

SKM Fan Coil Units

Chilled Water

Standard and District Cooling



Range 200 cfm to 2000 cfm
(94 l/s to 944 l/s)



ISO 9001
Quality
Management
Systems
CERTIFIED

ISO 14001
Environmental
Management
CERTIFIED

ISO 45001
Occupational
Health and Safety
Management
CERTIFIED

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Legend

The following legends are used throughout this manual:

AFRAir Flow Rate	LADBLeaving Air Dry Bulb
BEPBaked Enamel Paint	LAWB ...Leaving Air Wet Bulb
cfm Cubic feet per minute	lbs Pounds weight (British units)
dB Decibels	l/s Liters per second
EADB Entering Air Dry Bulb	MBh1000 Btuh
EAWB Entering Air Wet Bulb	ODOutside Diameter
ETEvaporating Temperature	PhPhase
EWT Entering Water Temperature	PaPascals
ESPExternal Static Pressure	SC Sensible Capacity
ftwg Feet of Water Gauge	SPL Sound Pressure Level
GPM Gallons per minute	TC Total Capacity
Hz Hertz	TR Tons of refrigeration = 12 MBH
inwgInch of Water Gauge	VVolts
kWKilowatts	WFRWater Flow Rate
kg Kilograms	WTRWater Temperature Rise
kPa Kilo Pascals	WPDWater Pressure Drop

Notes:

SKM fan coil units manufactured by SKM are available in two versions, for standard application D Series and for District cooling application DC Series are illustrated in the catalogue.



SKM reserves the right to change, in part or in whole the specifications of its Air Conditioning Equipment at any time in order to add the latest technology. Therefore, the enclosed information may change without any prior notice.

Introduction

SKM Fan Coil Units from SKM are a complete line of fan coil units to meet most air conditioning requirements.

High quality units are available for installation in apartments and single or multi room offices, schools, clinics, etc.

SKM Fan Coil Units from SKM are low noise, 3-speed units and available in varied configurations with many options and accessories.

SKM Fan Coil Units are easily installed and serviced. SKM Fan Coil Units feature high operating efficiency, low operating cost and quiet energy efficient fan motors.

SKM Fan Coil Units are designed and built in the Gulf to meet requirements of high sensible heat ratio, durability, minimum maintenance needs.

Deliveries on SKM Fan Coil Units are reliably prompt.

For those urgent jobs, **SKM** Fan Coil Units can be delivered, on request, as fast as required, handled the way they will be installed, with or without factory piped valve package to reduce field installation time and piping time to an absolute minimum.

SKM Fan Coil Units are certified in accordance with AHRI-440 standards and coil performance certified (Standard series) in accordance with AHRI-410 standards.

SKM provides qualified service and stock of replacement parts in all major cities of the G.C.C. countries, Egypt, Jordan, and Pakistan. See back cover for details or call SKM.

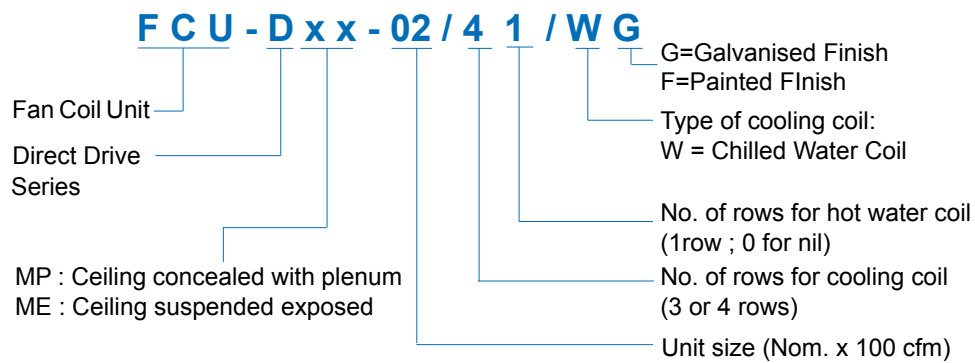
SKM Air Conditioning LLC



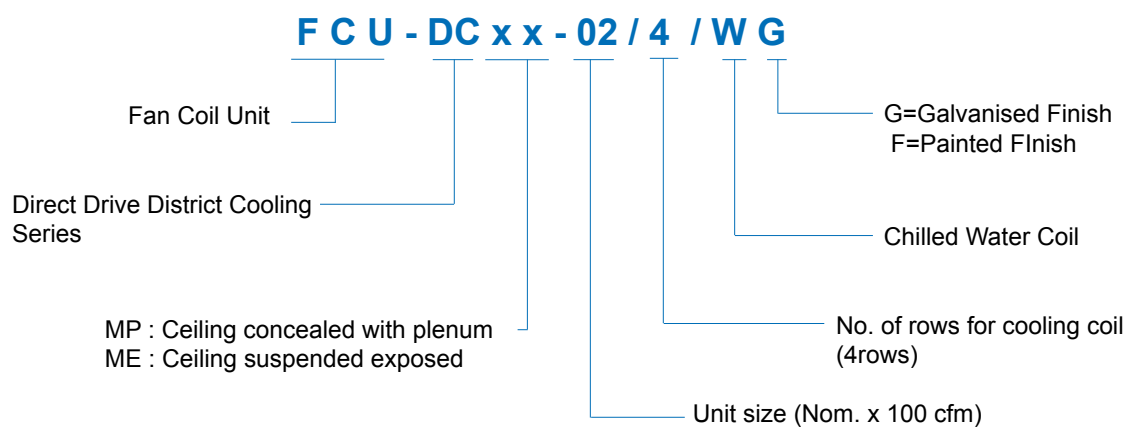
You name it.....We cool it

Nomenclature

Standard FCU Models



District Cooling FCU Models



General Features

Fan coil units manufactured by SKM have been designed with the requirement of the Middle East market foremost in consideration.

SKM fan coil units are ideally suited for installation in chilled water or to meet air conditioning requirements of individual rooms throughout the year. Increasingly, architects require a hidden indoor unit with custom enclosure to match the aesthetic requirements of the space.

For individual room temperature control in chilled water applications, SKM fan coils can be an ideal solution on major projects involving:

- Apartment Complexes
- Office Blocks
- Hospitals & Clinics
- Shopping Malls & Centers
- Airports
- Hi-rise Buildings
- Hotels & Motels
- Commercial Developments
- Schools & Colleges
- Libraries

SKM fan coil units provide flexibility of architectural design, economy of operation and space usage, individual room control with privacy, quietness, versatility of location and installation, and multiplicity of control system. All these reasons make the fan coils the first choice as Fan Coil units from SKM are: You name it.....We cool it.

Features:

- High efficiency coil with high efficiency wavy corrugated fins.
- Hi-efficiency, low power consumption PSC electric motor.
- Hi-efficiency forward curved fan for quiet operation.
- Manual air vent.
- Heavy gauge galvanised casing & fan housing. Hot dip is standard.
- Insulated heavy gauge drain pan.
- Quick electrical connections.

Component Features

Casing

Units are constructed from heavy gauge galvanized steel sheet complying with ASTM A653 and JIS-G3302 standards against corrosion. Units are with 12mm thick closed cell polyfoam insulation.

Options

- Double Skin Units **[DSU*]** Available for DMP/DCMP models only.
- Stainless Steel (Grade 304) Outer Skin **[USS]**.
- 13mm thick fiber glass insulation **[OSG]** Density: 32kg/m³.
- Stainless Steel Casing Outer skin- 0.7mm Grade316 **[USSL]**
- 1.0 mm thick sheet metal (GI) Outer Skin for Unit Casing **[OSG1.0]**
- 1.2 mm thick sheet metal (GI) Outer Skin for Unit Casing **[OSG1.2]**

* Double skinning is applicable on fan section only. Coil section is excluded from double skin

Finish

DMP/DCMP units are supplied unpainted in a Galvanized finish. Standard color for DME/DCME is Ivory white (RAL 7032). This finish and coating can pass a 1000-hour, 5% salt spray testing at 95°F (35°C) and 95% relative humidity as per ASTM B 117. DMP/DCMP series are painted when specified with option **[BEP]**

Coils

Cooling and Heating coils are manufactured from seamless copper tubes mechanically bonded to high efficiency wavy corrugated Aluminum fins. Coils are factory leak tested by air pressure at 300 psig (2068 kPa) under water. Manual air vent is standard. Chilled water cooling coils are available in 3, 4 rows. Coil connections are comes with MPT extensions supplied LH or RH as required for chilled water.

Hot water coils, single row **[CHW1]** and double rows **[CHW2]**, are available to meet a wide range of application requirements.

Hot water coils are available only in Standard applications. Coils connections are comes with MPT (NPT standard)

Options

- Pre-coated Fins **[EFAP]**
The pre-coating is hydrophobic polyurethane. Pre-coated fins passed a 1000-hr, 5% salt spray test at 95°F (35°C) temperature and 95% RH, according to ASTM B117.
- Copper fins
- Automatic Air Vent **[AAV]**

Fan / Motor

SKM fan coil units use centrifugal double inlet double width low noise fans direct driven by single phase, 3-speed permanent split capacitor motor. These motors have integral thermal protection, low temperature rise, are highly efficient, have high power factor and operate almost noiselessly with permanent lubricated sleeve bearings.

Motor Technical Data

All motors used in SKM Fan Coil Units are inherently protected by means of thermal cut-out embedded in the winding. This thermal cut-out is calibrated to trip out when the winding reaches a pre determined temperature. The thermal cut out will automatically reset when the temperature returns to a safe limit.

Efficiency and Power Factor

SKM Fan Coil Units are equipped with permanent split capacitor motors because of their high efficiency and higher power factor than that of shaded pole motors being used by many other manufacturers of fan coil units.

The efficiency range of permanent split capacitor motors varies between 50 & 60 % as compared to 30 to 40 % for shaded pole motors with power factor 0.6 to 0.7 while the power factor of a permanent split capacitor motor approaches 1.0.

SKM chooses permanent split capacitor motor on the basis of their higher efficiency and power factor, in order to maintain the total power factor of the installation above a set minimum value.

Filter

FCUs are lined with Aluminum media filter (ASHRAE 52.2) as standard 1".(Nominal thickness) Synthetic washable media filter is Option [1SMF].

Fabricated from heavy gauge Zinc-coated steel sheets, painted irrespective of the type of finish for unit casing and insulated from outside by 4mm thick polyfoam insulation for a maximum protection against sweating and corrosion. Drain connection 1/2" MPT is provided for removal of condensation.

Options

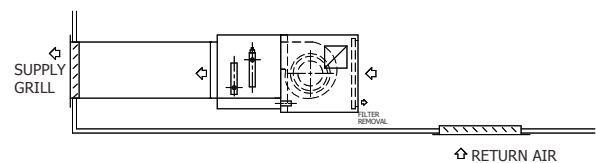
- Extended Drain Pan 100mm [EDP1] and 200mm [EDP2] extension.

Application Flexibility

SKM fan coil units are available in a capacity range of 200-2000 cfm (94-944 l/s), in various models having 12 sizes each. Configurations available include horizontal ceiling model.

1. DMP & DCMP

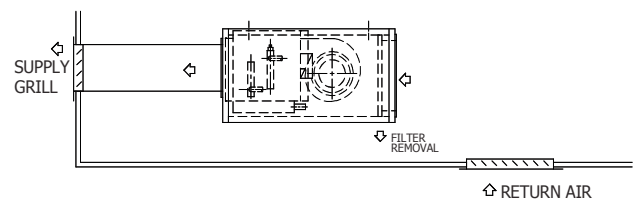
Ceiling concealed applications, includes a factory installed plenum. The plenum is lined with 12mm closed cell poly foam insulation. Units are supplied with 1" cleanable filter as standard.



DMP & DCMP

2. DME & DCME

Ceiling suspended, exposed type includes basic DME / DCME plus a cabinet with removable access panels lined with 12mm closed cell poly foam insulation. Units are supplied with 1" cleanable Filter. Units are painted with electrostatically applied polyester powder coat and supplied with supply and return air grilles as standard.



DME & DCME

Options and Accessories

The options available for SKM Fan Coil Units include :

Electric Heaters (FEH)

Application

Electric heaters are available only for DMP/DCMP models.

SKM Fan Coil Units with factory built heating elements as shown in Table 1 are available in two variants. Order should specify FEH1 for variant 1 and FEH2 for variant 2. Each variant is provided with one high limit safety cut-out (Auto Reset) and arranged for 1 stage operation at 220-240V 1 PH 50/60Hz. Maximum capacity of the electric heater is determined by the air flow rate of the particular model.

Notes:

For any other special requirements like thermostats, controls, power supply, etc. please contact SKM.

Contactors and Controls

Contactors are not included as standard and must be field supplied and installed.

Heater Elements

“U” shape finned tubular heating element constructed from high quality 80/20 nickel chrome resistance wire connected to terminal pins and centered in a metal tube with galvanized steel fin.

The elements are isolated from the casing. Separate power source is required for the heaters.

Unit Size	Number of Heater Elements	
	Variant 1	Variant 2
02	1 x 1	2 x 1
03	1 x 1	2 x 1
04	1 x 1.5	2 x 1.5
05	1 x 1.5	2 x 1.5
06	1 x 2	2 x 2
08	1 x 2	2 x 2
10	1 x 3	2 x 3
12	1 x 3	2 x 3
14	1 x 3	2 x 3
16	1 x 4	2 x 4
18	1 x 4	2 x 4
20	1 x 4	2 x 4

Table 1

Thermostat (CHTS)

Thermostat is wall mounted decorative type, with large LCD and backlight. Buttons are provided for power on/off, fan speed selection, cooling or heating mode selection, set point adjustment and sleep mode selection. Indoor temperature and set point are displayed simultaneously. Apart from that, display provides fan mode (high, medium, low or auto) and operating mode (cool or heat) status.

