LRA (Amp) (D/DD)	MAX CONSE POWER (kw)
HLCA-50-1	50	82.4	218/411	58.8
HLCA-60-1	60	97.6	269/508	71.8
HLCA-70-1	70	120.2	290/485	88.2
HLCA-80-1	80	132.1	350/585	98.2
HLCA-90-1	90	146.6	423/686	106.2
HLCA-100-1	100	172.4	479/790	115.6
HLCA-110-1 (336)	110	192.9	516/887	125.6
HLCA-110-1 (315)	110	184.5	520/801	125.6
HLCA-125-1	125	207	612/943	145.6
HLCA-140-1	140	245	665/1023	167
HLCA-160-1	160	268.4	729/1114	180.4
HLCA-100-2	2*50	157.4	2*(218/411)	114.2
HLCA-120-2	2*60	195.2	2*(269/508)	143.6
HLCA-140-2	2*70	233	2*(290/485)	173
HLCA-160-2	2*80	256.8	2*(350/585)	193
HLCA-180-2	2*90	293.2	2*(423/686)	212.4
HLCA-200-2	2*100	337.4	2*(479/790)	227.8
HLCA-220-2 (2*336)	2*110	385.8	2*(516/887)	251.2
HLCA-220-2 (2*315)	2*110	361.6	2*(520/801)	247.8
HLCA-250-2	2*125	414	2*(612/943)	291.2
HLCA-280-2	2*140	490	2*(665/1023)	334
HLCA-320-2	2*160	529.4	2*(729/1114)	357.4


REFRIGERANT
134a
REFRIGERANT
134a



ENGINEERING SPECIFICATIONS-50 HZ (R-134a)-BITZER

Model	HLCA	HLCA-35-1	HLCA-40-1	HLCA-50-1 (137)	HLCA-50-1 (195)	HLCA-50-1 (197)	HLCA-60-1 (170)	HLCA-60-1 (220)	HLCA-60-1 (227)
cooling capacity	TR	21.61	26.90	21.44	31.11	30.51	26.93	35.12	35.94
	kW	76	94.6	75.4	109.4	107.3	94.7	123.5	126.4
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 Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins								
Area	ft^2	49.71	99.42	49.71	99.42	99.42	99.42	99.42	99.42
	m^2	4.62	9.24	4.62	9.24	9.24	9.24	9.24	9.24
Condenser Fan (800)	Propeller direct drive 885 rpm								
QTY		2	4	2	4	4	4	4	4
Airflow Rate	cfm	24615	49231	24615	51577	51577	52750	50404	50404
	l/s	11666	23332	11666	24444	24444	25000	23888	23888
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected								
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube								
QTY	1								
Ref. Circuits		1	1	1	1	1	1	1	1
Water Volume	GPM	51.86	64.56	51.46	74.66	73.22	64.63	84.28	86.26
	Litre/s	3.27	4.07	3.25	4.71	4.62	4.08	5.32	5.44
Refrigerant Charge (R134a)(Approx)	Lb	83.972	96.976	121.22	121.22	121.22	145.464	145.464	145.464
	Kg	38.1	44	55	55	55	66	66	66
Operating Weight (Approx)	Lb	3086	3747	3306	4188	4408	3967	4298	4628
	Kg	1400	1700	1500	1900	2000	1800	1950	2100

Model	HLCA	HLCA-70-1 (197)	HLCA-70-1 (258)	HLCA-80-1 (227)	HLCA-80-1 (295)	HLCA- 80-1 (315)	HLCA-90-1 (258)	HLCA-90-1 (336)	HLCA-90-1 (359)
cooling capacity	TR	30.91	41.32	35.80	47.97	50.36	41.34	54.65	58.01
	kW	108.7	145.3	125.9	168.7	177.1	145.4	192.2	204
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 Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins								
Area	ft^2	99.42	99.42	99.42	149.13	149.13	99.42	149.13	149.13
	m^2	9.24	9.24	9.24	13.86	13.86	9.24	13.86	13.86
Condenser Fan (800)	Propeller direct drive 885 rpm								
QTY		4	4	4	6	6	4	6	6
Airflow Rate	cfm	51577	49231	50404	77365	75606	49231	75606	77365
	l/s	24444	23332	23888	36666	35832	23332	35832	36666
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected								
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube								
QTY	1								
Ref. Circuits		1	1	1	1	1	1	1	1
Water Volume	GPM	74.18	99.16	85.92	115.13	120.86	64.63	131.16	139.22
	Litre/s	4.68	6.26	5.42	7.26	7.62	4.08	8.28	8.78
Refrigerant Charge (R134a)(Approx)	Lb	169.7	169.7	194.0	194.0	194.0	218.2	218.2	218.2
	Kg	77	77	88	88	88	99	99	99
Operating Weight (Approx)	Lb	5400	5620	5510	6281	7053	5730	6392	7273
	Kg	2450	2550	2500	2850	3200	2600	2900	3300

Model	HLCA	HLCA-100-1 (295)	HLCA-110-1 (336)	HLCA-110-1 (315)	HLCA-110-1 (410)	HLCA-125-1 (359)	HLCA-125-1 (470)	HLCA-140-1 (410)	HLCA- 140-1 (535)
cooling capacity	TR	48.11	54.79	51.84	68.24	59.14	75.35	68.24	85.87
	kW	169.20	192.70	182.30	240.00	208.00	265.00	240.00	302.00
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 Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins								
Area	ft^2	149.13	149.13	149.13	198.84	149.13	198.84	149.13	198.84
	m^2	13.86	13.86	13.86	18.48	13.86	18.48	13.86	18.48
Condenser Fan (800)	Propeller direct drive 885 rpm								
QTY		6	6	6	8	6	8	6	8
Airflow Rate	cfm	77365	75606	75606	100807	77365	100807	75606	98461
	l/s	36666	35832	35832	47776	36666	47776	35832	46664
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected								
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube								
QTY	1								
Ref. Circuits		1	1	1	1	1	1	1	1
Water Volume	GPM	115.47	131.50	124.41	163.78	141.95	180.84	163.78	206.09
	Litre/s	7.28	8.30	7.85	10.33	8.96	11.41	10.33	13.00
Refrigerant Charge (R134a)(Approx)	Lb	244.6	266.7	266.7	266.7	303.1	303.1	339.4	339.4
	Kg	111	121	121	121	137.5	137.5	154	154
Operating Weight (Approx)	Lb	6392	6612	7273	8045	7714	8265	8265	9367
	Kg	2900	3000	3300	3650	3500	3750	3750	4250

Model	HLCA	HLCA-160-1 (470)	HLCA-160-1 (615)	HLCA-210-1 (615)
cooling capacity	TR	73.93	101.80	100.94
	kW	260.00	358.00	355.00
Compressor	Compact Screw Compressor CSH Series			
QTY		1	1	1
Oil Charge	USGal	5.02	7.93	7.93
	Litre	19	30	30
Condenser Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins			
Area	ft^2	198.84	248.56	248.56
	m^2	18.48	23.1	23.1
Condenser Fan (800)	Propeller direct drive 885 rpm			
QTY		8	10	10
Airflow Rate	cfm	100807	123083	123083
	l/s	47776	58333	58333
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected			
Size	kW	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube			
QTY	1			
Ref. Circuits		1	1	1
Water Volume	GPM	177.43	244.31	242.26
	Litre/s	11.19	15.41	15.28
Refrigerant Charge (R134a)(Approx)	Lb	387.9	387.9	509.1
	Kg	176	176	231
Operating Weight (Approx)	Lb	9257	12012	12342
	Kg	4200	5450	5600

Model	HLCA	HLCA-70-2	HLCA-40-80-2	HLCA-100-2 (2*137)	HLCA-100-2 (2*195)	HLCA-100-2 (2*197)	HLCA-120-2 (2*170)	HLCA-120-2 (2*220)	HLCA-120-2 (2*227)
cooling capacity	TR	43.22	53.80	42.88	62.21	61.02	53.85	70.23	71.88
	kW	152.00	189.20	150.80	218.80	214.60	189.40	247.00	252.80
Compressor	Compact Screw Compressor CSH Series								
QTY		2	2	2	2	2	2	2	2
Oil Charge	USGal	5.019	5.02	5.02	5.02	7.93	5.02	5.02	7.93
	Litre	19	19	19	19	30	19	19	30
Condenser Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins								
Area	ft^2	100.35	150.52	101.00	150.52	150.52	150.52	200.69	200.69
	m^2	9.24	13.86	9.30	13.86	13.86	13.86	18.48	18.48
Condenser Fan (800)	Propeller direct drive 885 rpm								
QTY		4	6	4	6	6	6	8	8
Airflow Rate	cfm	49231	75606	49231	73846	75606	75606	100807	100807
	l/s	23332	35832	23332	34998	35832	35832	47776	47776
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected								
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube								
QTY	1								
Ref. Circuits		2	2	2	2	2	2	2	2
Water Volume	GPM	103.73	129.12	102.91	149.32	146.45	129.25	168.56	172.52
	Litre/s	6.54	8.15	6.49	9.42	9.24	8.15	10.63	10.88
Refrigerant Charge (R134a)(Approx)	Lb	169.71	176.32	242.44	242.44	242.44	290.93	290.93	290.93
	Kg	77	80	110	110	110	132	132	132
Operating Weight (Approx)	Lb	5951	6943	6281	7383	7934	7163	8155	8706
	Kg	2700	3150	2850	3350	3600	3250	3700	3950

Model	HLCA	HLCA-140-2 (2*197)	HLCA-140-2 (2*258)	HLCA-160-2 (2*227)	HLCA-160-2 (2*295)	HLCA-160-2 (2*315)	HLCA-180-2 (2*258)	HLCA-180-2 (2*336)	HLCA-180-2 (2*359)
cooling capacity	TR	61.82	82.63	71.60	95.94	100.71	82.69	109.30	116.01
	kW	217.40	290.60	251.80	337.40	354.20	290.80	384.40	408.00
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 Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins								
Area	ft^2	149.13	198.84	198.84	248.56	248.56	198.84	248.56	298.27
	m^2	13.86	18.48	18.48	23.1	23.1	18.48	23.1	27.72
Condenser Fan (800)	Propeller direct drive 885 rpm								
QTY		6	8	8	10	10	8	10	12
Airflow Rate	cfm	73846	98461	100807	128944	123083	98461	123083	154731
	l/s	34998	46664	47776	61111	58333	46664	58333	73332
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected								
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube								
QTY	1								
Ref. Circuits		2	2	2	2	2	2	2	2
Water Volume	GPM	148.36	198.31	171.84	230.25	241.72	129.26	262.33	278.43
	Litre/s	9.36	12.51	10.84	14.53	15.25	8.16	16.55	17.57
Refrigerant Charge (R134a)(Approx)	Lb	339.4	339.4	387.9	387.9	387.9	436.4	436.4	436.4
	Kg	154	154	176	176	176	198	198	198
Operating Weight (Approx)	Lb	9147	10028	9918	11571	13224	10359	11902	13995
	Kg	4150	4550	4500	5250	6000	4700	5400	6350

Model	HLCA	HLCA-200-2 (2*295)	HLCA-220-2 (2*336)	HLCA-220-2 (2*315)	HLCA-220-2 (2*410)	HLCA-250-2 (2*359)	HLCA-250-2 (2*470)	HLCA-280-2 (2*410)	HLCA-280-2 (2*535)
cooling capacity	TR	96.22	109.59	103.67	136.49	118.29	150.70	136.49	171.74
	kW	338.40	385.40	364.60	480.00	416.00	530.00	480.00	604.00
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 Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins								
Area	ft^2	248.56	248.56	248.56	347.98	298.27	347.98	347.98	397.69
	m^2	23.1	23.1	23.1	32.34	27.72	32.34	32.34	36.96
Condenser Fan (800)	Propeller direct drive 885 rpm								
QTY		10	10	10	14	12	14	14	16
Airflow Rate	cfm	128944	123083	123083	180519	154731	172307	180519	196922
	l/s	61111	58333	58333	85554	73332	81662	85554	93328
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected								
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube								
QTY	1	2							
Ref. Circuits		2	2	2	2	2	2	2	2
Water Volume	GPM	230.93	263.01	248.81	327.57	283.89	361.69	327.57	412.19
	Litre/s	14.57	16.59	15.70	20.67	17.91	22.82	20.67	26.00
Refrigerant Charge (R134a)(Approx)	Lb	489.3	533.4	533.4	533.4	606.1	606.1	678.8	678.8
	Kg	222	242	242	242	275	275	308	308
Operating Weight (Approx)	Lb	11902	12783	13995	15648	15208	16089	16199	17191
	Kg	5400	5800	6350	7100	6900	7300	7350	7800

Model	HLCA	HLCA-320-2 (2*470)	HLCA-320-2 (2*615)	HLCA-420-2 (2*615)
cooling capacity	TR	147.86	203.59	201.88
	kW	520.00	716.00	710.00
Compressor	Compact Screw Compressor CSH Series			
QTY		2	2	2
Oil Charge	USGal	10.04	15.85	15.85
	Litre	38	60	60
Condenser Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins			
Area	ft^2	347.98	497.11	497.11
	m^2	32.34	46.2	46.2
Condenser Fan (800)	Propeller direct drive 885 rpm			
QTY		14	20	20
Airflow Rate	cfm	172307	246153	2461568
	l/s	81662	116660	1166620
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected			
Size	kW	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube			
QTY	2			
Ref. Circuits		2	2	2
Water Volume	GPM	354.86	488.62	484.52
	Litre/s	22.39	30.83	30.57
Refrigerant Charge (R134a)(Approx)	Lb	775.8	775.8	1018.2
	Kg	352	352	462
Operating Weight (Approx)	Lb	16640	22040	22481
	Kg	7550	10000	10200

CAPACITY RATING(50 HZ)-R 134a

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-134a)																			
		95°F (35°C)				104°F (40°C)				113°F (45°C)				122°F (50°C)				125,6°F (52°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-35-1	41.9	20.10	20.7	48.25	1.83	18.57	22.7	44.56	1.77	16.95	25	40.67	1.71	15.27	27.6	36.65	1.65	---	---	---	---
	5.5	70.7		3.04	6	65.3		2.81	5.8	59.6		2.57	5.6	53.7		2.31	5.4	---	---	---	---
	43.88	21.07	20.8	50.57	1.89	19.48	22.9	46.75	1.83	17.83	25.2	42.79	1.77	16.09	27.8	38.63	1.71	---	---	---	---
	6.6	74.1		3.19	6.2	68.5		2.95	6	62.7		2.70	5.8	56.6		2.44	5.6	---	---	---	---
	44.96	21.61	20.9	51.86	1.92	19.99	22.9	47.97	1.86	18.31	25.2	43.95	1.80	16.55	27.9	39.72	1.74	---	---	---	---
	7.2	76		3.27	6.3	70.3		3.03	6.1	64.4		2.77	5.9	58.2		2.51	5.7	---	---	---	---
	45.32	21.78	20.9	52.27	1.98	20.16	23	48.38	1.92	18.48	25.3	44.36	1.86	16.69	27.9	40.06	1.80	---	---	---	---
	7.4	76.6		3.30	6.5	70.9		3.05	6.3	65		2.80	6.1	58.7		2.53	5.9	---	---	---	---
HLCA-40-1	41.9	25.02	25.7	60.05	2.16	23.26	28.1	55.82	2.10	21.44	31	51.46	2.04	19.53	34.6	46.88	1.98	---	---	---	---
	5.5	88		3.79	7.1	81.8		3.52	6.9	75.4		3.25	6.7	68.7		2.96	6.5	---	---	---	---
	43.88	26.25	25.9	62.99	2.23	24.40	28.3	58.55	2.16	22.49	31.2	53.98	2.10	20.53	34.7	49.27	2.04	---	---	---	---
	6.6	92.3		3.97	7.3	85.8		3.69	7.1	79.1		3.41	6.9	72.2		3.11	6.7	---	---	---	---
	44.96	26.90	26	64.56	2.29	25.02	28.4	60.05	2.23	23.09	31.3	55.41	2.16	21.10	34.8	50.64	2.10	---	---	---	---
	7.2	94.6		4.07	7.5	88		3.79	7.3	81.2		3.50	7.1	74.2		3.19	6.9	---	---	---	---
	45.32	27.13	26	65.10	2.35	25.22	28.5	60.53	2.29	23.29	31.3	55.89	2.23	21.27	34.8	51.05	2.16	---	---	---	---
	7.4	95.4		4.11	7.7	88.7		3.82	7.5	81.9		3.53	7.3	74.8		3.22	7.1	---	---	---	---
HCUA-50-1 (139)	41.9	19.99	20.4	47.97	1.80	18.54	22.6	44.49	1.74	16.98	25.1	40.74	1.68	15.35	27.7	36.85	1.62	14.70	28.9	35.28	1.58
	5.5	70.3		3.03	5.9	65.2		2.81	5.7	59.7		2.57	5.5	54		2.32	5.3	51.7		2.23	5.2
	43.88	20.93	20.6	50.23	1.86	19.42	22.8	46.61	1.80	17.83	25.2	42.79	1.74	16.15	27.9	38.76	1.68	15.47	29	37.12	1.65
	6.6	73.6		3.17	6.1	68.3		2.94	5.9	62.7		2.70	5.7	56.8		2.45	5.5	54.4		2.34	5.4
	44.96	21.44	20.7	51.46	1.92	19.93	22.9	47.84	1.83	18.31	25.3	43.95	1.77	16.61	28	39.85	1.71	15.89	29.1	38.15	1.68
	7.2	75.4		3.25	6.3	70.1		3.02	6	64.4		2.77	5.8	58.4		2.51	5.6	55.9		2.41	5.5
	45.32	21.64	20.7	51.93	1.95	20.10	22.9	48.25	1.86	18.45	25.3	44.29	1.80	16.75	28	40.20	1.74	16.04	29.2	38.49	1.71
	7.4	76.1		3.28	6.4	70.7		3.04	6.1	64.9		2.79	5.9	58.9		2.54	5.7	56.4		2.43	5.6
HLCA-50-1 (195)	41.9	28.97	28.4	69.54	2.41	26.84	31.2	64.42	2.32	24.65	34.4	59.17	2.26	22.43	38	53.84	2.19	---	---	---	---
	5.5	101.9		4.39	7.9	94.4		4.06	7.6	86.7		3.73	7.4	78.9		3.40	7.2	---	---	---	---
	43.88	30.34	28.6	72.82	2.47	28.15	31.4	67.56	2.38	25.88	34.6	62.10	2.32	23.57	38.2	56.57	2.26	---	---	---	---
	6.6	106.7		4.59	8.1	99		4.26	7.8	91		3.92	7.6	82.9		3.57	7.4	---	---	---	---
	44.96	31.11	28.7	74.66	2.53	28.86	31.5	69.27	2.44	26.56	34.7	63.74	2.38	24.20	38.3	58.07	2.32	---	---	---	---
	7.2	109.4		4.71	8.3	101.5		4.37	8	93.4		4.02	7.8	85.1		3.66	7.6	---	---	---	---
	45.32	31.36	28.7	75.27	2.56	29.12	31.5	69.88	2.47	26.79	34.7	64.28	2.41	24.43	38.4	58.62	2.35	---	---	---	---
	7.4	110.3		4.75	8.4	102.4		4.41	8.1	94.2		4.06	7.9	85.9		3.70	7.7	---	---	---	---
HLCA-50-1 (197)	41.9	28.29	29.7	67.90	2.35	26.07	32.9	62.58	2.26	23.77	36.4	57.05	2.19	21.41	40.4	51.39	2.13	---	---	---	---
	5.5	99.5		4.28	7.7	91.7		3.95	7.4	83.6		3.60	7.2	75.3		3.24	7	---	---	---	---
	43.88	29.71	30	71.31	2.44	27.38	33.1	65.72	2.35	24.99	36.6	59.99	2.29	22.58	40.7	54.18	2.23	---	---	---	---
	6.6	104.5		4.50	8	96.3		4.15	7.7	87.9		3.78	7.5	79.4		3.42	7.3	---	---	---	---
	44.96	30.51	30.1	73.22	2.50	28.15	33.2	67.56	2.41	25.70	36.8	61.69	2.35	23.20	40.8	55.69	2.29	---	---	---	---
	7.2	107.3		4.62	8.2	99		4.26	7.9	90.4		3.89	7.7	81.6		3.51	7.5	---	---	---	---
	45.32	30.77	30.1	73.84	2.56	28.38	33.3	68.11	2.47	25.93	36.8	62.24	2.41	23.43	40.8	56.23	2.35	---	---	---	---
	7.4	108.2		4.66	8.4	99.8		4.30	8.1	91.2		3.93	7.9	82.4		3.55	7.7	---	---	---	---
HLCA-60-1 (170)	41.9	25.08	25.4	60.19	2.10	23.26	28.1	55.82	2.01	21.33	31.1	51.18	1.95	19.31	34.4	46.34	1.89	18.48	35.8	44.36	1.86
	5.5	88.2		3.80	6.9	81.8		3.52	6.6	75		3.23	6.4	67.9		2.92	6.2	65		2.80	6.1
	43.88	26.25	25.6	62.99	2.19	24.37	28.3	58.48	2.10	22.38	31.3	53.71	2.04	20.30	34.6	48.73	1.98	19.45	36	46.68	1.95
	6.6	92.3		3.97	7.2	85.7		3.69	6.9	78.7		3.39	6.7	71.4		3.07	6.5	68.4		2.94	6.4
	44.96	26.93	25.7	64.63	2.29	24.99	28.4	59.99	2.19	22.98	31.4	55.14	2.13	20.87	34.7	50.09	2.07	19.99	36.2	47.97	2.04
	7.2	94.7		4.08	7.5	87.9		3.78	7.2	80.8		3.48	7	73.4		3.16	6.8	70.3		3.03	6.7
	45.32	27.13	25.7	65.10	2.32	25.22	28.4	60.53	2.23	23.17	31.4	55.62	2.16	21.04	34.8	50.50	2.10	20.16	36.2	48.38	2.07
	7.4	95.4		4.11	7.6	88.7		3.82	7.3	81.5		3.51	7.1	74		3.19	6.9	70.9		3.05	6.8
HLCA-60-1 (220)	41.9	32.70	31.7	78.48	2.53	30.28	34.9	72.68	2.44	27.81	38.4	66.74	2.38	25.31	42.5	60.74	2.32	---	---	---	---
	5.5	115		4.95	8.3	106.5		4.59	8	97.8		4.21	7.8	89		3.83	7.6	---	---	---	---
	43.88	34.24	31.9	82.16	2.62	31.76	35.1	76.23	2.53	29.20	38.6	70.09	2.47	26.59	42.7	63.81	2.41	---	---	---	---
	6.6	120.4		5.18	8.6	111.7		4.81	8.3	102.7		4.42	8.1	93.5		4.03	7.9	---	---	---	---
	44.96	35.12	32	84.28	2.53	32.56	35.2	78.14	2.44	29.97	38.8	71.93	2.38	27.30	42.8	65.51	2.32	---	---	---	---
	7.2	123.5		5.32	8.3	114.5		4.93	8	105.4		4.54	7.8	96		4.13	7.6	---	---	---	---
	45.32	35.40	32.1	84.96	2.59	32.84	35.2	78.82	2.50	30.23	38.8	72.54	2.44	27.55	42.8	66.13	2.38	---	---	---	---
	7.4	124.5		5.36	8.5	115.5		4.97	8.2	106.3		4.58	8	96.9		4.17	7.8	---	---	---	---
HLCA-60-1 (227)	41.9	33.35	34.3	80.05	2.47	30.74	37.9	73.77	2.38	28.06	42	67.36	2.32	25.31	46.6	60.74	2.26	---	---	---	---
	5.5	117.3		5.05	8.1	108.1		4.65	7.8	98.7		4.25	7.6	89		3.83	7.4	---	---	---	---
	43.88	35.03	34.5	84.08	2.53	32.30	38.1	77.52	2.44	29.52	42.2	70.84	2.38	26.67	46.8	64.01	2.32	---	---	---	---
	6.6	123.2		5.30	8.3	113.6		4.89	8	103.8		4.47	7.8	93.8		4.04	7.6	---	---	---	---
	44.96	35.94	34.7	86.26	2.62	33.18	38.3	79.64	2.53	30.34	42.4	72.82	2.47	27.41	47	65.79	2.41	---	---	---	---
	7.2	126.4		5.44	8.6	116.7		5.02	8.3	106.7		4.59	8.1	96.4		4.15	7.9	---	---	---	---
	45.32	36.25	34.7	87.01	2.65	33.47	38.3	80.32	2.56	30.60	42.4	73.43	2.50	27.67	47	66.40	2.44	---	---	---	---
	7.4	127.5		5.49	8.7	117.7		5.07	8.4	107.6		4.63	8.2	97.3		4.19	8	---	---	---	---
HLCA-70-1 (197)	41.9	28.69	29.9	68.86	2.38	26.47	33.1	63.53	2.29	24.20	36.6	58.07	2.23	21.89	40.6	52.55	2.16	20.96	42.3	50.29	2.13
	5.5	100.9		4.34	7.8	93.1		4.01	7.5	85.1		3.66	7.3	77		3.32	7.1	73.7		3.17	7
	43.88	30.11	30.2	72.27	2.47	27.84	33.3	66.81	2.38	25.48	36.8	61.15	2.32	23.06	40.8	55.34	2.26	22.09	42.6	53.02	2.23
	6.6	105.9		4.56	8.1	97.9		4.22	7.8	89.6		3.86	7.6	81.1		3.49	7.4	77.7		3.35	7.3
	44.96	30.91	30.3	74.18	2.53	28.58	33.4	68.58	2.44	26.16	37	62.78	2.38	23.71	41	56.91	2.32	22.72	42.7	54.53	2.29
	7.2	108.7		4.68	8.3	100.5		4.33	8	92		3.96	7.8	83.4		3.59	7.6	79.9		3.44	7.5
	45.32	31.19	30.3	74.86	2.56	28.83	33.5	69.20	2.47	26.42	37	63.40	2.41	23.94	41	57.46	2.35	22.95	42.7	55.07	2.32
	7.4	109.7		4.72	8.4	101.4		4.37	8.1	92.9		4.00	7.9	84.2		3.63	7.7	80.7		3.47	7.6

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-134a)																			
		95°F (35°C)				104°F (40°C)				113°F (45°C)				122°F (50°C)				125,6°F (52°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-70-1 (258)	41.9	38.36	38.9	92.06	3.57	35.34	43	84.83	3.47	32.27	47.7	77.46	3.41	29.15	52.9	69.95	3.35	---	---	---	---
	5.5	134.9		5.81	11.7	124.3		5.35	11.4	113.5		4.89	11.2	102.5		4.41	11	---	---	---	---
	43.88	40.23	39.2	96.56	3.69	37.14	43.3	89.13	3.60	33.95	48	81.48	3.54	30.68	53.2	73.63	3.47	---	---	---	---
	6.6	141.5		6.09	12.1	130.6		5.62	11.8	119.4		5.14	11.6	107.9		4.65	11.4	---	---	---	---
	44.96	41.32	39.4	99.16	3.81	38.16	43.5	91.58	3.72	34.89	42.7	83.73	3.66	31.56	53.4	75.75	3.60	---	---	---	---
	7.2	145.3		6.26	12.5	134.2		5.78	12.2	122.7		5.28	12	111		4.78	11.8	---	---	---	---
	45.32	41.68	39.5	100.04	3.84	38.47	43.6	92.33	3.75	35.20	48.2	84.48	3.69	31.85	53.5	76.43	3.63	---	---	---	---
	7.4	146.6		6.31	12.6	135.3		5.83	12.3	123.8		5.33	12.1	112		4.82	11.9	---	---	---	---
HLCA-80-1 (227)	41.9	33.24	33.7	79.78	1.98	30.57	37	73.36	1.89	27.84	40.9	66.81	1.83	25.11	45.2	60.26	1.77	24.00	47.1	57.60	1.71
	5.5	116.9		5.03	6.5	107.5		4.63	6.2	97.9		4.22	6	88.3		3.80	5.8	84.4		3.63	5.6
	43.88	34.89	34	83.73	2.07	32.13	37.3	77.11	1.98	29.29	41.2	70.29	1.92	26.44	45.4	63.47	1.86	25.28	47.3	60.67	1.80
	6.6	122.7		5.28	6.8	113		4.87	6.5	103		4.43	6.3	93		4.00	6.1	88.9		3.83	5.9
	44.96	35.80	34.1	85.92	2.13	32.98	37.5	79.16	2.04	30.08	41.3	72.20	1.98	27.18	45.6	65.24	1.92	26.02	47.4	62.44	1.86
	7.2	125.9		5.42	7	116		4.99	6.7	105.8		4.56	6.5	95.6		4.12	6.3	91.5		3.94	6.1
	45.32	36.11	34.1	86.67	2.19	33.27	37.5	79.84	2.10	30.37	41.3	72.88	2.04	27.44	45.6	65.85	1.98	26.25	47.5	62.99	1.92
	7.4	127		5.47	7.2	117		5.04	6.9	106.8		4.60	6.7	96.5		4.15	6.5	92.3		3.97	6.3
HLCA-80-1 (295)	41.9	44.64	44.1	107.14	2.44	41.49	48.7	99.57	2.35	38.13	54	91.51	2.29	34.63	60.4	83.12	2.23	---	---	---	---
	5.5	157		6.76	8	145.9		6.28	7.7	134.1		5.77	7.5	121.8		5.24	7.3	---	---	---	---
	43.88	46.77	44.5	112.26	2.53	43.50	49	104.41	2.44	40.04	54.4	96.09	2.38	36.42	60.7	87.42	2.32	---	---	---	---
	6.6	164.5		7.08	8.3	153		6.59	8	140.8		6.06	7.8	128.1		5.52	7.6	---	---	---	---
	44.96	47.97	44.7	115.13	2.62	44.64	49.3	107.14	2.53	41.12	54.6	98.68	2.47	37.42	60.9	89.81	2.41	---	---	---	---
	7.2	168.7		7.26	8.6	157		6.76	8.3	144.6		6.23	8.1	131.6		5.67	7.9	---	---	---	---
	45.32	48.37	44.8	116.08	2.65	45.04	49.3	108.10	2.56	41.49	54.6	99.57	2.50	37.76	61	90.63	2.44	---	---	---	---
	7.4	170.1		7.32	8.7	158.4		6.82	8.4	145.9		6.28	8.2	132.8		5.72	8	---	---	---	---
HLCA-80-1 (315)	41.9	46.86	47.4	112.46	2.53	43.65	52.5	104.75	2.44	40.35	58.4	96.84	2.38	36.94	65.2	88.65	2.32	---	---	---	---
	5.5	164.8		7.10	8.3	153.5		6.61	8	141.9		6.11	7.8	129.9		5.59	7.6	---	---	---	---
	43.88	49.08	47.8	117.79	2.59	45.81	52.8	109.94	2.50	42.40	58.7	101.75	2.44	38.87	65.6	93.29	2.38	---	---	---	---
	6.6	172.6		7.43	8.5	161.1		6.94	8.2	149.1		6.42	8	136.7		5.89	7.8	---	---	---	---
	44.96	50.36	48	120.86	2.65	47.00	53	112.81	2.56	43.53	58.9	104.48	2.50	39.95	65.8	95.88	2.44	---	---	---	---
	7.2	177.1		7.62	8.7	165.3		7.12	8.4	153.1		6.59	8.2	140.5		6.05	8	---	---	---	---
	45.32	50.76	48	121.81	2.68	47.40	53.1	113.76	2.59	43.90	59	105.37	2.53	40.32	65.8	96.77	2.47	---	---	---	---
	7.4	178.5		7.69	8.8	166.7		7.18	8.5	154.4		6.65	8.3	141.8		6.11	8.1	---	---	---	---
HLCA-90-1 (258)	41.9	38.47	38.9	92.33	2.74	35.66	42.9	85.58	2.65	32.73	47.4	78.55	2.59	29.71	52.5	71.31	2.53	28.49	54.7	68.38	2.47
	5.5	135.3		5.83	9	125.4		5.40	8.7	115.1		4.96	8.5	104.5		4.50	8.3	100.2		4.31	8.1
	43.88	40.32	39.2	96.77	2.87	37.39	43.2	89.74	2.77	34.38	47.7	82.51	2.71	31.22	52.8	74.93	2.65	29.97	99.8	71.93	2.59
	6.6	141.8		6.11	9.4	131.5		5.66	9.1	120.9		5.21	8.9	109.8		4.73	8.7	105.4		4.54	8.5
	44.96	41.34	39.3	99.23	2.96	38.39	43.3	92.13	2.87	35.29	47.8	84.69	2.80	32.10	52.9	77.05	2.74	30.79	55.1	73.91	2.68
	7.2	145.4		6.26	9.7	135		5.81	9.4	124.1		5.34	9.2	112.9		4.86	9	108.3		4.66	8.8
	45.32	41.71	39.4	100.11	3.05	38.70	43.4	92.88	2.96	35.60	47.9	85.44	2.90	32.39	53	77.73	2.83	31.08	55.1	74.59	2.77
	7.4	146.7		6.32	10	136.1		5.86	9.7	125.2		5.39	9.5	113.9		4.90	9.3	109.3		4.71	9.1
HLCA-90-1 (336)	41.9	50.87	50.3	122.09	3.51	47.26	55.4	113.42	3.41	43.42	61.2	104.21	3.35	39.44	68.8	94.65	3.29	---	---	---	---
	5.5	178.9		7.70	11.5	166.2		7.16	11.2	152.7		6.57	11	138.7		5.97	10.8	---	---	---	---
	43.88	53.29	50.7	127.89	3.63	49.56	55.9	118.95	3.54	45.61	61.9	109.46	3.47	41.49	69.2	99.57	3.41	---	---	---	---
	6.6	187.4		8.07	11.9	174.3		7.50	11.6	160.4		6.91	11.4	145.9		6.28	11.2	---	---	---	---
	44.96	54.65	50.9	131.16		50.84	56.1	122.02	3.69	46.83	62.2	112.40	3.63	42.62	69.4	102.30	3.57	---	---	---	---
	7.2	192.2		8.28	12.4	178.8		7.70	12.1	164.7		7.09	11.9	149.9		6.45	11.7	---	---	---	---
	45.32	55.11	51	132.25	3.81	51.30	56.2	123.11	3.72	47.23	62.2	113.35	3.66	43.02	69.5	103.25	3.60	---	---	---	---
	7.4	193.8		8.34	12.5	180.4		7.77	12.2	166.1		7.15	12	151.3		6.51	11.8	---	---	---	---
HLCA-90-1 (359)	41.9	54.00	54	129.59	3.51	50.30	59.8	120.72	3.41	46.49	66.6	111.58	3.35	42.59	74.3	102.23	3.29	---	---	---	---
	5.5	189.9		8.18	11.5	176.9		7.62	11.2	163.5		7.04	11	149.8		6.45	10.8	---	---	---	---
	43.88	56.56	54.4	135.73	3.60	52.77	60.2	126.66	3.51	48.85	67	117.24	3.44	44.81	74.7	107.55	3.38	---	---	---	---
	6.6	198.9		8.56	11.8	185.6		7.99	11.5	171.8		7.40	11.3	157.6		6.79	11.1	---	---	---	---
	44.96	58.01	54.7	139.22	3.72	54.17	60.4	130.00	3.63	50.19	67.2	120.45	3.57	46.06	75	110.55	3.51	---	---	---	---
	7.2	204		8.78	12.2	190.5		8.20	11.9	176.5		7.60	11.7	162		6.97	11.5	---	---	---	---
	45.32	58.58	54.7	140.58	3.75	54.62	60.5	131.09	3.66	50.61	67.2	121.47	3.60	46.49	75	111.58	3.54	---	---	---	---
	7.4	206		8.87	12.3	192.1		8.27	12	178		7.66	11.8	163.5		7.04	11.6	---	---	---	---
HLCA-100-1 (295)	41.9	44.81	45.1	107.55	3.20	41.77	49.8	100.25	3.11	38.59	55	92.61	3.05	35.32	60.9	84.76	2.99	33.95	63.3	81.48	2.93
	5.5	157.6		6.79	10.5	146.9		6.32	10.2	135.7		5.84	10	124.2		5.35	9.8	119.4		5.14	9.6
	43.88	46.92	45.4	112.60	3.05	43.76	50.1	105.03	2.96	40.46	55.4	97.11	2.90	37.05	61.2	88.92	2.83	35.66	63.7	85.58	2.77
	6.6	165		7.10	10	153.9		6.63	9.7	142.3		6.13	9.5	130.3		5.61	9.3	125.4		5.40	9.1
	44.96	48.11	45.6	115.47	3.23	44.90	50.3	107.76	3.14	41.51	55.6	99.63	3.08	38.02	61.4	91.24	3.02	36.60	63.8	87.83	2.96
	7.2	169.2		7.28	10.6	157.9		6.80	10.3	146		6.29	10.1	133.7		5.76	9.9	128.7		5.54	9.7
	45.32	48.51	45.7	116.42	3.26	45.27	50.4	108.64	3.17	41.88	55.6	100.52	3.11	38.36	61.4	92.06	3.05	36.94	63.9	88.65	2.99
	7.4	170.6		7.35	10.7	159.2		6.85	10.4	147.3		6.34	10.2	134.9		5.81	10	129.9		5.59	9.8
HLCA-110-1 (336)	41.9	51.04	51.1	122.50	3.38	47.49	56.3	113.97	3.29	43.87	62.3	105.30	3.23	40.09	69.1	96.22	3.17	38.59	72	92.61	3.11
	5.5	179.5		7.73	11.1	167		7.19	10.8	154.3		6.64	10.6	141		6.07	10.4	135.7		5.84	10.2
	43.88	52.80	51.4	126.73	3.57	49.76	56.6	119.42	3.47	46.01	62.6	110.42	3.41	42.08	69.4	101.00	3.35	40.49	72.4	97.18	3.29
	6.6	185.7		8.00	11.7	175		7.53	11.4	161.8		6.97	11.2	148		6.37	11	142.4		6.13	10.8
	44.96	53.46	51.6	128.30	3.60	51.07	56.8	122.56	3.51	47.20	62.8	113.28	3.44	43.19	69.6	103.66	3.38	41.57	72.6	99.77	3.32
	7.2	188		8.09	11.8	179.6		7.73	11.5	166		7.15	11.3	151.9		6.54	11.1	146.2		6.29	10.9
	45.32	54.79	51.7	131.50	3.69	51.49	65.9	123.59	3.60	47.60	62.9	114.24	3.54	43.59	69.7	104.62	3.47	41.94	72.7	100.66	3.41
	7.4	192.7		8.30	12.1	181.1		7.80	11.8	167.4		7.21	11.6	153.3		6.60	11.4	147.5		6.35	11.2

