

Hi-Static with EC motor

Standard and District Cooling

Fan Coil Units



Range 600 cfm to
2100 cfm
(285 l/s to 991 l/s)



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Legend

The following legends are used throughout this manual:

AFR Air Flow Rate	LAWB ... Leaving Air Wet Bulb
BEP Baked Enamel Paint	lbsPounds weight (British units)
cfm Cubic feet per minute	l/sLiters per second
dB Decibels	MBh1000 Btuh
EADBEntering Air Dry Bulb	NCNoise Criteria
EAWBEntering Air Wet Bulb	ODOutside Diameter
ET Evaporating Temperature	PhPhase
EWT Entering Water Temperature	PaPascals
ESP External Static Pressure	SCSensible Capacity
ftwg Feet of Water Gauge	SPLSound Pressure Level
GPM Gallons per minute	TCTotal Capacity
Hz Hertz	TR Tons of refrigeration = 12 MBH
inwgInch of Water Gauge	USgpm ..US Gallons per minute
kWKilowatts	VVolts
kg Kilograms	WFR Water Flow Rate
kPa Kilo Pascals	WTR Water Temperature Rise
LADBLeaving Air Dry Bulb	WPDWater Pressure Drop



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 **Hi-Static** Fan Coil Units with Electronically Commutated (EC) Motors are complete line of fan coil units designed to meet most air conditioning requirements. High quality units are available for installation in apartments and single or multiform offices, schools, clinics, and etc.

Units are available in (7) standard models to deliver from 600 cfm (285 l/s) to 2100 cfm (991 l/s) nominal air flow rate.

SKM **Hi-Static** Fan Coil Units with Electronically Commutated Motors rated in accordance with AHRI - 440 standards.

SKM **Hi-Static** Fan Coil Units with Electronically Commutated Motors are another premium international quality product from SKM.

Units are certified in accordance with AHRI -440 standards and Coil performance (Standard Series) certified 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.

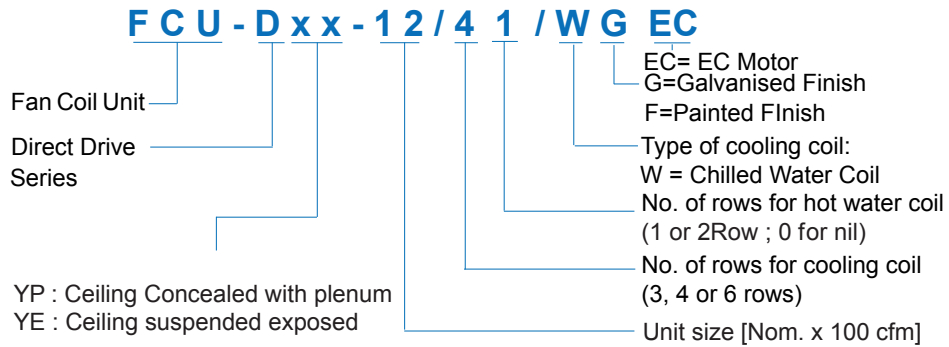
SKM Air Conditioning LLC



You name it.....We cool it

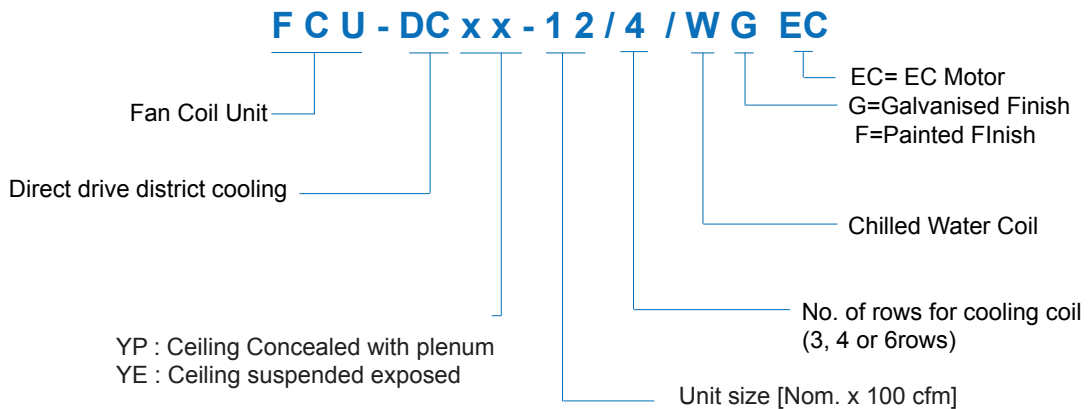
Standard FCU Models

Nomenclature



District Cooling FCU Models

Nomenclature



Notes:

Hi-Static fan coil units with EC Motors manufactured by SKM, are available in two versions: D Series (for standard applications) and DC Series (for District cooling applications) are illustrated in the catalogue.

General Features

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

- High efficiency forward curved fan with EC motors for quiet operation.
- Low power consumption.
- Low fluctuation in room temperature and relative humidity and maintains good comfort level.
- Less Noisy.
- High efficiency coil with high efficiency wavy corrugated fins.
- Manual air vent.
- Heavy gauge galvanized casing and fan housing.
- Insulated heavy gauge drain pan.
- Quick electrical connections.
- Easy for installation and maintenance.

Why EC Technology?

Electronically Commutated (EC) motors are permanent-magnet Brushless DC (BLDC) motors in which the motor runs on a DC voltage, but with a normal AC supply.

Advantages of EC motors over conventional AC motors are:

- High efficiency
- Less power consumption and high energy savings
- Integrated controller
- Very simple connections
- Quiet operation
- Eco friendly and suitable for green building concept

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. Refer to page 5, Application Flexibility, for more details.

Options

- Double Skin Units **[DSU*]** Available for DYP/DCYP models only.
- Stainless Steel (Grade 304) Outer Skin **[USS]**
- **3mm** thick fibreglass 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

DYP EC/DCYP EC units are supplied unpainted in a Galvanized finish.

Standard color for DYE/DCYE 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

DYP/DCYP 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**) underwater. Manual air vent is standard. Chilled water cooling coils are available in 3, 4 and 6 rows. Coil connections 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.

Coils are certified in accordance with AHRI Standard 410. Hi-Static fan coil units can be supplied with a maximum total of 6 rows/coil.

AHRI-410 Certification does not include the models which are certified under AHRI-440.

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 **[EFC]**
- Automatic Air Vent **[AAV]**

Fan and Motor

Forward curved, double inlet, centrifugal fan with EC motors, conforming to the standard EN 61800-5-1. Fan casing is galvanized sheet steel and impeller is sendzimir galvanized sheet steel. Fan is mounted on electronically commutated (EC) motor with integrated controls. Motor is class B, insulated with Thermal Overload Protector (TOP) and wired internally. Maximum permissible ambient motor temperature is +80 deg. C and minimum of -40 deg. C. Control input is 0-10 VDC.

Basic Unit and Cabinet

Units are constructed from high gauge galvanized steel sheet complying with ASTM-A653 and JSIG-3302 for maximum protection against corrosion. On request, as option, electrostatic polyester powder coating on zinc coated galvanized and phosphatised panels are available. Ivory white (RAL 7032) is the standard color and other colors available as an option, on request.

Filter

FCUs are lined with Aluminum media filter (ASHRAE 52.2) as standard 1" (Nominal thickness) panel filter with Synthetic washable media used as an option [1SMF].

Drain Pan

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]

Application Flexibility

1. DYP EC and DCYP EC

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

Notes

*DYP-EC and DCYP-EC Units up to 1500 CFM is coming under the scope of AHRI-440 Certification.

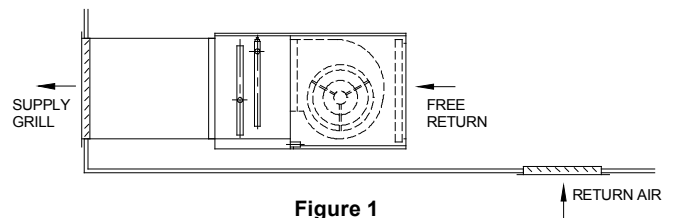


Figure 1

2. DYE EC and DCYE EC

Ceiling suspended, exposed type with chilled water coils includes a cabinet with removable access panels lined with 12mm thick 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.

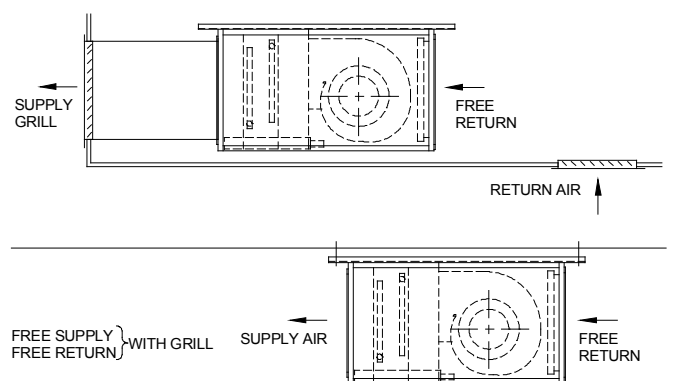


Figure 3

Options and Accessories

The standard options available for Hi - Static fan coil units include:

Thermostat (CHTS)

Thermostat is wall-mounted decorative type, with large LCD and backlight. It is energy-efficient modulating thermostat for controlling of EC fan, operating on AC 24V with DC 0-10V outputs for valves and fan.



It is very important to note that cooling and heating electric valves should be modulating type, since thermostat is providing 0-10V output for cooling and heating valves.

In case, on/off type valves are used, please consult SKM during time of order (it may need to add relay converter to operate on/off valves).

Notes

If CHTS option is not ordered, then 0-10V DC signal for the fan and the required signals and controls for the valves to be provided by others. The unit comes with only junction box with motor connections, if CHTS option is not included.

Recommended for all units installed in locations having a high temperature difference between supply air temperature and surrounding environment of the Hi - Static fan coil units. This

option is available for DYP and DCYP models only. Additional sound attenuation is achieved with double skinning. Cold bridges are avoided fully in the sandwich construction. Perforated inner skin is available as an option.

Controls

Various options on valve packages and control systems are available. Eight (8) 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 22-24.

Ducted Return, Rear (DRR)

Available only for DYP and DCYP models. Refer to page 25.

Ducted Return, Bottom (DRB)

Available only for DYP and DCYP models. Refer to page 25.

Control and Valve Packages

Available from Type 1 to type 8. Refer to page 22-24.

Physical and Electrical Data

Unit Size			6	8	10	12	15	18	21	
Nominal Airflow Rate @ 25Pa ESP, High Speed		cfm	600	800	1000	1200	1500	1800	2100	
		l/s	283	378	472	566	708	849	991	
Coil	Type	-	Copper tubes mechanically bonded to hi-efficiency wavy corrugated Aluminium fins							
	Face Area	ft ²	1.7	2.0	2.7	3.0	3.5	4.7	5.3	
		m ²	0.15	0.19	0.25	0.28	0.33	0.43	0.50	
Fan & Motor	Fan	-	Forward curved, double inlet, centrifugal fan							
	Model	-	180	180	225	180	180	225	225	
	Quantity	-	1	1	1	2	2	2	2	
	Motor	-	220V-240V/1Ph/50Hz-60Hz, EC motors. Control input is 0-10 VDC.							
	Current Drawn	A	1.25	1.25	2.20	2.50	2.50	4.40	4.40	
Unit Weight ** DYP EC & DCYP EC		3R	lbs	60	67	82	87	109	134	141
			kg	27	31	37	40	50	61	64
		4R	lbs	63	70	86	91	114	141	148
			kg	29	32	39	41	52	64	67
		6R	lbs	68	77	95	102	126	156	167
			kg	31	35	43	46	57	71	76
Unit Weight ** DYE EC & DCYE EC		3R	lbs	80	86	98	107	132	163	174
			kg	36	39	45	49	60	74	79
		4R	lbs	83	89	102	111	137	170	181
			kg	38	41	46	51	62	77	82
		6R	lbs	86	96	117	122	149	185	200
			kg	39	44	53	56	68	84	91
Sound Pressure Level *	High	dB(A)	46.0	45.7	49.2	48.5	48.4	51.7	47	

Table 1

Notes

All the specifications are subjected to change by the manufacturer without prior notice.

* Sound Pressure Level is based on DYP EC 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 at maximum capacity. Sound Pressure Values are indicative only and may vary with actual site conditions.

** Weight of Basic units are provided (Single skin casing + Fans + Coil Section 12 fpi/Al fins + Filter section, 1" Thick Flat aluminum Media) For units with any additional option or sections, consult SKM for weight.