Optional remote control and remote sensor are available on request.



Controls

Various options on valve packages and control systems are available. Eight different valve packages are available factory installed or loose for field mounting along with 3 options on control packages. Full details of options available see full write-up on page

Ducted Return,Rear (DRR)

Available only for DMP/DCMP models. Refer to page 24

Ducted Return,Bottom (DRB)

Available only for DMP/DCMP models. Refer to page 24

Control and Valve Packages

Available from Type 1 to type 8.
Refer page 23

Physical & Electrical Data

Unit Size				02	03	04	05	06	08	10	12	14	16	18	20	
Nominal Air Flow			cfm	200	300	400	500	600	800	1000	1200	1400	1600	1800	2000	
			l/s	94	142	189	236	283	377	472	566	660	755	849	943	
COIL	Type			Copper tubes mechanically bonded to Hi-Efficiency wavy corrugated Aluminium Fins												
	Face Area		Ft²	1.0	1.1	1.3	1.7	2.0	2.2	2.8	3.1	3.9	4.6	5.5	5.5	
			m²	0.09	0.10	0.12	0.15	0.19	0.21	0.26	0.29	0.36	0.43	0.51	0.51	
	Fin spacing			12 FPI												
	Number of Rows			3 & 4												
	Coil In/Out (MPT) #		Inch	1/2	1/2	1/2	3/4	3/4	3/4	1	1	1	1	1 1/4	1 1/4	
	Drain		Inch	1/2" MPT												
Fan	Type			Double Inlet Double Width Centrifugal Forward Curve Direct Drive												
	Model			160-160	160-160	160-160	160-160	160-160	160-200	180-200	180-200	180-200	180-200	180-200	180-200	
	Quantity			1	1	1	2	2	2	2	3	3	4	4	4	
Motor	Type			3 Speed Electric Motor with Permanent Split Capacitor												
	Power supply			220-240V/1Ph/50-60Hz												
	Size & Quantity		50Hz	Watts	40	65	72	120	65/2#	150	150	150	150	150/2#	150/2#	200/1#
																300/1#
			60Hz		40	65	65	120	65/2#	150	150	150	150	150/2#	150/2#	200/1#
												72	72			300/1#
	Max Amps	50Hz	High	A	0.38	0.62	1.02	0.99	1.24	1.70	1.70	2.72	2.72	3.40	3.40	4.10
		60Hz			0.4	0.73	0.73	0.96	1.46	2.1	2.1	3.22	3.22	4.2	4.2	5.7
Sound Pressure Level @ 1m		50Hz	High	dB(A)	41.6	41.8	42.1	42.5	43.0	43.5	45.5	51.4	51.7	52.2	53.5	53.9
			Medium		40.0	40.2	40.5	40.9	41.4	47.5	47.8	50.4	50.8	51.3	53.0	53.4
			Low		37.9	38.1	38.4	38.8	39.3	46.4	47.4	48.2	48.5	49.0	52.5	52.9
		60Hz	High		41.3	43.5	43.2	42.7	44.6	44.6	46.4	52.8	51.8	54.0	53.3	54.8
			Medium		38.7	41.5	42.2	39.7	42.6	48.2	47.9	51.3	50.3	52.2	52.1	53.5
			Low		36.2	38.5	40.0	36.2	40.4	45.7	46.3	47.9	47.4	48.8	50.8	52.1
Unit Weight (Kgs)			DMP/DCMP	16.3	19.7	22.4	26.1	28.8	34.5	43.5	51.4	58.8	73.3	81.9	83.2	
			DME/DCME	21.2	25.6	29.1	34.0	37.5	44.8	56.5	66.8	76.4	95.2	106.4	108.2	

Table 2

All specifications are subjected to change by the manufacturer without prior notice. The performance data are based on the following conditions.

1) Air Entering Temperature: 80°F/67°F (27°C/19.5°C), 45°F/55°F (7.2°C/12.8°C) entering /leaving chilled water temperature.

2) Sound Pressure Level is based on DMP model, 4Rows, 0.1 inWg (25Pa) External Static Pressure, air entering temperature DB/WB 80°F/67°F (27°C/19.5°C), 45°F/55°F (7.2°C/12.8°C) entering /leaving chilled water temperature.

Sound pressure values are indicative and may vary with actual site conditions.

3) Weight of basic units are provided, (single skin casing + fan + motor + 4 row coil with 12 fpi Aluminum fins + 1" thick flat filter). For units with any additional option, consult SKM for the weight.

4) #Connection sizes mentioned refers to DMP/DME models.

Nominal Capacity Rating

Models: DMP & DME

Chilled Water Coils

SIZE	3ROWS					4ROWS			
	Nominal Air flow	Total Capacity	Sensible Capacity	Water Flow Rate	Water Pressure Drop	Total Capacity	Sensible Capacity	Water Flow Rate	Water Pressure Drop
	cfm	MBh	MBh	Gpm	ftwg	MBh	MBh	Gpm	ftwg
	l/s	kW	kW	l/s	kPa	kW	kW	l/s	kPa
2	200	7.0	4.9	1.4	3.1	8.4	5.6	1.7	5.3
	94	2.0	1.4	0.1	9.3	2.5	1.7	0.1	15.8
3	300	10.1	7.1	2.0	6.6	12.3	8.2	2.5	11.3
	142	3.0	2.1	0.1	19.6	3.6	2.4	0.2	33.8
4	400	13.1	9.2	2.6	11.5	15.8	10.7	3.2	19.2
	189	3.9	2.7	0.2	34.2	4.6	3.1	0.2	57.3
5	500	14.3	10.7	2.9	2.7	18.0	12.6	3.6	4.8
	236	4.2	3.1	0.2	8.0	5.3	3.7	0.2	14.2
6	600	17.4	12.8	3.5	4.0	21.7	15.1	4.3	7.1
	283	5.1	3.8	0.2	12.0	6.4	4.4	0.3	21.2
8	800	23.6	17.2	4.7	7.7	28.8	20.0	5.8	13.1
	378	6.9	5.0	0.3	23.1	8.5	5.9	0.4	39.2
10	1000	28.8	21.1	5.8	7.0	35.4	24.7	7.1	12.0
	472	8.4	6.2	0.4	21.0	10.4	7.2	0.5	36.0
12	1200	33.8	25.0	6.8	6.6	40.1	28.7	8.0	5.3
	566	9.9	7.3	0.4	19.7	11.8	8.4	0.5	15.8
14	1400	42.6	30.5	8.5	17.6	48.2	34.2	9.6	4.9
	661	12.5	9.0	0.5	52.5	14.1	10.0	0.6	14.6
16	1600	50.0	35.4	10.0	25.1	56.5	39.6	11.3	7.0
	755	14.7	10.4	0.6	74.9	16.6	11.6	0.7	20.8
18	1800	55.2	39.7	11.1	8.1	65.1	45.3	13.0	6.5
	849	16.2	11.6	0.7	24.3	19.1	13.3	0.8	19.3
20	2000	58.3	42.5	11.7	9.0	69.4	48.9	13.9	7.3
	944	17.1	12.5	0.7	26.8	20.4	14.4	0.9	21.8

Table 3

NOTE:

Chilled water capacity ratings are based on nominal air flow rate; air entering temperature DB/WB 80°F/67°F (27°C/19.5°C), 45°F/55°F (7.2°C/12.8°C) entering/leaving chilled water temperature.

For conditions other than rated, use SKM FCU Computer Selection Software.

Nominal Capacity Rating

Models: DMP & DME

Hot Water Coils

SIZE	1ROWS				2ROWS		
	Nominal Air flow	Total Capacity	Water Flow Rate	Water Pressure Drop	Total Capacity	Water Flow Rate	Water Pressure Drop
	cfm	MBh	Gpm	ftwg	MBh	Gpm	ftwg
	l/s	kW	l/s	kPa	kW	l/s	kPa
2	200	10.5	2.0	1.8	16.3	4.6	2.8
	94	3.1	6.1	0.5	4.8	13.7	0.8
3	300	14.4	3.5	2.4	23.3	10.9	4.0
	142	4.2	10.4	0.7	6.8	32.5	1.2
4	400	18.3	5.8	3.1	28.7	3.1	2.4
	189	5.4	17.4	1.0	8.4	9.4	0.7
5	500	22.5	9.6	3.8	35.1	5.0	3.0
	236	6.6	28.6	1.2	10.3	15.0	0.9
6	600	25.0	2.6	2.1	41.9	7.8	3.6
	283	7.3	7.7	0.7	12.3	23.2	1.1
8	800	34.5	29.3	5.9	54.9	15.7	4.7
	378	10.1	87.7	1.8	16.1	47.1	1.4
10	1000	39.7	4.1	2.7	67.5	14.9	4.6
	472	11.6	12.2	0.8	19.8	44.4	1.4
12	1200	48.7	11.3	4.1	78.3	6.3	3.3
	566	14.3	33.6	1.3	23.0	18.8	1.0
14	1400	59.0	10.4	4.0	94.1	5.7	3.2
	661	17.3	31.2	1.2	27.6	17.1	1.0
16	1600	67.8	15.0	4.6	108.9	8.3	3.7
	755	19.9	44.8	1.4	31.9	24.8	1.1
18	1800	79.1	13.9	4.5	125.7	7.5	3.6
	849	23.2	41.6	1.4	36.9	22.6	1.1
20	2000	83.1	15.8	4.7	133.8	8.8	3.8
	944	24.4	47.2	1.4	39.2	26.3	1.2

Table 4

NOTE:

Data based on nominal air flow, 70°F (21°C) entering air temperature, 180°F/160°F (82°C/71°C) entering/leaving hot water temperature.

For other conditions use SKM FCU selection software.

