

Lo-Static

Standard and District Cooling

Fan Coil Units



Range 200 cfm to
1200 cfm
(94 l/s to 566 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	LAWB ...Leaving Air Wet Bulb
BEPBaked Enamel Paint	lbs Pounds weight (British units)
cfm Cubic feet per minute	l/s Liters per second
dB Decibels	MBh 1000 Btuh
EADB Entering Air Dry Bulb	NCNoise Criteria
EAWB Entering Air Wet Bulb	ODOutside Diameter
ETEvaporating Temperature	PhPhase
EWT Entering Water Temperature	PaPascals
ESPExternal Static Pressure	SC Sensible Capacity
Ft Total Capacity Factor	SPL Sound Pressure Level
ftwg Feet of Water Gauge	TC Total Capacity
GPM Gallons per minute	TR Tons of refrigeration = 12 MBH
Hz Hertz	USgpm .. US Gallons per minute
inwgInch of Water Gauge	VVolts
kWKilowatts	WFRWater Flow Rate
kg Kilograms	WTRWater Temperature Rise
kPa Kilo Pascals	WPDWater Pressure Drop
LADBLeaving Air Dry Bulb	

Notes:

Lo-Static 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

Lo-Static 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.

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

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

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

Deliveries on **Lo-Static** Fan Coil Units are reliably prompt.

For those urgent jobs, **Lo-Static** 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.

Lo-Static Fan Coil Units, are rated in accordance with standard AHRI - 440.

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.

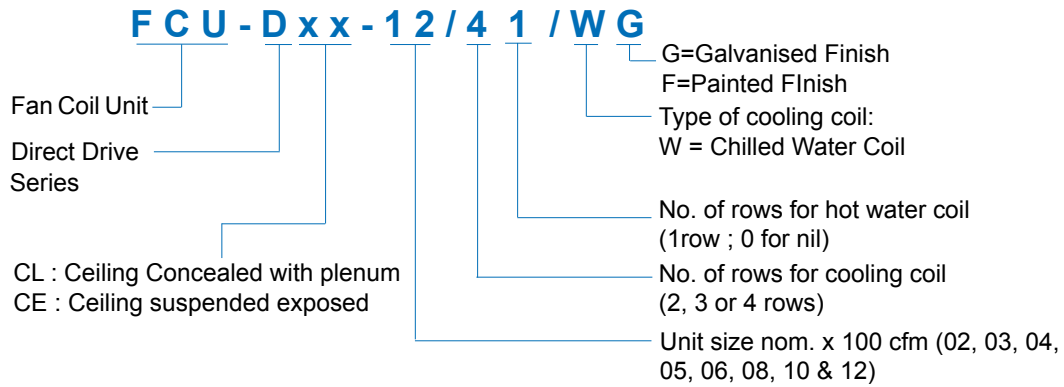
SKM Air Conditioning LLC



You name it....We cool it

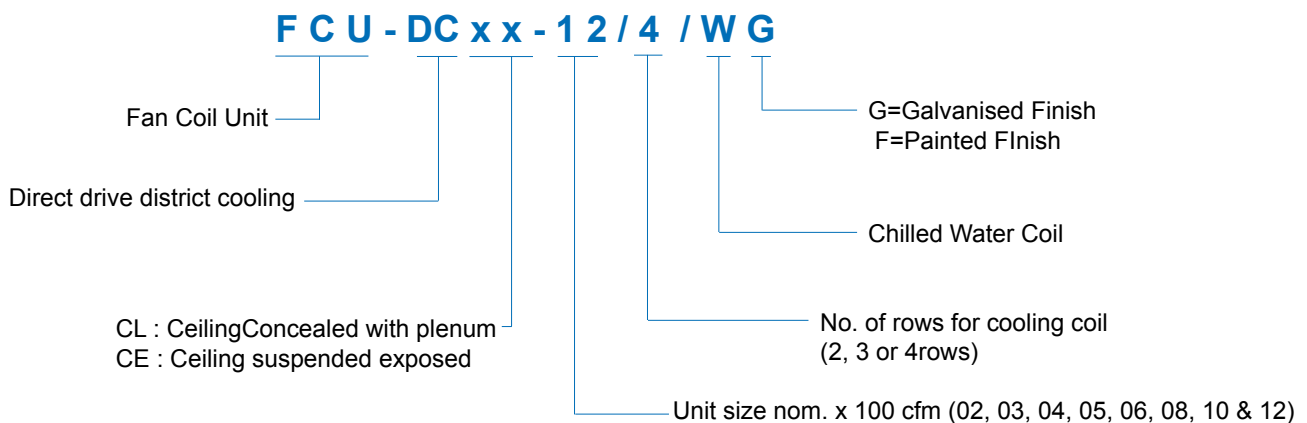
Standard FCU Models

Nomenclature



District Cooling FCU Models

Nomenclature



General Features

Lo-Static fan coil units manufactured by SKM have been designed with the requirement of the Middle East market foremost in consideration.

Lo - Static 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, Lo - Static 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

Lo - Static 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 **Lo - Static** series fan coils the first choice as **Lo - Static** 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. Refer to page 5, Application Flexibility, for more details.

Options

- Double Skin Units **[DSU]**
Available for DCL/DCCL models only
- Stainless Steel (Grade 304) Outer Skin **[USS]**
- Aluminum Outer Skin **[UAL]**
- Stainless Steel Inner Skin **[SIS]** Only with **DSU**
- Aluminum Inner Skin **[AIS]** Only with **DSU**
- **13mm** thick fiber glass insulation **[OSG]** Density: **32kg/m³**

Finish

DCL/DCCL units are supplied unpainted in a Galvanized finish. Standard color for DCE/DCCE 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. DCL/DCCL series are painted when specified with option **[BEP]**

Options

- Marine Paint **[MP]**
Includes Zinc-rich epoxy powder coating as primer coat and polyester powder coating as a finish coat.