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-134a)																					
		95°F (35°C)					104°F (40°C)				113°F (45°C)				122°F (50°C)				125,6°F (52°C)				
		Ccap	PI*	WFR	WPD		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	
	°F	TR	kW	USgpm	m.wg		TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	
	°C	kw		l/s	ft.wg		kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	
HLCA-110-1 (315)	41.9	48.34	47.9	116.01	3.26		45.01	53	108.03	3.17	41.51	58.8	99.63	3.11	37.90	65.4	90.97	3.02	36.42	68.2	87.42	2.96	
	5.5	170		7.32	10.7		158.3		6.82	10.4	146		6.29	10.2	133.3		5.74	9.9	128.1		5.52	9.7	
	43.88	50.58	48.2	121.40	3.35		47.12	53.2	113.08	3.26	43.53	59	104.48	3.20	39.78	65.7	95.47	3.11	38.24	38.5	91.79	3.05	
	6.6	177.9		7.66	11		165.7		7.13	10.7	153.1		6.59	10.5	139.9		6.02	10.2	134.5		5.79	10	
	44.96	51.84	48.3	124.41	3.47		48.31	53.4	115.94	3.38	44.64	59.2	107.14	3.32	40.83	65.8	98.00	3.23	39.27	68.7	94.24	3.17	
	7.2	182.3		7.85	11.4		169.9		7.31	11.1	157		6.76	10.9	143.6		6.18	10.6	138.1		5.95	10.4	
	45.32	52.26	48.4	125.43	3.54		48.71	53.5	116.90	3.44	45.01	59.3	108.03	3.38	41.17	65.9	98.82	3.29	39.61	68.8	95.06	3.23	
	7.4	183.8		7.91	11.6		171.3		7.38	11.3	158.3		6.82	11.1	144.8		6.23	10.8	139.3		6.00	10.6	
HLCA-110-1 (410)	41.9	63.69	61.4	152.86	3.96		59.14	68	141.95	3.87	54.22	75.6	130.14	3.81	49.48	84.5	118.74	3.72	---	---	---	---	
	5.5	224		9.64	13		208		8.96	12.7	190.7		8.21	12.5	174		7.49	12.2	---	---	---	---	
	43.88	66.54	61.8	159.69	3.99		61.99	68.4	148.77	3.90	56.87	76.1	136.49	3.84	51.98	84.9	124.75	3.75	---	---	---	---	
	6.6	234		10.07	13.1		218		9.39	12.8	200		8.61	12.6	182.8		7.87	12.3	---	---	---	---	
	44.96	68.24	62.1	163.78	4.05		63.41	68.7	152.18	3.96	58.29	76.3	139.90	3.90	53.37	85.2	128.09	3.81	---	---	---	---	
	7.2	240		10.33	13.3		223		9.60	13	205		8.83	12.8	187.7		8.08	12.5	---	---	---	---	
	45.32	68.81	62.2	165.15	4.11		63.98	68.8	153.55	4.02	58.86	76.4	141.26	3.96	53.83	85.2	129.18	3.87	---	---	---	---	
	7.4	242		10.42	13.5		225		9.69	13.2	207		8.91	13	189.3		8.15	12.7	---	---	---	---	
HLCA-125-1 (359)	41.9	55.11	54.6	132.25	2.44		51.30	60.3	123.11	2.35	47.32	67	113.56	2.29	43.19	74.5	103.66	2.19	41.51	77.8	99.63	2.13	
	5.5	193.8		8.34	8		180.4		7.77	7.7	166.4		7.16	7.5	151.9		6.54	7.2	146		6.29	7	
	43.88	57.72	54.9	138.53	2.59		53.71	60.7	128.91	2.50	49.59	67.3	119.02	2.44	45.32	74.8	108.78	2.35	43.59	78.1	104.62	2.29	
	6.6	203		8.74	8.5		188.9		8.13	8.2	174.4		7.51	8	159.4		6.86	7.7	153.3		6.60	7.5	
	44.96	59.14	55.1	141.95	2.65		55.05	60.9	132.12	2.56	50.87	67.5	122.09	2.50	46.52	75	111.65	2.41	44.76	78.3	107.41	2.35	
	7.2	208		8.96	8.7		193.6		8.34	8.4	178.9		7.70	8.2	163.6		7.04	7.9	157.4		6.78	7.7	
	45.32	59.43	55.1	142.63	2.71		55.50	60.9	133.21	2.62	51.30	67.5	123.11	2.56	46.95	75.1	112.67	2.47	45.15	78.4	108.37	2.41	
	7.4	209		9.00	8.9		195.2		8.40	8.6	180.4		7.77	8.4	165.1		7.11	8.1	158.8		6.84	7.9	
HLCA-125-1 (470)	41.9	70.23	69	168.56	2.87		65.40	76.4	156.96	2.77	60.28	85	144.67	2.71	55.13	94.9	132.32	2.62	---	---	---	---	
	5.5	247		10.63	9.4		230		9.90	9.1	212		9.13	8.9	193.9		8.35	8.6	---	---	---	---	
	43.88	73.65	69.5	176.75	2.96		68.53	76.9	164.47	2.87	63.12	85.5	151.50	2.80	58.01	95.5	139.22	2.71	---	---	---	---	
	6.6	259		11.15	9.7		241		10.38	9.4	222		9.56	9.2	204		8.78	8.9	---	---	---	---	
	44.96	75.35	69.8	180.84	3.02		70.23	77.2	168.56	2.93	64.83	85.8	155.59	2.87	59.43	95.7	142.63	2.77	---	---	---	---	
	7.2	265		11.41	9.9		247		10.63	9.6	228		9.82	9.4	209		9.00	9.1	---	---	---	---	
	45.32	75.92	69.9	182.21	3.11		70.80	77.3	169.92	3.02	65.40	85.9	156.96	2.96	60.00	95.8	143.99	2.87	---	---	---	---	
	7.4	267		11.50	10.2		249		10.72	9.9	230		9.90	9.7	211		9.08	9.4	---	---	---	---	
HLCA-140-1 (410)	41.9	63.69	62.3	152.86	2.77		59.14	68.9	141.95	2.68	54.65	76.5	131.16	2.62	49.90	85.1	119.77	2.53	47.97	88.8	115.13	2.47	
	5.5	224		9.64	9.1		208		8.96	8.8	192.2		8.28	8.6	175.5		7.56	8.3	168.7		7.26	8.1	
	43.88	66.54	62.7	159.69	2.80		61.99	69.3	148.77	2.71	57.15	76.9	137.17	2.65	52.38	85.5	125.70	2.56	50.36	89.2	120.86	2.50	
	6.6	234		10.07	9.2		218		9.39	8.9	201		8.65	8.7	184.2		7.93	8.4	177.1		7.62	8.2	
	44.96	68.24	62.9	163.78	2.83		63.69	69.5	152.86	2.74	58.86	77.1	141.26	2.68	53.74	146.4	128.98	2.59	51.69	89.4	124.07	2.53	
	7.2	240		10.33	9.3		224		9.64	9	207		8.91	8.8	189		8.14	8.5	181.8		7.83	8.3	
	45.32	68.81	63	165.15	2.87		63.98	69.6	153.55	2.77	59.14	77.1	141.95	2.71	54.22	85.8	130.14	2.62	52.15	89.5	125.16	2.56	
	7.4	242		10.42	9.4		225		9.69	9.1	208		8.96	8.9	190.7		8.21	8.6	183.4		7.90	8.4	
HLCA-140-1 (535)	41.9	79.90	78.6	191.76	3.29		74.50	87	178.80	3.20	69.95	96.8	167.88	3.14	62.84	179.3	150.82	3.05	---	---	---	---	
	5.5	281		12.10	10.8		262		11.28	10.5	246		10.59	10.3	221		9.52	10	---	---	---	---	
	43.88	83.60	79.1	200.63	3.35		77.91	87.6	186.99	3.26	71.94	97.3	172.65	3.20	65.97	108.7	158.32	3.11	---	---	---	---	
	6.6	294		12.66	11		274		11.80	10.7	253		10.89	10.5	232		9.99	10.2	---	---	---	---	
	44.96	85.87	79.5	206.09	3.44		79.90	87.9	191.76	3.35	73.93	97.7	177.43	3.29	67.67	109	162.42	3.20	---	---	---	---	
	7.2	302		13.00	11.3		281		12.10	11	260		11.19	10.8	238		10.25	10.5	---	---	---	---	
	45.32	86.44	79.6	207.46	3.66		80.75	88	193.81	3.57	74.50	97.8	178.80	3.51	68.24	109.1	163.78	3.41	---	---	---	---	
	7.4	304		13.09	12		284		12.23	11.7	262		11.28	11.5	240		10.33	11.2	---	---	---	---	
HLCA-160-1 (470)	41.9	68.81	69.6	165.15	3.05		63.98	77	153.55	2.96	59.14	85.5	141.95	2.90	54.22	95.4	130.14	2.80	52.29	99.8	125.50	2.74	
	5.5	242		10.42	10		225		9.69	9.7	208		8.96	9.5	190.7		8.21	9.2	183.9		7.92	9	
	43.88	71.94	70	172.65	3.23		67.11	77.5	161.05	3.14	61.99	86	148.77	3.08	56.87	95.9	136.49	2.99	54.96	100.3	131.91	2.93	
	6.6	253		10.89	10.6		236		10.16	10.3	218		9.39	10.1	200		8.61	9.8	193.3		8.32	9.6	
	44.96	73.93	70.3	177.43	3.38		68.81	77.7	165.15	3.29	63.69	86.3	152.86	3.23	58.58	96.2	140.58	3.14	56.47	100.6	135.53	3.08	
	7.2	260		11.19	11.1		242		10.42	10.8	224		9.64	10.6	206		8.87	10.3	198.6		8.55	10.1	
	45.32	74.50	70.4	178.80	3.47		69.38	77.8	166.51	3.38	64.26	86.4	154.23	3.32	59.14	96.3	141.95	3.23	56.87	100.7	136.49	3.17	
	7.4	262		11.28	11.4		244		10.51	11.1	226		9.73	10.9	208		8.96	10.6	200		8.61	10.4	
HLCA-160-1 (615)	41.9	94.97	92.5	227.93	3.96		88.15	102.2	211.55	3.87	80.75	113.1	193.81	3.78	73.36	125	176.07	3.69	---	---	---	---	
	5.5	334		14.38	13		310		13.35	12.7	284		12.23	12.4	258		11.11	12.1	---	---	---	---	
	43.88	99.52	93	238.85	4.11		92.41	102.8	221.79	4.02	85.02	113.7	204.05	3.93	77.34	125.7	185.62	3.84	---	---	---	---	
	6.6	350		15.07	13.5		325		13.99	13.2	299		12.87	12.9	272		11.71	12.6	---	---	---	---	
	44.96	101.80	93.3	244.31	4.24		94.69	103.1	227.25	4.15	87.01	114	208.82	4.05	79.33	126	190.40	3.96	---	---	---	---	
	7.2	358		15.41	13.9		333		14.34	13.6	306		13.17	13.3	279		12.01	13	---	---	---	---	
	45.32	102.65	93.4	246.36	4.27		95.54	103.2	229.30	4.18	87.86	114.1	210.87	4.08	80.19	126	192.44	3.99	---	---	---	---	
	7.4	361		15.54	14		336		14.47	13.7	309		13.30	13.4	282		12.14	13.1	---	---	---	---	
HLCA-210-1 (615)	41.9	94.12	92.1	225.88	3.05		87.58	101.6	210.19	2.96	80.47	112.4	193.13	2.87	73.36	124.3	176.07	2.77	70.52	129.4	169.24	2.71	
	5.5	331		14.25	10		308		13.26	9.7	283		12.18	9.4	258		11.11	9.1	248		10.68	8.9	
	43.88	98.67	92.6	236.80	3.23		91.56	102.1	219.74	3.14	84.45	112.9	202.68	3.05	77.06	124.8	184.94	2.96	74.21	130	178.11	2.90	
	6.6	347		14.94	10.6		322		13.86	10.3	297		12.79	10	271		11.67	9.7	261		11.24	9.5	
	44.96	100.94	92.8	242.26	3.41		94.12	102.4	225.88	3.32	86.73	113.2	208.14	3.23	79.33	125.1	190.40	3.14	76.20	130.3	182.89	3.08	
	7.2	355		15.28	11.2		331		14.25	10.9	305		13.13	10.6	279		12.01	10.3	268		11.54	10.1	
	45.32	101.80	92.9	244.31	3.47		94.69	102.5	227.25	3.38	87.58	113.3	210.19	3.29	79.90	125.2	191.76	3.20	76.77	130.4	184.26	3.14	
	7.4	358		15.41	11.4		333		14.34	11.1	308		13.26	10.8	281		12.10	10.5	270		11.62	10.3	

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-134a)																			
		95°F (35°C)				104°F (40°C)				113°F (45°C)				122°F (50°C)				125,6°F (52°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-70-2	41.9	40.21	41.4	96.50	3.66	37.14	45.4	89.13	3.54	33.89	50	81.35	3.41	30.54	55.2	73.29	3.29	---	---	---	---
	5.5	141.4		6.09	12	130.6		5.62	11.6	119.2		5.13	11.2	107.4		4.62	10.8	---	---	---	---
	43.88	42.14	41.6	101.14	3.78	38.96	45.8	93.49	3.66	35.66	50.4	85.58	3.54	32.19	55.6	77.25	3.41	---	---	---	---
	6.6	148.2		6.38	12.4	137		5.90	12	125.4		5.40	11.6	113.2		4.87	11.2	---	---	---	---
	44.96	43.22	41.8	103.73	3.84	39.98	45.8	95.95	3.72	36.62	50.4	87.90	3.60	33.10	55.8	79.43	3.47	---	---	---	---
	7.2	152		6.54	12.6	140.6		6.05	12.2	128.8		5.55	11.8	116.4		5.01	11.4	---	---	---	---
	45.32	43.56	41.8	104.55	3.96	40.32	46	96.77	3.84	36.96	50.6	88.72	3.72	33.38	55.8	80.12	3.60	---	---	---	---
	7.4	153.2		6.60	13	141.8		6.11	12.6	130		5.60	12.2	117.4		5.05	11.8	---	---	---	---
HLCA-80-2	41.9	50.04	51.4	120.11	4.33	46.52	56.2	111.65	4.21	42.88	62	102.91	4.08	39.07	69.2	93.77	3.96	---	---	---	---
	5.5	176		7.58	14.2	163.6		7.04	13.8	150.8		6.49	13.4	137.4		5.92	13	---	---	---	---
	43.88	52.49	51.8	125.98	4.45	48.79	56.6	117.10	4.33	44.98	62.4	107.96	4.21	41.06	69.4	98.54	4.08	---	---	---	---
	6.6	184.6		7.95	14.6	171.6		7.39	14.2	158.2		6.81	13.8	144.4		6.22	13.4	---	---	---	---
	44.96	53.80	52	129.12	4.57	50.04	56.8	120.11	4.45	46.18	62.6	110.83	4.33	42.20	69.6	101.27	4.21	---	---	---	---
	7.2	189.2		8.15	15	176		7.58	14.6	162.4		6.99	14.2	148.4		6.39	13.8	---	---	---	---
	45.32	54.25	52	130.21	4.69	50.44	57	121.06	4.57	46.58	62.6	111.78	4.45	42.54	69.6	102.09	4.33	---	---	---	---
	7.4	190.8		8.21	15.4	177.4		7.64	15	163.8		7.05	14.6	149.6		6.44	14.2	---	---	---	---
HLCA-100-2 (2*137)	41.9	39.98	40.8	95.95	3.60	37.08	45.2	88.99	3.47	33.95	50.2	81.48	3.35	30.71	55.4	73.70	3.23	29.40	57.8	70.56	3.17
	5.5	140.6		6.05	11.8	130.4		5.61	11.4	119.4		5.14	11	108		4.65	10.6	103.4		4.45	10.4
	43.88	41.86	41.2	100.45	3.72	38.84	45.6	93.22	3.60	35.66	50.4	85.58	3.47	32.30	55.8	77.52	3.35	30.94	58	74.25	3.29
	6.6	147.2		6.34	12.2	136.6		5.88	11.8	125.4		5.40	11.4	113.6		4.89	11	108.8		4.68	10.8
	44.96	42.88	41.4	102.91	3.84	39.87	45.8	95.68	3.66	36.62	50.6	87.90	3.54	33.21	56	79.71	3.41	31.79	58.2	76.30	3.35
	7.2	150.8		6.49	12.6	140.2		6.04	12	128.8		5.55	11.6	116.8		5.03	11.2	111.8		4.81	11
	45.32	43.28	41.4	103.87	3.90	40.21	45.8	96.50	3.72	36.91	50.6	88.58	3.60	33.50	56	80.39	3.47	32.07	58.4	76.98	3.41
	7.4	152.2		6.55	12.8	141.4		6.09	12.2	129.8		5.59	11.8	117.8		5.07	11.4	112.8		4.86	11.2
HLCA-100-2 (2*195)	41.9	57.95	56.8	139.08	4.82	53.68	62.4	128.84	4.63	49.31	68.8	118.33	4.51	44.87	76	107.69	4.39	---	---	---	---
	5.5	203.8		8.77	15.8	188.8		8.13	15.2	173.4		7.47	14.8	157.8		6.79	14.4	---	---	---	---
	43.88	60.68	57.2	145.63	4.94	56.30	62.8	135.12	4.75	51.75	69.2	124.20	4.63	47.14	76.4	113.15	4.51	---	---	---	---
	6.6	213.4		9.19	16.2	198		8.52	15.6	182		7.84	15.2	165.8		7.14	14.8	---	---	---	---
	44.96	62.21	57.4	149.32	5.06	57.72	63	138.53	4.88	53.12	69.4	127.48	4.75	48.40	76.6	116.15	4.63	---	---	---	---
	7.2	218.8		9.42	16.6	203		8.74	16	186.8		8.04	15.6	170.2		7.33	15.2	---	---	---	---
	45.32	62.73	57.4	150.54	5.12	58.23	63	139.76	4.94	53.57	69.4	128.57	4.82	48.85	76.8	117.24	4.69	---	---	---	---
	7.4	220.6		9.50	16.8	204.8		8.82	16.2	188.4		8.11	15.8	171.8		7.40	15.4	---	---	---	---
HLCA-100-2 (2*197)	41.9	56.58	59.4	135.80	4.69	52.15	65.8	125.16	4.51	47.54	72.8	114.10	4.39	42.82	80.8	102.77	4.27	---	---	---	---
	5.5	199		8.57	15.4	183.4		7.90	14.8	167.2		7.20	14.4	150.6		6.48	14	---	---	---	---
	43.88	59.43	60	142.63	4.88	54.76	66.2	131.44	4.69	49.99	73.2	119.97	4.57	45.15	81.4	108.37	4.45	---	---	---	---
	6.6	209		9.00	16	192.6		8.29	15.4	175.8		7.57	15	158.8		6.84	14.6	---	---	---	---
	44.96	61.02	60.2	146.45	5.00	56.30	66.4	135.12	4.82	51.41	73.6	123.38	4.69	46.41	81.6	111.37	4.57	---	---	---	---
	7.2	214.6		9.24	16.4	198		8.52	15.8	180.8		7.78	15.4	163.2		7.03	15	---	---	---	---
	45.32	61.53	60.2	147.68	5.12	56.76	66.6	136.21	4.94	51.86	73.6	124.47	4.82	46.86	81.6	112.46	4.69	---	---	---	---
	7.4	216.4		9.32	16.8	199.6		8.59	16.2	182.4		7.85	15.8	164.8		7.10	15.4	---	---	---	---
HLCA-120-2 (2*170)	41.9	50.16	50.8	120.38	4.21	46.52	56.2	111.65	4.02	42.65	62.2	102.36	3.90	38.61	68.8	92.67	3.78	36.96	71.6	240.76	3.72
	5.5	176.4		7.59	13.8	163.6		7.04	13.2	150		6.46	12.8	135.8		5.85	12.4	130		15.19	12.2
	43.88	52.49	51.2	125.98	4.39	48.74	56.6	116.97	4.21	44.76	62.6	107.41	4.08	40.60	69.2	97.45	3.96	38.90	72	251.95	3.90
	6.6	184.6		7.95	14.4	171.4		7.38	13.8	157.4		6.78	13.4	142.8		6.15	13	136.8		15.90	12.8
	44.96	53.85	51.4	129.25	4.57	49.99	56.8	119.97	4.39	45.95	62.8	110.28	4.27	41.74	69.4	100.18	4.15	39.98	72.4	258.50	4.08
	7.2	189.4		8.15	15	175.8		7.57	14.4	161.6		6.96	14	146.8		6.32	13.6	140.6		16.31	13.4
	45.32	54.25	51.4	130.21	4.63	50.44	56.8	121.06	4.45	46.35	62.8	111.24	4.33	42.08	69.6	101.00	4.21	40.32	72.4	260.41	4.15
	7.4	190.8		8.21	15.2	177.4		7.64	14.6	163		7.02	14.2	148		6.37	13.8	141.8		16.43	13.6
HLCA-120-2 (2*220)	41.9	65.40	63.4	156.96	5.06	60.57	69.8	145.36	4.88	55.62	76.8	133.48	4.75	50.61	85	121.47	4.63	---	---	---	---
	5.5	230		9.90	16.6	213		9.17	16	195.6		8.42	15.6	178		7.66	15.2	---	---	---	---
	43.88	68.47	63.8	164.33	5.24	63.52	70.2	152.45	5.06	58.40	77.2	140.17	4.94	53.17	85.4	127.61	4.82	---	---	---	---
	6.6	240.8		10.37	17.2	223.4		9.62	16.6	205.4		8.84	16.2	187		8.05	15.8	---	---	---	---
	44.96	70.23	64	168.56	5.06	65.12	70.4	156.28	4.88	59.94	77.6	143.86	4.75	54.59	85.6	131.03	4.63	---	---	---	---
	7.2	247		10.63	16.6	229		9.86	16	210.8		9.08	15.6	192		8.27	15.2	---	---	---	---
	45.32	70.80	64.2	169.92	5.18	65.68	70.4	157.64	5.00	60.45	77.6	145.08	4.88	55.11	85.6	132.25	4.75	---	---	---	---
	7.4	249		10.72	17	231		9.95	16.4	212.6		9.15	16	193.8		8.34	15.6	---	---	---	---
HLCA-120-2 (2*227)	41.9	66.71	68.6	160.10	4.94	61.48	75.8	147.54	4.75	56.13	84	134.71	4.63	50.61	93.2	121.47	4.51	---	---	---	---
	5.5	234.6		10.10	16.2	216.2		9.31	15.6	197.4		8.50	15.2	178		7.66	14.8	---	---	---	---
	43.88	70.06	69	168.15	5.06	64.60	76.2	155.05	4.88	59.03	84.4	141.67	4.75	53.34	93.6	128.02	4.63	---	---	---	---
	6.6	246.4		10.61	16.6	227.2		9.78	16	207.6		8.94	15.6	187.6		8.08	15.2	---	---	---	---
	44.96	71.88	69.4	172.52	5.24	66.37	76.6	159.28	5.06	60.68	84.8	145.63	4.94	54.82	94	131.57	4.82	---	---	---	---
	7.2	252.8		10.88	17.2	233.4		10.05	16.6	213.4		9.19	16.2	192.8		8.30	15.8	---	---	---	---
	45.32	72.51	69.4	174.02	5.30	66.93	76.6	160.64	5.12	61.19	84.8	146.86	5.00	55.33	94	132.80	4.88	---	---	---	---
	7.4	255		10.98	17.4	235.4		10.14	16.8	215.2		9.27	16.4	194.6		8.38	16	---	---	---	---
HLCA-140-2 (2*197)	41.9	57.38	59.8	137.71	4.75	52.95	66.2	127.07	4.57	48.40	73.2	116.15	4.45	43.79	81.2	105.09	4.33	41.91	84.6	100.59	4.27
	5.5	201.8		8.69	15.6	186.2		8.02	15	170.2		7.33	14.6	154		6.63	14.2	147.4		6.35	14
	43.88	60.22	60.4	144.54	4.94	55.67	66.6	133.62	4.75	50.95	73.6	122.29	4.63	46.12	81.6	110.69	4.51	44.19	85.2	106.05	4.45
	6.6	211.8		9.12	16.2	195.8		8.43	15.6	179.2		7.72	15.2	162.2		6.98	14.8	155.4		6.69	14.6
	44.96	61.82	60.6	148.36	5.06	57.15	66.8	137.17	4.88	52.32	74	125.57	4.75	47.43	82	113.83	4.63	45.44	85.4	109.05	4.57
	7.2	217.4		9.36	16.6	201		8.65	16	184		7.92	15.6	166.8		7.18	15.2	159.8		6.88	15
	45.32	62.39	60.6	149.72	5.12	57.67	67	138.40	4.94	52.83	74	126.80	4.82	47.88	82	114.92	4.69	45.89	85.4	110.14	4.63
	7.4	219.4		9.45	16.8	202.8		8.73	16.2	185.8		8.00	15.8	168.4		7.25	15.4	161.4		6.95	15.2

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-134a)																			
		95°F (35°C)				104°F (40°C)				113°F (45°C)				122°F (50°C)				125,6°F (52°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-140-2 (2*258)	41.9	76.72	77.8	184.12	7.13	70.69	86	169.65	6.95	64.55	95.4	154.91	6.83	58.29	105.8	139.90	6.71	---	---	---	---
	5.5	269.8		11.62	23.4	248.6		10.70	22.8	227		9.77	22.4	205		8.83	22	---	---	---	---
	43.88	80.47	78.4	193.13	7.38	74.27	86.6	178.25	7.19	67.90	96	162.96	7.07	61.36	106.4	147.27	6.95	---	---	---	---
	6.6	283		12.18	24.2	261.2		11.25	23.6	238.8		10.28	23.2	215.8		9.29	22.8	---	---	---	---
	44.96	82.63	78.8	198.31	7.62	76.32	87	183.16	7.44	69.78	85.4	167.47	7.32	63.12	106.8	151.50	7.19	---	---	---	---
	7.2	290.6		12.51	25	268.4		11.56	24.4	245.4		10.57	24	222		9.56	23.6	---	---	---	---
	45.32	83.37	79	200.09	7.68	76.94	87.2	184.67	7.50	70.40	96.4	168.97	7.38	63.69	107	152.86	7.25	---	---	---	---
	7.4	293.2		12.62	25.2	270.6		11.65	24.6	247.6		10.66	24.2	224		9.64	23.8	---	---	---	---
HLCA-160-2 (2*227)	41.9	66.48	67.4	159.55	3.96	61.13	74	146.72	3.78	55.67	81.8	133.62	3.66	50.22	90.4	120.52	3.54	48.00	94.2	115.19	3.41
	5.5	233.8		10.07	13	215		9.26	12.4	195.8		8.43	12	176.6		7.60	11.6	168.8		7.27	11.2
	43.88	69.78	68	167.47	4.15	64.26	74.6	154.23	3.96	58.58	82.4	140.58	3.84	52.89	90.8	126.93	3.72	50.56	94.6	121.34	3.60
	6.6	245.4		10.57	13.6	226		9.73	13	206		8.87	12.6	186		8.01	12.2	177.8		7.66	11.8
	44.96	71.60	68.2	171.84	4.27	65.97	75	158.32	4.08	60.17	82.6	144.40	3.96	54.37	91.2	130.48	3.84	52.04	94.8	124.88	3.72
	7.2	251.8		10.84	14	232		9.99	13.4	211.6		9.11	13	191.2		8.23	12.6	183		7.88	12.2
	45.32	72.22	68.2	173.34	4.39	66.54	75	159.69	4.21	60.74	82.6	145.77	4.08	54.88	91.2	131.71	3.96	52.49	95	125.98	3.84
	7.4	254		10.94	14.4	234		10.07	13.8	213.6		9.20	13.4	193		8.31	13	184.6		7.95	12.6
HLCA-160-2 (2*295)	41.9	89.28	88.2	214.28	4.88	82.97	97.4	199.13	4.69	76.26	108	183.03	4.57	69.27	120.8	166.24	4.45	---	---	---	---
	5.5	314		13.52	16	291.8		12.56	15.4	268.2		11.55	15	243.6		10.49	14.6	---	---	---	---
	43.88	93.55	89	224.52	5.06	87.01	98	208.82	4.88	80.07	108.8	192.17	4.75	72.85	121.4	174.84	4.63	---	---	---	---
	6.6	329		14.16	16.6	306		13.17	16	281.6		12.12	15.6	256.2		11.03	15.2	---	---	---	---
	44.96	95.94	89.4	230.25	5.24	89.28	98.6	214.28	5.06	82.23	109.2	197.36	4.94	74.84	121.8	179.62	4.82	---	---	---	---
	7.2	337.4		14.53	17.2	314		13.52	16.6	289.2		12.45	16.2	263.2		11.33	15.8	---	---	---	---
	45.32	96.73	89.6	232.16	5.30	90.08	98.6	216.19	5.12	82.97	109.2	199.13	5.00	75.52	122	181.25	4.88	---	---	---	---
	7.4	340.2		14.65	17.4	316.8		13.64	16.8	291.8		12.56	16.4	265.6		11.44	16	---	---	---	---
HLCA-160-2 (2*315)	41.9	93.72	94.8	224.93	5.06	87.29	105	209.51	4.88	80.70	116.8	193.67	4.75	73.87	130.4	177.29	4.63	---	---	---	---
	5.5	329.6		14.19	16.6	307		13.22	16	283.8		12.22	15.6	259.8		11.19	15.2	---	---	---	---
	43.88	98.16	95.6	235.57	5.18	91.62	105.6	219.88	5.00	84.79	117.4	203.50	4.88	77.74	131.2	186.58	4.75	---	---	---	---
	6.6	345.2		14.86	17	322.2		13.87	16.4	298.2		12.84	16	273.4		11.77	15.6	---	---	---	---
	44.96	100.71	96	241.72	5.30	94.00	106	225.61	5.12	87.07	117.8	208.96	5.00	79.90	131.6	191.76	4.88	---	---	---	---
	7.2	354.2		15.25	17.4	330.6		14.23	16.8	306.2		13.18	16.4	281		12.10	16	---	---	---	---
	45.32	101.51	96	243.63	5.36	94.80	106.2	227.52	5.18	87.81	118	210.73	5.06	80.64	131.6	193.54	4.94	---	---	---	---
	7.4	357		15.37	17.6	333.4		14.35	17	308.8		13.30	16.6	283.6		12.21	16.2	---	---	---	---
HLCA-180-2 (2*258)	41.9	76.94	77.8	184.67	5.49	71.31	85.8	171.15	5.30	65.46	94.8	157.09	5.18	59.43	105	142.63	5.06	56.98	109.4	136.76	4.94
	5.5	270.6		11.65	18	250.8		10.80	17.4	230.2		9.91	17	209		9.00	16.6	200.4		8.63	16.2
	43.88	80.64	78.4	193.54	5.73	74.78	86.4	179.48	5.55	68.75	95.4	165.01	5.43	62.44	105.6	149.86	5.30	59.94	199.6	143.86	5.18
	6.6	283.6		12.21	18.8	263		11.32	18.2	241.8		10.41	17.8	219.6		9.45	17.4	210.8		9.08	17
	44.96	82.69	78.6	198.45	5.91	76.77	86.6	184.26	5.73	70.57	95.6	169.38	5.61	64.21	105.8	154.09	5.49	61.59	110.2	147.81	5.36
	7.2	290.8		12.52	19.4	270		11.62	18.8	248.2		10.69	18.4	225.8		9.72	18	216.6		9.33	17.6
	45.32	83.43	78.8	200.22	6.10	77.40	86.8	185.76	5.91	71.20	95.8	170.88	5.79	64.77	106	155.46	5.67	62.16	110.2	149.18	5.55
	7.4	293.4		12.63	20	272.2		11.72	19.4	250.4		10.78	19	227.8		9.81	18.6	218.6		9.41	18.2
HLCA-180-2 (2*336)	41.9	101.74	100.6	244.17	7.01	94.52	110.8	226.84	6.83	86.84	122.4	208.41	6.71	78.88	137.6	189.31	6.58	---	---	---	---
	5.5	357.8		15.40	23	332.4		14.31	22.4	305.4		13.15	22	277.4		11.94	21.6	---	---	---	---
	43.88	106.57	101.4	255.77	7.25	99.12	111.8	237.89	7.07	91.22	123.8	218.92	6.95	82.97	138.4	199.13	6.83	---	---	---	---
	6.6	374.8		16.14	23.8	348.6		15.01	23.2	320.8		13.81	22.8	291.8		12.56	22.4	---	---	---	---
	44.96	109.30	101.8	262.33	0.00	101.68	112.2	244.04	7.38	93.66	124.4	224.79	7.25	85.25	138.8	204.59	7.13	---	---	---	---
	7.2	384.4		16.55	24.8	357.6		15.40	24.2	329.4		14.18	23.8	299.8		12.91	23.4	---	---	---	---
	45.32	110.21	102	264.51	7.62	102.59	112.4	246.22	7.44	94.46	124.4	226.70	7.32	86.04	139	206.50	7.19	---	---	---	---
	7.4	387.6		16.69	25	360.8		15.53	24.4	332.2		14.30	24	302.6		13.03	23.6	---	---	---	---
HLCA-180-2 (2*359)	41.9	107.99	108	259.19	7.01	100.60	119.6	241.44	6.83	92.98	133.2	223.15	6.71	85.19	148.6	204.46	6.58	---	---	---	---
	5.5	379.8		16.35	23	353.8		15.23	22.4	327		14.08	22	299.6		12.90	21.6	---	---	---	---
	43.88	113.11	108.8	271.47	7.19	105.55	120.4	253.32	7.01	97.70	134	234.48	6.89	89.63	149.4	215.10	6.77	---	---	---	---
	6.6	397.8		17.13	23.6	371.2		15.98	23	343.6		14.79	22.6	315.2		13.57	22.2	---	---	---	---
	44.96	116.01	109.4	278.43	7.44	108.34	120.8	260.01	7.25	100.37	134.4	240.90	7.13	92.13	150	221.11	7.01	---	---	---	---
	7.2	408		17.57	24.4	381		16.40	23.8	353		15.20	23.4	324		13.95	23	---	---	---	---
	45.32	117.15	109.4	281.16	7.50	109.25	121	262.19	7.32	101.23	134.4	242.94	7.19	92.98	150	223.15	7.07	---	---	---	---
	7.4	412		17.74	24.6	384.2		16.54	24	356		15.33	23.6	327		14.08	23.2	---	---	---	---
HLCA-200-2 (2*295)	41.9	89.63	90.2	215.10	6.40	83.54	99.6	200.50	6.22	77.17	110	185.21	6.10	70.63	121.8	169.52	5.97	67.90	126.6	162.96	5.85
	5.5	315.2		13.57	21	293.8		12.65	20.4	271.4		11.68	20	248.4		10.69	19.6	238.8		10.28	19.2
	43.88	93.83	90.8	225.20	6.10	87.52	100.2	210.05	5.91	80.92	110.8	194.22	5.79	74.10	122.4	177.84	5.67	71.31	127.4	171.15	5.55
	6.6	330		14.21	20	307.8		13.25	19.4	284.6		12.25	19	260.6		11.22	18.6	250.8		10.80	18.2
	44.96	96.22	91.2	230.93	6.46	89.80	100.6	215.51	6.28	83.03	111.2	199.27	6.16	76.03	122.8	182.48	6.04	73.19	127.6	175.66	5.91
	7.2	338.4		14.57	21.2	315.8		13.60	20.6	292		12.57	20.2	267.4		11.51	19.8	257.4		11.08	19.4
	45.32	97.02	91.4	232.84	6.52	90.54	100.8	217.29	6.34	83.77	111.2	201.04	6.22	76.72	122.8	184.12	6.10	73.87	127.8	177.29	5.97
	7.4	341.2		14.69	21.4	318.4		13.71	20.8	294.6		12.68	20.4	269.8		11.62	20	259.8		11.19	19.6
HLCA-220-2 (2*336)	41.9	102.08	102.2	244.99	6.77	94.97	112.6	227.93	6.58	87.75	124.6	210.60	6.46	80.19	138.2	192.44	6.34	77.17	144	185.21	6.22
	5.5	359		15.46	22.2	334		14.38	21.6	308.6		13.29	21.2	282		12.14	20.8	271.4		11.68	20.4
	43.88	105.61	102.8	253.45	7.13	99.52	113.2	238.85	6.95	92.01	125.2	220.83	6.83	84.17	138.8	202.00	6.71	80.98	144.8	194.36	6.58
	6.6	371.4		15.99	23.4	350		15.07	22.8	323.6		13.93	22.4	296		12.74	22	284.8		12.26	21.6
	44.96	106.91	103.2	256.59	7.19	102.14	113.6	245.13	7.01	94.40	125.6	226.57	6.89	86.38	139.2	207.32	6.77	83.14	145.2	199.54	6.64
	7.2	376		16.19	23.6	359.2		15.47	23	332		14.29	22.6	303.8		13.08	22.2	292.4		12.59	21.8
	45.32	109.59	103.4	263.01	7.38	102.99	131.8	247.18	7.19	95.20	125.8	228.48	7.07	87.18	139.4	209.23	6.95	83.88	145.4	201.32	6.83
	7.4	385.4		16.59	24.2	362.2		15.59	23.6	334.8		14.41	23.2	306.6		13.20	22.8	295		12.70	22.4

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-134a)																			
		95°F (35°C)				104°F (40°C)				113°F (45°C)				122°F (50°C)				125,6°F (52°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-220-2 (2*315)	41.9	96.68	95.8	232.03	6.52	90.02	106	216.06	6.34	83.03	117.6	199.27	6.22	75.81	130.8	181.94	6.04	72.85	136.4	174.84	5.91
	5.5	340		14.64	21.4	316.6		13.63	20.8	292		12.57	20.4	266.6		11.48	19.8	256.2		11.03	19.4
	43.88	101.17	96.4	242.81	6.71	94.23	106.4	226.16	6.52	87.07	118	208.96	6.40	79.56	131.4	190.94	6.22	76.49	77	183.57	6.10
	6.6	355.8		15.32	22	331.4		14.27	21.4	306.2		13.18	21	279.8		12.05	20.4	269		11.58	20
	44.96	103.67	96.6	248.81	6.95	96.62	106.8	231.89	6.77	89.28	118.4	214.28	6.64	81.66	131.6	195.99	6.46	78.54	137.4	188.49	6.34
	7.2	364.6		15.70	22.8	339.8		14.63	22.2	314		13.52	21.8	287.2		12.37	21.2	276.2		11.89	20.8
	45.32	104.53	96.8	250.86	7.07	97.42	107	233.80	6.89	90.02	118.6	216.06	6.77	82.35	131.8	197.63	6.58	79.22	137.6	190.12	6.46
	7.4	367.6		15.83	23.2	342.6		14.75	22.6	316.6		13.63	22.2	289.6		12.47	21.6	278.6		11.99	21.2
HLCA-220-2 (2*410)	41.9	127.39	122.8	305.73	7.92	118.29	136	283.89	7.74	108.45	151.2	260.28	7.62	98.95	169	237.48	7.44	---	---	---	---
	5.5	448		19.29	26	416		17.91	25.4	381.4		16.42	25	348		14.98	24.4	---	---	---	---
	43.88	133.07	123.6	319.38	7.99	123.97	136.8	297.54	7.80	113.74	152.2	272.97	7.68	103.96	169.8	249.50	7.50	---	---	---	---
	6.6	468		20.15	26.2	436		18.77	25.6	400		17.22	25.2	365.6		15.74	24.6	---	---	---	---
	44.96	136.49	124.2	327.57	8.11	126.82	137.4	304.36	7.92	116.58	152.6	279.80	7.80	106.74	170.4	256.18	7.62	---	---	---	---
	7.2	480		20.67	26.6	446		19.20	26	410		17.65	25.6	375.4		16.16	25	---	---	---	---
	45.32	137.62	124.4	330.30	8.23	127.96	137.6	307.09	8.05	117.72	152.8	282.53	7.92	107.65	170.4	258.37	7.74	---	---	---	---
	7.4	484		20.84	27	450		19.37	26.4	414		17.82	26	378.6		16.30	25.4	---	---	---	---
HLCA-250-2 (2*359)	41.9	110.21	109.2	264.51	4.88	102.59	120.6	246.22	4.69	94.63	134	227.11	4.57	86.38	149	207.32	4.39	83.03	155.6	199.27	4.27
	5.5	387.6		16.69	16	360.8		15.53	15.4	332.8		14.33	15	303.8		13.08	14.4	292		12.57	14
	43.88	115.44	109.8	277.07	5.18	107.43	121.4	257.82	5.00	99.18	134.6	238.03	4.88	90.65	149.6	217.56	4.69	87.18	156.2	209.23	4.57
	6.6	406		17.48	17	377.8		16.27	16.4	348.8		15.02	16	318.8		13.73	15.4	306.6		13.20	15
	44.96	118.29	110.2	283.89	5.30	110.10	121.8	264.24	5.12	101.74	135	244.17	5.00	93.04	150	223.29	4.82	89.51	156.6	214.83	4.69
	7.2	416		17.91	17.4	387.2		16.67	16.8	357.8		15.40	16.4	327.2		14.09	15.8	314.8		13.55	15.4
	45.32	118.86	110.2	285.25	5.43	111.01	121.8	266.42	5.24	102.59	135	246.22	5.12	93.89	150.2	225.34	4.94	90.31	156.8	216.74	4.82
	7.4	418		18.00	17.8	390.4		16.81	17.2	360.8		15.53	16.8	330.2		14.22	16.2	317.6		13.67	15.8
HLCA-250-2 (2*470)	41.9	140.47	138	337.12	5.73	130.80	152.8	313.92	5.55	120.56	170	289.35	5.43	110.27	189.8	264.65	5.24	---	---	---	---
	5.5	494		21.27	18.8	460		19.81	18.2	424		18.26	17.8	387.8		16.70	17.2	---	---	---	---
	43.88	147.29	139	353.50	5.91	137.05	153.8	328.93	5.73	126.25	171	303.00	5.61	116.01	191	278.43	5.43	---	---	---	---
	6.6	518		22.30	19.4	482		20.75	18.8	444		19.12	18.4	408		17.57	17.8	---	---	---	---
	44.96	150.70	139.6	361.69	6.04	140.47	154.4	337.12	5.85	129.66	171.6	311.19	5.73	118.86	191.4	285.25	5.55	---	---	---	---
	7.2	530		22.82	19.8	494		21.27	19.2	456		19.63	18.8	418		18.00	18.2	---	---	---	---
	45.32	151.84	139.8	364.42	6.22	141.60	154.6	339.85	6.04	130.80	171.8	313.92	5.91	119.99	191.6	287.98	5.73	---	---	---	---
	7.4	534		22.99	20.4	498		21.44	19.8	460		19.81	19.4	422		18.17	18.8	---	---	---	---
HLCA-280-2 (2*410)	41.9	127.39	124.6	305.73	5.55	118.29	137.8	283.89	5.36	109.30	153	262.33	5.24	99.81	170.2	239.53	5.06	95.94	177.6	230.25	4.94
	5.5	448		19.29	18.2	416		17.91	17.6	384.4		16.55	17.2	351		15.11	16.6	337.4		14.53	16.2
	43.88	133.07	125.4	319.38	5.61	123.97	138.6	297.54	5.43	114.31	153.8	274.34	5.30	104.75	171	251.41	5.12	100.71	178.4	241.72	5.00
	6.6	468		20.15	18.4	436		18.77	17.8	402		17.31	17.4	368.4		15.86	16.8	354.2		15.25	16.4
	44.96	136.49	125.8	327.57	5.67	127.39	139	305.73	5.49	117.72	154.2	282.53	5.36	107.48	292.8	257.96	5.18	103.39	178.8	248.13	5.06
	7.2	480		20.67	18.6	448		19.29	18	414		17.82	17.6	378		16.27	17	363.6		15.65	16.6
	45.32	137.62	126	330.30	5.73	127.96	139.2	307.09	5.55	118.29	154.2	283.89	5.43	108.45	171.6	260.28	5.24	104.30	179	250.31	5.12
	7.4	484		20.84	18.8	450		19.37	18.2	416		17.91	17.8	381.4		16.42	17.2	366.8		15.79	16.8
HLCA-280-2 (2*535)	41.9	159.80	157.2	383.52	6.58	149.00	174	357.59	6.40	139.90	193.6	335.75	6.28	125.68	358.6	301.63	6.10	---	---	---	---
	5.5	562		24.20	21.6	524		22.56	21	492		21.18	20.6	442		19.03	20	---	---	---	---
	43.88	167.19	158.2	401.27	6.71	155.82	175.2	373.97	6.52	143.88	194.6	345.31	6.40	131.94	217.4	316.65	6.22	---	---	---	---
	6.6	588		25.32	22	548		23.59	21.4	506		21.79	21	464		19.98	20.4	---	---	---	---
	44.96	171.74	159	412.19	6.89	159.80	175.8	383.52	6.71	147.86	195.4	354.86	6.58	135.35	218	324.84	6.40	---	---	---	---
	7.2	604		26.00	22.6	562		24.20	22	520		22.39	21.6	476		20.49	21	---	---	---	---
	45.32	172.88	159.2	414.92	7.32	161.51	176	387.62	7.13	149.00	195.6	357.59	7.01	136.49	218.2	327.57	6.83	---	---	---	---
	7.4	608		26.18	24	568		24.45	23.4	524		22.56	23	480		20.67	22.4	---	---	---	---
HLCA-320-2 (2*470)	41.9	137.62	139.2	330.30	6.10	127.96	154	307.09	5.91	118.29	171	283.89	5.79	108.45	190.8	260.28	5.61	104.58	199.6	251.00	5.49
	5.5	484		20.84	20	450		19.37	19.4	416		17.91	19	381.4		16.42	18.4	367.8		15.84	18
	43.88	143.88	140	345.31	6.46	134.21	155	322.11	6.28	123.97	172	297.54	6.16	113.74	191.8	272.97	5.97	109.93	200.6	263.83	5.85
	6.6	506		21.79	21.2	472		20.32	20.6	436		18.77	20.2	400		17.22	19.6	386.6		16.64	19.2
	44.96	147.86	140.6	354.86	6.77	137.62	155.4	330.30	6.58	127.39	172.6	305.73	6.46	117.15	192.4	281.16	6.28	112.94	201.2	271.06	6.16
	7.2	520		22.39	22.2	484		20.84	21.6	448		19.29	21.2	412		17.74	20.6	397.2		17.10	20.2
	45.32	149.00	140.8	357.59	6.95	138.76	155.6	333.02	6.77	128.52	172.8	308.46	6.64	118.29	192.6	283.89	6.46	113.74	201.4	272.97	6.34
	7.4	524		22.56	22.8	488		21.01	22.2	452		19.46	21.8	416		17.91	21.2	400		17.22	20.8
HLCA-320-2 (2*615)	41.9	189.94	185	455.86	7.92	176.29	204.4	423.11	7.74	161.51	226.2	387.62	7.56	146.72	250	352.13	7.38	---	---	---	---
	5.5	668		28.76	26	620		26.69	25.4	568		24.45	24.8	516		22.22	24.2	---	---	---	---
	43.88	199.04	186	477.70	8.23	184.82	205.6	443.58	8.05	170.04	227.4	408.09	7.86	154.68	251.4	371.24	7.68	---	---	---	---
	6.6	700		30.14	27	650		27.99	26.4	598		25.75	25.8	544		23.42	25.2	---	---	---	---
	44.96	203.59	186.6	488.62	8.47	189.37	206.2	454.50	8.29	174.02	228	417.65	8.11	158.66	252	380.79	7.92	---	---	---	---
	7.2	716		30.83	27.8	666		28.67	27.2	612		26.35	26.6	558		24.02	26	---	---	---	---
	45.32	205.30	186.8	492.71	8.53	191.08	206.4	458.59	8.35	175.73	228.2	421.74	8.17	160.37	252	384.89	7.99	---	---	---	---
	7.4	722		31.09	28	672		28.93	27.4	618		26.61	26.8	564		24.28	26.2	---	---	---	---
HLCA-420-2 (2*615)	41.9	188.24	184.2	451.77	6.10	175.16	203.2	420.38	5.91	160.94	224.8	386.25	5.73	146.72	248.6	352.13	5.55	141.04	258.8	338.48	5.43
	5.5	662		28.50	20	616		26.52	19.4	566		24.37	18.8	516		22.22	18.2	496		21.35	17.8
	43.88	197.34	185.2	473.61	6.46	183.12	204.2	439.48	6.28	168.90	225.8	405.36	6.10	154.11	249.6	369.88	5.91	148.43	260	356.23	5.79
	6.6	694		29.88	21.2	644		27.73	20.6	594		25.57	20	542		23.34	19.4	522		22.47	19
	44.96	201.88	185.6	484.52	6.83	188.24	204.8	451.77	6.64	173.45	226.4	416.28	6.46	158.66	250.2	380.79	6.28	152.41	260.6	365.78	6.16
	7.2	710		30.57	22.4	662		28.50	21.8	610		26.26	21.2	558		24.02	20.6	536		23.08	20.2
	45.32	203.59	185.8	488.62	6.95	189.37	205	454.50	6.77	175.16	226.6	420.38	6.58	159.80	250.4	383.52	6.40	153.55	260.8	368.51	6.28
	7.4	716		30.83	22.8	666		28.67	22.2	616		26.52	21.6	562		24.20	21	540		23.25	20.6