SKM Fan Coil Units

Chilled Water Standard and District Cooling

Capacity Ratings

Chilled Water - Standard

DMP & DME 3ROWS

Size	Speed	50HZ												60Hz											
		External Static Pressure		Airflow Rate		Total Capacity		Sensible Capacity		Water Flow Rate		Water Pressure Drop		Airflow Rate		Total Capacity		Sensible Capacity		Water Flow Rate		Water Pressure Drop			
		inwg	Pa	cfm	l/s	MBh	kW	MBh	kW	gpm	l/s	ftwg	kPa	cfm	l/s	MBh	kW	MBh	kW	gpm	l/s	ftwg	kPa		
2	High	0.1	25	270	128	7.95	2.33	5.88	1.72	1.59	0.1	3.97	11.86	256	121	7.7	2.26	5.66	1.66	1.54	0.1	3.75	11.2		
		0.2	50	244	115	7.5	2.2	5.47	1.6	1.5	0.09	3.57	10.66	242	114	7.47	2.19	5.44	1.59	1.49	0.09	3.54	10.57		
		0.3	75	212	100	6.96	2.04	4.98	1.46	1.39	0.09	3.11	9.29	220	104	7.1	2.08	5.1	1.5	1.42	0.09	3.22	9.64		
	Medium	0.1	25	245	116	7.53	2.21	5.5	1.61	1.51	0.1	3.59	10.74	203	96	6.8	1.99	4.82	1.41	1.36	0.09	2.97	8.89		
		0.2	50	220	104	7.1	2.08	5.1	1.5	1.42	0.09	3.23	9.64	185	87	6.47	1.9	4.53	1.33	1.29	0.08	2.72	8.13		
		0.3	75	184	87	6.45	1.89	4.51	1.32	1.29	0.08	2.7	8.07	170	80	6.17	1.81	4.27	1.25	1.23	0.08	2.49	7.45		
	Low	0.1	25	219	103	7.08	2.08	5.09	1.49	1.42	0.09	3.21	9.6	169	80	6.15	1.8	4.25	1.25	1.23	0.08	2.48	7.4		
		0.2	50	194	92	6.63	1.94	4.68	1.37	1.33	0.08	2.85	8.51	156	73	5.88	1.72	4.02	1.18	1.18	0.07	2.28	6.81		
		0.3	75	164	77	6.05	1.77	4.16	1.22	1.21	0.08	2.4	7.17	139	66	5.43	1.59	3.68	1.08	1.09	0.07	1.97	5.88		
	3	High	0.1	25	309	146	9.92	2.91	7.09	2.08	1.98	0.13	6.41	19.17	370	175	11.02	3.23	8.04	2.36	2.2	0.14	7.78	23.24	
			0.2	50	284	134	9.44	2.77	6.67	1.95	1.89	0.12	5.85	17.49	350	165	10.67	3.13	7.73	2.27	2.13	0.13	7.32	21.89	
			0.3	75	245	116	8.67	2.54	6.02	1.76	1.73	0.11	5.01	14.97	329	155	10.28	3.01	7.4	2.17	2.06	0.13	6.85	20.46	
Medium		0.1	25	278	131	9.33	2.73	6.57	1.93	1.87	0.12	5.72	17.11	321	151	10.14	2.97	7.27	2.13	2.03	0.13	6.67	19.94		
		0.2	50	255	120	8.87	2.6	6.18	1.81	1.77	0.11	5.22	15.61	306	144	9.87	2.89	7.04	2.06	1.97	0.12	6.35	18.98		
		0.3	75	215	102	8.04	2.36	5.49	1.61	1.61	0.1	4.36	13.02	287	135	9.5	2.79	6.72	1.97	1.9	0.12	5.92	17.7		
Low		0.1	25	256	121	8.89	2.61	6.2	1.82	1.78	0.11	5.24	15.67	270	127	9.18	2.69	6.45	1.89	1.84	0.12	5.56	16.62		
		0.2	50	235	111	8.48	2.48	5.85	1.71	1.7	0.11	4.8	14.34	253	119	8.84	2.59	6.16	1.8	1.77	0.11	5.19	15.51		
		0.3	75	198	93	7.65	2.24	5.18	1.52	1.53	0.1	3.98	11.89	231	109	8.39	2.46	5.78	1.69	1.68	0.11	4.71	14.09		
4		High	0.1	25	411	194	12.98	3.81	9.26	2.72	2.6	0.16	11.22	33.53	462	218	13.77	4.04	10	2.93	2.75	0.17	12.5	37.36	
			0.2	50	377	178	12.43	3.64	8.76	2.57	2.49	0.16	10.36	30.96	435	205	13.37	3.92	9.62	2.82	2.67	0.17	11.84	35.39	
			0.3	75	336	158	11.71	3.43	8.1	2.38	2.34	0.15	9.28	27.73	409	193	12.96	3.8	9.24	2.71	2.59	0.16	11.17	33.4	
	Medium	0.1	25	339	160	11.78	3.45	8.16	2.39	2.36	0.15	9.39	28.06	408	192	12.94	3.79	9.22	2.7	2.59	0.16	11.14	33.3		
		0.2	50	315	148	11.26	3.3	7.74	2.27	2.25	0.14	8.63	25.79	388	183	12.61	3.7	8.92	2.62	2.52	0.16	10.64	31.8		
		0.3	75	277	131	10.42	3.05	7.07	2.07	2.08	0.13	7.49	22.39	359	169	12.13	3.55	8.48	2.49	2.43	0.15	9.9	29.58		
	Low	0.1	25	286	135	10.62	3.11	7.23	2.12	2.12	0.13	7.75	23.18	345	163	11.88	3.48	8.25	2.42	2.38	0.15	9.53	28.48		
		0.2	50	263	124	10.08	2.96	6.8	1.99	2.02	0.13	7.05	21.08	322	152	11.41	3.35	7.87	2.31	2.28	0.14	8.85	26.46		
		0.3	75	233	110	9.35	2.74	6.23	1.83	1.87	0.12	6.14	18.34	295	139	10.82	3.17	7.39	2.17	2.16	0.14	8.03	24		
	5	High	0.1	25	613	289	15.67	4.59	12.16	3.57	3.13	0.2	31.8	9.5	614	290	15.68	4.6	12.18	3.57	3.14	0.2	31.8	9.52	
			0.2	50	554	262	14.79	4.34	11.34	3.32	2.96	0.19	2.85	8.53	588	277	15.29	4.48	11.81	3.46	3.06	0.19	30.4	9.08	
			0.3	75	485	229	13.69	4.01	10.31	3.02	2.74	0.17	2.47	7.39	562	265	14.9	4.37	11.44	3.35	2.98	0.19	2.89	8.65	
Medium		0.1	25	572	270	15.07	4.42	11.59	3.4	3.01	0.19	2.95	8.83	476	225	13.56	3.97	10.19	2.99	2.71	0.17	2.43	7.26		
		0.2	50	525	248	14.32	4.2	10.5	3.2	2.86	0.18	2.69	8.03	461	218	13.33	3.91	9.97	2.92	2.67	0.17	2.35	7.03		
		0.3	75	459	217	13.29	3.9	9.93	2.91	2.66	0.17	2.34	6.99	441	208	13.02	3.82	9.67	2.83	2.6	0.16	2.25	6.73		
Low		0.1	25	496	234	13.87	4.07	10.48	3.07	2.77	0.18	2.53	7.57	327	155	10.99	3.22	7.84	2.3	2.2	0.14	1.64	4.91		
		0.2	50	462	218	13.34	3.91	9.98	2.92	2.67	0.17	2.35	7.04	316	149	10.74	3.15	7.63	2.24	2.15	0.14	1.57	4.7		
		0.3	75	399	188	12.37	3.63	9.04	2.65	2.47	0.16	2.05	6.11	297	140	10.29	3.02	7.27	2.13	2.06	0.13	1.45	4.35		
6		High	0.1	25	632	298	17.5	5.13	13.16	3.86	3.5	0.22	4.08	12.2	739	349	19.09	5.59	14.66	4.3	3.82	0.24	4.8	14.34	
			0.2	50	575	271	16.49	4.83	12.28	3.6	3.3	0.21	3.65	10.92	706	333	18.62	5.46	14.21	4.16	3.72	0.23	4.58	13.69	
			0.3	75	506	239	15.31	4.49	11.23	3.29	3.06	0.19	3.18	9.52	665	314	18.01	5.28	13.64	4	3.6	0.23	4.31	12.87	
	Medium	0.1	25	582	275	16.61	4.87	12.39	3.63	3.32	0.21	3.7	11.07	662	313	17.97	5.27	13.6	3.99	3.59	0.23	4.29	12.81		
		0.2	50	530	250	15.72	4.61	11.6	3.4	3.14	0.2	3.34	9.99	639	302	17.61	5.16	13.26	3.89	3.52	0.22	4.13	12.34		
		0.3	75	460	217	14.53	4.26	10.51	3.08	2.91	0.18	2.89	8.63	605	285	17.01	4.99	12.74	3.74	3.4	0.21	3.87	11.57		
	Low	0.1	25	514	242	15.44	4.53	11.35	3.33	3.09	0.19	3.23	9.67	584	275	16.64	4.88	12.42	3.64	3.33	0.21	3.71	11.1		
		0.2	50	469	221	14.69	4.31	10.66	3.12	2.94	0.19	2.95	8.81	551	260	16.07	4.71	11.92	3.49	3.21	0.2	3.48	10.41		
		0.3	75	412	194	13.7	4.02	9.75	2.86	2.74	0.17	2.59	7.74	509	240	15.36	4.5	11.27	3.3	3.07	0.19	3.2	9.57		
	8	High	0.1	25	905	427	24.65	7.22	18.45	5.41	4.93	0.31	8.37	25.01	992	468	25.92	7.6	19.64	5.76	5.18	0.33	9.19	27.47	
			0.2	50	813	383	23.27	6.82	17.16	5.03	4.65	0.29	7.52	22.47	938	443	25.13	7.37	18.91	5.54	5.03	0.32	8.68	25.94	
			0.3	75	710	335	21.52	6.31	15.62	4.58	4.3	0.27	6.5	19.43	871	411	24.15	7.08	17.98	5.27	4.83	0.3	8.06	24.08	
Medium		0.1	25	852	402	23.87	7	17.72	5.19	4.77	0.3	7.88	23.57	903	426	24.62	7.21	18.42	5.4	4.92	0.31	8.35	24.96		
		0.2	50	761	359	22.41	6.57	16.39	4.8	4.48	0.28	7.01	20.95	838	395	23.66	6.94	17.52	5.13	4.73	0.3	7.76	23.19		
		0.3	75	656	310	20.54	6.02	14.77	4.33	4.11	0.26	5.97	17.83	767	362	22.51	6.6	16.48	4.83	4.5	0.28	7.07	21.13		
Low		0.1	25	754	366	22.29	6.53	16.29	4.77	4.46	0.28	6.94	20.74	689	325	21.15	6.2	15.3	4.48	4.23	0.27	6.29	18.81		
		0.2	50	663	313	20.67	6.06	14.88	4.36	4.13	0.26	6.03	18.04	651	307	20.46	6	14.7	4.31	4.09	0.26	5.92	17.69		
		0.3	75	533	252	18.22	5.34	12.77	3.74	3.64	0.23	4.78	14.28	602	284	19.55	5.73	13.92	4.08	3.91	0.25	5.4			

Capacity Ratings

Chilled Water - Standard

DMP & DME 4ROWS

Size	Speed	50HZ										60Hz											
		External Static Pressure		Airflow Rate		Total Capacity		Sensible Capacity		Water Flow Rate		Water Pressure Drop		Airflow Rate		Total Capacity		Sensible Capacity		Water Flow Rate		Water Pressure Drop	
		inwg	Pa	cfm	l/s	MBh	kW	MBh	kW	gpm	l/s	ftwg	kPa	cfm	l/s	MBh	kW	MBh	kW	gpm	l/s	ftwg	kPa
2	High	0.1	25	262	124	9.62	2.82	6.7	1.96	1.92	0.12	6.71	20.06	253	120	9.42	2.76	6.54	1.92	1.88	0.12	6.45	19.28
		0.2	50	237	112	9.01	2.64	6.21	1.82	1.8	0.11	5.95	17.8	238	112	9.05	2.65	6.24	1.83	1.81	0.11	5.99	17.92
		0.3	75	205	97	8.22	2.41	5.58	1.63	1.64	0.1	5.03	15.04	217	102	8.52	2.5	5.81	1.7	1.7	0.11	5.37	16.04
	Medium	0.1	25	239	113	9.08	2.66	6.26	1.84	1.82	0.11	6.03	18.04	200	94	8.08	2.37	5.47	1.6	1.62	0.1	4.88	14.59
		0.2	50	213	101	8.43	2.47	5.74	1.68	1.69	0.11	5.27	15.75	182	86	7.61	2.23	5.1	1.5	1.52	0.1	4.38	13.08
		0.3	75	178	84	7.5	2.2	5.01	1.47	1.5	0.09	4.25	12.71	168	79	7.21	2.11	4.79	1.4	1.44	0.09	3.97	11.85
	Low	0.1	25	214	101	8.45	2.48	5.76	1.69	1.69	0.11	5.3	15.83	167	79	7.18	2.11	4.77	1.4	1.44	0.09	3.94	11.76
		0.2	50	189	89	7.8	2.29	5.24	1.54	1.56	0.1	4.57	13.66	154	72	6.8	1.99	4.48	1.31	1.36	0.09	3.56	10.65
		0.3	75	159	75	6.95	2.04	4.59	1.35	1.39	0.09	3.71	11.08	138	65	6.34	1.86	4.13	1.21	1.27	0.08	3.13	9.37
3	High	0.1	25	303	143	11.91	3.49	8.09	2.37	2.38	0.15	10.72	32.04	365	172	13.26	3.89	9.23	2.71	2.65	0.17	13.04	38.98
		0.2	50	276	130	11.22	3.29	7.55	2.21	2.24	0.14	9.61	28.71	345	163	12.84	3.76	8.87	2.6	2.57	0.16	12.29	36.75
		0.3	75	237	112	10.09	2.96	6.7	1.96	2.02	0.13	7.92	23.88	324	153	12.38	3.63	8.48	2.49	2.48	0.16	11.5	34.37
	Medium	0.1	25	274	129	11.14	3.27	7.49	2.2	2.23	0.14	9.49	28.36	318	150	12.25	3.59	8.38	2.45	2.45	0.15	11.29	33.74
		0.2	50	248	117	10.44	3.06	6.96	2.04	2.09	0.13	8.42	25.17	304	143	11.93	3.5	8.1	2.38	2.39	0.15	10.75	32.12
		0.3	75	208	98	9.23	2.71	6.06	1.78	1.85	0.12	6.74	20.14	283	134	11.4	3.34	7.69	2.25	2.28	0.14	9.89	29.57
	Low	0.1	25	253	119	10.55	3.09	7.04	2.06	2.11	0.13	8.59	25.67	267	126	10.95	3.21	7.35	2.15	2.19	0.14	9.19	27.47
		0.2	50	230	109	9.91	2.9	6.56	1.92	1.98	0.12	7.66	22.88	250	118	10.47	3.07	6.98	2.05	2.09	0.13	8.47	25.32
		0.3	75	191	90	8.69	2.55	5.67	1.66	1.74	0.11	6.03	18.02	229	108	9.87	2.89	6.54	1.92	1.97	0.12	7.61	22.74
4	High	0.1	25	401	189	13.84	4.06	9.9	2.9	2.77	0.17	2.78	8.32	451	213	14.9	4.37	10.82	3.17	2.98	0.19	3.19	9.54
		0.2	50	366	173	13.12	3.84	9.27	2.72	2.62	0.17	2.52	7.53	426	201	14.37	4.21	10.36	3.04	2.87	0.18	2.98	8.92
		0.3	75	325	153	12.22	3.58	8.5	2.49	2.44	0.15	2.21	6.61	399	188	13.68	4.04	9.87	2.89	2.76	0.17	2.77	8.28
	Medium	0.1	25	334	158	12.43	3.64	8.68	2.54	2.49	0.16	2.28	6.82	403	190	13.88	4.07	9.94	2.91	2.78	0.18	2.78	8.36
		0.2	50	308	145	11.84	3.47	8.17	2.4	2.37	0.15	2.09	6.24	381	180	13.42	3.93	9.54	2.8	2.68	0.17	2.63	7.86
		0.3	75	270	127	10.75	3.15	7.35	2.15	2.15	0.14	1.75	5.22	352	166	12.81	3.76	9.01	2.64	2.56	0.16	2.41	7.21
	Low	0.1	25	282	133	11.12	3.26	7.62	2.23	2.22	0.14	1.86	5.55	341	161	12.57	3.68	8.79	2.58	2.51	0.16	2.33	6.96
		0.2	50	259	122	10.44	3.06	7.11	2.08	2.09	0.13	1.65	4.94	317	149	12.04	3.53	8.34	2.45	2.41	0.15	2.15	6.44
		0.3	75	229	108	9.53	2.79	6.43	1.88	1.91	0.12	1.4	4.18	290	137	11.34	3.32	7.79	2.28	2.27	0.14	1.93	5.76
5	High	0.1	25	588	277	19.24	5.64	13.93	4.08	3.85	0.24	5.4	16.15	603	285	19.55	5.73	14.21	4.16	3.91	0.25	5.57	16.64
		0.2	50	530	250	18.06	5.29	12.92	3.79	3.61	0.23	4.8	14.36	579	273	19.06	5.59	13.78	4.04	3.81	0.24	5.31	15.87
		0.3	75	461	217	16.46	4.83	11.6	3.4	3.29	0.21	4.05	12.1	551	260	18.51	5.43	13.3	3.9	3.7	0.23	5.03	15.03
	Medium	0.1	25	555	262	18.59	5.45	13.37	3.92	3.72	0.23	5.07	15.16	472	223	18.72	4.9	11.82	3.46	3.34	0.21	4.77	12.46
		0.2	50	505	238	17.47	5.12	12.43	3.64	3.49	0.22	4.52	13.51	457	216	18.38	4.8	11.54	3.38	3.28	0.21	4.01	12
		0.3	75	439	207	15.96	4.68	11.19	3.28	3.19	0.2	3.83	11.44	434	205	15.86	4.65	11.1	3.25	3.17	0.2	3.78	11.29
	Low	0.1	25	490	231	17.12	5.02	12.15	3.56	3.42	0.22	4.35	13.01	326	154	13.27	3.89	8.98	2.63	2.65	0.17	2.72	8.13
		0.2	50	449	212	16.19	4.75	11.38	3.34	3.24	0.2	3.93	11.74	314	148	12.97	3.8	8.73	2.56	2.59	0.16	2.61	7.79
		0.3	75	384	181	14.7	4.31	10.14	2.97	2.94	0.19	3.28	9.82	293	138	12.43	3.64	8.3	2.43	2.49	0.16	2.41	7.2
6	High	0.1	25	607	286	21.15	6.2	14.96	4.39	4.23	0.27	6.76	20.21	725	342	23.62	6.92	17.06	5	4.72	0.3	8.3	24.8
		0.2	50	550	259	19.83	5.81	13.89	4.07	3.97	0.25	6.01	17.95	689	325	22.89	6.71	16.44	4.82	4.58	0.29	7.83	23.4
		0.3	75	481	227	18.22	5.34	12.58	3.69	3.64	0.23	5.14	15.35	647	305	22.01	6.45	15.69	4.6	4.4	0.28	7.28	21.76
	Medium	0.1	25	565	267	20.2	5.92	14.19	4.16	4.04	0.25	6.21	18.57	654	309	22.16	6.5	15.82	4.64	4.43	0.28	7.37	22.04
		0.2	50	511	241	18.92	5.55	13.14	3.85	3.78	0.24	5.5	16.45	627	296	21.59	6.33	15.34	4.5	4.32	0.27	7.03	21.01
		0.3	75	440	208	17.2	5.04	11.76	3.45	3.44	0.22	4.62	13.8	590	278	20.76	6.09	14.65	4.29	4.15	0.26	6.54	19.54
	Low	0.1	25	502	237	18.72	5.49	12.98	3.81	3.74	0.24	5.4	16.14	574	271	20.4	5.98	14.35	4.21	4.08	0.26	6.32	18.9
		0.2	50	457	215	17.62	5.16	12.09	3.54	3.52	0.22	4.83	14.42	540	255	19.62	5.75	13.71	4.02	3.92	0.25	5.88	17.59
		0.3	75	400	189	16.19	4.75	10.96	3.21	3.24	0.2	4.13	12.34	498	235	18.62	5.46	12.9	3.78	3.72	0.23	5.35	15.98
8	High	0.1	25	859	405	29.28	8.58	20.78	6.09	5.86	0.37	13.5	40.34	966	456	31.65	9.28	22.71	6.66	6.33	0.4	15.58	46.58
		0.2	50	770	363	27.33	8.01	19.16	5.62	5.47	0.34	11.88	35.52	909	429	30.39	8.91	21.68	6.35	6.08	0.38	14.45	43.2
		0.3	75	674	318	25.32	7.42	17.44	5.11	5.06	0.32	10.32	30.86	842	397	28.89	8.47	20.46	6	5.78	0.36	13.17	39.36
	Medium	0.1	25	813	384	28.26	8.28	19.94	5.84	5.65	0.36	12.64	37.78	874	412	29.61	8.68	21.04	6.17	5.92	0.37	13.77	41.17
		0.2	50	724	342	26.39	7.74	18.35	5.38	5.28	0.33	11.14	33.3	809	382	28.18	8.26	19.87	5.82	5.64	0.36	12.57	37.57
		0.3	75	623	294	24.21	7.09	16.5	4.84	4.84	0.31	9.5	28.4	743	350	26.78	7.85	18.68	5.48	5.36	0.34	11.44	34.2
	Low	0.1	25	724	342	26.39	7.74	18.35	5.38	5.28	0.33	11.14	33.3	677	320	28.4	7.44	17.5	5.13	5.08	0.32	10.36	31.03
		0.2	50	629	297	24.34	7.13	16.61	4.87	4.87	0.31	9.6	28.69	638	301	24.55	7.19	16.78	4.92	4.91	0.31	9.75	29.14
		0.3	75	503	237	21.04	6.17	14.04	4.12	4.21	0.27	7.34	21.94	585	276	23.32	6.83	15.78	4.62	4.66			