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 2, 3 and 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.

Coils are certified in accordance with AHRI Standard 410 (Standard series). Lo-Static fan coil units can be supplied with a maximum total of 4 rows/coil.

Options

- Aeris Guard Coil Coat **[EFAA]**
Aeris Guard Coil Coat is a self-etching high performance epoxy water based finish. For single dip coating there was no evidence of corrosion after exposure to 5% Neutral Salt Spray under AS233.32-1980 (ASTM B117) conditions over periods in excess of 3000 hours.
- 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]**
- Copper fins with Aeris coating **[EFCA]**
- Automatic Air Vent **[AAV]**

Fan / Motor

Lo - Static 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 low Static 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 Low Static 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) 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

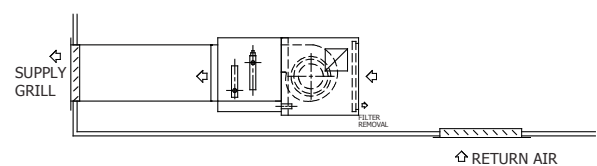
- Stainless Steel (Grade 304) Drain Pan [SDP] insulated from outside with 4mm thick polyfoam insulation.
- Extended Drain Pan 100mm [EDP1] and 200mm [EDP2] extensions.

Application Flexibility

Lo - Static fan coil units are available in a capacity range of 200-1200 cfm (94-566 l/s), in various models having 8 sizes each.

1. DCL & DCCL

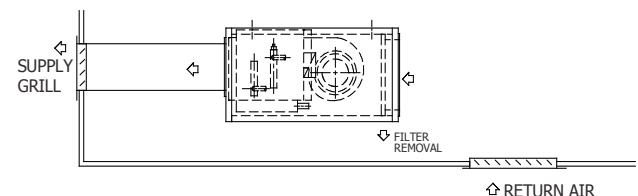
Ceiling suspended for concealed applications, includes a factory installed plenum. The plenum is lined with 12mm closed cell poly foam insulation. Units are supplied with 1" cleanable filter as standard.



DCL & DCCL

2. DCE & DCCE

Ceiling suspended, exposed type includes basic DCB / DCCB 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.



DCE & DCCE

Options and Accessories

The options available for Lo - Static Fan Coil Units include :

Electric Heaters (FEH)

Application

Electric heaters are available only for DCL/DCCL models

Low Static 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 1.0	2 x 1.0
03	1 x 1.0	2 x 1.0
04	1 x 1.5	2 x 1.5
05	1 x 1.5	2 x 1.5
06	1 x 2.0	2 x 2.0
08	1 x 2.0	2 x 2.0
10	1 x 3.0	2 x 3.0
12	1 x 3.0	2 x 3.0

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 32.

Ducted Return, Rear (DRR)

Available only for DCL and DCCL models. Refer to page 36.

Ducted Return, Bottom (DRB)

Available only for DCL and DCCL models. Refer to page 36.

UV Lamp with Section (UVL)

Control and Valve Packages

Available from Type 1 to type 8. Refer to page 32-34.

Physical & Electrical Data

Unit Size				02	03	04	05	06	08	10	12
Nominal Airflow Rate			cfm	200	300	400	500	600	800	1000	1200
			l/s	94	142	189	236	283	378	472	566
Coil	Type			Copper tubes mechanically bonded to Hi-Efficiency wavy corrugated Aluminium Fins							
	Fin Height		inch	06	06	08	06	08	08	6	8
			mm	152	152	203	152	203	203	152	203
	Fin Length		inch	20	24	24	34	34	40	65	65
			mm	508	610	610	864	864	1016	1651	1651
	Face Area		ft²	0.8	1.0	1.3	1.4	1.9	2.2	2.7	3.6
m²			0.08	0.09	0.12	0.13	0.18	0.21	0.25	0.34	
Fan	Type			Double Inlet Double Width Centrifugal Forward Curve Direct Drive							
	Code (50Hz)			1319	1520	1524	1319	1520	1524	1319	1520
	Code (60Hz)			1319	1520	1524	1319	1422	1424	1422	1422
	Quantity		#	01	01	01	02	02	02	4	4
Motor	Type			220-240V/1Ph/50-60Hz, 3 Speed Electric Motor with Permanent Spit Capacitor							
	Size 50/60		Watts	30/30	30/30	48/48	48/48	76/90	76/90	48/90	76/90
	Quantity		#	01	01	01	01	01	01	2	2
Maximum Amps.	50 Hz.	Speed	High	0.5	0.5	0.5	0.5	0.8	0.8	1	1.6
	60 Hz.			0.5	0.5	0.5	0.5	0.75	0.75	1.5	1.5
Sound Pressure Level @ 1m dB(A)	50Hz	Speed	High	36.3	43.4	40	46.2	46.9	50	50.8	53.8
			Medium	36.3	39.9	38.3	39.3	43.5	44.3	45.7	51.6
			Low	36.1	37.3	38	39.2	41.2	42.2	45.6	48.4
	60Hz		High	34.1	44.3	50.1	41.1	51.2	52.9	52.2	54.2
			Medium	32.6	37.9	37.3	38.9	41.5	42.3	45.1	52.5
			Low	32	33	34	35	36.7	37.7	39.8	41.7

Table 2

Machine Weight

Model	Number of Rows	Machine Weight	Unit Size							
			02	03	04	05	06	08	10	12
DCL DCCL	2R	lbs	31	36	37	46	48	53	59	88
		kg	14.1	16.3	16.8	20.9	21.8	24.1	26.8	40
	3R	lbs	32	37	39	49	52	57	64	95
		kg	14.5	16.8	17.7	22.2	23.6	25.9	29.1	43.1
	4R	lbs	34	39	42	52	55	61	69	102
		kg	15.4	17.7	19.1	23.6	25	27.7	31.3	46.3
DCE DCCE	2R	lbs	55	62	63	77	78	86	95	131
		kg	25	28.1	28.6	35	35.4	39	43.1	59.5
	3R	lbs	56	64	65	79	82	90	100	138
		kg	25.4	29.1	29.5	35.9	37.2	40.9	45.4	62.7
	4R	lbs	58	65	68	82	85	94	105	145
		kg	26.3	29.5	30.9	37.2	38.6	42.7	47.7	65.8