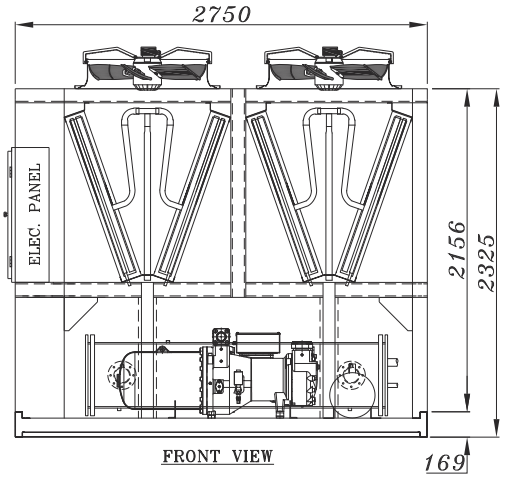
ENGINEERING SPECIFICATIONS (50 HZ) (R-134a)											
chiller MODEL	no.of circuit	comp.oil charge (dm^3)	condenser coil					condenser fan			
			row	fpi	QTY	total heat rejection (kw)	total face area (m2)	size (mm)	QTY	total air flow rate (cfm)	motor power (kw)
HLCA-35-1	1	9.5	4	12	2	97.6	2*2.31	800	2	2*12360	2*1.7
HLCA-40-1	1	9.5	2	12	4	121.4	4*2.31	800	4	4*12360	4*1.7
HLCA-50-1 (139)	1	9.5	4	12	2	96.8	2*2.31	800	2	2*12360	2*1.7
HLCA-50-1 (195)	1	9.5	3	10	4	139.1	4*2.31	800	4	4*12948	4*1.7
HLCA-50-1 (197)	1	15	3	10	4	138.3	4*2.31	800	4	4*12948	4*1.7
HLCA-60-1 (170)	1	9.5	2	12	4	121.1	4*2.31	800	4	4*13243	4*1.7
HLCA-60-1 (220)	1	9.5	3	12	4	156.6	4*2.31	800	4	4*12654	4*1.7
HLCA-60-1 (227)	1	15	3	12	4	162.2	4*2.31	800	4	4*12654	4*1.7
HLCA-70-1 (197)	1	15	3	10	4	140	4*2.31	800	4	4*12948	4*1.7
HLCA-70-1 (258)	1	15	4	12	4	186	4*2.31	800	4	4*12360	4*1.7
HLCA-80-1 (227)	1	15	3	12	4	161.2	4*2.31	800	4	4*12654	4*1.7
HLCA-80-1 (295)	1	15	3	10	6	215	6*2.31	800	6	6*12948	6*1.7
HLCA-80-1 (315)	1	22	3	12	6	227	6*2.31	800	6	6*12654	6*1.7
HLCA-90-1 (258)	1	15	4	12	4	186	4*2.31	800	4	4*12360	4*1.7
HLCA-90-1 (336)	1	15	3	12	6	245	6*2.31	800	6	6*12654	6*1.7
HLCA-90-1 (359)	1	22	4	10	6	260	6*2.31	800	6	6*12948	6*1.7
HLCA-100-1 (295)	1	15	3	10	6	216	6*2.31	800	6	6*12948	6*1.7
HLCA-110-1 (336)	1	15	3	12	6	246	6*2.31	800	6	6*12654	6*1.7
HLCA-110-1 (315)	1	22	3	12	6	232	6*2.31	800	6	6*12654	6*1.7
HLCA-110-1 (410)	1	22	3	12	8	305	8*2.31	800	8	8*12654	8*1.7
HLCA-125-1 (359)	1	22	4	10	6	265	6*2.31	800	6	6*12948	6*1.7
HLCA-125-1 (470)	1	19	3	12	8	337	8*2.31	800	8	8*12654	8*1.7
HLCA-140-1 (410)	1	22	3	12	8	305	8*2.31	800	8	8*12654	8*1.7
HLCA-140-1 (535)	1	19	4	12	8	383	8*2.31	800	8	8*12360	8*1.7
HLCA-160-1 (470)	1	19	3	12	8	332	8*2.31	800	8	8*12654	8*1.7
HLCA-160-1 (615)	1	30	4	12	10	455	10*2.31	800	10	10*12360	10*1.7

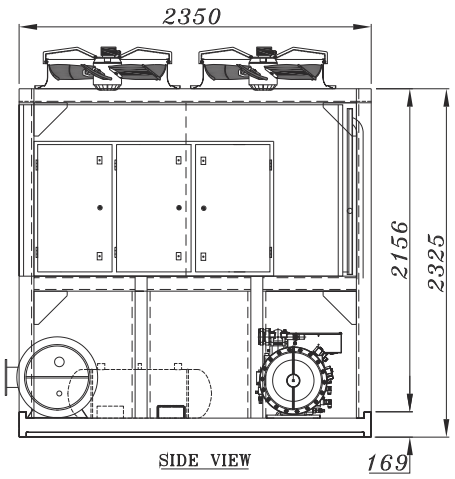
ENGINEERING SPECIFICATIONS (50 HZ) (R-134a)											
chiller MODEL	no.of circuit	comp.oil charge (dm^3)	condenser coil					condenser fan			
			row	fpi	QTY	total heat rejection (kw)	total face area (m2)	size (mm)	QTY	total air flow rate (cfm)	motor power (kw)
HLCA-210-1 (615)	1	30	4	12	10	451	10*2.31	800	10	10*12360	10*1.7
HLCA-70-2	2	19	4	12	4	195.2	4*2.31	800	4	4*12360	4*1.7
HLCA-80-2	2	19	3	12	6	242.8	6*2.31	800	6	6*12654	6*1.7
HLCA-100-2 (2*137)	2	19	4	12	4	193.6	4*2.31	800	4	4*12360	4*1.7
HLCA-100-2 (2*195)	2	19	4	12	6	278.2	6*2.31	800	6	6*12360	6*1.7
HLCA-100-2 (2*197)	2	30	4	12	6	276.6	6*2.31	800	6	6*12654	6*1.7
HLCA-120-2 (2*170)	2	19	3	12	6	242.2	6*2.31	800	6	6*12654	6*1.7
HLCA-120-2 (2*220)	2	19	3	12	8	313.2	8*2.31	800	8	8*12654	8*1.7
HLCA-120-2 (2*227)	2	30	3	12	8	324.4	8*2.31	800	8	8*12654	8*1.7
HLCA-140-2 (2*197)	2	30	4	12	6	280	6*2.31	800	6	6*12360	6*1.7
HLCA-140-2 (2*258)	2	30	4	12	8	372	8*2.31	800	8	8*12360	8*1.7
HLCA-160-2 (2*227)	2	30	3	12	8	322.4	8*2.31	800	8	8*12654	8*1.7
HLCA-160-2 (2*295)	2	30	4	10	10	430	10*2.31	800	10	10*12948	10*1.7
HLCA-160-2 (2*315)	2	44	4	12	10	454	10*2.31	800	10	10*12360	10*1.7
HLCA-180-2 (2*258)	2	30	4	12	8	372	8*2.31	800	8	8*12360	8*1.7
HLCA-180-2 (2*336)	2	30	4	12	10	490	10*2.31	800	10	10*21000	10*1.7
HLCA-180-2 (2*359)	2	44	4	10	12	520	12*2.31	800	12	12*12948	12*1.7
HLCA-200-2 (2*295)	2	30	4	10	10	432	10*2.31	800	10	10*12948	10*1.7
HLCA-220-2 (2*336)	2	30	4	12	10	492	10*2.31	800	10	10*12360	10*1.7
HLCA-220-2 (2*315)	2	44	4	12	10	464	10*2.31	800	10	10*12360	10*1.7
HLCA-220-2 (2*410)	2	44	4	10	14	610	12*2.31	800	14	14*12948	14*1.7
HLCA-250-2 (2*359)	2	44	4	10	12	530	12*2.31	800	12	12*12948	12*1.7
HLCA-250-2 (2*470)	2	38	4	12	14	674	14*2.31	800	14	12*12360	14*1.7
HLCA-280-2 (2*410)	2	44	4	10	14	610	12*2.31	800	14	14*12360	14*1.7
HLCA-280-2 (2*535)	2	38	4	12	16	766	16*2.31	800	16	16*12360	16*1.7
HLCA-320-2 (2*470)	2	38	4	12	14	664	14*2.31	800	14	14*12360	14*1.7
HLCA-320-2 (2*615)	2	60	4	12	20	910	19*2.31	800	20	20*12360	20*1.7
HLCA-420-2 (2*615)	2	60	4	12	20	902	19*2.31	800	20	20*12360	20.1.7

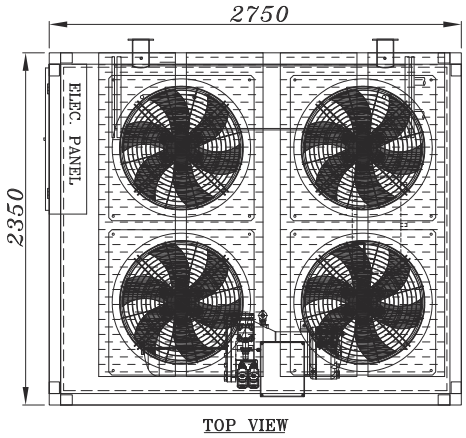
ELECTRICAL DATA (R-134a)				
chiller MODEL	Nominal Comp. power (HP)	MRA (Amp)	LRA (Amp) (D/DD)	MAX CONSE POWER (kw)
HLCA-35-1	35	57.7	153/305	37.4
HLCA-40-1	40	75.8	182/338	47.8
HLCA-50-1 (139)	50	59.2	218/411	55.4
HLCA-50-1 (195)	50	82.1	218/411	57.8
HLCA-50-1 (197)	50	86	206/355	58.8
HLCA-60-1 (170)	60	78.5	269/508	71.8
HLCA-60-1 (220)	60	90.1	269/508	62.8
HLCA-60-1 (227)	60	96.5	267/449	71.8
HLCA-70-1 (197)	70	88.7	290/485	84.8
HLCA-70-1 (258)	70	107	290/485	84.8
HLCA-80-1 (227)	80	96.8	350/585	94.8
HLCA-80-1 (295)	80	127.9	350/585	98.2
HLCA-80-1 (315)	80	129.3	394/606	98.2
HLCA-90-1 (258)	90	106.2	423/686	102.8
HLCA-90-1 (336)	90	139.6	423/686	106.2
HLCA-90-1 (359)	90	148.2	439/675	106.2
HLCA-100-1 (295)	100	127.6	479/790	112.2
HLCA-110-1 (336)	110	142.5	516/887	122.2
HLCA-110-1 (315)	110	139.1	520/801	122.2
HLCA-110-1 (410)	110	176.7	520/801	123.6
HLCA-125-1 (359)	125	156.4	612/943	142.2
HLCA-125-1 (470)	125	196	612/943	133.6
HLCA-140-1 (410)	140	174.1	665/1023	160.2
HLCA-140-1 (535)	140	217.9	665/1023	144.6
HLCA-160-1 (470)	160	196.9	729/1114	173.6
HLCA-160-1 (615)	160	250	436/1364	172

ELECTRICAL DATA (R-134a)				
chiller MODEL	Nominal Comp. power (HP)	MRA (Amp)	LRA (Amp) (D/DD)	MAX CONSE POWER (kw)
HLCA-210-1 (615)	210	255	586/1853	263
HLCA-70-2	2*35	115.4	2*(153/305)	74.8
HLCA-80-2	2*40	144.2	2*(182/338)	92.2
HLCA-100-2 (2*137)	2*50	118.4	2*(218/411)	110.8
HLCA-100-2 (2*195)	2*50	156.8	2*(218/411)	112.2
HLCA-100-2 (2*197)	2*50	164.6	2*(206/355)	114.2
HLCA-120-2 (2*170)	2*60	149.6	2*(269/508)	140.2
HLCA-120-2 (2*220)	2*60	180.2	2*(269/508)	125.6
HLCA-120-2 (2*227)	2*60	193	2*(267/449)	143.6
HLCA-140-2 (2*197)	2*70	170	2*(290/485)	166.2
HLCA-140-2 (2*258)	2*70	214	2*(290/485)	169.6
HLCA-160-2 (2*227)	2*80	193.6	2*(350/585)	189.6
HLCA-160-2 (2*295)	2*80	248.4	2*(350/585)	193
HLCA-160-2 (2*315)	2*80	251.2	2*(394/606)	193
HLCA-180-2 (2*258)	2*90	212.4	2*(423/686)	205.6
HLCA-180-2 (2*336)	2*90	271.8	2*(423/686)	209
HLCA-180-2 (2*359)	2*90	296.4	2*(439/675)	212.4
HLCA-200-2 (2*295)	2*100	247.8	2*(479/790)	221
HLCA-220-2 (2*336)	2*110	277.6	2*(516/887)	241
HLCA-220-2 (2*315)	2*110	270.8	2*(520/801)	241
HLCA-220-2 (2*410)	2*110	346	2*(520/801)	243.8
HLCA-250-2 (2*359)	2*125	312.8	2*(612/943)	284.4
HLCA-250-2 (2*470)	2*125	384.6	2*(612/943)	263.8
HLCA-280-2 (2*410)	2*140	355.6	2*(665/1023)	323.8
HLCA-280-2 (2*535)	2*140	435.8	2*(665/1023)	289.2
HLCA-320-2 (2*470)	2*160	386.4	2*(729/1114)	343.8
HLCA-320-2 (2*615)	2*160	500	2*(436/1364)	344
HLCA-420-2 (2*615)	2*210	510	2*(586/1853)	526

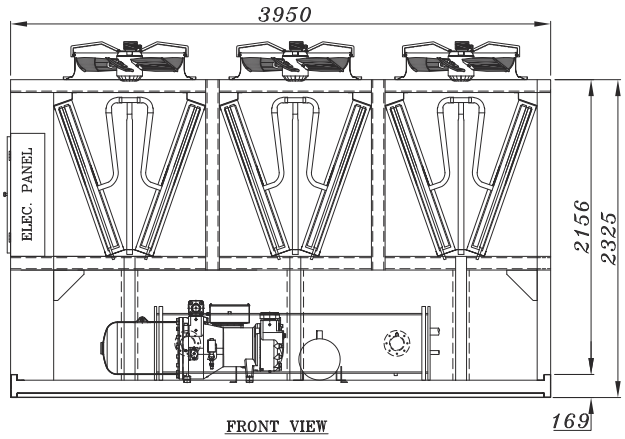
Dimensions(R-22)-BITZER

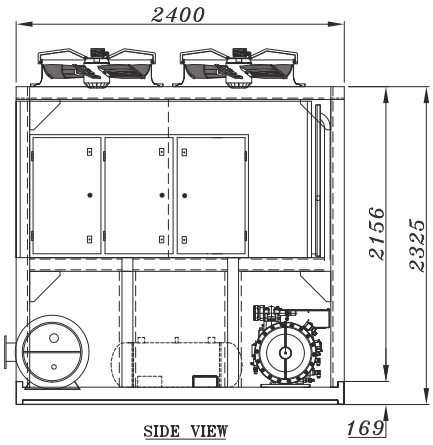


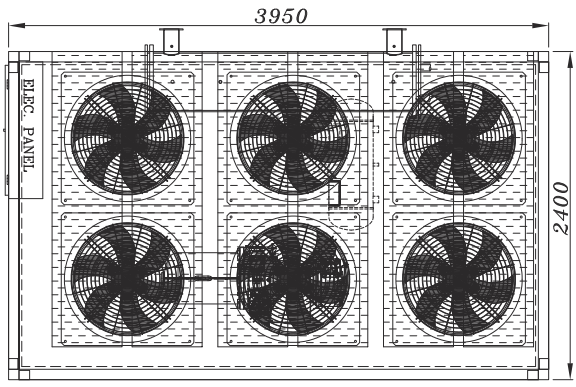




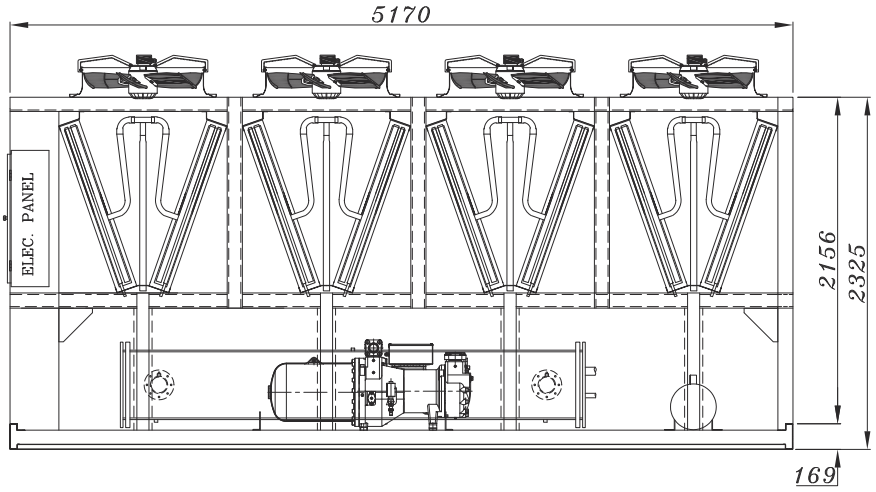
HLCA - 50 - 1
HLCA - 60 - 1

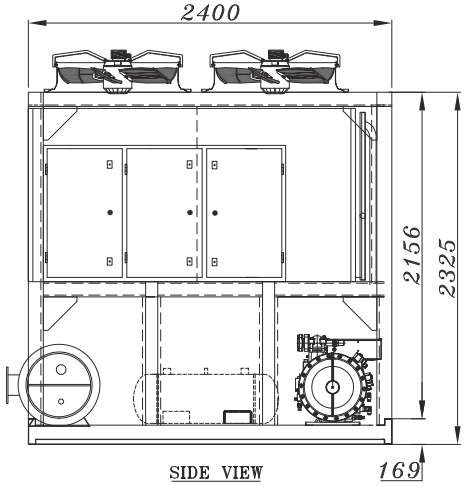




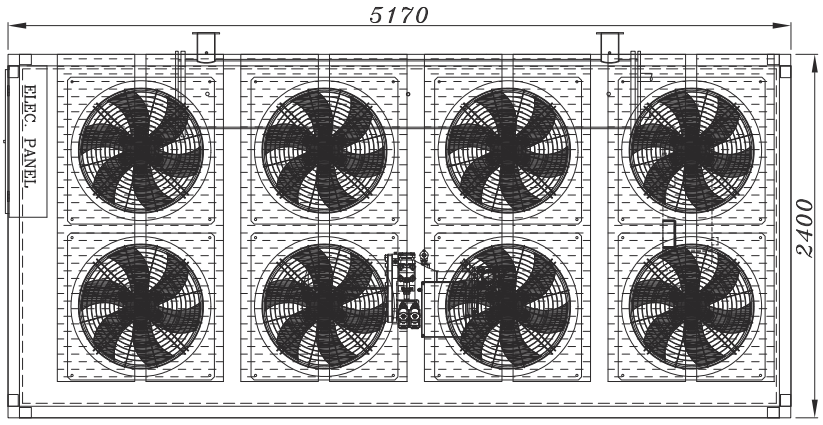


HLCA - 70 - 1
HLCA - 80 - 1
HLCA - 90 - 1





SIDE VIEW

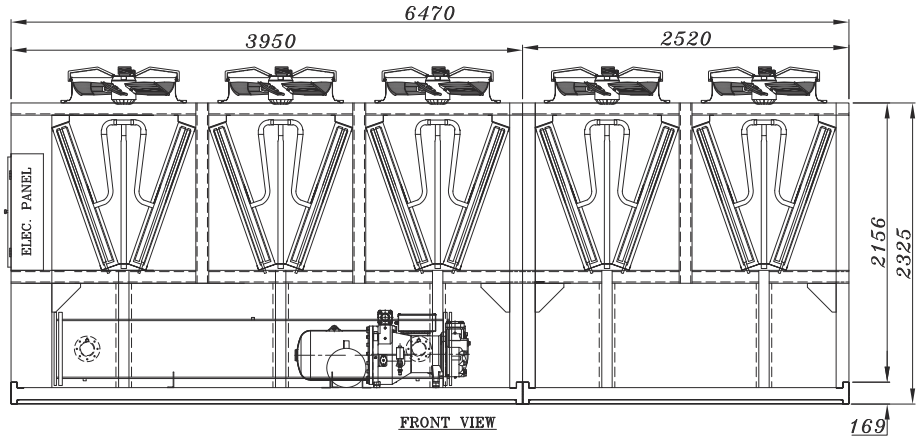


TOP VIEW

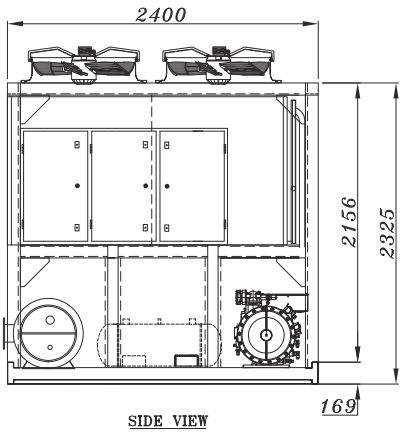
HLCA - 100 - 1

HLCA - 110 - 1

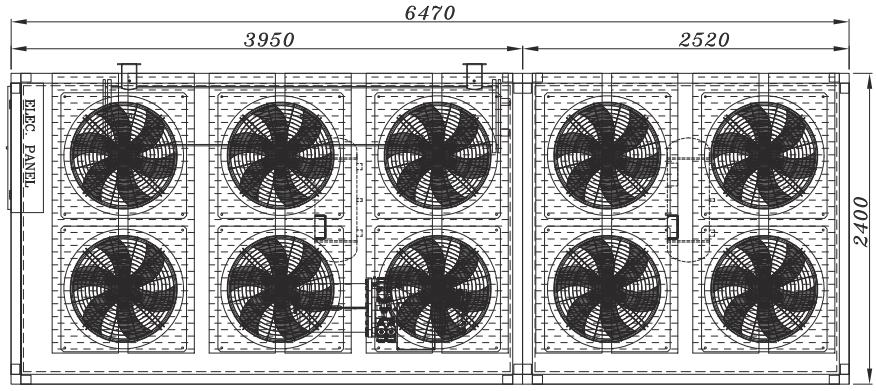
HLCA - 125 - 1



FRONT VIEW

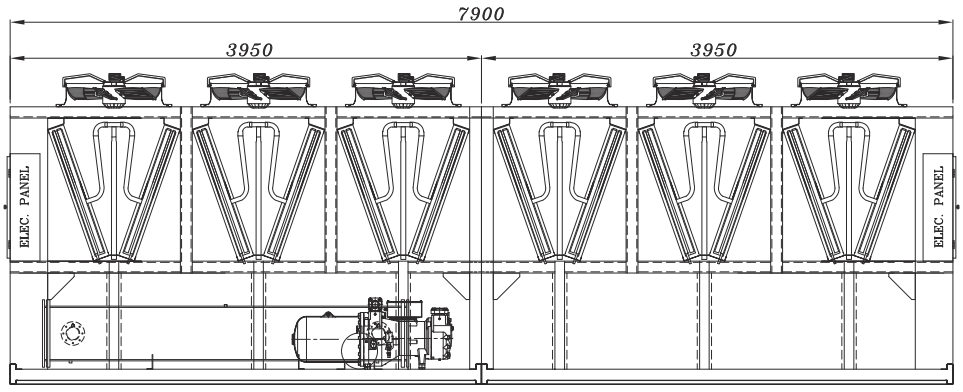


SIDE VIEW

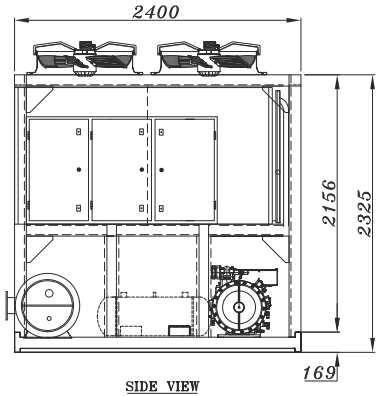


TOP VIEW

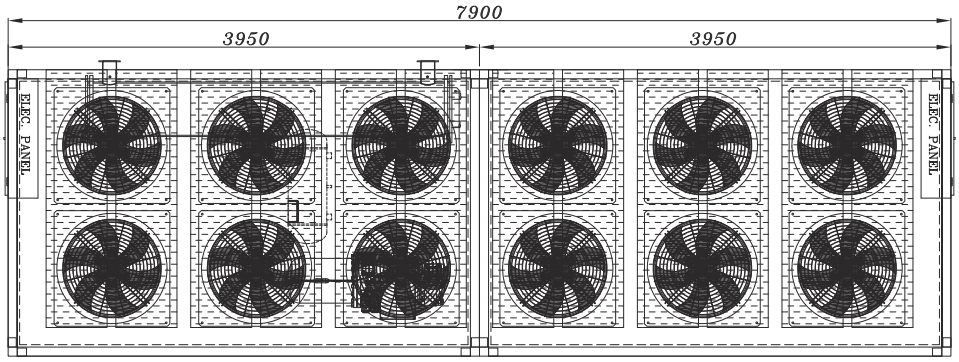
HLCA - 140 - 1



FRONT VIEW

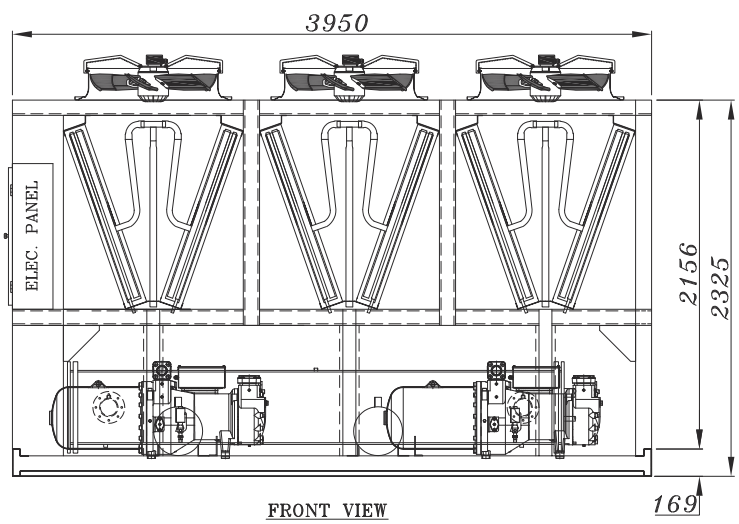


SIDE VIEW

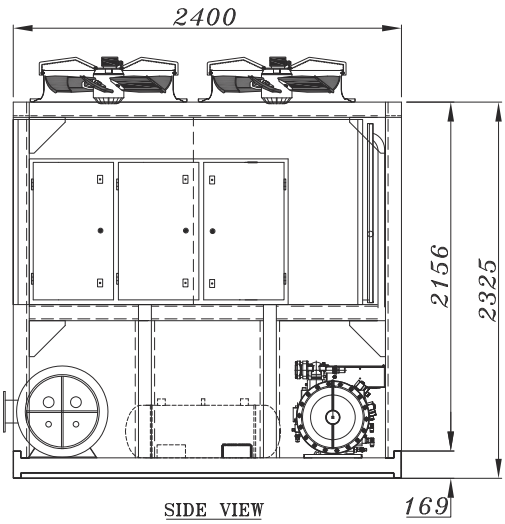


TOP VIEW

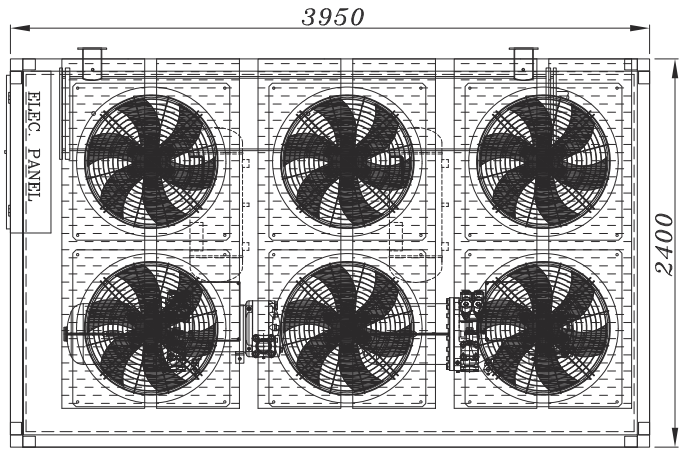
HLCA - 160 - 1



FRONT VIEW

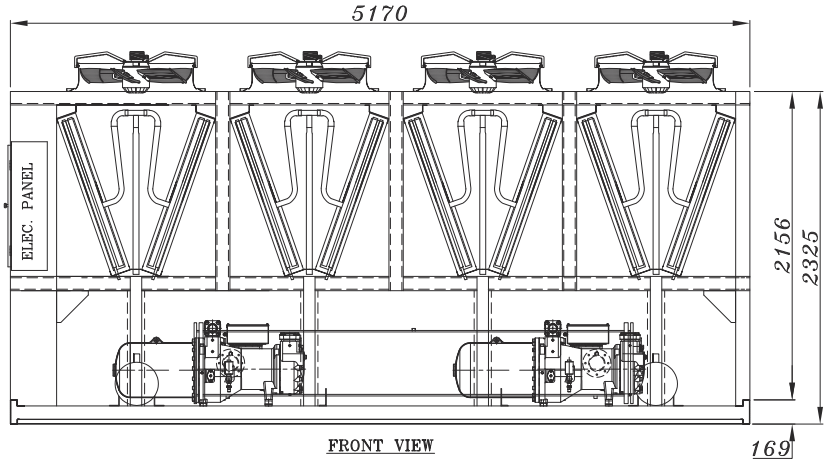


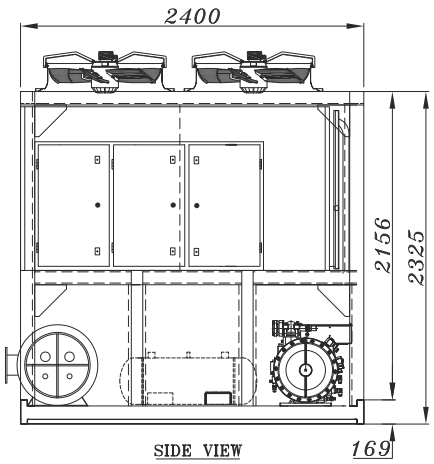
SIDE VIEW

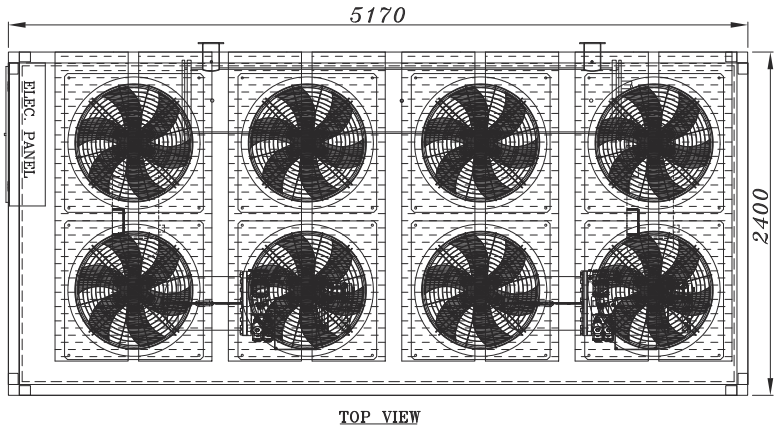


TOP VIEW

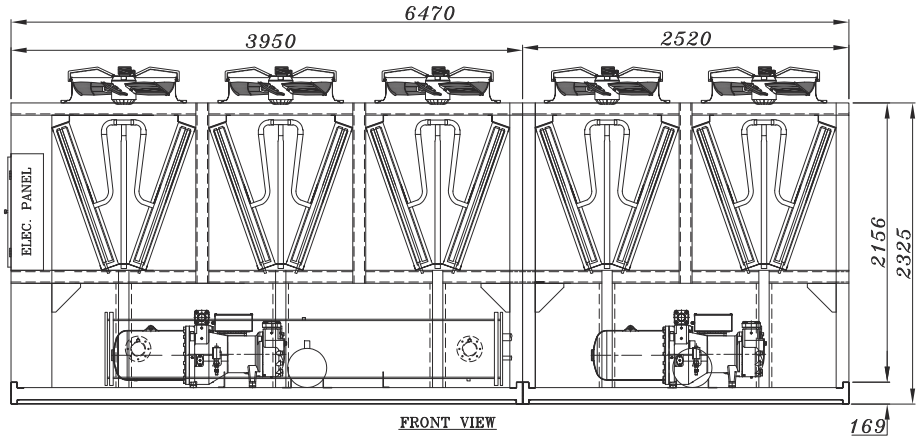
HLCA - 100 - 2


5170
ELEC. PANEL
2156
2325
169
FRONT VIEW

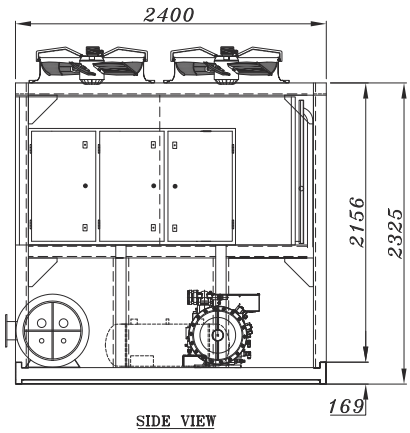

2400
2156
2325
169
SIDE VIEW


5170
ELEC. PANEL
2400
TOP VIEW

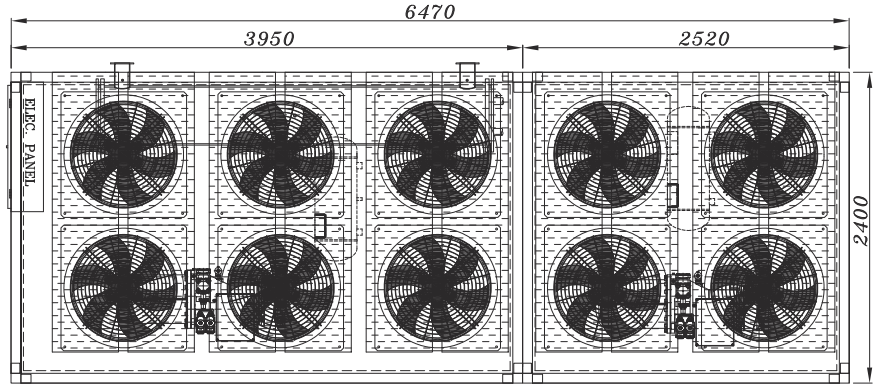
HLCA - 120 - 2



FRONT VIEW

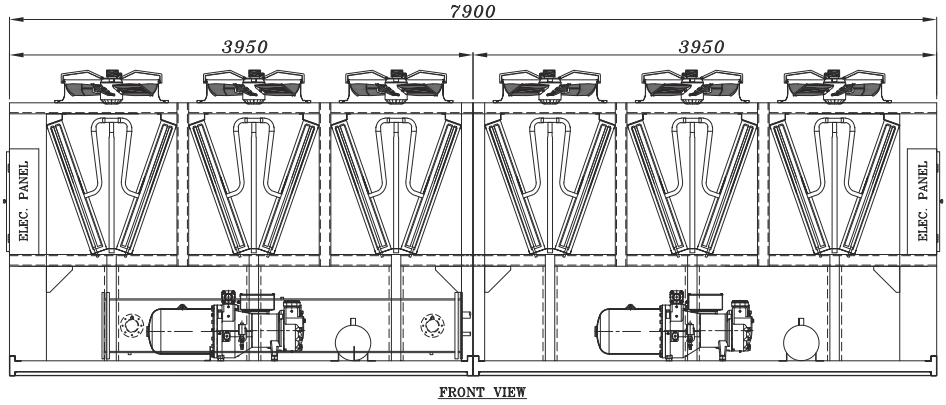


SIDE VIEW

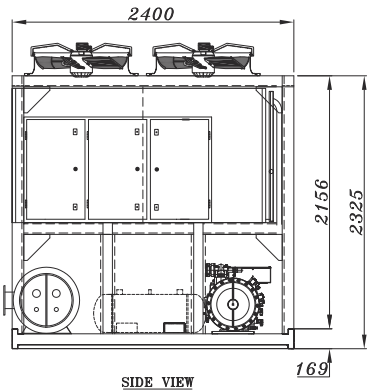


TOP VIEW

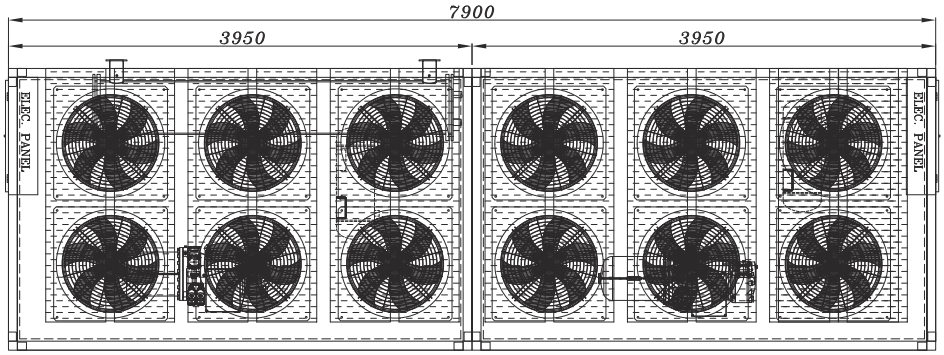
HLCA - 140-2
HLCA - 160-2



FRONT VIEW

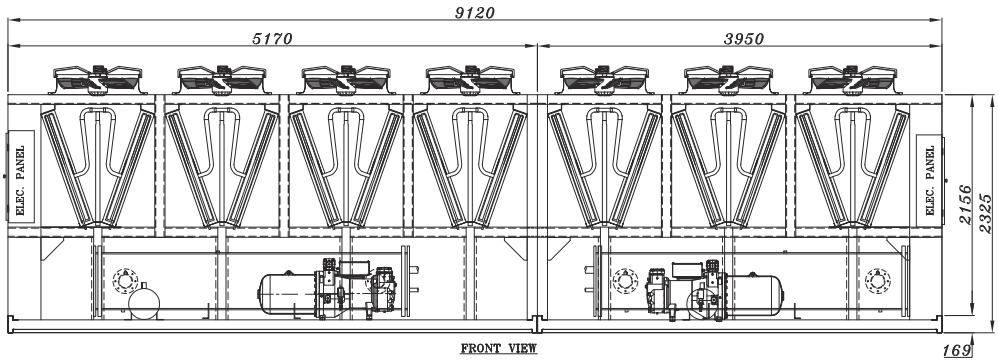


SIDE VIEW

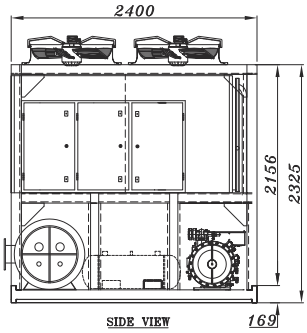


TOP VIEW

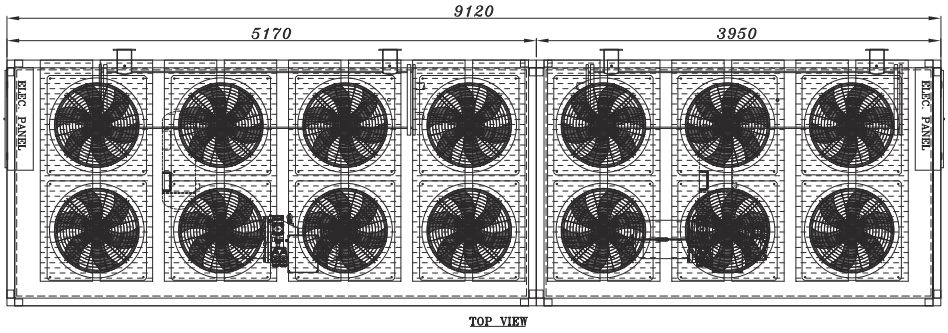
HLCA - 180-2



FRONT VIEW



SIDE VIEW

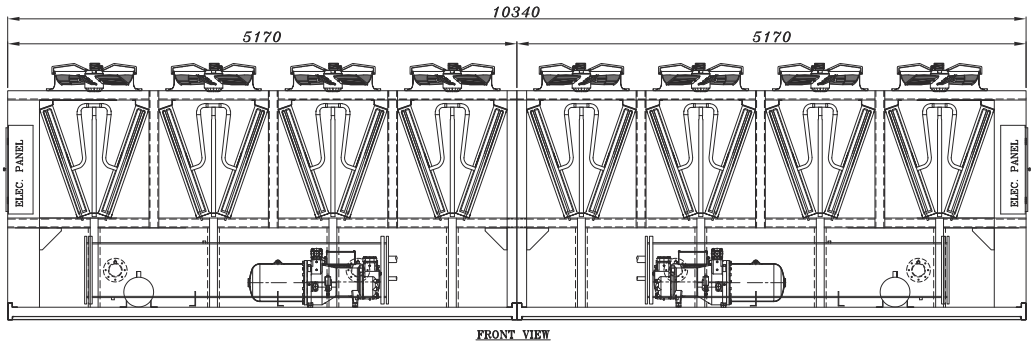


TOP VIEW

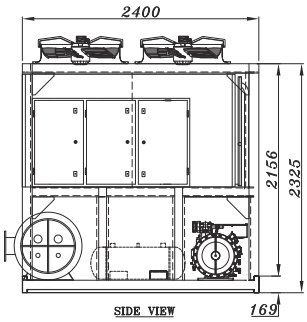
HLCA - 200-2

HLCA - 220-2

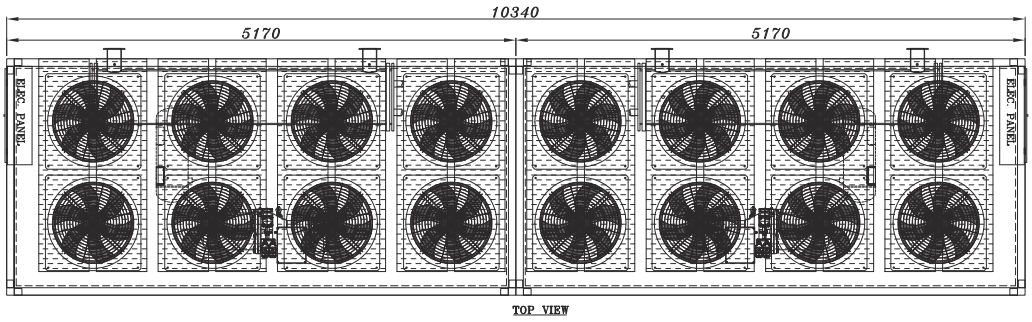
(CSH8553 - 110)