Capacity Ratings

Hot Water - Standard

DMP & DME 1ROW

Size	Speed	50Hz										60Hz									
		External Static Pressure		Airflow Rate		Total Capacity		Water Flow Rate		Water Pressure Drop		Airflow Rate		Total Capacity		Water Flow Rate		Water Pressure Drop			
		inwg	Pa	cfm	l/s	MBh	kW	gpm	l/s	ftwg	kPa	cfm	l/s	MBh	kW	gpm	l/s	ftwg	kPa		
2	High	0.1	25	282	133	12.16	3.57	1.22	0.08	2.55	7.63	220	104	10.99	3.22	1.1	0.07	2.17	6.5		
		0.2	50	255	120	11.68	3.42	1.17	0.07	2.39	7.14	209	99	10.73	3.14	1.07	0.07	2.1	6.27		
		0.3	75	225	106	11.11	3.25	1.11	0.07	2.21	6.8	193	91	10.33	3.03	1.03	0.07	1.99	5.94		
	Medium	0.1	25	255	120	11.68	3.42	1.17	0.07	2.39	7.14	204	96	10.61	3.11	1.06	0.07	2.06	6.16		
		0.2	50	232	109	11.25	3.3	1.13	0.07	2.25	6.73	185	87	10.12	2.97	1.01	0.06	1.93	5.77		
		0.3	75	198	93	10.46	3.06	1.05	0.07	2.02	6.04	168	79	9.65	2.83	0.96	0.06	1.81	5.41		
3	Low	0.1	25	228	108	11.17	3.28	1.12	0.07	2.23	6.66	172	81	9.76	2.86	0.98	0.06	1.84	5.5		
		0.2	50	203	96	10.58	3.1	1.06	0.07	2.05	6.14	158	75	9.35	2.74	0.94	0.06	1.74	5.2		
		0.3	75	172	81	9.76	2.86	0.98	0.06	1.84	5.5	142	67	8.84	2.59	0.88	0.06	1.63	4.86		
	High	0.1	25	316	149	14.68	4.3	1.47	0.09	3.64	10.88	323	152	14.81	4.34	1.48	0.09	3.7	11.07		
		0.2	50	293	138	14.23	4.17	1.42	0.09	3.43	10.25	307	145	14.5	4.25	1.45	0.09	3.56	10.63		
		0.3	75	259	122	13.54	3.97	1.35	0.09	3.13	9.35	289	136	14.15	4.15	1.42	0.09	3.39	10.15		
4	Medium	0.1	25	284	134	14.05	4.12	1.41	0.09	3.35	10.01	269	127	13.75	4.03	1.37	0.09	3.22	9.62		
		0.2	50	264	125	13.64	4	1.36	0.09	3.17	9.48	258	122	13.52	3.96	1.35	0.09	3.12	9.32		
		0.3	75	230	109	12.89	3.78	1.29	0.08	2.87	8.57	243	115	13.19	3.87	1.32	0.08	2.98	8.92		
	Low	0.1	25	259	122	13.54	3.97	1.35	0.09	3.13	9.35	242	114	13.17	3.86	1.32	0.08	2.98	8.89		
		0.2	50	242	114	13.17	3.86	1.32	0.08	2.98	8.89	227	107	12.83	3.76	1.28	0.08	2.84	8.49		
		0.3	75	209	99	12.38	3.63	1.24	0.08	2.68	8	209	99	12.38	3.63	1.24	0.08	2.68	8		
5	High	0.1	25	438	207	19.09	5.59	1.91	0.12	6.41	19.15	477	225	19.87	5.82	1.99	0.13	7.02	20.97		
		0.2	50	405	191	18.4	5.39	1.84	0.12	5.9	17.65	452	213	19.38	5.68	1.94	0.12	6.63	19.81		
		0.3	75	364	172	17.51	5.13	1.75	0.11	5.31	15.86	425	201	18.82	5.52	1.88	0.12	6.21	18.55		
	Medium	0.1	25	355	168	17.32	5.08	1.73	0.11	5.18	15.48	405	191	18.4	5.39	1.84	0.12	5.9	17.65		
		0.2	50	335	158	16.87	4.94	1.69	0.11	4.9	14.84	388	183	18.04	5.29	1.8	0.11	5.65	16.89		
		0.3	75	300	142	16.11	4.72	1.61	0.1	4.45	13.3	364	172	17.51	5.13	1.75	0.11	5.31	15.86		
6	Low	0.1	25	293	138	15.95	4.67	1.59	0.1	4.36	13.04	343	162	17.05	5	1.71	0.11	5.01	14.98		
		0.2	50	271	128	15.43	4.52	1.54	0.1	4.08	12.2	322	152	16.59	4.86	1.66	0.1	4.73	14.14		
		0.3	75	242	114	14.69	4.31	1.47	0.09	3.71	11.08	296	140	16.02	4.69	1.6	0.1	4.4	13.15		
	High	0.1	25	647	305	25.22	7.39	2.52	0.16	12.58	37.59	559	264	23.59	6.91	2.36	0.15	10.67	31.91		
		0.2	50	589	278	24.14	7.08	2.41	0.15	11.29	33.76	540	255	23.25	6.81	2.32	0.15	10.3	30.79		
		0.3	75	522	246	22.93	6.72	2.29	0.14	9.96	29.78	516	244	22.82	6.65	2.28	0.14	9.85	29.45		
7	Medium	0.1	25	574	271	23.87	7	2.39	0.15	10.98	32.82	459	217	21.68	6.35	2.17	0.14	8.71	26.04		
		0.2	50	535	252	23.16	6.79	2.32	0.15	10.21	30.51	446	210	21.39	6.27	2.14	0.13	8.44	25.24		
		0.3	75	478	226	22.09	6.47	2.21	0.14	9.11	27.23	430	203	21.03	6.16	2.1	0.13	8.11	24.26		
	Low	0.1	25	461	218	21.72	6.37	2.17	0.14	8.75	26.16	357	168	19.28	5.65	1.93	0.12	6.66	19.89		
		0.2	50	442	209	21.3	6.24	2.13	0.13	8.36	24.99	348	164	19.06	5.59	1.91	0.12	6.48	19.37		
		0.3	75	395	186	20.21	5.92	2.02	0.13	7.41	22.14	330	156	18.59	5.45	1.86	0.12	6.13	18.33		
8	High	0.1	25	760	359	27.65	8.1	2.76	0.17	3.09	9.23	713	336	26.89	7.88	2.69	0.17	2.94	8.78		
		0.2	50	700	330	26.68	7.82	2.67	0.17	2.89	8.65	685	323	26.43	7.75	2.64	0.17	2.85	8.51		
		0.3	75	624	294	25.41	7.45	2.54	0.16	2.66	7.94	652	308	25.88	7.59	2.59	0.16	2.74	8.2		
	Medium	0.1	25	627	296	25.46	7.46	2.55	0.16	2.67	7.97	642	303	25.72	7.54	2.57	0.16	2.71	8.11		
		0.2	50	585	276	24.7	7.24	2.47	0.16	2.53	7.57	620	293	25.34	7.43	2.53	0.16	2.64	7.9		
		0.3	75	518	244	23.51	6.89	2.35	0.15	2.33	6.97	595	281	24.88	7.29	2.49	0.16	2.56	7.66		
9	Low	0.1	25	517	244	23.49	6.88	2.35	0.15	2.33	6.97	555	262	24.17	7.08	2.42	0.15	2.44	7.3		
		0.2	50	476	225	22.73	6.66	2.27	0.14	2.21	6.62	529	250	23.7	6.95	2.37	0.15	2.36	7.07		
		0.3	75	422	199	21.55	6.32	2.16	0.14	2.04	6.11	493	233	23.05	6.76	2.3	0.15	2.26	6.76		
	High	0.1	25	1038	490	36.61	10.73	3.66	0.23	5.58	16.67	955	451	35.24	10.33	3.52	0.22	5.13	15.33		
		0.2	50	938	443	34.95	10.25	3.5	0.22	5.04	15.06	908	428	34.44	10.09	3.44	0.22	4.88	14.59		
		0.3	75	822	388	32.95	9.66	3.29	0.21	4.44	13.28	855	403	33.52	9.82	3.35	0.21	4.61	13.77		
10	Medium	0.1	25	950	448	35.16	10.3	3.52	0.22	5.1	15.25	910	429	34.48	10.11	3.45	0.22	4.89	14.62		
		0.2	50	855	403	33.52	9.82	3.35	0.21	4.61	13.77	859	405	33.59	9.84	3.36	0.21	4.63	13.83		
		0.3	75	742	350	31.46	9.22	3.15	0.2	4.04	12.08	788	372	32.35	9.48	3.24	0.2	4.28	12.79		
	Low	0.1	25	809	382	32.72	9.59	3.27	0.21	4.38	13.09	720	340	31.03	9.1	3.1	0.2	3.93	11.75		
		0.2	50	739	349	31.4	9.2	3.14	0.2	4.03	12.03	679	320	30.25	8.87	3.02	0.19	3.74	11.17		
		0.3	75	614	290	29.01	8.5	2.9	0.18	3.44	10.29	636	300	29.43	8.63	2.94	0.19	3.54	10.58		
11	High	0.1	25	1197	565	42.96	12.59	4.3	0.27	4.81	14.39	1172	553	42.55	12.47	4.25	0.27	4.71	14.09		
		0.2	50	1123	530	41.74	12.23	4.17	0.26	4.53	13.53	1125	531	41.77	12.24	4.18	0.26	4.53	13.55		
		0.3	75	1041	491	40.36	11.83	4.04	0.25	4.22	12.61	1076	508	40.95	12	4.1	0.26	4.35	13		
	Medium	0.1	25	1069	504	40.83	11.97	4.08	0.26	4.32	12.92	973	459	39.19	11.49	3.92	0.25	3.97	11.88		
		0.2	50	1010	477	39.83	11.67	3.98	0.25	4.11	12.27	928	438	38.39	11.25	3.84	0.24	3.81	11.39		
		0.3	75	931	439	38.45	11.27	3.84	0.24	3.82	11.43	879	415	37.44	10.97	3.74	0.24	3.63	10.84		
12	Low	0.1	25	839	396	36.68	10.75	3.67	0.23	3.48	10.42	704	332	34.12	10	3.41	0.22	3.04	9.09		
		0.2	50	783	369	35.63	10.44	3.56	0.22	3.3	9.85	653	308	33.1	9.7	3.31	0.21	2.88	8.6		
		0.3	75	723	344	34.6	10.14	3.45	0.22	3.19	9.46	622	313	31.93	9.36	3.19	0.2	2.75	8.07		
	High	0.1	25	1404	663	52.44	15.37	5.24	0.33	13.55	40.51	1554	733	55.08	16.14	5.51	0.35	15.36	45.93		
		0.2	50	1318	622	50.87	14.91	5.09	0.32	12.55	37.52	1492	704	54.01	15.83	5.4	0.34	14.61	43.67		
		0.3	75	1221	576	49.08	14.39	4.91	0.31	11.48	34.3	1425	672	52.82	15.48	5.28	0.33	13.8	41.26		
13	Medium	0.1	25	1254	592																

