

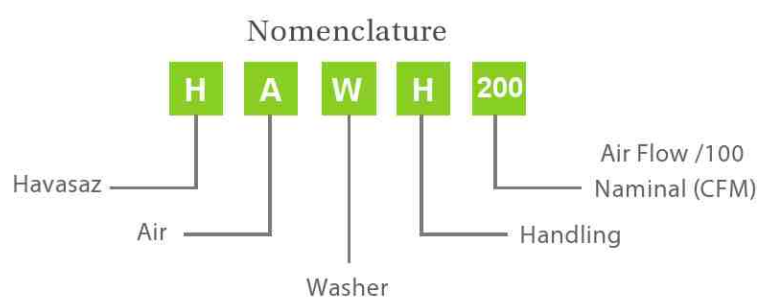


AIR HANDLING UNIT





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HAHU

Features and Benefits

Features

The modular air handling unit design concept provides the flexibility to meet the rising demand of indoor air quality. A quality range of 33 units with airflows of 1,058 CMH to 85,600 CMH and up to 1,500 pascals total static pressure. Our specially galvanized profile posts, galvanized corners and flush fitting panels and doors give the building designer and occupier a unit of aesthetic and clean lines unsurpassed in the marketplace.

Chilled water and DX cooling coils are manufactured from copper tubes with aluminum, copper or hydrophilic coated fins. Heating can be hot water coil or electric heaters.

Rigidity & Flexibility

Manufactured from robust galvanized profile, strong galvanized corner and double skin panel with injected polyurethane foams insulation adding rigidity to the unit.

The major components such as fans, cooling coils, heating coils, electric heater, filters etc. can be selected as per design requirement to give complete application flexibility.

Unit can be delivered as completely assembled or separated sections.

Fan Selection Flexibility

You have a choice of blower to meet your design and sound power requirement.

Advantage of Polyurethane Injection

Double skin panel construction allows easy inspection, cleaning and maintenance of the interior surface. Moisture intrusion and microbial growth are inhibited. And polyurethane is very good insulation for prevent energy wasting and decreases equipment's sound level as well as sound insulator.

Air Tightness & Easy Access

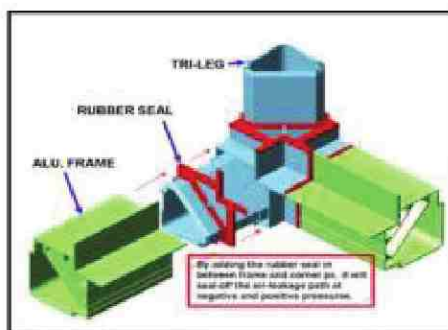
Provided with a combination of closed cells insulation and tape seals to ensure an air tight construction. HAVASAZ is using an EPDM strip between galvanized profile and panels to ensure fastening of all panels and their easy dismantling for service and maintenance.

Construction

Galvanized profile joined by galvanized corners, forming the structural frame to house all internal components. Double skin construction is provided by "sandwich" type 25mm/50mm

thick panel comprising 0.7mm thick galvanized steel internal skin with, for protection against corrosion HAVASAZ paint external skin by electrostatic powder coating with approximately 60 micron and injected with polyurethane foam of 40 kg/m³ density, providing an overall thermal transmission coefficient of $U=0.68 \text{ W/M}^2\text{K}$ for 25mm and 50mm thick panel, $U=0.34 \text{ W/M}^2\text{K}$.

Unit sections are mounted on a thick galvanized steel bolted base frame, to assure stability and permit easy lifting, handling and positioning on site. Unit with sectional split (s) shall be provided with gaskets and sealing material as well as connection clamps, to permit quick and air tight site assembly.



3 Leg Corner



3 Leg Corner Unit



Control Dampers

Air intake, mixing box dampers have rotating blades. The standard galvanized steel blades will turn in counter-action providing a smooth operation requiring no lubrication.

Filtration

Various options of flat filter and bag filter media available to meet the different air quality requirement.

Filter sections are provided to house the following options:

Pre-filters of all type are arranged in aluminum sliding rails for side removal. Main filters, of bag type with 85% or 95% efficiency and 533.4mm (21") deep housing. The section shall be accessible from one side with access door. Besides, filters such as carbon filter, chemical filter, electronic filter, and HEPA filter can be offered as option.

Aluminum surface filters: in which the filtering mat is mounted in zigzag fashion. As a result, the filtering area is larger, the air flow rate is low, and the service interval for replacement or cleaning is longer.

The filtering efficiency is low; and therefore the unit can be used in systems for human comfort where the atmosphere has a low level of contamination. Bag filters: This can be flexible or stiff and have a medium or high filtering efficiency, depending on the class. The bag

filters have an individual frame and airtight seals. They are particularly recommended for installations requiring extra-pure air. The bag filters are generally preceded by a pre filter section of lower efficiency (e.g., aluminum surface filters). This approach extends the service life of the bag filters, which are more costly and must be replaced, as they cannot be regenerated.

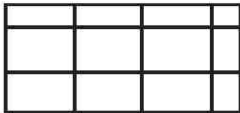
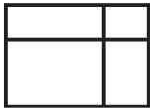
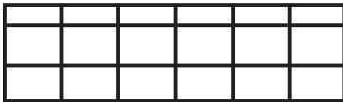
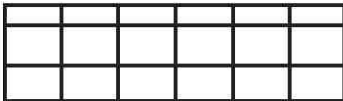
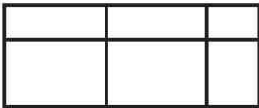
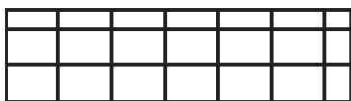
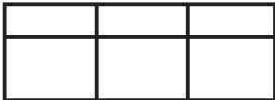
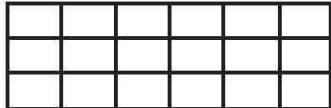
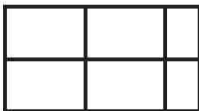
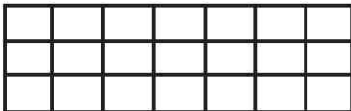
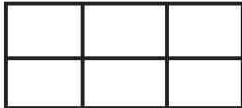
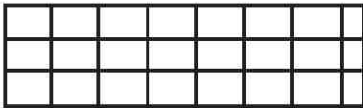
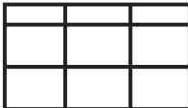
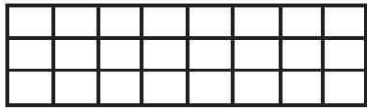
Absolute filters: have an efficiency of almost 100% as indicated by the name. They are equipped with an individual frame and airtight gaskets.

For heating processes, the same type of copper/aluminum units used for cooling is normally used.

If the air might contain corrosive chemicals, copper tube and fin (Cu/Cu) units should be used to improve the corrosion resistance of the equipment. This type of unit is more expensive than the copper/aluminum unit.

In facilities where the heating fluid is at high temperature and pressure (e.g., steam, super-heated water or special thermal fluids), units composed of steel tubes and fins (Fe/Fe), which have a much higher strength, should be used. This type of unit is more expensive than the copper/aluminum unit. Electrical heating units can also be installed upon request, depending on the customer's needs.

Filter arrangement

Model	Arrangment	Model	Arrangment
15		150	
20		180	
30-40		150	
50		210	
60		270	
75		320	
85		350	
100		390	
130		420	

Coils

Cooling and heating coils are manufactured from copper tubes with aluminum fins bonded to the tubes through mechanical expansion and all housed in galvanized steel frames. Headers come with threaded male pipe connections and include drain and vent. Coils shall be tested to 2,400 Kpa, with a maximum design operating pressure of 1,700 Kpa. Condensate pans will be of the "dry pan" design to ensure complete condensate removal and recommended for dx coil or chilled water coil in tropical area.

Options include;

- 2 to 12 rows, ½ inch OD chilled water coils.
- 1 and 2 rows, ½ inch OD hot water coils.
- 4 and 6 rows, or ¾ inch OD refrigerant coils.
- Infinitely variable fin spacing (IVS).
- Stainless steel coil casing (option). Copper fins (as an option).
- Coated aluminum fin for corrosion resistance.
- Header drains and vents connections.
- Fully Drainable coils at header 5/8 inch coil

Humidifier section

Three different types of air humidifiers can be installed in our air handling units. In two cases, the units are adiabatic humidifiers.

Adiabatic Humidification (with water spray)

At constant enthalpy part of the sensible heat content of the air is converted into latent heat of evaporation. The efficiency of that process is defined by:

$$E\% = \frac{Xl - Xe}{Xs - Xe} \times 100$$

Xl = quantity of water vapor in hot air leaving the humidifier (g/kg)

Xe = quantity of water vapor in the air entering the Humidifier (g/kg)

Xs = quantity of water vapor at saturation in the air entering the humidifier (g/kg)

Panel humidifier, composed of a standardized enclosure, including a stainless steel drip pan at the bottom.

The enclosure houses the humidifier panel, which has crosswise corrugated channels to ensure minimum air resistance as well as a large contact surface between the air and water, thereby releasing moisture into the circulating air.

The top of the panel contains a water manifold, to which the water is pumped through the pipework from the drip pan by means of a small submersible electrical pump.

Water is distributed vertically by gravity, coating the entire inner panel surface with an extremely fine film. As the air flows by the panel horizontally through the spaces provided, turbulent flow conditions are established, thereby resulting in efficient transfer of heat and moisture.

The humidifier panel is manufactured of three different types:

1- Pan type

2- Spray type

3- Isothermal type: this type use for medical or industrial applications and should be installing beside of AHU. Mentioned panel would be connecting with a flexible pipe (hose) to stainless steel humidifier nozzle.

4- Steam jacket (grid) type

FAN SECTION

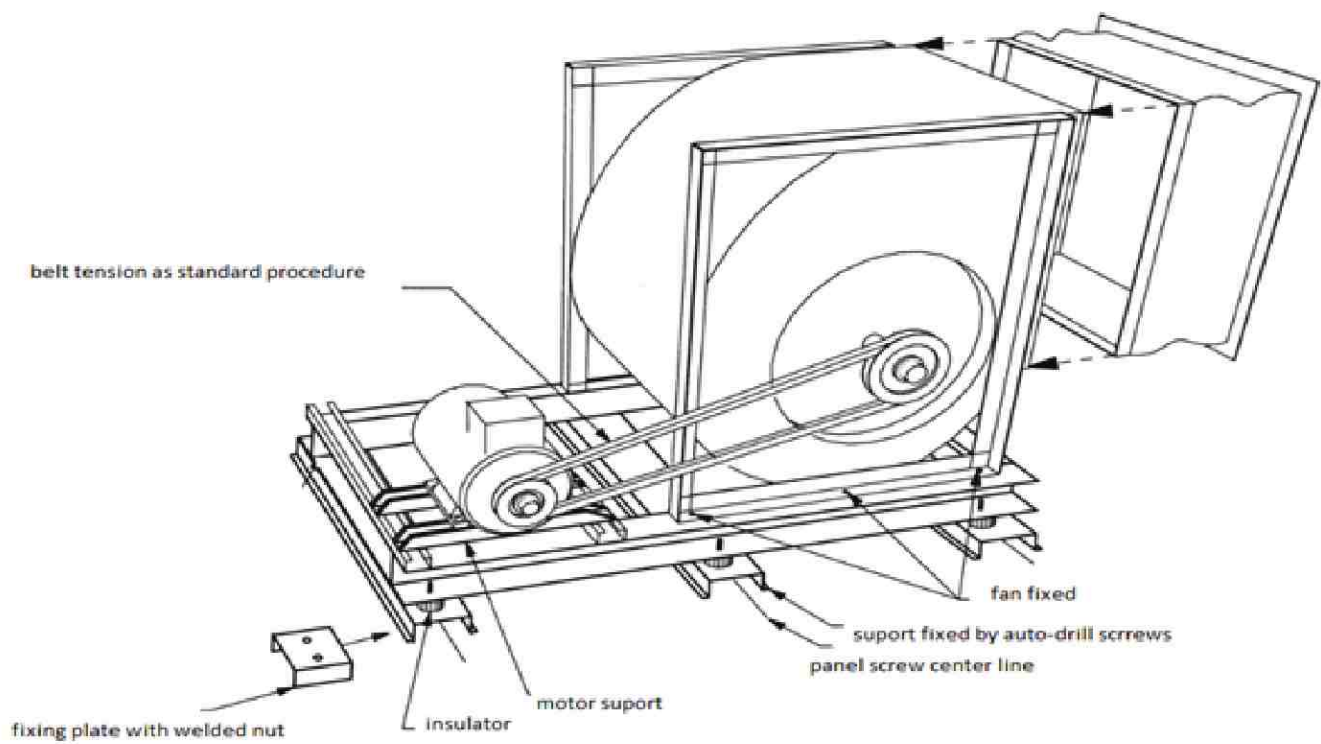
shall be fitted with double inlet, forward curved or backward centrifugal fan (air foil as

option), depending upon air volume and static pressure requirements. Fan inlets are aerodynamically designed and wheels statically and dynamically balanced according to rated air flow and speed.

Fan drives (V belt) shall be factory selected and installed to meet the required performances. Motor shall be TEFC type, class F insulation, and IP54 or 55 protection. Total fan motor assembly shall be installed on a separate base frame supported and isolated from the unit structure by spring or rubber isolators. Flexible connections shall be provided between fan discharge and casing.

Options:

- Dual speed motors (2/4, 4/8, 4/6, 6/8 poles)
- Frequency inverter drive for V.A.V applications.
- Varies motor voltage and frequency.