FRONT VIEW



SIDE VIEW

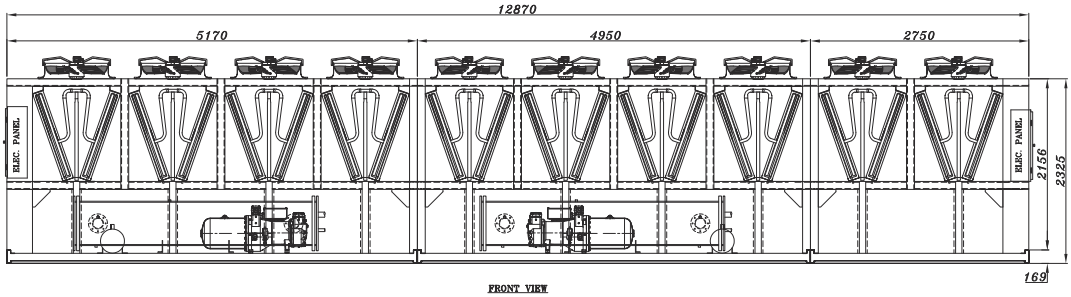


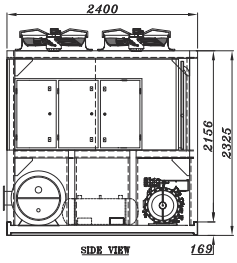
TOP VIEW

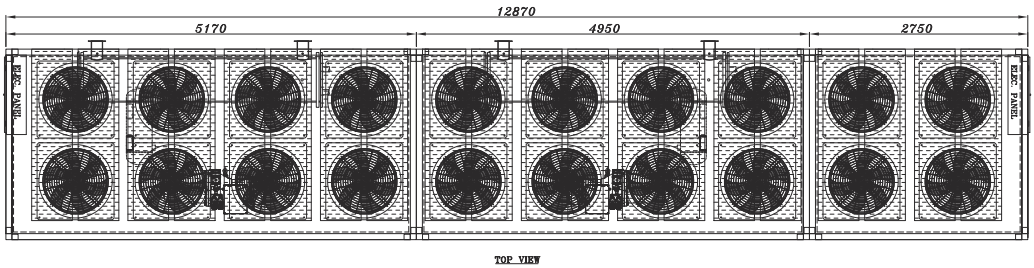
HLCA - 220-2

(CSH7593 - 110)

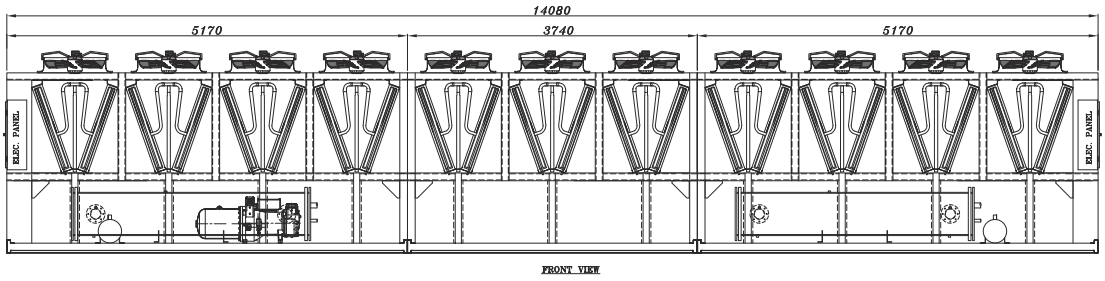
HLCA - 250-2



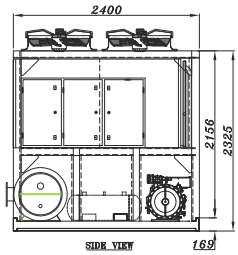




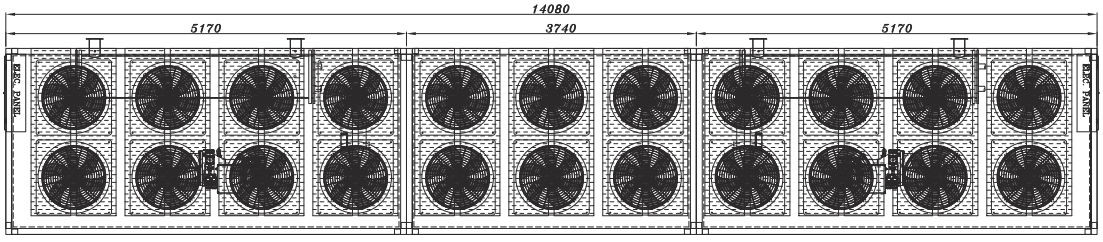
HLCA - 280-2



FRONT VIEW



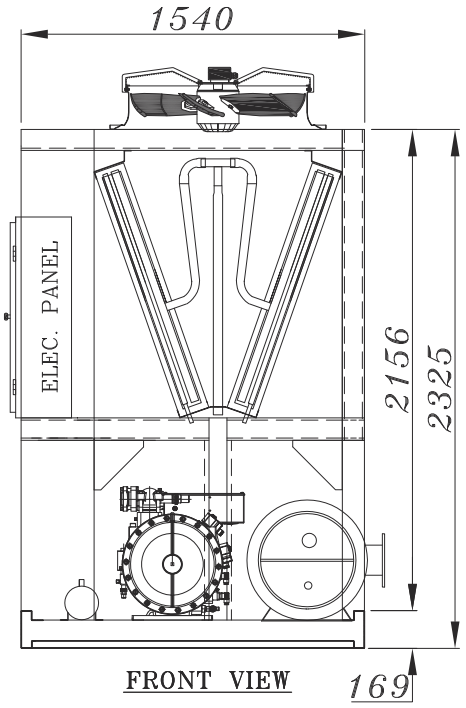
SIDE VIEW

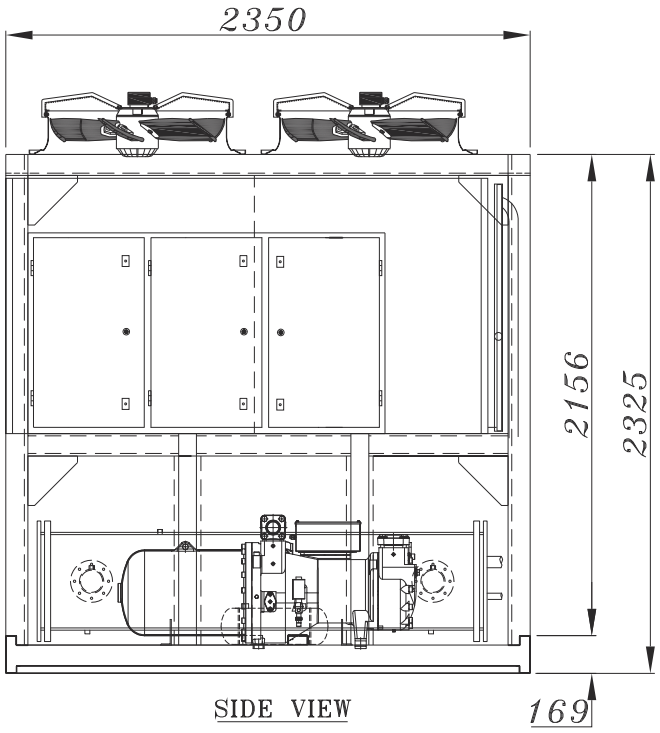


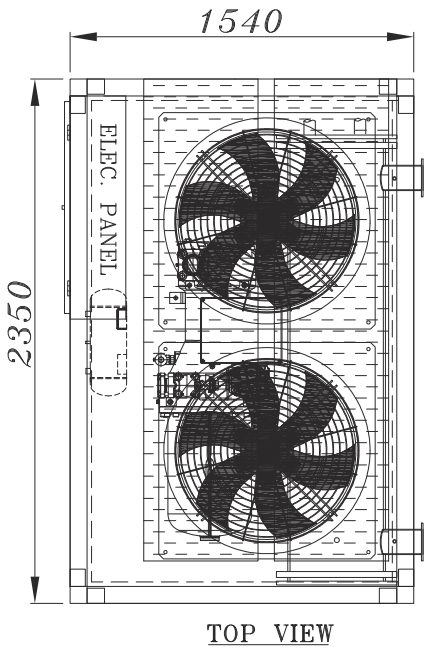
TOP VIEW

HLCA - 320-2

Dimensions(R-134a)-BITZER

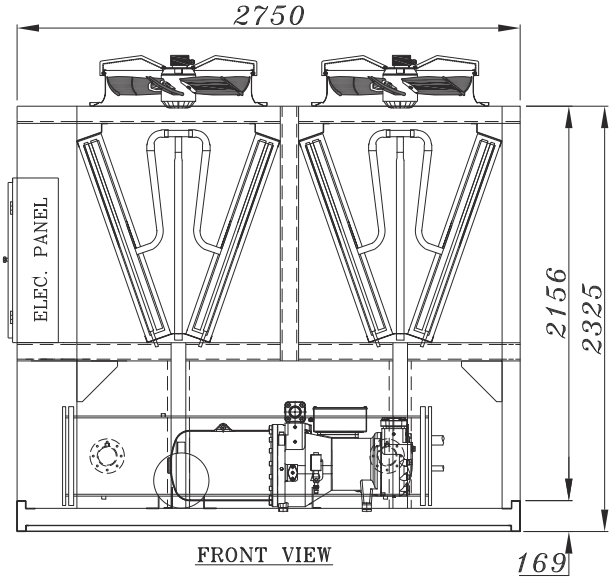


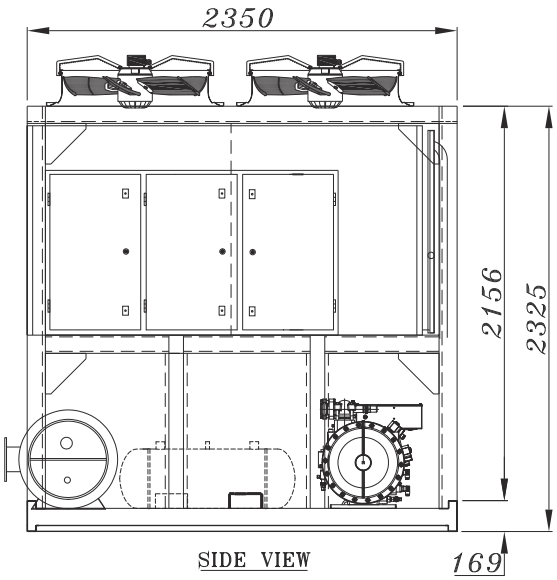


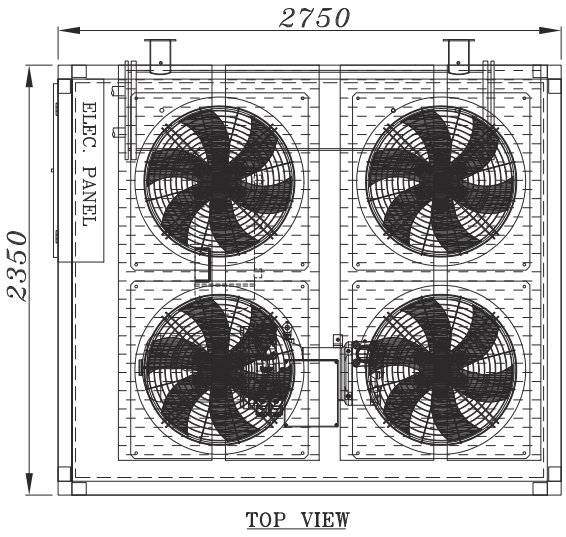


HLCA - 35-1

HLCA - 50-1 (139)







HLCA - 40-1

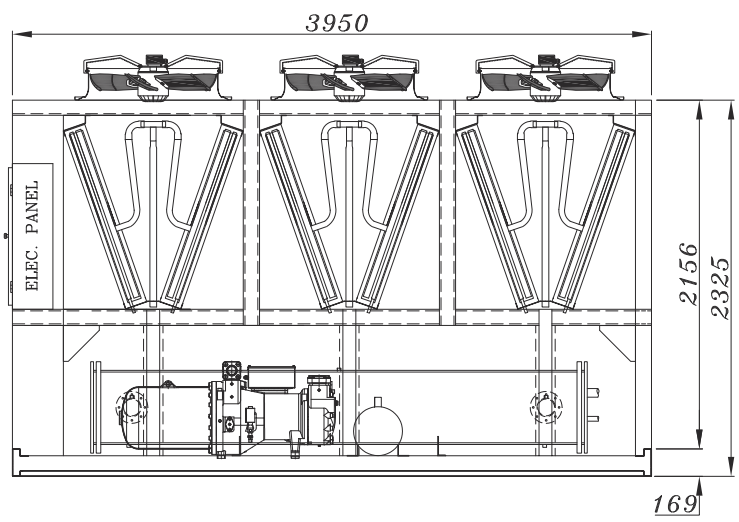
HLCA - 50-1 (195,197)

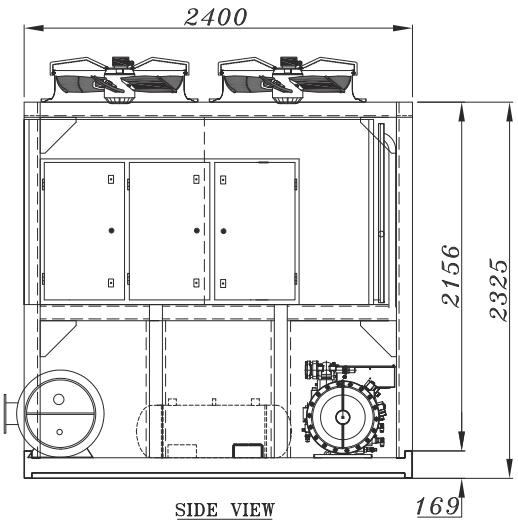
HLCA - 60-1 (170,220,227)

HLCA - 70-1 (197,258)

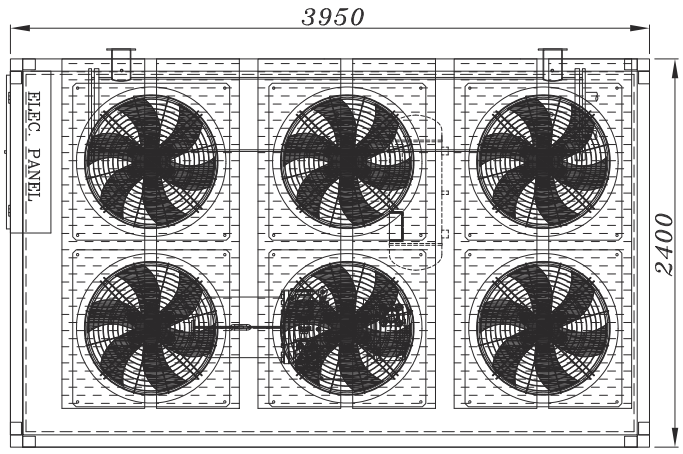
HLCA - 80-1 (227)

HLCA - 90-1 (258)





SIDE VIEW



TOP VIEW

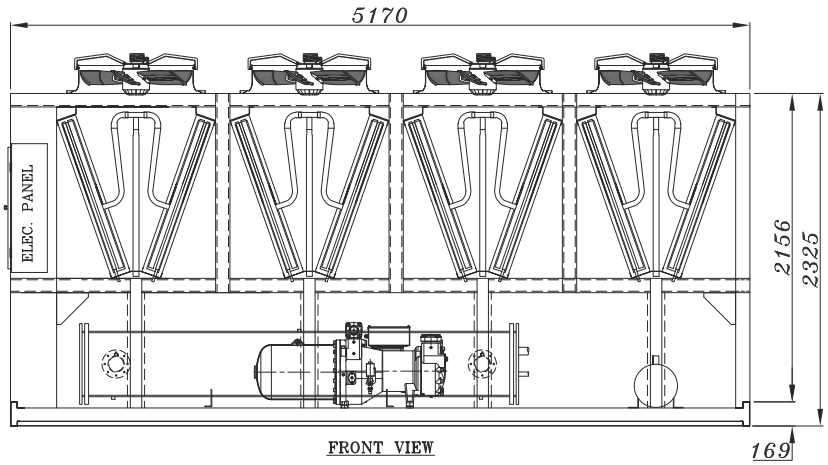
HLCA - 80-1 (295,315)

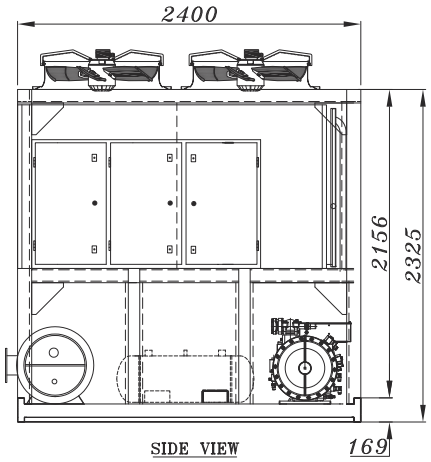
HLCA - 90-1 (336,359)

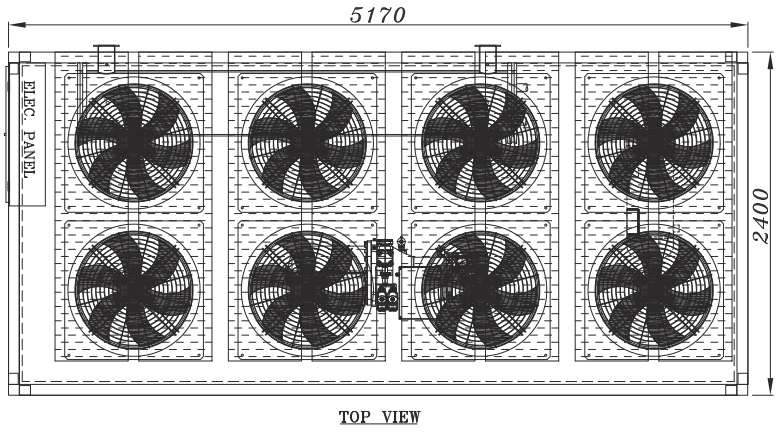
HLCA - 100-1 (295)

HLCA - 110-1 (336,319)

HLCA - 125-1 (336,359)





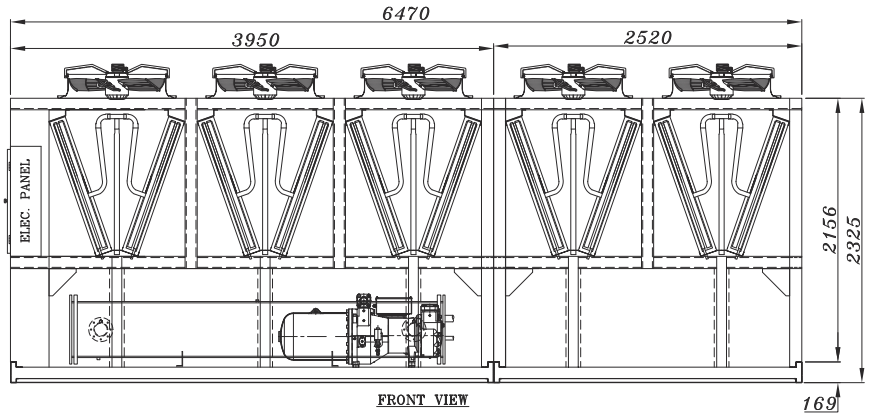


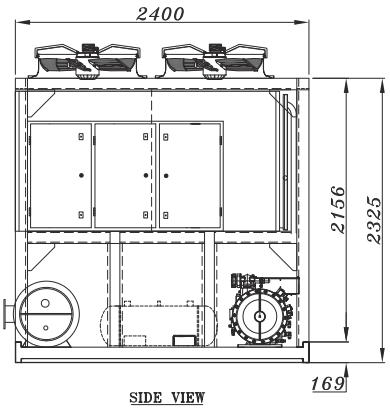
HLCA - 110-1 (410)

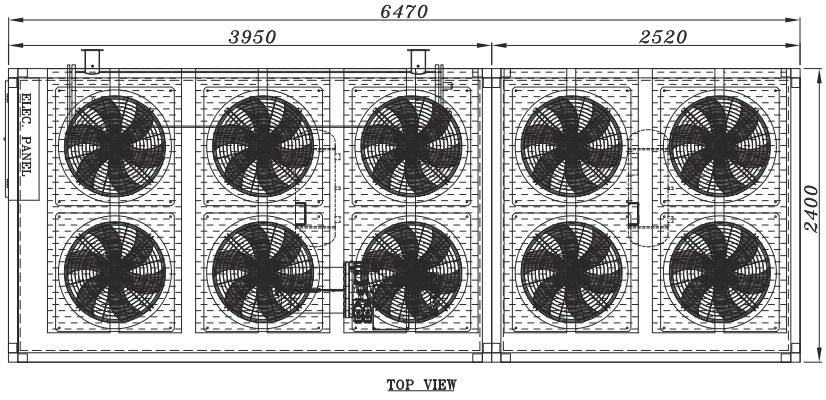
HLCA - 125-1 (470)

HLCA - 140-1 (410,535)

HLCA - 160-1 (470)

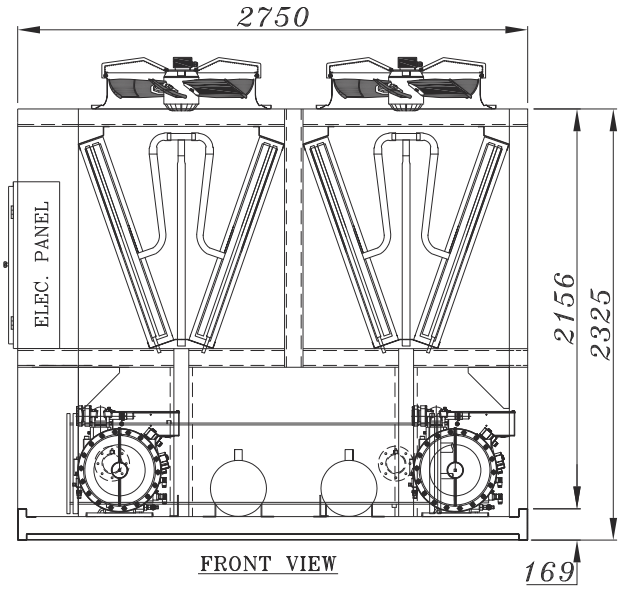




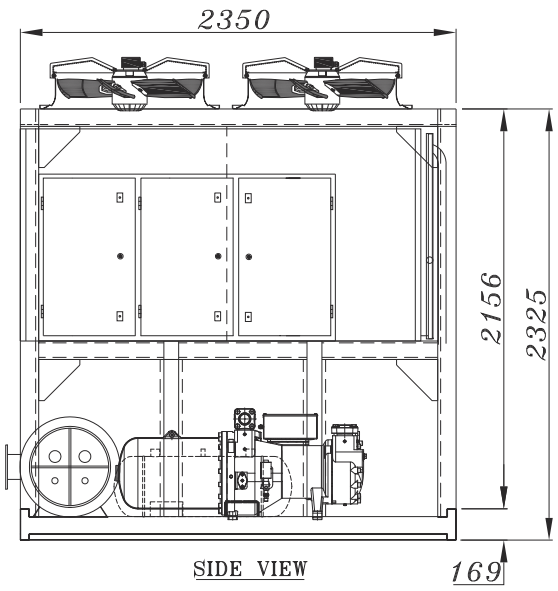


HLCA - 160-1 (615)

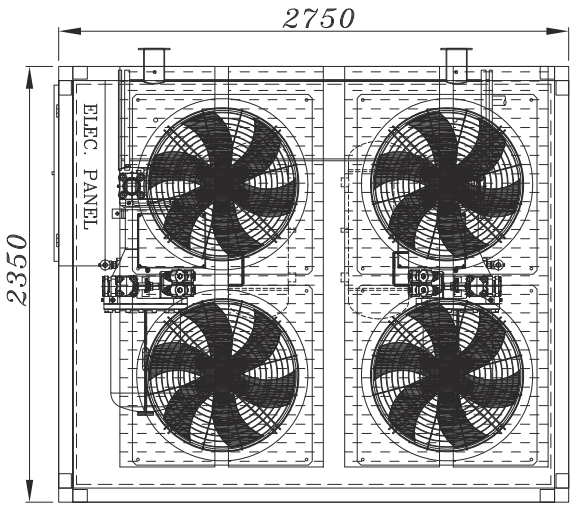
HLCA - 210-1 (615)



FRONT VIEW



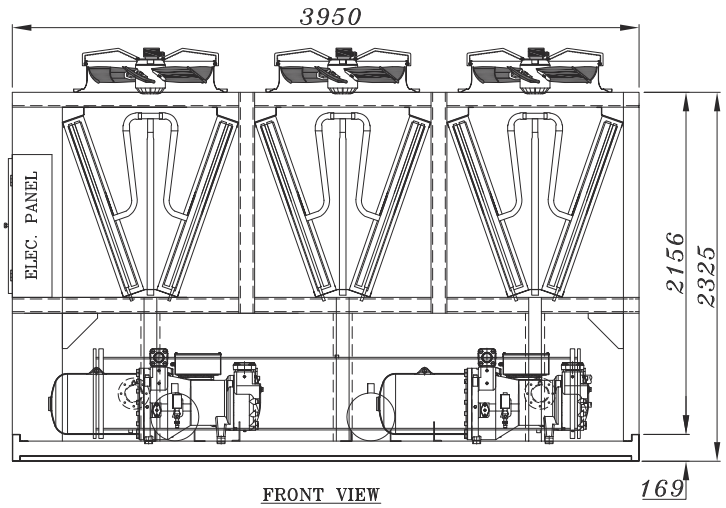
SIDE VIEW



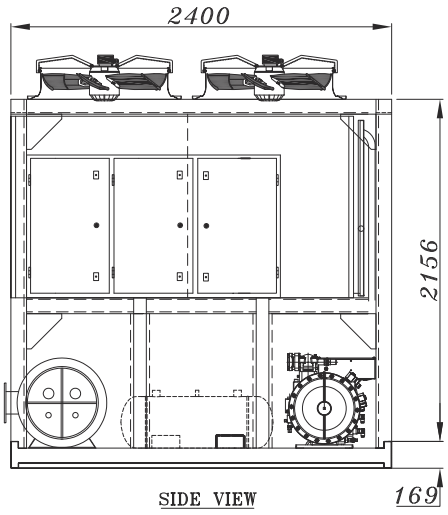
TOP VIEW

HLCA - 70-2

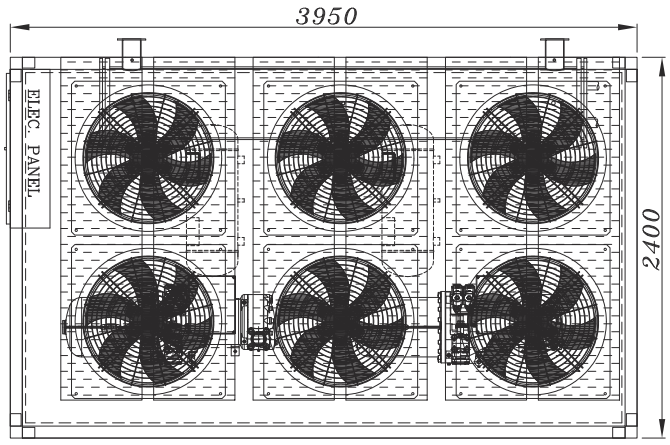
HLCA - 100-2 (2*137)



FRONT VIEW



SIDE VIEW



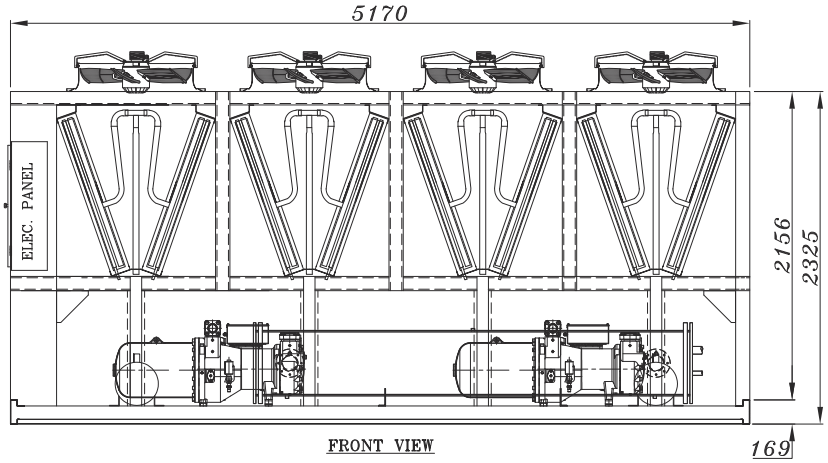
TOP VIEW

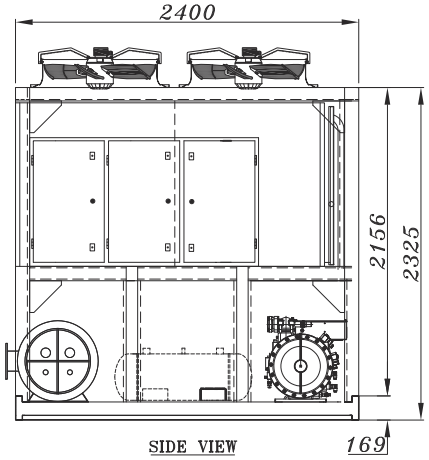
HLCA - 80 -2

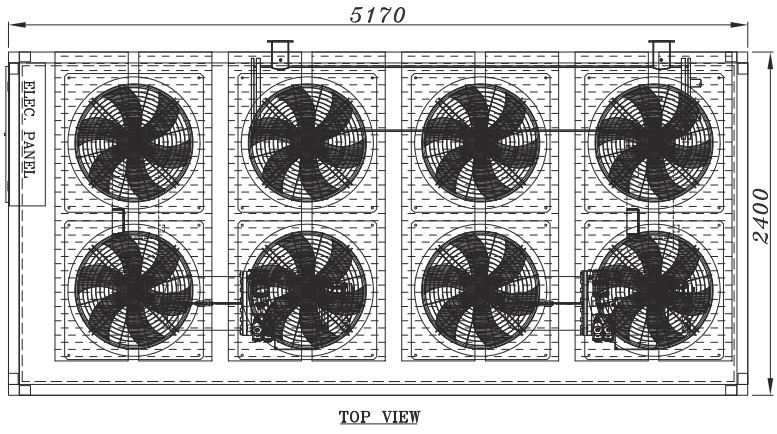
HLCA - 100 -2 (2*195,197)

HLCA - 120 -2 (2*170)

HLCA - 140 -2 (2*197)







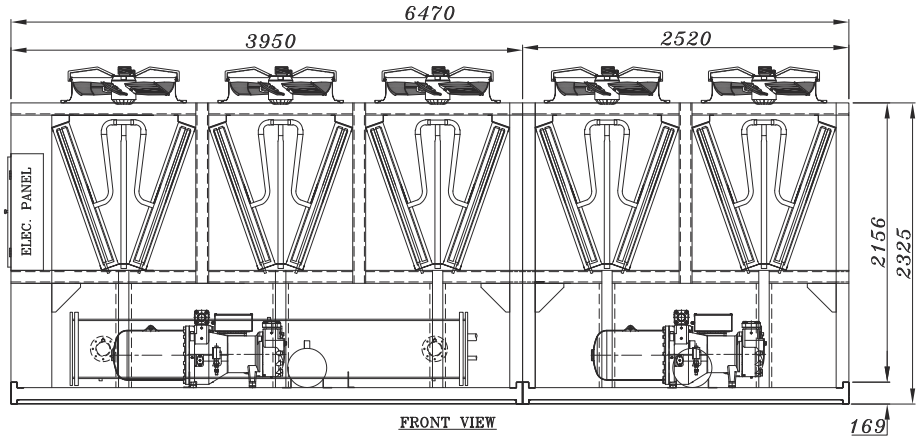
HLCA - 120 -2 (2*220)

HLCA - 120 -2 (2*227)

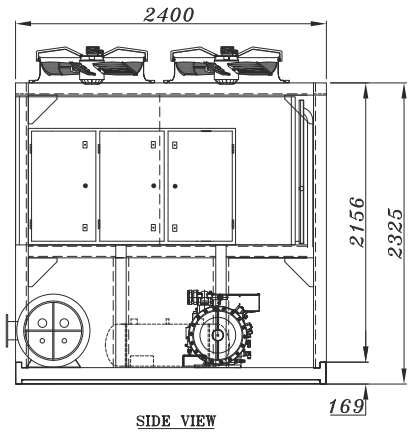
HLCA - 140 -2 (2*258)

HLCA - 160 -2 (2*227)

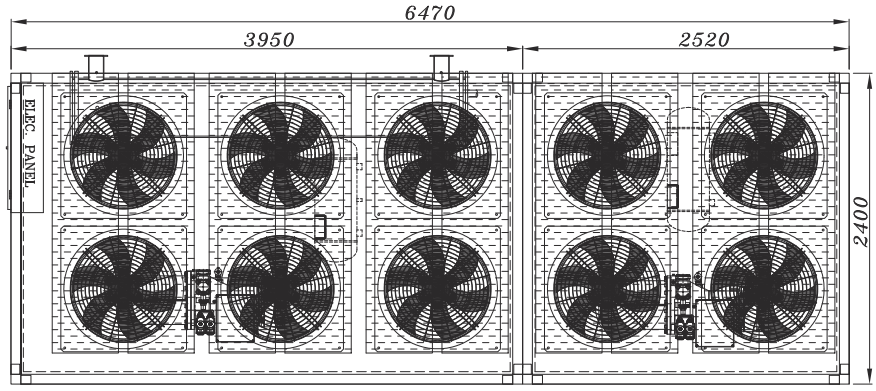
HLCA - 180 -2 (2*258)



FRONT VIEW



SIDE VIEW



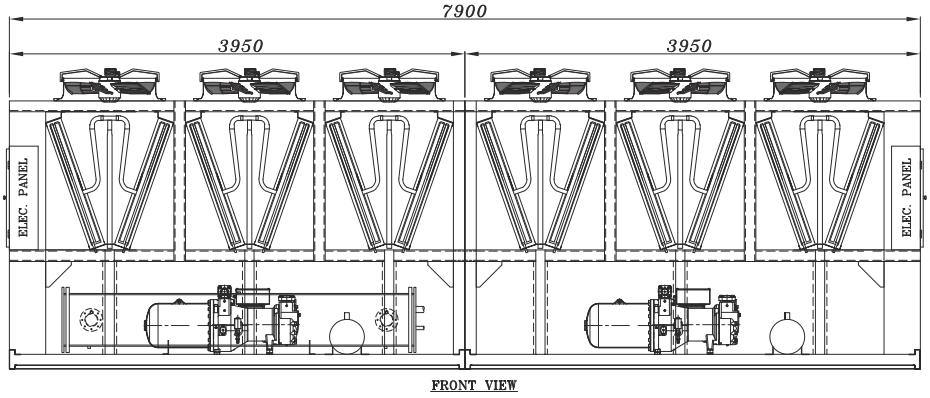
TOP VIEW

HLCA - 160 -2 (2*295,315)

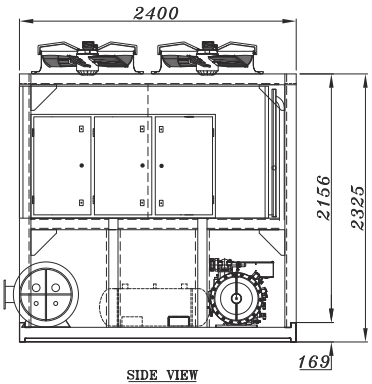
HLCA - 180 -2 (2*336)

HLCA - 200 -2 (2*295)

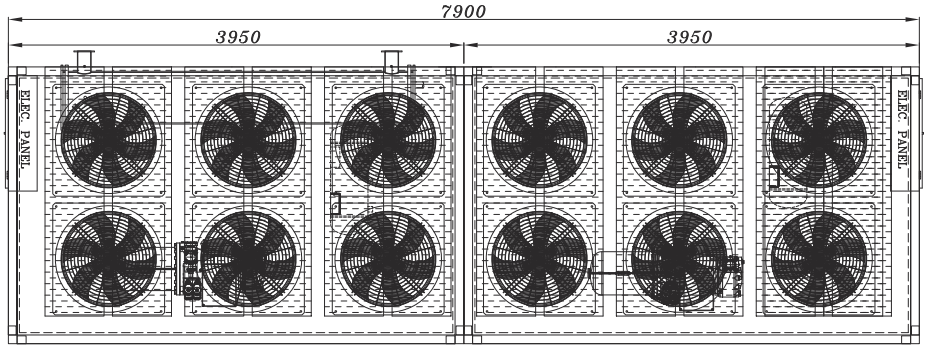
HLCA - 220 -2 (2*336,315)



FRONT VIEW



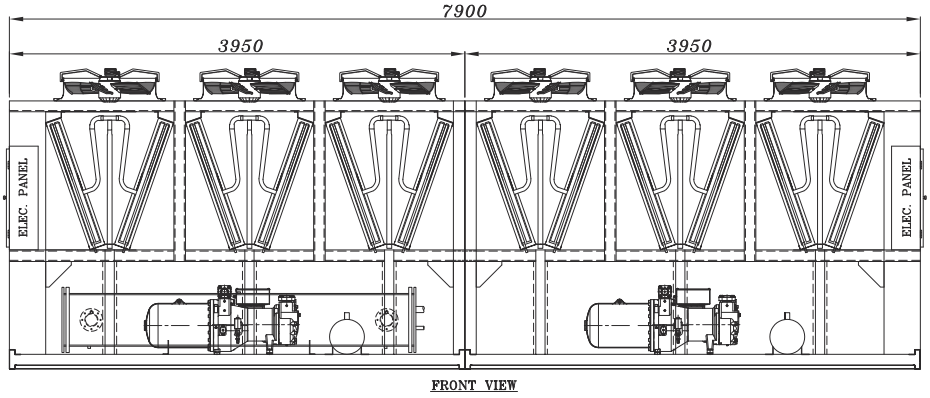
SIDE VIEW



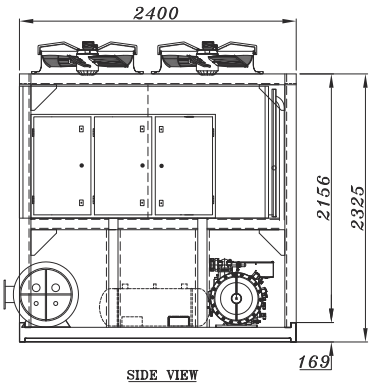
TOP VIEW

HLCA - 180 -2 (2*359)