District Cooling FCU Models



Nominal Capacity Ratings

Models: DCMP & DCME

Chilled Water Coils

SIZE	Nominal Air flow	4ROWS			
		Total Capacity	Sensible Capacity	Water Flow Rate	Water Pressure Drop
	cfm	MBh	MBh	Gpm	ftwg
	l/s	kW	kW	l/s	kPa
2	200	6.4	4.9	0.8	3.3
	94	1.9	1.5	0.1	9.9
3	300	9.5	7.3	1.2	7.3
	142	2.8	2.1	0.1	21.8
4	400	12.9	9.8	1.6	13.7
	189	3.8	2.9	0.1	40.9
5	500	13.4	11.1	1.7	2.6
	236	3.9	3.2	0.1	7.9
6	600	16.2	13.3	2.0	4.0
	283	4.8	3.9	0.1	11.9
8	800	22.5	18.0	2.8	8.1
	378	6.6	5.3	0.2	24.2
10	1000	27.5	22.2	3.4	7.2
	472	8.1	6.5	0.2	21.6
12	1200	29.9	25.5	3.7	2.8
	566	8.8	7.5	0.2	8.4
14	1400	35.8	30.2	4.5	2.6
	661	10.5	8.8	0.3	7.8
16	1600	42.2	35.0	5.3	3.8
	755	12.4	10.3	0.3	11.3
18	1800	48.6	40.0	6.1	3.5
	849	14.3	11.7	0.4	10.5
20	2000	52.1	43.3	6.5	4.0
	944	15.3	12.7	0.4	11.8

Table 8

Notes:

Chilled water capacity ratings are based on nominal air flow rate; air entering temperature DB/WB 78°F/65°F (25.5°C/18.3°C), 42°F (5.5°C) entering chilled water temperature and 16°F (8.9°C) water temperature rise.

For conditions other than rated, use SKM FCU Computer Selection Software

SKM Fan Coil Units Chilled Water Standard and District Cooling

Capacity Ratings

Chilled Water -DISTRICT COOLING

DCMP & DCME 4 ROWS

Size	Speed	50Hz												60Hz											
		External Static Pressure		Airflow Rate		Total Capacity		Sensible Capacity		Water Flow Rate		Water Pressure Drop		Airflow Rate		Total Capacity		Sensible Capacity		Water Flow Rate		Water Pressure Drop			
		inwg	Pa	cfm	l/s	MBh	kW	MBh	kW	gpm	l/s	ftwg	kPa	cfm	l/s	MBh	kW	MBh	kW	gpm	l/s	ftwg	kPa		
2	High	0.1	25	264	125	6.02	1.76	5.49	1.61	0.75	0.05	2.93	8.77	256	121	5.9	1.73	5.35	1.57	0.74	0.05	2.84	8.48		
		0.2	50	239	113	5.68	1.66	5.08	1.49	0.71	0.04	2.65	7.91	242	114	5.71	1.67	5.12	1.5	0.71	0.05	2.68	8		
		0.3	75	210	99	5.26	1.54	4.59	1.35	0.66	0.04	2.31	6.92	221	105	5.43	1.59	4.79	1.41	0.68	0.04	2.45	7.33		
	Medium	0.1	25	241	114	5.7	1.67	5.11	1.5	0.71	0.04	2.67	7.98	204	96	5.18	1.52	4.5	1.32	0.65	0.04	2.25	6.73		
		0.2	50	217	103	5.38	1.58	4.73	1.39	0.67	0.04	2.4	7.19	185	88	4.89	1.43	4.18	1.22	0.61	0.04	2.04	6.09		
		0.3	75	184	87	4.87	1.43	4.16	1.22	0.61	0.04	2.02	6.04	170	80	4.65	1.36	3.91	1.14	0.58	0.04	1.86	5.56		
	Low	0.1	25	215	102	5.35	1.57	4.69	1.38	0.67	0.04	2.38	7.12	169	80	4.63	1.36	3.89	1.14	0.58	0.04	1.85	5.52		
		0.2	50	192	91	5	1.46	4.29	1.26	0.62	0.04	2.11	6.32	156	74	4.42	1.29	3.65	1.07	0.55	0.03	1.7	5.08		
		0.3	75	162	76	4.51	1.32	3.76	1.1	0.56	0.04	1.76	5.27	141	67	4.16	1.22	3.38	0.99	0.52	0.03	1.53	4.57		
	3	High	0.1	25	303	143	7.42	2.17	6.52	1.91	0.93	0.06	4.69	14.02	371	175	8.35	2.45	7.61	2.23	1.04	0.07	5.78	17.28	
			0.2	50	280	132	7.09	2.08	6.14	1.8	0.89	0.06	4.34	12.96	351	166	8.07	2.36	7.29	2.14	1.01	0.06	5.44	16.26	
			0.3	75	243	115	6.57	1.93	5.52	1.62	0.82	0.05	3.79	11.32	330	156	7.78	2.28	6.95	2.04	0.97	0.06	5.1	15.25	
Medium		0.1	25	271	128	6.97	2.04	5.99	1.76	0.87	0.06	4.21	12.58	320	151	7.64	2.24	6.79	1.99	0.96	0.06	4.95	14.78		
		0.2	50	250	118	6.68	1.96	5.65	1.66	0.83	0.05	3.9	11.65	307	145	7.46	2.19	6.58	1.93	0.93	0.06	4.74	14.18		
		0.3	75	214	101	6.11	1.79	5.02	1.47	0.76	0.05	3.33	9.96	287	136	7.2	2.11	6.27	1.84	0.9	0.06	4.45	13.31		
Low		0.1	25	249	117	6.65	1.95	5.62	1.65	0.83	0.05	3.87	11.57	270	127	6.96	2.04	5.97	1.75	0.87	0.05	4.19	12.52		
		0.2	50	231	109	6.38	1.87	5.31	1.56	0.8	0.05	3.6	10.75	253	119	6.71	1.97	5.69	1.67	0.84	0.05	3.93	11.76		
		0.3	75	197	93	5.8	1.7	4.7	1.38	0.72	0.05	3.04	9.08	232	110	6.4	1.88	5.34	1.56	0.8	0.05	3.62	10.82		
4		High	0.1	25	404	191	9.91	2.91	8.65	2.54	1.24	0.08	8.56	25.59	464	219	11.02	3.23	9.71	2.85	1.38	0.09	10.32	30.86	
			0.2	50	373	176	9.44	2.77	8.13	2.38	1.18	0.07	7.86	23.49	439	207	10.52	3.08	9.25	2.71	1.32	0.08	9.51	28.44	
			0.3	75	333	157	8.9	2.61	7.49	2.19	1.11	0.07	7.08	21.17	412	194	10.04	2.94	8.78	2.57	1.26	0.08	8.76	26.18	
	Medium	0.1	25	334	158	8.91	2.61	7.5	2.2	1.11	0.07	7.1	21.22	408	192	9.97	2.92	8.71	2.55	1.25	0.08	8.65	25.87		
		0.2	50	317	147	8.6	2.52	7.14	2.09	1.08	0.07	6.67	19.93	389	184	9.68	2.84	8.4	2.46	1.21	0.08	8.21	24.55		
		0.3	75	277	131	8.07	2.36	6.53	1.91	1.01	0.06	5.95	17.79	363	171	9.31	2.73	7.97	2.34	1.16	0.07	7.66	22.89		
	Low	0.1	25	284	134	8.18	2.4	6.66	1.95	1.02	0.06	6.11	18.26	345	163	9.07	2.66	7.68	2.25	1.13	0.07	7.31	21.86		
		0.2	50	263	124	7.83	2.29	6.28	1.84	0.98	0.06	5.65	16.88	324	153	8.77	2.57	7.33	2.15	1.1	0.07	6.89	20.61		
		0.3	75	233	110	7.29	2.14	5.73	1.68	0.91	0.06	4.98	14.89	297	140	8.38	2.46	6.88	2.02	1.05	0.07	6.37	19.03		
	5	High	0.1	25	593	280	13.59	3.98	12.14	3.56	1.7	0.11	2.73	8.15	616	291	13.95	4.09	12.52	3.67	1.74	0.11	2.86	8.55	
			0.2	50	539	254	12.78	3.75	11.27	3.3	1.6	0.1	2.45	7.32	591	279	13.56	3.97	12.1	3.55	1.69	0.11	2.72	8.12	
			0.3	75	474	224	11.82	3.46	10.21	2.99	1.48	0.09	2.13	6.36	565	267	13.17	3.86	11.69	3.43	1.65	0.1	2.58	7.71	
Medium		0.1	25	557	263	13.05	3.82	11.56	3.39	1.63	0.1	2.54	7.58	475	224	11.83	3.47	10.23	3	1.48	0.09	2.13	6.37		
		0.2	50	513	242	12.4	3.64	10.86	3.18	1.55	0.1	2.32	6.93	461	218	11.63	3.41	10	2.93	1.45	0.09	2.07	6.18		
		0.3	75	453	214	11.51	3.37	9.87	2.89	1.44	0.09	2.03	6.07	442	209	11.34	3.32	9.69	2.84	1.42	0.09	1.98	5.92		
Low		0.1	25	493	233	12.1	3.55	10.52	3.08	1.51	0.1	2.22	6.64	329	155	9.48	2.78	7.71	2.26	1.18	0.07	1.44	4.3		
		0.2	50	464	219	11.67	3.42	10.04	2.94	1.46	0.09	2.08	6.22	319	151	9.32	2.73	7.54	2.21	1.17	0.07	1.4	4.18		
		0.3	75	406	192	10.75	3.15	9.07	2.66	1.34	0.08	1.8	5.38	301	142	9.01	2.64	7.21	2.11	1.13	0.07	1.32	3.93		
6		High	0.1	25	609	287	13.95	4.09	12.56	3.68	1.74	0.11	3.06	9.14	728	344	15.78	4.63	14.49	4.25	1.97	0.12	3.81	11.38	
			0.2	50	557	263	13.21	3.87	11.73	3.44	1.65	0.1	2.78	8.3	699	330	15.31	4.49	14.01	4.11	1.91	0.12	3.61	10.78	
			0.3	75	493	232	12.29	3.6	10.68	3.13	1.54	0.1	2.44	7.3	660	311	14.71	4.31	13.38	3.92	1.84	0.12	3.36	10.05	
	Medium	0.1	25	566	267	13.34	3.91	11.88	3.48	1.67	0.11	2.83	8.45	666	314	14.8	4.34	13.48	3.95	1.85	0.12	3.4	10.16		
		0.2	50	520	245	12.68	3.72	11.12	3.26	1.58	0.1	2.58	7.71	644	304	14.47	4.24	13.13	3.85	1.81	0.11	3.26	9.76		
		0.3	75	454	214	11.73	3.44	10.04	2.94	1.47	0.09	2.25	6.72	613	289	14.02	4.11	12.63	3.7	1.75	0.11	3.08	9.22		
	Low	0.1	25	505	238	12.46	3.65	10.88	3.19	1.56	0.1	2.5	7.48	585	276	13.61	3.99	12.18	3.57	1.7	0.11	2.93	8.75		
		0.2	50	462	218	11.84	3.47	10.16	2.98	1.48	0.09	2.29	6.83	554	262	13.17	3.86	11.68	3.42	1.65	0.1	2.76	8.25		
		0.3	75	407	192	11.01	3.23	9.24	2.71	1.38	0.09	2.01	6	513	242	12.59	3.69	11.02	3.23	1.57	0.1	2.55	7.62		
	8	High	0.1	25	868	410	21.58	6.32	18.38	5.39	2.7	0.17	7.49	22.39	973	459	24.09	7.06	20.39	5.98	3.01	0.19	9.11	27.22	
			0.2	50	781	369	19.97	5.85	16.86	4.94	2.5	0.16	6.53	19.52	926	437	22.85	6.7	19.45	5.7	2.86	0.18	8.3	24.8	
			0.3	75	684	323	18.36	5.38	15.22	4.46	2.3	0.14	5.63	16.82	863	407	21.48	6.3	18.29	5.36	2.69	0.17	7.43	22.22	
Medium		0.1	25	828	391	20.82	6.1	17.68	5.18	2.8	0.16	7.03	21.02	876	413	21.73	6.37	18.51	5.43	2.72	0.17	7.59	22.88		
		0.2	50	742	350	19.31	5.66	16.2	4.75	2.41	0.15	6.15	18.39	817	386	20.61	6.04	17.48	5.12	2.58	0.16	6.91	20.84		
		0.3	75	641	303	17.69	5.18	14.5	4.25	2.21	0.14	5.27	15.74	747	352	19.38	5.68	16.28	4.77	2.42	0.15	6.2	18.52		
Low		0.1	25	734	346	19.17	5.62	16.06	4.71	2.4	0.15	6.07	18.15	679	320	18.28	5.36	15.14	4.44	2.29	0.14	5.59	16.7		
		0.2	50	653	308	17.88	5.24	14.71	4.31	2.24	0.14	5.37	16.05	642	303	17.71	5.19	14.52	4.26	2.21	0.14	5.28	15.77		
		0.3	75	531	251	15.95	4.68	12.64	3.7	1.99	0.13	4.39	13.11	598	282	17.01	4.98	13.77	4.04	2.13	0.13	4.91	14.69		
10		High																							