Forward curve impeller

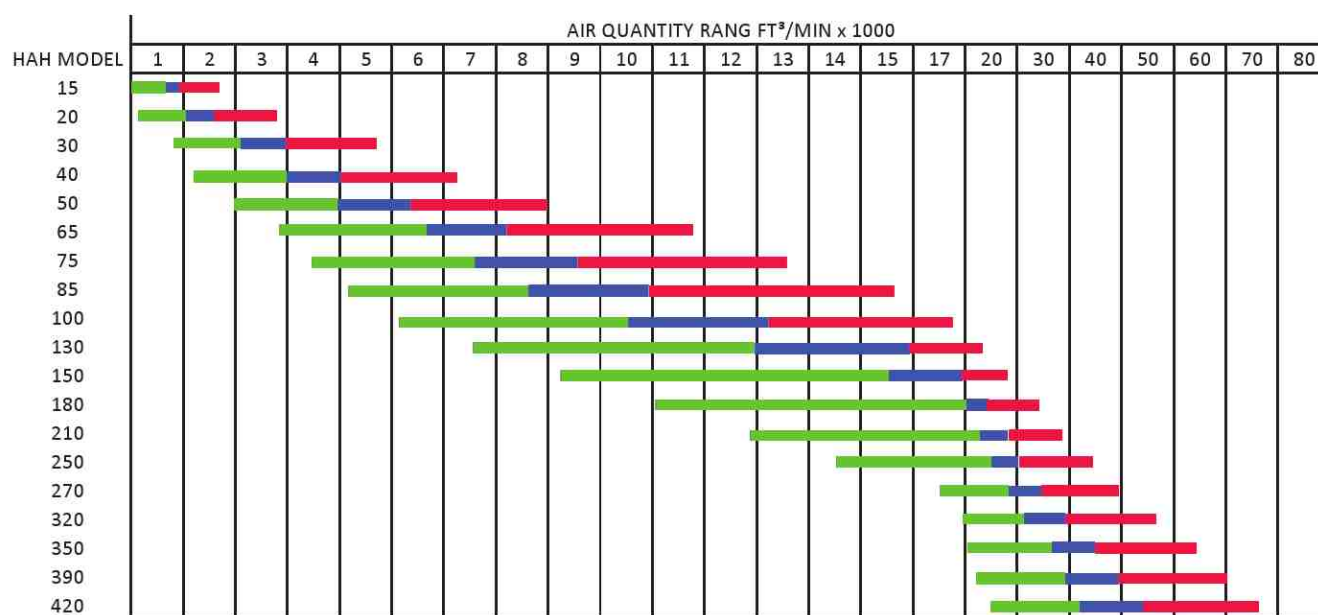


Backward impeller

FAN MOTOR SPECIFICATIONS

WEIGHT	MOMENT OF INERTIA	Rated torque at 50 Hz	STARTING TORQUE	MAX CURRENT	POWER FACTOR	EFFICIENCY	CURRENT	RPM	VOLTAGE	OUTPUT POWER		FRAME SIZE	MOTOR TYPE
KG	J/KGM ²	NM	NM	A	COSΦ	η	A		V	HP	Frame Size		
2.9	0.00009	3.9	3.5	3.1	0.56	58	0.87Δ/0.5Y	2840	220Δ/380Y	0.12	0.09	56	56-2A
3.2	0.000105	3.8	3.8	4.1	0.61	60	1Δ/0.6Y	2835	220Δ/380Y	0.16	0.12	56	56-2B
3.8	0.000149	3	3.2	3.9	0.7	64	1.27Δ/0.7Y	2750	220Δ/380Y	0.25	0.18	63	63-2A
4.3	0.000184	3.9	3.7	5	0.73	65	1.4Δ/0.8Y	2825	220Δ/380Y	0.33	0.25	63	63-2B
5.7	0.000383	2.6	2.4	4.7	0.8	70	1.9Δ/1.1Y	2825	220Δ/380Y	0.5	0.37	71	71-2A
6.8	0.000463	3	2.8	5.2	0.72	74	2.6Δ/1.5Y	2830	220Δ/380Y	0.75	0.55	71	71-2B
8.7	0.000718	2.6	2.6	4.4	0.79	70	4Δ/2.3Y	2795	220Δ/380Y	1	0.75	80	80-2A
10	0.000889	3.1	3.1	5.7	0.82	77	4.7Δ/2.7Y	2825	220Δ/380Y	1.5	1.1	80	80-2B
13	0.001483	2.6	2.3	5.9	0.87	80	5.7Δ/3.3Y	2830	220Δ/380Y	2	1.5	90L	90L2A
15.5	0.001816	2.7	2.5	6.3	0.88	81	8.3Δ/4.8Y	2830	220Δ/380Y	3	2.2	90L	90L2B
18.5	0.002998	2.9	2.9	6.8	0.87	83.95	11.3Δ/6.5Y	2895	220Δ/380Y	4	3	100L	100L2
27	0.005326	3.4	2.6	7.1	0.86	85.95	9.0Δ/5.2Y	2895	220Δ/380Y	5.5	4	112M	112M2
37	0.011716	2.9	2.4	6.2	0.86	85.9	11.6Δ/6.7Y	2905	220Δ/380Y	7.5	5.5	132M	132M2A
43.5	0.014361	3.2	2.8	7.2	0.85	87.65	15.6Δ/9Y	2940	220Δ/380Y	10	7.5	132M	132M2B
67	0.035588	2.9	2.8	7.5	0.88	89.45	22.9Δ/13.2Y	2925	220Δ/380Y	15	11	160L	160L2A
82	0.045925	3.1	2.2	8.1	0.91	90.55	29.0Δ/16.7Y	2940	220Δ/380Y	20	15	160L	160L2B
93	0.053162	2.5	3.5	8.4	0.85	91.25	38.5Δ/22.2Y	2940	220Δ/380Y	25	18.5	160L	160L2C
2.7	0.000148	2.8	2.7	2.3	0.63	53	0.7Δ/0.4Y	1360	220Δ/380Y	0.08	0.06	56	56-4A
3.6	0.000172	2.4	2.5	2.8	0.67	54	0.7Δ/0.4Y	1335	220Δ/380Y	0.12	0.09	56	56-4B
3.8	0.000222	2.1	1.9	2.8	0.77	57	0.87Δ/0.5Y	1350	220Δ/380Y	0.16	0.12	63	63-4A
4.2	0.000279	2.2	2.2	3	0.7	58	1.2Δ/0.7Y	1350	220Δ/380Y	0.25	0.18	63	63-4B
5.5	0.000612	2.4	2.3	3.7	0.7	65	1.6Δ/0.9Y	1400	220Δ/380Y	0.33	0.25	71	71-4A
6.7	0.000744	2.2	2.1	4.1	0.71	69	1.9Δ/1.1Y	1390	220Δ/380Y	0.5	0.37	71	71-4B
8.8	0.001134	2.3	2	4.1	0.76	70	2.8Δ/1.6Y	1390	220Δ/380Y	0.75	0.55	80	80-4A
10	0.001424	2.4	2.4	4.3	0.76	70	3.8Δ/2.2Y	1385	220Δ/380Y	1.1	0.75	80	80-4B
12.5	0.002385	2.2	1.9	4.6	0.8	77.2	5Δ/2.9Y	1395	220Δ/380Y	1.5	1.1	90L	90L4A
15	0.003001	2.7	2.4	4.9	0.78	79.4	7.1Δ/4.1Y	1405	220Δ/380Y	2	1.5	90L	90L4B
18.2	0.004613	2.5	2.1	5.2	0.8	81.25	9.2Δ/5.3Y	1410	220Δ/380Y	3	2.2	100L	100L4A
20.7	0.006274	2.7	2.5	5.6	0.79	83.35	13Δ/7.5Y	1415	380Δ/660Y	4	3	100L	100L4B
30.5	0.011467	2.6	2.3	6	0.84	84.6	8.7Δ/5Y	1420	380Δ/660Y	5.5	4	112M	112M4
43	0.024381	2.3	2.1	5.4	0.83	86.2	12Δ/6.9Y	1430	380Δ/660Y	7.5	5.5	132M	132M4A
52	0.031417	2.7	2.5	6.7	0.82	87.55	16.2Δ/9.4Y	1445	380Δ/660Y	10	7.5	132M	132M4B
76.5	0.062502	2.1	2.2	6	0.83	89	24.1Δ/13.9Y	1455	380Δ/660Y	15	11	160L	160L4A
96	0.080486	2.3	2	6.7	0.85	90	31.9Δ/18.4Y	1455	380Δ/660Y	20	15	160L	160L4B
8.5	0.002162	2.5	2.3	3.3	0.66	63	2.4Δ/1.4Y	920	220Δ/380Y	0.5	0.37	80	80-6A
10	0.002681	2.2	2.1	3.4	0.71	70	3.1Δ/1.8Y	900	220Δ/380Y	0.75	0.55	80	80-6B
11.7	0.00368	1.9	1.7	3	0.74	71	4.5Δ/2.6Y	895	220Δ/380Y	1	0.75	90L	90L6A
14	0.005137	2.3	2.2	3.3	0.69	72	6.8Δ/3.9Y	915	220Δ/380Y	1.5	1.1	90L	90L6B
16.5	0.009616	2.2	2.1	4.3	0.71	74	7.3Δ/4.2Y	930	220Δ/380Y	2	1.5	100L	100L6
28.5	0.017553	2.5	2.3	4.5	0.72	77	10.9Δ/6.3Y	945	220Δ/380Y	3	2.2	112M	112M6
42	0.030891	2.7	2.1	5.3	0.76	83	7.3Δ/4.2Y	960	380Δ/660Y	4	3	132M	132M6A
47	0.036244	2.2	1.7	5.2	0.82	81	8.8Δ/5.1Y	945	380Δ/660Y	5.5	4	132M	132M6B
53	0.042267	2.4	1.8	5.7	0.79	82	12.6Δ/7.3Y	950	380Δ/660Y	7.5	5.5	132M	132M6C
80	0.091156	3.1	2.1	6.3	0.8	86	16.8Δ/9.7Y	965	380Δ/660Y	10	7.5	160L	160L6A
97.5	0.120803	3	2.1	6.1	0.76	85	26.2Δ/15.1Y	965	380Δ/660Y	15	11	160L	160L6B
17	0.007481	2.6	1.9	4.5	0.58	63	5.9Δ/3.4Y	695	220Δ/380Y	1	0.75	100L	100L8A
20	0.009616	1.4	1.3	2.6	0.72	65	8.7Δ/5Y	645	220Δ/380Y	1.5	1.1	100L	100L8B
29	0.017553	2.1	1.8	3.3	0.61	69	9.9Δ/5.7Y	695	220Δ/380Y	2	1.5	112M	112M8
36.5	0.028978	2.1	1.8	3.9	0.74	75	10.9Δ/6.3Y	690	220Δ/380Y	3	2.2	132M	132M8A
44	0.037782	2.5	2.2	4.3	0.71	78	15.2Δ/8.8Y	700	220Δ/380Y	4	3	160L	132M8B
66	0.077393	2	1.3	4.1	0.76	80	9.8Δ/5.7Y	715	380Δ/660Y	5.5	4	160L	160L8A
78	0.099187	1.9	1.3	3.8	0.74	83	13.4Δ/7.7Y	710	380Δ/660Y	7.5	5.5	160L	160L8B
96	0.131878	2	1.3	4.5	0.76	82	17.6Δ/10.2Y	715	380Δ/660Y	10	7.5	160L	160L8C

QUICK SELECTION CHART



300 to 500 fpm		Heating and Cooling coil
500 to 630 fpm		Cooling coil with eliminator
630 to 900 fpm		Just heating coil

Selection Examples

Example 1:

Given

Location: Karaj/Tehran 1250 m above sea level

Air Delivery 8495 m³/hr

Return Air 5946 m³/hr

Fresh Air 2549 m³/hr

External Static Pressure loss..... 0.5 in.w.g

V-Type filter

Summer cooling

Cooling load 97.2 kw

Indoor DB 32.2°C

Indoor WB 22.2 °c

Outdoor DB 40 °c

Outdoor WB 23 °c

By considering Air delivery and allowable face velocity of unit when cooling coil is a part of the unit, the maximum face velocity of unit would be 2.5 (without Eliminator after cooling coil) and 3.15 with it. You go to chart with information velocity and Air delivery and selection models of Air handling unit.

2: cooling coil specification leaving DB/WB:

Cooling process line demonstrates on table of coil. First demonstrate

DB/WB:

$DB = x (\text{outdoor air.DB}) + x (\text{indoor air.DB})$

DB =

WB =

According to entrance temperature of coil and with considering the coil's information chart, the number of rows would be 6 rows / 8 fin per inch.

D-Fan performance motor size:

The selected Air handling unit has these accessories:

- 1- Cooling coil
- 2- Heating coil
- 3- Mixing box
- 4- Fresh and Return Dampers
- 5- V-Type washable aluminum filter

Now determine pressure loss of air through each section:

1- Cooling coil from the property table of coil, for 6/8 (6 rows / 8 fin per inch) cooling coil with =2.6 m / sec face velocity

2- Heating coil from the mentioned table for 2/8 heating coil with =2.6m / sec face velocity

- From the pressure drop table you can find the pressure loss of air in throw other accessories:

$\Delta P = 0.1 \text{ in.w.g}$

$\Delta P = 0.1 \text{ in.w.g}$

$$\Delta P = 0.1 \text{ in.w.g}$$

$$\Delta P = 0.2 \text{ in.w.g}$$

$$\Delta P = 0.6 \text{ in.w.g}$$

So, the total air pressure loss of unit determines as below: total static

$$\Delta P = 0.1 + 0.1 + 0.1 + 0.2 + 0.6 = 1.1$$

$$\Delta P = \Delta P + \Delta P = 1.1 + 0.5 = 1.6$$

From fan and motor table select fans and motor.

Fan size is a 15-15 , motor size is a 3 kw and 826 rpm

Unit dimension:

From table of dimension of each section can be determined for HAHU 50:

HEIGHT=1500 MM

WEIGHT=1550 MM ...

Table A: Quick Select

model size	coil Face Area	Airflow At 2.5m/s Face Velocity	Total Cooling Capacity	External Static Pressure	Water Pressure Drop	Water Flow Rate	Motor Installed Power
	m ²	m ³ /hr	kw	Pa	kPa	L/s	kw
15	0,3	2549	20,1	500	2,3	3,14	0,75
20	4,7	3568	28,8	500	5,2	4,49	1,1
30	6,7	5437	43,8	500	5,7	6,82	1,5
40	0,74	6796	55,2	500	9,3	8,61	2,2
50	0,92	8495	69,4	500	13,3	10,81	3
65	1,22	11044	90,9	500	25,3	14,17	4
75	1,41	12912	107	500	36,9	16,61	4
85	1,65	14781	122	500	24,7	18,98	5,5
100	1,92	17840	147	500	38	22,93	5,5
130	2,42	22087	182	500	36,4	28,29	7,5
150	2,88	26335	217	500	56,4	33,84	11
180	3,43	31432	259	500	59,5	40,39	11
210	3,98	36529	302	500	86,8	47,05	11
250	4,52	41626	343	500	108,5	53,41	11
270	5,12	46723	184	500	18,1	28,69	15
320	5,85	54368	223	500	37,6	34,79	15
350	6,61	60315	249	500	49,4	38,72	18,5
390	7,1	66261	272	500	41,2	42,42	18,5
420	7,75	72208	297	500	51,1	46,31	22

Fan Size and Diameter

Model Size	Fan model	Fan Size	Fan Size Diameter (mm)
15	Backward	280	280
	Forward	12-9	300
20	Backward	280	280
	Forward	12-9	300
30	Backward	315	315
	Forward	12-12	300
40	Backward	355	355
	Forward	15-15	380
50	Backward	400	400
	Forward	15-15	380
65	Backward	450	450
	Forward	18-18	450
75	Backward	450	450
	Forward	20-20	500
85	Backward	450	450
	Forward	20-20	500
100	Backward	560	560
	Forward	22-22	550
130	Backward	560	560
	Forward	25-25	635
150	Backward	560	560
	Forward	25-25	635
180	Backward	710	710
	Forward	28-28	710
210	Backward	710	710
	Forward	28-28	710
250	Backward	900	900
	Forward	25-20*2	635
270	Backward	900	900
	Forward	25-20*2	635
320	Backward	900	900
	Forward	25-25*2	635
350	Backward	900	900
	Forward	28-28*2	710
390	Backward	1000	1000
	Forward	28-28*2	710
420	Backward	1000	1000
	Forward	30-28*2	760

UNIT SIZE		15										UNIT SIZE		20											
NUMBER*FAN SIZE(MM)		1*TLHZ 180-450										NUMBER*FAN SIZE(MM)		1*TLHZ 180-450											
TOTAL STATIC PRESSURE		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5	6	TOTAL STATIC PRESSURE		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5	6.00
1350 CFM/450FPM	FAN RPM	1350	1501	1638	1765	1886	2109	2315	2508	2663	3186	3484	1890 CFM/450FPM	FAN RPM	1638	1770	1889	2000	2104	2300	2481	2653	2971	3265	3540
	MOTOR KW	0.25	0.25	0.37	0.37	0.55	0.75	0.75	1.1	1.5	2.2	2.2		MOTOR KW	0.37	0.55	0.55	0.75	0.75	1.1	1.1	1.5	2.2	2.2	3
1425 CFM/475FPM	FAN RPM	1390	1538	1671	1796	1913	2132	2334	2524	2673	3192	3487	1995 CFM/475FPM	FAN RPM	1698	1827	1944	2052	2154	2345	2523	2690	3002	3291	3560
	MOTOR KW	0.25	0.37	0.37	0.55	0.55	0.75	1.1	1.1	1.5	2.2	2.2		MOTOR KW	0.37	0.55	0.55	0.75	0.75	1.1	1.1	1.5	2.2	2.2	3
1500 CFM/500FPM	FAN RPM	1424	1569	1701	1823	1938	2153	2352	2539	2683	3199	3491	2100 CFM/500FPM	FAN RPM	1763	1889	2003	2109	2209	2395	2569	2733	3038	3320	3585
	MOTOR KW	0.25	0.37	0.37	0.55	0.55	0.75	1.1	1.1	1.5	2.2	2.2		MOTOR KW	0.55	0.55	0.55	0.75	0.75	1.1	1.5	1.5	2.2	2.2	3
1575 CFM/525FPM	FAN RPM	1472	1613	1741	1861	1973	2183	2378	2561	2699	3210	3498	2205 CFM/525FPM	FAN RPM	1820	1945	2057	2161	2259	2441	2612	2772	3072	3349	3610
	MOTOR KW	0.25	0.37	0.37	0.55	0.55	0.75	1.1	1.1	1.5	2.2	2.2		MOTOR KW	0.55	0.55	0.75	0.75	1.1	1.1	1.5	1.5	2.2	2.2	3
1650 CFM/550FPM	FAN RPM	1513	1652	1778	1895	2005	2211	2402	2582	2915	3221	3506	2310 CFM/550FPM	FAN RPM	1882	2004	2114	2216	2312	2492	2658	2816	3110	3382	3638
	MOTOR KW	0.37	0.37	0.37	0.55	0.75	0.75	1.1	1.1	1.5	2.2	2.2		MOTOR KW	0.55	0.55	0.75	0.75	1.1	1.1	1.5	1.5	2.2	3	3
1725 CFM/575FPM	FAN RPM	1555	1692	1815	1930	2038	2240	2428	2605	2933	3235	3516	2415 CFM/575FPM	FAN RPM	1944	2064	2173	2273	2367	2543	2707	2861	3149	3417	3669
	MOTOR KW	0.37	0.37	0.55	0.55	0.75	0.75	1.1	1.5	2.2	2.2	3		MOTOR KW	0.55	0.75	0.75	1.1	1.1	1.1	1.5	2.2	2.2	3	3
1800 CFM/600FPM	FAN RPM	1598	1732	1820	1966	2072	2271	2455	2629	2952	3252	3528	2520 CFM/600FPM	FAN RPM	2007	2125	2231	2330	2423	2595	2756	2908	3191	3454	3702
	MOTOR KW	0.37	0.55	0.55	0.55	0.75	1.1	1.1	1.5	2.2	2.2	3		MOTOR KW	0.55	0.75	0.75	1.1	1.1	1.5	1.5	2.2	2.2	3	3
UNIT SIZE		30										UNIT SIZE		40											
NUMBER*FAN SIZE(MM)		1*VTZ355										NUMBER*FAN SIZE(MM)		1*VTZ355											
TOTAL STATIC PRESSURE		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5	6	TOTAL STATIC PRESSURE		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5	6
2880 CFM/450FPM	FAN RPM	1140	1243	1337	1425	1508	1663	1809	1946	2200	2433	2649	3590 CFM/450FPM	FAN RPM	1319	1413	1499	1578	1653	1794	1925	2049	2282	2499	2701
	MOTOR KW	0.75	0.75	0.75	1.1	1.1	1.5	2.2	2.2	3	4	4		MOTOR KW	1.1	1.1	1.1	1.5	1.5	2.2	2.2	3	4	4	5.5
3040 CFM/475FPM	FAN RPM	1179	1280	1372	1457	1538	1690	1832	1966	2216	2445	2658	3790 CFM/475FPM	FAN RPM	1370	1463	1546	1624	1697	1834	1962	2083	2311	2522	2721
	MOTOR KW	0.75	0.75	0.75	1.1	1.1	1.5	2.2	2.2	3	4	4		MOTOR KW	1.1	1.5	1.5	1.5	2.2	2.2	3	3	4	4	5.5
3200 CFM/500FPM	FAN RPM	1221	1320	1409	1493	1572	1720	1858	1985	2234	2459	2669	4000 CFM/500FPM	FAN RPM	1422	1512	1594	1670	1742	1876	2001	2119	2341	2548	2744
	MOTOR KW	0.75	0.75	1.1	1.1	1.5	1.5	2.2	2.2	3	4	5.5		MOTOR KW	1.1	1.5	1.5	2.2	2.2	2.2	3	3	4	5.5	5.5
3360 CFM/525FPM	FAN RPM	1258	1356	1443	1525	1603	1748	1883	2011	2251	2473	2681	4190 CFM/525FPM	FAN RPM	1474	1563	1643	1717	1787	1918	2041	2156	2374	2576	2768
	MOTOR KW	0.75	1.1	1.1	1.1	1.5	1.5	2.2	2.2	3	4	5.5		MOTOR KW	1.5	1.5	2.2	2.2	2.2	2.2	3	3	4	5.5	5.5
3520 CFM/550FPM	FAN RPM	1299	1394	1480	1561	1636	1778	1911	2036	2271	2490	2694	4390 CFM/550FPM	FAN RPM	1526	1613	1692	1765	1834	1962	2082	2082	2408	2606	2794
	MOTOR KW	0.75	1.1	1.1	1.5	1.5	2.2	2.2	3	3	4	5.5		MOTOR KW	1.5	1.5	2.2	2.2	2.2	3	3	3	4	5.5	5.5
3680 CFM/575FPM	FAN RPM	1340	1433	1518	1596	1671	1810	1940	2063	2293	2508	2709	4590 CFM/575FPM	FAN RPM	1579	1664	1742	1813	1881	2007	2124	2235	2444	2638	2822
	MOTOR KW	1.1	1.1	1.1	1.5	1.5	2.2	2.2	3	4	4	5.5		MOTOR KW	1.5	2.2	2.2	2.2	2.2	3	3	4	4	5.5	5.5
3840 CFM/600FPM	FAN RPM	1381	1473	1556	1633	1706	1842	1970	2091	2317	2527	2726	4785 CFM/600FPM	FAN RPM	1632	1716	1792	1862	1929	2053	2168	2277	2481	2672	2852
	MOTOR KW	1.1	1.1	1.5	1.5	1.5	2.2	2.2	3	4	4	5.5		MOTOR KW	1.5	2.2	2.2	2.2	2.2	3	3	4	4	5.5	7.5