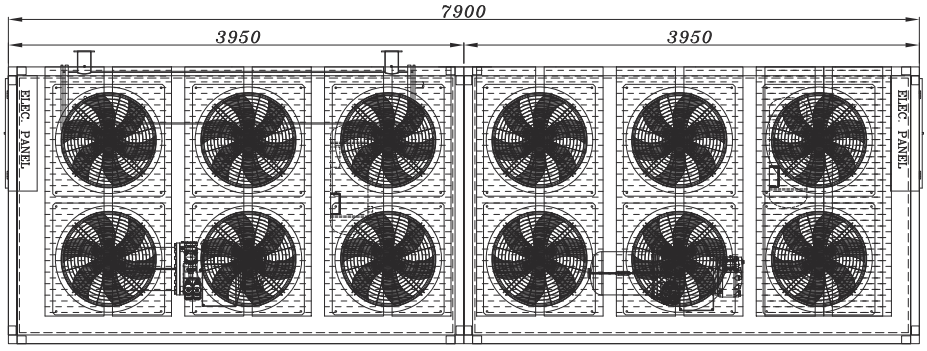
HLCA - 250 -2 (2*359)



FRONT VIEW



SIDE VIEW



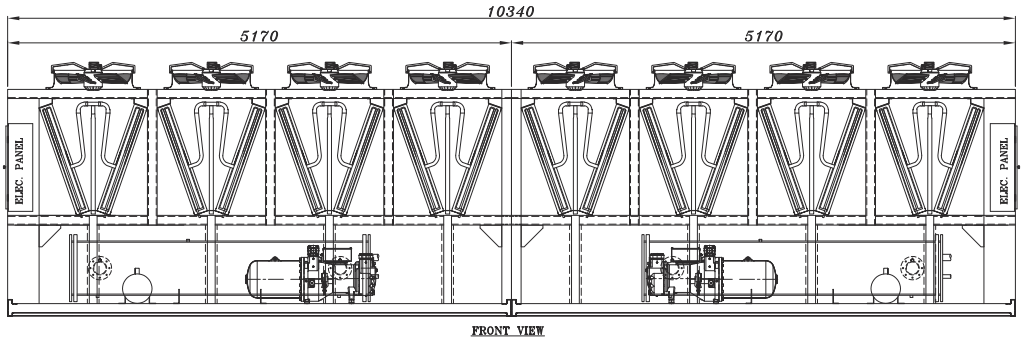
TOP VIEW

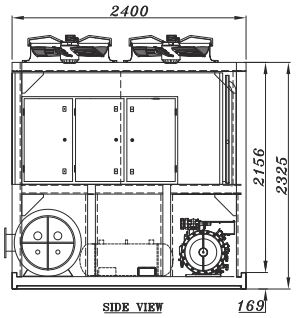
HLCA-250-2(2*470)

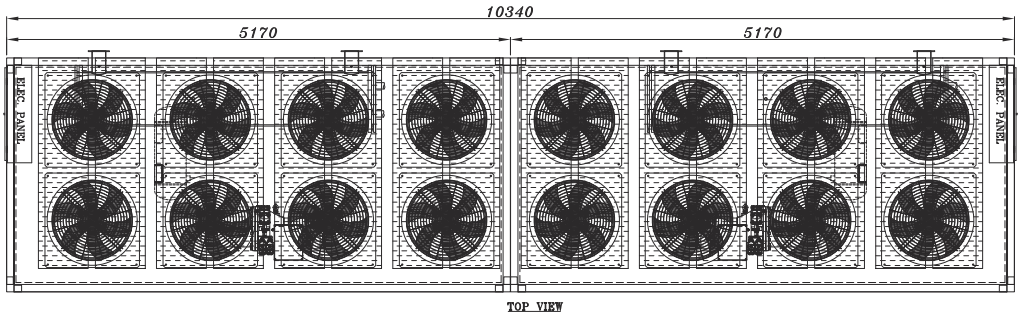
HLCA-220-2(2*410)

HLCA-280-2(2*535)

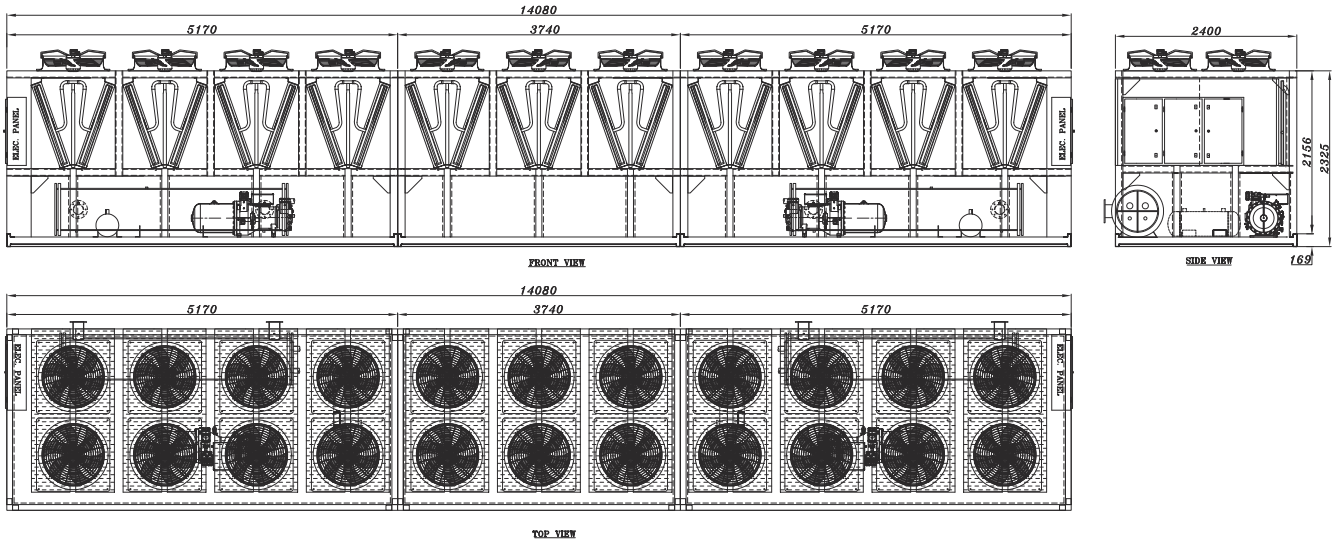
HLCA-320-2(2*470)







HLCA - 280 -2 (2*535)



HLCA - 320 -2 (2*615)

HLCA - 420 -2 (2*615)


DuPont
Freon 22
DuPont
Freon 22
DuPont
Freon 22


Copeland Scroll

ENGINEERING SPECIFICATIONS-50 HZ (R-22)-COPELAND

Model	HLCA	HLCA-5-1	HLCA-6-1	HLCA-7-1	HCLA-8-1	HLCA-9-1	HLCA-10-1
cooling capacity	TR	3.72	4.55	5.12	5.97	6.80	7.99
	kW	13.10	16.00	18.00	21.00	23.90	28.10
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	1.70	1.80	1.80	2.70	3.4	3.4
Condenser Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins						
Area	ft^2	14.20	14.20	14.20	28.41	28.41	28.41
	m^2	1.32	1.32	1.32	2.64	2.64	2.64
Condenser Fan (800)	Propeller direct drive 720 rpm				Propeller direct drive 885 rpm		
QTY		1	1	1	1	1	1
Airflow Rate	cfm	9377	8790	8674	28563	28563	28563
	l/s	4444	4166	4111	13537	13537	13537
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected						
Size	kW	1.19	1.19	1.19	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube						
QTY	1						
Ref. Circuits		1	1	1	1	1	1
Water Volume	GPM	8.94	10.92	12.28	14.33	16.31	19.18
	Litre/s	0.56	0.69	0.77	0.90	1.03	1.21
Refrigerant Charge (R22)(Approx)	Lb	12.1	14.5	17.0	19.4	21.8	22.3
	Kg	5.5	6.6	7.7	8.8	9.9	10.1
Operating Weight (Approx)	Lb	1433	1433	1433	1543	1543	1763
	Kg	650	650	650	700	700	800

Model	HLCA	HLCA-12-1	HLCA-13-1	HLCA-15-1	HLCA-20-1	HLCA-25-1	HLCA-30-1
cooling capacity	TR	9.16	9.67	11.66	15.27	18.97	23.57
	kW	32.20	34.00	41.00	53.70	66.70	82.90
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 Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins						
Area	ft^2	28.41	28.41	49.71	49.71	49.71	49.71
	m^2	2.64	2.64	4.62	4.62	4.62	4.62
Condenser Fan (800)	Propeller direct drive 885 rpm						
QTY		1	1	2	2	2	4
Airflow Rate	cfm	12894	12894	26957	26375	25202	52750
	l/s	6111	6111	12776	12500	11944	25000
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected						
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube						
QTY	1						
Ref. Circuits		1	1	1	1	1	1
Water Volume	GPM	21.97	23.20	27.98	36.65	45.52	56.57
	Litre/s	1.39	1.46	1.77	2.31	2.87	3.57
Refrigerant Charge (R22)(Approx)	Lb	29.1	31.5	36.4	48.5	60.6	72.7
	Kg	13.2	14.3	16.5	22	27.5	33
Operating Weight (Approx)	Lb	1763	1763	2094	2645	2755	3526
	Kg	800	800	950	1200	1250	1600

Model	HLCA	HCLA-16-2	HLCA-18-2	HLCA-20-2	HLCA-24-2	HLCA-26-2	HLCA-30-2	HLCA-40-2	HLCA-50-2	HLCA-60-2
cooling capacity	TR	12.00	13.59	15.98	18.31	19.34	23.32	30.54	37.93	47.14
	kW	42.2	47.80	56.20	64.40	68.00	82.00	107.40	133.40	165.80
Compressor	Copeland Scroll									
QTY		2	2	2	2	2	2	2	2	2
Oil Charge	USGal	1.43	1.80	1.80	1.80	1.80	2.06	2.48	3.59	3.33
	Litre	5.4	6.8	6.8	6.8	6.8	7.8	9.4	13.6	12.6
Condenser Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins									
Area	ft^2	56.813	56.81	56.81	56.81	56.81	99.42	99.42	99.42	149.13
	m^2	5.28	5.28	5.28	5.28	5.28	9.24	9.24	9.24	13.86
Condenser Fan (800)	Propeller direct drive 885 rpm									
QTY		2	2	2	2	2	4	4	4	6
Airflow Rate	cfm	26957	26957	25788	25788	25788	52750	51577	50404	77365
	l/s	12776	12776	12222	12222	12222	25000	24444	23888	36666
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected									
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube									
QTY	1									
Ref. Circuits		2	2	2	2	2	2	2	2	2
Water Volume	GPM	28.66	32.62	38.35	43.95	46.41	55.96	73.29	91.04	113.15
	Litre/s	1.81	2.06	2.42	2.77	2.93	3.53	4.62	5.74	7.14
Refrigerant Charge (R22)(Approx)	Lb	38.8	43.6	44.5	58.2	63.0	72.7	97.0	121.2	145.5
	Kg	17.6	19.8	20.2	26.4	28.6	33	44	55	66
Operating Weight (Approx)	Lb	2535	2535	2645	2645	3526	4408	4518	5510	2975
	Kg	1150	1150	1200	1200	1600	2000	2050	2500	1350

Model	HLCA	HLCA-20-4	HLCA-24-4	HLCA-28-4	HCLA-32-4	HLCA-36-4	HLCA-40-4
cooling capacity	TR	14.90	18.20	20.47	23.88	27.18	31.96
	kW	52.40	64.00	72.00	84.00	95.60	112.40
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	6.80	7.20	7.20	10.80	13.6	13.6
Condenser Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins						
Area	ft^2	56.81	56.81	56.81	99.42	99.42	99.42
	m^2	5.28	5.28	5.28	9.24	9.24	9.24
Condenser Fan (800)	Propeller direct drive 885 rpm						
QTY		2	2	2	4	4	4
Airflow Rate	cfm	26957	25202	25788	52750	52750	51577
	l/s	12776	11944	12222	25000	25000	24444
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected						
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube						
QTY	1						
Ref. Circuits		2	2	2	2	2	2
Water Volume	GPM	35.76	43.68	49.13	57.32	65.24	76.70
	Litre/s	2.26	2.76	3.10	3.62	4.12	4.84
Refrigerant Charge (R22)(Approx)	Lb	24.24	29.09	33.94	38.79	43.64	44.52
	Kg	11.00	13.20	15.40	17.60	19.80	20.20
Operating Weight (Approx)	Lb	3196	3196	4077	4077	4298	4408
	Kg	1450	1450	1850	1850	1950	2000

Model	HLCA	HLCA-48-4	HLCA-52-4	HLCA- 60-4	HLCA-80-4	HLCA-100-4	HLCA-120-4
cooling capacity	TR	36.62	38.67	46.63	61.08	75.86	94.29
	kW	128.80	136.00	164.00	214.80	266.80	331.60
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 Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins						
Area	ft^2	99.42	99.42	149.13	149.13	198.84	248.56
	m^2	9.24	9.24	13.86	13.86	18.48	23.1
Condenser Fan (800)	Propeller direct drive 885 rpm						
QTY		4	4	6	6	8	10
Airflow Rate	cfm	50404	51577	77365	73846	100807	126009
	l/s	23888	24444	36666	34998	47776	59720
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected						
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube						
QTY	1						
Ref. Circuits		2	2	2	2	2	2
Water Volume	GPM	87.90	92.81	111.92	146.59	182.07	226.29
	Litre/s	5.55	5.86	7.06	9.25	11.49	14.28
Refrigerant Charge (R22)(Approx)	Lb	116.4	126.1	145.5	194.0	242.4	290.9
	Kg	52.8	57.2	66	88	110	132
Operating Weight (Approx)	Lb	4628	4628	5400	7053	7714	8485
	Kg	2100	2100	2450	3200	3500	3850

CAPACITY RATING(50 HZ)-R 22

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-22)											
		95°F (35°C)				104°F (40°C)				113°F (45°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-5-1	41.9	3.48	3.55	8.36	0.30	3.27	3.94	7.85	0.37	3.01	4.39	7.21	0.40
	5.5	12.25		0.53	1.00	11.5		0.50	1.20	10.57		0.46	1.30
	43.88	3.64	3.57	8.74	0.30	3.41	3.95	8.19	0.37	3.20	4.4	7.68	0.40
	6.6	12.8		0.55	1.00	12		0.52	1.20	11.25		0.48	1.30
	44.96	3.72	3.58	8.94	0.30	3.50	3.96	8.39	0.37	3.28	4.41	7.88	0.40
	7.2	13.1		0.56	1.00	12.3		0.53	1.20	11.55		0.50	1.30
	45.32	3.75	3.58	9.01	0.34	3.53	3.96	8.46	0.40	3.31	4.41	7.95	0.43
	7.4	13.2		0.57	1.10	12.4		0.53	1.30	11.65		0.50	1.40
HLCA-6-1	41.9	4.28	4.3	10.27	0.34	4.04	4.78	9.69	0.40	3.78	5.31	9.08	0.43
	5.5	15.05		0.65	1.10	14.2		0.61	1.30	13.3		0.57	1.40
	43.88	4.45	4.3	10.68	0.37	4.21	4.78	10.10	0.43	3.94	5.31	9.45	0.46
	6.6	15.65		0.67	1.20	14.8		0.64	1.40	13.85		0.60	1.50
	44.96	4.55	4.3	10.92	0.37	4.29	4.78	10.30	0.43	4.04	5.3	9.69	0.46
	7.2	16		0.69	1.20	15.1		0.65	1.40	14.2		0.61	1.50
	45.32	4.58	4.3	10.99	0.40	4.32	4.78	10.37	0.46	4.07	5.3	9.76	0.49
	7.4	16.1		0.69	1.30	15.2		0.65	1.50	14.3		0.62	1.60
HLCA-7-1	41.9	4.81	4.74	11.53	0.43	4.54	5.26	10.88	0.49	4.24	5.84	10.17	0.52
	5.5	16.9		0.73	1.40	15.95		0.69	1.60	14.9		0.64	1.70
	43.88	5.02	4.75	12.04	0.43	4.73	5.27	11.36	0.49	4.42	5.85	10.61	0.52
	6.6	17.65		0.76	1.40	16.65		0.72	1.60	15.55		0.67	1.70
	44.96	5.12	4.75	12.28	0.43	4.83	5.27	11.60	0.49	4.54	5.85	10.88	0.52
	7.2	18		0.77	1.40	17		0.73	1.60	15.95		0.69	1.70
	45.32	5.16	4.75	12.39	0.46	4.88	5.27	11.70	0.52	4.56	5.85	10.95	0.55
	7.4	18.15		0.78	1.50	17.15		0.74	1.70	16.05		0.69	1.80
HCLA-8-1	41.9	5.62	5.47	13.48	0.52	5.27	6.1	12.66	0.58	4.90	6.83	11.77	0.61
	5.5	19.75		0.85	1.70	18.55		0.80	1.90	17.25		0.74	2.00
	43.88	5.86	5.47	14.06	0.55	5.50	6.1	13.20	0.61	5.13	6.83	12.32	0.64
	6.6	20.6		0.89	1.80	19.35		0.83	2.00	18.05		0.78	2.10
	44.96	6.00	5.48	14.40	0.58	5.64	6.11	13.55	0.64	5.26	6.83	12.62	0.67
	7.2	21.1		0.91	1.90	19.85		0.85	2.10	18.5		0.80	2.20
	45.32	6.03	5.48	14.47	0.58	5.69	6.11	13.65	0.64	5.30	6.83	12.73	0.67
	7.4	21.2		0.91	1.90	20		0.86	2.10	18.65		0.80	2.20
HLCA-9-1	41.9	6.40	6.08	15.35	0.61	6.06	6.78	14.54	0.67	5.69	7.58	13.65	0.70
	5.5	22.5		0.97	2.00	21.3		0.92	2.20	20		0.86	2.30
	43.88	6.65	6.1	15.97	0.61	6.28	6.78	15.08	0.67	5.91	7.59	14.19	0.70
	6.6	23.4		1.01	2.00	22.1		0.95	2.20	20.8		0.90	2.30
	44.96	6.80	6.1	16.31	0.61	6.43	6.79	15.42	0.67	6.06	7.59	14.54	0.70
	7.2	23.9		1.03	2.00	22.6		0.97	2.20	21.3		0.92	2.30
	45.32	6.85	6.11	16.45	0.61	6.48	6.79	15.56	0.67	6.11	7.59	14.67	0.70
	7.4	24.1		1.04	2.00	22.8		0.98	2.20	21.5		0.93	2.30
HLCA-10-1	41.9	7.51	7.21	18.02	0.61	7.11	8.07	17.06	0.67	6.68	9.06	16.04	0.70
	5.5	26.4		1.14	2.00	25		1.08	2.20	23.5		1.01	2.30
	43.88	7.82	7.22	18.77	0.64	7.42	8.08	17.81	0.70	6.97	9.07	16.72	0.73
	6.6	27.5		1.18	2.10	26.1		1.12	2.30	24.5		1.05	2.40
	44.96	7.99	7.23	19.18	0.64	7.56	8.09	18.15	0.70	7.14	9.07	17.13	0.73
	7.2	28.1		1.21	2.10	26.6		1.15	2.30	25.1		1.08	2.40
	45.32	8.05	7.23	19.31	0.64	7.62	8.09	18.29	0.70	7.19	9.07	17.27	0.73
	7.4	28.3		1.22	2.10	26.8		1.15	2.30	25.3		1.09	2.40

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-22)											
		95°F (35°C)				104°F (40°C)				113°F (45°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-12-1	41.9	8.62	8.13	20.68	0.67	8.10	9.08	19.45	0.73	7.54	10.15	18.08	0.76
	5.5	30.3		1.30	2.20	28.5		1.23	2.40	26.5		1.14	2.50
	43.88	8.96	8.15	21.50	0.70	8.42	9.09	20.20	0.76	7.88	10.15	18.90	0.79
	6.6	31.5		1.36	2.30	29.6		1.27	2.50	27.7		1.19	2.60
	44.96	9.16	8.16	21.97	0.70	8.62	9.1	20.68	0.76	8.05	10.15	19.31	0.79
	7.2	32.2		1.39	2.30	30.3		1.30	2.50	28.3		1.22	2.60
	45.32	9.21	8.16	22.11	0.70	8.67	9.1	20.81	0.76	8.10	10.15	19.45	0.79
	7.4	32.4		1.39	2.30	30.5		1.31	2.50	28.5		1.23	2.60
HLCA-13-1	41.9	9.30	9.15	22.32	0.70	8.67	10.15	20.81	0.76	7.99	11.3	19.18	0.79
	5.5	32.7		1.41	2.30	30.5		1.31	2.50	28.1		1.21	2.60
	43.88	9.67	9.18	23.20	0.73	9.07	10.15	21.77	0.79	8.36	11.3	20.06	0.82
	6.6	34		1.46	2.40	31.9		1.37	2.60	29.4		1.27	2.70
	44.96	9.90	9.2	23.75	0.76	9.27	10.15	22.25	0.82	8.59	11.3	20.61	0.85
	7.2	34.8		1.50	2.50	32.6		1.40	2.70	30.2		1.30	2.80
	45.32	9.95	9.21	23.88	0.76	9.35	10.15	22.45	0.82	8.64	11.3	20.75	0.85
	7.4	35		1.51	2.50	32.9		1.42	2.70	30.4		1.31	2.80
HLCA-15-1	41.9	10.46	11.1	25.11	0.94	10.26	12.3	24.64	1.01	9.50	13.7	22.79	1.04
	5.5	36.8		1.58	3.10	36.1		1.55	3.30	33.4		1.44	3.40
	43.88	11.46	11.1	27.50	0.98	10.75	12.3	25.80	1.04	9.92	13.7	23.82	1.07
	6.6	40.3		1.74	3.20	37.8		1.63	3.40	34.9		1.50	3.50
	44.96	11.72	11.1	28.12	1.01	11.00	12.35	26.41	1.07	10.18	13.7	24.43	1.10
	7.2	41.2		1.77	3.30	38.7		1.67	3.50	35.8		1.54	3.60
	45.32	11.80	14	28.32	1.07	11.09	12.35	26.61	1.13	10.26	13.7	24.64	1.16
	7.4	41.5		1.79	3.50	39		1.68	3.70	36.1		1.55	3.80
HLCA-20-1	41.9	14.39	14.45	34.53	0.52	13.62	16	32.69	0.58	12.77	17.8	30.64	0.61
	5.5	50.6		2.18	1.70	47.9		2.06	1.90	44.9		1.93	2.00
	43.88	14.96	14.5	35.90	0.55	14.19	16.05	34.05	0.61	13.34	17.8	32.01	0.64
	6.6	52.6		2.26	1.80	49.9		2.15	2.00	46.9		2.02	2.10
	44.96	15.27	14.5	36.65	0.61	14.50	16.05	34.80	0.67	13.65	17.85	32.76	0.70
	7.2	53.7		2.31	2.00	51		2.20	2.20	48		2.07	2.30
	45.32	15.38	14.5	36.92	0.67	14.62	16.05	35.08	0.73	13.76	17.85	33.03	0.76
	7.4	54.1		2.33	2.20	51.4		2.21	2.40	48.4		2.08	2.50
HLCA-25-1	41.9	17.77	17.85	42.65	0.76	16.78	19.9	40.26	0.82	15.67	22.2	37.60	0.85
	5.5	62.5		2.69	2.50	59		2.54	2.70	55.1		2.37	2.80
	43.88	18.54	17.9	44.49	0.79	17.49	19.95	41.97	0.85	16.21	22.2	38.90	0.88
	6.6	65.2		2.81	2.60	61.5		2.65	2.80	57		2.45	2.90
	44.96	18.97	17.9	45.52	0.85	17.91	19.95	42.99	0.91	16.78	22.2	40.26	0.94
	7.2	66.7		2.87	2.80	63		2.71	3.00	59		2.54	3.10
	45.32	19.11	17.95	45.86	0.91	18.06	19.95	43.33	0.98	16.92	22.2	40.60	1.01
	7.4	67.2		2.89	3.00	63.5		2.73	3.20	59.5		2.56	3.30
HLCA-30-1	41.9	22.21	21.8	53.30	0.98	21.07	24.1	50.57	1.04	19.82	26.6	47.57	1.07
	5.5	78.1		3.36	3.20	74.1		3.19	3.40	69.7		3.00	3.50
	43.88	23.09	21.9	55.41	1.07	21.92	24.2	52.62	1.13	20.64	26.7	49.54	1.16
	6.6	81.2		3.50	3.50	77.1		3.32	3.70	72.6		3.13	3.80
	44.96	23.57	21.9	56.57	1.13	22.41	24.2	53.78	1.19	21.13	26.8	50.70	1.22
	7.2	82.9		3.57	3.70	78.8		3.39	3.90	74.3		3.20	4.00
	45.32	23.74	21.9	56.98	1.19	22.55	24.2	54.12	1.25	21.27	26.8	51.05	1.28
	7.4	83.5		3.60	3.90	79.3		3.41	4.10	74.8		3.22	4.20

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-22)											
		95°F (35°C)				104°F (40°C)				113°F (45°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HCLA-16-2	41.9	11.23	10.94	26.96	1.04	10.55	12.2	25.32	1.16	9.81	13.66	23.54	1.22
	5.5	39.5		1.70	3.40	37.1		1.60	3.80	34.5		1.49	4.00
	43.88	11.72	10.94	28.12	1.10	11.00	12.2	26.41	1.22	10.26	13.66	24.64	1.28
	6.6	41.2		1.77	3.60	38.7		1.67	4.00	36.1		1.55	4.20
	44.96	12.00	10.96	28.80	1.16	11.29	12.22	27.09	1.28	10.52	13.66	25.25	1.34
	7.2	42.2		1.82	3.80	39.7		1.71	4.20	37		1.59	4.40
	45.32	12.06	10.96	28.93	1.16	11.37	12.22	27.30	1.28	10.61	13.66	25.45	1.34
	7.4	42.4		1.83	3.80	40		1.72	4.20	37.3		1.61	4.40
HLCA-18-2	41.9	12.80	12.16	30.71	1.22	12.11	13.56	29.07	1.34	11.37	15.16	27.30	1.40
	5.5	45		1.94	4.00	42.6		1.83	4.40	40		1.72	4.60
	43.88	13.31	12.2	31.94	1.22	12.57	13.56	30.16	1.34	11.83	15.18	28.39	1.40
	6.6	46.8		2.01	4.00	44.2		1.90	4.40	41.6		1.79	4.60
	44.96	13.59	12.2	32.62	1.22	12.85	13.58	30.85	1.34	12.11	15.18	29.07	1.40
	7.2	47.8		2.06	4.00	45.2		1.95	4.40	42.6		1.83	4.60
	45.32	13.71	12.22	32.89	1.22	12.97	13.58	31.12	1.34	12.23	15.18	29.34	1.40
	7.4	48.2		2.08	4.00	45.6		1.96	4.40	43		1.85	4.60
HLCA-20-2	41.9	15.01	14.42	36.03	1.22	14.22	16.14	34.12	1.34	13.36	18.12	32.07	1.40
	5.5	52.8		2.27	4.00	50		2.15	4.40	47		2.02	4.60
	43.88	15.64	14.44	37.53	1.28	14.84	16.16	35.62	1.40	13.93	18.14	33.44	1.46
	6.6	55		2.37	4.20	52.2		2.25	4.60	49		2.11	4.80
	44.96	15.98	14.46	38.35	1.28	15.13	16.18	36.31	1.40	14.27	18.14	34.26	1.46
	7.2	56.2		2.42	4.20	53.2		2.29	4.60	50.2		2.16	4.80
	45.32	16.09	14.46	38.63	1.28	15.24	16.18	36.58	1.40	14.39	18.14	34.53	1.46
	7.4	56.6		2.44	4.20	53.6		2.31	4.60	50.6		2.18	4.80
HLCA-24-2	41.9	17.23	16.26	41.36	1.34	16.21	18.16	38.90	1.46	15.07	20.3	36.17	1.52
	5.5	60.6		2.61	4.40	57		2.45	4.80	53		2.28	5.00
	43.88	17.91	16.3	42.99	1.40	16.83	18.18	40.40	1.52	15.75	20.3	37.81	1.58
	6.6	63		2.71	4.60	59.2		2.55	5.00	55.4		2.39	5.20
	44.96	18.31	16.32	43.95	1.40	17.23	18.2	41.36	1.52	16.09	20.3	38.63	1.58
	7.2	64.4		2.77	4.60	60.6		2.61	5.00	56.6		2.44	5.20
	45.32	18.43	16.32	44.22	1.40	17.35	18.2	41.63	1.52	16.21	20.3	38.90	1.58
	7.4	64.8		2.79	4.60	61		2.63	5.00	57		2.45	5.20

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-22)											
		95°F (35°C)				104°F (40°C)				113°F (45°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-26-2	41.9	18.60	18.3	44.63	1.40	17.35	20.3	41.63	1.52	15.98	22.6	38.35	1.58
	5.5	65.4		2.82	4.60	61		2.63	5.00	56.2		2.42	5.20
	43.88	19.34	18.36	46.41	1.46	18.14	20.3	43.54	1.58	16.72	22.6	40.13	1.65
	6.6	68		2.93	4.80	63.8		2.75	5.20	58.8		2.53	5.40
	44.96	19.79	18.4	47.50	1.52	18.54	20.3	44.49	1.65	17.17	22.6	41.22	1.71
	7.2	69.6		3.00	5.00	65.2		2.81	5.40	60.4		2.60	5.60
	45.32	19.90	18.42	47.77	1.52	18.71	20.3	44.90	1.65	17.29	22.6	41.49	1.71
	7.4	70		3.01	5.00	65.8		2.83	5.40	60.8		2.62	5.60
HLCA-30-2	41.9	20.93	22.2	50.23	1.89	20.53	24.6	49.27	2.01	18.99	27.4	45.59	2.07
	5.5	73.6		3.17	6.20	72.2		3.11	6.60	66.8		2.88	6.80
	43.88	22.92	22.2	55.00	1.95	21.50	24.6	51.59	2.07	19.85	27.4	47.63	2.13
	6.6	80.6		3.47	6.40	75.6		3.25	6.80	69.8		3.01	7.00
	44.96	23.43	22.2	56.23	2.01	22.01	24.7	52.82	2.13	20.36	27.4	48.86	2.19
	7.2	82.4		3.55	6.60	77.4		3.33	7.00	71.6		3.08	7.20
	45.32	23.60	28	56.64	2.13	22.18	24.7	53.23	2.26	20.53	27.4	49.27	2.32
	7.4	83		3.57	7.00	78		3.36	7.40	72.2		3.11	7.60
HLCA-40-2	41.9	28.78	28.9	69.06	1.04	27.24	32	65.38	1.16	25.53	35.6	61.28	1.22
	5.5	101.2		4.36	3.40	95.8		4.12	3.80	89.8		3.87	4.00
	43.88	29.91	29	71.79	1.10	28.38	32.1	68.11	1.22	26.67	35.6	64.01	1.28
	6.6	105.2		4.53	3.60	99.8		4.30	4.00	93.8		4.04	4.20
	44.96	30.54	29	73.29	1.22	29.00	32.1	69.61	1.34	27.30	35.7	65.51	1.40
	7.2	107.4		4.62	4.00	102		4.39	4.40	96		4.13	4.60
	45.32	30.77	29	73.84	1.34	29.23	32.1	70.15	1.46	27.52	35.7	66.06	1.52
	7.4	108.2		4.66	4.40	102.8		4.43	4.80	96.8		4.17	5.00
HLCA-50-2	41.9	35.54	35.7	85.30	1.52	33.55	39.8	80.53	1.65	31.33	44.4	75.20	1.71
	5.5	125		5.38	5.00	118		5.08	5.40	110.2		4.74	5.60
	43.88	37.08	35.8	88.99	1.58	34.97	39.9	83.94	1.71	32.42	44.4	77.80	1.77
	6.6	130.4		5.61	5.20	123		5.30	5.60	114		4.91	5.80
	44.96	37.93	35.8	91.04	1.71	35.83	39.9	85.99	1.83	33.55	44.4	80.53	1.89
	7.2	133.4		5.74	5.60	126		5.42	6.00	118		5.08	6.20
	45.32	38.22	35.9	91.72	1.83	36.11	39.9	86.67	1.95	33.84	44.4	81.21	2.01
	7.4	134.4		5.79	6.00	127		5.47	6.40	119		5.12	6.60
HLCA-60-2	41.9	44.41	43.6	106.60	1.95	42.14	48.2	101.14	2.07	39.64	53.2	95.13	2.13
	5.5	156.2		6.73	6.40	148.2		6.38	6.80	139.4		6.00	7.00
	43.88	46.18	43.8	110.83	2.13	43.85	48.4	105.23	2.26	41.29	53.4	99.09	2.32
	6.6	162.4		6.99	7.00	154.2		6.64	7.40	145.2		6.25	7.60
	44.96	47.14	43.8	113.15	2.26	44.81	48.4	107.55	2.38	42.25	53.6	101.41	2.44
	7.2	165.8		7.14	7.40	157.6		6.79	7.80	148.6		6.40	8.00
	45.32	47.49	43.8	113.97	2.38	45.10	48.4	108.23	2.50	42.54	53.6	102.09	2.56
	7.4	167		7.19	7.80	158.6		6.83	8.20	149.6		6.44	8.40

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-22)											
		95°F (35°C)				104°F (40°C)				113°F (45°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-20-4	41.9	13.93	14.2	33.44	1.22	13.08	15.76	31.39	1.46	12.02	17.56	28.85	1.58
	5.5	49		2.11	4.00	46		1.98	4.80	42.28		1.82	5.20
	43.88	14.56	14.28	34.94	1.22	13.65	15.8	32.76	1.46	12.80	17.6	30.71	1.58
	6.6	51.2		2.20	4.00	48		2.07	4.80	45		1.94	5.20
	44.96	14.90	14.32	35.76	1.22	13.99	15.84	33.58	1.46	13.14	17.64	31.53	1.58
	7.2	52.4		2.26	4.00	49.2		2.12	4.80	46.2		1.99	5.20
	45.32	15.01	14.32	36.03	1.34	14.10	15.84	33.85	1.58	13.25	17.64	31.80	1.71
	7.4	52.8		2.27	4.40	49.6		2.14	5.20	46.6		2.01	5.60
HLCA-24-4	41.9	17.12	17.2	41.08	1.34	16.15	19.12	38.76	1.58	15.13	21.24	36.31	1.71
	5.5	60.2		2.59	4.40	56.8		2.45	5.20	53.2		2.29	5.60
	43.88	17.80	17.2	42.72	1.46	16.83	19.12	40.40	1.71	15.75	21.24	37.81	1.83
	6.6	62.6		2.70	4.80	59.2		2.55	5.60	55.4		2.39	6.00
	44.96	18.20	17.2	43.68	1.46	17.17	19.12	41.22	1.71	16.15	21.2	38.76	1.83
	7.2	64		2.76	4.80	60.4		2.60	5.60	56.8		2.45	6.00
	45.32	18.31	17.2	43.95	1.58	17.29	19.12	41.49	1.83	16.26	21.2	39.03	1.95
	7.4	64.4		2.77	5.20	60.8		2.62	6.00	57.2		2.46	6.40
HLCA-28-4	41.9	19.22	18.96	46.13	1.71	18.14	21.04	43.54	1.95	16.95	23.36	40.67	2.07
	5.5	67.6		2.91	5.60	63.8		2.75	6.40	59.6		2.57	6.80
	43.88	20.07	19	48.18	1.71	18.94	21.08	45.45	1.95	17.69	23.4	42.45	2.07
	6.6	70.6		3.04	5.60	66.6		2.87	6.40	62.2		2.68	6.80
	44.96	20.47	19	49.13	1.71	19.34	21.08	46.41	1.95	18.14	23.4	43.54	2.07
	7.2	72		3.10	5.60	68		2.93	6.40	63.8		2.75	6.80
	45.32	20.64	19	49.54	1.83	19.51	21.08	46.81	2.07	18.25	23.4	43.81	2.19
	7.4	72.6		3.13	6.00	68.6		2.95	6.80	64.2		2.76	7.20
HCLA-32-4	41.9	22.46	21.88	53.91	2.07	21.10	24.4	50.64	2.32	19.62	27.32	47.09	2.44
	5.5	79		3.40	6.80	74.2		3.19	7.60	69		2.97	8.00
	43.88	23.43	21.88	56.23	2.19	22.01	24.4	52.82	2.44	20.53	27.32	49.27	2.56
	6.6	82.4		3.55	7.20	77.4		3.33	8.00	72.2		3.11	8.40
	44.96	24.00	21.92	57.60	2.32	22.58	24.44	54.18	2.56	21.04	27.32	50.50	2.68
	7.2	84.4		3.63	7.60	79.4		3.42	8.40	74		3.19	8.80
	45.32	24.11	21.92	57.87	2.32	22.75	24.44	54.59	2.56	21.21	27.32	50.91	2.68
	7.4	84.8		3.65	7.60	80		3.44	8.40	74.6		3.21	8.80
HLCA-36-4	41.9	25.59	24.32	61.42	2.44	24.23	27.12	58.14	2.68	22.75	30.32	54.59	2.80
	5.5	90		3.87	8.00	85.2		3.67	8.80	80		3.44	9.20
	43.88	26.61	24.4	63.88	2.44	25.14	27.12	60.33	2.68	23.66	30.36	56.78	2.80
	6.6	93.6		4.03	8.00	88.4		3.81	8.80	83.2		3.58	9.20
	44.96	27.18	24.4	65.24	2.44	25.70	27.16	61.69	2.68	24.23	30.36	58.14	2.80
	7.2	95.6		4.12	8.00	90.4		3.89	8.80	85.2		3.67	9.20
	45.32	27.41	24.44	65.79	2.44	25.93	27.16	62.24	2.68	24.45	30.36	58.69	2.80
	7.4	96.4		4.15	8.00	91.2		3.93	8.80	86		3.70	9.20
HLCA-40-4	41.9	30.03	28.84	72.06	2.44	28.43	32.28	68.24	2.68	26.73	36.24	64.15	2.80
	5.5	105.6		4.55	8.00	100		4.31	8.80	94		4.05	9.20
	43.88	31.28	28.88	75.07	2.56	29.69	32.32	71.25	2.80	27.87	36.28	66.88	2.93
	6.6	110		4.74	8.40	104.4		4.49	9.20	98		4.22	9.60
	44.96	31.96	28.92	76.70	2.56	30.25	32.36	72.61	2.80	28.55	36.28	68.52	2.93
	7.2	112.4		4.84	8.40	106.4		4.58	9.20	100.4		4.32	9.60
	45.32	32.19	28.92	77.25	2.56	30.48	32.36	73.16	2.80	28.78	36.28	69.06	2.93
	7.4	113.2		4.87	8.40	107.2		4.62	9.20	101.2		4.36	9.60

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-22)											
		95°F (35°C)				104°F (40°C)				113°F (45°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-48-4	41.9	34.46	32.52	82.71	2.68	32.42	36.32	77.80	2.93	30.14	40.6	72.34	3.05
	5.5	121.2		5.22	8.80	114		4.91	9.60	106		4.56	10.00
	43.88	35.83	32.6	85.99	2.80	33.67	36.36	80.80	3.05	31.51	40.6	75.61	3.17
	6.6	126		5.42	9.20	118.4		5.10	10.00	110.8		4.77	10.40
	44.96	36.62	32.64	87.90	2.80	34.46	36.4	82.71	3.05	32.19	40.6	77.25	3.17
	7.2	128.8		5.55	9.20	121.2		5.22	10.00	113.2		4.87	10.40
	45.32	36.85	32.64	88.44	2.80	34.69	36.4	83.26	3.05	32.42	40.6	77.80	3.17
	7.4	129.6		5.58	9.20	122		5.25	10.00	114		4.91	10.40
HLCA-52-4	41.9	37.19	36.6	89.26	2.80	34.69	40.6	83.26	3.05	31.96	45.2	76.70	3.17
	5.5	130.8		5.63	9.20	122		5.25	10.00	112.4		4.84	10.40
	43.88	38.67	36.72	92.81	2.93	36.28	40.6	87.08	3.17	33.44	45.2	80.25	3.29
	6.6	136		5.86	9.60	127.6		5.49	10.40	117.6		5.06	10.80
	44.96	39.58	36.8	94.99	3.05	37.08	40.6	88.99	3.29	34.35	45.2	82.44	3.41
	7.2	139.2		5.99	10.00	130.4		5.61	10.80	120.8		5.20	11.20
	45.32	39.81	36.84	95.54	3.05	37.42	40.6	89.81	3.29	34.58	45.2	82.98	3.41
	7.4	140		6.03	10.00	131.6		5.67	10.80	121.6		5.24	11.20
HLCA-60-4	41.9	41.86	44.4	100.45	3.78	41.06	49.2	98.54	4.02	37.99	54.8	91.17	4.15
	5.5	147.2		6.34	12.40	144.4		6.22	13.20	133.6		5.75	13.60
	43.88	45.84	44.4	110.01	3.90	42.99	49.2	103.18	4.15	39.69	54.8	95.27	4.27
	6.6	161.2		6.94	12.80	151.2		6.51	13.60	139.6		6.01	14.00
	44.96	46.86	44.4	112.46	4.02	44.02	49.4	105.64	4.27	40.72	54.8	97.72	4.39
	7.2	164.8		7.10	13.20	154.8		6.66	14.00	143.2		6.17	14.40
	45.32	47.20	56	113.28	4.27	44.36	49.4	106.46	4.51	41.06	54.8	98.54	4.63
	7.4	166		7.15	14.00	156		6.72	14.80	144.4		6.22	15.20
HLCA-80-4	41.9	57.55	57.8	138.12	2.07	54.48	64	130.75	2.32	51.07	71.2	122.56	2.44
	5.5	202.4		8.71	6.80	191.6		8.25	7.60	179.6		7.73	8.00
	43.88	59.83	58	143.58	2.19	56.76	64.2	136.21	2.44	53.34	71.2	128.02	2.56
	6.6	210.4		9.06	7.20	199.6		8.59	8.00	187.6		8.08	8.40
	44.96	61.08	58	146.59	2.44	58.01	64.2	139.22	2.68	54.59	71.4	131.03	2.80
	7.2	214.8		9.25	8.00	204		8.78	8.80	192		8.27	9.20
	45.32	61.53	58	147.68	2.68	58.46	64.2	140.31	2.93	55.05	71.4	132.12	3.05
	7.4	216.4		9.32	8.80	205.6		8.85	9.60	193.6		8.34	10.00
HLCA-100-4	41.9	71.09	71.4	170.61	3.05	67.11	79.6	161.05	3.29	62.67	88.8	150.41	3.41
	5.5	250		10.76	10.00	236		10.16	10.80	220.4		9.49	11.20
	43.88	74.16	71.6	177.98	3.17	69.95	79.8	167.88	3.41	64.83	88.8	155.59	3.54
	6.6	260.8		11.23	10.40	246		10.59	11.20	228		9.82	11.60
	44.96	75.86	71.6	182.07	3.41	71.65	79.8	171.97	3.66	67.11	88.8	161.05	3.78
	7.2	266.8		11.49	11.20	252		10.85	12.00	236		10.16	12.40
	45.32	76.43	71.8	183.44	3.66	72.22	79.8	173.34	3.90	67.67	88.8	162.42	4.02
	7.4	268.8		11.57	12.00	254		10.94	12.80	238		10.25	13.20
HLCA-120-4	41.9	88.83	87.2	213.19	3.90	84.28	96.4	202.27	4.15	79.28	106.4	190.26	4.27
	5.5	312.4		13.45	12.80	296.4		12.76	13.60	278.8		12.00	14.00
	43.88	92.36	87.6	221.65	4.27	87.69	96.8	210.46	4.51	82.57	106.8	198.18	4.63
	6.6	324.8		13.98	14.00	308.4		13.28	14.80	290.4		12.50	15.20
	44.96	94.29	87.6	226.29	4.51	89.63	96.8	215.10	4.75	84.51	107.2	202.82	4.88
	7.2	331.6		14.28	14.80	315.2		13.57	15.60	297.2		12.80	16.00
	45.32	94.97	87.6	227.93	4.75	90.19	96.8	216.47	5.00	85.08	107.2	204.18	5.12
	7.4	334		14.38	15.60	317.2		13.66	16.40	299.2		12.88	16.80