Nominal Capacity Ratings - Standard

DYP EC and DYE EC

Chilled Water Coils

Size	3 Rows					4 Rows				6 Rows			
	Nominal Airflow	Total Capacity	Sensible Capacity	Water Flow Rate	Water Pressure Drop	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	MBh	MBh	gpm	ftWg
	l/s	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa
6	600	17.71	12.88	3.54	8.83	21.59	15.01	4.32	15.15	25.61	17.19	5.12	4.86
	283	5.19	3.78	0.22	26.38	6.33	4.40	0.27	45.30	7.51	5.04	0.32	14.53
8	800	22.97	16.77	4.59	15.20	27.36	19.34	5.47	12.35	33.91	22.76	6.78	8.70
	378	6.73	4.92	0.29	45.44	8.02	5.67	0.35	36.91	9.94	6.67	0.43	26.00
10	1000	29.45	21.37	5.89	14.14	34.67	24.45	6.93	8.44	43.27	28.86	8.65	8.02
	472	8.63	6.26	0.37	42.28	10.16	7.17	0.44	25.24	12.68	8.46	0.55	23.98
12	1200	32.97	24.62	6.59	6.50	41.04	29.01	8.21	11.40	50.87	34.14	10.17	8.01
	566	9.66	7.21	0.42	19.44	12.03	8.50	0.52	34.07	14.91	10.01	0.64	23.96
15	1500	40.99	30.48	8.20	10.33	49.02	35.25	9.80	8.44	62.50	42.16	12.50	9.68
	708	12.01	8.93	0.52	30.88	14.37	10.33	0.62	25.22	18.32	12.36	0.79	28.94
18	1800	51.58	37.83	10.32	9.28	60.11	43.07	12.02	5.45	77.19	51.62	15.44	7.47
	849	15.12	11.09	0.65	27.73	17.62	12.62	0.76	16.31	22.63	15.13	0.97	22.33
21	2100	56.68	42.77	11.34	4.46	71.35	50.65	14.27	7.91	90.77	60.48	18.15	10.67
	991	16.61	12.54	0.72	13.32	20.91	14.84	0.90	23.63	26.60	17.73	1.15	31.90

Table 2

Notes

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 (7.2°C) entering chilled water temperature and 10°F (5.5°C) water temperature rise.

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

Capacity Ratings - Standard

DYP EC

3 ROWS

Size	Speed	External Static Prsr.		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
6	Maximum	0.1	25	709	335	18.93	5.55	14.25	4.18	3.79	0.24	9.98	29.84
		0.2	50	673	318	18.4	5.39	13.76	4.03	3.68	0.23	9.47	28.32
		0.3	75	631	298	17.79	5.21	13.18	3.86	3.56	0.22	8.9	26.61
	Medium	0.1	25	619	292	17.61	5.16	13.01	3.81	3.52	0.22	8.73	26.11
		0.2	50	584	276	17.03	4.99	12.49	3.66	3.41	0.21	8.22	24.56
		0.3	75	538	254	16.23	4.76	11.8	3.46	3.25	0.2	7.52	22.48
	Minimum	0.1	25	480	227	15.19	4.45	10.89	3.19	3.04	0.19	6.65	19.89
		0.2	50	457	216	14.76	4.33	10.52	3.08	2.95	0.19	6.31	18.88
		0.3	75	423	200	14.12	4.14	9.97	2.92	2.82	0.18	5.82	17.39
8	Maximum	0.1	25	767	362	21.92	6.43	16.11	4.72	4.38	0.28	13.95	41.69
		0.2	50	723	341	21.16	6.2	15.45	4.53	4.23	0.27	13.07	39.06
		0.3	75	666	314	20.26	5.94	14.62	4.29	4.05	0.26	12.06	36.05
	Medium	0.1	25	635	300	19.78	5.8	14.17	4.15	3.96	0.25	11.54	34.49
		0.2	50	603	285	19.26	5.65	13.7	4.02	3.85	0.24	10.99	32.86
		0.3	75	555	262	18.47	5.41	12.97	3.8	3.69	0.23	10.17	30.41
	Minimum	0.1	25	487	230	17.21	5.05	11.87	3.48	3.44	0.22	8.94	26.72
		0.2	50	465	219	16.73	4.9	11.49	3.37	3.35	0.21	8.49	25.37
		0.3	75	435	205	16.07	4.71	10.95	3.21	3.21	0.2	7.88	23.54
10	Maximum	0.1	25	1212	572	32.48	9.52	24.25	7.11	6.5	0.41	16.94	50.63
		0.2	50	1150	543	31.43	9.21	23.36	6.85	6.29	0.4	15.95	47.66
		0.3	75	1084	512	30.29	8.88	22.39	6.56	6.06	0.38	14.9	44.53
	Medium	0.1	25	1048	495	29.67	8.7	21.85	6.41	5.93	0.37	14.34	42.85
		0.2	50	1006	475	28.94	8.48	21.23	6.22	5.79	0.37	13.69	40.93
		0.3	75	956	451	28.08	8.23	20.48	6	5.62	0.35	12.95	38.71
	Minimum	0.1	25	851	402	26.44	7.75	18.96	5.56	5.29	0.33	11.59	34.65
		0.2	50	813	384	25.83	7.57	18.4	5.39	5.17	0.33	11.11	33.2
		0.3	75	780	368	25.29	7.41	17.9	5.25	5.06	0.32	10.69	31.94
12	Maximum	0.1	25	1331	628	34.25	10.04	26.18	7.67	6.85	0.43	16.98	48.87
		0.2	50	1273	601	33.39	9.79	25.38	7.44	6.68	0.42	16.66	47.91
		0.3	75	1205	569	32.37	9.49	24.44	7.16	6.47	0.41	16.28	46.79
	Medium	0.1	25	1201	567	32.31	9.47	24.38	7.15	6.46	0.41	16.26	46.72
		0.2	50	1133	535	31.26	9.16	23.42	6.86	6.25	0.39	15.89	45.61
		0.3	75	1049	495	29.94	8.77	22.2	6.51	5.99	0.38	15.43	44.53
	Minimum	0.1	25	952	449	28.26	8.28	20.73	6.08	5.65	0.36	14.88	43.59
		0.2	50	904	427	27.42	8.04	19.99	5.86	5.48	0.35	14.62	42.85
		0.3	75	832	393	26.15	7.66	18.86	5.53	5.23	0.33	14.22	42.63
15	Maximum	0.1	25	1457	688	39.54	11.59	29.59	8.67	7.91	0.5	19.66	56.88
		0.2	50	1377	650	38.32	11.23	28.47	8.34	7.66	0.48	19.11	55.24
		0.3	75	1284	606	36.91	10.82	27.15	7.96	7.38	0.47	18.5	53.41
	Medium	0.1	25	1250	590	36.4	10.67	26.67	7.82	7.28	0.46	18.29	52.77
		0.2	50	1182	558	35.4	10.38	25.72	7.54	7.08	0.45	17.87	51.52
		0.3	75	1086	512	33.7	9.88	24.24	7.11	6.74	0.43	17.18	50.46
	Minimum	0.1	25	964	455	31.42	9.21	22.29	6.53	6.28	0.4	16.31	48.85
		0.2	50	919	434	30.56	8.96	21.56	6.32	6.11	0.39	15.99	47.9
		0.3	75	852	402	29.24	8.57	20.44	5.99	5.85	0.37	15.52	46.49
18	Maximum	0.1	25	2269	1071	57.64	16.89	43.94	12.88	11.53	0.73	24.41	70.09
		0.2	50	2149	1014	55.85	16.37	42.31	12.4	11.17	0.7	23.76	68.32
		0.3	75	2036	961	54.15	15.87	40.75	11.94	10.83	0.68	23.15	66.35
	Medium	0.1	25	2009	948	53.74	15.75	40.38	11.84	10.75	0.68	23.01	66.93
		0.2	50	1915	904	52.3	15.33	39.07	11.45	10.46	0.66	22.52	65.45
		0.3	75	1808	853	50.66	14.85	37.56	11.01	10.13	0.64	21.87	64.22
	Minimum	0.1	25	1641	774	48.16	14.11	35.2	10.32	9.63	0.61	21.16	62.41
		0.2	50	1575	743	47.19	13.83	34.27	10.05	9.44	0.6	20.86	61.5
		0.3	75	1509	712	46.03	13.49	33.27	9.75	9.21	0.58	20.51	60.45
21	Maximum	0.1	25	2423	1143	60.19	17.64	46.78	13.71	12.04	0.76	25.99	77.41
		0.2	50	2299	1085	58.44	17.13	45.11	13.22	11.69	0.74	25.42	75.41
		0.3	75	2168	1023	56.56	16.58	43.31	12.69	11.31	0.71	24.44	73.27
	Medium	0.1	25	2096	989	55.51	16.27	42.31	12.4	11.1	0.7	23.89	71.64
		0.2	50	2012	949	54.27	15.91	41.14	12.06	10.85	0.68	23.41	70.28
		0.3	75	1912	902	52.74	15.46	39.71	11.64	10.55	0.67	22.89	69.14
	Minimum	0.1	25	1702	803	49.05	14.38	36.49	10.7	9.81	0.62	22.4	67.17
		0.2	50	1626	767	47.76	14	35.33	10.36	9.55	0.6	22.04	66.17
		0.3	75	1559	736	46.63	13.67	34.31	10.06	9.33	0.59	21.69	65.25

Table 3

Data based on 80°F/67°F (27°C/19.5°C) air on-coil DBT/WBT,
45°F/55°F (7.2°C/12.8°C) entering/leaving chilled water temperature

Capacity Ratings - Standard

DYP EC

4 ROWS

Size	Speed	External Static Prsr.		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
6	Maximum	0.1	25	690	326	22.98	6.74	16.41	4.81	4.6	0.29	16.98	50.77
		0.2	50	653	308	22.16	6.49	15.74	4.61	4.43	0.28	15.89	47.49
		0.3	75	610	288	21.2	6.21	14.96	4.38	4.24	0.27	14.66	43.81
	Medium	0.1	25	606	286	21.11	6.19	14.88	4.36	4.22	0.27	14.54	43.47
		0.2	50	567	268	20.28	5.95	14.19	4.16	4.06	0.26	13.52	40.4
		0.3	75	521	246	19.33	5.67	13.36	3.92	3.87	0.24	12.38	36.99
	Minimum	0.1	25	474	224	18.3	5.37	12.5	3.66	3.66	0.23	11.2	33.49
		0.2	50	449	212	17.74	5.2	12.03	3.53	3.55	0.22	10.58	31.64
		0.3	75	414	195	16.81	4.93	11.31	3.32	3.36	0.21	9.59	28.66
8	Maximum	0.1	25	748	353	25.56	7.49	18.15	5.32	5.11	0.32	10.89	32.56
		0.2	50	700	330	24.59	7.21	17.31	5.07	4.92	0.31	10.14	30.32
		0.3	75	645	304	23.47	6.88	16.34	4.79	4.69	0.3	9.32	27.85
	Medium	0.1	25	625	295	23	6.74	15.96	4.68	4.6	0.29	8.97	26.82
		0.2	50	589	278	22.12	6.48	15.26	4.47	4.42	0.28	8.36	24.98
		0.3	75	541	255	20.93	6.13	14.31	4.2	4.19	0.26	7.54	22.55
	Minimum	0.1	25	482	227	19.4	5.69	13.12	3.84	3.88	0.24	6.57	19.63
		0.2	50	460	217	18.81	5.51	12.66	3.71	3.76	0.24	6.21	18.55
		0.3	75	428	202	17.94	5.26	11.99	3.51	3.59	0.23	5.69	17
10	Maximum	0.1	25	1173	554	37.04	10.86	27.03	7.92	7.41	0.47	9.54	28.51
		0.2	50	1112	525	35.9	10.52	26.01	7.62	7.18	0.45	9	26.91
		0.3	75	1050	495	34.68	10.16	24.95	7.31	6.94	0.44	8.45	25.25
	Medium	0.1	25	1028	485	34.22	10.03	24.56	7.2	6.84	0.43	8.24	24.64
		0.2	50	984	464	33.31	9.76	23.78	6.97	6.66	0.42	7.84	23.43
		0.3	75	933	440	32.22	9.44	22.86	6.7	6.44	0.41	7.38	22.05
	Minimum	0.1	25	837	395	30.04	8.81	21.07	6.18	6.01	0.38	6.48	19.38
		0.2	50	802	378	29.23	8.57	20.41	5.98	5.85	0.37	6.16	18.42
		0.3	75	769	363	28.45	8.34	19.78	5.8	5.69	0.36	5.87	17.53
12	Maximum	0.1	25	1297	612	41.91	12.28	30.28	8.87	8.38	0.53	11.85	35.43
		0.2	50	1237	584	40.69	11.93	29.24	8.57	8.14	0.51	11.22	33.53
		0.3	75	1165	550	39.21	11.49	27.98	8.2	7.84	0.49	10.48	31.32
	Medium	0.1	25	1169	552	39.29	11.52	28.05	8.22	7.86	0.5	10.52	31.44
		0.2	50	1097	518	37.83	11.09	26.79	7.85	7.57	0.48	9.81	29.31
		0.3	75	1014	479	36.17	10.6	25.34	7.43	7.23	0.46	9.03	26.98
	Minimum	0.1	25	938	443	34.51	10.11	23.95	7.02	6.9	0.44	8.28	24.74
		0.2	50	884	417	33.2	9.73	22.9	6.71	6.64	0.42	7.71	23.03
		0.3	75	811	383	31.38	9.2	21.46	6.29	6.28	0.4	6.94	20.75
15	Maximum	0.1	25	1416	668	46.15	13.53	33.35	9.78	9.23	0.58	7.54	22.55
		0.2	50	1333	629	44.45	13.03	31.9	9.35	8.89	0.56	7.04	21.03
		0.3	75	1241	586	42.52	12.46	30.26	8.87	8.5	0.54	6.48	19.37
	Medium	0.1	25	1225	578	42.18	12.36	29.97	8.78	8.44	0.53	6.38	19.08
		0.2	50	1148	542	40.45	11.86	28.54	8.36	8.09	0.51	5.91	17.66
		0.3	75	1053	497	38.26	11.21	26.75	7.84	7.65	0.48	5.33	15.93
	Minimum	0.1	25	952	449	35.88	10.52	24.8	7.27	7.18	0.45	4.73	14.14
		0.2	50	905	427	34.74	10.18	23.88	7	6.95	0.44	4.46	13.32
		0.3	75	835	394	32.99	9.67	22.49	6.59	6.6	0.42	4.05	12.11
18	Maximum	0.1	25	2186	1032	65.81	19.29	48.93	14.34	13.16	0.83	6.46	19.3
		0.2	50	2075	979	63.74	18.68	47.1	13.81	12.75	0.8	6.08	18.19
		0.3	75	1977	933	61.89	18.14	45.47	13.33	12.38	0.78	5.76	17.22
	Medium	0.1	25	1957	924	61.51	18.03	45.13	13.23	12.3	0.78	5.69	17.02
		0.2	50	1860	878	59.64	17.48	43.48	12.74	11.93	0.75	5.38	16.07
		0.3	75	1755	828	57.56	16.87	41.67	12.21	11.51	0.73	5.03	15.04
	Minimum	0.1	25	1613	761	54.65	16.02	39.15	11.48	10.93	0.69	4.57	13.66
		0.2	50	1551	732	53.27	15.61	38	11.14	10.65	0.67	4.36	13.03
		0.3	75	1482	699	51.68	15.15	36.7	10.76	10.34	0.65	4.12	12.31
21	Maximum	0.1	25	2347	1108	74.1	21.72	54.07	15.85	14.82	0.93	8.48	25.35
		0.2	50	2223	1049	71.78	21.04	52.01	15.24	14.36	0.91	7.99	23.9
		0.3	75	2101	991	69.38	20.33	49.91	14.63	13.88	0.88	7.5	22.43
	Medium	0.1	25	2056	970	68.45	20.06	49.12	14.4	13.69	0.86	7.32	21.88
		0.2	50	1969	929	66.63	19.53	47.58	13.94	13.33	0.84	6.96	20.81
		0.3	75	1864	880	64.4	18.88	45.69	13.39	12.88	0.81	6.54	19.54
	Minimum	0.1	25	1675	790	60.11	17.62	42.16	12.36	12.02	0.76	5.75	17.19
		0.2	50	1604	757	58.46	17.13	40.81	11.96	11.69	0.74	5.46	16.32
		0.3	75	1539	726	56.93	16.69	39.57	11.6	11.39	0.72	5.2	15.54