Capacity Ratings

Chilled Water -DISTRICT COOLING

DCMP & DCME 4 ROWS

Size	Speed	50Hz														60Hz													
		External Static Pressure		Airflow Rate		Total Capacity		Sensible Capacity		Water Flow Rate		Water Pressure Drop		Airflow Rate		Total Capacity		Sensible Capacity		Water Flow Rate		Water Pressure Drop							
		inwg	Pa	cfm	l/s	MBh	kW	MBh	kW	gpm	l/s	ftwg	kPa	cfm	l/s	MBh	kW	MBh	kW	gpm	l/s	ftwg	kPa						
2	High	0.1	25	264	125	5.16	1.51	5.16	1.51	0.65	0.04	2.24	6.69	256	121	5.06	1.48	5.06	1.48	0.63	0.04	2.16	6.47						
		0.2	50	239	113	4.86	1.42	4.85	1.42	0.61	0.04	2.01	6	242	114	4.89	1.43	4.89	1.43	0.61	0.04	2.04	6.08						
		0.3	75	210	99	4.48	1.31	4.47	1.28	0.56	0.04	1.74	5.21	221	105	4.63	1.34	4.63	1.34	0.58	0.04	1.85	5.53						
	Medium	0.1	25	241	114	4.88	1.43	4.88	1.43	0.61	0.04	2.03	6.06	204	96	4.41	1.29	4.28	1.26	0.55	0.03	1.69	5.07						
		0.2	50	217	103	4.58	1.34	4.5	1.32	0.57	0.04	1.81	5.42	185	88	4.17	1.22	3.98	1.17	0.52	0.03	1.54	4.6						
		0.3	75	184	87	4.16	1.22	3.95	1.16	0.52	0.03	1.53	4.56	170	80	3.97	1.16	3.72	1.09	0.5	0.03	1.41	4.22						
	Low	0.1	25	215	102	4.56	1.34	4.47	1.31	0.57	0.04	1.8	5.37	169	80	3.96	1.16	3.7	1.08	0.49	0.03	1.4	4.19						
		0.2	50	192	91	4.26	1.25	4.08	1.2	0.53	0.03	1.59	4.76	156	74	3.79	1.11	3.47	1.02	0.47	0.03	1.29	3.87						
		0.3	75	162	76	3.86	1.13	3.57	1.05	0.48	0.03	1.34	4.01	141	67	3.58	1.05	3.21	0.94	0.45	0.03	1.17	3.51						
3	High	0.1	25	303	143	6.32	1.85	6.22	1.82	0.79	0.05	3.53	10.56	371	175	7.12	2.09	7.12	2.09	0.89	0.06	4.36	13.03						
		0.2	50	280	132	6.03	1.77	5.84	1.71	0.75	0.05	3.26	9.74	351	166	6.88	2.02	6.88	2.02	0.86	0.05	4.11	12.27						
		0.3	75	243	115	5.57	1.63	5.24	1.54	0.7	0.04	2.83	8.47	330	156	6.63	1.94	6.63	1.94	0.83	0.05	3.85	11.51						
	Medium	0.1	25	271	128	5.93	1.74	5.7	1.67	0.74	0.05	3.16	9.45	320	151	6.51	1.91	6.48	1.9	0.81	0.05	3.73	11.15						
		0.2	50	250	118	5.67	1.66	5.36	1.57	0.71	0.04	2.92	8.73	307	145	6.36	1.86	6.27	1.84	0.79	0.05	3.58	10.69						
		0.3	75	214	101	5.17	1.52	4.75	1.39	0.65	0.04	2.48	7.42	287	136	6.13	1.8	5.96	1.75	0.77	0.05	3.35	10.02						
	Low	0.1	25	249	117	5.65	1.65	5.33	1.56	0.71	0.04	2.9	8.66	270	127	5.91	1.73	5.68	1.66	0.74	0.05	3.15	9.4						
		0.2	50	231	109	5.41	1.59	5.03	1.48	0.68	0.04	2.69	8.03	253	119	5.7	1.67	5.4	1.58	0.71	0.04	2.95	8.81						
		0.3	75	197	93	4.9	1.44	4.43	1.3	0.61	0.04	2.26	6.75	232	110	5.43	1.59	5.06	1.48	0.68	0.04	2.71	8.09						
4	High	0.1	25	404	191	8.38	2.46	8.21	2.41	1.05	0.07	6.36	19.02	464	219	9.14	2.68	9.14	2.68	1.14	0.07	7.41	22.16						
		0.2	50	373	176	8	2.34	7.72	2.26	1	0.06	5.87	17.54	439	207	8.81	2.58	8.76	2.57	1.1	0.07	6.95	20.78						
		0.3	75	333	157	7.53	2.21	7.1	2.08	0.94	0.06	5.28	15.77	412	194	8.47	2.48	8.34	2.44	1.06	0.07	6.49	19.4						
	Medium	0.1	25	354	168	7.54	2.21	7.11	2.08	0.94	0.06	5.29	15.81	408	192	8.42	2.47	8.27	2.42	1.05	0.07	6.42	19.2						
		0.2	50	312	147	7.27	2.13	6.75	1.98	0.91	0.06	4.96	14.83	389	184	8.2	2.4	7.98	2.34	1.02	0.06	6.13	18.31						
		0.3	75	277	131	6.81	2	6.17	1.81	0.85	0.05	4.42	13.2	363	171	7.88	2.31	7.56	2.22	0.99	0.06	5.71	17.08						
	Low	0.1	25	284	134	6.91	2.03	6.29	1.84	0.86	0.05	4.53	13.56	345	163	7.67	2.25	7.29	2.14	0.96	0.06	5.45	16.3						
		0.2	50	263	124	6.61	1.94	5.92	1.74	0.83	0.05	4.19	12.52	324	153	7.42	2.17	6.94	2.03	0.93	0.06	5.13	15.34						
		0.3	75	233	110	6.15	1.8	5.39	1.58	0.77	0.05	3.69	11.03	297	140	7.08	2.07	6.5	1.91	0.88	0.06	4.73	14.14						
5	High	0.1	25	593	280	11.68	3.42	11.63	3.41	1.46	0.09	2.09	6.23	616	291	11.98	3.51	11.98	3.51	1.5	0.09	2.18	6.52						
		0.2	50	539	254	10.97	3.21	10.78	3.16	1.37	0.09	1.86	5.57	591	279	11.66	3.42	11.6	3.4	1.46	0.09	2.08	6.21						
		0.3	75	474	224	10.05	2.95	9.71	2.85	1.26	0.08	1.6	4.77	565	267	11.33	3.32	11.2	3.28	1.42	0.09	1.98	5.91						
	Medium	0.1	25	557	263	11.22	3.29	11.07	3.24	1.4	0.09	1.94	5.8	475	224	10.07	2.95	9.73	2.85	1.26	0.08	1.6	4.78						
		0.2	50	513	242	10.6	3.11	10.36	3.04	1.33	0.08	1.76	5.25	461	218	9.88	2.9	9.51	2.79	1.24	0.08	1.55	4.63						
		0.3	75	453	214	9.77	2.86	9.38	2.75	1.22	0.08	1.52	4.54	442	209	9.62	2.82	9.2	2.7	1.2	0.08	1.48	4.42						
	Low	0.1	25	493	233	10.32	3.02	10.03	2.94	1.29	0.08	1.67	5	329	155	8.11	2.38	7.32	2.15	1.01	0.06	1.09	3.26						
		0.2	50	464	219	9.92	2.91	9.55	2.8	1.24	0.08	1.56	4.66	319	151	7.98	2.34	7.16	2.1	1	0.06	1.06	3.17						
		0.3	75	406	192	9.14	2.68	8.61	2.52	1.14	0.07	1.35	4.04	301	142	7.73	2.27	6.85	2.01	0.97	0.06	1	3						
6	High	0.1	25	609	287	11.97	3.51	11.97	3.51	1.5	0.09	2.33	6.97	728	344	13.48	3.95	13.48	3.95	1.69	0.11	2.88	8.61						
		0.2	50	557	263	11.34	3.32	11.22	3.29	1.42	0.09	2.12	6.33	699	330	13.1	3.84	13.1	3.84	1.64	0.1	2.74	8.18						
		0.3	75	493	232	10.53	3.09	10.19	2.99	1.32	0.08	1.86	5.55	660	311	12.61	3.69	12.61	3.69	1.58	0.1	2.55	7.64						
	Medium	0.1	25	566	267	11.45	3.36	11.37	3.33	1.43	0.09	2.15	6.44	666	314	12.68	3.72	12.68	3.72	1.59	0.1	2.58	7.72						
		0.2	50	520	245	10.88	3.19	10.63	3.12	1.36	0.09	1.97	5.88	644	304	12.41	3.64	12.41	3.64	1.55	0.1	2.48	7.42						
		0.3	75	454	214	10.01	2.93	9.56	2.8	1.25	0.08	1.7	5.07	613	289	12.02	3.52	12.02	3.52	1.5	0.09	2.35	7.02						
	Low	0.1	25	505	238	10.69	3.13	10.39	3.04	1.34	0.08	1.91	5.7	585	276	11.68	3.42	11.66	3.42	1.46	0.09	2.23	6.67						
		0.2	50	462	218	10.11	2.96	9.68	2.84	1.26	0.08	1.73	5.16	554	262	11.3	3.31	11.18	3.28	1.41	0.09	2.1	6.29						
		0.3	75	407	192	9.37	2.75	8.77	2.57	1.17	0.07	1.51	4.52	513	242	10.8	3.16	10.53	3.09	1.35	0.09	1.94	5.8						
8	High	0.1	25	868	410	17.46	5.12	17.46	5.12	2.06	0.14	3.19	9.73	420	201	15.49	4.54	15.49	4.54	2.11	0.16	6.61	19.58						
		0.2	50	781	369	17.01	4.99	16.03	4.7	2.13	0.13	4.91	14.69	326	437	17.27	5.05	18.43	5.4	2.41	0.17	6.13	18.32						
		0.3	75	684	323	15.65	4.59	14.46	4.24	1.96	0.12	4.24	12.68	367	407	18.25	5.35	17.38	5.09	2.28	0.14	5.57	16.64						
	Medium	0.1	25	828	391	17.71	5.19	16.8	4.93	2.21	0.14	5.28	15.78	876	413	18.45	5.41	17.59	5.16	2.31	0.15	5.67	16.96						
		0.2	50	742	350	16.46	4.82	15.4	4.51	2.06	0.13	4.64	13.86	817	386	17.54	5.14	16.62	4.87	2.19	0.14	5.19	15.5						
		0.3	75	641	303	15.07	4.42	13.76	4.03	1.88	0.12	3.97	11.86	747	352	16.52	4.84	15.48	4.54	2.07	0.13	4.67	13.95						
	Low	0.1	25	734	346	16.34	4.79	15.27	4.47	2.04	0.13	4.58	13.68	679	320	15.59	4.57	14.38	4.22	1.95	0.12	4.21	12.59						
		0.2	50	653	308	15.24	4.47	13.96	4.09	1.91	0.12	4.05	12.09	642	303	15.09	4.42	13.78	4.04	1.89	0.12	3.97	11.88						
		0.3	75	531	251	13.56	3.97	11.95	3.5	1.69	0.11	3.29	9.83	598	282	14.48	4.25	13.05	3.83	1.81	0.11	3.7	11.05						
10	High	0.																											

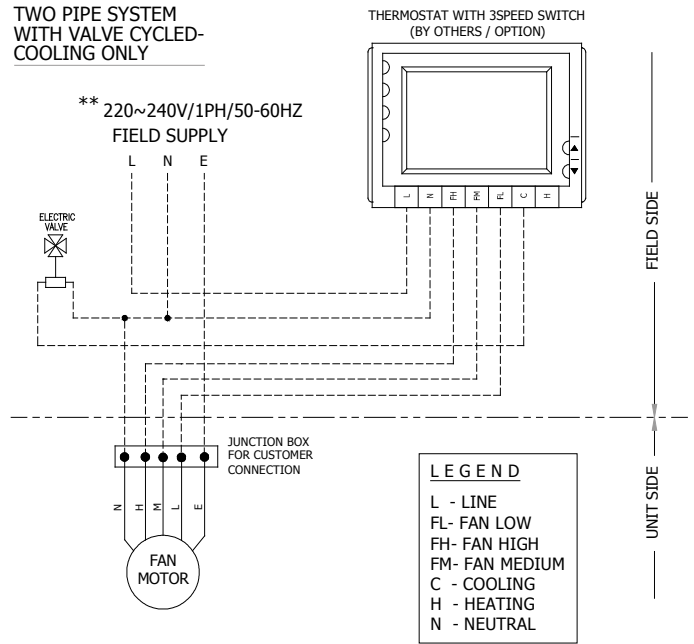
Control System Description

Control System Operation

- CP-1:

Two pipe system with valve cycled cooling only.