ENGINEERING SPECIFICATIONS (50 HZ) (R-22)											
chiller MODEL	no.of circuit	comp.oil charge (dm^3)	condenser coil					condenser fan			
			row	fpi	QTY	total heat rejection (kw)	total face area (m2)	size (mm)	QTY	total air flow rate (cfm)	motor power (kw)
HLCA-5-1	1	1.7	2	10	1	16.8	1.32	800	1	9417	1.19
HLCA-6-1	1	1.8	2	12	1	20.4	1.32	800	1	8828	1.19
HLCA-7-1	1	1.8	2	14	1	22.9	1.32	800	1	8710	1.19
HCLA-8-1	1	2.7	2	10	2	26.7	2*1.32	800	1	13537	1.7
HLCA-9-1	1	3.4	2	12	2	30.21	2*1.32	800	1	13537	1.7
HLCA-10-1	1	3.4	2	12	2	35.53	2*1.32	800	1	13537	1.7
HLCA-12-1	1	3.4	3	12	2	40.56	2*1.32	800	1	12948	1.7
HLCA-13-1	1	3.4	3	12	2	44.21	2*1.32	800	1	12948	1.7
HLCA-15-1	1	3.9	2	10	2	55.5	2*2.31	800	2	2*13537	2*1.7
HLCA-20-1	1	4.7	3	10	2	68.6	2*2.31	800	2	2*13243	2*1.7
HLCA-25-1	1	6.8	3	12	2	85.15	2*2.31	800	2	2*12654	2*1.7
HLCA-30-1	1	6.3	2	10	4	105.4	4*2.31	800	4	4*13243	4*1.7
HCLA-16-2	2	5.4	2	10	4	53.4	4*1.32	800	2	2*13537	2*1.7
HLCA-18-2	2	6.8	2	12	4	60.42	4*1.32	800	2	2*13537	2*1.7
HLCA-20-2	2	6.8	3	10	4	71.06	4*1.32	800	2	2*12948	2*1.7
HLCA-24-2	2	6.8	3	12	4	81.12	4*1.32	800	2	2*12948	2*1.7
HLCA-26-2	2	6.8	3	12	4	88.42	4*1.32	800	2	2*12948	2*1.7
HLCA-30-2	2	7.8	2	10	4	111	4*2.31	800	4	4*13243	4*1.7
HLCA-40-2	2	9.4	3	10	4	137.2	4*2.31	800	4	4*12948	4*1.7
HLCA-50-2	2	13.6	3	12	4	170.3	4*2.31	800	4	4*12654	4*1.7
HLCA-60-2	2	12.6	3	10	6	210.8	6*2.31	800	6	6*12948	6*1.7
HLCA-20-4	2	6.8	2	12	4	67.2	4*1.32	800	2	2*13537	2*1.7
HLCA-24-4	2	7.2	3	12	4	81.6	4*1.32	800	2	2*12654	2*1.7
HLCA-28-4	2	7.2	4	10	4	91.6	4*1.32	800	2	2*12948	2*1.7
HCLA-32-4	2	10.8	2	10	4	106.8	4*2.31	800	4	4*13243	4*1.7
HLCA-36-4	2	13.6	2	12	4	120.84	4*2.31	800	4	4*13243	4*1.7
HLCA-40-4	2	13.6	3	10	4	142.12	4*2.31	800	4	4*12948	4*1.7
HLCA-48-4	2	13.6	3	12	4	162.24	4*2.31	800	4	4*12654	4*1.7
HLCA-52-4	2	13.6	4	10	4	176.84	4*2.31	800	4	4*12948	4*1.7
HLCA-60-4	2	15.6	3	10	6	222	6*2.31	800	6	6*12948	6*1.7
HLCA-80-4	2	18.8	4	12	6	274.4	6*2.31	800	6	6*12360	6*1.7
HLCA-100-4	2	27.2	3	12	8	340.6	8*2.31	800	8	8*12654	8*1.7
HLCA-120-4	2	25.2	3	12	10	421.6	10*2.31	800	10	10*12654	10*1.7

ELECTRICAL DATA (R-22)				
chiller MODEL	Nominal Comp. power (HP)	MRA (Amp)	LRA (Amp)	RATE CONSE POWER (kw)
HLCA-5-1	5	10.12	65.5	4.6
HLCA-6-1	6	11.2	74	5.4
HLCA-7-1	7	12.83	101	5.7
HCLA-8-1	8	16.33	95	6.9
HLCA-9-1	9	17.53	111	8.2
HLCA-10-1	10	19.56	118	9.2
HLCA-12-1	12	21.41	118	10.0
HLCA-13-1	13	24.03	140	11.3
HLCA-15-1	15	33.12	174	17.2
HLCA-20-1	20	37.14	225	19.1
HLCA-25-1	25	45.56	272	23.1
HLCA-30-1	30	45.65	310	26.5
HCLA-16-2	2*8	32.66	190	17.0
HLCA-18-2	2*9	35.06	222	18.2
HLCA-20-2	2*10	39.12	236	20.1
HLCA-24-2	2*12	42.82	236	21.8
HLCA-26-2	2*13	48.06	280	24.3
HLCA-30-2	2*15	66.24	348	36.2
HLCA-40-2	2*20	74.28	450	40.0
HLCA-50-2	2*25	91.12	544	47.9
HLCA-60-2	2*30	113.5	620	61.9
HLCA-20-4	4*5	40.28	262	20.6
HLCA-24-4	4*6	44.6	296	22.6
HLCA-28-4	4*7	51.12	404	25.7
HCLA-32-4	4*8	65.32	380	35.8
HLCA-36-4	4*9	70.12	444	38.1
HLCA-40-4	4*10	78.24	472	41.9
HLCA-48-4	4*12	85.64	472	45.4
HLCA-52-4	4*13	96.12	560	50.3
HLCA-60-4	4*15	125.08	696	67.3
HLCA-80-4	4*20	141.16	900	74.9
HLCA-100-4	4*25	182.24	1088	97.6
HLCA-120-4	4*30	219.6	1240	118.6


REFRIGERANT
134a
30LBS. NET WEIGHT 13.6KG
REFRIGERANT
134a


EMERSON
Copeland Scroll

ENGINEERING SPECIFICATIONS-50 HZ (R-134a)-COPELAND

Model	HLCA	HLCA-5-1	HLCA-6-1	HLCA-7-1	HCLA-8-1	HLCA-9-1	HLCA-10-1
cooling capacity	TR	2.49	2.96	3.31	3.95	4.44	5.18
	kW	8.76	10.40	11.65	13.90	15.60	18.20
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 Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins						
Area	ft^2	14.20	14.20	14.20	14.20	14.20	14.20
	m^2	1.32	1.32	1.32	1.32	1.32	1.32
Condenser Fan (800)	Propeller direct drive 720 rpm						885 rpm
QTY		1	1	1	1	1	1
Airflow Rate	cfm	9963	9963	9963	9377	8790	12894
	l/s	4722	4722	4722	4444	4166	6111
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected						
Size	kW	1.19	1.19	1.19	1.19	1.19	1.7
Evaporator	Direct Expansion shell & tube						
QTY	1						
Ref. Circuits		1	1	1	1	1	1
Water Volume	GPM	5.98	7.10	7.95	9.49	10.65	12.42
	Litre/s	0.38	0.45	0.50	0.60	0.67	0.78
Refrigerant Charge (R134a)(Approx)	Lb	12.1	14.5	17.0	19.4	21.8	22.3
	Kg	5.5	6.6	7.7	8.8	9.9	10.1
Operating Weight (Approx)	Lb	1433	1433	1433	1543	1543	1763
	Kg	650	650	650	700	700	800

Model	HLCA	HLCA-12-1	HLCA-13-1	HLCA-15-1	HLCA-20-1	HLCA-25-1	HLCA-30-1
cooling capacity	TR	6.06	6.51	7.76	9.98	12.34	15.61
	kW	21.30	22.90	27.30	35.10	43.40	54.90
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 Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins						
Area	ft^2	28.41	28.41	28.41	28.41	49.71	49.71
	m^2	2.64	2.64	2.64	2.64	4.62	4.62
Condenser Fan (800)	Propeller direct drive 885rpm						
QTY		1	1	1	1	2	2
Airflow Rate	cfm	13530	13530	12943	12943	26475	25886
	l/s	6388	6388	6111	6111	12500	12222
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected						
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube						
QTY	1						
Ref. Circuits		1	1	1	1	1	1
Water Volume	GPM	14.54	15.63	18.63	23.95	29.62	37.47
	Litre/s	0.92	0.99	1.18	1.51	1.87	2.36
Refrigerant Charge (R134a)(Approx)	Lb	29.1	31.5	36.4	48.5	60.6	72.7
	Kg	13.2	14.3	16.5	22	27.5	33
Operating Weight (Approx)	Lb	1763	1763	2094	2645	2755	3526
	Kg	800	800	950	1200	1250	1600

Model	HLCA	HLCA-20-2	HLCA-24-2	HLCA-26-2	HLCA-30-2	HLCA-40-2	HLCA-50-2	HLCA-60-2
cooling capacity	TR	10.35	12.11	13.02	15.53	19.96	24.68	31.22
	kW	36.4	42.60	45.80	54.60	70.20	86.80	109.80
Compressor	Copeland Scroll							
QTY		2	2	2	2	2	2	2
Oil Charge	USGal	1.80	1.80	1.80	2.06	2.48	3.59	3.33
	Litre	6.8	6.8	6.8	7.8	9.4	13.6	12.6
Condenser Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins							
Area	ft^2	56.81	56.81	56.81	56.81	56.81	99.42	99.42
	m^2	5.28	5.28	5.28	5.28	5.28	9.24	9.24
Condenser Fan (800)	Propeller direct drive 885 rpm							
QTY		2	2	2	2	2	4	4
Airflow Rate	cfm	26475	27060	27060	25886	25886	52950	51772
	l/s	12500	12776	12776	12222	12222	25000	24444
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected							
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube							
QTY	1							
Ref. Circuits		2	2	2	2	2	2	2
Water Volume	GPM	24.84	29.08	31.26	37.26	47.9	59.24	74.94
	Litre/s	1.567	1.83	1.97	2.35	3.02	3.74	4.73
Refrigerant Charge (R134a)(Approx)	Lb	44.521	58.19	63.03	72.73	96.98	121.22	145.46
	Kg	20.2	26.4	28.6	33.0	44.0	55.0	66.0
Operating Weight (Approx)	Lb	2645	2645	3526	4408	4518	5510	2975
	Kg	1200	1200	1600	2000	2050	2500	1350

Model	HLCA	HLCA-40-4	HLCA-48-4	HLCA-52-4	HLCA-60-4	HLCA- 80-4	HLCA-100-4	HLCA-120-4
cooling capacity	TR	20.70	24.23	26.05	31.05	39.92	49.36	62.44
	kW	72.80	85.20	91.60	109.20	140.40	173.60	219.60
Compressor	Copeland Scroll							
QTY		4	4	4	4	4	4	4
Oil Charge	USGal	3.59	3.59	3.59	4.12	4.97	7.19	6.66
	Litre	13.6	13.6	13.6	15.6	18.8	27.2	25.2
Condenser Coil	Air-cooled 2 or 3 or 4or rows, copper tubes aluminum fins							
Area	ft^2	56.81	99.42	99.42	99.42	99.42	149.13	149.13
	m^2	5.28	9.24	9.24	9.24	9.24	13.86	13.86
Condenser Fan (800)	Propeller direct drive 885 rpm							
QTY		2	4	4	4	4	6	6
Airflow Rate	cfm	25886	52950	52950	51772	49417	77659	74126
	l/s	12222	25000	25000	24444	23332	36666	34998
Condenser Fan Motor	Totally enclosed air over, Class-F insulation, 6 pole, IP-54 protected							
Size	kW	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Evaporator	Direct Expansion shell & tube							
QTY	1							
Ref. Circuits		2	2	2	2	2	2	2
Water Volume	GPM	49.68	58.16	62.52	74.52	95.8	118.48	149.88
	Litre/s	3.13	3.67	3.94	4.70	6.04	7.47	9.46
Refrigerant Charge (R134a)(Approx)	Lb	89.0	116.37	126.07	145.46	193.95	242.44	290.93
	Kg	40.4	52.8	57.2	66.0	88.0	110.0	132.0
Operating Weight (Approx)	Lb	4408	4628	4628	5290	6832	7494	8045
	Kg	2000	2100	2100	2400	3100	3400	3650

CAPACITY RATING(50 HZ)-R 134a

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-134a)																			
		95°F (35°C)				104°F (40°C)				113°F (45°C)				122°F (50°C)				125,6°F (52°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-5-1	41.9	2.32	2.42	5.57	0.21	2.19	2.69	5.25	0.24	2.05	2.99	4.91	0.27	1.91	3.34	4.57	0.30	1.85	3.49	4.43	0.34
	5.5	8.16		0.35	0.7	7.69		0.33	0.8	7.2		0.31	0.9	6.7		0.29	1	6.49		0.28	1.1
	43.88	2.43	2.43	5.83	0.21	2.29	2.7	5.49	0.24	2.15	3	5.15	0.27	2.00	3.34	4.79	0.30	1.94	3.49	4.65	0.34
	6.6	8.55		0.37	0.7	8.05		0.35	0.8	7.55		0.33	0.9	7.02		0.30	1	6.81		0.29	1.1
	44.96	2.49	2.43	5.98	0.21	2.35	2.7	5.64	0.24	2.20	3	5.28	0.27	2.05	3.34	4.91	0.30	1.99	3.49	4.77	0.34
	7.2	8.76		0.38	0.7	8.26		0.36	0.8	7.74		0.33	0.9	7.2		0.31	1	6.99		0.30	1.1
	45.32	2.51	2.43	6.03	0.24	2.37	2.7	5.68	0.27	2.22	3	5.32	0.30	2.07	3.34	4.96	0.34	2.00	3.49	4.81	0.37
	7.4	8.83		0.38	0.8	8.33		0.36	0.9	7.8		0.34	1	7.27		0.31	1.1	7.05		0.30	1.2
HLCA-6-1	41.9	2.76	2.89	6.62	0.24	2.57	3.23	6.18	0.27	2.39	3.63	5.73	0.30	2.20	4.08	5.28	0.34	2.12	4.28	5.09	0.37
	5.5	9.7		0.42	0.8	9.05		0.39	0.9	8.4		0.36	1	7.73		0.33	1.1	7.46		0.32	1.2
	43.88	2.89	2.89	6.93	0.27	2.70	3.24	6.48	0.30	2.51	3.63	6.01	0.34	2.31	4.08	5.54	0.37	2.23	4.27	5.35	0.40
	6.6	10.15		0.44	0.9	9.49		0.41	1	8.81		0.38	1.1	8.12		0.35	1.2	7.84		0.34	1.3
	44.96	2.96	2.89	7.10	0.27	2.77	3.24	6.65	0.30	2.57	3.63	6.18	0.34	2.37	4.08	5.69	0.37	2.29	4.27	5.49	0.40
	7.2	10.4		0.45	0.9	9.74		0.42	1	9.05		0.39	1.1	8.34		0.36	1.2	8.05		0.35	1.3
	45.32	2.99	2.89	7.17	0.30	2.79	3.24	6.70	0.34	2.60	3.63	6.23	0.37	2.39	4.07	5.74	0.40	2.31	4.27	5.55	0.43
	7.4	10.5		0.45	1	9.82		0.42	1.1	9.13		0.39	1.2	8.41		0.36	1.3	8.13		0.35	1.4
HLCA-7-1	41.9	3.10	3.23	7.44	0.34	2.91	3.6	6.99	0.37	2.72	4.02	6.54	0.40	2.53	4.49	6.07	0.43	2.45	4.7	5.88	0.46
	5.5	10.9		0.47	1.1	10.25		0.44	1.2	9.58		0.41	1.3	8.9		0.38	1.4	8.62		0.37	1.5
	43.88	3.24	3.23	7.78	0.34	3.04	3.61	7.30	0.37	2.86	4.03	6.86	0.40	2.65	4.5	6.36	0.43	2.57	4.7	6.17	0.46
	6.6	11.4		0.49	1.1	10.7		0.46	1.2	10.05		0.43	1.3	9.32		0.40	1.4	9.04		0.39	1.5
	44.96	3.31	3.23	7.95	0.34	3.13	3.61	7.51	0.37	2.93	4.03	7.03	0.40	2.72	4.5	6.52	0.43	2.64	4.7	6.33	0.46
	7.2	11.65		0.50	1.1	11		0.47	1.2	10.3		0.44	1.3	9.56		0.41	1.4	9.27		0.40	1.5
	45.32	3.34	3.24	8.02	0.37	3.14	3.61	7.54	0.40	2.94	4.03	7.06	0.43	2.74	4.5	6.58	0.46	2.66	4.7	6.38	0.49
	7.4	11.75		0.51	1.2	11.05		0.48	1.3	10.35		0.45	1.4	9.64		0.42	1.5	9.35		0.40	1.6
HCLA-8-1	41.9	3.68	3.86	8.84	0.43	3.44	4.27	8.26	0.46	3.18	4.73	7.64	0.49	2.93	5.21	7.03	0.52	2.83	5.42	6.78	0.55
	5.5	12.95		0.56	1.4	12.1		0.52	1.5	11.2		0.48	1.6	10.3		0.44	1.7	9.94		0.43	1.8
	43.88	3.85	3.87	9.25	0.46	3.60	4.28	8.63	0.49	3.34	4.74	8.02	0.52	3.07	5.23	7.37	0.55	2.97	5.43	7.13	0.58
	6.6	13.55		0.58	1.5	12.65		0.54	1.6	11.75		0.51	1.7	10.8		0.46	1.8	10.45		0.45	1.9
	44.96	3.95	3.87	9.49	0.49	3.70	4.29	8.87	0.52	3.43	4.74	8.22	0.55	3.16	5.23	7.57	0.58	3.04	5.44	7.30	0.61
	7.2	13.9		0.60	1.6	13		0.56	1.7	12.05		0.52	1.8	11.1		0.48	1.9	10.70		0.46	2
	45.32	3.98	3.87	9.55	0.49	3.72	4.29	8.94	0.52	3.45	4.74	8.29	0.55	3.18	5.23	7.64	0.58	3.07	5.44	7.37	0.61
	7.4	14		0.60	1.6	13.1		0.56	1.7	12.15		0.52	1.8	11.2		0.48	1.9	10.80		0.46	2
HLCA-9-1	41.9	4.12	4.31	9.90	0.52	3.85	4.78	9.25	0.55	3.57	5.29	8.56	0.58	3.28	5.83	7.88	0.61	3.16	6.06	7.57	0.64
	5.5	14.5		0.62	1.7	13.55		0.58	1.8	12.55		0.54	1.9	11.55		0.50	2	11.10		0.48	2.1
	43.88	4.32	4.32	10.37	0.52	4.04	4.79	9.69	0.55	3.74	5.3	8.97	0.58	3.44	5.85	8.26	0.61	3.33	6.08	7.98	0.64
	6.6	15.2		0.65	1.7	14.2		0.61	1.8	13.15		0.57	1.9	12.1		0.52	2	11.70		0.50	2.1
	44.96	4.44	4.32	10.65	0.52	4.14	4.79	9.93	0.55	3.84	5.3	9.21	0.58	3.53	5.85	8.46	0.61	3.41	6.08	8.19	0.64
	7.2	15.6		0.67	1.7	14.55		0.63	1.8	13.5		0.58	1.9	12.4		0.53	2	12.00		0.52	2.1
	45.32	4.46	4.33	10.71	0.52	4.17	3.06	10.00	0.55	3.87	5.3	9.28	0.58	3.57	5.86	8.56	0.61	3.44	6.09	8.26	0.64
	7.4	15.7		0.68	1.7	14.65		0.63	1.8	13.6		0.59	1.9	12.55		0.54	2	12.10		0.52	2.1
HLCA-10-1	41.9	4.82	5.04	11.57	0.52	4.49	5.58	10.78	0.55	4.17	6.16	10.00	0.58	3.82	6.8	9.18	0.61	3.70	7.06	8.87	0.64
	5.5	16.95		0.73	1.7	15.8		0.68	1.8	14.65		0.63	1.9	13.45		0.58	2	13.00		0.56	2.1
	43.88	5.05	5.05	12.11	0.55	4.72	5.59	11.33	0.58	4.36	6.18	10.48	0.61	4.02	6.81	9.66	0.64	3.88	7.08	9.32	0.67
	6.6	17.75		0.76	1.8	16.6		0.71	1.9	15.35		0.66	2	14.15		0.61	2.1	13.65		0.59	2.2
	44.96	5.18	5.06	12.42	0.55	4.83	5.6	11.60	0.58	4.48	6.18	10.75	0.61	4.12	6.82	9.90	0.64	3.98	7.09	9.55	0.67
	7.2	18.2		0.78	1.8	17		0.73	1.9	15.75		0.68	2	14.5		0.62	2.1	14.00		0.60	2.2
	45.32	5.22	5.06	12.52	0.55	4.88	5.6	11.70	0.58	4.52	6.19	10.85	0.61	4.15	6.82	9.96	0.64	4.01	7.09	9.62	0.67
	7.4	18.35		0.79	1.8	17.15		0.74	1.9	15.9		0.68	2	14.6		0.63	2.1	14.10		0.61	2.2

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-134a)																			
		95°F (35°C)				104°F (40°C)				113°F (45°C)				122°F (50°C)				125,6°F (52°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-12-1	41.9	5.69	5.62	13.65	0.58	5.30	6.32	12.73	0.61	4.90	7.05	11.77	0.64	4.46	7.79	10.71	0.67	4.28	8.08	10.27	0.70
	5.5	20		0.86	1.9	18.65		0.80	2	17.25		0.74	2.1	15.7		0.68	2.2	15.05		0.65	2.3
	43.88	5.91	5.62	14.19	0.61	5.53	6.32	13.27	0.64	5.12	7.05	12.28	0.67	4.66	7.8	11.19	0.70	4.48	8.1	10.75	0.73
	6.6	20.8		0.90	2	19.45		0.84	2.1	18		0.77	2.2	16.4		0.71	2.3	15.75		0.68	2.4
	44.96	6.06	5.62	14.54	0.61	5.66	6.31	13.58	0.64	5.13	7.05	12.31	0.67	4.78	7.8	11.46	0.70	4.58	8.1	10.99	0.73
	7.2	21.3		0.92	2	19.9		0.86	2.1	18.04		0.78	2.2	16.8		0.72	2.3	16.10		0.69	2.4
	45.32	6.08	5.62	14.60	0.61	5.69	6.31	13.65	0.64	5.27	7.05	12.66	0.67	4.82	7.8	11.57	0.70	4.62	8.1	11.09	0.73
	7.4	21.4		0.92	2	20		0.86	2.1	18.55		0.80	2.2	16.95		0.73	2.3	16.25		0.70	2.4
HLCA-13-1	41.9	6.11	6.17	14.67	0.61	5.72	6.83	13.72	0.64	5.25	7.62	12.59	0.67	4.71	8.59	11.29	0.70	4.46	9.04	10.71	0.73
	5.5	21.5		0.93	2	20.1		0.87	2.1	18.45		0.79	2.2	16.55		0.71	2.3	15.70		0.68	2.4
	43.88	6.37	6.19	15.29	0.64	5.97	6.84	14.33	0.67	5.50	7.63	13.20	0.70	4.96	8.58	11.91	0.73	4.72	9.02	11.33	0.76
	6.6	22.4		0.96	2.1	21		0.90	2.2	19.35		0.83	2.3	17.45		0.75	2.4	16.60		0.71	2.5
	44.96	6.51	6.2	15.63	0.67	5.97	6.85	14.33	0.70	5.64	7.63	13.55	0.73	5.10	8.57	12.25	0.76	4.86	9.01	11.67	0.79
	7.2	22.9		0.99	2.2	21		0.90	2.3	19.85		0.85	2.4	17.95		0.77	2.5	17.10		0.74	2.6
	45.32	6.57	6.2	15.76		6.14	6.86	14.74	0.10	5.69	7.63	13.65	0.73	5.15	8.57	12.35	0.76	4.92	9	11.81	0.79
	7.4	23.1		0.99	2.2	21.6		0.93	2.3	20		0.86	2.4	18.1		0.78	2.5	17.30		0.74	2.6
HLCA-15-1	41.9	7.28	7.49	17.47	0.85	6.80	8.31	16.31	0.88	6.26	9.24	15.01	0.91	5.67	10.3	13.61	0.94	5.40	10.75	12.97	0.98
	5.5	25.6		1.10	2.8	23.9		1.03	2.9	22		0.95	3	19.95		0.86	3.1	19.00		0.82	3.2
	43.88	7.39	7.51	17.74	0.88	7.11	8.32	17.06	0.91	6.57	9.25	15.76	0.94	5.97	10.3	14.33	0.98	5.69	10.75	13.65	1.01
	6.6	26		1.12	2.9	25		1.08	3	23.1		0.99	3.1	21		0.90	3.2	20.00		0.86	3.3
	44.96	7.76	7.51	18.63	0.91	7.28	8.33	17.47	0.94	6.74	9.26	16.17	0.98	6.11	1.3	14.67	1.01	5.86	10.75	14.06	1.04
	7.2	27.3		1.18	3	25.6		1.10	3.1	23.7		1.02	3.2	21.5		0.93	3.3	20.60		0.89	3.4
	45.32	7.82	7.52	18.77	0.98	7.34	8.33	17.61	1.01	6.80	9.26	16.31	1.04	6.17	10.3	14.81	1.07	5.91	10.75	14.19	1.10
	7.4	27.5		1.18	3.2	25.8		1.11	3.3	23.9		1.03	3.4	21.7		0.93	3.5	20.80		0.90	3.6
HLCA-20-1	41.9	9.10	9.95	21.84	0.43	8.76	11.05	21.02	0.46	8.19	12.25	19.65	0.49	7.65	13.65	18.36	0.52	7.42	14.2	17.81	0.55
	5.5	32		1.38	1.4	30.8		1.33	1.5	28.8		1.24	1.6	26.9		1.16	1.7	26.10		1.12	1.8
	43.88	9.72	9.97	23.34	0.46	9.16	11.05	21.97	0.49	8.59	12.3	20.61	0.52	8.02	13.65	19.24	0.55	7.76	14.25	18.63	0.58
	6.6	34.2		1.47	1.5	32.2		1.39	1.6	30.2		1.30	1.7	28.2		1.21	1.8	27.30		1.18	1.9
	44.96	9.98	9.98	23.95	0.52	9.38	11.1	22.52	0.55	8.81	12.3	21.16	0.58	8.22	13.65	19.72	0.61	7.99	14.25	19.18	0.64
	7.2	35.1		1.51	1.7	33		1.42	1.8	31		1.33	1.9	28.9		1.24	2	28.10		1.21	2.1
	45.32	10.07	9.98	24.16	0.58	9.47	11.1	22.72	0.61	8.87	12.3	21.29	0.64	8.27	13.65	19.86	0.67	8.05	14.25	19.31	0.70
	7.4	35.4		1.52	1.9	33.3		1.43	2	31.2		1.34	2.1	29.1		1.25	2.2	28.30		1.22	2.3
HLCA-25-1	41.9	11.52	12.4	27.64	0.61	10.83	13.8	26.00	0.64	10.18	15.35	24.43	0.67	9.50	17.05	22.79	0.70	9.21	17.8	22.11	0.73
	5.5	40.5		1.74	2	38.1		1.64	2.1	35.8		1.54	2.2	33.4		1.44	2.3	32.40		1.39	2.4
	43.88	12.03	12.45	28.87	0.64	11.35	13.8	27.23	0.67	10.66	15.35	25.59	0.70	9.95	17.1	23.88	0.73	9.67	17.85	23.20	0.76
	6.6	42.3		1.82	2.1	39.9		1.72	2.2	37.5		1.61	2.3	35		1.51	2.4	34.00		1.46	2.5
	44.96	12.34	14.45	29.62	0.70	11.63	13.8	27.91	0.73	10.92	15.35	26.21	0.76	10.21	17.1	24.50	0.79	9.92	17.85	23.82	0.82
	7.2	43.4		1.87	2.3	40.9		1.76	2.4	38.4		1.65	2.5	35.9		1.55	2.6	34.90		1.50	2.7
	45.32	12.45	12.45	29.89	0.76	11.74	13.85	28.18	0.79	11.00	15.35	26.41	0.82	10.29	17.1	24.70	0.85	10.01	17.85	24.02	0.95
	7.4	43.8		1.89	2.5	41.3		1.78	2.6	38.7		1.67	2.7	36.2		1.56	2.8	35.20		1.52	2.9
HLCA-30-1	41.9	14.59	15.2	35.01	0.82	13.76	16.8	33.03	0.85	12.91	18.6	30.98	0.88	12.06	20.6	28.93	0.91	11.74	21.4	28.18	0.94
	5.5	51.3		2.21	2.7	48.4		2.08	2.8	45.4		1.95	2.9	42.4		1.83	3	41.30		1.78	3.1
	43.88	15.24	15.25	36.58	0.91	14.39	16.9	34.53	0.94	13.51	18.65	32.42	0.98	12.65	20.6	30.37	1.01	12.28	21.5	29.48	1.04
	6.6	53.6		2.31	3	50.6		2.18	3.1	47.5		2.05	3.2	44.5		1.92	3.3	43.20		1.86	3.4
	44.96	15.61	15.3	37.47	0.98	14.76	16.9	35.42	1.01	13.85	18.7	33.23	1.04	12.97	20.7	31.12	1.07	12.60	21.5	30.23	1.10
	7.2	54.9		2.36	3.2	51.9		2.23	3.3	48.7		2.10	3.4	45.6		1.96	3.5	44.30		1.91	3.6
	45.32	15.75	15.3	37.81	1.04	14.87	16.95	35.69	1.07	13.96	18.7	33.51	1.10	13.08	20.7	31.39	1.13	12.71	21.6	30.50	1.16
	7.4	55.4		2.39	3.4	52.3		2.25	3.5	49.1		2.11	3.6	46		1.98	3.7	44.70		1.92	3.8

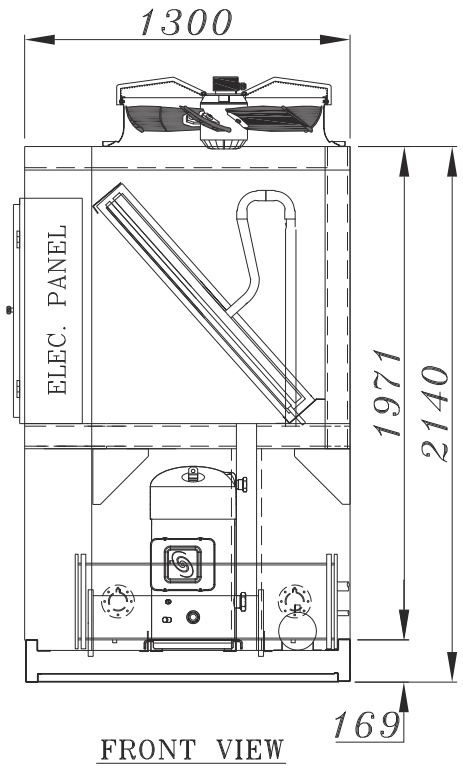
Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-134a)																			
		95°F (35°C)				104°F (40°C)				113°F (45°C)				122°F (50°C)				125,6°F (52°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-20-2	41.9	9.64	10.08	23.13	1.04	8.99	11.16	21.56	1.10	8.33	12.32	20.00	1.16	7.65	13.6	18.36	1.22	7.39	14.12	17.74	1.28
	5.5	33.9		1.46	3.4	31.6		1.36	3.6	29.3		1.26	3.8	26.9		1.16	4	26.00		1.12	4.2
	43.88	10.09	10.1	24.23	1.10	9.44	11.18	22.66	1.16	8.73	12.36	20.95	1.22	8.05	13.62	19.31	1.28	7.76	14.16	18.63	1.34
	6.6	35.5		1.53	3.6	33.2		1.43	3.8	30.7		1.32	4	28.3		1.22	4.2	27.30		1.18	4.4
	44.96	10.35	10.12	24.84	1.10	9.67	11.2	23.20	1.16	8.96	12.36	21.50	1.22	8.25	13.64	19.79	1.28	7.96	14.18	19.11	1.34
	7.2	36.4		1.57	3.6	34		1.46	3.8	31.5		1.36	4	29		1.25	4.2	28.00		1.21	4.4
	45.32	10.44	10.12	25.05	1.10	9.75	11.2	23.41	1.16	9.04	12.38	21.70	1.22	8.30	13.64	19.93	1.28	8.02	14.18	19.24	1.34
	7.4	36.7		1.58	3.6	34.3		1.48	3.8	31.8		1.37	4	29.2		1.26	4.2	28.20		1.21	4.4
HLCA-24-2	41.9	11.37	11.24	27.30	1.16	10.61	12.64	25.45	1.22	9.81	14.1	23.54	1.28	8.93	15.58	21.43	1.34	8.56	16.16	20.54	1.40
	5.5	40		1.72	3.8	37.3		1.61	4	34.5		1.49	4.2	31.4		1.35	4.4	30.10		1.30	4.6
	43.88	11.83	11.24	28.39	1.22	11.06	12.64	26.55	1.28	10.24	14.1	24.57	1.34	9.33	15.6	22.38	1.40	8.96	16.20	21.50	1.46
	6.6	41.6		1.79	4	38.9		1.67	4.2	36		1.55	4.4	32.8		1.41	4.6	31.50		1.36	4.8
	44.96	12.11	11.24	29.07	1.22	11.32	12.62	27.16	1.28	10.26	14.1	24.62	1.34	9.55	15.6	22.93	1.40	9.16	16.20	21.97	1.46
	7.2	42.6		1.83	4	39.8		1.71	4.2	36.08		1.55	4.4	33.6		1.45	4.6	32.20		1.39	4.8
	45.32	12.17	11.24	29.21	1.22	11.37	12.62	27.30	1.28	10.55	14.1	25.32	1.34	9.64	15.6	23.13	1.40	9.24	16.20	22.18	1.46
	7.4	42.8		1.84	4	40		1.72	4.2	37.1		1.60	4.4	33.9		1.46	4.6	32.50		1.40	4.8
HLCA-26-2	41.9	12.23	12.34	29.34	1.22	11.43	13.66	27.43	1.28	10.49	15.24	25.18	1.34	9.41	17.18	22.59	1.40	8.93	18.08	21.43	1.46
	5.5	43		1.85	4	40.2		1.73	4.2	36.9		1.59	4.4	33.1		1.43	4.6	31.40		1.35	4.8
	43.88	12.74	12.38	30.57	1.28	11.94	13.68	28.66	1.34	11.00	15.26	26.41	1.40	9.92	17.16	23.82	1.46	9.44	18.04	22.66	1.52
	6.6	44.8		1.93	4.2	42		1.81	4.4	38.7		1.67	4.6	34.9		1.50	4.8	33.20		1.43	5
	44.96	13.02	12.4	31.26	1.34	11.94	13.7	28.66	1.40	11.29	15.26	27.09	1.46	10.21	17.14	24.50	1.52	9.72	18.02	23.34	1.58
	7.2	45.8		1.97	4.4	42		1.81	4.6	39.7		1.71	4.8	35.9		1.55	5	34.20		1.47	5.2
	45.32	13.14	12.4	31.53	0.00	12.28	13.72	29.48	0.20	11.37	15.26	27.30	1.46	10.29	17.14	24.70	1.52	9.84	18.00	23.61	1.58
	7.4	46.2		1.99	4.4	43.2		1.86	4.6	40		1.72	4.8	36.2		1.56	5	34.60		1.49	5.2
HLCA-30-2	41.9	14.56	14.98	34.94	1.71	13.59	16.62	32.62	1.77	12.51	18.48	30.03	1.83	11.35	20.6	27.23	1.89	10.81	21.50	25.93	1.95
	5.5	51.2		2.20	5.6	47.8		2.06	5.8	44		1.89	6	39.9		1.72	6.2	38.00		1.64	6.4
	43.88	14.79	15.02	35.49	1.77	14.22	16.64	34.12	1.83	13.14	18.5	31.53	1.89	11.94	20.6	28.66	1.95	11.37	21.50	27.30	2.01
	6.6	52		2.24	5.8	50		2.15	6	46.2		1.99	6.2	42		1.81	6.4	40.00		1.72	6.6
	44.96	15.53	15.02	37.26	1.83	14.56	16.66	34.94	1.89	13.48	18.52	32.35	1.95	12.23	2.6	29.34	2.01	11.72	21.50	28.12	2.07
	7.2	54.6		2.35	6	51.2		2.20	6.2	47.4		2.04	6.4	43		1.85	6.6	41.20		1.77	6.8
	45.32	15.64	15.04	37.53	1.95	14.67	16.66	35.21	2.01	13.59	18.52	32.62	2.07	12.34	20.6	29.62	2.13	11.83	21.50	28.39	2.19
	7.4	55		2.37	6.4	51.6		2.22	6.6	47.8		2.06	6.8	43.4		1.87	7	41.60		1.79	7.2
HLCA-40-2	41.9	18.20	19.9	43.68	0.85	17.52	22.1	42.04	0.91	16.38	24.5	39.31	0.98	15.30	27.3	36.71	1.04	14.84	28.40	35.62	1.10
	5.5	64		2.76	2.8	61.6		2.65	3	57.6		2.48	3.2	53.8		2.32	3.4	52.20		2.25	3.6
	43.88	19.45	19.94	46.68	0.91	18.31	22.1	43.95	0.98	17.17	24.6	41.22	1.04	16.04	27.3	38.49	1.10	15.53	28.50	37.26	1.16
	6.6	68.4		2.94	3	64.4		2.77	3.2	60.4		2.60	3.4	56.4		2.43	3.6	54.60		2.35	3.8
	44.96	19.96	19.96	47.91	1.04	18.77	22.2	45.04	1.10	17.63	24.6	42.31	1.16	16.44	27.3	39.44	1.22	15.98	28.50	38.35	1.28
	7.2	70.2		3.02	3.4	66		2.84	3.6	62		2.67	3.8	57.8		2.49	4	56.20		2.42	4.2
	45.32	20.13	19.96	48.32	1.16	18.94	22.2	45.45	1.22	17.74	24.6	42.58	1.28	16.55	27.3	39.72	1.34	16.09	28.50	38.63	1.40
	7.4	70.8		3.05	3.8	66.6		2.87	4	62.4		2.69	4.2	58.2		2.51	4.4	56.60		2.44	4.6
HLCA-50-2	41.9	23.03	24.8	55.28	1.22	21.67	27.6	52.00	1.28	20.36	30.7	48.86	1.34	18.99	34.1	45.59	1.40	18.43	35.60	44.22	1.46
	5.5	81		3.49	4	76.2		3.28	4.2	71.6		3.08	4.4	66.8		2.88	4.6	64.80		2.79	4.8
	43.88	24.06	24.9	57.73	1.28	22.69	27.6	54.46	1.34	21.33	30.7	51.18	1.40	19.90	34.2	47.77	1.46	19.34	35.70	46.41	1.52
	6.6	84.6		3.64	4.2	79.8		3.44	4.4	75		3.23	4.6	70		3.01	4.8	68.00		2.93	5
	44.96	24.68	28.9	59.23	1.40	23.26	27.6	55.82	1.46	21.84	30.7	52.41	1.52	20.42	34.2	49.00	1.58	19.85	35.70	47.63	1.65
	7.2	86.8		3.74	4.6	81.8		3.52	4.8	76.8		3.31	5	71.8		3.09	5.2	69.80		3.01	5.4
	45.32	24.91	24.9	59.78	1.52	23.49	27.7	56.37	1.58	22.01	30.7	52.82	1.65	20.59	34.2	49.41	1.71	20.02	35.70	48.04	1.91
	7.4	87.6		3.77	5	82.6		3.56	5.2	77.4		3.33	5.4	72.4		3.12	5.6	70.40		3.03	5.8
HLCA-60-2	41.9	29.17	30.4	70.02	1.65	27.52	33.6	66.06	1.71	25.82	37.2	61.96	1.77	24.11	41.2	57.87	1.83	23.49	42.80	56.37	1.89
	5.5	102.6		4.42	5.4	96.8		4.17	5.6	90.8		3.91	5.8	84.8		3.65	6	82.60		3.56	6.2
	43.88	30.48	30.5	73.16	1.83	28.78	33.8	69.06	1.89	27.01	37.3	64.83	1.95	25.31	41.2	60.74	2.01	24.57	43.00	58.96	2.07
	6.6	107.2		4.62	6	101.2		4.36	6.2	95		4.09	6.4	89		3.83	6.6	86.40		3.72	6.8
	44.96	31.22	30.6	74.93	1.95	29.52	33.8	70.84	2.01	27.70	37.4	66.47	2.07	25.93	41.4	62.24	2.13	25.19	43.00	60.46	2.19
	7.2	109.8		4.73	6.4	103.8		4.47	6.6	97.4		4.19	6.8	91.2		3.93	7	88.60		3.81	7.2
	45.32	31.51	30.6	75.61	2.07	29.74	33.9	71.38	2.13	27.92	37.4	67.01	2.19	26.16	41.4	62.78	2.26	25.42	43.20	61.01	2.32
	7.4	110.8		4.77	6.8	104.6		4.50	7	98.2		4.23	7.2	92		3.96	7.4	89.40		3.85	7.6