Table 4

Data based on 80°F/67°F (27°C/19.5°C) air on-coil DBT/WBT, 45°F/55°F (7.2°C/12.8°C) entering/leaving chilled water temperature

Capacity Ratings - Standard

DYP EC

6 ROWS

Size	Speed	External Static Prsr.		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
6	Maximum	0.1	25	651	307	26.01	7.62	17.89	5.24	5.2	0.33	5	14.95
		0.2	50	614	290	24.93	7.31	17.06	5	4.99	0.31	4.63	13.83
		0.3	75	570	269	23.62	6.92	16.06	4.71	4.72	0.3	4.19	12.53
	Medium	0.1	25	575	271	23.77	6.97	16.18	4.74	4.75	0.3	4.24	12.68
		0.2	50	534	252	22.52	6.6	15.23	4.46	4.5	0.28	3.84	11.48
		0.3	75	492	232	21.25	6.23	14.25	4.18	4.25	0.27	3.45	10.32
	Minimum	0.1	25	462	218	20.33	5.96	13.56	3.97	4.07	0.26	3.18	9.52
		0.2	50	433	204	19.43	5.69	12.87	3.77	3.89	0.25	2.93	8.76
		0.3	75	398	188	18.31	5.37	12.03	3.53	3.66	0.23	2.63	7.85
8	Maximum	0.1	25	708	334	29.86	8.75	20.14	5.9	5.97	0.38	6.88	20.58
		0.2	50	659	311	28.33	8.3	19	5.57	5.67	0.36	6.25	18.69
		0.3	75	608	287	26.71	7.83	17.79	5.22	5.34	0.34	5.61	16.78
	Medium	0.1	25	604	285	26.58	7.79	17.7	5.19	5.32	0.34	5.56	16.63
		0.2	50	562	265	25.2	7.39	16.68	4.89	5.04	0.32	5.05	15.08
		0.3	75	516	244	23.67	6.94	15.56	4.56	4.73	0.3	4.5	13.45
	Minimum	0.1	25	473	223	22.2	6.51	14.49	4.25	4.44	0.28	4	11.96
		0.2	50	449	212	21.36	6.26	13.88	4.07	4.27	0.27	3.73	11.15
		0.3	75	415	196	20.14	5.9	13.01	3.81	4.03	0.25	3.35	10.01
10	Maximum	0.1	25	1104	521	44.44	13.03	30.43	8.92	8.89	0.56	8.42	25.18
		0.2	50	1049	495	42.88	12.57	29.21	8.56	8.58	0.54	7.89	23.58
		0.3	75	998	471	41.4	12.13	28.08	8.23	8.28	0.52	7.4	22.11
	Medium	0.1	25	988	466	41.11	12.05	27.85	8.16	8.22	0.52	7.3	21.82
		0.2	50	941	444	39.72	11.64	26.79	7.85	7.94	0.5	6.86	20.49
		0.3	75	889	420	38.11	11.17	25.58	7.5	7.62	0.48	6.35	18.99
	Minimum	0.1	25	814	384	35.72	10.47	23.8	6.98	7.14	0.45	5.64	16.87
		0.2	50	782	369	34.68	10.16	23.03	6.75	6.94	0.44	5.35	15.98
		0.3	75	749	353	33.59	9.85	22.23	6.52	6.72	0.42	5.04	15.08
12	Maximum	0.1	25	1229	580	49.63	14.55	33.95	9.95	9.93	0.63	7.66	22.89
		0.2	50	1164	549	47.77	14	32.51	9.53	9.55	0.6	7.14	21.33
		0.3	75	1084	512	45.44	13.32	30.71	9	9.09	0.57	6.51	19.45
	Medium	0.1	25	1103	521	46	13.48	31.14	9.13	9.2	0.58	6.66	19.9
		0.2	50	1030	486	43.81	12.84	29.47	8.64	8.76	0.55	6.08	18.19
		0.3	75	953	450	41.38	12.13	27.66	8.11	8.28	0.52	5.48	16.37
	Minimum	0.1	25	906	428	39.88	11.69	26.55	7.78	7.98	0.5	5.12	15.3
		0.2	50	843	398	37.8	11.08	25.02	7.33	7.56	0.48	4.64	13.87
		0.3	75	775	366	35.54	10.42	23.36	6.85	7.11	0.45	4.14	12.38
15	Maximum	0.1	25	1336	630	55.48	16.26	37.59	11.02	11.1	0.7	7.77	23.22
		0.2	50	1254	592	53.04	15.55	35.73	10.47	10.61	0.67	7.15	21.38
		0.3	75	1163	549	50.21	14.72	33.61	9.85	10.04	0.63	6.46	19.33
	Medium	0.1	25	1168	551	50.37	14.76	33.73	9.89	10.07	0.64	6.5	19.44
		0.2	50	1084	512	47.68	13.98	31.74	9.3	9.54	0.6	5.88	17.57
		0.3	75	998	471	44.87	13.15	29.66	8.69	8.97	0.57	5.26	15.71
	Minimum	0.1	25	930	439	42.58	12.48	27.99	8.2	8.52	0.54	4.77	14.27
		0.2	50	874	412	40.66	11.92	26.6	7.8	8.13	0.51	4.39	13.11
		0.3	75	805	380	38.24	11.21	24.86	7.29	7.65	0.48	3.92	11.71
18	Maximum	0.1	25	2050	967	81.07	23.76	55.82	16.36	16.21	1.02	8.18	24.44
		0.2	50	1963	926	78.64	23.05	53.93	15.81	15.73	0.99	7.73	23.11
		0.3	75	1881	888	76.33	22.37	52.13	15.28	15.27	0.96	7.31	21.87
	Medium	0.1	25	1855	875	75.58	22.15	51.55	15.11	15.12	0.95	7.18	21.47
		0.2	50	1759	830	72.82	21.34	49.42	14.48	14.56	0.92	6.71	20.04
		0.3	75	1665	786	70.06	20.53	47.3	13.86	14.01	0.88	6.24	18.67
	Minimum	0.1	25	1564	738	66.94	19.62	44.95	13.18	13.39	0.84	5.74	17.16
		0.2	50	1502	709	64.99	19.05	43.49	12.75	13	0.82	5.44	16.25
		0.3	75	1429	674	62.66	18.37	41.76	12.24	12.53	0.79	5.08	15.2
21	Maximum	0.1	25	2209	1042	90.25	26.45	61.42	18	18.05	1.14	10.56	31.56
		0.2	50	2098	990	87.12	25.53	58.98	17.29	17.42	1.1	9.89	29.57
		0.3	75	1996	942	84.25	24.69	56.74	16.63	16.85	1.06	9.3	27.8
	Medium	0.1	25	1976	932	83.68	24.53	56.3	16.5	16.74	1.06	9.19	27.46
		0.2	50	1881	888	80.86	23.7	54.14	15.87	16.17	1.02	8.62	25.77
		0.3	75	1777	839	77.57	22.73	51.7	15.15	15.51	0.98	7.99	23.88
	Minimum	0.1	25	1627	768	72.67	21.3	48.1	14.1	14.53	0.92	7.08	21.18
		0.2	50	1564	738	70.56	20.68	46.56	13.65	14.11	0.89	6.71	20.06
		0.3	75	1498	707	68.32	20.03	44.94	13.17	13.66	0.86	6.33	18.91

Table 5

Data based on 80°F/67°F (27°C/19.5°C) air on-coil DBT/WBT, 45°F/55°F (7.2°C/12.8°C) entering/leaving chilled water temperature

Nominal Capacity Ratings - District Cooling

DCYP EC and DCYE EC

Chilled Water Coils

Size	3 Rows					4 Rows				6 Rows			
	Nominal Airflow	Total Capacity	Sensible Capacity	Water Flow Rate	Water Pressure Drop	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	MBh	MBh	gpm	ftWg
	l/s	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa
6	600	16.55	12.73	2.07	21.34	17.66	13.82	2.21	10.61	22.64	16.40	2.83	10.91
	283	4.85	3.73	0.13	63.78	5.18	4.05	0.14	31.71	6.64	4.81	0.18	32.61
8	800	18.58	15.49	2.32	10.04	22.13	17.75	2.77	8.23	32.22	22.65	4.03	22.27
	378	5.44	4.54	0.15	30.02	6.49	5.20	0.17	24.59	9.44	6.64	0.25	66.56
10	1000	23.59	19.63	2.95	9.21	32.54	24.20	4.07	20.54	38.09	27.45	4.76	13.25
	472	6.92	5.75	0.19	27.54	9.54	7.09	0.26	61.39	11.16	8.04	0.30	39.62
12	1200	30.41	24.20	3.80	14.24	33.19	26.63	4.15	7.39	43.03	31.78	5.38	7.71
	566	8.91	7.09	0.24	42.56	9.73	7.80	0.26	22.09	12.61	9.31	0.34	23.03
15	1500	32.66	28.03	4.08	6.29	44.69	34.36	5.59	13.66	56.53	40.77	7.07	13.65
	708	9.57	8.22	0.26	18.80	13.10	10.07	0.35	40.83	16.57	11.95	0.45	40.82
18	1800	46.94	36.92	5.87	14.90	53.54	41.49	6.69	11.30	65.65	48.17	8.21	7.90
	849	13.76	10.82	0.37	44.55	15.69	12.16	0.42	33.77	19.24	14.12	0.52	23.62
21	2100	48.93	40.79	6.12	8.34	59.57	47.21	7.45	8.35	79.76	57.47	9.97	12.08
	991	14.34	11.96	0.39	24.92	17.46	13.84	0.47	24.97	23.38	16.84	0.63	36.10

Table 6

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.