Table 3

NOTE :

- 1) All the specifications are subjectd to change by the manufacturer without prior notice. The performance data is based on the following conditions.
- 2) Air entering temperature: 80°F/67°F (27 °C/19.5°C), 45°F/55°F (7.2°C/12.8°C) entering and leaving water temperature. Sound pressure level is based on DCL model, 3Rows, 0.2 inWg (50Pa) External Static Pressure, air entering temperature 80°F/67°F (27°C/19.5°C), 45°F/55°F (7.2°C/12.8°C
- 3) Sound Pressure Values are indicative only and may vary with actual site conditions.
- 4) The maximum Ampere shown in Table 2 is the total Amps per unit.
- 5) Inductive current (Amps) rating of 3 speed switch thermostat must be greater than the maximum Amps of the unit Maximum allowable fuse rating for any unit size must not exceed 15 Amps/250 Vac.
- 6) The units are suitable for electrical system where voltage supplied to the unit should not vary $\pm 10\%$ of the rated voltage.
- 7) Weight of basic units are provided, (single skin casing + fan /motor +chilled water coil with 12 fpi Aluminum fins + 1 " thick flat filter). For units with any additional option, consult SKM for the weight.

Nominal Capacity Ratings

Models DCL and DCE

Chilled Water Coils

Size	Nominal Airflow Rate	2Rows				3 Rows				4 Rows			
		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
		MBh	MBh	gpm	ftwg	MBh	MBh	gpm	ftwg	MBh	MBh	gpm	ftwg
		kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa
02	200	4.5	3.6	0.9	1.0	6.7	4.7	1.3	2.6	8.1	5.5	1.6	4.4
	94	1.3	1.0	0.1	3.0	1.9	1.4	0.1	7.8	2.4	1.6	0.1	13.3
03	300	6.5	5.1	1.3	2.2	9.4	6.7	1.9	5.2	11.6	7.9	2.3	9.1
	142	1.9	1.5	0.1	6.5	2.7	2.0	0.1	15.5	3.4	2.3	0.1	27.3
04	400	9.4	7.1	1.9	4.9	12.1	8.8	2.4	3.7	15.1	10.4	3.0	6.6
	189	2.8	2.1	0.1	14.7	3.6	2.6	0.2	11.1	4.4	3.0	0.2	19.6
05	500	11.0	8.4	2.2	6.4	15.2	10.9	3.0	14.4	17.9	12.5	3.6	8.7
	236	3.2	2.5	0.1	19.2	4.4	3.2	0.2	43.1	5.3	3.7	0.2	26.0
06	600	14.5	10.7	2.9	12.4	19.0	13.5	3.8	9.7	22.5	15.5	4.5	7.7
	283	4.3	3.1	0.2	37.2	5.6	4.0	0.2	29.0	6.6	4.5	0.3	23.1
08	800	18.5	13.8	3.7	20.8	24.2	17.4	4.8	16.1	28.8	20.0	5.8	13.1
	378	5.4	4.0	0.2	62.2	7.1	5.1	0.3	48.3	8.4	5.9	0.4	39.1
10	1000	22.2	16.8	4.4	11.6	29.7	21.5	5.9	12.4	35.0	24.6	7.0	7.4
	472	6.5	4.9	0.3	34.7	8.7	6.3	0.4	37.0	10.3	7.2	0.4	22.2
12	1200	28.2	21.0	5.6	10.6	37.1	26.6	7.4	8.3	43.7	30.4	8.7	6.6
	566	8.3	6.2	0.4	31.6	10.9	7.8	0.5	24.8	12.8	8.9	0.6	19.7

Table 7

Notes:

Chilled water capacity ratings are based on nominal air flow rate; air entering temperature DB/WB 80/67°F (26.7/19.4°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.

Nominal Capacity Ratings

Models DCL and DCE

Hot Water Coil

Size	Nominal Airflow Rate	1Rows			2 Rows		
		Total Capacity	Water Flow Rate	Water Pressure Drop	Total Capacity	Water Flow Rate	Water Pressure Drop
		MBh	gpm	ftwg	MBh	gpm	ftwg
		kW	l/s	kPa	kW	l/s	kPa
02	200	11.2	1.1	9.8	16.7	1.7	4.7
	94	3.3	0.1	29.2	4.9	0.1	13.9
03	300	13.4	1.3	1.6	22.6	2.3	3.5
	142	3.9	0.1	4.7	6.6	0.1	10.5
04	400	19.3	1.9	6.5	31.3	3.1	23.6
	189	5.6	0.1	19.5	9.2	0.2	70.6
05	500	21.4	2.1	3.3	36.3	3.6	11.2
	236	6.3	0.1	9.9	10.6	0.2	33.3
06	600	27.3	2.7	3.0	45.9	4.6	21.4
	283	8.0	0.2	9.1	13.4	0.3	64.1
08	800	34.3	3.4	4.8	57.8	5.8	18.0
	378	10.0	0.2	14.4	16.9	0.4	53.8
10	1000	44.1	4.4	18.5	71.0	7.1	10.2
	472	12.9	0.3	55.2	20.8	0.4	30.6
12	1200	56.0	5.6	16.3	88.9	8.9	8.8
	566	16.4	0.4	48.7	26.1	0.6	26.2

Table 8

Note :

Table 8 data based on Nominal Air Flow, 70°F (21°C) entering air temperature, 180/160°F (82/71°C) entering/leaving hot water temperature. For other conditions use SKM FCU selection software.