Model	LWCT	Condenser Entering Air Temperature °F (°C) (R-134a)																			
		95°F (35°C)				104°F (40°C)				113°F (45°C)				122°F (50°C)				125,6°F (52°C)			
		Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD	Ccap	PI*	WFR	WPD
	°F	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg	TR	kW	USgpm	m.wg
	°C	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg	kw		l/s	ft.wg
HLCA-40-4	41.9	19.28	20.16	46.27	2.07	17.97	22.32	43.13	2.19	16.66	24.64	39.99	2.32	15.30	27.2	36.71	2.44	14.79	28.24	35.49	2.56
	5.5	67.8		2.92	6.8	63.2		2.72	7.2	58.6		2.52	7.6	53.8		2.32	8	52.00		2.24	8.4
	43.88	20.19	20.2	48.45	2.07	18.88	22.36	45.31	2.19	17.46	24.72	41.90	2.32	16.09	27.24	38.63	2.44	15.53	28.32	37.26	2.56
	6.6	71		3.06	6.8	66.4		2.86	7.2	61.4		2.64	7.6	56.6		2.44	8	54.60		2.35	8.4
	44.96	20.70	20.24	49.68	2.07	19.34	22.4	46.41	2.19	17.91	24.72	42.99	2.32	16.49	27.28	39.58	2.44	15.92	28.36	38.22	2.56
	7.2	72.8		3.13	6.8	68		2.93	7.2	63		2.71	7.6	58		2.50	8	56.00		2.41	8.4
	45.32	20.87	20.24	50.09	2.07	19.51	22.4	46.81	2.19	18.08	24.76	43.40	2.32	16.61	27.28	39.85	2.44	16.04	28.36	38.49	2.56
	7.4	73.4		3.16	6.8	68.6		2.95	7.2	63.6		2.74	7.6	58.4		2.51	8	56.40		2.43	8.4
HLCA-48-4	41.9	22.75	22.48	54.59	2.07	21.21	25.28	50.91	2.19	19.62	28.2	47.09	2.32	17.86	31.16	42.86	2.44	17.12	32.32	41.08	2.56
	5.5	80		3.44	6.8	74.6		3.21	7.2	69		2.97	7.6	62.8		2.70	8	60.20		2.59	8.4
	43.88	23.66	22.48	56.78	2.19	22.12	25.28	53.09	2.32	20.47	28.2	49.13	2.44	18.65	31.2	44.77	2.56	17.91	32.4	42.99	2.68
	6.6	83.2		3.58	7.2	77.8		3.35	7.6	72		3.10	8	65.6		2.82	8.4	63.00		2.71	8.8
	44.96	24.23	22.48	58.14	2.19	22.63	25.24	54.32	2.32	20.52	28.2	49.24	2.44	19.11	31.2	45.86	2.56	18.31	32.4	43.95	2.68
	7.2	85.2		3.67	7.2	79.6		3.43	7.6	72.16		3.11	8	67.2		2.89	8.4	64.40		2.77	8.8
	45.32	24.34	22.48	58.42	2.19	22.75	25.24	54.59	2.32	21.10	28.2	50.64	2.44	19.28	31.2	46.27	2.56	18.48	32.4	44.36	2.68
	7.4	85.6		3.69	7.2	80		3.44	7.6	74.2		3.19	8	67.8		2.92	8.4	65.00		2.80	8.8
HLCA-52-4	41.9	24.45	24.68	58.69	2.32	22.86	27.32	54.87	2.44	20.98	30.48	50.36	2.56	18.82	34.36	45.18	2.68	17.86	36.16	42.86	2.80
	5.5	86		3.70	7.6	80.4		3.46	8	73.8		3.18	8.4	66.2		2.85	8.8	62.80		2.70	9.2
	43.88	25.48	24.76	61.15	2.44	23.88	27.36	57.32	2.56	22.01	30.52	52.82	2.68	19.85	34.32	47.63	2.80	18.88	36.08	45.31	2.93
	6.6	89.6		3.86	8	84		3.62	8.4	77.4		3.33	8.8	69.8		3.01	9.2	66.40		2.86	9.6
	44.96	26.05	24.8	62.51	2.44	23.88	27.4	57.32	2.56	22.58	30.52	54.18	2.68	20.42	34.28	49.00	2.80	19.45	36.04	46.68	2.93
	7.2	91.6		3.94	8	84		3.62	8.4	79.4		3.42	8.8	71.8		3.09	9.2	68.40		2.94	9.6
	45.32	26.27	24.8	63.06	2.44	24.57	27.44	58.96	2.56	22.75	30.52	54.59	2.68	20.59	34.28	49.41	2.80	19.68	36	47.22	2.93
	7.4	92.4		3.98	8	86.4		3.72	8.4	80		3.44	8.8	72.4		3.12	9.2	69.20		2.98	9.6
HLCA-60-4	41.9	29.12	29.96	69.88	2.44	27.18	33.24	65.24	2.56	25.02	36.96	60.05	2.68	22.69	41.2	54.46	2.80	21.61	43	51.86	2.93
	5.5	102.4		4.41	8	95.6		4.12	8.4	88		3.79	8.8	79.8		3.44	9.2	76.00		3.27	9.6
	43.88	29.57	30.04	70.97	2.56	28.43	33.28	68.24	2.68	26.27	37	63.06	2.80	23.88	41.2	57.32	2.93	22.75	43	54.59	3.05
	6.6	104		4.48	8.4	100		4.31	8.8	92.4		3.98	9.2	84		3.62	9.6	80.00		3.44	10
	44.96	31.05	30.04	74.52	2.68	29.12	33.32	69.88	2.80	26.96	37.04	64.69	2.93	24.45	5.2	58.69	3.05	23.43	43	56.23	3.17
	7.2	109.2		4.70	8.8	102.4		4.41	9.2	94.8		4.08	9.6	86		3.70	10	82.40		3.55	10.4
	45.32	31.28	30.08	75.07	0.00	29.34	33.32	70.43	0.40	27.18	37.04	65.24	2.93	24.68	41.2	59.23	3.05	23.66	43	56.78	3.17
	7.4	110		4.74	8.8	103.2		4.44	9.2	95.6		4.12	9.6	86.8		3.74	10	83.20		3.58	10.4
HLCA-80-4	41.9	36.40	39.8	87.35	3.41	35.03	44.2	84.08	3.54	32.76	49	78.62	3.66	30.60	54.6	73.43	3.78	29.69	56.8	71.25	3.90
	5.5	128		5.51	11.2	123.2		5.30	11.6	115.2		4.96	12	107.6		4.63	12.4	104.40		4.49	12.8
	43.88	38.90	39.88	93.36	3.54	36.62	44.2	87.90	3.66	34.35	49.2	82.44	3.78	32.07	54.6	76.98	3.90	31.05	57	74.52	4.02
	6.6	136.8		5.89	11.6	128.8		5.55	12	120.8		5.20	12.4	112.8		4.86	12.8	109.20		4.70	13.2
	44.96	39.92	39.92	95.81	3.66	37.53	44.4	90.08	3.78	35.26	49.2	84.62	3.90	32.87	54.6	78.89	4.02	31.96	57	76.70	4.15
	7.2	140.4		6.04	12	132		5.68	12.4	124		5.34	12.8	115.6		4.98	13.2	112.40		4.84	13.6
	45.32	40.26	39.92	96.63	3.90	37.87	44.4	90.90	4.02	35.49	49.2	85.17	4.15	33.10	54.6	79.43	4.27	32.19	57	77.25	4.39
	7.4	141.6		6.10	12.8	133.2		5.73	13.2	124.8		5.37	13.6	116.4		5.01	14	113.20		4.87	14.4
HLCA-100-4	41.9	46.06	49.6	110.55	1.71	43.33	55.2	104.00	1.83	40.72	61.4	97.72	1.95	37.99	68.2	91.17	2.07	36.85	71.2	88.44	2.19
	5.5	162		6.97	5.6	152.4		6.56	6	143.2		6.17	6.4	133.6		5.75	6.8	129.60		5.58	7.2
	43.88	48.11	49.8	115.47	1.83	45.38	55.2	108.92	1.95	42.65	61.4	102.36	2.07	39.81	68.4	95.54	2.19	38.67	71.4	92.81	2.32
	6.6	169.2		7.28	6	159.6		6.87	6.4	150		6.46	6.8	140		6.03	7.2	136.00		5.86	7.6
	44.96	49.36	57.8	118.47	2.07	46.52	55.2	111.65	2.19	43.68	61.4	104.82	2.32	40.83	68.4	98.00	2.44	39.69	71.4	95.27	2.56
	7.2	173.6		7.47	6.8	163.6		7.04	7.2	153.6		6.61	7.6	143.6		6.18	8	139.60		6.01	8.4
	45.32	49.82	49.8	119.56	2.32	46.97	55.4	112.74	2.44	44.02	61.4	105.64	2.56	41.17	68.4	98.82	2.68	40.04	71.4	96.09	2.80
	7.4	175.2		7.54	7.6	165.2		7.11	8	154.8		6.66	8.4	144.8		6.23	8.8	140.80		6.06	9.2
HLCA-120-4	41.9	58.35	60.8	140.03	2.44	55.05	67.2	132.12	2.56	51.64	74.4	123.93	2.68	48.22	82.4	115.74	2.80	46.97	85.6	112.74	2.93
	5.5	205.2		8.83	8	193.6		8.34	8.4	181.6		7.82	8.8	169.6		7.30	9.2	165.20		7.11	9.6
	43.88	60.96	61	146.31	2.56	57.55	67.6	138.12	2.68	54.03	74.6	129.66	2.80	50.61	82.4	121.47	2.93	49.13	86	117.92	3.05
	6.6	214.4		9.23	8.4	202.4		8.71	8.8	190		8.18	9.2	178		7.66	9.6	172.80		7.44	10
	44.96	62.44	61.2	149.86	2.80	59.03	67.6	141.67	2.93	55.39	74.8	132.94	3.05	51.86	82.8	124.47	3.17	50.39	86	120.93	3.29
	7.2	219.6		9.45	9.2	207.6		8.94	9.6	194.8		8.39	10	182.4		7.85	10.4	177.20		7.63	10.8
	45.32	63.01	61.2	151.23	3.05	59.48	67.8	142.76	3.17	55.85	74.8	134.03	3.29	52.32	82.8	125.57	3.41	50.84	86.4	122.02	3.81
	7.4	221.6		9.54	10	209.2		9.01	10.4	196.4		8.46	10.8	184		7.92	11.2	178.80		7.70	11.6

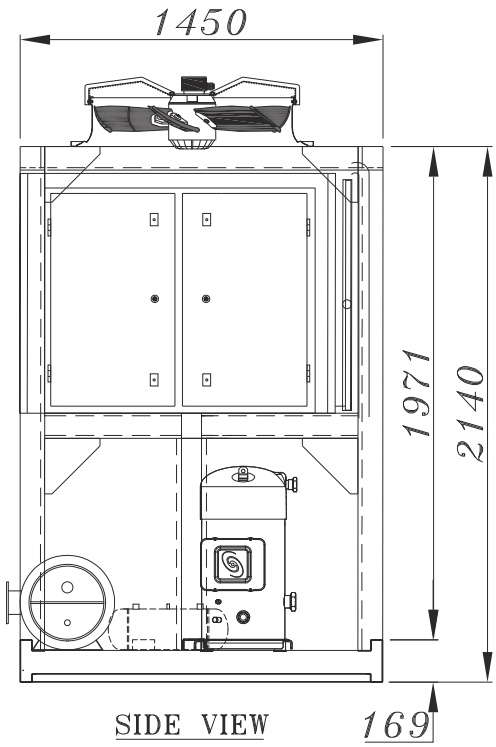
ENGINEERING SPECIFICATIONS (50 HZ) (R-134a)											
chiller MODEL	no.of circuit	comp.oil charge (dm^3)	condenser coil					condenser fan			
			row	fpi	QTY	total heat rejection (kw)	total face area (m2)	size (mm)	QTY	total air flow rate (cfm)	motor power (kw)
HLCA-5-1	1	1.7	2	8	1	11.3	1.32	800	1	10005	1.19
HLCA-6-1	1	1.8	2	8	1	13.6	1.32	800	1	10005	1.19
HLCA-7-1	1	1.8	2	8	1	15	1.32	800	1	10005	1.19
HCLA-8-1	1	2.7	2	10	1	17.9	1.32	800	1	9417	1.19
HLCA-9-1	1	3.4	2	12	1	20.1	1.32	800	1	8828	1.19
HLCA-10-1	1	3.4	4	10	1	23.4	1.32	800	1	12948	1.7
HLCA-12-1	1	3.4	2	12	2	29.4	2*1.32	800	1	13537	1.7
HLCA-13-1	1	3.4	2	10	2	27.1	2*1.32	800	1	13537	1.7
HLCA-15-1	1	3.9	3	10	2	36.1	2*1.32	800	1	12948	1.7
HLCA-20-1	1	4.7	4	10	2	45.4	2*1.32	800	1	12948	1.7
HLCA-25-1	1	6.8	2	10	2	52.2	2*2.31	800	2	2*13243	2*1.7
HLCA-30-1	1	6.3	3	10	2	71	2*2.31	800	2	2*12948	2*1.7
HLCA-20-2	2	6.8	2	10	4	46.8	4*1,32	800	2	2*13537	2*1.7
HLCA-24-2	2	6.8	2	10	4	54.2	4*1.32	800	2	2*13537	2*1.7
HLCA-26-2	2	6.8	2	10	4	58.8	4*1.32	800	2	2*13537	2*1.7
HLCA-30-2	2	7.8	3	10	4	72.2	4*1.32	800	2	2*12948	2*1.7
HLCA-40-2	2	9.4	4	10	4	90.8	4*1.32	800	2	2*12948	2*1.7
HLCA-50-2	2	13.6	2	10	4	104.4	4*2.31	800	4	4*13243	4*1.7
HLCA-60-2	2	12.6	3	10	4	142	4*2.31	800	4	4*12948	4*1.7
HLCA-40-4	2	13.6	4	10	4	93.6	4*1.32	800	2	2*12948	2*1.7
HLCA-48-4	2	13.6	2	10	4	108.4	4*2.31	800	4	4*13243	4*1.7
HLCA-52-4	2	13.6	2	12	4	117.6	4*2.31	800	4	4*13243	4*1.7
HLCA-60-4	2	15.6	3	10	4	144.4	4*2.31	800	4	4*12948	4*1.7
HLCA-80-4	2	18.8	4	12	4	181.6	4*2.31	800	4	4*12360	4*1.7
HLCA-100-4	2	27.2	3	10	6	208.8	6*2.31	800	6	6*12948	6*1.7
HLCA-120-4	2	25.2	4	12	6	284	6*2.31	800	6	6*12360	6*1.7

ELECTRICAL DATA (R-134a)				
chiller MODEL	Nominal Comp. power (HP)	MRA (Amp)	LRA (Amp)	RATE CONSE POWER (kw)
HLCA-5-1	5	8.97	65.5	4.9
HLCA-6-1	6	9.73	74	5.2
HLCA-7-1	7	11.44	101	5.9
HCLA-8-1	8	13.27	95	6.7
HLCA-9-1	9	14.62	111	7.3
HLCA-10-1	10	17.52	118	9.9
HLCA-12-1	12	17.97	118	10.2
HLCA-13-1	13	20.9	140	11.5
HLCA-15-1	15	25.64	174	13.8
HLCA-20-1	20	29.4	225	15.5
HLCA-25-1	25	38.78	272	21.6
HLCA-30-1	30	46.51	310	25.3
HLCA-20-2	2*10	35.04	236	19.9
HLCA-24-2	2*12	35.94	236	20.3
HLCA-26-2	2*13	41.8	280	23.1
HLCA-30-2	2*15	51.28	348	27.5
HLCA-40-2	2*20	58.8	450	31.1
HLCA-50-2	2*25	77.56	544	43.3
HLCA-60-2	2*30	93.02	620	50.6
HLCA-40-4	4*10	62.68	472	32.9
HLCA-48-4	4*12	71.88	472	40.6
HLCA-52-4	4*13	83.6	560	46.1
HLCA-60-4	4*15	102.56	696	55.1
HLCA-80-4	4*20	117.6	900	62.1
HLCA-100-4	4*25	147.72	1088	79.7
HLCA-120-4	4*30	178.64	1240	94.3

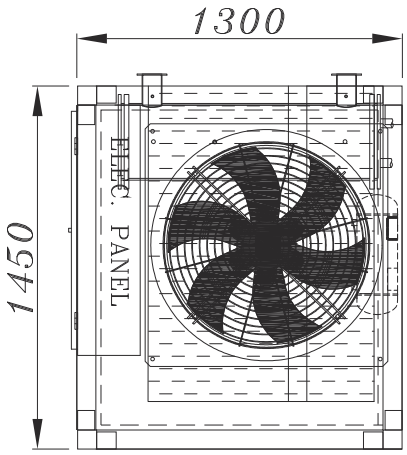
Dimensions(R-22)-COPELAND



FRONT VIEW



SIDE VIEW

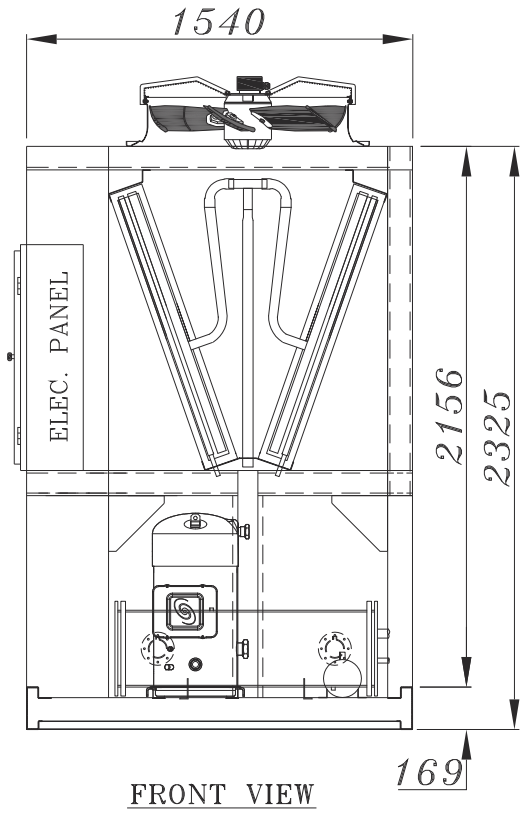


TOP VIEW

HLCA - 5 -1

HLCA - 6 -1

HLCA - 7 -1



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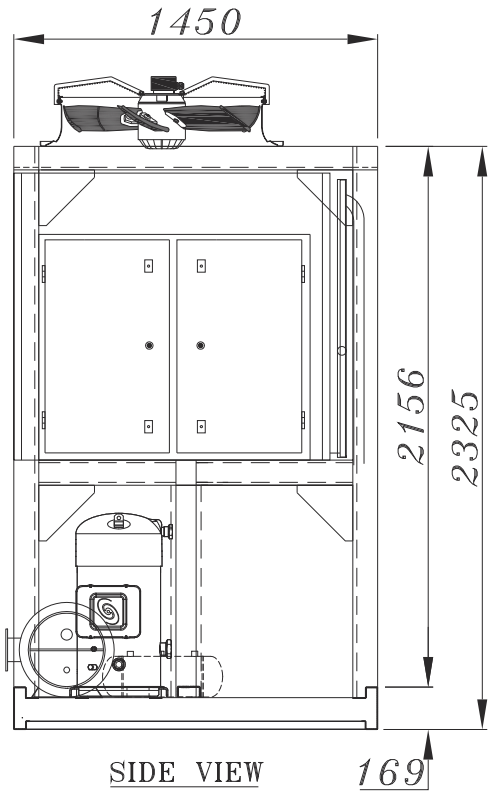
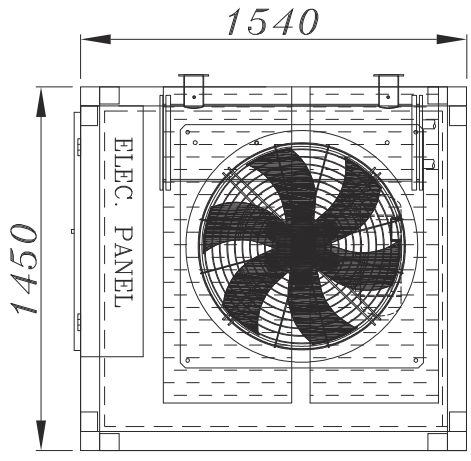


SIDE VIEW



TOP VIEW

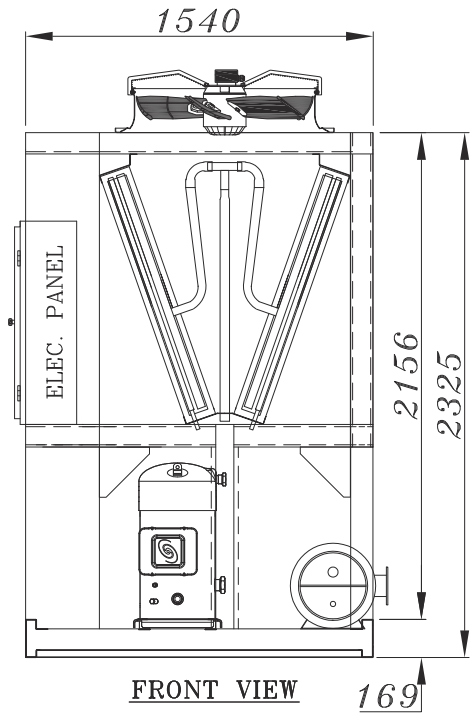
HLCA - 8 -1

HLCA - 9 -1

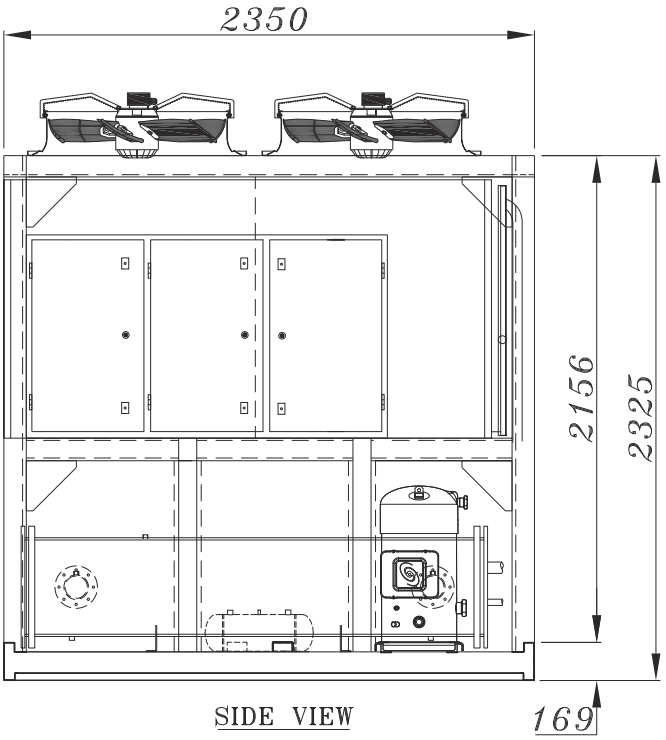
HLCA - 10 -1

HLCA - 12 -1

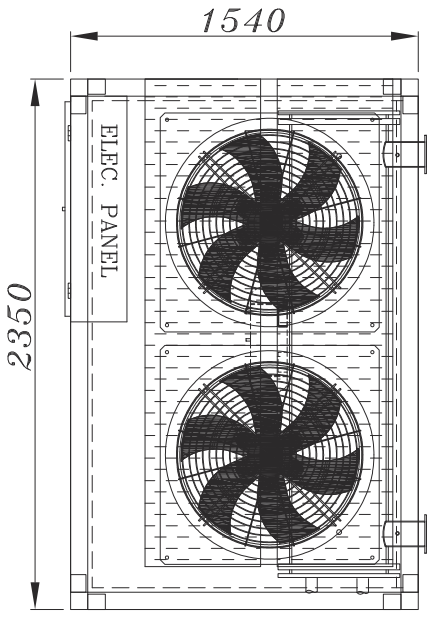
HLCA - 13 -1



FRONT VIEW



SIDE VIEW

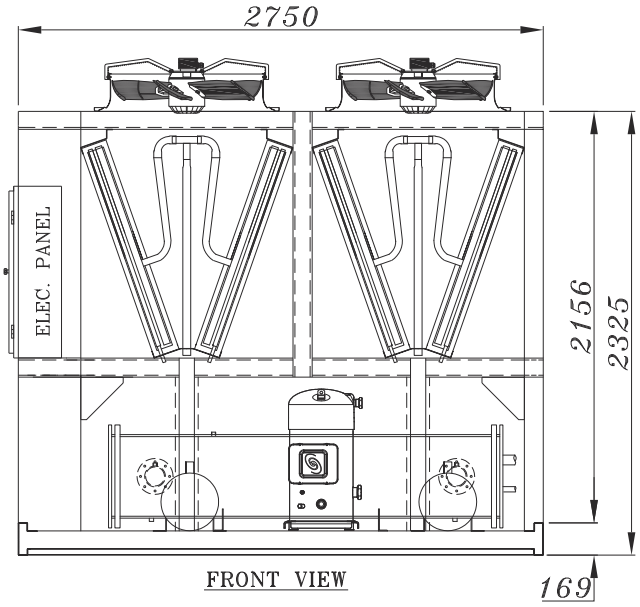


TOP VIEW

HLCA - 15 -1

HLCA - 20 -1

HLCA - 25 -1



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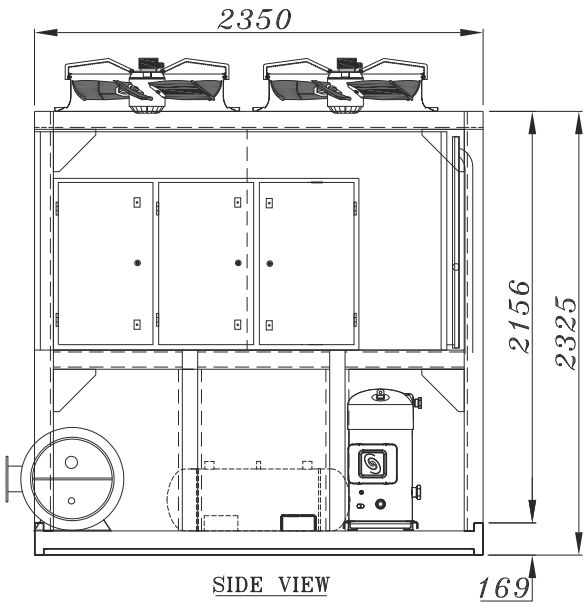
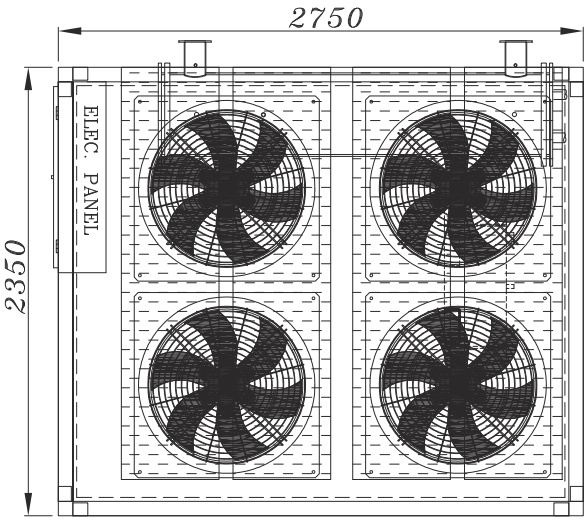
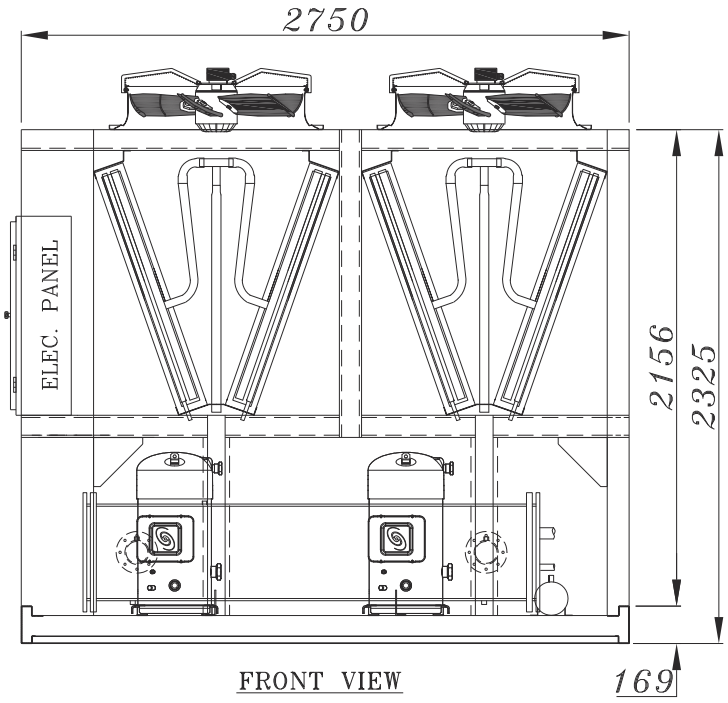


SIDE VIEW

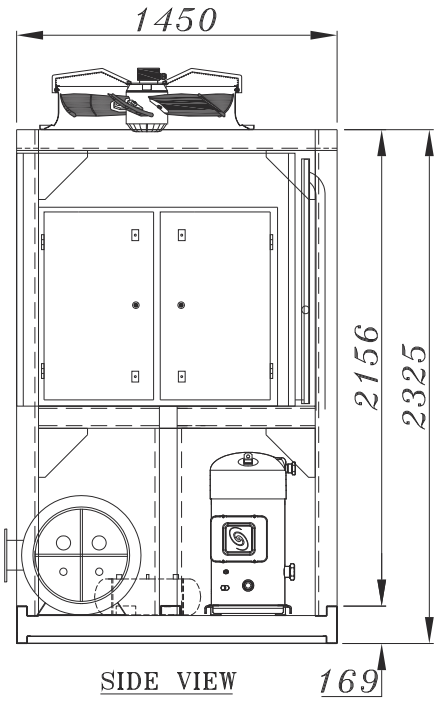


TOP VIEW

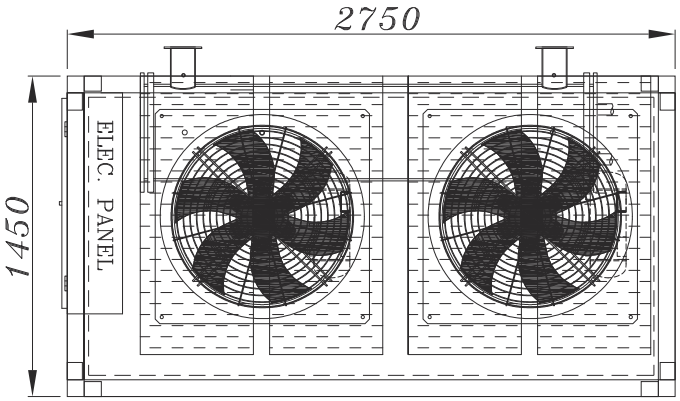
HLCA - 30 -1



FRONT VIEW

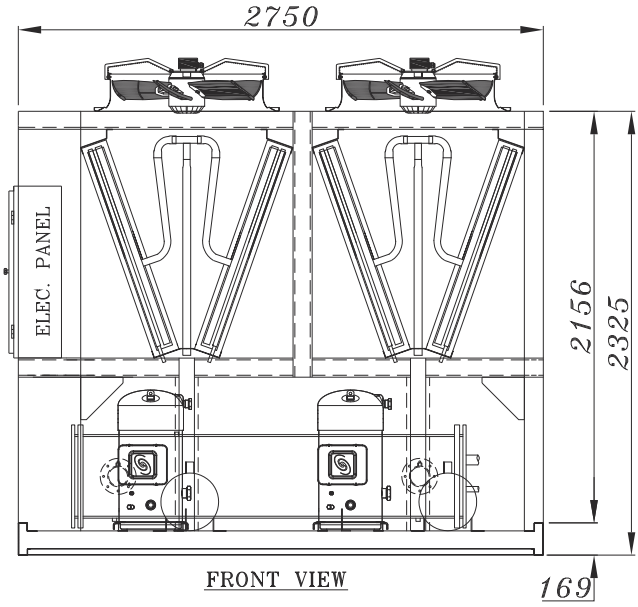


SIDE VIEW

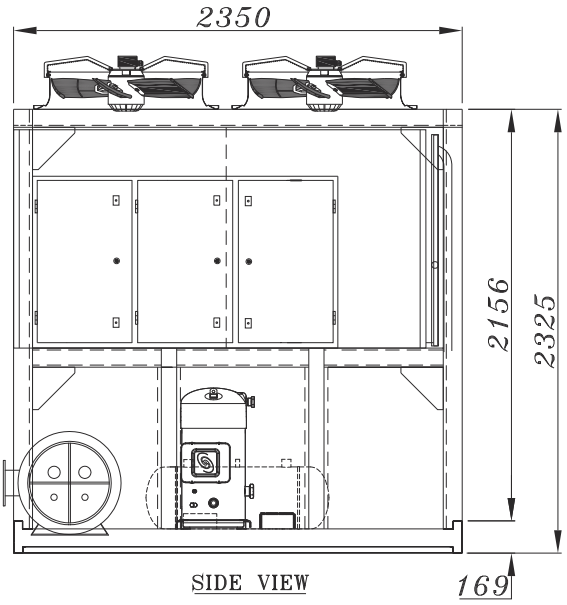


TOP VIEW

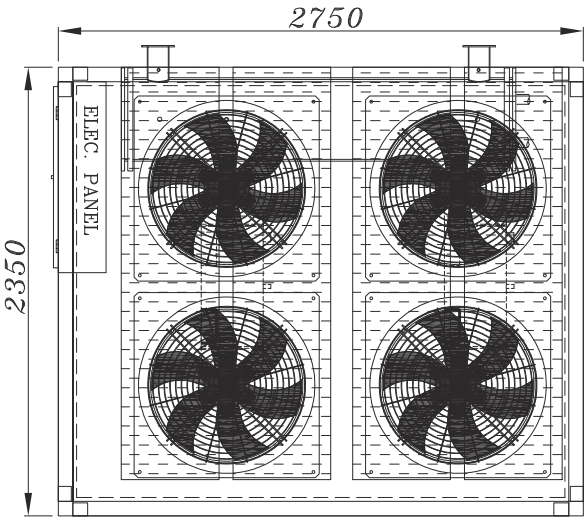
HLCA - 16 -2
HLCA - 18 -2
HLCA - 20 -2
HLCA - 24 -2
HLCA - 26 -2