Air Flow Rates - District Cooling

DCYP EC

3 Rows

Size	Speed	External Static Pressure		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
6	Maximum	0.1	25	730.1	345	18.58	5.45	14.62	4.28	2.32	0.15	26.18	78.26
		0.2	50	682.08	322	17.48	5.12	13.8	4.04	2.18	0.14	23.5	70.23
		0.3	75	633.08	299	16.14	4.73	12.87	3.77	2.02	0.13	20.41	61
	Medium	0.1	25	614.46	290	15.66	4.59	12.52	3.67	1.96	0.12	19.34	57.8
		0.2	50	584.08	276	14.91	4.37	11.97	3.51	1.86	0.12	17.74	53.04
		0.3	75	542.92	256	14.01	4.11	11.26	3.3	1.75	0.11	15.9	47.53
	Minimum	0.1	25	482.16	228	12.94	3.79	10.29	3.02	1.62	0.1	13.81	41.29
		0.2	50	460.6	217	12.63	3.7	9.97	2.92	1.58	0.1	13.23	39.53
		0.3	75	436.1	206	12.3	3.61	9.61	2.82	1.54	0.1	12.64	37.77
8	Maximum	0.1	25	767.886	362	16.86	4.94	14.57	4.27	2.11	0.13	8.45	25.27
		0.2	50	727.419	343	16.22	4.75	13.97	4.09	2.03	0.13	7.9	23.61
		0.3	75	675.108	319	15.47	4.53	13.22	3.87	1.93	0.12	7.26	21.7
	Medium	0.1	25	636.615	300	14.95	4.38	12.67	3.71	1.87	0.12	6.83	20.42
		0.2	50	609.966	288	14.6	4.28	12.29	3.6	1.82	0.12	6.55	19.59
		0.3	75	572.46	270	14.13	4.14	11.76	3.45	1.77	0.11	6.18	18.48
	Minimum	0.1	25	499.422	236	13.22	3.88	10.72	3.14	1.65	0.1	5.5	16.43
		0.2	50	473.76	224	12.9	3.78	10.34	3.03	1.61	0.1	5.26	15.73
		0.3	75	452.046	213	12.61	3.7	10.02	2.94	1.58	0.1	5.06	15.12
10	Maximum	0.1	25	1215.36	574	26.39	7.74	22.53	6.6	3.3	0.21	11.24	33.6
		0.2	50	1160.64	548	25.11	7.36	21.59	6.33	3.14	0.2	10.29	30.77
		0.3	75	1095.36	517	23.7	6.95	20.51	6.01	2.96	0.19	9.29	27.77
	Medium	0.1	25	1053.975	497	22.98	6.73	19.88	5.83	2.87	0.18	8.79	26.28
		0.2	50	1012.05	478	22.29	6.53	19.25	5.64	2.79	0.18	8.33	24.9
		0.3	75	968.175	457	21.6	6.33	18.6	5.45	2.7	0.17	7.88	23.56
	Minimum	0.1	25	856.52	404	20.03	5.87	17	4.98	2.5	0.16	6.89	20.6
		0.2	50	817.32	386	19.52	5.72	16.45	4.82	2.44	0.15	6.59	19.68
		0.3	75	781.06	369	19.06	5.59	15.94	4.67	2.38	0.15	6.31	18.87
12	Maximum	0.1	25	1384.304	653	32.78	9.61	26.64	7.81	4.1	0.26	16.27	48.63
		0.2	50	1292.724	610	30.51	8.94	25.02	7.33	3.81	0.24	14.32	42.8
		0.3	75	1201.144	567	28.23	8.27	23.38	6.85	3.53	0.22	12.47	37.28
	Medium	0.1	25	1198.275	565	28.16	8.25	23.33	6.84	3.52	0.22	12.42	37.13
		0.2	50	1128.075	532	26.52	7.77	22.11	6.48	3.32	0.21	11.17	33.39
		0.3	75	1046.175	494	24.84	7.28	20.75	6.08	3.1	0.2	9.94	29.71
	Minimum	0.1	25	952.495	449	23.34	6.84	19.33	5.67	2.92	0.18	8.9	26.62
		0.2	50	913.095	431	22.81	6.69	18.77	5.5	2.85	0.18	8.55	25.56
		0.3	75	856.95	404	22.09	6.48	17.97	5.27	2.76	0.17	8.08	24.14
15	Maximum	0.1	25	1487.35	702	30.43	8.92	27.11	7.94	3.8	0.24	5.54	16.57
		0.2	50	1394.76	658	28.97	8.49	25.75	7.55	3.62	0.23	5.08	15.18
		0.3	75	1293.305	610	27.48	8.05	24.3	7.12	3.43	0.22	4.62	13.82
	Medium	0.1	25	1245.04	588	26.81	7.86	23.62	6.92	3.35	0.21	4.42	13.22
		0.2	50	1186.925	560	26.03	7.63	22.8	6.68	3.25	0.21	4.2	12.55
		0.3	75	1106.155	522	24.99	7.33	21.66	6.35	3.12	0.2	3.9	11.67
	Minimum	0.1	25	969.198	457	23.29	6.83	19.74	5.78	2.91	0.18	3.44	10.29
		0.2	50	925.188	437	22.74	6.67	19.11	5.6	2.84	0.18	3.3	9.87
		0.3	75	877.266	414	22.14	6.49	18.41	5.4	2.77	0.17	3.15	9.4
18	Maximum	0.1	25	2295.82	1083	55.27	16.2	44.22	12.96	6.91	0.44	19.93	59.57
		0.2	50	2175.49	1027	53	15.53	42.38	12.42	6.63	0.42	18.5	55.29
		0.3	75	2049.43	967	49.86	14.61	40.15	11.77	6.23	0.39	16.59	49.59
	Medium	0.1	25	1999.68	944	48.57	14.23	39.25	11.5	6.07	0.38	15.84	47.33
		0.2	50	1918.08	905	46.45	13.61	37.76	11.07	5.81	0.37	14.63	43.73
		0.3	75	1819.2	858	43.94	12.88	35.96	10.54	5.49	0.35	13.26	39.63
	Minimum	0.1	25	1656.2	782	40.19	11.78	33.11	9.71	5.02	0.32	11.31	33.82
		0.2	50	1583.68	747	38.73	11.35	31.91	9.35	4.84	0.31	10.6	31.68
		0.3	75	1518.02	716	37.54	11	30.87	9.05	4.69	0.3	10.02	29.96
21	Maximum	0.1	25	2419.015	1142	52.51	15.39	44.86	13.15	6.56	0.41	9.46	28.26
		0.2	50	2308.235	1089	49.93	14.63	42.96	12.59	6.24	0.39	8.64	25.83
		0.3	75	2179.31	1028	47.2	13.83	40.84	11.97	5.9	0.37	7.82	23.37
	Medium	0.1	25	2118.76	1000	46.14	13.52	39.92	11.7	5.77	0.36	7.51	22.45
		0.2	50	2034.48	960	44.74	13.11	38.65	11.33	5.59	0.35	7.11	21.25
		0.3	75	1945.3	918	43.34	12.7	37.34	10.94	5.42	0.34	6.72	20.08
	Minimum	0.1	25	1720.795	812	40.16	11.77	34.12	10	5.02	0.32	5.87	17.54
		0.2	50	1641.995	775	39.13	11.47	33	9.67	4.89	0.31	5.6	16.74
		0.3	75	1569.105	740	38.21	11.2	31.97	9.37	4.78	0.3	5.37	16.05

Table 7

Data based on 78°F/65°F (25.5°C/18.3°C) air on-coil DBT/WBT, 42°F/58°F (5.5°C/14.4°C) entering/leaving chilled water temperature

Air Flow Rates - District Cooling

DCYP EC

Size	Speed	External Static Pressure		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
6	Maximum	0.1	25	730.1	345	15.07	4.42	13.56	3.97	1.88	0.12	18.08	54.05
		0.2	50	682.08	322	14.01	4.11	12.73	3.73	1.75	0.11	15.9	47.54
		0.3	75	633.08	299	13	3.81	11.91	3.49	1.63	0.1	13.93	41.63
	Medium	0.1	25	614.46	290	12.65	3.71	11.61	3.4	1.58	0.1	13.27	39.65
		0.2	50	584.08	276	12.11	3.55	11.12	3.26	1.51	0.1	12.3	36.75
		0.3	75	542.92	256	11.56	3.39	10.53	3.09	1.45	0.09	11.32	33.84
	Minimum	0.1	25	482.16	228	10.84	3.18	9.68	2.84	1.36	0.09	10.11	30.22
		0.2	50	460.6	217	10.6	3.11	9.38	2.75	1.33	0.08	9.72	29.06
		0.3	75	436.1	206	10.34	3.03	9.04	2.65	1.29	0.08	9.29	27.78
8	Maximum	0.1	25	767.886	362	14.31	4.19	13.88	4.07	1.79	0.11	6.32	18.9
		0.2	50	727.419	343	13.79	4.04	13.31	3.9	1.72	0.11	5.92	17.71
		0.3	75	675.108	319	13.16	3.86	12.59	3.69	1.64	0.1	5.45	16.3
	Medium	0.1	25	636.615	300	12.72	3.73	12.06	3.53	1.59	0.1	5.13	15.34
		0.2	50	609.966	288	12.42	3.64	11.69	3.43	1.55	0.1	4.92	14.71
		0.3	75	572.46	270	12	3.52	11.17	3.27	1.5	0.09	4.63	13.85
	Minimum	0.1	25	499.422	236	11.19	3.28	10.14	2.97	1.4	0.09	4.09	12.23
		0.2	50	473.76	224	10.89	3.19	9.77	2.86	1.36	0.09	3.9	11.67
		0.3	75	452.046	213	10.64	3.12	9.45	2.77	1.33	0.08	3.74	11.19
10	Maximum	0.1	25	1215.36	574	21.88	6.41	21.26	6.23	2.74	0.17	8.06	24.1
		0.2	50	1160.64	548	21.01	6.16	20.45	6	2.63	0.17	7.51	22.43
		0.3	75	1095.36	517	20.05	5.88	19.51	5.72	2.51	0.16	6.91	20.64
	Medium	0.1	25	1053.975	497	19.48	5.71	18.93	5.55	2.43	0.15	6.56	19.61
		0.2	50	1012.05	478	18.92	5.55	18.34	5.38	2.37	0.15	6.23	18.63
		0.3	75	968.175	457	18.37	5.38	17.73	5.2	2.3	0.14	5.91	17.67
	Minimum	0.1	25	856.52	404	17.04	5	16.18	4.74	2.13	0.13	5.18	15.48
		0.2	50	817.32	386	16.6	4.87	15.64	4.58	2.08	0.13	4.94	14.78
		0.3	75	781.06	369	16.2	4.75	15.14	4.44	2.02	0.13	4.73	14.15
12	Maximum	0.1	25	1384.304	653	26.57	7.79	24.8	7.27	3.32	0.21	11.2	33.48
		0.2	50	1292.724	610	24.67	7.23	23.28	6.82	3.08	0.19	9.82	29.35
		0.3	75	1201.144	567	23.07	6.76	21.87	6.41	2.88	0.18	8.72	26.06
	Medium	0.1	25	1198.275	565	23.02	6.75	21.83	6.4	2.88	0.18	8.69	25.97
		0.2	50	1128.075	532	22	6.45	20.8	6.1	2.75	0.17	8.01	23.95
		0.3	75	1046.175	494	20.9	6.13	19.64	5.76	2.61	0.16	7.32	21.88
	Minimum	0.1	25	952.495	449	19.76	5.79	18.32	5.37	2.47	0.16	6.63	19.81
		0.2	50	913.095	431	19.31	5.66	17.77	5.21	2.41	0.15	6.36	19.01
		0.3	75	856.95	404	18.68	5.47	16.99	4.98	2.33	0.15	6	17.93
15	Maximum	0.1	25	1487.35	702	25.85	7.58	25.85	7.58	3.23	0.2	4.15	12.39
		0.2	50	1394.76	658	24.68	7.23	24.61	7.21	3.09	0.19	3.82	11.41
		0.3	75	1293.305	610	23.47	6.88	23.24	6.81	2.93	0.19	3.49	10.44
	Medium	0.1	25	1245.04	588	22.92	6.72	22.58	6.62	2.86	0.18	3.35	10
		0.2	50	1186.925	560	22.27	6.53	21.8	6.39	2.78	0.18	3.18	9.5
		0.3	75	1106.155	522	21.37	6.26	20.69	6.07	2.67	0.17	2.96	8.83
	Minimum	0.1	25	969.198	457	19.87	5.82	18.8	5.51	2.48	0.16	2.6	7.76
		0.2	50	925.188	437	19.38	5.68	18.17	5.33	2.42	0.15	2.48	7.43
		0.3	75	877.266	414	18.84	5.52	17.49	5.13	2.35	0.15	2.36	7.06
18	Maximum	0.1	25	2295.82	1083	45.25	13.26	41.26	12.09	5.66	0.36	13.97	41.75
		0.2	50	2175.49	1027	42.84	12.56	39.33	11.53	5.36	0.34	12.67	37.88
		0.3	75	2049.43	967	40.19	11.78	37.24	10.92	5.02	0.32	11.31	33.81
	Medium	0.1	25	1999.68	944	39.14	11.47	36.41	10.67	4.89	0.31	10.79	32.26
		0.2	50	1918.08	905	37.45	10.98	35.05	10.27	4.68	0.3	9.98	29.84
		0.3	75	1819.2	858	35.62	10.44	33.48	9.81	4.45	0.28	9.13	27.3
	Minimum	0.1	25	1656.2	782	33.3	9.76	31.11	9.12	4.16	0.26	8.1	24.23
		0.2	50	1583.68	747	32.36	9.49	30.08	8.82	4.05	0.26	7.7	23.03
		0.3	75	1518.02	716	31.55	9.25	29.15	8.54	3.94	0.25	7.37	22.02
21	Maximum	0.1	25	2419.015	1142	43.57	12.77	42.34	12.41	5.45	0.34	6.78	20.28
		0.2	50	2308.235	1089	41.83	12.26	40.72	11.93	5.23	0.33	6.31	18.85
		0.3	75	2179.31	1028	39.94	11.71	38.87	11.39	4.99	0.31	5.81	17.36
	Medium	0.1	25	2118.76	1000	39.1	11.46	38.01	11.14	4.89	0.31	5.59	16.72
		0.2	50	2034.48	960	37.98	11.13	36.82	10.79	4.75	0.3	5.31	15.88
		0.3	75	1945.3	918	36.84	10.8	35.58	10.43	4.61	0.29	5.03	15.04
	Minimum	0.1	25	1720.795	812	34.17	10.02	32.47	9.52	4.27	0.27	4.4	13.16
		0.2	50	1641.995	775	33.29	9.76	31.38	9.2	4.16	0.26	4.2	12.56
		0.3	75	1569.105	740	32.48	9.52	30.37	8.9	4.06	0.26	4.02	12.02