UNIT SIZE		50										UNIT SIZE		65											
NUMBER*FAN SIZE(MM)		1*VTZ400										NUMBER*FAN SIZE(MM)		1*VTZ450											
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5	6	TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5	6
4476 CFM/450FPM	FAN RPM	1131	1218	1298	1372	1442	1571	1692	1805	2018	2214	2398	5900 CFM/450FPM	FAN RPM	1051	1122	1190	1254	1315	1430	1535	1635	1822	1994	2155
	MOTOR KW	1.1	1.5	1.5	2.2	2.2	2.2	3	3	4	5.5	7.5		MOTOR KW	2.2	2.2	2.2	2.2	3	3	4	4	5.5	7.5	7.5
4724 CFM/475FPM	FAN RPM	1173	1259	1337	1409	1477	1604	1721	1832	2040	2233	2413	6227 CFM/475FPM	FAN RPM	1093	1161	1227	1289	1349	1461	1564	1662	1844	2013	2117
	MOTOR KW	1.5	1.5	2.2	2.2	2.2	3	4	4	4	5.5	7.5		MOTOR KW	1.5	2.2	2.2	3	3	3	4	4	5.5	7.5	7.5
4973 CFM/500FPM	FAN RPM	1217	1300	12376	1447	1513	1638	1753	1861	2064	2253	2430	6555 CFM/500FPM	FAN RPM	1136	1202	1265	1326	1384	1493	1594	1690	1868	2034	2189
	MOTOR KW	1.5	1.5	2.2	2.2	2.2	3	3	4	5.5	5.5	7.5		MOTOR KW	2.2	2.2	3	3	3	4	2.5	5.5	5.5	7.5	11
5222 CFM/525FPM	FAN RPM	1261	1341	1416	1485	1551	1672	1785	1892	2090	2275	2449	6883 CFM/525FPM	FAN RPM	1180	1243	1304	1363	1419	1526	1625	1719	1894	2056	2209
	MOTOR KW	1.5	2.2	2.2	2.2	2.2	3	3	4	5.5	5.5	7.5		MOTOR KW	2.2	2.2	3	3	3	4	4	5.5	7.5	7.5	11
5470 CFM/550FPM	FAN RPM	1305	1383	1456	1524	1588	1708	1819	1923	2118	2299	2470	7211 CFM/550FPM	FAN RPM	1225	1285	1344	1401	1465	1560	1657	1749	1921	2111	2230
	MOTOR KW	2.2	2.2	2.2	2.2	3	3	4	4	5.5	5.5	7.5		MOTOR KW	2.2	3	3	3	4	4	5.5	5.5	7.5	7.5	11
5719 CFM/575FPM	FAN RPM	1350	1426	1497	1564	1627	1744	1853	1955	2147	2325	2492	7539 CFM/575FPM	FAN RPM	1270	1327	1384	1439	1493	1595	1690	1780	1949	2105	2253
	MOTOR KW	2.2	2.2	2.2	3	3	3	4	4	5.5	7.5	7.5		MOTOR KW	2.2	3	3	4	4	4	5.5	5.5	7.5	7.5	11
5968 CFM/600FPM	FAN RPM	1395	1469	1538	1604	1666	1781	1888	1989	2177	2351	2516	7866 CFM/600FPM	FAN RPM	1316	1370	1425	1479	1531	1630	1724	1812	1978	2132	2276
	MOTOR KW	2.2	2.2	3	3	3	4	4	4	5.5	7.5	7.5		MOTOR KW	3	3	3	4	4	5.5	5.5	5.5	7.5	11	11
UNIT SIZE		75										UNIT SIZE		85											
NUMBER*FAN SIZE(MM)		1*VTZ450										NUMBER*FAN SIZE(MM)		1*VTZ450											
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5	6	TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5	6
3836 CFM/450FPM	FAN RPM	1174	1237	1298	1358	1414	1521	1621	1715	1890	2053	2206	8007 CFM/450FPM	FAN RPM	1336	1389	1443	1496	1547	1646	1738	1826	1991	2143	2287
	MOTOR KW	2.2	2.2	3	3	3	4	4	5.5	5.5	7.5	11		MOTOR KW	3	3	4	4	4	5.5	5.5	5.5	7.5	11	11
7215 CFM/475FPM	FAN RPM	1226	1285	1344	1401	1456	1560	1658	1750	1921	2081	2230	8452 CFM/475FPM	FAN RPM	1398	1449	1500	1550	1600	1695	1786	1871	2032	2181	2322
	MOTOR KW	2.2	3	3	3	4	4	5.5	5.5	7.5	7.5	11		MOTOR KW	3	4	4	4	4	5.5	5.5	5.5	7.5	11	11
7595 CFM/500FPM	FAN RPM	1278	1335	1391	1446	1499	1601	1696	1786	1954	2110	2256	8896 CFM/500FPM	FAN RPM	1461	1509	1558	1606	1654	1746	1834	1918	2075	2221	2358
	MOTOR KW	3	3	3	4	4	4	5.5	5.5	7.5	7.5	11		MOTOR KW	4	4	4	4	5.5	5.5	7.5	7.5	11	11	11
7975 CFM/525FPM	FAN RPM	1331	1358	1439	1492	1543	1642	1735	1823	1988	2141	2284	9341 CFM/525FPM	FAN RPM	1525	1571	1617	1663	1709	1798	1883	1965	2118	2262	2397
	MOTOR KW	3	3	4	4	4	5.5	5.5	5.5	7.5	11	11		MOTOR KW	4	4	4	5.5	5.5	5.5	7.5	7.5	11	11	11
8355 CFM/550FPM	FAN RPM	1384	1436	1487	1538	1588	1684	1775	1861	2023	2173	2314	9786 CFM/550FPM	FAN RPM	1590	1633	1677	1721	1765	1851	1934	2013	2164	2304	2436
	MOTOR KW	3	3	4	4	4	5.5	5.5	7.5	7.5	11	11		MOTOR KW	4	4	5.5	5.5	5.5	7.5	7.5	7.5	11	11	15
8734 CFM/575FPM	FAN RPM	1438	1487	1537	1586	1634	1727	1816	1900	2059	2206	2345	10231 CFM/575FPM	FAN RPM	1654	1695	1737	1779	1822	1904	1985	2063	2210	2348	2477
	MOTOR KW	3	4	4	4	5.5	5.5	5.5	7.5	7.5	11	11		MOTOR KW	5.5	5.5	5.5	5.5	7.5	7.5	7.5	11	11	11	15
9114 CFM/600FPM	FAN RPM	1493	1539	1587	1634	1680	1771	1858	1941	2096	2241	2377	10676 CFM/600FPM	FAN RPM	1719	1759	1799	1839	1879	1959	2037	2113	2257	2392	---
	MOTOR KW	4	4	4	5.5	5.5	5.5	7.5	7.5	11	11	11		MOTOR KW	5.5	5.5	5.5	7.5	7.5	7.5	11	11	11	15	---

UNIT SIZE		100										UNIT SIZE		130											
NUMBER*FAN SIZE(MM)		1*VTZ500										NUMBER*FAN SIZE(MM)		1*VTZ560											
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5	6	TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5	6
9277 CFM/450FPM	FAN RPM	848	898	947	995	1042	1131	1215	1296	1448	1589	1721	11718 CFM/450FPM	FAN RPM	1023	1063	1103	1143	1182	1258	1331	1402	1537	1664	1785
	MOTOR KW	2.2	3	3	3	4	4	5.5	5.5	7.5	11	11		MOTOR KW	4	4	4	5.5	5.5	5.5	7.5	7.5	11	11	15
9792 CFM/475FPM	FAN RPM	884	932	979	1025	1069	1156	1238	1316	1464	1603	1739	12369 CFM/475FPM	FAN RPM	1072	1110	1148	1185	1222	1295	1366	1434	1565	1689	1806
	MOTOR KW	2.2	3	3	4	4	5.5	5.5	7.5	7.5	11	11		MOTOR KW	4	4	5.5	5.5	5.5	7.5	7.5	11	11	15	15
10308 CFM/500FPM	FAN RPM	921	966	1011	1055	1098	1182	1261	1338	1482	1617	1745	13020 CFM/500FPM	FAN RPM	1120	1156	1192	1228	1264	1334	1402	1488	1595	1715	1830
	MOTOR KW	3	3	4	4	4	5.5	5.5	7.5	11	11	15		MOTOR KW	4	5.5	5.5	5.5	7.5	7.5	11	11	15	15	15
10823 CFM/525FPM	FAN RPM	958	1001	1044	1087	1128	1209	1286	1360	1501	1633	1758	13671 CFM/525FPM	FAN RPM	1169	1204	1238	1272	1306	1373	1439	1503	1626	1743	1855
	MOTOR KW	3	4	4	4	4	5.5	7.5	7.5	11	11	15		MOTOR KW	5.5	5.5	5.5	7.5	7.5	7.5	11	11	15	15	15
11338 CFM/550FPM	FAN RPM	990	1037	1078	1119	1159	1237	1312	1384	1521	1651	1773	14322 CFM/550FPM	FAN RPM	1219	1251	1284	1317	1350	1414	1477	1539	1658	1772	1881
	MOTOR KW	3	4	4	4	5.5	5.5	7.5	7.5	11	11	15		MOTOR KW	5.5	5.5	7.5	7.5	7.5	11	11	15	15	15	15
11854 CFM/575FPM	FAN RPM	1033	1073	1113	1152	1190	1266	1338	1409	1543	1669	1789	14973 CFM/575FPM	FAN RPM	1286	1300	1331	1362	1394	1455	1516	1576	1692	1803	1909
	MOTOR KW	4	4	4	5.5	5.5	7.5	7.5	11	11	15	15		MOTOR KW	7.5	7.5	7.5	7.5	7.5	11	11	15	15	15	18.5
12370 CFM/600FPM	FAN RPM	1072	1110	1148	1185	1222	1295	1366	1434	1565	1689	1806	15624 CFM/600FPM	FAN RPM	1318	1364	1378	1408	1438	1498	1557	1614	1727	1834	1938
	MOTOR KW	4	4	5.5	5.5	5.5	7.5	7.5	11	11	15	15		MOTOR KW	7.5	7.5	7.5	7.5	11	11	11	15	15	15	18.5
UNIT SIZE		150										UNIT SIZE		180											
NUMBER*FAN SIZE(MM)		1*VTZ560										NUMBER*FAN SIZE(MM)		1*VTZ710											
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5	6	TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5	6
13950 CFM/450FPM	FAN RPM	1190	1224	1258	1291	1325	1391	1455	1518	1640	1755	1866	16600 CFM/450FPM	FAN RPM	724	764	803	839	874	941	1003	1063	1175	1260	1379
	MOTOR KW	5.5	5.5	7.5	7.5	7.5	7.5	11	11	15	15	15		MOTOR KW	4	4	5.5	5.5	5.5	7.5	11	11	11.13	15	18.5
14725 CFM/475FPM	FAN RPM	1249	1281	1313	1345	1377	1440	1501	1562	1679	1791	1898	17523 CFM/475FPM	FAN RPM	756	794	831	866	900	965	1026	1084	1193	1295	1392
	MOTOR KW	5.5	7.5	7.5	7.5	7.5	11	11	11	15	15	18.5		MOTOR KW	4	5.5	5.5	5.5	7.5	7.5	11	11	15	15	18.5
15500 CFM/500FPM	FAN RPM	1309	1339	1369	1399	1430	1490	1549	1607	1720	1828	1933	18445 CFM/500FPM	FAN RPM	787	824	859	894	927	990	1049	1105	1212	1311	1406
	MOTOR KW	7.5	7.5	7.5	7.5	11	11	11	11	15	15	18.5		MOTOR KW	4	5.5	5.5	7.5	7.5	11	11	11	15	18.5	18.5
16275 CFM/525FPM	FAN RPM	1397	1426	1455	1483	1541	1598	1654	1762	1867	1969	—	19367 CFM/525FPM	FAN RPM	820	855	899	922	954	1015	1073	1128	1232	1329	1421
	MOTOR KW	7.5	11	11	11	11	11	15	15	15	18.5	18.5		MOTOR KW	5.5	5.5	7.5	7.5	7.5	11	11	15	15	18.5	22
17050 CFM/550FPM	FAN RPM	1455	1483	1510	1538	1593	1647	1701	1806	1908	—	—	20290 CFM/550FPM	FAN RPM	852	886	918	951	982	1041	1098	1152	1253	1348	1438
	MOTOR KW	11	11	11	11	11	15	15	15	18.5	—	—		MOTOR KW	7.5	7.5	7.5	7.5	11	11	11	15	15	18.5	22
17825 CFM/575FPM	FAN RPM	1514	1541	1567	1593	1646	1698	1750	1852	1950	—	—	21212 CFM/575FPM	FAN RPM	885	917	949	980	1010	1086	1123	1176	1275	1376	—
	MOTOR KW	11	11	11	11	15	15	15	18.5	18.5	—	—		MOTOR KW	7.5	7.5	7.5	11	11	11	15	15	18.5	22	—
18600 CFM/600FPM	FAN RPM	1574	1599	1624	1649	1700	1750	1800	1898	—	—	—	22134 CFM/600FPM	FAN RPM	918	949	979	1009	1038	1095	1149	1200	1297	1388	—
	MOTOR KW	11	11	15	15	15	15	15	18.5	—	—	—		MOTOR KW	7.5	7.5	11	11	11	11	15	15	18.5	22	—