FRONT VIEW



SIDE VIEW

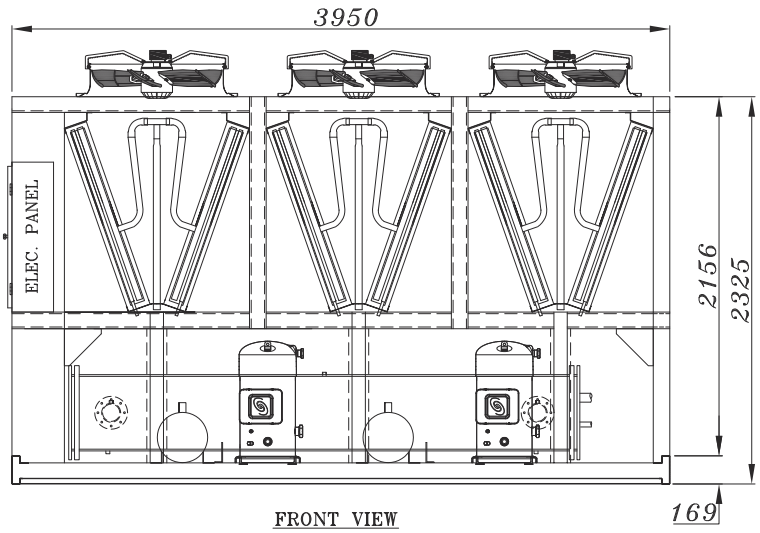


TOP VIEW

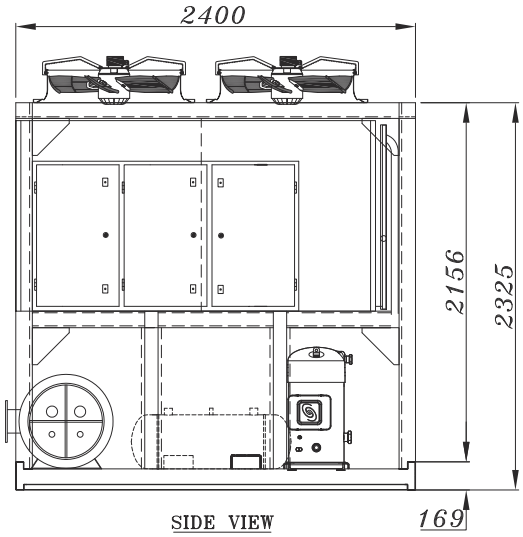
HLCA - 30 - 2

HLCA - 40 - 2

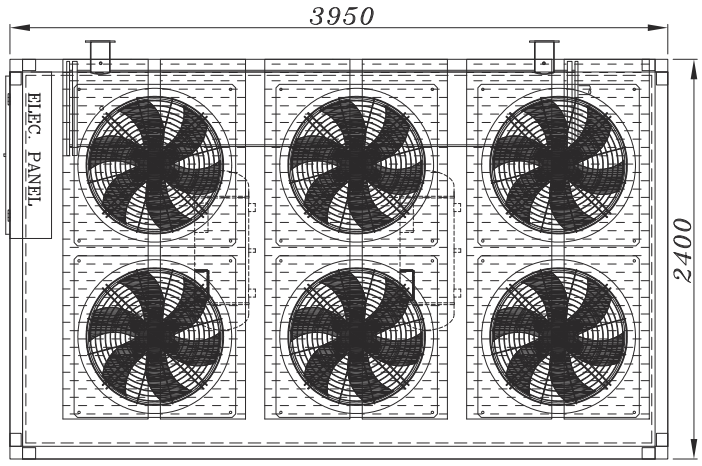
HLCA - 50 - 2



FRONT VIEW

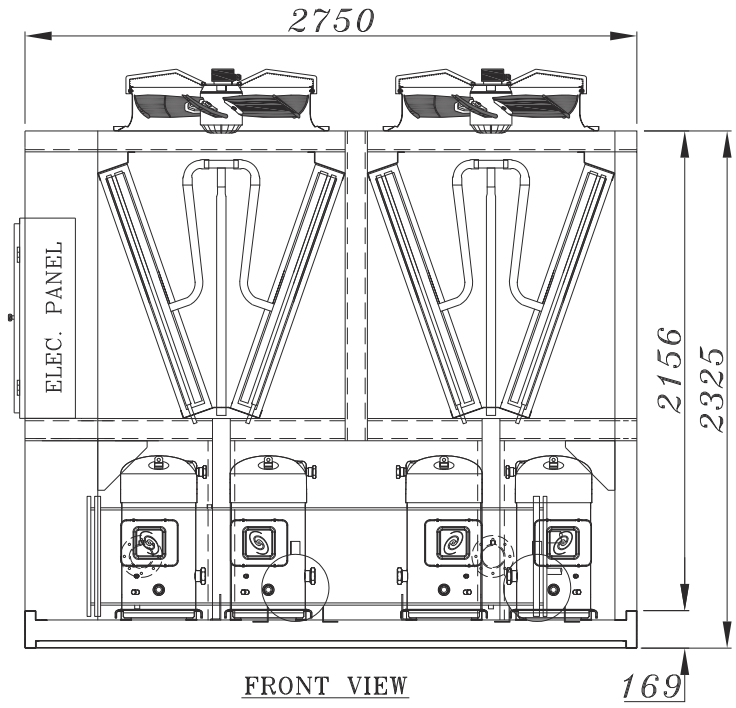


SIDE VIEW

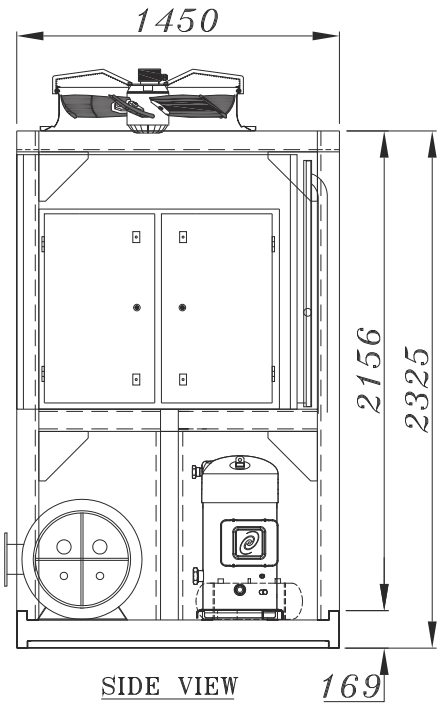


TOP VIEW

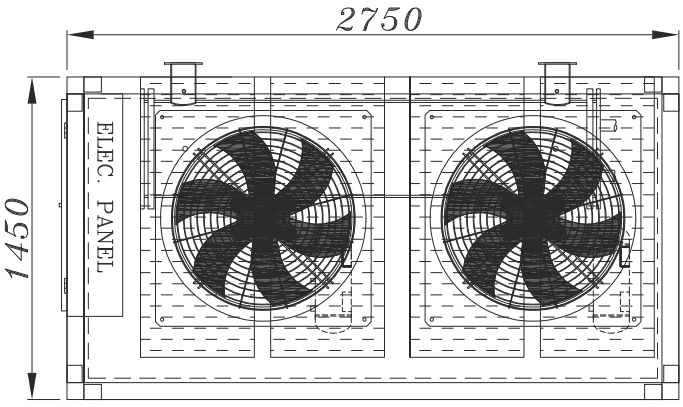
HLCA - 60 - 2



FRONT VIEW



SIDE VIEW

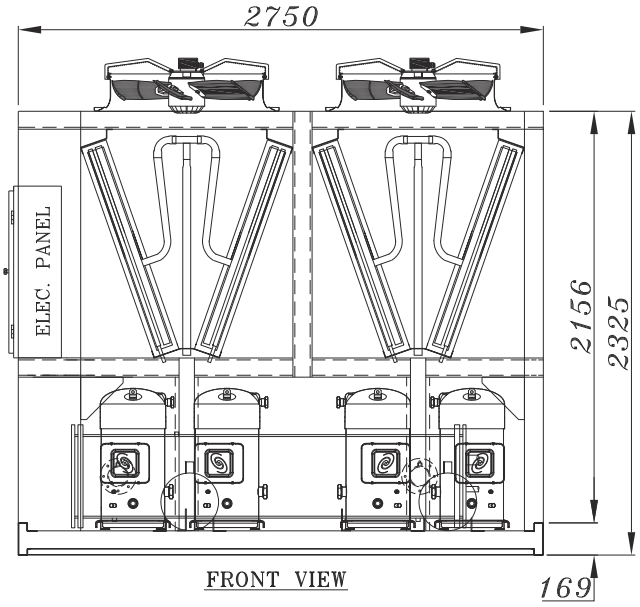


TOP VIEW

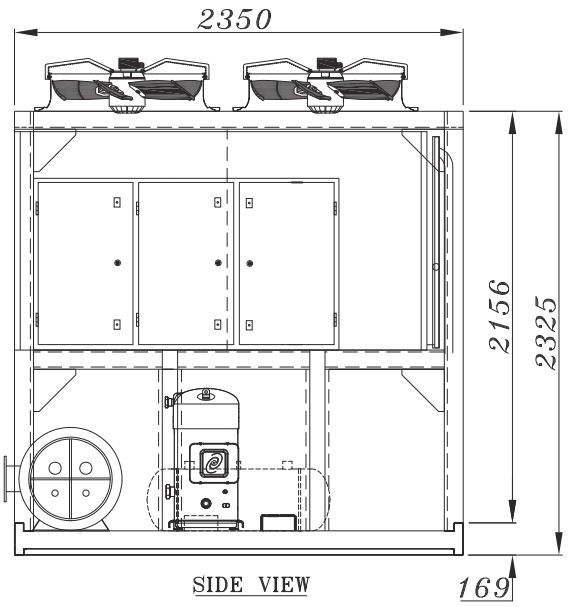
HLCA - 20 - 4

HLCA - 24 - 4

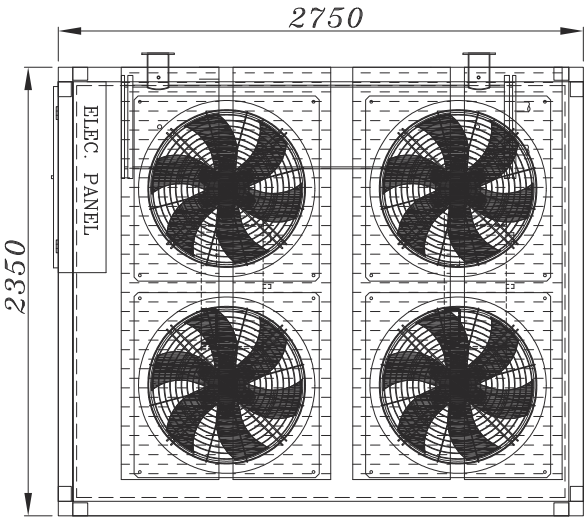
HLCA - 28 - 4



FRONT VIEW



SIDE VIEW



TOP VIEW

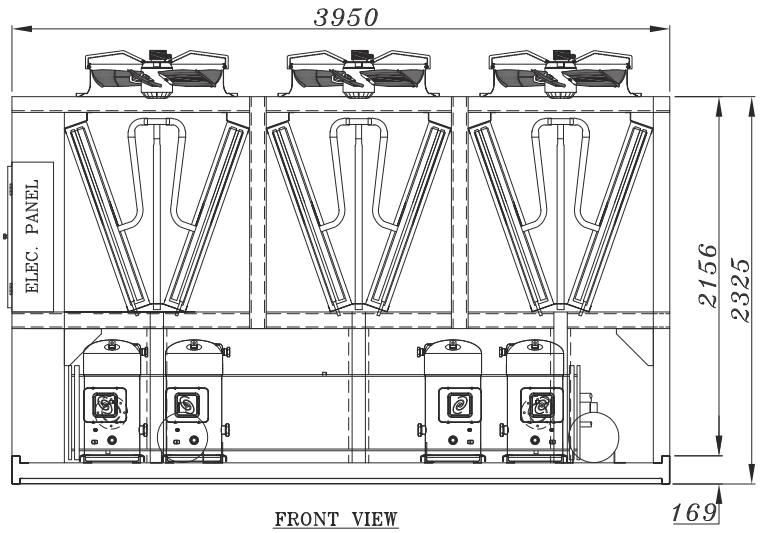
HLCA - 32 - 4

HLCA - 36 - 4

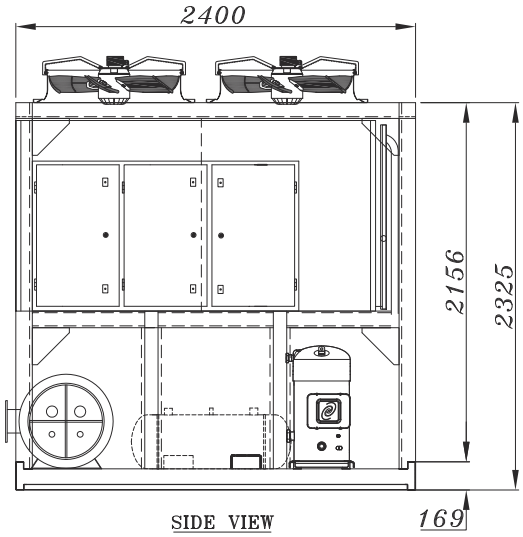
HLCA - 40 - 4

HLCA - 48 - 4

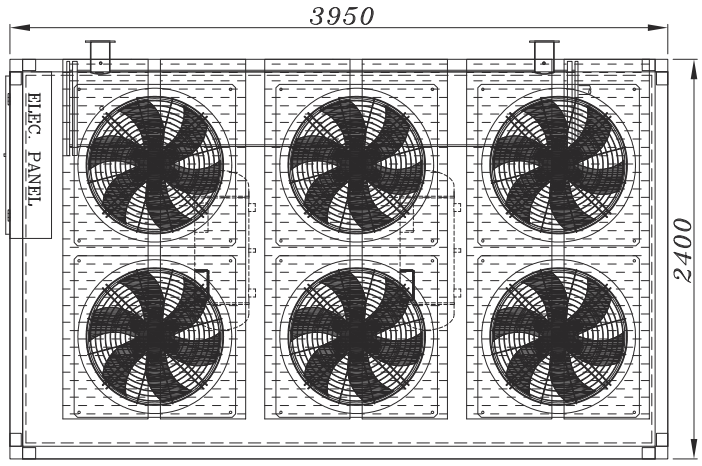
HLCA - 52 - 4



FRONT VIEW



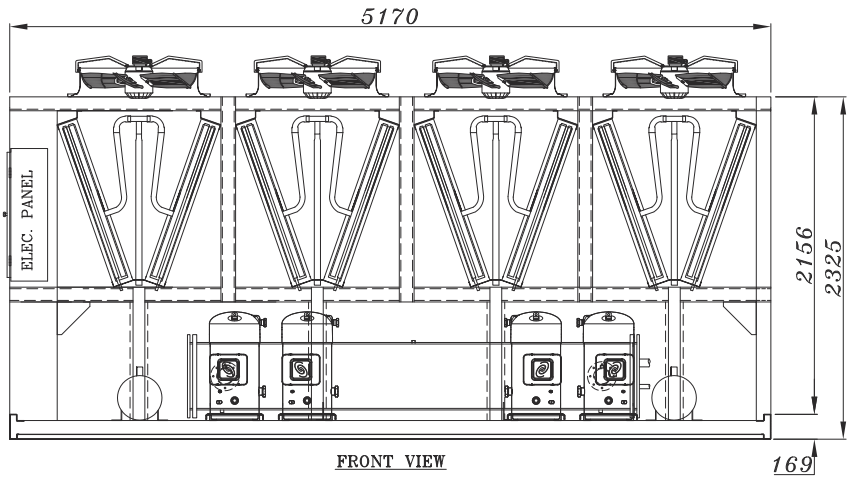
SIDE VIEW

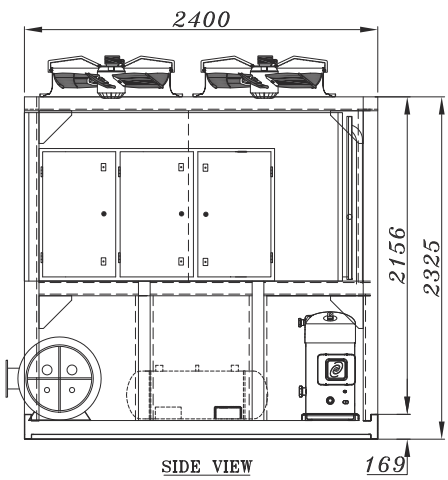


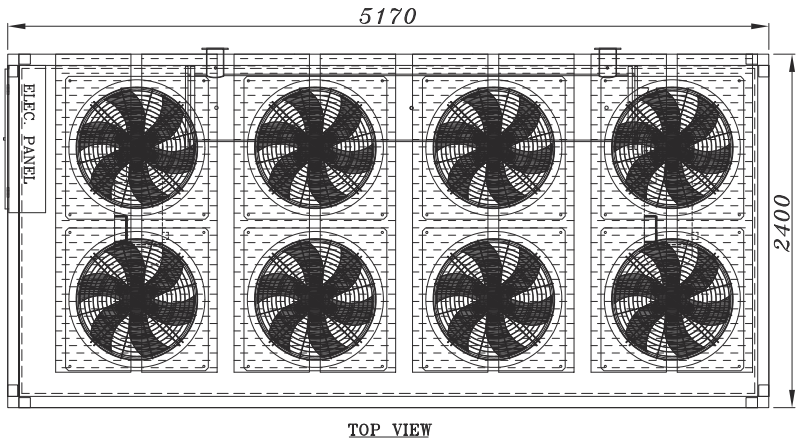
TOP VIEW

HLCA - 60 - 4

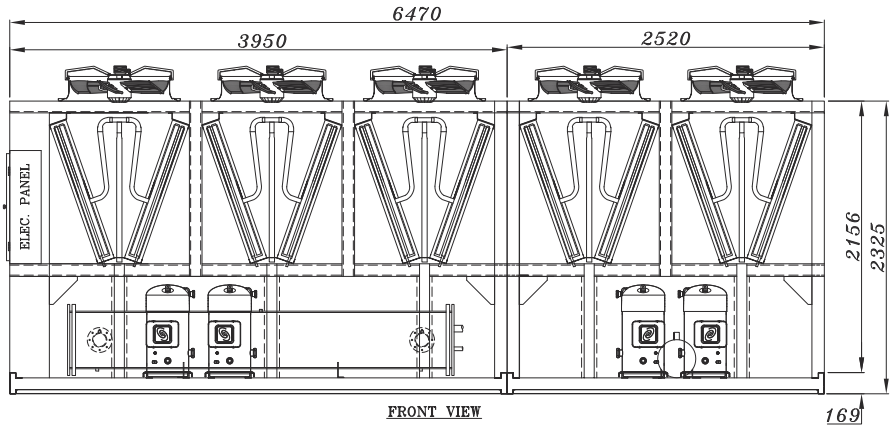
HLCA - 80 - 4


5170
ELEC. PANEL
2156
2325
169
FRONT VIEW

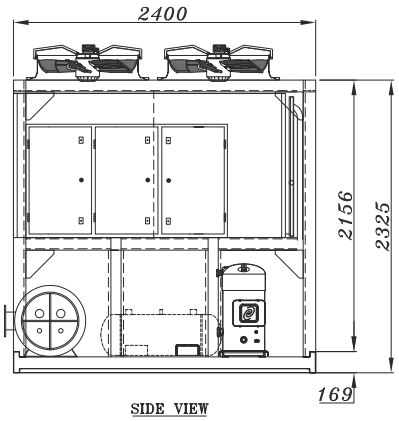

2400
2156
2325
169
SIDE VIEW


5170
ELEC. PANEL
2400
TOP VIEW

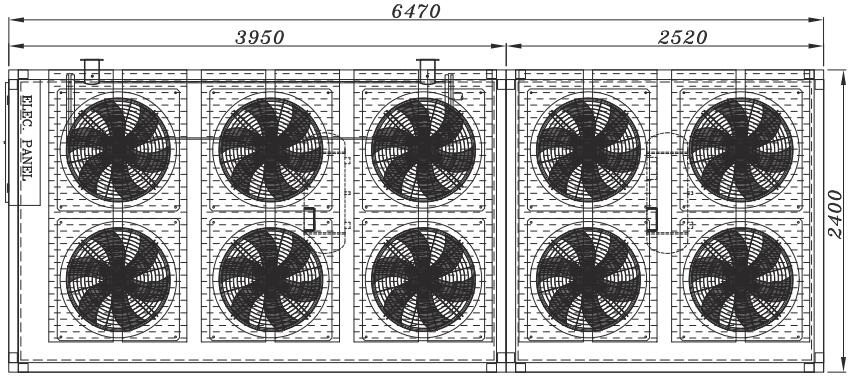
HLCA - 100 - 4



FRONT VIEW



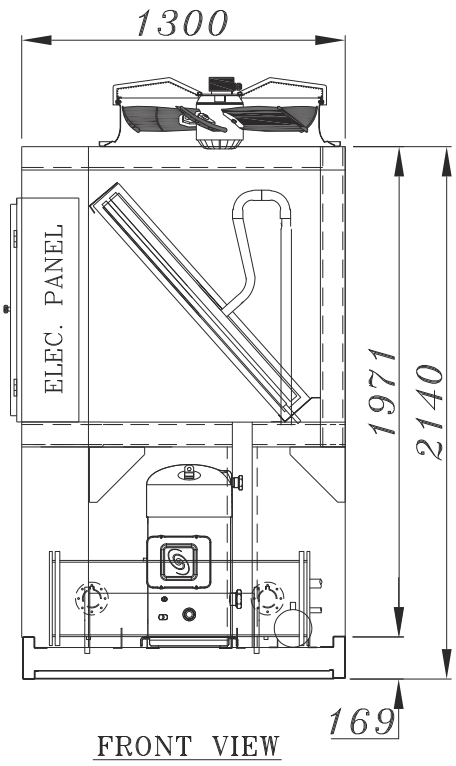
SIDE VIEW



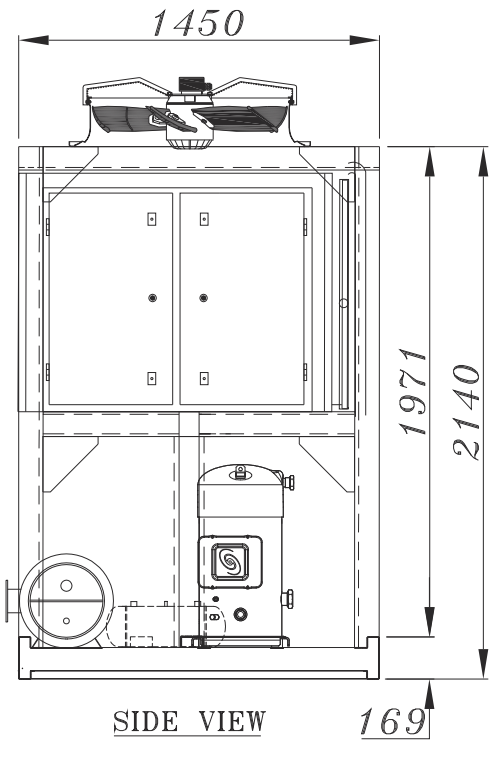
TOP VIEW

HLCA - 120 - 4

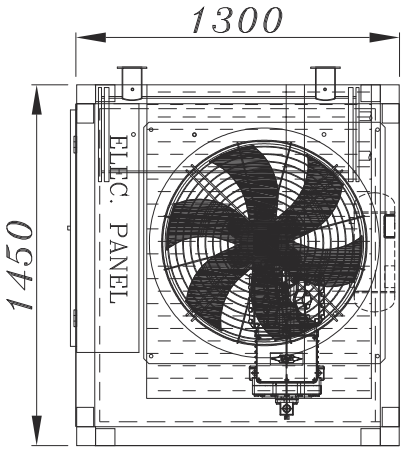
Dimensions(R-134a)-COPELAND



FRONT VIEW



SIDE VIEW



TOP VIEW

HLCA - 5 - 1

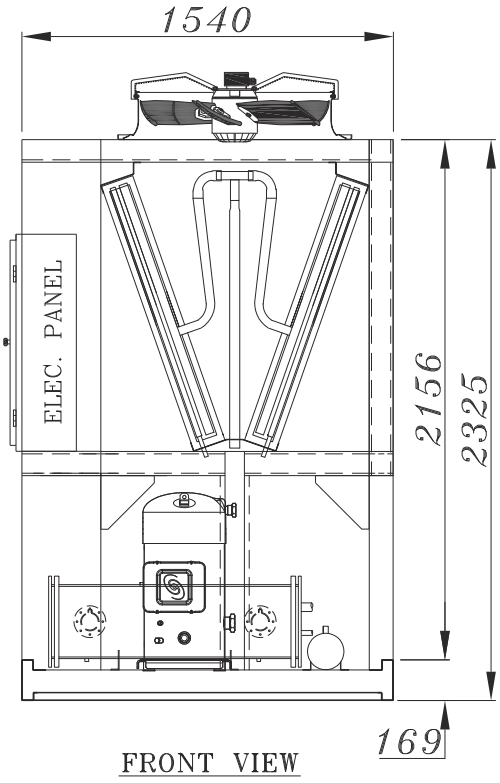
HLCA - 6 - 1

HLCA - 7 - 1

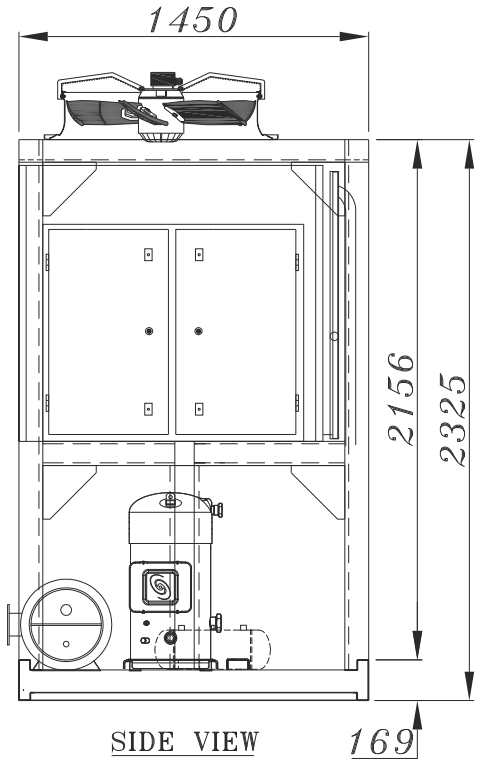
HLCA - 8 - 1

HLCA - 9 - 1

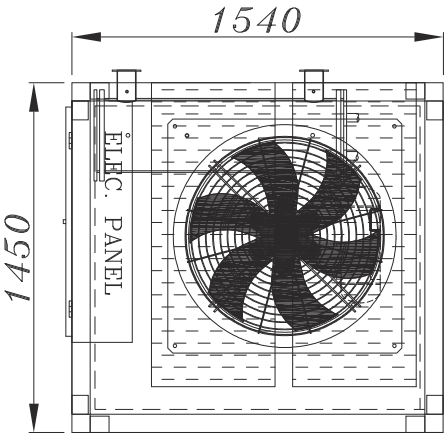
HLCA - 10 - 1



FRONT VIEW



SIDE VIEW



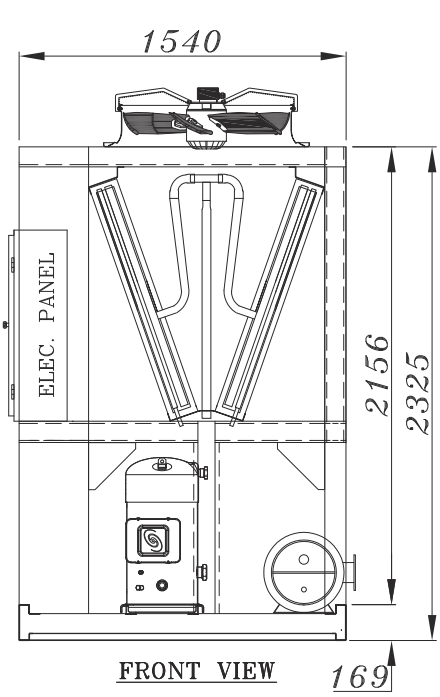
TOP VIEW

HLCA - 12 - 4

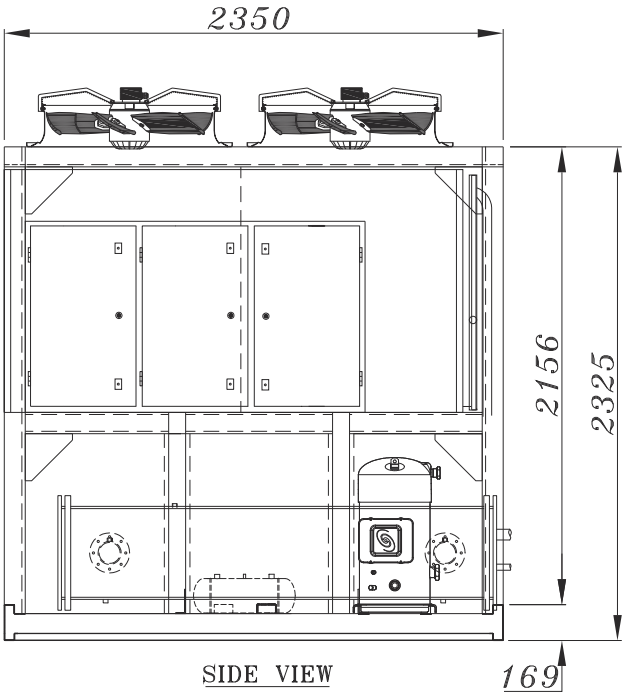
HLCA - 13 - 4

HLCA - 15 - 4

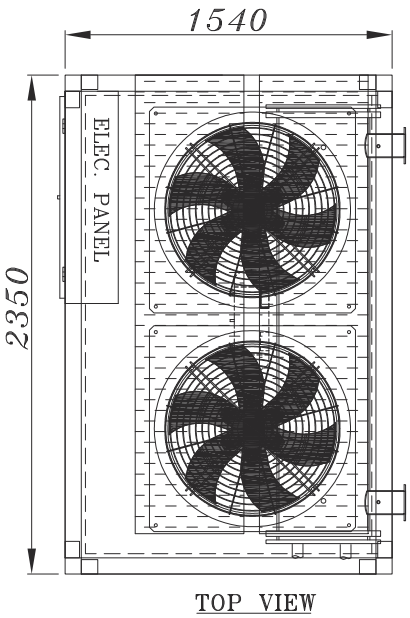
HLCA - 20 - 4



FRONT VIEW



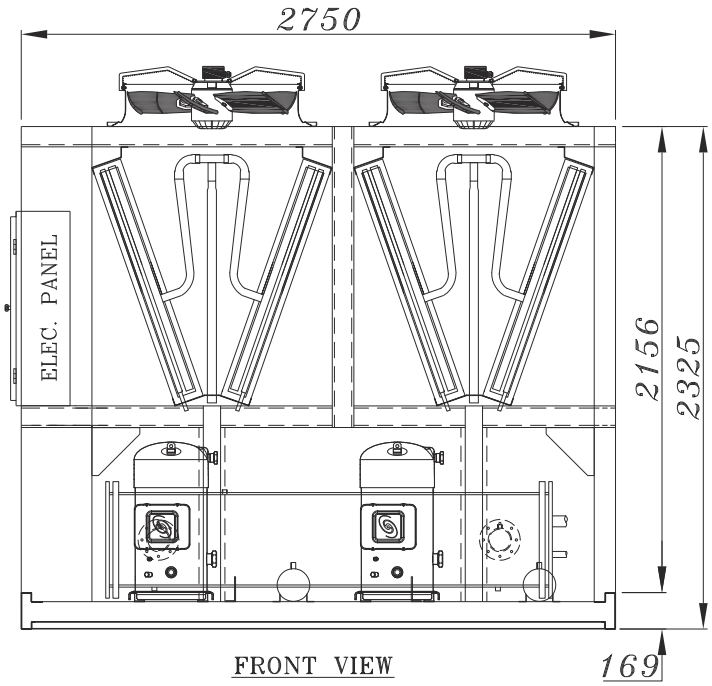
SIDE VIEW



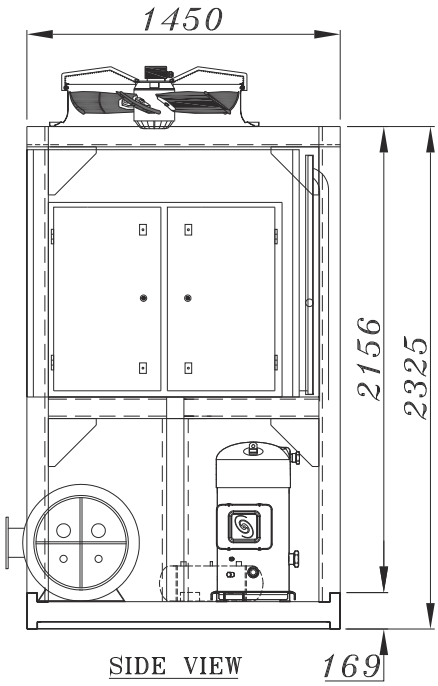
TOP VIEW

HLCA - 25 - 1

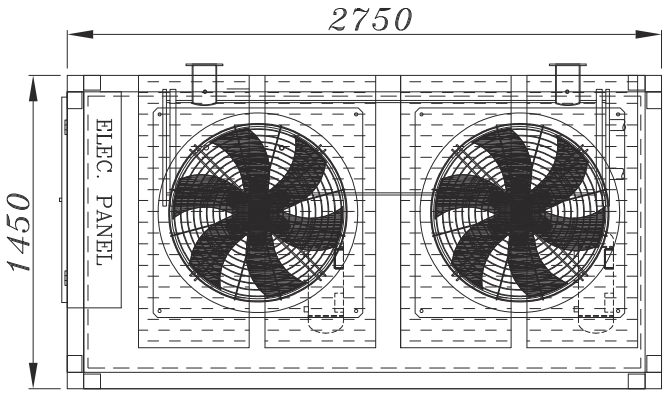
HLCA - 30 - 1



FRONT VIEW



SIDE VIEW



TOP VIEW

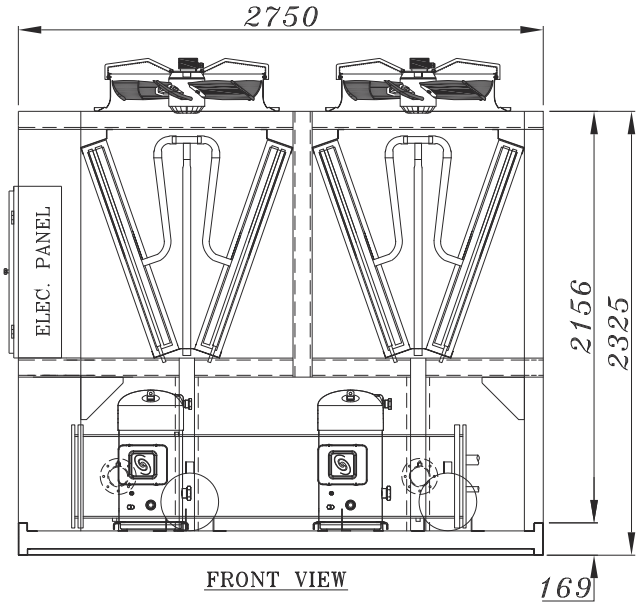
HLCA - 20 - 2

HLCA - 24 - 2

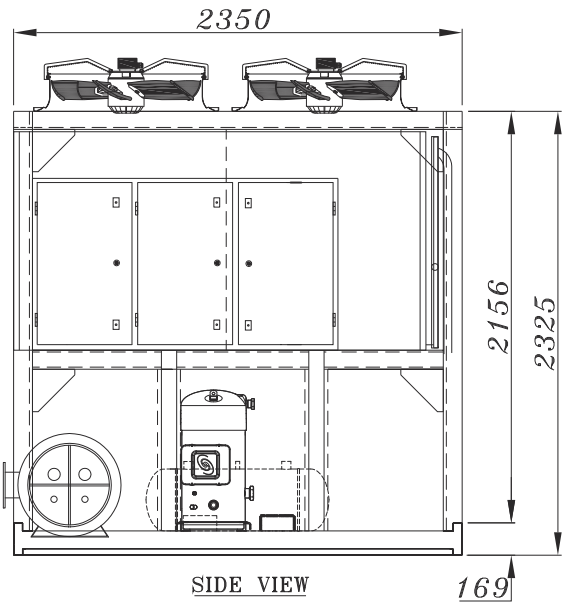
HLCA - 26 - 2

HLCA - 30- 2

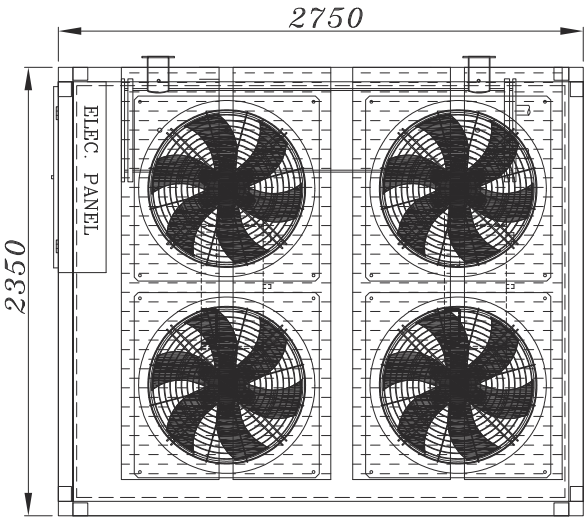
HLCA - 40 - 2



FRONT VIEW



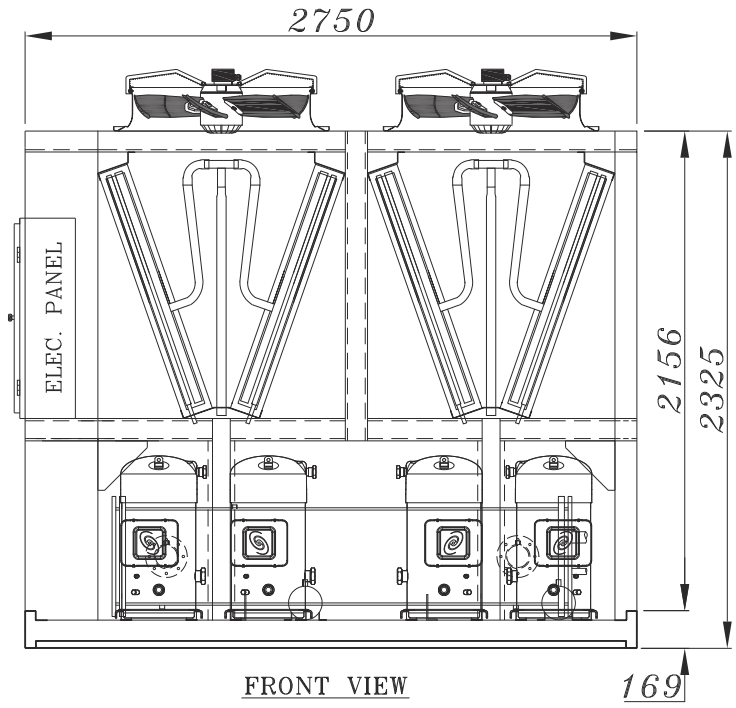
SIDE VIEW



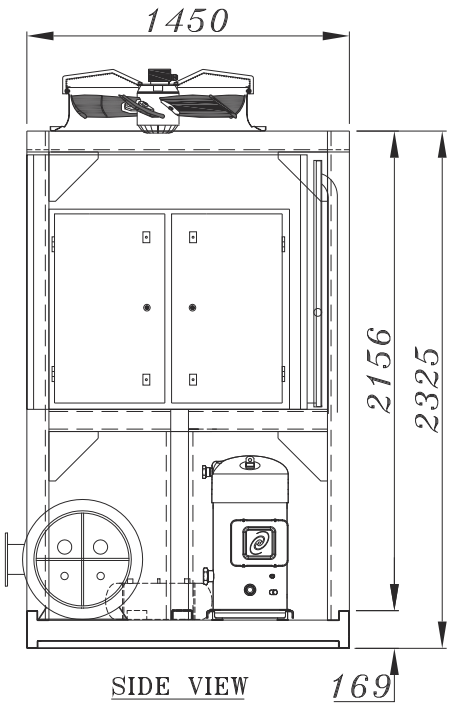
TOP VIEW

HLCA - 50 - 2

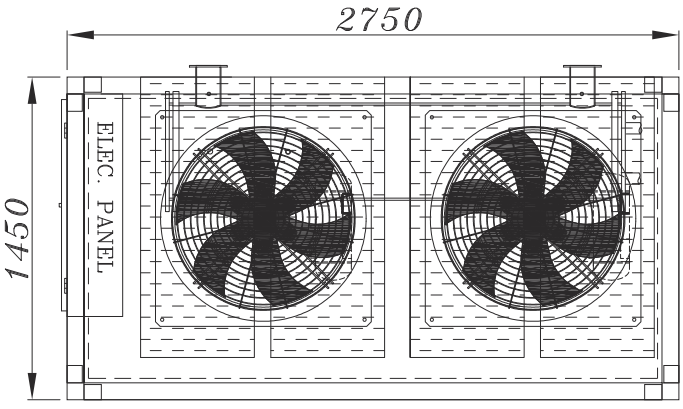
HLCA - 60 - 2



FRONT VIEW

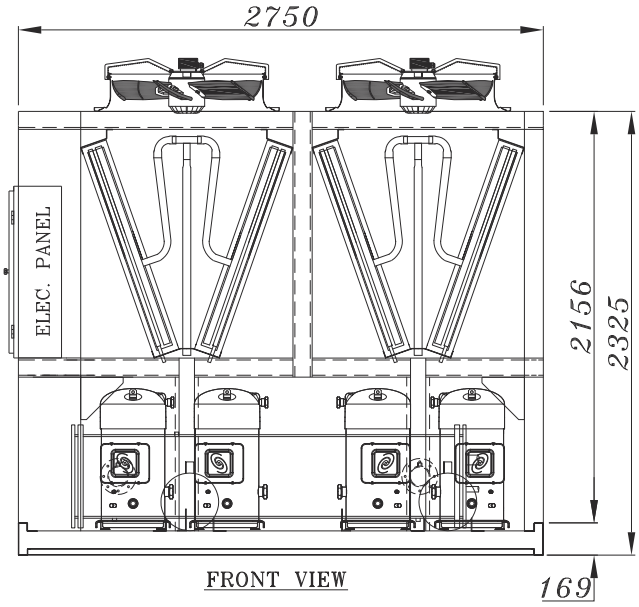


SIDE VIEW

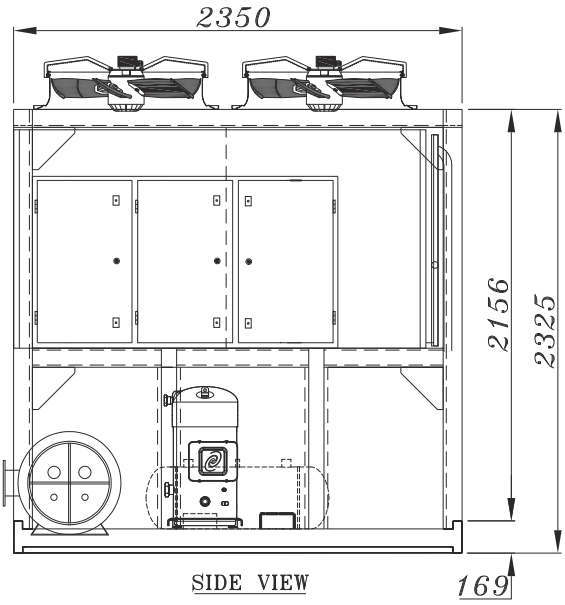


TOP VIEW

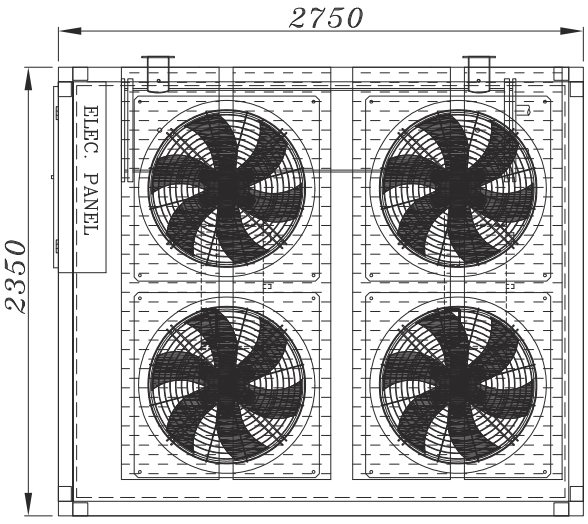
HLCA - 40 - 4



FRONT VIEW



SIDE VIEW



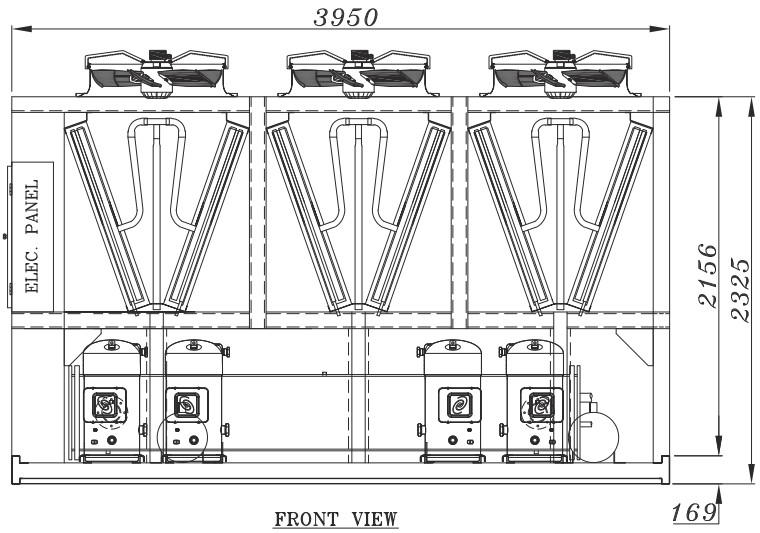
TOP VIEW

HLCA - 48 - 4

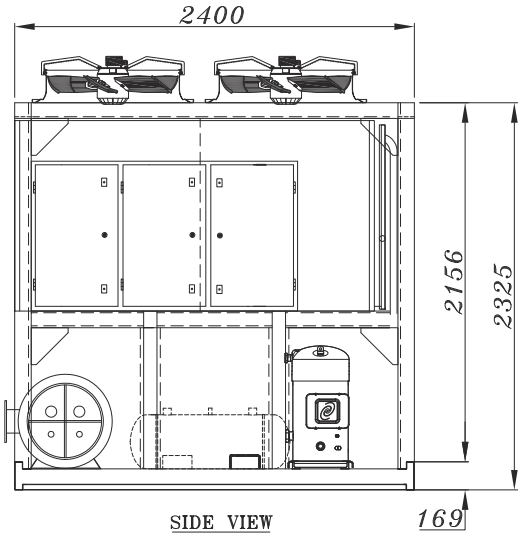
HLCA - 52 - 4

HLCA - 60 - 4

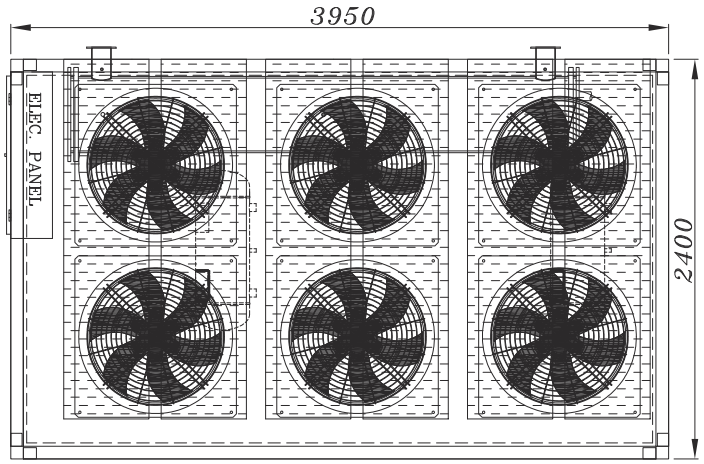
HLCA - 80 - 4



FRONT VIEW



SIDE VIEW



TOP VIEW

HLCA - 100 - 4

HLCA - 120 - 4

HAVASAZ

Life Is Cool Air Conditioning since 1967

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 Frasscold,bitzer,copeland , Carrier,refcomp از نوع Scroll , Screw , Reciprocating
مبدلهای Shell & Tube مارک رادیران و Compact Plate Heat Exchanger مارک Danfoss

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Life Is Cool Air Conditioning since 1967

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تلفن : ۸۸۷۵۴۹۱۰ فکس : ۸۸۷۵۴۹۱۱
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تلفن : ۷۵-۴۶۸۸۱۹۶۵ فکس : ۴۶۸۴۲۲۹۲