Table 8

Data based on 76°F/63°F (24.4°C/17.2°C) air on-coil DBT/WBT, 42°F/58°F (5.5°C/14.4°C) entering/leaving chilled water temperature

Capacity Ratings - District Cooling

DCYP EC

4 Rows

Size	Speed	External Static Pressure		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
6	Maximum	0.1	25	713.44	337	19.02	5.57	15.48	4.54	2.38	0.15	12.09	36.14
		0.2	50	667.38	315	17.81	5.22	14.56	4.27	2.23	0.14	10.76	32.17
		0.3	75	620.34	293	16.82	4.93	13.71	4.02	2.1	0.13	9.74	29.1
	Medium	0.1	25	607.6	287	16.57	4.86	13.48	3.95	2.07	0.13	9.48	28.33
		0.2	50	574.28	271	15.94	4.67	12.89	3.78	1.99	0.13	8.85	26.46
		0.3	75	533.12	252	15.2	4.46	12.18	3.57	1.9	0.12	8.14	24.33
	Minimum	0.1	25	477.26	225	14.25	4.18	11.22	3.29	1.78	0.11	7.26	21.7
		0.2	50	457.66	216	13.92	4.08	10.88	3.19	1.74	0.11	6.96	20.82
		0.3	75	431.2	203	13.47	3.95	10.42	3.05	1.68	0.11	6.57	19.65
8	Maximum	0.1	25	758.016	358	19.81	5.81	16.45	4.82	2.48	0.16	6.76	20.21
		0.2	50	714.588	337	19.01	5.57	15.69	4.6	2.38	0.15	6.28	18.79
		0.3	75	663.264	313	18.11	5.31	14.81	4.34	2.26	0.14	5.77	17.24
	Medium	0.1	25	630.693	298	17.56	5.15	14.25	4.18	2.19	0.14	5.46	16.32
		0.2	50	604.044	285	17.12	5.02	13.8	4.04	2.14	0.13	5.22	15.6
		0.3	75	565.551	267	16.48	4.83	13.14	3.85	2.06	0.13	4.88	14.58
	Minimum	0.1	25	495.474	234	15.29	4.48	11.93	3.5	1.91	0.12	4.28	12.78
		0.2	50	470.799	222	14.86	4.36	11.49	3.37	1.86	0.12	4.06	12.15
		0.3	75	449.085	212	14.47	4.24	11.1	3.25	1.81	0.11	3.88	11.58
10	Maximum	0.1	25	1195.2	564	35.95	10.54	27.43	8.04	4.49	0.28	24.5	73.22
		0.2	50	1137.6	537	34.15	10.01	26.17	7.67	4.27	0.27	22.36	66.85
		0.3	75	1072.32	506	32.08	9.4	24.72	7.25	4.01	0.25	20.03	59.86
	Medium	0.1	25	1041.3	491	31.11	9.12	24.04	7.05	3.89	0.25	18.97	56.71
		0.2	50	1000.35	472	29.88	8.76	23.15	6.78	3.73	0.24	17.66	52.79
		0.3	75	954.525	450	28.56	8.37	22.17	6.5	3.57	0.23	16.31	48.76
	Minimum	0.1	25	847.7	400	25.89	7.59	20.03	5.87	3.24	0.2	13.71	40.98
		0.2	50	809.48	382	25.07	7.35	19.32	5.66	3.13	0.2	12.95	38.72
		0.3	75	775.18	366	24.39	7.15	18.7	5.48	3.05	0.19	12.34	36.9
12	Maximum	0.1	25	1347.672	636	34.13	10	28.47	8.34	4.27	0.27	7.77	23.21
		0.2	50	1259.948	595	32.18	9.43	26.86	7.87	4.02	0.25	6.99	20.91
		0.3	75	1173.188	554	30.41	8.91	25.3	7.42	3.8	0.24	6.33	18.91
	Medium	0.1	25	1178.775	556	30.52	8.95	25.4	7.45	3.82	0.24	6.37	19.03
		0.2	50	1106.625	522	29.15	8.54	24.14	7.08	3.64	0.23	5.87	17.54
		0.3	75	1026.675	484	27.72	8.12	22.76	6.67	3.46	0.22	5.37	16.04
	Minimum	0.1	25	944.615	446	26.32	7.71	21.36	6.26	3.29	0.21	4.89	14.63
		0.2	50	904.23	427	25.64	7.52	20.67	6.06	3.21	0.2	4.67	13.97
		0.3	75	846.115	399	24.68	7.23	19.68	5.77	3.08	0.19	4.37	13.05
15	Maximum	0.1	25	1458.785	688	40.04	11.74	32.16	9.43	5.01	0.32	11.24	33.6
		0.2	50	1364.225	644	37.44	10.97	30.21	8.86	4.68	0.3	9.97	29.82
		0.3	75	1267.695	598	35.18	10.31	28.36	8.31	4.4	0.28	8.93	26.7
	Medium	0.1	25	1232.235	581	34.48	10.11	27.72	8.13	4.31	0.27	8.62	25.77
		0.2	50	1170.18	552	33.31	9.76	26.63	7.81	4.16	0.26	8.11	24.24
		0.3	75	1088.425	514	31.85	9.33	25.22	7.39	3.98	0.25	7.49	22.38
	Minimum	0.1	25	960.396	453	29.66	8.69	23.01	6.74	3.71	0.23	6.6	19.73
		0.2	50	919.32	434	28.96	8.49	22.3	6.54	3.62	0.23	6.33	18.91
		0.3	75	869.442	410	28.1	8.24	21.43	6.28	3.51	0.22	6	17.93
18	Maximum	0.1	25	2240.43	1057	61.82	18.12	49	14.36	7.73	0.49	14.58	43.59
		0.2	50	2122.965	1002	58.52	17.15	46.6	13.66	7.32	0.46	13.23	39.55
		0.3	75	2003.59	945	55.07	16.14	44.1	12.93	6.88	0.43	11.87	35.5
	Medium	0.1	25	1971.84	931	54.15	15.87	43.44	12.73	6.77	0.43	11.53	34.45
		0.2	50	1887.36	891	51.77	15.17	41.68	12.22	6.47	0.41	10.64	31.81
		0.3	75	1785.6	843	49.04	14.37	39.61	11.61	6.13	0.39	9.67	28.9
	Minimum	0.1	25	1637.58	773	45.87	13.44	36.87	10.81	5.73	0.36	8.59	25.67
		0.2	50	1568	740	44.56	13.06	35.65	10.45	5.57	0.35	8.16	24.38
		0.3	75	1503.32	709	43.38	12.72	34.52	10.12	5.42	0.34	7.78	23.25
21	Maximum	0.1	25	2376.995	1122	61.97	18.16	50.91	14.92	7.75	0.49	8.96	26.78
		0.2	50	2263.35	1068	59.02	17.3	48.66	14.26	7.38	0.47	8.22	24.56
		0.3	75	2133.47	1007	56.16	16.46	46.26	13.56	7.02	0.44	7.52	22.48
	Medium	0.1	25	2092.3	987	55.3	16.21	45.52	13.34	6.91	0.44	7.32	21.87
		0.2	50	2010.96	949	53.66	15.73	44.06	12.91	6.71	0.42	6.94	20.74
		0.3	75	1918.84	906	51.89	15.21	42.43	12.44	6.49	0.41	6.54	19.54
	Minimum	0.1	25	1705.035	805	48.06	14.09	38.73	11.35	6.01	0.38	5.7	17.05
		0.2	50	1627.22	768	46.73	13.7	37.4	10.96	5.84	0.37	5.43	16.22
		0.3	75	1557.285	735	45.56	13.35	36.2	10.61	5.69	0.36	5.19	15.51

Table 9

Data based on 78°F/65°F (25.5°C/18.3°C) air on-coil DBT/WBT, 42°F/58°F (5.5°C/14.4°C) entering/leaving chilled water temperature

Capacity Ratings - District Cooling

DCYP EC

Size	Speed	External Static Pressure		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
6	Maximum	0.1	25	713.44	337	15.94	4.67	14.59	4.28	1.99	0.13	8.85	26.47
		0.2	50	667.38	315	15.1	4.43	13.79	4.04	1.89	0.12	8.05	24.05
		0.3	75	620.34	293	14.31	4.19	12.99	3.81	1.79	0.11	7.31	21.87
	Medium	0.1	25	607.6	287	14.1	4.13	12.78	3.75	1.76	0.11	7.13	21.31
		0.2	50	574.28	271	13.58	3.98	12.22	3.58	1.7	0.11	6.67	19.94
		0.3	75	533.12	252	12.96	3.8	11.54	3.38	1.62	0.1	6.14	18.36
	Minimum	0.1	25	477.26	225	12.14	3.56	10.61	3.11	1.52	0.1	5.47	16.36
		0.2	50	457.66	216	11.86	3.47	10.29	3.01	1.48	0.09	5.25	15.68
		0.3	75	431.2	203	11.46	3.36	9.84	2.88	1.43	0.09	4.94	14.78
8	Maximum	0.1	25	758.016	358	16.91	4.95	15.63	4.58	2.11	0.13	5.1	15.26
		0.2	50	714.588	337	16.25	4.76	14.92	4.37	2.03	0.13	4.76	14.22
		0.3	75	663.264	313	15.49	4.54	14.08	4.13	1.94	0.12	4.37	13.07
	Medium	0.1	25	630.693	298	15.02	4.4	13.54	3.97	1.88	0.12	4.14	12.38
		0.2	50	604.044	285	14.64	4.29	13.1	3.84	1.83	0.12	3.96	11.83
		0.3	75	565.551	267	14.08	4.13	12.46	3.65	1.76	0.11	3.69	11.04
	Minimum	0.1	25	495.474	234	13.04	3.82	11.28	3.31	1.63	0.1	3.23	9.65
		0.2	50	470.799	222	12.66	3.71	10.85	3.18	1.58	0.1	3.06	9.15
		0.3	75	449.085	212	12.31	3.61	10.47	3.07	1.54	0.1	2.91	8.71
10	Maximum	0.1	25	1195.2	564	29.27	8.58	25.35	7.43	3.66	0.23	17.03	50.91
		0.2	50	1137.6	537	27.78	8.14	24.19	7.09	3.47	0.22	15.53	46.42
		0.3	75	1072.32	506	26.13	7.66	22.88	6.71	3.27	0.21	13.94	41.66
	Medium	0.1	25	1041.3	491	25.38	7.44	22.27	6.53	3.17	0.2	13.24	39.57
		0.2	50	1000.35	472	24.43	7.16	21.47	6.29	3.05	0.19	12.38	37.01
		0.3	75	954.525	450	23.54	6.9	20.64	6.05	2.94	0.19	11.59	34.65
	Minimum	0.1	25	847.7	400	21.77	6.38	18.82	5.52	2.72	0.17	10.1	30.19
		0.2	50	809.48	382	21.18	6.21	18.18	5.33	2.65	0.17	9.62	28.76
		0.3	75	775.18	366	20.66	6.06	17.6	5.16	2.58	0.16	9.21	27.52
12	Maximum	0.1	25	1347.672	636	28.88	8.46	26.97	7.91	3.61	0.23	5.77	17.25
		0.2	50	1259.948	595	27.35	8.01	25.49	7.47	3.42	0.22	5.24	15.66
		0.3	75	1173.188	554	25.93	7.6	24.04	7.05	3.24	0.2	4.77	14.24
	Medium	0.1	25	1178.775	556	26.01	7.62	24.14	7.07	3.25	0.21	4.79	14.33
		0.2	50	1106.625	522	24.89	7.3	22.94	6.73	3.11	0.2	4.43	13.25
		0.3	75	1026.675	484	23.7	6.95	21.63	6.34	2.96	0.19	4.06	12.15
	Minimum	0.1	25	944.615	446	22.51	6.6	20.29	5.95	2.81	0.18	3.71	11.09
		0.2	50	904.23	427	21.93	6.43	19.62	5.75	2.74	0.17	3.54	10.58
		0.3	75	846.115	399	21.09	6.18	18.66	5.47	2.64	0.17	3.3	9.88
15	Maximum	0.1	25	1458.785	688	33.28	9.75	30.16	8.84	4.16	0.26	8.09	24.2
		0.2	50	1364.225	644	31.54	9.24	28.51	8.35	3.94	0.25	7.36	22
		0.3	75	1267.695	598	29.9	8.76	26.86	7.87	3.74	0.24	6.69	20.01
	Medium	0.1	25	1232.235	581	29.32	8.59	26.26	7.7	3.67	0.23	6.47	19.34
		0.2	50	1170.18	552	28.35	8.31	25.22	7.39	3.54	0.22	6.09	18.21
		0.3	75	1088.425	514	27.11	7.95	23.86	6.99	3.39	0.21	5.63	16.83
	Minimum	0.1	25	960.396	453	25.23	7.39	21.73	6.37	3.15	0.2	4.95	14.81
		0.2	50	919.32	434	24.62	7.21	21.03	6.16	3.08	0.19	4.74	14.18
		0.3	75	869.442	410	23.86	6.99	20.18	5.92	2.98	0.19	4.49	13.42
18	Maximum	0.1	25	2240.43	1057	50.88	14.91	45.71	13.4	6.36	0.4	10.32	30.85
		0.2	50	2122.965	1002	48.01	14.07	43.43	12.73	6	0.38	9.31	27.82
		0.3	75	2003.59	945	45.52	13.34	41.25	12.09	5.69	0.36	8.47	25.32
	Medium	0.1	25	1971.84	931	44.89	13.16	40.69	11.93	5.61	0.35	8.26	24.7
		0.2	50	1887.36	891	43.28	12.69	39.2	11.49	5.41	0.34	7.75	23.16
		0.3	75	1785.6	843	41.47	12.15	37.43	10.97	5.18	0.33	7.18	21.46
	Minimum	0.1	25	1637.58	773	39.01	11.43	34.92	10.23	4.88	0.31	6.44	19.26
		0.2	50	1568	740	37.92	11.11	33.75	9.89	4.74	0.3	6.13	18.32
		0.3	75	1503.32	709	36.93	10.82	32.68	9.58	4.62	0.29	5.85	17.48
21	Maximum	0.1	25	2376.995	1122	52.11	15.27	48.06	14.09	6.51	0.41	6.58	19.68
		0.2	50	2263.35	1068	49.99	14.65	46.09	13.51	6.25	0.39	6.12	18.28
		0.3	75	2133.47	1007	47.71	13.99	43.87	12.86	5.96	0.38	5.63	16.83
	Medium	0.1	25	2092.3	987	47.02	13.78	43.17	12.65	5.88	0.37	5.49	16.4
		0.2	50	2010.96	949	45.69	13.39	41.81	12.25	5.71	0.36	5.21	15.59
		0.3	75	1918.84	906	44.24	12.97	40.28	11.8	5.53	0.35	4.92	14.72
	Minimum	0.1	25	1705.035	805	41.03	12.03	36.74	10.77	5.13	0.32	4.31	12.88
		0.2	50	1627.22	768	39.89	11.69	35.46	10.39	4.99	0.31	4.1	12.25
		0.3	75	1557.285	735	38.88	11.4	34.3	10.05	4.86	0.31	3.91	11.7