UNIT SIZE		210										UNIT SIZE		250											
NUMBER*FAN SIZE(MM)		1*VTZ710										NUMBER*FAN SIZE(MM)		1*VTZ900											
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5	6	TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5	6
19286 CFM/450FPM	FAN RPM	817	852	886	919	952	1013	171	1126	1327	1230	1420	21913 CFM/450FPM	FAN RPM	506	543	577	610	640	698	751	802	899	989	1074
	MOTOR KW	5.5	7.5	7.5	7.5	11	11	11	15	18.5	15	22		MOTOR KW	4	5.5	7.5	7.5	7.5	11	11	15	18.5	22	30
20357 CFM/475FPM	FAN RPM	875	888	921	953	984	1043	100	1153	1254	1349	1439	23130 CFM/475FPM	FAN RPM	525	561	595	626	656	712	764	814	908	996	1079
	MOTOR KW	7.5	7.5	7.5	11	11	11	15	15	15	18.5	22		MOTOR KW	5.5	5.5	7.5	7.5	11	11	15	15	18.5	22	30
21429 CFM/500FPM	FAN RPM	893	924	956	986	11	1074	1129	1181	1280	1372	—	24348 CFM/500FPM	FAN RPM	546	580	613	643	673	727	778	827	918	1004	1085
	MOTOR KW	7.5	7.5	11	11	1016	11	15	15	18.5	18.5	—		MOTOR KW	5.5	7.5	7.5	7.5	11	11	11	15	18.5	22	30
22500 CFM/525FPM	FAN RPM	932	961	991	1021	11	1159	1106	1210	1306	1396	—	25565 CFM/525FPM	FAN RPM	566	599	631	661	689	743	793	840	929	1013	1093
	MOTOR KW	7.5	11	11	11	1050	15	15	15	18.5	22	—		MOTOR KW	5.5	7.5	7.5	11	11	11	11	15	18.5	30	30
23572 CFM/550FPM	FAN RPM	970	99	1027	1056	1084	1138	1190	1240	1313	1422	—	26783 CFM/550FPM	FAN RPM	587	619	649	678	706	759	808	854	941	1023	—
	MOTOR KW	11	11	11	11	11	15	15	18.5	18.5	22	—		MOTOR KW	7.5	7.5	11	11	11	15	15	15	22	30	—
24643 CFM/575FPM	FAN RPM	1009	1037	1064	1091	1118	1171	1221	1270	1361	1448	—	28000 CFM/575FPM	FAN RPM	608	638	668	696	724	775	823	868	954	1033	—
	MOTOR KW	11	11	11	11	15	15	15	18.5	22	30	—		MOTOR KW	7.5	7.5	11	11	11	15	15	15	22	30	—
25715 CFM/600FPM	FAN RPM	1049	1075	1101	1127	1153	1204	1253	1300	1390	—	—	29218 CFM/600FPM	FAN RPM	629	658	687	715	741	792	839	883	967	1045	—
	MOTOR KW	11	11	15	15	15	15	18.5	18.5	22	—	—		MOTOR KW	7.5	11	11	11	11	15	15	18.5	22	30	—
UNIT SIZE		270										UNIT SIZE		320											
NUMBER*FAN SIZE(MM)		1*VTZ900										NUMBER*FAN SIZE(MM)		1*VTZ900											
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5	6	TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5	6
24779 CFM/450FPM	FAN RPM	553	587	619	649	678	733	783	831	922	1007	1088	28319 CFM/450FPM	FAN RPM	614	643	673	701	728	779	827	872	957	1036	—
	MOTOR KW	5.5	7.5	7.5	11	11	11	11	15	18.5	22	30		MOTOR KW	7.5	11	11	11	15	15	15	18.5	22	30	—
26155 CFM/475FPM	FAN RPM	576	608	640	669	697	750	800	847	935	1017	1096	29892 CFM/475FPM	FAN RPM	641	670	698	725	751	801	848	892	974	1052	—
	MOTOR KW	7.5	7.5	7.5	11	11	15	15	15	18.5	30	30		MOTOR KW	11	11	11	11	15	15	22	18.5	22	30	—
27532 CFM/500FPM	FAN RPM	600	631	661	689	717	769	817	836	949	1029	—	31465 CFM/500FPM	FAN RPM	669	696	723	749	775	823	866	912	992	1068	—
	MOTOR KW	7.5	7.5	11	11	11	15	15	18.5	22	30	—		MOTOR KW	11	11	11	15	15	15	18.5	18.5	30	30	—
28909 CFM/525FPM	FAN RPM	624	653	682	710	737	788	835	870	963	1042	—	33038 CFM/525FPM	FAN RPM	697	723	749	774	799	846	890	933	1011	1085	—
	MOTOR KW	7.5	11	11	11	15	15	15	18.5	22	30	—		MOTOR KW	11	11	15	15	15	18.5	18.5	22	30	30	—
30285 CFM/550FPM	FAN RPM	648	678	704	731	757	807	897	853	979	1056	—	34612 CFM/550FPM	FAN RPM	726	750	775	799	823	869	913	954	1031	—	—
	MOTOR KW	11	11	11	15	15	15	18.5	18.5	30	30	—		MOTOR KW	11	15	15	15	18.5	18.5	22	22	30	—	—
31662 CFM/575FPM	FAN RPM	673	699	726	752	778	826	872	914	995	1070	—	36185 CFM/575FPM	FAN RPM	755	778	801	825	848	893	935	975	1051	—	—
	MOTOR KW	11	11	15	15	15	15	18.5	30	30	—	—		MOTOR KW	15	15	15	18.5	18.5	18.5	22	30	30	—	—
33038 CFM/600FPM	FAN RPM	697	723	749	774	799	846	890	933	1011	1085	—	37758 CFM/600FPM	FAN RPM	784	806	828	851	873	916	958	997	1072	—	—
	MOTOR KW	11	11	15	1500	15	22	18.5	22	30	30	—		MOTOR KW	15	15	18.5	18.5	18.5	22	30	30	30	—	—

UNIT SIZE		350										UNIT SIZE		390									
NUMBER*FAN SIZE(MM)		1*VTZ900										NUMBER*FAN SIZE(MM)		1*VTZ1000									
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5	TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5
32027 CFM/450FPM	FAN RPM	679	706	732	758	783	831	877	919	999	174	34387 CFM/450FPM	FAN RPM	552	582	610	636	661	709	753	795	873	948
	MOTOR KW	11	11	15	15	15	15	18.5	18.5	30	30		MOTOR KW	7.5	11	11	15	15	15	18.5	22	30	30
33806 CFM/475FPM	FAN RPM	711	736	761	786	811	857	901	943	1021	944	36297 CFM/475FPM	FAN RPM	575	604	632	658	682	728	771	812	889	961
	MOTOR KW	11	15	15	15	15	18.5	18.5	22	30	30		MOTOR KW	11	11	11	15	15	18.5	18.5	22	30	37
35585 CFM/500FPM	FAN RPM	744	767	791	815	838	884	926	967	1043	---	38208 CFM/500FPM	FAN RPM	600	627	654	679	703	748	790	830	904	975
	MOTOR KW	15	15	15	15	15	18.5	22	30	30	---		MOTOR KW	11	11	15	15	15	18.5	22	22	30	37
35585 CFM/500FPM	FAN RPM	776	799	821	844	867	910	952	992	1066	---	40118 CFM/525FPM	FAN RPM	624	651	677	701	768	809	809	848	921	990
	MOTOR KW	15	15	15	18.5	18.5	22	30	30	30	---		MOTOR KW	11	15	15	18.5	18.5	22	22	30	30	37
39144 CFM/550FPM	FAN RPM	809	830	852	874	895	938	978	1017	1090	---	42028 CFM/550FPM	FAN RPM	649	674	699	723	746	789	829	867	939	---
	MOTOR KW	15	18.5	18.5	18.5	22	22	30	30	37	---		MOTOR KW	11	15	15	18.5	18.5	22	30	30	37	---
40923 CFM/575FPM	FAN RPM	842	863	883	904	925	965	1005	1043	---	---	43939 CFM/575FPM	FAN RPM	---	698	723	746	768	810	849	886	956	---
	MOTOR KW	18.5	18.5	18.5	22	22	30	30	30	---	---		MOTOR KW	---	15	18.5	18.5	18.5	22	30	30	37	---
42703 CFM/600FPM	FAN RPM	876	895	915	934	954	1032	994	1069	---	---	45849 CFM/600FPM	FAN RPM	---	722	746	768	790	831	870	906	975	---
	MOTOR KW	18.5	18.5	22	22	22	30	30	37	---	---		MOTOR KW	---	18.5	18.5	18.5	22	30	30	30	37	---

UNIT SIZE		420									
NUMBER*FAN SIZE(MM)		1*VTZ1000									
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	4	5
37549 CFM/450FPM	FAN RPM	591	620	646	672	696	741	783	823	899	970
	MOTOR KW	11	11	15	15	15	18.5	22	22	30	37
39635 CFM/475FPM	FAN RPM	618	645	671	695	715	763	804	843	917	986
	MOTOR KW	11	15	15	15	22	18.5	22	30	30	37
41721 CFM/500FPM	FAN RPM	645	671	696	720	742	786	826	864	936	---
	MOTOR KW	15	15	15	18.5	18.5	22	30	30	37	---
43807 CFM/525FPM	FAN RPM	---	697	721	744	766	808	848	885	955	---
	MOTOR KW	---	15	18.5	18.5	18.5	22	30	30	37	---
45893 CFM/550FPM	FAN RPM	---	723	746	769	791	832	870	907	975	---
	MOTOR KW	---	15	18.5	18.5	22	30	30	30	37	---
47979 CFM/575FPM	FAN RPM	---	749	772	794	815	855	893	929	996	---
	MOTOR KW	---	18.5	18.5	22	22	30	30	37	45	---
50065 CFM/600FPM	FAN RPM	---	776	798	819	840	879	916	951	---	---
	MOTOR KW	---	18.5	22	22	30	30	37	37	---	---

UNIT SIZE		15								UNIT SIZE		20							
NUMBER*FAN SIZE(MM)		1*15-15,AFTER 1,8 IS 10-8								NUMBER*FAN SIZE(MM)		1*15-15,AFTER 1,9 IS 10-8							
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3
1350 CFM/450FPM	FAN RPM	702	821	935	1042	1143	1330	1500	1655	1890 CFM/450FPM	FAN RPM	835	921	1005	1088	1169	1325	1474	1615
	MOTOR KW	0.25	0.37	0.55	0.55	0.55	0.75	1.1	1.1		MOTOR KW	0.75	0.75	0.75	1.1	1.1	1.1	1.5	2.2
1425 CFM/475FPM	FAN RPM	715	829	938	1043	1142	1326	1493	1648	1995 CFM/475FPM	FAN RPM	863	944	1024	1104	1181	1332	1477	1614
	MOTOR KW	0.37	0.37	0.55	0.55	0.75	0.75	1.1	1.1		MOTOR KW	0.75	0.75	1.1	1.1	1.1	1.5	1.5	2.2
1500 CFM/500FPM	FAN RPM	728	838	944	1045	1142	1322	1488	1641	2100 CFM/500FPM	FAN RPM	892	969	1046	1121	1196	1341	1481	1615
	MOTOR KW	0.37	0.55	0.55	0.55	0.75	1.1	1.1	1.5		MOTOR KW	0.75	1.1	1.1	1.1	1.1	1.5	2.2	2.2
1575 CFM/525FPM	FAN RPM	743	848	950	1048	1143	1320	1438	1635	2205 CFM/525FPM	FAN RPM	921	991	1068	1140	1212	1352	1488	1618
	MOTOR KW	0.37	0.55	0.55	0.75	0.75	1.1	1.1	1.5		MOTOR KW	1.1	1.1	1.1	1.1	1.5	1.5	2.2	2.2
1650 CFM/550FPM	FAN RPM	758	859	958	1053	1145	1318	1479	1629	2310 CFM/550FPM	FAN RPM	951	1022	1092	1161	1230	1365	1496	1623
	MOTOR KW	0.55	0.55	0.75	0.75	0.75	1.1	1.1	1.5		MOTOR KW	1.1	1.1	1.1	1.5	1.5	2.2	2.2	2.2
1725 CFM/575FPM	FAN RPM	775	872	967	1059	1148	1318	1477	1625	2415 CFM/575FPM	FAN RPM	982	1049	1117	1183	1249	1379	1506	1630
	MOTOR KW	0.55	0.55	0.75	0.75	0.75	1.1	1.1	1.5		MOTOR KW	1.1	1.5	1.5	1.5	1.5	2.2	2.2	2.2
1800 CFM/600FPM	FAN RPM	792	885	977	1066	1153	1319	1475	1621	2520 CFM/600FPM	FAN RPM	1013	1078	1142	1206	1270	1395	1518	1638
	MOTOR KW	0.37	0.55	0.75	0.75	1.1	1.1	1.5	1.5		MOTOR KW	1.5	1.5	1.5	1.5	2.2	2.2	2.2	3
UNIT SIZE		30								UNIT SIZE		40							
NUMBER*FAN SIZE(MM)		1*15-15,AFTER 1,4 IS 12-12								NUMBER*FAN SIZE(MM)		1*15-15,AFTER 1,5 IS 18-13							
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3
2880 CFM/450FPM	FAN RPM	618	711	802	892	979	1143	1293	1430	3590 CFM/450FPM	FAN RPM	498	585	670	750	826	793	894	987
	MOTOR KW	0.75	0.75	1.1	1.1	1.5	1.5	2.2	2.2		MOTOR KW	1.1	1.1	1.5	1.5	2.2	2.2	3	4
3040 CFM/475FPM	FAN RPM	632	720	807	893	977	1137	1285	1422	3790 CFM/475FPM	FAN RPM	506	590	671	749	823	789	890	982
	MOTOR KW	0.75	1.1	1.1	1.1	1.5	2.2	2.2	3		MOTOR KW	1.1	1.5	1.5	2.2	2.2	2.2	3	4
3200 CFM/500FPM	FAN RPM	647	731	814	896	977	1133	1279	1414	4000 CFM/500FPM	FAN RPM	516	596	673	749	821	786	887	978
	MOTOR KW	1.1	1.1	1.1	1.5	1.5	2.2	2.2	3		MOTOR KW	1.1	1.5	1.5	2.2	2.2	2.2	3	4
3360 CFM/525FPM	FAN RPM	663	743	822	901	979	1130	1273	1407	4190 CFM/525FPM	FAN RPM	525	602	677	750	820	784	883	975
	MOTOR KW	1.1	1.1	1.1	1.5	1.5	2.2	2.2	3		MOTOR KW	1.5	1.5	2.2	2.2	3	3	3	4
3520 CFM/550FPM	FAN RPM	679	756	832	908	982	1128	1268	1400	4390 CFM/550FPM	FAN RPM	536	610	681	752	820	782	880	971
	MOTOR KW	1.1	1.1	1.5	1.5	2.2	2.2	3	3		MOTOR KW	1.5	1.5	2.2	2.2	3	3	4	4
3680 CFM/575FPM	FAN RPM	696	770	843	915	987	1128	1264	1394	4590 CFM/575FPM	FAN RPM	546	618	687	755	821	780	878	968
	MOTOR KW	1.1	1.5	1.5	1.5	2.2	2.2	3	3		MOTOR KW	1.5	2.2	2.2	2.2	3	3	4	4
3840 CFM/600FPM	FAN RPM	714	785	855	924	993	1130	1262	1389	4785 CFM/600FPM	FAN RPM	557	626	693	759	823	779	875	965
	MOTOR KW	1.5	1.5	1.5	2.2	2.2	3	3	3		MOTOR KW	1.5	2.2	2.2	3	3	3	4	5