Air Flow Rates (50 Hz)

Model DCL

	Size	02	03	04	05	06	08	10	12
Nom	cfm	200	300	400	500	600	800	1000	1200
AFR	l/s	94	142	189	236	283	378	472	566

Speed	DCL DFB		2Rows			3 Rows			4 Rows		
						External Static Pressure					
		<i>inwg</i>	0	0.1	0.2	0	0.1	0.2	0	0.1	0.2
		<i>Pa</i>	0	25	50	0	25	50	0	25	50
High	02	<i>cfm</i> <i>l/s</i>	262 124	195 92	113 53	245 116	182 86	107 50	230 108	172 81	101 48
	03	<i>cfm</i> <i>l/s</i>	393 185	339 160	265 125	373 176	318 150	246 116	353 167	300 141	232 109
	04	<i>cfm</i> <i>l/s</i>	495 234	424 200	329 155	471 222	400 189	308 145	448 211	377 178	290 137
	05	<i>cfm</i> <i>l/s</i>	592 279	504 238	407 192	553 261	471 222	382 180	521 246	445 210	362 171
	06	<i>cfm</i> <i>l/s</i>	754 356	667 315	574 271	717 338	635 300	548 258	685 323	608 287	524 247
	08	<i>cfm</i> <i>l/s</i>	942 445	839 396	720 340	894 422	794 375	682 322	852 402	755 356	648 306
	10	<i>cfm</i> <i>l/s</i>	1163 549	990 467	800 378	1083 511	924 436	749 354	1017 480	869 410	706 333
	12	<i>cfm</i> <i>l/s</i>	1489 702	1317 622	1133 535	1411 666	1251 590	1079 509	1345 635	1194 563	1031 487
Medium	02	<i>cfm</i> <i>l/s</i>	248 117	179 84	98 46	232 109	168 79	93 44	218 103	158 75	89 42
	03	<i>cfm</i> <i>l/s</i>	323 152	275 130	210 99	310 146	262 124	199 94	298 141	250 118	189 89
	04	<i>cfm</i> <i>l/s</i>	429 202	366 173	290 137	412 194	350 165	277 131	396 187	335 158	265 125
	05	<i>cfm</i> <i>l/s</i>	506 239	416 196	338 159	474 224	394 186	327 154	448 212	376 177	319 150
	06	<i>cfm</i> <i>l/s</i>	642 303	575 271	501 237	621 293	555 262	484 228	600 283	537 254	468 221
	08	<i>cfm</i> <i>l/s</i>	728 343	651 307	555 262	705 333	628 296	535 252	684 323	606 286	515 243
	10	<i>cfm</i> <i>l/s</i>	994 469	818 386	670 316	929 438	775 366	648 306	877 414	740 349	631 298
	12	<i>cfm</i> <i>l/s</i>	1273 601	1139 538	992 468	1227 579	1097 518	956 451	1184 559	1060 500	924 436
Low	02	<i>cfm</i> <i>l/s</i>	219 103	155 73	73 35	207 98	147 69	70 33	197 93	139 65	66 31
	03	<i>cfm</i> <i>l/s</i>	216 102	173 82	132 62	209 99	169 80	129 61	204 96	164 78	127 60
	04	<i>cfm</i> <i>l/s</i>	370 175	319 151	250 118	360 170	308 145	241 114	349 165	298 140	231 109
	05	<i>cfm</i> <i>l/s</i>	467 220	372 175	254 120	440 207	349 165	239 113	416 196	331 156	226 107
	06	<i>cfm</i> <i>l/s</i>	498 235	454 214	396 187	489 231	444 210	385 182	481 227	434 205	376 177
	08	<i>cfm</i> <i>l/s</i>	554 261	501 236	425 201	545 257	489 231	414 195	535 253	478 226	403 190
	10	<i>cfm</i> <i>l/s</i>	919 433	730 345	498 235	862 407	684 323	468 221	814 384	646 305	443 209
	12	<i>cfm</i> <i>l/s</i>	991 468	903 426	785 370	973 459	881 416	763 360	954 450	861 406	743 351

Table 10

Air Flow Rates (50 Hz)

Model DCE

	Size	02	03	04	05	06	08	10	12
Nom	cfm	200	300	400	500	600	800	1000	1200
AFR	l/s	94	142	189	236	283	378	472	566