Table 10

Data based on 76°F/63°F (24.4°C/17.2°C) air on-coil DBT/WBT, 42°F/58°F (5.5°C/14.4°C) entering/leaving chilled water temperature

Capacity Ratings - District Cooling

DCYP EC

6 Rows

Size	Speed	External Static Pressure		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
6	Maximum	0.1	25	683.06	322	23.12	6.78	17.52	5.13	2.89	0.18	11.32	33.83
		0.2	50	639.94	302	21.9	6.42	16.54	4.85	2.74	0.17	10.29	30.76
		0.3	75	595.84	281	20.73	6.08	15.57	4.56	2.59	0.16	9.34	27.91
	Medium	0.1	25	591.92	279	20.63	6.05	15.48	4.54	2.58	0.16	9.26	27.67
		0.2	50	556.64	263	19.73	5.78	14.72	4.31	2.47	0.16	8.56	25.59
		0.3	75	516.46	244	18.74	5.49	13.85	4.06	2.34	0.15	7.81	23.36
	Minimum	0.1	25	470.4	222	17.61	5.16	12.86	3.77	2.2	0.14	7	20.93
		0.2	50	449.82	212	17.09	5.01	12.42	3.64	2.14	0.13	6.65	19.86
		0.3	75	422.38	199	16.4	4.81	11.82	3.46	2.05	0.13	6.18	18.46
8	Maximum	0.1	25	736.302	347	27.01	7.92	19.79	5.8	3.38	0.21	16.32	48.77
		0.2	50	689.913	326	25.48	7.47	18.64	5.46	3.18	0.2	14.72	43.99
		0.3	75	640.563	302	23.99	7.03	17.48	5.12	3	0.19	13.24	39.56
	Medium	0.1	25	620.823	293	23.47	6.88	17.04	5	2.93	0.19	12.74	38.07
		0.2	50	591.213	279	22.71	6.66	16.39	4.8	2.84	0.18	12.01	35.91
		0.3	75	550.746	260	21.66	6.35	15.5	4.54	2.71	0.17	11.05	33.04
	Minimum	0.1	25	487.578	230	19.99	5.86	14.09	4.13	2.5	0.16	9.59	28.68
		0.2	50	465.864	220	19.39	5.68	13.6	3.98	2.42	0.15	9.09	27.18
		0.3	75	442.176	209	18.71	5.48	13.05	3.82	2.34	0.15	8.54	25.54
10	Maximum	0.1	25	1152	544	39.96	11.71	29.89	8.76	4.99	0.32	14.42	43.11
		0.2	50	1093.44	516	37.9	11.11	28.4	8.32	4.74	0.3	13.14	39.26
		0.3	75	1032	487	35.85	10.51	26.89	7.88	4.48	0.28	11.91	35.6
	Medium	0.1	25	1017.9	480	35.45	10.39	26.56	7.79	4.43	0.28	11.67	34.9
		0.2	50	976.95	461	34.31	10.06	25.64	7.52	4.29	0.27	11.02	32.95
		0.3	75	927.225	438	32.99	9.67	24.54	7.19	4.12	0.26	10.28	30.73
	Minimum	0.1	25	832.02	393	30.55	8.96	22.47	6.58	3.82	0.24	8.98	26.85
		0.2	50	795.76	376	29.65	8.69	21.68	6.35	3.71	0.23	8.52	25.45
		0.3	75	763.42	360	28.84	8.45	20.98	6.15	3.6	0.23	8.11	24.24
12	Maximum	0.1	25	1284.048	606	42	12.31	32.3	9.47	5.25	0.33	7.38	22.06
		0.2	50	1203.072	568	39.78	11.66	30.5	8.94	4.97	0.31	6.71	20.04
		0.3	75	1122.096	530	37.69	11.05	28.74	8.42	4.71	0.3	6.09	18.21
	Medium	0.1	25	1138.8	537	38.11	11.17	29.1	8.53	4.76	0.3	6.21	18.58
		0.2	50	1065.675	503	36.28	10.63	27.53	8.07	4.54	0.29	5.7	17.03
		0.3	75	990.6	467	34.46	10.1	25.93	7.6	4.31	0.27	5.2	15.54
	Minimum	0.1	25	929.84	439	33	9.67	24.64	7.22	4.13	0.26	4.82	14.4
		0.2	50	885.515	418	31.94	9.36	23.7	6.95	3.99	0.25	4.55	13.59
		0.3	75	824.445	389	30.47	8.93	22.4	6.56	3.81	0.24	4.18	12.5
15	Maximum	0.1	25	1401.655	661	48.25	14.14	36.3	10.64	6.03	0.38	10.31	30.83
		0.2	50	1310.05	618	45.62	13.37	34.21	10.03	5.7	0.36	9.34	27.92
		0.3	75	1220.415	576	43.22	12.67	32.22	9.44	5.4	0.34	8.49	25.37
	Medium	0.1	25	1205.64	569	42.84	12.56	31.89	9.35	5.36	0.34	8.36	24.98
		0.2	50	1136.69	536	41.08	12.04	30.39	8.91	5.14	0.32	7.76	23.19
		0.3	75	1054.935	498	39.04	11.44	28.63	8.39	4.88	0.31	7.09	21.19
	Minimum	0.1	25	945.726	446	36.3	10.64	26.26	7.7	4.54	0.29	6.23	18.64
		0.2	50	906.606	428	35.31	10.35	25.4	7.44	4.41	0.28	5.94	17.74
		0.3	75	852.816	402	33.91	9.94	24.21	7.09	4.24	0.27	5.52	16.51
18	Maximum	0.1	25	2141.11	1010	70.28	20.6	53.83	15.78	8.79	0.55	8.92	26.65
		0.2	50	2030.33	958	66.93	19.62	51.25	15.02	8.37	0.53	8.17	24.44
		0.3	75	1927.19	909	63.97	18.75	48.91	14.33	8	0.5	7.55	22.56
	Medium	0.1	25	1915.2	904	63.64	18.65	48.64	14.26	7.95	0.5	7.48	22.35
		0.2	50	1825.92	862	61.21	17.94	46.65	13.67	7.65	0.48	6.98	20.86
		0.3	75	1723.2	813	58.54	17.16	44.41	13.02	7.32	0.46	6.45	19.27
	Minimum	0.1	25	1603.28	757	55.53	16.28	41.83	12.26	6.94	0.44	5.87	17.55
		0.2	50	1539.58	727	53.97	15.82	40.47	11.86	6.75	0.43	5.58	16.69
		0.3	75	1474.9	696	52.41	15.36	39.09	11.46	6.55	0.41	5.3	15.84
21	Maximum	0.1	25	2292	1082	79.49	23.3	59.47	17.43	9.94	0.63	12.01	35.89
		0.2	50	2175.49	1027	75.4	22.1	56.52	16.57	9.43	0.59	10.93	32.68
		0.3	75	2054.205	969	71.42	20.93	53.55	15.69	8.93	0.56	9.93	29.69
	Medium	0.1	25	2045.26	965	71.17	20.86	53.34	15.63	8.9	0.56	9.87	29.5
		0.2	50	1962.94	926	68.88	20.19	51.49	15.09	8.61	0.54	9.31	27.84
		0.3	75	1865.92	881	66.28	19.43	49.33	14.46	8.28	0.52	8.7	26.01
	Minimum	0.1	25	1672.53	789	61.32	17.97	45.11	13.22	7.67	0.48	7.58	22.67
		0.2	50	1599.64	755	59.49	17.44	43.54	12.76	7.44	0.47	7.19	21.48
		0.3	75	1533.645	724	57.84	16.95	42.11	12.34	7.23	0.46	6.84	20.44

Table 11

Data based on 76°F/63°F (25.5°C/18.3°C) air on-coil DBT/WBT, 42°F/58°F (5.5°C/14.4°C) entering/leaving chilled water temperature

Capacity Ratings - District Cooling
DCYP EC

Size	Speed	External Static Pressure		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
6	Maximum	0.1	25	683.06	322	19.75	5.79	16.53	4.84	2.47	0.16	8.58	25.63
		0.2	50	639.94	302	18.76	5.5	15.62	4.58	2.35	0.15	7.83	23.41
		0.3	75	595.84	281	17.79	5.22	14.71	4.31	2.22	0.14	7.13	21.32
	Medium	0.1	25	591.92	279	17.71	5.19	14.63	4.29	2.21	0.14	7.07	21.15
		0.2	50	556.64	263	16.96	4.97	13.9	4.07	2.12	0.13	6.55	19.59
		0.3	75	516.46	244	16.12	4.72	13.08	3.83	2.01	0.13	5.99	17.91
	Minimum	0.1	25	470.4	222	15.15	4.44	12.13	3.56	1.89	0.12	5.37	16.05
		0.2	50	449.82	212	14.71	4.31	11.7	3.43	1.84	0.12	5.1	15.24
		0.3	75	422.38	199	14.11	4.13	11.13	3.26	1.76	0.11	4.74	14.16
8	Maximum	0.1	25	736.302	347	22.76	6.67	18.48	5.42	2.85	0.18	12.07	36.07
		0.2	50	689.913	326	21.67	6.35	17.49	5.13	2.71	0.17	11.07	33.08
		0.3	75	640.563	302	20.56	6.03	16.45	4.82	2.57	0.16	10.09	30.16
	Medium	0.1	25	620.823	293	20.13	5.9	16.03	4.7	2.52	0.16	9.71	29.04
		0.2	50	591.213	279	19.48	5.71	15.42	4.52	2.43	0.15	9.17	27.41
		0.3	75	550.746	260	18.59	5.45	14.57	4.27	2.32	0.15	8.44	25.24
	Minimum	0.1	25	487.578	230	17.16	5.03	13.22	3.88	2.15	0.14	7.34	21.93
		0.2	50	465.864	220	16.65	4.88	12.75	3.74	2.08	0.13	6.95	20.79
		0.3	75	442.176	209	16.07	4.71	12.23	3.58	2.01	0.13	6.54	19.54
10	Maximum	0.1	25	1152	544	33.62	9.85	27.95	8.19	4.2	0.27	10.63	31.77
		0.2	50	1093.44	516	32.13	9.42	26.67	7.82	4.02	0.25	9.82	29.34
		0.3	75	1032	487	30.66	8.99	25.35	7.43	3.83	0.24	9.04	27.01
	Medium	0.1	25	1017.9	480	30.33	8.89	25.05	7.34	3.79	0.24	8.87	26.5
		0.2	50	976.95	461	29.4	8.62	24.19	7.09	3.67	0.23	8.39	25.08
		0.3	75	927.225	438	28.3	8.29	23.15	6.79	3.54	0.22	7.84	23.45
	Minimum	0.1	25	832.02	393	26.25	7.69	21.18	6.21	3.28	0.21	6.87	20.54
		0.2	50	795.76	376	25.48	7.47	20.44	5.99	3.18	0.2	6.52	19.48
		0.3	75	763.42	360	24.79	7.26	19.77	5.79	3.1	0.2	6.21	18.56
12	Maximum	0.1	25	1284.048	606	35.9	10.52	30.53	8.95	4.49	0.28	5.59	16.71
		0.2	50	1203.072	568	34.11	10	28.85	8.46	4.26	0.27	5.1	15.26
		0.3	75	1122.096	530	32.38	9.49	27.2	7.97	4.05	0.26	4.66	13.92
	Medium	0.1	25	1138.8	537	32.73	9.59	27.54	8.07	4.09	0.26	4.75	14.19
		0.2	50	1065.675	503	31.21	9.15	26.05	7.64	3.9	0.25	4.36	13.04
		0.3	75	990.6	467	29.68	8.7	24.54	7.19	3.71	0.23	3.99	11.93
	Minimum	0.1	25	929.84	439	28.44	8.34	23.31	6.83	3.55	0.22	3.7	11.06
		0.2	50	885.515	418	27.53	8.07	22.41	6.57	3.44	0.22	3.49	10.44
		0.3	75	824.445	389	26.26	7.7	21.15	6.2	3.28	0.21	3.21	9.6
15	Maximum	0.1	25	1401.655	661	41.2	12.08	34.21	10.03	5.15	0.32	7.8	23.31
		0.2	50	1310.05	618	39.07	11.45	32.27	9.46	4.88	0.31	7.1	21.22
		0.3	75	1220.415	576	37.09	10.87	30.41	8.91	4.64	0.29	6.47	19.35
	Medium	0.1	25	1205.64	569	36.77	10.78	30.1	8.82	4.6	0.29	6.38	19.06
		0.2	50	1136.69	536	35.29	10.34	28.68	8.41	4.41	0.28	5.93	17.72
		0.3	75	1054.935	498	33.55	9.83	26.99	7.91	4.19	0.26	5.42	16.21
	Minimum	0.1	25	945.726	446	31.22	9.15	24.73	7.25	3.9	0.25	4.77	14.27
		0.2	50	906.606	428	30.36	8.9	23.91	7.01	3.79	0.24	4.54	13.58
		0.3	75	852.816	402	29.15	8.54	22.76	6.67	3.64	0.23	4.23	12.64
18	Maximum	0.1	25	2141.11	1010	59.79	17.52	50.74	14.87	7.47	0.47	6.69	20.01
		0.2	50	2030.33	958	57.12	16.74	48.38	14.18	7.14	0.45	6.17	18.45
		0.3	75	1927.19	909	54.73	16.04	46.22	13.55	6.84	0.43	5.72	17.11
	Medium	0.1	25	1915.2	904	54.46	15.96	45.97	13.47	6.81	0.43	5.67	16.96
		0.2	50	1825.92	862	52.48	15.38	44.11	12.93	6.56	0.41	5.31	15.88
		0.3	75	1723.2	813	50.27	14.74	42.01	12.31	6.28	0.4	4.92	14.72
	Minimum	0.1	25	1603.28	757	47.77	14	39.57	11.6	5.97	0.38	4.5	13.44
		0.2	50	1539.58	727	46.45	13.62	38.28	11.22	5.81	0.37	4.28	12.79
		0.3	75	1474.9	696	45.12	13.23	36.96	10.83	5.64	0.36	4.07	12.15
21	Maximum	0.1	25	2292	1082	66.92	19.61	55.63	16.31	8.37	0.53	8.85	26.46
		0.2	50	2175.49	1027	63.99	18.76	53.08	15.56	8	0.5	8.18	24.44
		0.3	75	2054.205	969	61.09	17.91	50.49	14.8	7.64	0.48	7.53	22.51
	Medium	0.1	25	2045.26	965	60.88	17.85	50.3	14.74	7.61	0.48	7.49	22.38
		0.2	50	1962.94	926	59	17.29	48.57	14.23	7.38	0.47	7.08	21.17
		0.3	75	1865.92	881	56.85	16.66	46.54	13.64	7.11	0.45	6.63	19.82
	Minimum	0.1	25	1672.53	789	52.67	15.44	42.54	12.47	6.58	0.42	5.79	17.32
		0.2	50	1599.64	755	51.12	14.98	41.04	12.03	6.39	0.4	5.5	16.43
		0.3	75	1533.645	724	49.72	14.57	39.67	11.63	6.21	0.39	5.23	15.64