UNIT SIZE		50								UNIT SIZE		65							
NUMBER*FAN SIZE(MM)		1*15-15,AFTER 1,5 IS 18-13								NUMBER*FAN SIZE(MM)		18*18							
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3
4476 CFM/450FPM	FAN RPM	540	613	684	753	820	781	879	970	5900 CFM/450FPM	FAN RPM	439	506	570	631	689	796	895	987
	MOTOR KW	1.5	1.5	2.2	2.2	3	3	4	4		MOTOR KW	2.2	2.2	3	3	3	4	5.5	5.5
4724 CFM/475FPM	FAN RPM	554	624	691	758	822	779	876	966	6227 CFM/475FPM	FAN RPM	448	513	575	633	690	795	893	983
	MOTOR KW	1.5	2.2	2.2	3	3	3	4	4		MOTOR KW	2.2	2.2	3	3	4	4	5.5	5.5
4973 CFM/500FPM	FAN RPM	568	635	700	764	826	778	873	962	6555 CFM/500FPM	FAN RPM	458	520	580	667	692	795	891	980
	MOTOR KW	2.2	2.2	3	3	3	3	4	5.5		MOTOR KW	2.2	3	3	3	4	4	5.5	7.5
5222 CFM/525FPM	FAN RPM	583	648	710	771	831	778	871	959	6883 CFM/525FPM	FAN RPM	468	528	586	641	694	795	889	977
	MOTOR KW	2.2	2.2	3	3	3	3	4	5.5		MOTOR KW	3	3	3	4	4	5.5	5.5	7.5
5470 CFM/550FPM	FAN RPM	599	661	721	779	837	778	870	956	7211 CFM/550FPM	FAN RPM	479	537	593	646	698	796	889	975
	MOTOR KW	2.2	3	3	3	4	4	5.5	5.5		MOTOR KW	3	3	4	4	4	5.5	5.5	7.5
5719 CFM/575FPM	FAN RPM	478	530	582	633	683	779	869	955	7539 CFM/575FPM	FAN RPM	490	546	600	652	702	798	889	974
	MOTOR KW	2.2	3	3	3	4	4	5.5	5.5		MOTOR KW	3	3	4	4	5.5	5.5	7.5	7.5
5968 CFM/600FPM	FAN RPM	489	540	590	639	688	781	869	953	7866 CFM/600FPM	FAN RPM	502	556	608	658	707	801	890	973
	MOTOR KW	3	3	3	4	4	4	5.5	7.5		MOTOR KW	3	3	4	4	5.5	5.5	7.5	7.5
UNIT SIZE		75								UNIT SIZE		85							
NUMBER*FAN SIZE(MM)		20*20								NUMBER*FAN SIZE(MM)		20*20							
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3
6836 CFM/450FPM	FAN RPM	393	452	508	562	614	713	804	888	8007 CFM/450FPM	FAN RPM	420	474	524	572	618	709	795	876
	MOTOR KW	2.2	2.2	3	3	4	5.5	5.5	7.5		MOTOR KW	3	3	4	4	4	5.5	7.5	7.5
7215 CFM/475FPM	FAN RPM	402	458	512	564	614	711	801	884	8452 CFM/475FPM	FAN RPM	431	484	532	578	622	710	793	873
	MOTOR KW	2.2	3	3	3	4	5.5	7.5	7.5		MOTOR KW	3	3	4	4	5.5	5.5	7.5	7.5
7595 CFM/500FPM	FAN RPM	411	466	517	567	616	709	798	880	8896 CFM/500FPM	FAN RPM	427	493	540	585	628	712	793	870
	MOTOR KW	2.2	3	3	4	4	5.5	7.5	7.5		MOTOR KW	3	4	4	5.5	5.5	5.5	7.5	10
7975 CFM/525FPM	FAN RPM	420	473	523	571	618	709	795	876	9341 CFM/525FPM	FAN RPM	441	504	549	592	634	715	793	869
	MOTOR KW	3	3	4	4	5.5	5.5	7.5	7.5		MOTOR KW	4	4	5.5	5.5	5.5	7.5	7.5	10
8355 CFM/550FPM	FAN RPM	429	481	530	576	621	709	794	873	9786 CFM/550FPM	FAN RPM	455	491	559	601	641	719	795	868
	MOTOR KW	3	3	4	4	5.5	5.5	7.5	7.5		MOTOR KW	4	5.5	5.5	5.5	5.5	7.5	10	10
8734 CFM/575FPM	FAN RPM	422	490	537	582	626	711	793	871	10231 CFM/575FPM	FAN RPM	404	447	569	610	649	724	798	869
	MOTOR KW	3	4	4	5.5	5.5	7.5	7.5	10		MOTOR KW	4	4	5.5	5.5	7.5	7.5	10	10
9114 CFM/600FPM	FAN RPM	434	498	545	588	631	713	793	869	10676 CFM/600FPM	FAN RPM	414	455	579	619	657	730	801	870
	MOTOR KW	4	4	4	5.5	5.5	7.5	7.5	10		MOTOR KW	4	4	5.5	7.5	7.5	10	10	10

UNIT SIZE		100								UNIT SIZE		130							
NUMBER*FAN SIZE(MM)		22*22								NUMBER*FAN SIZE(MM)		25*25							
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3
9277 CFM/450FPM	FAN RPM	383	430	477	523	568	653	731	804	11718 CFM/450FPM	FAN RPM	302	347	392	435	477	554	625	800
	MOTOR KW	3	3	4	4	5.5	5.5	7.5	10		MOTOR KW	3	4	5.5	5.5	5.5	7.5	11	15
9792 CFM/475FPM	FAN RPM	394	439	483	528	571	653	730	802	12369 CFM/475FPM	FAN RPM	309	352	394	436	477	553	622	686
	MOTOR KW	3	4	4	5.5	5.5	7.5	7.5	10		MOTOR KW	3	4	5.5	5.5	7.5	7.5	11	15
10308 CFM/500FPM	FAN RPM	406	448	491	533	574	654	730	801	13020 CFM/500FPM	FAN RPM	316	357	398	438	477	551	620	684
	MOTOR KW	3	4	4	5.5	5.5	7.5	10	10		MOTOR KW	4	4	5.5	7.5	7.5	11	11	15
10823 CFM/525FPM	FAN RPM	418	458	498	539	579	656	730	800	13671 CFM/525FPM	FAN RPM	324	363	402	440	478	550	618	681
	MOTOR KW	4	4	5.5	5.5	7.5	7.5	10	10		MOTOR KW	4	5.5	5.5	7.5	7.5	11	11	15
11338 CFM/550FPM	FAN RPM	430	469	507	546	584	659	731	800	14322 CFM/550FPM	FAN RPM	332	369	406	443	480	550	617	679
	MOTOR KW	4	5.5	5.5	7.5	7.5	7.5	10	15		MOTOR KW	5.5	5.5	7.5	7.5	7.5	11	15	15
11854 CFM/575FPM	FAN RPM	443	480	516	553	590	663	733	800	14973 CFM/575FPM	FAN RPM	341	376	412	447	482	551	616	677
	MOTOR KW	5.5	7.5	7.5	7.5	7.5	10	10	15		MOTOR KW	5.5	7.5	7.5	7.5	11	11	15	15
12370 CFM/600FPM	FAN RPM	456	491	526	562	597	667	735	801	15624 CFM/600FPM	FAN RPM	350	384	417	451	485	552	615	676
	MOTOR KW	5.5	5.5	7.5	7.5	7.5	10	10	15		MOTOR KW	5.5	7.5	7.5	7.5	11	11	15	15
UNIT SIZE		150								UNIT SIZE		180							
NUMBER*FAN SIZE(MM)		25*25								NUMBER*FAN SIZE(MM)		28*28							
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3
13950 CFM/450FPM	FAN RPM	328	366	404	441	479	550	617	680	16600 CFM/450FPM	FAN RPM	284	323	360	397	432	501	566	628
	MOTOR KW	4	5.5	5.5	7.5	7.5	11	11	15		MOTOR KW	5.5	5.5	7.5	7.5	11	11	15	15
14725 CFM/475FPM	FAN RPM	338	374	410	446	481	550	616	678	17523 CFM/475FPM	FAN RPM	291	328	364	399	433	500	536	623
	MOTOR KW	5.5	7.5	7.5	7.5	7.5	11	15	15		MOTOR KW	5.5	7.5	7.5	7.5	11	11	15	15
15500 CFM/500FPM	FAN RPM	348	382	416	451	485	551	615	676	18445 CFM/500FPM	FAN RPM	299	334	369	402	435	499	560	619
	MOTOR KW	5.5	7.5	7.5	7.5	11	11	15	15		MOTOR KW	5.5	7.5	7.5	11	11	15	15	18.5
16275 CFM/525FPM	FAN RPM	359	391	424	456	489	553	615	675	19367 CFM/525FPM	FAN RPM	307	341	374	406	438	499	559	616
	MOTOR KW	7.5	7.5	7.5	11	11	11	15	15		MOTOR KW	7.5	7.5	7.5	11	11	15	15	18.5
17050 CFM/550FPM	FAN RPM	---	401	432	463	494	556	616	674	20290 CFM/550FPM	FAN RPM	---	348	380	410	441	500	558	614
	MOTOR KW	---	7.5	11	11	11	15	15	15		MOTOR KW	---	7.5	11	11	11	15	18.5	18.5
17825 CFM/575FPM	FAN RPM	---	411	440	470	500	559	618	---	21212 CFM/575FPM	FAN RPM	---	355	386	415	445	502	557	612
	MOTOR KW	---	11	11	11	11	15	15	---		MOTOR KW	---	11	11	11	15	15	18.5	18.5
18600 CFM/600FPM	FAN RPM	---	421	449	478	506	563	620	---	22134 CFM/600FPM	FAN RPM	---	362	392	421	449	505	559	---
	MOTOR KW	---	11	11	11	15	15	15	---		MOTOR KW	---	11	11	15	15	15	18.5	---

UNIT SIZE		210								UNIT SIZE		250							
NUMBER*FAN SIZE(MM)		30*28								NUMBER*FAN SIZE(MM)		2(25*20)							
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3
19286 CFM/450FPM	FAN RPM	270	306	340	373	404	463	512	576	21913 CFM/450FPM	FAN RPM	344	386	426	465	503	574	641	703
	MOTOR KW	5.5	5.5	7.5	7.5	11	11	15	15		MOTOR KW	3	4	4	5.5	5.5	7.5	11	11
20357 CFM/475FPM	FAN RPM	277	312	344	376	407	464	517	566	23130 CFM/475FPM	FAN RPM	354	394	433	470	506	576	641	702
	MOTOR KW	5.5	7.5	7.5	11	11	11	15	15		MOTOR KW	4	4	5.5	5.5	7.5	7.5	11	11
21429 CFM/500FPM	FAN RPM	285	318	349	380	409	465	517	566	24348 CFM/500FPM	FAN RPM	364	403	440	476	511	578	642	702
	MOTOR KW	7.5	7.5	7.5	11	11	15	15	15		MOTOR KW	4	4	5.5	5.5	7.5	7.5	11	11
22500 CFM/525FPM	FAN RPM	293	324	354	384	413	467	518	566	25565 CFM/525FPM	FAN RPM	374	412	447	482	516	581	643	702
	MOTOR KW	7.5	7.5	11	11	11	15	15	18.5		MOTOR KW	5.5	5.5	5.5	7.5	7.5	11	11	15
23572 CFM/550FPM	FAN RPM	301	331	380	360	389	470	520	567	26783 CFM/550FPM	FAN RPM	385	421	455	489	522	585	645	703
	MOTOR KW	7.5	11	11	11	11	15	15	18.5		MOTOR KW	5.5	5.5	7.5	7.5	7.5	11	11	15
24643 CFM/575FPM	FAN RPM	309	338	366	394	421	472	521	568	28000 CFM/575FPM	FAN RPM	396	431	464	496	528	589	648	705
	MOTOR KW	11	11	11	11	15	15	18.5	18.5		MOTOR KW	5.5	7.5	7.5	7.5	11	11	11	15
25715 CFM/600FPM	FAN RPM	317	345	373	399	425	476	523	569	29218 CFM/600FPM	FAN RPM	---	441	473	504	535	594	652	707
	MOTOR KW	11	11	11	15	15	15	18.5	18.5		MOTOR KW	---	7.5	7.5	11	11	11	15	15
UNIT SIZE		270								UNIT SIZE		320							
NUMBER*FAN SIZE(MM)		2(25*20)								NUMBER*FAN SIZE(MM)		2(25*25)							
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3
24779 CFM/450FPM	FAN RPM	---	406	442	478	512	579	642	702	28319 CFM/450FPM	FAN RPM	---	368	405	443	479	550	617	---
	MOTOR KW	---	5.5	5.5	7.5	7.5	7.5	11	11		MOTOR KW	---	4	5.5	7.5	7.5	11	11	---
26155 CFM/475FPM	FAN RPM	---	416	451	485	519	583	644	702	29892 CFM/475FPM	FAN RPM	---	376	411	447	482	551	616	677
	MOTOR KW	---	5.5	5.5	7.5	7.5	11	11	15		MOTOR KW	---	5.5	7.5	7.5	7.5	11	11	15
27532 CFM/500FPM	FAN RPM	---	427	461	494	526	588	647	704	31465 CFM/500FPM	FAN RPM	---	385	419	453	486	552	615	675
	MOTOR KW	---	5.5	7.5	7.5	7.5	11	11	15		MOTOR KW	---	7.5	7.5	7.5	11	11	15	15
28909 CFM/525FPM	FAN RPM	---	438	471	502	533	593	651	706	33038 CFM/525FPM	FAN RPM	---	394	426	458	491	554	615	674
	MOTOR KW	---	7.5	7.5	7.5	11	11	11	15		MOTOR KW	---	7.5	7.5	11	11	11	15	15
30285 CFM/550FPM	FAN RPM	---	450	481	512	541	599	655	709	34612 CFM/550FPM	FAN RPM	---	404	435	465	496	557	616	674
	MOTOR KW	---	7.5	7.5	11	11	11	15	15		MOTOR KW	---	7.5	11	11	11	15	15	15
31662 CFM/575FPM	FAN RPM	---	461	492	521	550	606	660	713	36185 CFM/575FPM	FAN RPM	---	414	443	473	502	561	618	---
	MOTOR KW	---	7.5	11	11	11	11	15	15		MOTOR KW	---	11	11	11	11	15	15	---
33038 CFM/600FPM	FAN RPM	---	474	503	532	559	614	666	717	37758 CFM/600FPM	FAN RPM	---	425	453	481	509	565	621	---
	MOTOR KW	---	11	11	11	11	15	15	15		MOTOR KW	---	11	11	11	15	15	15	---

UNIT SIZE		350								UNIT SIZE		390							
NUMBER*FAN SIZE(MM)		2(28*28)								NUMBER*FAN SIZE(MM)		2(28*28)							
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3	TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3
32027 CFM/450FPM	FAN RPM	---	319	358	395	432	503	569	631	34387 CFM/450FPM	FAN RPM	---	326	363	398	433	500	564	625
	MOTOR KW	---	5.5	5.5	7.5	7.5	11	15	15		MOTOR KW	---	5.5	7.5	7.5	11	11	15	15
33806 CFM/475FPM	FAN RPM	---	352	361	397	432	500	565	626	36297 CFM/475FPM	FAN RPM	---	332	367	401	434	499	561	620
	MOTOR KW	---	5.5	7.5	7.5	11	11	15	15		MOTOR KW	---	7.5	7.5	7.5	11	11	15	15
35585 CFM/500FPM	FAN RPM	---	330	365	400	434	499	562	622	38208 CFM/500FPM	FAN RPM	---	339	372	405	437	499	559	617
	MOTOR KW	---	7.5	7.5	7.5	11	11	15	18.5		MOTOR KW	---	7.5	7.5	11	11	15	15	18.5
37365 CFM/525FPM	FAN RPM	---	336	370	403	436	499	560	618	40118 CFM/525FPM	FAN RPM	---	346	378	409	440	500	558	614
	MOTOR KW	---	7.5	7.5	11	11	11	15	18.5		MOTOR KW	---	7.5	11	11	11	15	15	18.5
39144 CFM/550FPM	FAN RPM	---	342	375	407	438	499	559	616	42028 CFM/550FPM	FAN RPM	---	353	384	414	444	502	558	612
	MOTOR KW	---	7.5	11	11	11	15	15	18.5		MOTOR KW	---	11	11	11	11	15	18.5	18.5
40923 CFM/575FPM	FAN RPM	---	349	381	411	442	501	558	613	43939 CFM/575FPM	FAN RPM	---	361	391	420	448	504	558	---
	MOTOR KW	---	11	11	11	11	15	15	18.5		MOTOR KW	---	11	11	11	15	15	18.5	---
42703 CFM/600FPM	FAN RPM	---	356	387	416	445	502	558	612	45849 CFM/600FPM	FAN RPM	---	369	398	426	453	507	560	---
	MOTOR KW	---	11	11	11	15	15	18.5	18.5		MOTOR KW	---	11	11	15	15	15	18.5	---

UNIT SIZE		420							
NUMBER*FAN SIZE(MM)		2(30*28)							
TOTAL STATIC PRESSUR		0.5	0.75	1	1.25	1.5	2	2.5	3
37549 CFM/450FPM	FAN RPM	---	303	338	372	403	462	517	567
	MOTOR KW	---	7.5	7.5	7.5	11	11	15	15
39635 CFM/475FPM	FAN RPM	---	309	342	374	405	463	517	566
	MOTOR KW	---	7.5	7.5	11	11	15	15	18.5
41721 CFM/500FPM	FAN RPM	---	314	347	378	408	464	517	566
	MOTOR KW	---	7.5	11	11	11	15	15	18.5
43807 CFM/525FPM	FAN RPM	---	320	352	382	411	466	518	566
	MOTOR KW	---	11	11	11	11	15	18.5	18.5
45893 CFM/550FPM	FAN RPM	---	327	357	386	414	468	519	---
	MOTOR KW	---	11	11	11	15	15	18.5	---
47979 CFM/575FPM	FAN RPM	---	333	362	391	418	471	520	---
	MOTOR KW	---	11	11	15	15	18.5	18.5	---
50065 CFM/600FPM	FAN RPM	---	340	368	396	422	474	---	---
	MOTOR KW	---	11	15	15	15	18.5	---	---