Thermostat cycles an electric 2-way or 3-way motorized valve according to the set point. The fan runs as per the setting of fan mode (Hi-Med-Low-Auto).

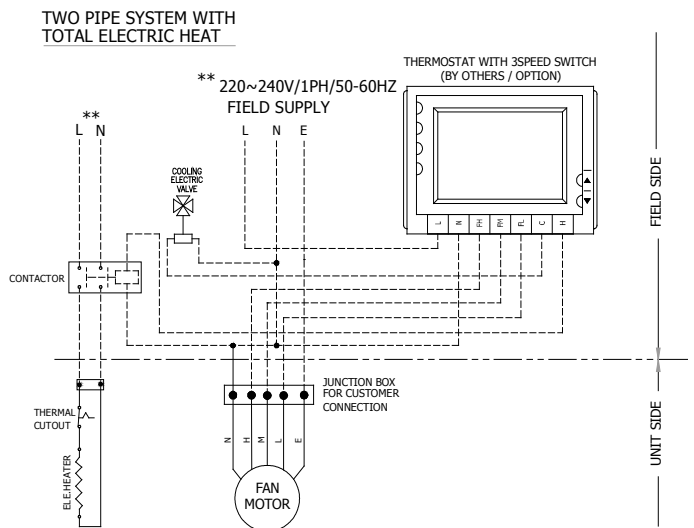


- CP-2:

Two pipe system with total electric heat

The thermostat opens an electric 2-way or 3-way motorized valve on cooling coil or switches on the electric heater for heating depending on which is required to satisfy the thermostat setting. Heat/cool selection and fan speed selection is from the thermostat.

When ordering Code CP-2 and the electric heater option FEH, the auto high temperature cut out is provided as standard.



- CP-3:

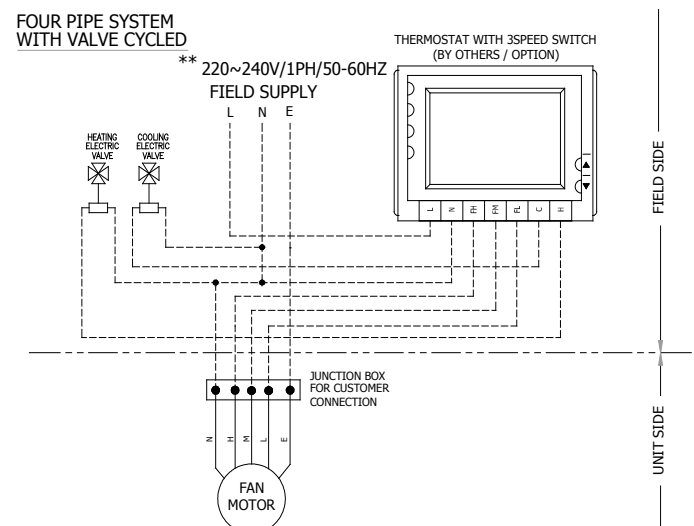
Four pipe system with valve cycled

The thermostat cycles 2 or 3-way motorized hot or chilled water valves to maintain desired room temperature. The thermostat with manual Heat- Cool selection prevents recycling.

The fan runs as per the setting of fan mode (Hi-Med-Low-Auto).

*

Not applicable for district cooling



Selection

Selection Considerations

In selecting SKM Fan Coil units for a specific application, the factors to be considered should include:

- Available space for the unit including floor to ceiling height.
- Type of application (Standard / District cooling)
- Presence of high sensible or peripheral loads in space.
- Functionality of intended space usage.
- Availability of access for pipes, drains & power.
- Compatibility with intended space finish.
- Fresh air and ventilation requirements.
- Noise level desired at peak or part load operations.
- Control system desired especially if winter heating is required.
- Economy of layout.

Once a particular model or models in the Fan coil series is selected after consideration of the above factors, it is necessary to select the unit and coil size to match. It is possible to obtain different unit size with or without different coil depths to meet given design parameters.

The correct unit with correct coil size is obtained only when required cfm at defined speed; i.e. High, Medium or Low to meet sensible load of the space is matched to the correct coil providing the required sensible cooling or outlet temperature at given flow rate and design temperature rise with the unit operating at functional sound levels. To achieve this, the engineer or designer must not only check aesthetic needs but also space limitations, psychrometric feasibility, circulation and ventilation, room acoustical effect, control system, piping accesses including overall chilled water circuits and effect of diversity on same.

Selection Procedure

It is recommend to use SKM selection software. If it is not suitable, then follow the procedure below :

1. Select unit that delivers approximately airflow required at desired speed and external static pressure from airflow rate tables. Select unit with airflow equal or more than the requirement.
2. Apply correction factors to selected unit and find out the actual total and sensible cooling capacity.
3. Repeat step 1 if required parameter is not achieved with actual values obtained from initially selected unit.

Control Packages

SKM provides a variety of control options, a few of which are mentioned below. Please consult SKM sales department for other control applications. Thermostat for Heat-Cool auto changeover must be field supplied and field installed by others, if necessary.

Control System

The control systems for SKM FCUs can be selected provided the application is identified for :

- Cooling/Heating.
- Cooling or Heating.

The control system can be:

- 2-pipe with valve cycled ([Code CPI](#))
- 2-pipe with total electric heat ([Code CP2](#))
- 4-pipe with valve cycled ([Code CP3](#)).

Control valves in the control system are available in 2-way and 3-way motorized versions with compression ends for easy field installation and replacement.

Location of the Thermostat determines need for a remote or unit mounted control.

For remote mounting, option available is:
Wall mounting Digital thermostat with cooling/heating selection and fan speed selection ([Code RTH1](#)).

For unit mounting, option available is:
Unit mounting Digital thermostat with cooling/heating selection, fan speed selection and external sensor ([Code UTH1](#)).

Valve Packages

SKM offers a wide variety of optional valve packages (Type 1 to Type 8 shown below) that can suit practically any application.

Any one of the following options may be chosen, considering application requirements:

1. Factory furnished and installed as a complete package. Specify Type number.
2. Furnished by the factory and field installed by the customer. Add prefix C to the valve package type; e.g. Type C1.

Specify your valve package requirements from the full line of accessories as follows :

- Ball valve
- Globe or balancing valve
- 3-way motorized valve, electric
- 2-way motorized valve, electric

The type nos. are as corresponding to those shown in Fig.1. Combinations available can be selected as standard.

Combinations and/or requirements not covered in Figure 6, Types 1 to 8, may be available and should be referred to factory for selection.

Ordering & Selection Procedure

To correctly order the desired valve package and/or control package as a complete integrated control system, the following procedure should be adopted.

1. Select desired valve package. Type 1 to Type 8.
2. Decide to have same factory installed. Add prefix C to Type (eg. Type C1) if to be supplied only by SKM for field installation.
3. Select desired control package Code CP1 to CP3.
4. Select remote mounted or unit mounted thermostat.
5. Complete ordering code option 3CP2RTH1 shall provide a factory installed valve package with a 2 way electric motorized valve plus Ball valve, for the supply and return lines as shown in Type 3, Figure 6.

The control system is for a 2 pipe installation total electric heating (option FEH1 or FEH2 should ordered as from Table 1 Page 5).

The control system is complete with a wall mounted digital cooling/heating thermostat with 3 speed switch and manual Heat-Off-Cool changeover switch.

Valve Packages

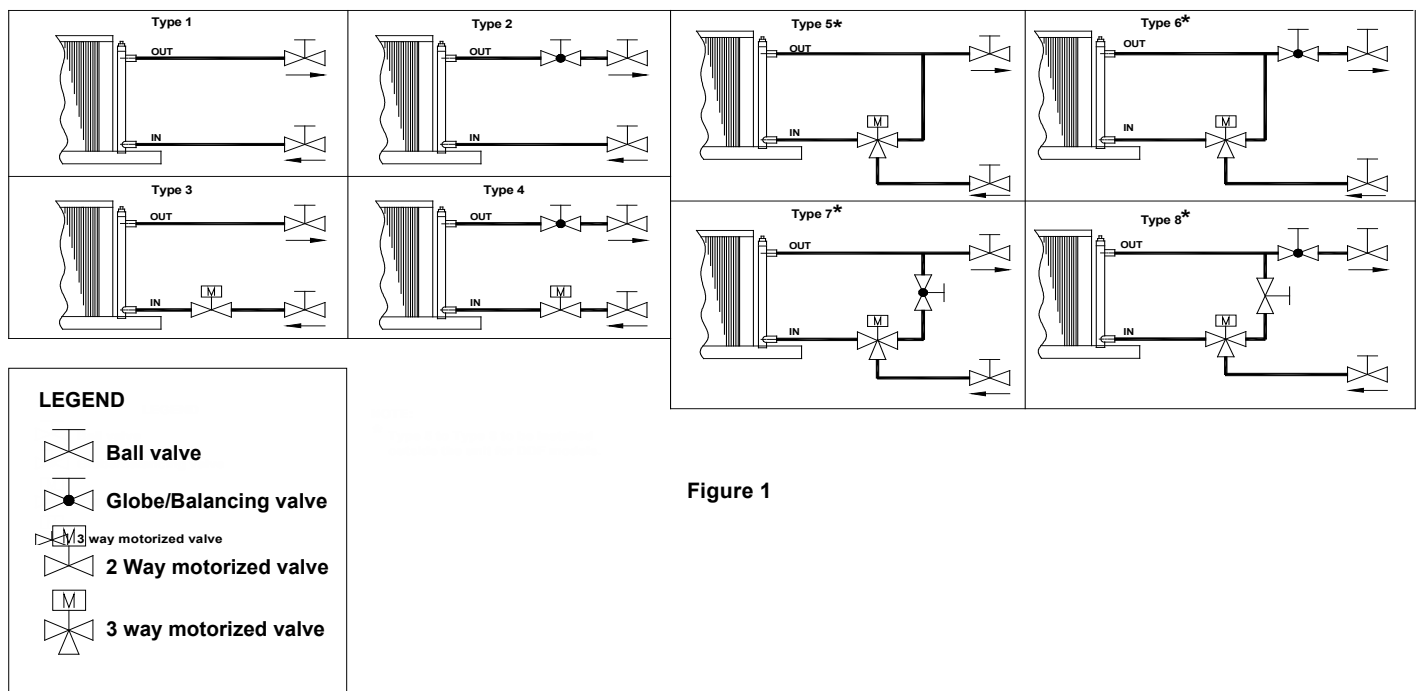
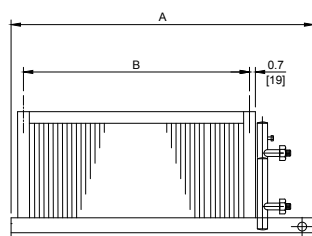
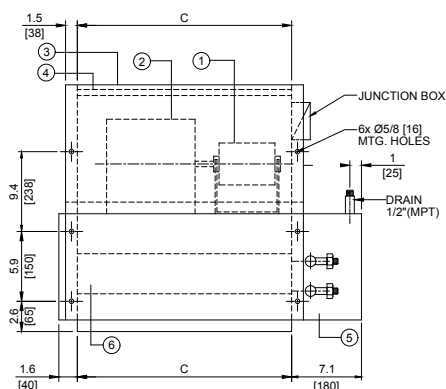


Figure 1

Dimensional Data DMP & DCMP Models

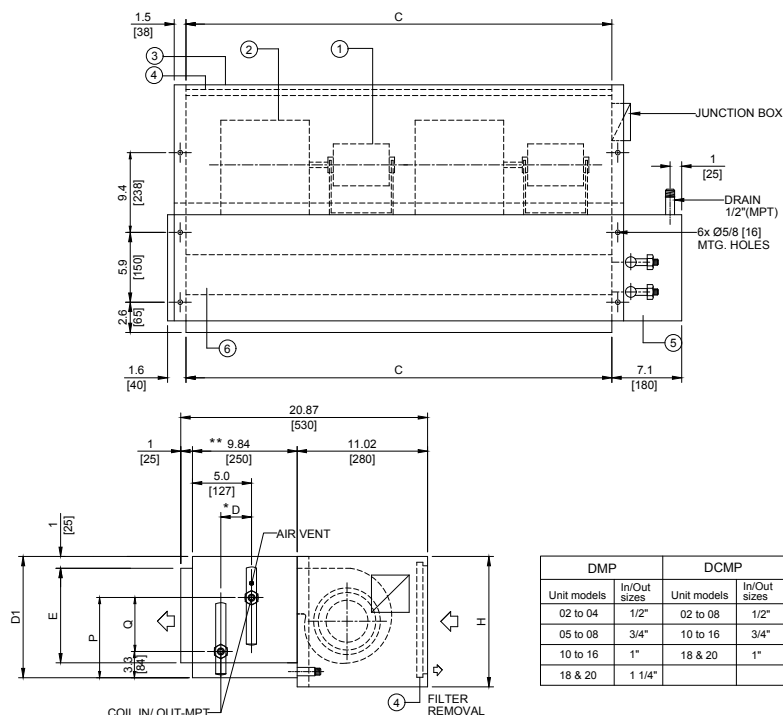
UNIT SIZE 02 - 04



LEFT HAND UNIT SHOWN
RIGHT HAND UNIT OPPOSITE

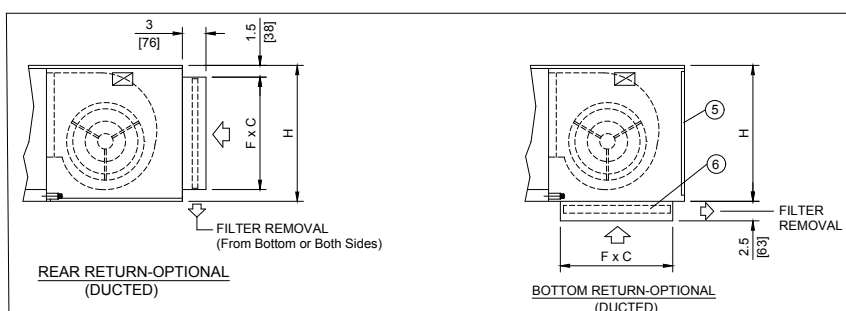
UNIT SIZE 05 - 20

(SIZE 05, 08 & 10 WITH 1 MOTOR & 2 FANS)
(SIZE 06 WITH 2 MOTORS & 2 FANS)
(SIZE 12 & 14 WITH 2 MOTORS & 3 FANS)
(SIZE 16 - 20 WITH 2 MOTORS & 4 FANS)