Speed	DCE DFE		2Rows			3 Rows			4 Rows		
			External Static Pressure								
		inwg	0	0.1	0.2	0	0.1	0.2	0	0.1	0.2
		Pa	0	25	50	0	25	50	0	25	50
High	02	cfm	230	156	66	215	146	62	202	138	59
		l/s	108	74	31	101	69	29	95	65	28
	03	cfm	369	305	219	347	284	203	328	267	191
		l/s	174	144	103	164	134	96	155	126	90
	04	cfm	463	379	270	437	356	253	415	336	240
		l/s	218	179	127	206	168	120	196	159	113
	05	cfm	549	457	355	513	428	334	484	405	316
		l/s	259	216	167	242	202	158	228	191	149
06	cfm	712	621	525	677	592	502	647	567	481	
	l/s	336	293	248	319	280	237	305	267	227	
08	cfm	892	781	655	846	739	620	805	704	590	
	l/s	421	369	309	399	349	293	380	332	279	
10	cfm	1078	898	697	1005	839	654	945	790	618	
	l/s	509	424	329	474	396	309	446	373	292	
12	cfm	1404	1227	1037	1332	1166	988	1271	1114	945	
	l/s	662	579	489	629	550	466	600	526	446	
Medium	02	cfm	215	140	54	201	132	51	189	125	49
		l/s	101	66	25	95	62	24	89	59	23
	03	cfm	301	245	169	288	232	160	276	221	153
		l/s	142	116	80	136	110	76	130	104	72
	04	cfm	399	330	246	382	315	235	367	302	226
		l/s	188	156	116	180	149	111	173	143	107
	05	cfm	460	374	313	433	358	308	412	345	305
		l/s	217	176	148	204	169	145	194	163	144
06	cfm	609	539	462	589	521	446	570	504	432	
	l/s	288	254	218	278	246	210	269	238	204	
08	cfm	691	606	501	668	583	482	647	563	464	
	l/s	326	286	236	315	275	227	305	266	219	
10	cfm	905	738	622	850	705	613	806	679	610	
	l/s	427	348	293	401	333	289	381	320	288	
12	cfm	1208	1068	914	1164	1029	881	1123	993	851	
	l/s	570	504	431	549	485	416	530	469	402	
Low	02	cfm	189	116	0	178	110	0	169	105	0
		l/s	89	55	0	84	52	0	80	49	0
	03	cfm	195	152	115	189	149	113	184	145	111
		l/s	92	72	54	89	70	53	87	68	52
	04	cfm	347	287	208	336	277	200	325	266	193
		l/s	164	136	98	158	131	94	153	126	91
	05	cfm	422	316	183	396	297	173	375	282	163
		l/s	199	149	86	187	140	81	177	133	77
06	cfm	478	427	360	469	417	351	459	407	341	
	l/s	226	201	170	221	197	166	217	192	161	
08	cfm	530	466	379	520	454	368	509	443	359	
	l/s	250	220	179	245	214	174	240	209	169	
10	cfm	828	621	359	777	583	338	733	550	321	
	l/s	391	293	170	367	275	159	346	259	151	
12	cfm	951	848	714	930	826	694	910	805	675	
	l/s	449	400	337	439	390	328	429	380	319	

Table 11

Air Flow Rates (60 Hz)

Model DCL

	Size	02	03	04	05	06	08	10	12
Nom	cfm	200	300	400	500	600	800	1000	1200
AFR	l/s	94	142	189	236	283	378	472	566

Speed	DCL DFB		2 Rows			3 Rows			4 Rows		
			External Static Pressure								
		inwg	0	0.1	0.2	0	0.1	0.2	0	0.1	0.2
		Pa	0	25	50	0	25	50	0	25	50
High	02	cfm	321	266	187	302	246	173	284	230	161
		l/s	152	126	88	142	116	82	134	108	76
	03	cfm	388	349	296	373	332	279	358	317	264
		l/s	183	165	140	176	157	132	169	150	125
	04	cfm	455	415	386	441	405	382	429	396	382
		l/s	215	196	182	208	191	180	202	187	180
	05	cfm	602	531	470	567	506	454	540	485	441
		l/s	284	251	222	268	239	214	255	229	208
06	cfm	763	723	675	745	704	655	728	686	634	
	l/s	456	423	388	434	403	370	415	385	353	
08	cfm	880	857	819	871	843	799	860	827	777	
	l/s	404	381	354	394	371	344	385	361	334	
10	cfm	1444	1358	1253	1383	1292	1185	1323	1231	1124	
	l/s	560	495	439	526	470	424	500	451	412	
12	cfm	1517	1437	1340	1479	1396	1295	1441	1356	1252	
	l/s	819	791	747	803	768	717	783	742	686	
Medium	02	cfm	282	237	171	270	223	161	258	212	151
		l/s	133	112	81	127	105	76	122	100	71
	03	cfm	309	270	227	298	261	219	288	252	213
		l/s	146	127	107	141	123	103	136	119	100
	04	cfm	328	306	266	324	301	259	320	295	251
		l/s	155	144	126	153	142	122	151	139	119
	05	cfm	560	510	447	539	488	426	520	468	406
		l/s	264	241	211	255	230	201	245	221	192
06	cfm	565	537	502	557	529	491	550	521	481	
	l/s	243	215	198	236	211	198	230	207	199	
08	cfm	627	586	539	617	576	530	608	567	520	
	l/s	238	219	200	234	216	197	231	213	195	
10	cfm	1093	1034	950	1068	1003	912	1042	971	876	
	l/s	524	476	416	503	455	395	483	435	377	
12	cfm	1126	1070	998	1110	1053	975	1094	1035	952	
	l/s	579	540	496	566	527	483	553	515	470	
Low	02	cfm	205	167	119	199	161	115	192	156	111
		l/s	97	79	56	94	76	54	91	74	53
	03	cfm	189	154	128	184	151	126	180	148	125
		l/s	89	73	60	87	71	60	85	70	59
	04	cfm	266	226	201	261	223	200	256	219	200
		l/s	126	107	95	123	105	94	121	103	94
	05	cfm	457	401	339	441	386	327	426	373	316
		l/s	216	189	160	208	182	154	201	176	149
06	cfm	362	326	294	357	322	291	352	318	288	
	l/s	163	148	135	161	146	133	158	145	131	
08	cfm	402	371	337	399	367	334	395	364	331	
	l/s	161	142	122	159	140	121	157	139	120	
10	cfm	698	632	572	682	621	562	669	611	554	
	l/s	427	374	317	411	360	305	396	347	294	
12	cfm	722	649	587	710	641	580	700	634	574	
	l/s	374	345	314	370	340	310	365	336	306	

Table 13

Air Flow Rates (60 Hz)

Model DCE

	Size	02	03	04	05	06	08	10	12
Nom	cfm	200	300	400	500	600	800	1000	1200
AFR	l/s	94	142	189	236	283	378	472	566