General Coils Data

Model Size	Coil Face Area		Actual Fin Height		Finned Length	
	Ft ²	M ²	in	mm	in	mm
15	3,2	0,3	21,26	540	21,65	550
20	4,7	0,44	21,26	540	21,65	550
30	6,7	0,62	30,71	780	31,5	800
40	7,98	0,74	30,71	780	37,4	950
50	9,95	0,92	33,07	840	43,31	1100
65	13,11	1,22	33,07	840	57,09	1450
75	15,19	1,41	33,07	840	66,14	1680
85	17,79	1,65	44,88	1140	57,09	1450
100	20,62	1,92	44,88	1140	66,14	1680
130	26,04	2,42	44,88	1440	66,14	1680
150	31,00	2,88	44,88	1440	78,74	2000
180	36,89	3,43	66,14	1680	80,31	2040
210	42,86	3,98	66,14	1680	93,31	2370
250	48,70	4,52	68,5	1740	102,36	2600
270	55,06	5,12	68,5	1740	57,87	1470
320	62,93	5,85	68,5	1740	66,14	1680
350	71,17	6,61	68,5	1740	74,8	1900
390	76,42	7,10	80,31	2040	68,5	1740
420	83,44	7,75	80,31	2040	74,8	1900

Cooling Coil Data (Water Side)

Model	4 Row		6 Row		8 Row	
	Flow rate (m ³ / hr)	Pressure drop (kpa)	Flow rate (m ³ / hr)	Pressure drop (kpa)	Flow rate (m ³ / hr)	Pressure drop (kpa)
15	4,27	1,8	4,75	3,5	4,93	5,2
20	6,2	4,3	6,79	7,9	6,98	11,3
30	9,38	4,6	10,3	8,6	10,61	12,4
40	11,85	7,7	13	14,2	13,38	20,3
50	14,94	11	16,32	20,2	16,76	28,8
65	19,7	21,4	21,38	38,5	21,88	54,4
75	23,14	31,5	25,06	56,1	25,62	79
85	26,42	21	28,64	37,6	29,29	53,1
100	27,6	25,1	34,58	57,8	35,37	81,5
130	39,34	31	42,59	55,3	43,54	77,8
150	47,17	48,5	50,94	85,6	52	120,1
180	56,31	51,2	60,8	90,4	62,07	126,8
210	65,71	75,3	70,82	132,1	72,22	184,6
250	73,52	91,7	80,03	163,8	82	230,8
270	41,39	22,2	44,92	39,8	45,98	56,3
320	43,3	31,9	52,36	57	53,56	80,3
350	53,95	42,4	58,29	75	59,53	105,3
390	58,91	35,1	63,84	62,6	65,29	88,1
420	55,94	34,1	69,69	77,6	71,22	109,1

Unit Size	AHU 15				AHU 20				AHU 30			
AIR FLOW RATE (CFM)	1500				2100				3200			
Edb_Ewb (oC)	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2
4 Rows / 8 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	12.2 17.4_14.9	19.1 18.3_14.7	23.2 19.6_14.7	30.7 20.7_17	20.3 16.1_13.6	28.6 17.4_14.1	34.3 18.6_14.1	44.9 19.8_16.8	30.4 16.3_13.4	43 17.6_14.3	51.7 18.9_14.3	67.5 20.1_16
4 Rows / 10 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	14.1 16_14.3	20.9 16.8_14.2	25.2 17.8_13.8	33.4 18.7_16.3	22.1 15_13	31 16_13.8	37 16.9_13.5	48.3 17.9_14.6	33.2 15.2_13.1	46.7 16.2_13.6	55.8 17.1_13.4	72.9 18.2_14.8
4 Rows / 12 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	16.1 14.4_12.3	22.9 15.1_13	27.4 15.7_13	36.1 16.5_13.7	24.2 13.7_12.1	33.6 14.4_12.2	39.8 15_12.5	51.9 15.8_13.1	36.5 13.8_12	50.7 14.6_12.5	60.2 15.2_12.5	78.5 16_13.2
6 Rows / 8 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	16.6 14.2_12	23.4 14.9_13	27.9 15.6_12.5	36.5 16.3_13.7	24.8 13.6_12.1	34.2 14.3_12.2	40.5 14.9_12	52.4 15.7_13.2	37.4 13.7_12	51.6 14.4_12.5	61.2 15.1_12.4	79.3 15.9_13.2
6 Rows / 10 fpi Cooling Capacity(KW) Ldb/Lwb(C)	17.7 13.2_11.6	24.7 13.7_12	29.2 14.1_12	38.2 14.8_12_7	26.1 12.6_11.1	35.7 13.2_11.6	42.1 13.6_11.7	54.5 14.3_12.2	39.4 12.8_11.9	54.1 13.3_12	63.8 13.7_11.9	82.6 14.5_12.5
6 Rows / 12 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	18.9 12.1_11.1	25.9 12.5_11.4	30.5 12.7_11.2	39.6 13.4_12.4	27.4 11.7_10.7	37.2 12.1_11.5	43.5 12.3_11	56.2 13_12	41.6 11.8_11	56.5 12.2_11	66.1 12.4_11	85.4 13.1_11.8
8 Rows / 8 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	18.5 12.6_11.2	25.6 13_11.5	30.2 13.3_11.5	39.2 14_12	27.1 12.1_11	36.9 12.6_11.4	43.3 12.8_11.2	55.8 13.6_12	41.1 12.2_11.2	55.8 12.7_11.5	65.6 13_11.3	84.6 13.7_12.2
8 Rows / 10 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	19.3 11.8_11.1	26.4 12.1_11.2	31 12.3_11.6	40.1 13_11.7	28 11.4_10.6	37.8 11.8_11.2	44.1 11.9_11	56.8 12.7_11.8	42.4 11.5_10.8	57.3 11.9_11.2	67 12_10.8	86.3 12.8_11.6
8 Rows / 12 fpi Cooling Capacity(KW) Ldb/Lwb(C)	20.1 11_10.8	27.2 11.3_11	31.7 11.4_11.1	40.8 12.1_11.3	28.8 10.8_10.6	38.6 11.1_10.8	44.8 11.1_10.7	57.5 11.9_11.5	43.8 10.8_10.4	58.6 11.2_10.7	68 11.2_10.5	87.6 12_11.2

Edb: Entering dry bulb temperature
Ewb: Entering wet bulb temperature
Ldb: Leaving dry bulb temperature
Lwb: Leaving wet bulb temperature

Unit Size	AHU 40				AHU 50				AHU 65			
AIR FLOW RATE (CFM)	4000				5000				6500			
Edb_Ewb (oC)	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2
4 Rows / 8 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	38.8 16.2_13.5	54.2 17.5_14.2	65.3 18.8_14.3	84.4 20.1_16	49.6 16_13.1	68.7 17.3_14	82.5 18.6_14.2	106 19.9_16.7	66.8 15.6_13	91.5 17_14	109 18.3_14.2	114 15.7_13.1
4 Rows / 10 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	42.2 15_13	58.8 16.1_13.5	70.5 17.1_13.4	91.1 18.2_14.8	54 14.9_12.8	74.4 16_13.5	89 17_13.3	115 18_14.7	72.4 14.6_12.3	98.9 15.7_13.1	118 16.6_13.5	151 17.7_13.3
4 Rows / 12 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	46.4 13.7_12	63.9 14.5_12.4	76.1 15.2_12.4	98.1 16.1_13.5	58.9 13.6_12	80.6 14.4_12.4	95.9 15.1_12.3	123 15.9_13.5	78.6 13.3_11.6	107 14.1_12.1	126 14.8_12.7	162 14.7_12.7
6 Rows / 8 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	47.4 13.6_11.9	64.8 14.4_12.4	77.2 15.1_12.4	99 15.9_13.2	60.1 13.5_12	81.8 14.3_12.3	97.2 14.9_12.2	124 14.9_12.3	79.9 13.2_11.4	108 14_12	128 14.7_12.1	163 15.6_13
6 Rows / 10 fpi Cooling Capacity(KW) Ldb/Lwb(C)	50 12.7_11.5	67.9 13.3_12	80.4 13.8_11.9	103 14.5_12.5	63.1 12.6_11.4	85.5 13.2_11.7	101 13.6_11	129 13.6_11.5	83.7 12.4_11.1	113 13_11.8	133 13.4_11.9	170 14.2_12.2
6 Rows / 12 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	52.6 11.7_11	70.9 12.2_11	83.4 12.4_11	107 13.2_11.8	66.3 11.6_10.9	89.1 12.1_10.1	105 12.3_10.9	134 13.1_11.8	87.5 11.5_10.7	117 12_11.2	137 12.2_11	175 13_11.9
8 Rows / 8 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	51.9 12.2_11.1	70 12.7_11.6	82.6 13_11.2	106 13.8_12.1	65.4 12.1_11	88.11 12.6_11.5	104 12.9_11	132 13.7_12	86.4 11.9_10.8	116 12.4_11	136 12.7_10.8	173 13.5_12
8 Rows / 10 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	53.6 11.5_10.7	71.9 11.9_11.2	84.4 12.1_10.9	108 12.8_11.6	67.4 11.4_11	90.3 11.8_10.9	106 12_10.8	135 12.8_11.8	88.8 11.2_10.5	118 11.7_10.8	139 11.9_10.5	176 12.6_11.5
8 Rows / 12 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	55.2 10.8_10.4	73.5 11.2_10.7	85.9 11.2_10.5	109 12_11.3	69.4 10.8_10.5	92.2 11.1_11.5	108 11.2_10.5	137 11.9_11.5	90.9 10.7_10.2	120 11_10.5	140 11.1_10.1	179 11.9_11.4

Edb: Entering dry bulb temperature
Ewb: Entering wet bulb temperature
Ldb: Leaving dry bulb temperature
Lwb: Leaving wet bulb temperature

Unit Size	AHU 75				AHU 85				AHU 100			
AIR FLOW RATE (CFM)	7600				8700				10500			
Edb_Ewb (oC)	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2
4 Rows / 8 fpi Cooling Capacity(KW) Ldb/Lwb(C)	79.1 15.5_13.1	108 16.9_14.1	129 18.2_14.1	165 19.4_15	89.7 15.6_13	123 17_13.8	147 18.2_14.8	188 19.4_15.5	109 15.6_13.1	148 17_13.9	177 18.2_14	227 19.5_13.8
4 Rows / 10 fpi Cooling Capacity(KW) Ldb/Lwb(C)	85.5 14.5_12.7	116 15.6_13	139 16.5_12.1	177 17.6_14.4	97.2 14.5_12.7	133 15.6_13	158 16.6_13.2	203 17.6_14.1	118 14.5_12.3	160 15.6_13.1	191 16.6_13	244 17.7_14.6
4 Rows / 12 fpi Cooling Capacity(KW) Ldb/Lwb(C)	92.6 13.2_11.9	125 14.1_12	149 14.7_12	190 15.6_13	105 13.3_11.5	143 14.1_12	170 14.7_12	217 15.6_13.2	128 13.3_11.8	173 14.1_12.2	205 14.8_12.3	262 15.7_13.3
6 Rows / 8 fpi Cooling Capacity(KW) Ldb/Lwb(C)	94.2 13.1_11.7	127 14_12	150 14.6_12	191 15.5_13	107 13.2_11.5	145 14_12	172 14.6_11.9	219 15.5_13.2	130 13.2_11.3	175 14_12	207 14.7_12	264 15.6_13.1
6 Rows / 10 fpi Cooling Capacity(KW) Ldb/Lwb(C)	98.5 12.3_11	132 12.9_11.8	156 13.4_11.7	199 14.2_12.2	112 12.3_11.2	151 13_11.5	178 13.4_11.5	227 14.2_12.3	136 12.3_11.1	182 13_11.5	215 13.4_11.6	274 14.3_12.5
6 Rows / 12 fpi Cooling Capacity(KW) Ldb/Lwb(C)	103 11.4_10.5	137 11.9_11	161 12.2_11.1	205 12.9_11.9	117 11.5_11	157 11_10	184 12.2_11.3	234 12.9_11.8	142 11.5_10.8	189 12_11.3	222 12.2_10.8	283 13_11.7
8 Rows / 8 fpi Cooling Capacity(KW) Ldb/Lwb(C)	102 11.8_10.9	136 12.4_11.2	160 12.7_10.9	203 13.5_12.4	116 11.8_11.1	155 12.4_11.3	182 12.7_11.5	232 13.5_12	140 11.8_11	187 12.4_11	220 12.7_11	280 13.5_11.9
8 Rows / 10 fpi Cooling Capacity(KW) Ldb/Lwb(C)	104 11.2_10.6	139 11.6_10.8	162 11.8_10.8	207 12.6_11.3	119 11.2_10.5	159 11.7_10.8	186 11.8_10.9	236 12.6_11.8	144 11.2_10.7	191 11.7_10.8	224 11.9_11	285 12.6_11.4
8 Rows / 12 fpi Cooling Capacity(KW) Ldb/Lwb(C)	107 10.6_10	141 11_10.5	164 11.1_10.7	209 11.9_11.2	122 10.6_10	161 11_10.7	188 11.1_10.7	239 11.8_11.5	147 10.6_10.4	195 11_10.3	227 11.1_10.7	289 11.9_11.1

Edb: Entering dry bulb temperature
Ewb: Entering wet bulb temperature
Ldb: Leaving dry bulb temperature
Lwb: Leaving wet bulb temperature

Unit Size	AHU 130				AHU 150				AHU 180			
AIR FLOW RATE (CFM)	13000				15500				18500			
Edb_Ewb (oC)	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2
4 Rows / 8 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	135 15.5_13	184 16.9_13.9	219 18.1_13.5	282 19.4_15	163 15.3_12.8	222 16.7_13.7	264 18_14	338 19.3_15.4	194 15.3_12.8	265 16.7_13.7	315 18_14	403 19.3_15.4
4 Rows / 10 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	146 14.4_12.5	199 15.5_13	236 16.5_13	303 17.6_14.3	176 14.3_12	239 15.4_12.8	283 16.4_13	363 17.5_14	210 14.3_12	285 15.4_12.8	338 16.4_13	433 17.5_14
4 Rows / 12 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	158 13.2_11.6	214 14_12	253 14.7_12	325 15.6_13.5	190 13.1_11.6	257 13.9_12	303 14.6_12	389 15.5_13	227 13.1_11.6	307 13.9_12	361 14.6_12	464 15.5_13
6 Rows / 8 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	160 13.1_11.5	217 13.9_12.9	256 14.6_12	327 15.5_13	193 13_11.5	260 13.8_11.8	306 14.5_11.9	392 15.4_13	230 13_11.5	311 13.8_11.8	366 14.5_11.9	468 15.4_13
6 Rows / 10 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	168 12.3_11.1	226 12.9_11.4	265 13.3_11.3	340 14.2_12.3	202 12.2_11.1	271 12.9_11.5	317 13.3_11.5	407 14.1_12.7	241 12.2_11.1	323 12.9_11.5	379 13.3_11.5	485 14.1_12.7
6 Rows / 12 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	172 11.4_10.7	234 11.9_11	273 12.1_10.8	351 12.9_11.5	210 11.4_10.7	280 11.9_11.1	327 12.1_11.2	419 12.9_12.4	251 11.4_10.7	335 11.9_11.1	390 12.1_11.2	500 12.9_12.4
8 Rows / 8 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	173 11.8_10.7	232 12.4_10.9	271 12.7_11.1	347 13.5_11.8	208 11.7_11	278 12.3_11.2	325 12.6_11	415 13.4_11.8	248 11.7_11	332 12.3_11.2	388 12.6_11	495 13.4_11.8
8 Rows / 10 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	177 11.2_10.6	237 11.6_10.7	276 11.8_10.7	354 12.6_11.5	213 11.1_10.5	283 11.6_10.8	330 11.8_10.8	422 12.6_11.7	254 11.1_10.5	338 11.6_10.8	394 11.8_10.8	504 12.6_11.7
8 Rows / 12 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	182 10.6_10.2	241 11_10.4	279 11.1_10.5	358 11.9_11.4	217 10.6_10.4	288 11_10.5	334 11_10.2	427 11.8_11	259 10.6_10.4	334 11_10.5	398 11_10.2	510 11.8_11