Table 12

Data based on 78°F/65°F (24.4°C/17.2°C) air on-coil DBT/WBT, 42°F/58°F (5.5°C/14.4°C) entering/leaving chilled water temperature

Control System Description

Control System Operation

- MP1: 2-pipe system with modulating valve

Thermostat modulates an electric 2-way or 3-way motorized chilled water valve according to the setpoint. The fan runs between minimum and maximum speed set in the thermostat and according to the cooling demand.

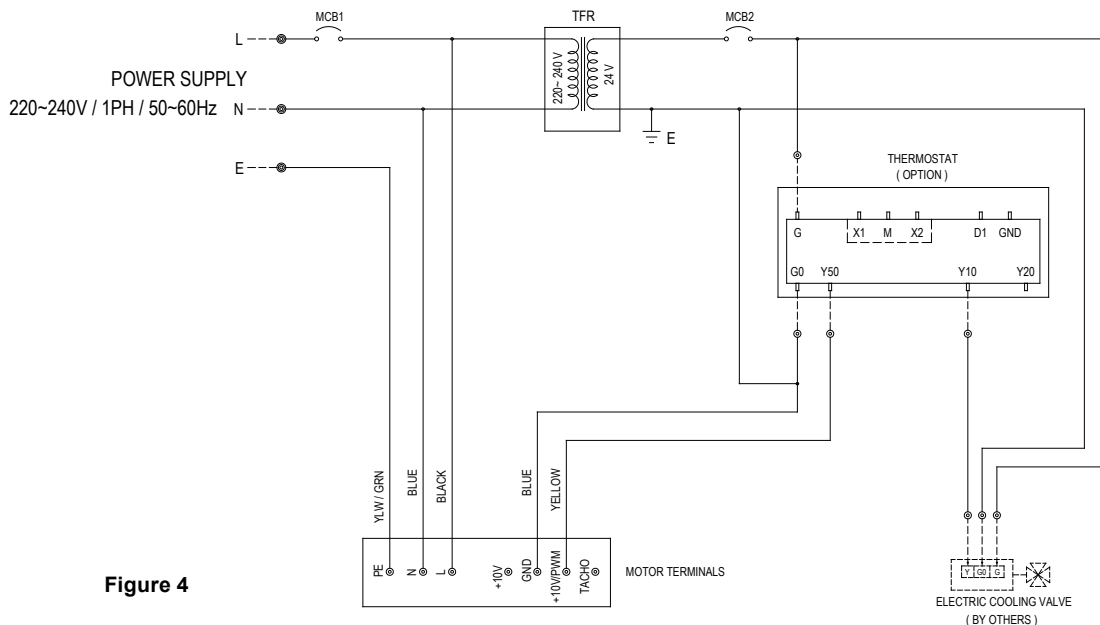


Figure 4

Notes:

Above wiring from factory is provided only if CHTS option is ordered, or else all the required signals and controls (including 0-10V DC signals for CHTS fan to be provided at site by others.

- MP2: 4-pipe system with modulating valve

Thermostat modulates electric 2-way or 3-way motorized hot or chilled water valve to maintain the desired temperature. The fan runs between minimum and maximum speed set in the thermostat and according to the cooling or heating demand.

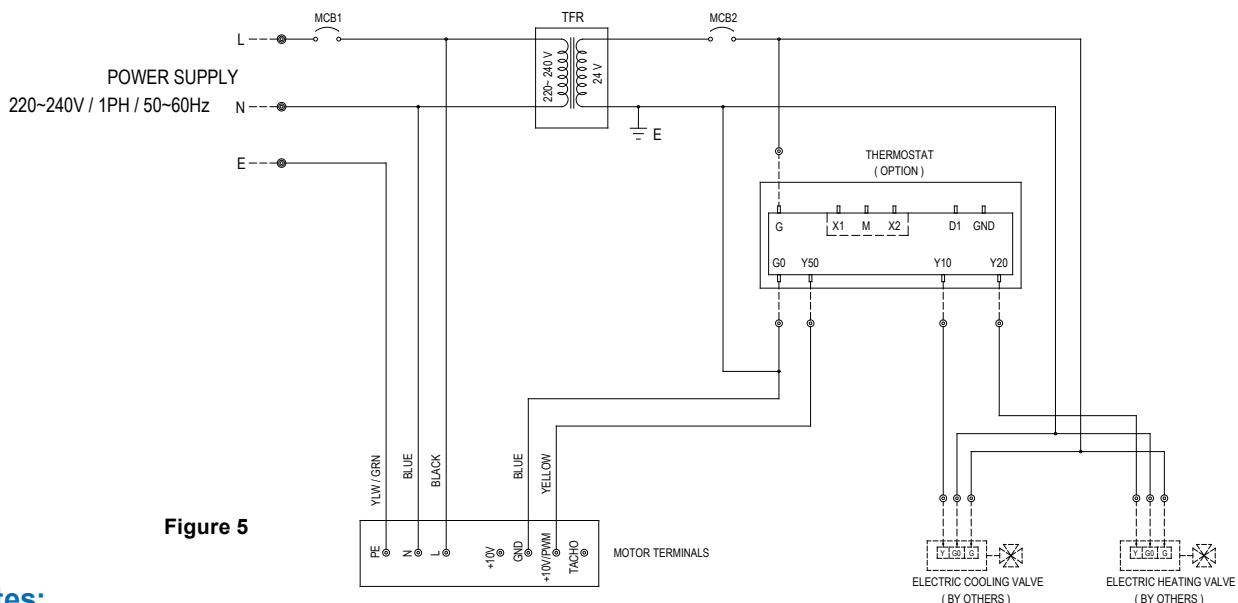


Figure 5

Notes:

Above wiring from factory is provided only if CHTS option is ordered, or else all the required signals and controls (including 0-10V DC signals for CHTS fan to be provided at site by others.

Selection

Selection Considerations

In selecting Hi - Static 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 and power.
- Compatibility with intended space finish.
- Fresh air and ventilation requirements.
- Noise level desired at peak or part load operations.
- Control system desired .
- Economy of layout.

Once a particular model or models in the **Hi - Static** 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. Maximum, Medium or Minimum 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 recommended 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 that required.
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 met 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.

Control System

The control systems for SKM Hi - Static FCUs can be selected provided the application is identified for Cooling and/or Heating.

The control system can be:

- 2-pipe with modulating valve ([Code MP1](#))
- 4-pipe with modulating valve ([Code MP2](#))

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

Valve Packages

SKM offers a wide variety of optional valve packages (Types1 to Type8), shown in Figure 6, that can suit practically any application.

Anyone 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:

- Gate or stop valve
- Globe or balancing valve
- 3 - way motorized valve, electric
- 2 - way motorized valve, electric

Combinations available can be selected as standard.

Combinations and/or requirements not covered in Figure 6, Type1 to Type8, may be available and should refer to factory for selection.

Valve Packages

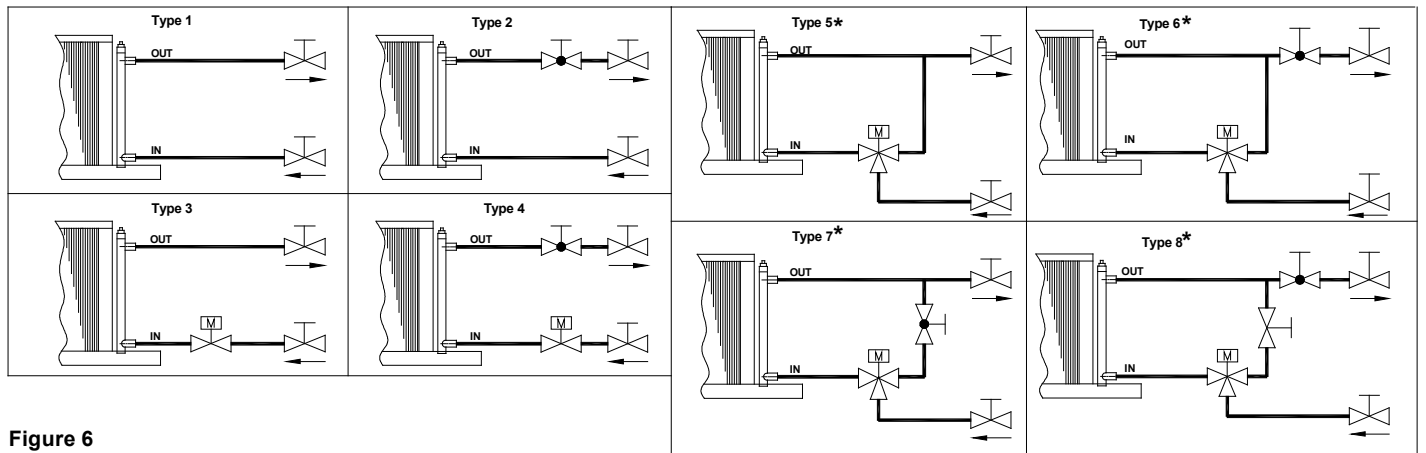
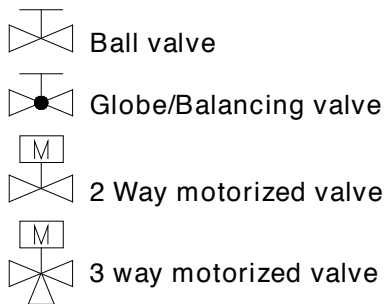


Figure 6

LEGEND



NOTE:

* Type 5 to Type 8 to be installed outside the unit.