Speed	DCE DFE		2 Rows			3 Rows			4 Rows		
			External Static Pressure								
		<i>inwg</i>	0	0.1	0.2	0	0.1	0.2	0	0.1	0.2
		<i>Pa</i>	0	25	50	0	25	50	0	25	50
High	02	<i>cfm</i>	296	229	138	276	212	128	258	197	120
		<i>l/s</i>	140	108	65	130	100	61	122	93	57
	03	<i>cfm</i>	369	324	262	354	308	247	339	293	234
		<i>l/s</i>	174	153	124	167	145	117	160	138	110
	04	<i>cfm</i>	435	398	382	422	391	384	411	385	394
		<i>l/s</i>	205	188	180	199	184	181	194	182	186
	05	<i>cfm</i>	566	499	446	536	478	435	512	461	427
		<i>l/s</i>	267	235	210	253	226	205	242	218	202
06	<i>cfm</i>	744	700	647	726	681	625	707	661	605	
	<i>l/s</i>	351	331	305	342	321	295	334	312	286	
08	<i>cfm</i>	870	841	793	859	824	769	845	804	745	
	<i>l/s</i>	411	397	374	405	389	363	399	379	352	
10	<i>cfm</i>	1403	1308	1193	1339	1241	1125	1279	1180	1066	
	<i>l/s</i>	662	617	563	632	586	531	603	557	503	
12	<i>cfm</i>	1478	1391	1283	1439	1348	1237	1400	1306	1193	
	<i>l/s</i>	698	656	605	679	636	584	661	616	563	
Medium	02	<i>cfm</i>	262	207	130	248	194	122	236	183	115
		<i>l/s</i>	124	98	61	117	92	57	111	86	54
	03	<i>cfm</i>	290	249	204	280	240	198	271	233	192
		<i>l/s</i>	137	117	96	132	113	93	128	110	91
	04	<i>cfm</i>	318	289	235	314	283	227	309	276	220
		<i>l/s</i>	150	137	111	148	133	107	146	130	104
	05	<i>cfm</i>	536	480	409	515	459	389	495	439	370
		<i>l/s</i>	253	227	193	243	216	184	234	207	175
06	<i>cfm</i>	551	521	477	544	512	466	537	503	454	
	<i>l/s</i>	260	246	225	257	242	220	253	237	214	
08	<i>cfm</i>	607	564	513	597	554	503	588	544	493	
	<i>l/s</i>	286	266	242	282	261	237	277	257	233	
10	<i>cfm</i>	1066	996	895	1038	961	855	1009	926	818	
	<i>l/s</i>	503	470	422	490	453	404	476	437	386	
12	<i>cfm</i>	1099	1038	948	1083	1018	923	1067	998	898	
	<i>l/s</i>	518	490	447	511	480	436	503	471	424	
Low	02	<i>cfm</i>	188	144	92	181	139	89	175	134	86
		<i>l/s</i>	89	68	43	85	66	42	83	63	41
	03	<i>cfm</i>	170	140	116	166	138	115	163	136	113
		<i>l/s</i>	80	66	55	78	65	54	77	64	54
	04	<i>cfm</i>	246	210	204	241	208	206	237	206	210
		<i>l/s</i>	116	99	96	114	98	97	112	97	99
	05	<i>cfm</i>	430	371	306	414	357	296	400	345	286
		<i>l/s</i>	203	175	145	195	169	140	189	163	135
06	<i>cfm</i>	343	310	278	339	306	275	334	303	273	
	<i>l/s</i>	162	146	131	160	145	130	158	143	129	
08	<i>cfm</i>	387	354	321	383	351	318	380	348	315	
	<i>l/s</i>	183	167	151	181	165	150	179	164	149	
10	<i>cfm</i>	663	602	541	651	592	531	639	583	522	
	<i>l/s</i>	313	284	255	307	279	251	302	275	246	
12	<i>cfm</i>	683	617	555	674	610	549	665	604	543	
	<i>l/s</i>	322	291	262	318	288	259	314	285	256	

Table 14

Chilled Water- Standard Capacity Ratings (DCL - 2 Rows)