DMP		DCMP	
Unit models	In/Out sizes	Unit models	In/Out sizes
02 to 04	1/2"	02 to 08	1/2"
05 to 08	3/4"	10 to 16	3/4"
10 to 16	1"	18 & 20	1"
18 & 20	1 1/4"		

FREE RETURN-STANDARD



- 1- FAN MOTOR
- 2- SUPPLY FAN
- 3- RETURN AIR PLENUM
- 4- FLAT FILTER
- 5- DRAIN PAN
- 6- COOLING COIL

*D=1.73" [44] FOR 3R
2.60" [66] FOR 4R

** For Heater & HW option add 2" [50.8]

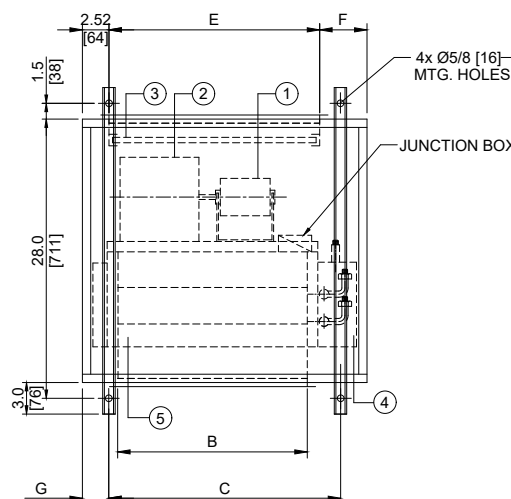
DMP/ DCMP	A	B	C	F	D1	E	H	P	Q
2	26.8	21.1	20.1	8.0	10.6	8.0	11.0	6.7	3.4
	680	535	510	204	270	203	280	171	87
	28.7	21.1	20.1	8.0	10.6	8.0	11.0	6.7	3.4
3	730	535	510	204	270	203	280	171	87
	32.7	25.0	24.0	8.0	10.6	8.0	11.0	6.7	3.4
	830	635	610	204	270	203	280	171	87
4	38.6	30.9	29.9	8.0	10.6	8.0	11.0	6.7	3.4
	980	785	760	204	270	203	280	171	87
	44.7	37.0	36.0	8.0	10.6	8.0	11.0	6.7	3.4
5	1135	940	915	204	270	203	280	171	87
	48.8	41.1	40.2	8.0	10.6	8.0	11.0	6.7	3.4
	1240	1045	1020	204	270	203	280	171	87
8	48.8	41.1	40.2	8.8	11.4	8.7	11.8	8.7	5.4
	1240	1045	1020	224	290	220	300	222	138
	64.6	56.9	56.0	8.8	11.4	8.7	11.8	6.7	3.4
12	1640	1445	1422	224	290	220	300	171	87
	64.8	57.1	56.0	8.8	11.4	8.7	11.8	8.7	5.4
	1645	1450	1422	224	290	220	300	222	138
14	74.6	66.9	65.9	10.4	13.0	10.2	13.4	8.7	5.4
	1895	1700	1675	264	330	260	340	222	138
	74.6	66.9	65.9	10.4	13.0	10.2	13.4	10.7	7.4
16	1895	1700	1675	264	330	260	340	273	189
	75.0	66.9	65.9	10.4	13.0	10.2	13.4	10.7	7.4
	1905	1700	1675	264	330	260	340	273	189

Table 11

ALL DIMENSIONS ARE IN INCHES [MM]

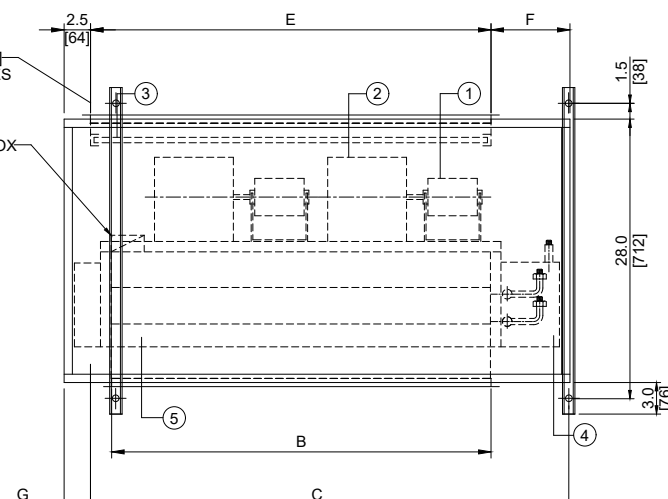
Dimensional Data DME & DCME Models

UNIT SIZE 02 - 04

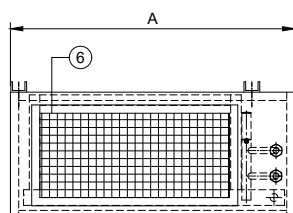


UNIT SIZE 05 - 20

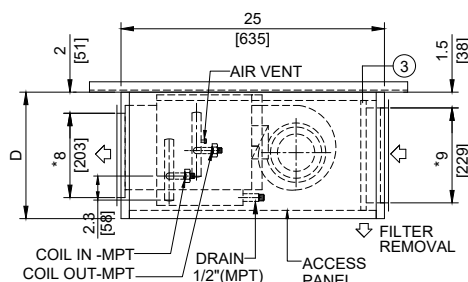
(SIZE 05,08 & 10 WITH 1 MOTOR & 2 FANS)
(SIZE 06 WITH 2 MOTORS & 2 FANS)
(SIZE 12 & 14 WITH 2 MOTORS & 3 FANS)
(SIZE 16 - 20 WITH 2 MOTORS & 4 FANS)



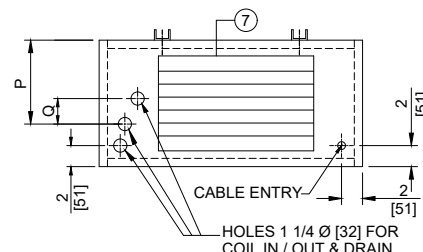
- 1- FAN MOTOR
- 2- SUPPLY FAN
- 3- FLAT FILTER
- 4- DRAIN PAN
- 5- COOLING COIL
- 6- SUPPLY GRILL
- 7- RETURN GRILL



LEFT HAND UNIT SHOWN
RIGHT HAND UNIT OPPOSITE



FREE RETURN-STANDARD



REAR VIEW

DME/ DCME	A	B	C	D	E	F	G	P	Q
2	27.0	18.0	22.0	12.0	32.0	4.5	2.5	8.4	4.8
	686	457	559	305	813	114	64	214	121
3	29.0	20.0	24.0	12.0	22.0	4.5	2.6	8.4	4.8
	737	508	610	305	559	114	66	214	121
4	33.0	24.0	28.0	12.0	26.0	4.5	2.6	8.4	4.8
	838	610	711	305	660	114	66	214	121
5	42.0	30.0	36.9	12.0	31.8	7.7	2.6	8.4	4.8
	1067	762	937	305	808	196	66	214	121
6	48.0	36.0	41.8	12.0	38.0	7.5	2.5	8.4	4.8
	1219	914	1062	305	965	191	64	214	121
8	52.0	40.0	47.0	12.0	42.0	7.5	2.4	8.4	4.8
	1321	1016	1194	305	1067	191	61	214	121
10	52.0	40.0	47.0	13.2	42.0	7.5	2.4	9.6	6.8
	1321	1016	1194	335	1067	191	61	244	172
12	68.0	56.0	63.0	13.2	58.0	7.5	2.6	8.6	6.8
	1727	1422	1600	335	1473	191	66	218	172
14	68.0	56.0	63.0	13.2	58.0	7.5	2.6	9.6	6.8
	1727	1422	1600	335	1473	191	66	244	172
16	78.0	66.0	72.0	13.2	68.0	7.5	3.0	9.6	6.8
	1981	1676	1829	335	1727	191	76	244	172
18	78.0	66.0	72.0	14.5	68.0	7.5	3.0	11.0	8.8
	1981	1676	1829	369	1727	191	76	280	223
20	78.0	66.0	72.0	14.5	68.0	7.4	3.0	11.0	8.8
	1981	1676	1829	369	1727	188	76	280	223

DME		DCME	
Unit models	In/Out sizes	Unit models	In/Out sizes
02 to 04	1/2"	02 to 08	1/2"
05 to 08	3/4"	10 to 16	3/4"
10 to 16	1"	18 & 20	1"
18 & 20	1 1/4"		

Table 12

GUIDE SPECIFICATIONS

Fan Coil Units type and size shall be as indicated on the equipment schedule. Units shall be blow-through arrangement. Units configurations shall be horizontal, suitable for concealed or exposed applications. Units shall be able to handle external static pressure up to 0.3 in W.G.. Units shall be installed at site as per Installation, Operation & Maintenance Manual.

Basic Unit and Cabinet

Fan Coil Units shall include casing, fan/s, motor/s, coil, drain pan, inlet plenum and air filter. Units casing shall be in galvanized or painted Finish as indicated on the equipment schedule. Galvanized finish is standard for all models with exception of exposed units which are with painted finish as standard.

Galvanized casing shall be made of hot-dip galvanized steel sheets. Painted casing shall be made of hot-dip galvanized steel sheets, fabricated steel shall be thoroughly de-greased and then phosphatized before application of an average 60 micron baked electrostatic polyester dry powder coating in RAL 7032 color scheme. This finish can pass 1000-hour, 5% salt spray test at 95 oF (35oC) and 95% relative humidity (ASTM B 117). Units casing shall be made of stainless steel or aluminum if so specified. Units casing shall be thermally and acoustically insulated with 12mm closed cell poly foam insulation.

Units shall be supplied with removable panels for easy access to internal components. For easy installation, ceiling units shall be provided with mounting holes. Units shall be supplied with free return and 1" supply air duct collar.

Fan

Fan shall be double inlet, double width, direct driven with centrifugal type wheel. Fan wheel shall be with multi forward curved blades. Fan shall be applicable for operation up to 0.3" W.G. external static pressure. Fan shall be statically & dynamically balanced. Fan housing and wheel shall be made of galvanized steel sheet.

Motor

Motor shall be single phase, 3-speed permanent split capacitor type, 220-240V/1 Ph/50/60 Hz, highly efficient with integral thermal protection (thermal cut-out embedded in the winding). Motor shall have high power factor. Motor shall be with permanent lubricated sleeve bearings.

Coil

Coil shall be constructed of seamless copper tubes, arranged in a staggered form mechanically bonded to high efficiency wavy corrugated aluminum fins. Copper fins or Pre-Coated Aluminum fins shall be provided if so specified.

Fins spacing shall be 12 fpi. for chilled water & Hot water coils shall be provided as indicated on the equipment schedule. All water coils shall be provided with manual air vent, automatic air vent shall be provided if so specified. Coil circuiting shall be counter flow. (Direction of coil water flow shall be counter to direction of unit air flow). Coil connections shall be MPT type. Optional FPT connections shall be provided if so specified. Coil shall be certified in accordance with AHRI - 410 (DMP/DME) and tested by compressed air under water to the pressure of 300 psig.

Drain Pan

Drain pan shall be constructed from 1mm thick zinc coated steel sheets, shall be painted, irrespective of the type of finish for unit casing, and insulated from outside with 4mm thick polyethylene foam insulation. Drain pan shall be constructed from Stainless steel if so specified. Drain pan shall be extended to include coil, headers and U - bends. The bottom of drain pan shall be plain and drain connection shall be 1/2" MPT, GI pipe. Auxiliary drip lip shall be supplied loose for field installation if so specified.

Filter

Air filter shall be 1" thick (Nominal thickness) cleanable Aluminum media and in accordance with ASHRAE 52.2 standards. 1" thick washable or disposable Synthetic media shall be provided if so specified.

Options

Following shall be provided as an option:

Double skin casing for locations having a high temperature difference between supply air temperature and surrounding environment of the unit. (for DMP/DCMP only)

Electric Heater Battery

Electric heater capacity shall be as indicated on the equipment schedule. Electric heater element shall be constructed from 80/20 nickel chrome resistance wire, which is connected to terminal pins and centered in stainless steel grade 304L sheath metal tubes by compressed magnesium oxide. The terminal pins shall be insulated from metal tube by ceramic bushes. Helical fins mild steel galvanized shall be tightly wound around tubular heater elements. Stainless steel helical fins shall be provided if so specified. Electric heater batteries shall be provided with one safety cut-out (Auto Reset) and arranged for one stage operation at 220-240V /1 ph / 50Hz.

Valve Packages

Valve Packages shall be field installed by customer or factory installed, if so specified. As indicated on the equipment schedule, Valve Packages shall consist of various combinations of Ball or stop valves, globe or balancing valves, 2-way motorized valves and 3-way motorized valves.

Thermostats

Thermostat shall be wall mounted decorative type, with large LCD and backlight. Buttons shall be provided for power on/off, fan speed selection, cooling or heating mode selection, set point adjustment and sleep mode selection. Indoor temperature and set point shall be displayed simultaneously. Apart from that, display shall provide fan mode (high, medium, low or auto) and operating mode (cool or heat).