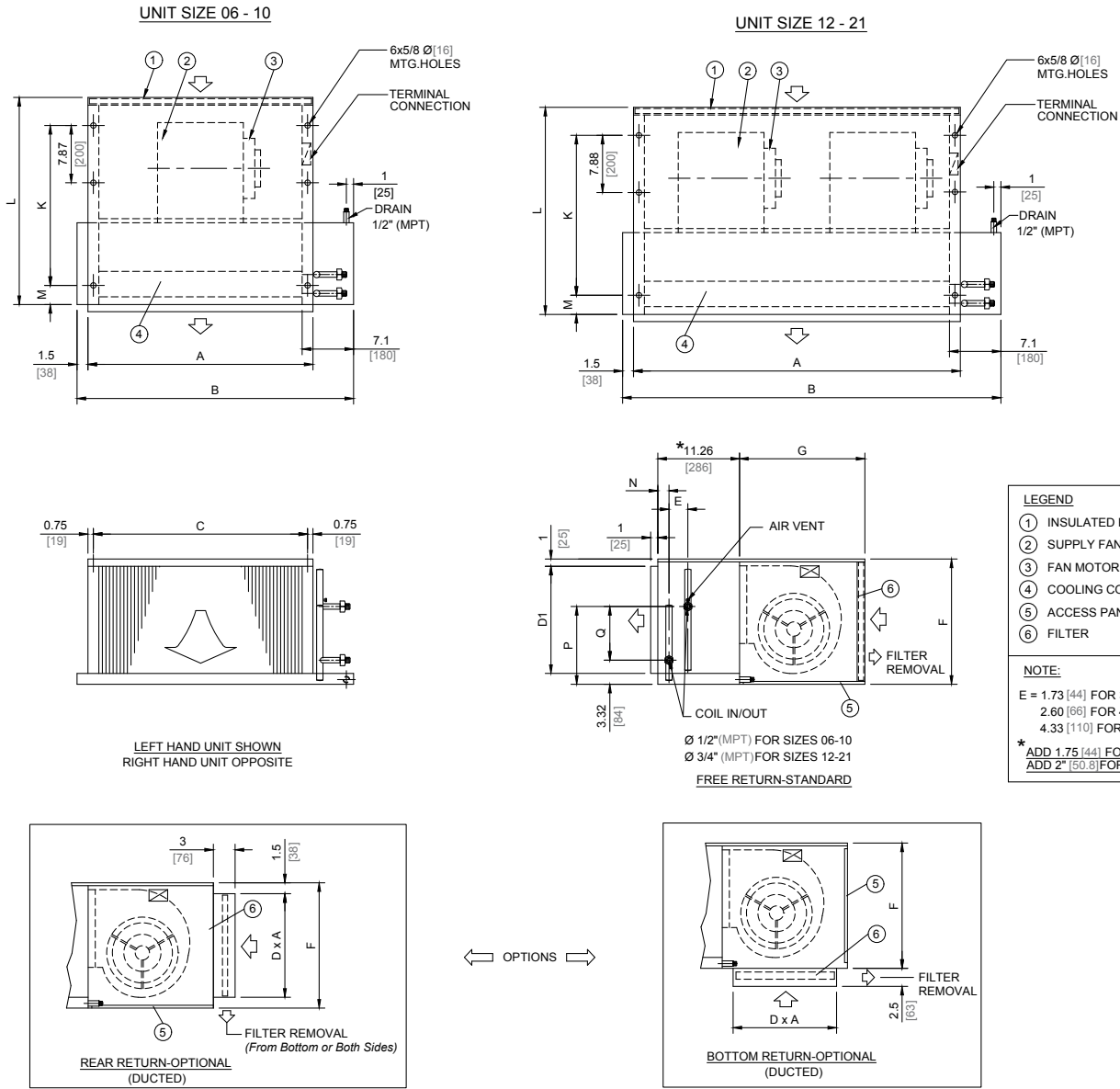
Ordering and Selection Procedure

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 **MP1** or **MP2**
4. Complete ordering code option. For example ordering code 3MP1 shall provide a factory installed valve package with a 2 way electric modulating motorized valve plus stop valve for the supply and return lines as shown in Type 3, Figure 6.

Dimensional Data

DYP EC and DCYP EC



ALL DIMENSIONS ARE IN INCHES

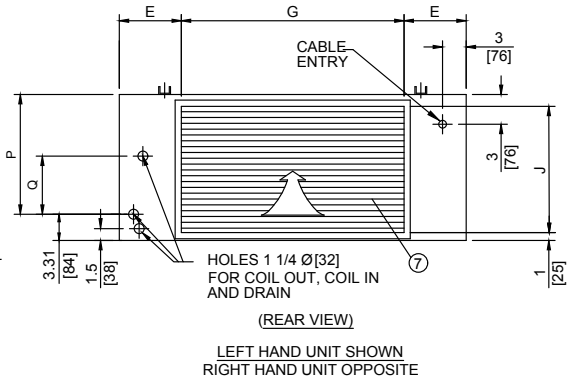
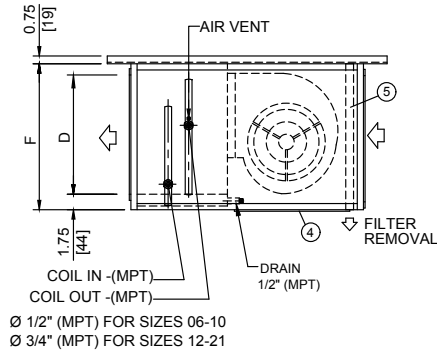
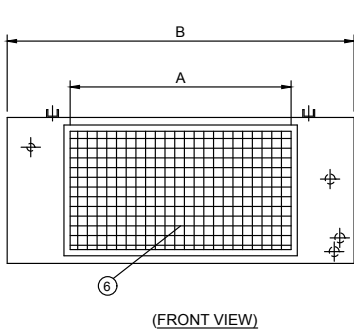
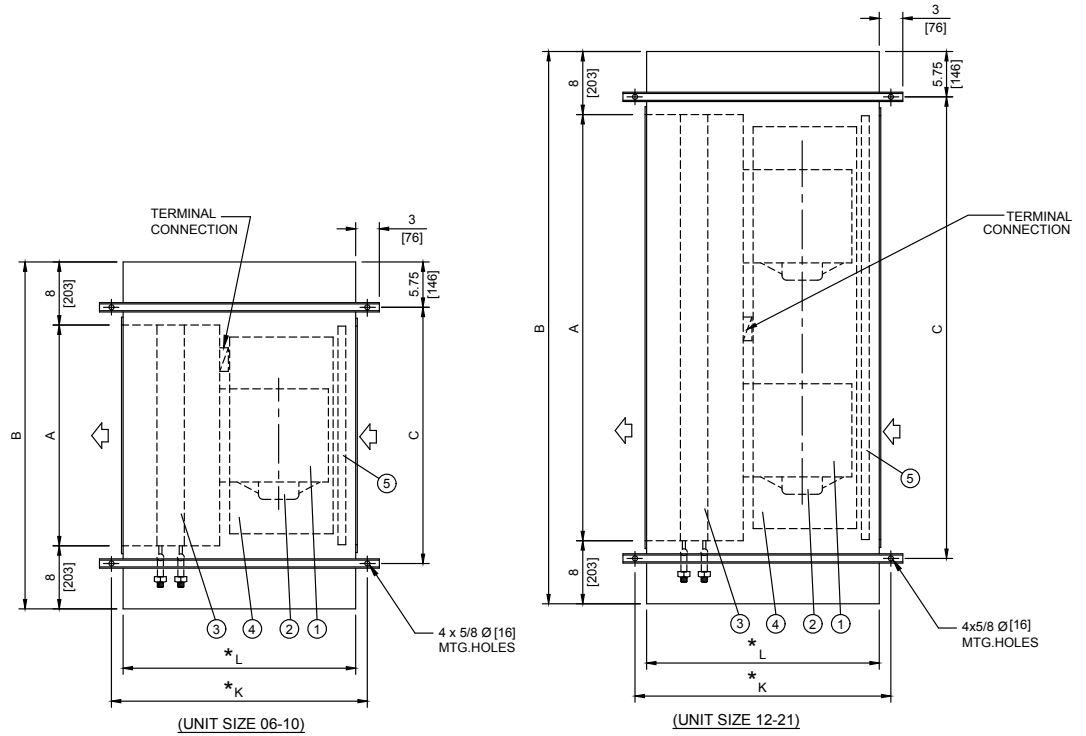
UNIT MODEL	A		B		[mm] C		D		D1		F		G		P		Q		UNIT MODEL	DIMENSIONS FOR	K		L		M		N		
	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM			INCH	MM	INCH	MM	INCH	MM	INCH	MM	
06	23	584	30	763	21.5	546	12	305	12.48	317	15	381	16.42	417	10.8	274	7.5	190	06 08 12 15	3R / 4R	22	559	27.68	703	2.64	67	1.54	39	
08	27	686	34	865	25.5	648	12	305	12.48	317	15	381	16.42	417	10.8	274	7.5	190			6R	23.74	603	29.41	747	2.64	67	1.54	39
10	27	686	34	865	25.5	648	14.5	368	14.84	377	17.32	440	18.67	474	14.8	375	11.5	291				26.12	663	29.93	760	0.79	20	1.54	39
12	39	991	46	1170	37.5	952	12	305	12.48	317	15	381	16.42	417	10.8	274	7.5	190	10 18 21	3R / 4R	26.12	663	29.93	760	0.79	20	1.54	39	
15	45	1143	52	1322	43.5	1105	12	305	12.48	317	15	381	16.42	417	10.8	274	7.5	190			6R	27.84	707	31.66	804	0.79	20	1.54	39
18	45	1143	52	1322	43.5	1105	14.5	368	14.84	377	17.32	440	18.67	474	14.8	375	11.5	291				27.84	707	31.66	804	0.79	20	1.54	39
21	51	1295	58	1474	49.5	1257	14.5	368	14.84	377	17.32	440	18.67	474	14.8	375	11.5	291											

Table 13

Dimensional Data

DYE EC and DCYE EC

- LEGEND**
- ① SUPPLY FAN
 - ② FAN MOTOR
 - ③ COOLING COIL
 - ④ ACCESS PANEL
 - ⑤ FILTER
 - ⑥ SUPPLY AIR GRILL
 - ⑦ RETURN AIR GRILL



FREE SUPPLY & RETURN WITH GRILL - STANDARD

* ADD 1.75 [45] FOR 6 ROW

UNIT SIZE	A		B		C		D		E		F		G		J	* K		* L		P		Q		
	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM		INCH	MM	INCH	MM	INCH	MM	INCH	MM	
06	20	508	36	914	24.5	622	12	305	7.5	190	15	381	21	533	12	305	31.75	806	28.75	730	9.9	251	6.5	165
08	24	610	40	1016	28.5	724	12	305	7.5	190	15	381	25	635	12	305	31.75	806	28.75	730	9.9	251	6.5	165
10	24	610	40	1016	28.5	724	15	381	7.5	190	18.5	470	25	635	16	406	34	864	31	787	13.9	353	10.5	267
12	36	914	52	1321	40.5	1029	12	305	7.5	190	15	381	37	940	12	305	31.75	806	28.75	730	9.9	251	6.5	165
15	42	1067	58	1473	46.5	1181	12	305	7.5	190	15	381	43	1092	12	305	31.75	806	28.75	730	9.9	251	6.5	165
18	42	1067	58	1473	46.5	1181	15	381	7.5	190	18.5	470	43	1092	16	406	34	864	31	787	13.9	353	10.5	267
21	48	1219	64	1626	52.5	1333	15	381	7.5	190	18.5	470	49	1245	16	406	34	864	31	787	13.9	353	10.5	267

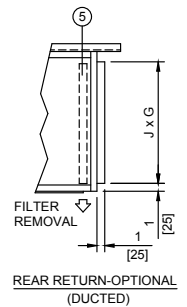


Table 14

ALL DIMENSIONS ARE IN INCHES [MM]

GUIDE SPECIFICATIONS

Fan Coil Units type and size shall be as indicated on the equipment schedule. Units shall be blow-thru arrangement. Units configurations shall be horizontal, suitable for concealed or exposed applications with or without inlet plenum. Units shall be able to handle external static pressure up to 0.4 inwg. Units shall be installed at site as per Installation, Operation and Maintenance Manual.

Basic Unit and Cabinet

Fan Coil Units shall include casing, fan(s), motor(s), coil, drain pan, inlet plenum and air filter. Unit 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°F (35 °C) and 95% relative humidity (ASTM B117). Units casing shall be made of stainless steel or aluminum if so specified. Units casing shall be thermally and acoustically insulated with 12mm thick closed cell poly foam insulation.

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

Fan and Motor

Fan shall be Forward curved, double inlet, centrifugal fan with EC motors, conforming to the standard EN 61800-5-1. Fan casing shall be galvanized sheet steel and impeller shall be sendzimir galvanized sheet steel. Fan shall be mounted on electronically commutated (EC) motor with integrated controls. Motor shall be class B, insulated with Thermal Overload Protector (TOP) and wired internally. Maximum permissible ambient motor temperature shall be +80 deg. C and minimum of -40 deg. C. Control input shall be 0-10 VDC.

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.

Fin spacing shall be 12 fpi for chilled water and 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 airflow). Coil connections shall be MPT connections. Coil shall be certified in accordance with AHRI - 410 and tested by compressed air underwater 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 polyfoam 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.

Filter

Air filter shall be 1" thick washable 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 if so specified:

- Double skin casing for locations having a high temperature difference between supply air temperature and surrounding environment of the unit.

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 gate 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. It shall be energy efficient modulating type for controlling EC fan, operating on AC 24V with 0-10V DC outputs for valves and fan.

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