Size	Speed	ESP		50 Hz										60 Hz									
				Air Flow Rate		Total Capacity		Sensible Capacity		Water Flow Rate		Water Pressure Drop		Air Flow 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	0	262	124	5.2	1.52	4.3	1.26	1.04	0.07	1.3	4.0	321	151	5.87	1.72	4.93	1.45	1.17	0.07	1.7	5.0
		0.1	25	195	92	4.4	1.29	3.5	1.03	0.88	0.06	1.0	2.9	266	126	5.23	1.53	4.33	1.27	1.05	0.07	1.4	4.1
		0.2	50	113	53	3.3	0.96	2.4	0.71	0.66	0.04	0.6	1.7	187	88	4.31	1.26	3.41	1.00	0.86	0.05	0.9	2.8
	Medium	0	0	248	117	5.0	1.47	4.1	1.21	1.00	0.06	1.3	3.8	282	133	5.42	1.59	4.51	1.32	1.08	0.07	1.5	4.3
		0.1	25	179	84	4.2	1.23	3.3	0.97	0.84	0.05	0.9	2.7	237	112	4.90	1.43	4.00	1.17	0.98	0.06	1.2	3.6
		0.2	50	98	46	3.0	0.88	2.2	0.64	0.60	0.04	0.5	1.5	171	81	4.11	1.20	3.21	0.94	0.82	0.05	0.9	2.6
	Low	0	0	219	103	4.7	1.37	3.8	1.11	0.94	0.06	1.1	3.3	205	97	4.53	1.33	3.63	1.06	0.91	0.06	1.0	3.1
		0.1	25	155	73	3.9	1.14	3.0	0.88	0.78	0.05	0.8	2.3	167	79	4.06	1.19	3.16	0.93	0.81	0.05	0.8	2.5
		0.2	50	73	34	2.6	0.75	1.8	0.52	0.51	0.03	0.4	1.1	119	56	3.37	0.99	2.50	0.73	0.67	0.04	0.6	1.8
3	High	0	0	393	185	7.5	2.19	6.1	1.79	1.50	0.09	2.8	8.3	388	183	7.43	2.18	6.07	1.78	1.49	0.09	2.8	8.2
		0.1	25	339	160	6.9	2.03	5.6	1.63	1.39	0.09	2.4	7.2	349	165	7.05	2.07	5.67	1.66	1.41	0.09	2.5	7.4
		0.2	50	265	125	6.2	1.82	4.8	1.40	1.24	0.08	2.0	5.9	296	140	6.51	1.91	5.11	1.50	1.30	0.08	2.1	6.4
	Medium	0	0	323	152	6.8	1.99	5.4	1.58	1.36	0.09	2.3	6.9	309	146	6.64	1.94	5.25	1.54	1.33	0.08	2.2	6.7
		0.1	25	275	130	6.3	1.85	4.9	1.43	1.26	0.08	2.0	6.0	270	127	6.25	1.83	4.82	1.41	1.25	0.08	2.0	6.0
		0.2	50	210	99	5.5	1.62	4.1	1.20	1.11	0.07	1.6	4.8	227	107	5.79	1.70	4.33	1.27	1.16	0.07	1.7	5.2
	Low	0	0	216	102	5.6	1.65	4.2	1.23	1.13	0.07	1.6	4.9	189	89	5.22	1.53	3.82	1.12	1.04	0.07	1.4	4.3
		0.1	25	173	82	5.0	1.45	3.6	1.05	0.99	0.06	1.3	3.9	154	73	4.63	1.36	3.31	0.97	0.93	0.06	1.1	3.4
		0.2	50	132	62	4.2	1.24	3.0	0.87	0.84	0.05	1.0	2.9	128	60	4.15	1.22	2.90	0.85	0.83	0.05	0.9	2.8
4	High	0	0	495	234	10.5	3.07	8.1	2.39	2.09	0.13	6.0	17.9	455	215	10.04	2.94	7.71	2.26	2.01	0.13	5.6	16.6
		0.1	25	424	200	9.7	2.84	7.4	2.16	1.94	0.12	5.2	15.5	415	196	9.58	2.81	7.27	2.13	1.92	0.12	5.1	15.2
		0.2	50	329	155	8.6	2.51	6.3	1.84	1.71	0.11	4.1	12.4	386	182	9.24	2.71	6.94	2.04	1.85	0.12	4.8	14.2
	Medium	0	0	429	202	9.7	2.86	7.4	2.18	1.95	0.12	5.3	15.7	328	155	8.56	2.51	6.27	1.84	1.71	0.11	4.1	12.3
		0.1	25	366	173	9.0	2.64	6.7	1.97	1.80	0.11	4.5	13.6	306	144	8.29	2.43	6.00	1.76	1.66	0.10	3.9	11.6
		0.2	50	290	137	8.1	2.37	5.8	1.70	1.62	0.10	3.7	11.1	266	126	7.77	2.28	5.50	1.61	1.55	0.10	3.5	10.3
	Low	0	0	370	175	9.1	2.66	6.8	1.98	1.81	0.11	4.6	13.7	266	126	7.77	2.28	5.50	1.61	1.55	0.10	3.5	10.3
		0.1	25	319	151	8.5	2.48	6.2	1.81	1.69	0.11	4.0	12.0	226	107	7.21	2.11	4.98	1.46	1.44	0.09	3.0	9.0
		0.2	50	250	118	7.6	2.21	5.3	1.55	1.51	0.10	3.3	9.8	201	95	6.83	2.00	4.62	1.36	1.37	0.09	2.7	8.1
5	High	0	0	592	279	12.0	3.51	9.4	2.75	2.39	0.15	7.5	22.3	602	284	12.06	3.53	9.47	2.78	2.41	0.15	7.6	22.7
		0.1	25	504	238	11.1	3.24	8.5	2.48	2.21	0.14	6.5	19.3	531	251	11.35	3.33	8.76	2.57	2.27	0.14	6.8	20.2
		0.2	50	407	192	9.9	2.91	7.4	2.17	1.99	0.13	5.3	15.8	470	222	10.68	3.13	8.11	2.38	2.14	0.13	6.1	18.1
	Medium	0	0	506	239	11.1	3.25	8.5	2.49	2.22	0.14	6.5	19.4	560	264	11.65	3.42	9.06	2.65	2.33	0.15	7.1	21.3
		0.1	25	416	196	10.1	2.95	7.5	2.20	2.01	0.13	5.4	16.1	510	241	11.13	3.26	8.54	2.50	2.23	0.14	6.5	19.5
		0.2	50	338	160	9.1	2.67	6.6	1.93	1.82	0.11	4.5	13.4	447	211	10.42	3.05	7.85	2.30	2.08	0.13	5.8	17.2
	Low	0	0	467	220	10.7	3.12	8.1	2.37	2.13	0.13	6.0	18.0	457	216	10.53	3.09	7.96	2.33	2.11	0.13	5.9	17.6
		0.1	25	372	176	9.5	2.79	7.0	2.05	1.90	0.12	4.9	14.6	401	189	9.87	2.89	7.33	2.15	1.97	0.12	5.2	15.6
		0.2	50	254	120	8.0	2.33	5.5	1.62	1.59	0.10	3.5	10.5	339	160	9.12	2.67	6.60	1.93	1.82	0.12	4.5	13.5
6	High	0	0	754	356	16.3	4.79	12.4	3.63	3.27	0.21	15.5	46.3	763	360	16.44	4.82	12.50	3.66	3.29	0.21	15.7	46.9
		0.1	25	667	315	15.2	4.46	11.4	3.35	3.04	0.19	13.6	40.5	723	341	15.93	4.67	12.06	3.53	3.19	0.20	14.8	44.2
		0.2	50	574	271	14.2	4.17	10.4	3.06	2.85	0.18	12.0	35.9	675	319	15.30	4.49	11.51	3.37	3.06	0.19	13.7	41.0
	Medium	0	0	642	303	14.9	4.38	11.2	3.27	2.99	0.19	13.1	39.2	565	267	14.14	4.14	10.34	3.03	2.83	0.18	11.9	35.4
		0.1	25	575	271	14.3	4.18	10.5	3.06	2.85	0.18	12.0	35.9	537	253	13.83	4.05	10.03	2.94	2.77	0.17	11.4	34.0
		0.2	50	501	236	13.4	3.94	9.6	2.82	2.69	0.17	10.8	32.2	502	237	13.44	3.94	9.63	2.82	2.69	0.17	10.8	32.2
	Low	0	0	498	235	13.4	3.93	9.6	2.81	2.68	0.17	10.7	32.0	362	171	11.77	3.45	7.97	2.34	2.35	0.15	8.4	25.2
		0.1	25	454	214	12.9	3.78	9.1	2.66	2.58	0.16	10.0	29.8	326	154	11.15	3.27	7.45	2.18	2.23	0.14	7.6	22.8
		0.2	50	396	187	12.2	3.58	8.4	2.46	2.44	0.15	9.0	27.0	294	139	10.56	3.09	6.96	2.04	2.11	0.13	6.9	20.6
8	High	0	0	942	445	20.5	6.00	15.4	4.51	4.09	0.26	25.1	75.0	880	415	19.70	5.77	14.71	4.31	3.94	0.25	23.4	69.9
		0.1	25	839	396	19.1	5.61	14.2	4.17	3.82	0.24	22.1	66.1	857	404	19.38	5.68	14.45	4.24	3.88	0.24	22.7	67.8
		0.2	50	720	340	17.5	5.12	12.9	3.77	3.50	0.22	18.7	56.0	819	386	18.82	5.52	14.00	4.10	3.76	0.24	21.5	64.2
	Medium	0	0	728	344	17.6	5.15	12.9	3.79	3.51	0.22	18.9	56.5	827	396	16.37	4.80	11.80	3.46	3.27	0.21	16.6	49.6
		0.1	25	651	307	16.7	4.89	12.1	3.54	3.33	0.21	17.2	51.3	586	277	15.86	4.65	11.32	3.32	3.17	0.20	15.6	46.8
		0.2	50	555	262	15.5	4.53	11.0	3.21	3.09	0.20	14.9	44.6	539	254	15.27	4.47	10.76	3.15	3.05	0.19	14.6	43.6
	Low	0	0	554	261	15.5	4.53	10.9	3.21	3.09	0.20	14.9	44.6	402	190	13.48	3.95	9.05	2.65	2.70	0.17	11.6	34.6
		0.1	25	501	236	14.8	4.33	10.3	3.02	2.96	0.19	13.7	41.1	371	175	13.05	3.82	8.63	2.53	2.61	0.16	10.9	32.6
		0.2	50	425	201	13.8	4.04	9.4	2.74	2.76	0.17	12.1	36.1	337	159	12.54	3.68	8.17	2.39	2.51	0.16	10.1	30.3
10	High	0	0	1163	549	24.2	7.10	18.6	5.45	4.84	0.31	13.6	40.8	1444	681	27.19	7.97	21.37	6.26	5.44	0.34	16.9	50.6
		0.1	25	990	467	22.1	6.48	16.7	4.90														