Edb: Entering dry bulb temperature

Ewb: Entering wet bulb temperature

Ldb: Leaving dry bulb temperature

Lwb: Leaving wet bulb temperature

Unit Size	AHU				AHU				AHU.270			
AIR FLOW RATE (CFM)	21500				24500				27500			
Edb_Ewb (oC)	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2
4 Rows / 8 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	228 15.2_12.8	310 16.6_13.7	368 17.9_14	471 19.2_15.4	262 15.2_12.8	354 16.6_13.7	421 17.8_14	537 19.1_15.3	141 15.6_13.1	193 17_13.9	230 18.2_14	297 19.5_13.8
4 Rows / 10 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	246 14.2_12	334 15.3_12.8	395 16.3_13	505 17.4_14	282 14.2_12	381 15.3_12.8	451 16.2_13	577 17.3_13.9	152 14.5_12.3	209 15.6_13.1	248 16.6_13	319 17.7_14.6
4 Rows / 12 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	266 13_11.6	359 13.8_12	422 14.5_12	541 15.4_13	304 13_11.6	410 13.8_12	482 14.5_12	617 15.4_13	165 13.3_11.8	225 14.1_12.2	266 14.8_12.3	343 15.7_13.3
6 Rows / 8 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	270 12.9_11.5	363 13.7_11.8	426 14.4_11.9	454 15.3_13	308 12.9_11.5	414 13.7_11.8	487 14.4_11.9	622 15.3_13	168 13.2_11.3	228 14_12	269 14.7_12	345 15.6_13.1
6 Rows / 10 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	281 12.1_11.1	377 12.8_11.5	442 13.2_11.5	565 14_12.7	321 12.1_11.1	431 12.8_11.5	504 13.2_11.5	645 14.1_12.7	176 12.3_11.1	238 13_11.5	279 13.4_11.6	359 14.3_12.5
6 Rows / 12 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	292 11.3_10.7	390 11.8_11.1	455 12_11.2	582 12.8_12.4	334 11.3_10.7	445 11.8_11.1	519 12_11.2	663 12.8_12.4	184 11.5_10.8	247 12_11.3	288 12.2_10.8	370 13_11.7
8 Rows / 8 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	289 11.6_11	396 12.2_11.2	452 12.5_11	577 13.3_11.8	330 11.6_11	441 12.2_11.2	515 12.5_11	658 13.4_11.7	168 11.8_11	244 12.4_11	286 12.7_11	367 13.5_11.9
8 Rows / 10 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	296 11_10.5	394 11.5_10.8	459 11.7_10.8	586 12.5_11.7	338 11.1_10.5	450 11.5_10.8	523 11.7_10.8	669 12.5_11.7	176 11.2_10.7	250 11.7_10.8	291 11.9_11	373 12.6_11.4
8 Rows / 12 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	302 10.5_10.4	400 10.9_10.5	464 10.9_10.2	593 11.7_11	345 10.5_10.4	456 10.9_10.5	529 11_10.2	676 11.8_11	184 10.6_10.4	254 11_10.3	295 11.1_10.7	378 11.9_11.1

Edb: Entering dry bulb temperature
Ewb: Entering wet bulb temperature
Ldb: Leaving dry bulb temperature
Lwb: Leaving wet bulb temperature

Unit Size	AHU 320				AHU 350				AHU 390				AHU 420			
AIR FLOW RATE (CFM)	32000				35500				39000				42500			
Edb_Ewb (oC)	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2	26.7_19.4	32.2_22.2	37.7_23.8	43.3_27.2
4 Rows / 8 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	165 15.5_13	226 16.9_13.9	268 18.1_13.5	346 19.4_15	186 15.4_12.8	253 16.8_13.8	301 18_14	386 19.3_15.8	201 15.5_13	275 16.9_13.8	327 18.2_13.8	421 19.5_15	221 15.4_12.9	302 16.9_13.8	359 18.1_14	461 19.4_15.3
4 Rows / 10 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	179 14.4_12.5	244 15.5_13	289 16.5_13	372 17.6_14.3	201 14.3_12.1	273 15.5_13	323 16_12.7	415 17.5_14.6	218 14.5_12.5	298 15.6_13	352 16.6_13.5	453 17.7_14.2	239 14.4_12.6	326 15.5_12.9	386 16.5_13.2	495 17.6_14.5
4 Rows / 12 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	194 13.2_11.6	263 14_12	310 14.7_12	399 15.6_13.5	217 13.1_11.3	294 14_12	346 14.6_12	445 15.5_13.1	236 13.3_12.1	321 14.1_12	378 14.7_12	486 15.7_14	259 13.2_11.9	351 14_12	413 14.7_12.1	531 15.6_13
6 Rows / 8 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	197 13.1_11.5	266 13.9_12.9	314 14.6_12	402 15.5_13	220 13.1_11.3	297 13.9_11.9	350 14.5_11.7	448 15.4_13	240 13.2_12.1	325 14_12	382 14.6_12	490 15.6_13	263 13.1_11.9	355 13.9_12	418 14.6_12	535 15.5_13
6 Rows / 10 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	206 12.3_11.1	278 12.9_11.4	326 13.3_11.3	418 14.2_12.3	230 12.2_11	310 12.9_11.4	363 13.3_11.2	465 14.1_12.3	251 12.3_10.6	339 13_11.6	397 13.4_11.8	509 14.2_12.3	275 12.3_11.1	370 12.9_11.1	434 13.3_11.3	556 14.2_12.2
6 Rows / 12 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	215 11.4_10.7	288 11.9_11	336 12.1_10.8	431 12.9_11.5	240 11.4_10.6	321 11.9_11.1	374 12.1_10.9	479 12.9_11.8	262 11.4_10.8	351 11.9_11.1	410 12.2_11	525 13_11.9	287 11.4_10.7	384 11.9_11	447 12.1_11	573 12.9_11.5
8 Rows / 8 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	212 11.8_10.7	285 12.4_10.9	333 12.7_11.1	427 13.5_11.8	237 11.7_10.6	318 12.3_11	371 12.6_10.8	475 13.4_11.7	259 11.8_11	347 12.4_11.3	406 12.7_10.8	520 13.5_11.5	283 11.8_11.1	380 12.4_11.3	444 12.7_10.7	568 13.5_12
8 Rows / 10 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	218 11.2_10.6	291 11.6_10.7	339 11.8_10.7	435 12.6_11.5	243 11.1_10.5	324 11.6_10.7	378 11.8_11	483 12.6_11.5	266 11.2_10.3	355 11.7_10.9	414 11.9_10.9	530 12.6_11.7	291 11.2_11.5	388 11.6_10.8	452 11.8_10.5	578 12.6_11.2
8 Rows / 12 fpi Cooling Capacity(KW) Ldb_Lwb (oC)	223 10.6_10.2	296 11_10.4	334 11.1_10.5	440 11.9_11.4	249 10.6_10.2	330 11_10.5	382 11_10.3	489 15.4_11	272 10.6_10	361 11_10.6	419 11.1_10.3	536 11.9_11.1	297 10.6_10	394 11_10.5	457 11.1_10.3	58 511.9_11.4

Edb: Entering dry bulb temperature

Ewb: Entering wet bulb temperature

Ldb: Leaving dry bulb temperature

Lwb: Leaving wet bulb temperature

Heting Coil Data (Water Side)

Model	1 Row		2 Row		3 Row	
	Flow rate (m ³ / hr)	Pressure drop (kpa)	Flow rate (m ³ / hr)	Pressure drop (kpa)	Flow rate (m ³ / hr)	Pressure drop (kpa)
15	2,19	0,5	3,78	3,5	4,8	8,5
20	3,22	1,3	5,44	8	6,86	18,9
30	4,8	1,4	8,16	8,5	10,32	20,3
40	5,94	2,3	9,77	1,6	12,79	32,4
50	7,48	3,3	12,33	2,4	16,02	46
65	9,92	6,7	16,28	4,7	21	87,9
75	11,62	10	19,11	7,1	24,56	127,6
85	13,36	6,6	21,9	4,7	28,19	86,1
100	15,97	10,2	26,22	7,2	33,77	130,6
130	19,93	10	32,72	7	42,02	127,2
150	23,9	15,8	39,21	11,1	50,2	196,6
180	28,49	16,6	46,78	11,8	59,88	207,3
210	33,31	24,8	54,64	17,5	69,7	302,6
250	37,98	31,7	62,31	22,4	79,36	383,6
270	20,93	7	34,4	5	44,38	91,8
320	24,32	10,1	40,02	7,2	51,45	130,2
350	27,33	13,7	44,86	9,7	57,46	172,3
390	29,65	11,2	48,74	7,9	62,71	142,8
420	32,43	14	53,39	10	68,5	177,4

Heating coil performance

Unit Size	AHU 15				AHU 20				AHU 30			
AIR FLOW(CFM)	1500				2100				3200			
Edb(oC)	-20	-10	0	15.5	-20	-10	0	15.5	-20	-10	0	15.5
1 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	21.4 1.7	18.8 9.8	16.2 17.7	12.3 29.8	31.9 3.1	28.1 11.2	24.4 19.1	18.7 31	47.5 2.5	41.9 10.7	36.3 18.6	27.9 30.7
1 Rows / 10 fpi Heating Capacity(KW) Ldb(C)	25.4 5.7	22.3 13.5	19.3 21.1	14.7 32.6	37.5 7.1	33 14.8	28.7 22.4	22.1 33.8	55.8 6.5	49.2 14.3	42.7 21.9	32.9 33.4
1 Rows / 12 fpi Heating Capacity(KW) Ldb(C)	30.9 11.3	27.2 18.6	23.6 25.8	18.1 36.5	45.3 12.8	40 20.1	34.8 27.2	26.9 37.8	67.6 12.1	59.7 19.4	51.9 26.6	40.1 37.3
2 Rows / 8 fpi Heating Capacity(KW) Ldb(C)	40 20.5	35.3 27.1	30.6 33.4	23.5 42.8	58.3 22.1	51.4 28.6	44.7 34.9	34.6 44.2	87 21.3	76.8 27.9	66.8 34.2	51.7 43.6
2 Rows / 10 fpi Heating Capacity(KW) Ldb(C)	45.8 26.4	40.3 32.4	35 38.3	27 46.8	66.3 27.9	58.4 33.9	50.8 39.7	39.4 48.1	99.1 27	87.4 33.1	76 38.9	58.9 47.5
2 Rows / 12 fpi Heating Capacity(KW) Ldb(C)	53.4 34.1	47 39.4	40.8 44.6	31.5 52	76.9 35.6	67.7 40.9	58.8 45.9	45.6 53.3	115 34.6	101 40	88.2 45.2	68.3 52.6
3 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	54 34.6	47.5 40	41.2 45	31.8 52.4	77.8 36.3	68.5 41.5	59.5 46.5	46.1 53.7	117 35.3	103 40.6	89.2 45.7	69.1 53.1
3 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	60.3 41.1	53 45.8	46 50.2	35.5 56.6	86.5 42.5	76.1 47.2	66 51.5	51.1 57.8	130 41.6	114 46.3	99.1 50.2	76.7 57.2
3 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	68.1 48.9	59.8 52.9	51.7 56.5	39.9 61.8	97.2 50.3	85.3 54.1	73.9 57.7	57.2 62.9	146 49.3	128 53.3	111 57	86.1 62.3

Edb: Entering dry bulb temperature

Ldb: Leaving dry bulb temperature

Unit Size	AHU 40				AHU 50				AHU 65			
AIR FLOW RATE(CFM)	4000				5000				6500			
Edb(oC)	-20	-10	0	11	-20	-10	0	15.5	-20	-10	0	15.5
1 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	58.9 2.4	52 10.5	45.2 78.5	34.9 30.5	74.4 2.6	65.8 10.7	57.3 18.7	44.3 30.8	99 3.1	87.6 11.3	76.5 19.2	59.4 31.3
1 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	69.1 6.2	61 14	53.1 21.7	41 33.2	87.1 6.4	77.1 14.3	67.1 21.9	52 33.4	116 7	102 14.9	89.5 22.5	69.6 34
1 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	83.1 11.7	73.9 19.1	64.1 26.3	49.8 37	105 12	93.1 19.3	81.1 26.5	63 37.2	139 12.6	123 19.9	108 27.1	83.9 37.8
2 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	103 19.1	90.7 25.8	78.6 32.1	60.4 40.5	130 19.5	115 26.1	99.5 32.5	76.6 41.9	173 20.4	153 27	133 33.4	103 42.7
2 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	118 24.8	104 31	90.1 36.8	69.3 45.4	149 25.2	131 31.4	114 37.2	87.5 45.8	198 26.1	174 32.2	151 38.1	117 46.6
2 Rows / 12 fpi Heating Capacity(KW) Ldb(C)	138 32.5	122 37.9	105 43.1	81.2 50.5	174 32.8	153 38.3	133 43.4	103 50.9	230 33.7	203 39.1	176 44.3	136 51.7
3 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	144 34.7	127 40.1	110 45.1	85.7 52.5	181 34.9	159 40.2	139 45.3	108 52.7	237 35.4	209 40.8	182 45.8	142 53.1
3 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	161 40.9	141 45.7	123 50.2	95.2 56.6	201 41.1	177 45.9	154 50.3	120 56.7	264 41.7	233 46.4	202 50.9	157 57.2
3 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	181 48.7	159 52.7	138 56.4	107 61.6	227 48.8	199 52.8	173 56.5	134 61.7	297 49.4	261 53.3	227 57	176 62.2

Edb: Entering dry bulb temperature

Ldb: Leaving dry bulb temperature

Unit Size	AHU 75				AHU 85				AHU 100			
AIR FLOW RATE(CFM)	7600 ^{Heating}				8700				10500			
Edb(oC)	-20	-10	0	15.5	-20	-10	0	15.5	-20	-10	0	15.5
1 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	116 3.2	103 11.4	90 19.4	70 31.4	133 3.2	118 11.4	103 19.3	80 31.4	159 3	141 11.2	123 19.2	96 31.3
1 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	136 7.1	120 14.9	105 22.6	81.9 34.1	156 7.2	138 15	120 22.6	93.7 34.1	186 6.9	165 14.8	144 22.4	112 33.9
1 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	163 12.6	145 20	126 27.2	98.6 37.9	188 12.7	166 20.1	145 27.2	113 37.9	224 12.4	199 19.8	173 27	135 37.7
2 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	203 20.6	179 27.2	156 33.6	121 43	233 20.6	205 27.2	178 33.5	138 42.9	279 20.3	246 26.9	214 33.3	166 42.8
2 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	232 26.3	204 32.4	178 38.3	138 46.8	266 26.4	234 32.4	204 38.3	158 46.8	318 26	281 32.1	244 38	189 46.6
2 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	270 33.9	238 39.3	207 44.4	160 51.9	309 34	273 39.4	237 44.5	183 51.8	370 33.5	326 39	284 44.2	220 51.6
3 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	278 35.4	245 40.8	213 45.9	166 53.2	319 35.7	282 41	245 46	191 53.3	381 35.1	337 40.5	293 45.6	228 53
3 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	309 41.7	272 46.4	237 50.9	184 57.2	355 41.9	313 46.6	272 51.1	211 57.4	424 41.3	374 46.1	325 50.6	253 57.1
3 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	347 49.3	305 53.3	265 57	206 62.2	399 49.6	351 53.5	304 57.2	236 62.3	478 49	420 53	365 56.8	283 62

Edb: Entering dry bulb temperature

Ldb: Leaving dry bulb temperature

Unit Size	AHU 130				AHU 150				AHU 180			
AIR FLOW RATE (CFM)	13000				15500				18500			
Edb(oC)	-20	-10	0	15.5	-20	-10	0	15.5	-20	-10	0	15.5
1 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	199 3.2	176 11.4	154 19.4	120 31.4	239 3.4	212 11.6	186 19.6	145 31.6	285 3.4	253 11.1	221 19.5	173 31.6
1 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	232 7.1	206 15	180 22.6	140 34.1	279 7.3	247 15.2	216 22.8	169 34.3	333 7.3	295 15.1	258 22.8	201 34.3
1 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	280 12.7	248 20	216 27.2	169 37.9	335 12.8	297 20.2	260 27.4	203 38.1	400 12.8	355 20.2	310 27.4	242 38.1
2 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	348 20.6	307 27.2	267 33.6	207 43	418 20.9	369 27.5	322 33.9	250 43.3	498 20.9	440 27.5	384 33.9	298 43.3
2 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	397 26.3	350 32.4	304 38.3	236 46.8	476 26.6	420 32.7	366 38.6	284 47.1	568 26.6	501 32.7	437 38.6	339 47.1
2 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	462 33.9	407 39.3	354 44.5	274 51.9	553 34.2	488 39.6	424 44.7	329 52.2	660 33	582 39.6	506 44.7	393 52.24
3 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	475 35.5	466 46.5	365 45.9	284 53.2	568 35.6	502 41	437 46.1	340 53.4	678 35.6	598 41	521 46	406 53.4
3 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	529 41.7	419 40.8	405 50.9	315 57.3	631 41.8	557 46.6	484 51.1	377 57.4	753 41.8	664 46.6	578 51	449 57.4
3 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	594 49.4	523 53.4	454 57	352 62.2	710 49.5	624 53.5	542 57.2	421 62.3	847 49.5	754 53.4	674 57.1	502 62.3

Edb: Entering dry bulb temperature

Ldb: Leaving dry bulb temperature

Unit Size	AHU 210				AHU 250				AHU 270			
AIR FLOW RATE(CFM)	21500				24500				27500			
Edb(oC)	-20	-10	0	15.5	-20	-10	0	15.5	-20	-10	0	15.5
1 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	334 3.5	296 11.7	259 19.7	202 31.7	381 3.6	338 11.8	296 19.8	232 31.8	209 3.1	185 11.2	161 19.2	125 31.2
1 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	389 7.4	345 15.3	302 22.9	236 34.4	444 7.5	394 15.3	345 23	270 34.5	244 7	216 14.8	189 22.4	147 33.9
1 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	467 12.9	414 20.3	362 27.5	283 38.2	533 13	473 20.4	413 27.6	323 38.3	294 12.5	261 19.9	227 27	177 37.7
2 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	583 21.1	515 27.8	449 34.1	349 43.5	666 21.2	589 27.9	513 34.2	400 43.6	365 20.3	322 26.9	280 33.3	217 42.7
2 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	663 26.8	586 32.9	510 38.8	397 47.4	757 26.9	669 33	583 38.9	454 47.4	417 26	368 32.2	320 38	248 46.6
2 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	770 34.4	679 39.8	591 44.9	459 52.4	879 34.9	775 39.9	675 45	525 52.5	486 33.6	428 39.1	372 44.2	288 51.6
3 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	789 35.7	697 41.1	607 46.2	473 53.5	900 35.7	795 41.1	693 46.2	540 53.5	501 35.5	442 40.7	385 45.8	300 53.1
3 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	877 41.9	773 46.7	673 51.1	524 57.5	1000 41.9	881 46.7	767 51.2	597 57.5	558 41.5	491 46.3	427 50.8	332 57.2
3 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	986 49.6	886 53.5	753 57.2	585 62.4	1123 49.6	988 53.6	858 57.3	667 62.4	628 49.3	552 53.2	479 56.9	371 62.1

Edb: Entering dry bulb temperature

Ldb: Leaving dry bulb temperature

Unit Size	AHU 320				AHU 350				AHU 390				AHU420			
AIR FLOW RATE(CFM)	32000				35500				39000				42500			
Edb(oC)	-20	-10	0	15.5	-20	-10	0	15.5	-20	-10	0	15.5	-20	-10	0	15.5
1 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	243 3	215 11.2	188 19.2	146 31.1	273 3.4	242 11.5	212 19.5	165 31.6	296 3.1	263 11.2	229 19.2	179 31.3	324 3.2	288 11.3	251 19.3	196 31.4
1 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	284 6.9	251 14.8	220 22.4	171 34	319 7.3	283 15.1	247 22.8	193 34.3	346 6.9	307 14.8	268 22.4	209 34	379 7	336 14.9	293 22.6	229 34.1
1 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	342 12.4	303 19.8	264 27	206 37.7	384 12.8	340 20.2	297 27.4	232 38	416 12.4	369 19.8	322 27	251 37.7	455 12.5	404 19.9	353 27.1	275 37.9
2 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	425 20.3	375 27	327 33.4	253 42.8	478 20.8	422 27.5	367 33.8	285 43.2	518 20.3	458 27	398 33.5	309 42.8	567 20.5	501 27.2	436 33.7	339 43.2
2 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	485 26	428 32.2	372 38	289 46.6	545 26.6	481 32.7	418 38.5	325 47.1	591 26	522 32.2	454 38.2	352 46.7	647 26.2	571 32.4	497 38.4	386 47.1
2 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	565 33.6	498 39	432 44.2	335 51.7	633 34.1	558 39.6	485 44.7	377 52.1	688 33.6	607 39	527 44.3	409 51.7	753 33.8	664 39.3	577 44.5	448 52.2
3 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	581 35.1	513 40.6	447 45.7	348 53	650 35.6	574 41	500 46	389 53.4	708 35.1	625 40.5	544 45.6	424 53	773 35.2	683 40.6	595 45.7	463 53.1
3 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	647 41.4	570 46.2	496 50.7	386 57.1	723 41.8	637 46.6	554 51.1	431 57.4	788 41	695 46.1	604 50.6	470 57.1	860 41.4	758 46.2	660 50.8	513 57.2
3 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	728 49.1	640 53.1	556 56.8	431 62	813 49.5	715 53.5	621 57.2	482 62.3	887 49	780 53	677 56.8	526 62	968 49.1	852 53.1	732 56.9	574 62.1

Edb: Entering dry bulb temperature

Ldb: Leaving dry bulb temperature

Steam coil performance

Unit Size	AHU 15				AHU 20				AHU 30			
AIR FLOW RATE(CFM)	1500				2100				3000			
Edb_Ewb (oC)	-20	-12.2	-1.1	15.5	-20	-12.2	-1.1	15.5	-20	-12.2	-1.1	15.5
1 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	27.8 8.2	25.9 14.8	23.2 24.2	19.2 37.8	39.8 8.8	37.1 15.4	33.2 24.7	27.5 38.3	59.1 8	55 14.7	49.3 24.1	40.8 37.7
1 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	32.3 12.7	30.1 19.2	26.9 28.2	22.3 41.3	46.1 13.3	42.8 19.7	38.3 28.7	31.7 41.8	68.4 12.5	63.7 18.9	57 28	47.1 41.1
1 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	38.6 19	35.9 25.2	32 33.8	26.4 46.2	55 19.7	51.1 25.9	45.6 34.4	37.6 46.7	81.7 18.8	76 24.9	67.9 33.5	56 46
2 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	48.8 29.4	45.3 35.1	40.4 42.8	33.2 54	69.6 30.3	64.8 35.9	57.5 43.6	47.3 54.7	104 29.2	96.2 34.9	85.8 42.7	70.5 53.8
2 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	55.4 36.1	51.3 41.3	45.6 48.6	37.4 58.9	78.7 36.9	72.9 42.1	64.8 49.3	53.1 59.5	117 35.7	109 41	96.8 48.3	79.4 58.7
2 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	64 44.8	59.2 49.5	52.5 56	42.9 65.2	90.9 45.7	84 50.4	74.5 56.8	60.8 65.9	136 44.4	126	111 55.7	91 65

Edb: Entering dry bulb temperature

Ldb: Leaving dry bulb temperature

Unit Size	AHU 40				AHU 50				AHU 65			
AIR FLOW RATE(CFM)	4000				5000				6500			
Edb_Ewb (oC)	-20	-12.2	-1.1	15.5	-20	-12.2	-1.1	15.5	-20	-12.2	-1.1	15.5
1 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	71.5 7.1	66.5 13.8	59.5 23.2	49.3 36.9	89 7.3	83 13.8	74.3 23.2	62.2 37.1	118 7.4	109 14.1	98 23.5	81.3 37.3
1 Rows / 10 fpi Heating Capacity(KW) Ldb(C)	82.8 11.4	77 17.9	68.9 27	56.9 40.3	104 11.6	96.2 17.9	86 27	71.8 40.5	136 11.8	127 18.3	114 27.4	94 40.7
1 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	99 17.6	92 23.8	82.1 32.4	67.7 45	125 17.8	115 23.7	103 32.4	85.4 45.2	163 18.1	151 24.3	135 32.9	112 45.4
2 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	126 27.8	117 33.5	104 41.3	85.4 52.6	158 28.1	146 33.4	130 41.3	108 53	207 28.3	192 34	171 41.9	141 53.2
2 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	143 34.2	132 39.5	118 46.9	96.2 57.4	180 34.5	165 39.5	147 46.8	121 57.8	235 34.8	218 40.2	194 47.5	159 58
2Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	165 42.7	153 47.6	136 54.2	111 63.6	208 43.2	191 47.5	169 54.2	140 64.1	272 43.5	251 48.3	223 54.9	182 64.3

Edb: Entering dry bulb temperature

Ldb: Leaving dry bulb temperature

Unit Size	AHU 75				AHU 85				AHU 100			
AIR FLOW RATE(CFM)	7600				8700				10500			
Edb_Ewb (oC)	-20	-12.2	-1.1	15.5	-20	-12.2	-1.1	15.5	-20	-12.2	-1.1	15.5
1 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	137 7.3	127 14	114 23.4	94.6 37.2	158 7.6	147 14.3	132 23.7	109 37.4	187 7.1	175 13.8	156 23.2	130 37
1 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	159 11.7	148 18.2	132 27.3	109 40.5	184 12.1	171 18.5	153 27.6	127 40.8	217 11.4	202 17.9	181 27.1	150 40.3
1 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	190 17.9	176 24.1	158 32.8	130 45.3	220 18.3	204 24.5	182 33.1	151 45.6	260 17.6	242 23.8	216 32.5	178 45.1
2 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	241 28.2	224 33.9	199 41.7	164 53	279 28.6	258 34.3	230 42.1	189 53.4	330 27.8	307 33.5	273 41.4	225 52.8
2 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	273 34.6	253 40	226 47.3	185 57.9	316 35.1	293 40.5	260 47.8	214 58.2	375 34.2	348 39.6	309 47	254 57.6
2 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	317 43.3	293 48.1	260 54.8	212 64.2	366 43.8	338 48.6	300 55.2	245 64.5	435 42.8	402 47.7	357 54.4	292 63.9

Edb: Entering dry bulb temperature

Ldb: Leaving dry bulb temperature

Unit Size	AHU 130				AHU 150				AHU 180			
AIR FLOW RATE(CFM)	13000				15500				18500			
Edb_Ewb (oC)	-20	-12.2	-1.1	15.5	-20	-12.2	-1.1	15.5	-20	-12.2	-1.1	15.5
1 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	234 7.4	218 14.1	196 23.5	162 37.2	279 7.4	260 14.1	233 23.4	193 37.2	333 7.3	310 14	278 23.4	230 37.1
1 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	272 11.7	253 18.2	226 27.3	187 40.6	324 11.7	301 18.2	270 27.3	223 40.6	386 11.7	359 18.2	321 27.3	266 40.5
1 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	325 17.9	302 24.2	270 32.8	223 45.3	387 17.9	360 24.1	322 32.8	266 45.3	461 17.9	429 24.1	383 32.7	316 45.3
2 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	413 28.2	383 33.9	341 41.8	281 53.1	492 28.2	456 33.9	407 41.8	335 53.1	586 28.1	544 33.8	485 41.7	399 53
2 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	468 34.7	434 40	386 47.4	317 57.9	558 34.6	517 40	460 47.4	377 57.9	665 34.6	616 39.9	548 47.3	450 57.8
2Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	542 43.3	502 48.2	445 54.8	364 64.2	646 43.3	598 48.2	530 54.8	433 64.2	770 43.2	713 48.1	632 54.7	517 64.1

Edb: Entering dry bulb temperature

Ldb: Leaving dry bulb temperature

Unit Size	AHU 210				AHU 250				AHU 270			
AIR FLOW RATE(CFM)	21500				24500				27500			
Edb_Ewb (oC)	-20	-12.2	-1.1	15.5	-20	-12.2	-1.1	15.5	-20	-12.2	-1.1	15.5
1 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	387 7.3	360 14	323 23.4	267 37.1	440 7.3	410 14	367 23.4	304 37.1	248 7.4	231 14.1	207 23.5	171 37.2
1 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	448 11.7	417 18.2	373 27.3	309 40.5	510 11.6	475 18.1	425 27.2	352 40.5	287 11.7	267 18.2	239 27.3	198 40.6
1 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	536 17.9	498 24.1	445 32.7	368 45.3	610 17.8	567 24	507 32.7	419 45.2	344 17.9	319 24.1	285 32.8	236 45.3
2 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	681 28.1	632 33.8	563 41.7	463 53	775 28.1	720 33.8	641 41.6	528 53	436 28.2	405 33.9	361 41.8	297 53.1
2 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	773 34.6	716 39.9	637 47.3	523 57.8	880 34.5	815 39.9	725 47.2	595 57.8	495 34.7	459 40	408 47.4	335 57.9
2Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	895 43.2	828 48.1	735 54.7	601 64.1	1019 43.1	943 48	837 54.6	684 64.1	573 43.3	530 48.2	471 54.8	385 64.2

Edb: Entering dry bulb temperature

Ldb: Leaving dry bulb temperature

Unit Size	AHU 320				AHU 350				AHU 390				AHU 420			
AIR FLOW RATE(CFM)	32000				35500				39000				42500			
Edb_Ewb (oC)	-20	-12.2	-1.1	15.5	-20	-12.2	-1.1	15.5	-20	-12.2	-1.1	15.5	-20	-12.2	-1.1	15.5
1 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	286 7.1	266 13.8	238 23.2	198 37	320 7.4	298 14.1	267 23.5	221 37.2	348 7.1	324 13.8	290 23.2	240 37	379 7.1	353 13.8	316 23.2	262 37
1 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	331 11.5	308 18	276 27.1	229 40.4	371 11.7	345 18.3	309 27.3	256 40.6	403 11.4	375 17.9	336 27	278 40.3	440 11.4	409 17.9	366 27.1	303 40.3
1 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	396 17.6	369 23.8	329 32.5	272 45.1	444 18	413 24.2	369 32.8	304 45.3	482 17.6	448 23.8	401 32.5	331 45	526 17.6	489 23.8	437 32.5	361 45.1
2 Rows / 8 fpi Heating Capacity(KW) Ldb(oC)	504 27.8	468 33.5	417 41.9	343 52.8	564 28.2	523 33.9	466 41.8	383 53.1	613 27.7	569 33.5	507 41.4	417 52.7	669 27.8	620 33.5	553 41.4	455 52.8
2 Rows / 10 fpi Heating Capacity(KW) Ldb(oC)	572 34.3	530 39.6	472 47	387 57.6	640 34.7	593 40	527 47.4	433 57.9	696 34.2	645 39.6	574 47	471 57.5	759 34.9	704 39.6	626 47	514 57.6
2 Rows / 12 fpi Heating Capacity(KW) Ldb(oC)	663 42.9	613 47.8	544 54.4	445 63.9	741 43.3	685 48.2	608 54.8	497 64.2	807 42.8	746 47.7	662 54.4	541 63.8	880 42.8	814 47.7	722 54.4	590 63.9

Edb: Entering dry bulb temperature

Ldb: Leaving dry bulb temperature

Water Coil Connection

MODEL	COLECTOR 1,2,3	COLECTOR 4,6,8
40	1 1/2"	2 1/2"
50	2"	2 1/2"
65	2"	2 1/2"
75	2"	2 1/2"
85	2"	2 1/2"
100	2"	2 1/2"
130	2 1/2"	3"
150	2 1/2"	3"
180	2 1/2"	3 1/2"
210	2 1/2"	3 1/2"
250	2 1/2"	3 1/2"
270	2 1/2"	3 1/2"
320	2 1/2"	3 1/2"
350	2 1/2"	3 1/2"
390	2 1/2"	3 1/2"
420	2 1/2"	3 1/2"

Air handling unit module lenght (mm)

Model	Fan Section		Mix Box AL(Filter)	Filter Section					Coil Section			Drain Pan	Eliminator	Electrical Coil	Humidity		
	Top	Front		plated	Bag	Plated & Bag	Carbon Active	Hepa	1 to 4 Row	6 Row	8 Row				Water Spray & Eliminator	Steam	Electrical
15	1250	1200	600	100	300	450	210	410	220	275	340	130	235	350	350	235	235
20	1250	1200	600	100	300	450	210	410	220	275	340	130	235	350	350	235	235
30	1350	1300	750	100	300	450	210	410	220	275	340	130	235	350	350	235	235
40	1550	1500	750	100	300	450	210	410	220	275	340	130	235	350	350	235	235
50	1550	1500	750	100	300	450	210	410	220	275	340	130	235	350	350	235	235
65	1650	1600	900	100	300	450	210	410	220	275	340	130	235	350	350	235	235
75	1750	1700	900	100	300	450	210	410	220	275	340	130	235	350	350	235	235
85	1750	1700	900	100	300	450	210	410	220	275	340	130	235	350	350	235	235
100	1850	1800	900	100	300	450	210	410	220	275	340	130	235	350	350	235	235
130	2000	1900	900	100	300	450	210	410	220	275	340	130	235	350	350	235	235
150	2000	1900	1050	100	300	450	210	410	220	275	340	130	235	350	350	235	300
180	2050	2000	1050	100	300	450	210	410	220	275	340	130	235	350	350	235	300
210	2050	2000	1050	100	300	450	210	410	220	275	340	130	235	350	350	235	300
250	2000	1900	1050	100	300	450	210	410	220	275	340	130	235	350	350	235	300
270	2000	1900	1050	100	300	450	210	410	220	275	340	130	235	350	350	235	300
320	2000	1900	1200	100	300	450	210	410	220	275	340	130	235	350	350	235	300
350	2050	2000	1200	100	300	450	210	410	220	275	340	130	235	350	350	235	300
390	2050	2000	1200	100	300	450	210	410	220	275	340	130	235	350	350	235	300
420	2150	2100	1200	100	300	450	210	410	220	275	340	130	235	350	350	235	300

Air handling unit width & height																				
Model	15	20	30	40	50	65	75	85	100	130	150	180	210	250	270	320	350	390	420	
														1 COIL/1 FAN	2 COIL/2 FAN	2 COIL/1 FAN	2 COIL/2 FAN	2 COIL/1 FAN	2 COIL/2 FAN	2 COIL/1 FAN
WIDTH (mm)	770	1050	1100	1260	1400	1770	2000	1770	2000	2000	2300	2350	2660	2900	3700	3500	4085	3900	4360	4050
HEIGHT (mm)	880	880	1200	1200	1200	1200	1200	1500	1500	1850	1850	2070	2070	2100	1850	2100	1850	2100	2100	2400

Note:

- above dimensions are for 1 inch Panels thickness . For 2 inch panels add 40 mm to above dimensions.
- above dimensions are for water coils. For Dx cooling coil add below amounts to above width unie dimensions :
approximate 150~200 mm for unite with 1 coil & 300~400 mm for unite with 2 coils.
- for air washer add approximate 400 mm to above unite height
- air washer module lenght with class 6 : 1750 mm
- air washer module lenght with class 8 : 2500 m





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

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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