Chilled Water- Standard Capacity Ratings (DCL - 3 Rows)

Size	Speed	ESP		50 Hz										60 Hz									
				Air Flow Rate		Total Capacity		Sensible Capacity		Water Flow Rate		Water Pressure Drop		Air Flow 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	0	245	116	7.4	2.16	5.4	1.59	1.48	0.09	3.2	9.4	302	143	8.33	2.44	6.26	1.84	1.67	0.11	3.9	11.8
		0.1	25	182	86	6.3	1.86	4.4	1.30	1.27	0.08	2.4	7.1	246	116	7.40	2.17	5.43	1.59	1.48	0.09	3.2	9.5
		0.2	50	107	50	4.5	1.32	3.0	0.87	0.90	0.06	1.3	3.8	173	82	6.18	1.81	4.29	1.26	1.24	0.08	2.3	6.8
	Medium	0	0	232	109	7.2	2.10	5.2	1.53	1.44	0.09	3.0	9.0	270	127	7.79	2.28	5.79	1.70	1.56	0.10	3.5	10.4
		0.1	25	168	79	6.1	1.79	4.2	1.23	1.22	0.08	2.2	6.6	223	105	7.03	2.06	5.08	1.49	1.41	0.09	2.9	8.6
		0.2	50	93	44	4.1	1.19	2.7	0.78	0.81	0.05	1.1	3.1	161	76	5.96	1.75	4.09	1.20	1.19	0.08	2.1	6.4
	Low	0	0	207	98	6.8	1.98	4.8	1.42	1.35	0.09	2.7	8.0	199	94	6.63	1.94	4.71	1.38	1.33	0.08	2.6	7.7
		0.1	25	147	69	5.6	1.65	3.8	1.12	1.12	0.07	1.9	5.7	161	76	5.96	1.75	4.09	1.20	1.19	0.08	2.1	6.4
		0.2	50	70	33	3.3	0.96	2.1	0.62	0.66	0.04	0.7	2.1	115	54	4.73	1.39	3.16	0.93	0.95	0.06	1.4	4.2
3	High	0	0	373	176	10.6	3.10	7.8	2.29	2.11	0.13	6.5	19.5	373	176	10.57	3.10	7.82	2.29	2.11	0.13	6.5	19.5
		0.1	25	318	150	9.7	2.83	7.0	2.05	1.93	0.12	5.5	16.5	332	157	9.91	2.90	7.22	2.12	1.98	0.13	5.8	17.2
		0.2	50	246	116	8.4	2.46	5.9	1.72	1.68	0.11	4.2	12.7	279	132	8.98	2.63	6.40	1.88	1.80	0.11	4.8	14.4
	Medium	0	0	310	146	9.5	2.79	6.9	2.02	1.91	0.12	5.4	16.0	298	141	9.32	2.73	6.70	1.96	1.86	0.12	5.2	15.4
		0.1	25	262	124	8.7	2.54	6.1	1.80	1.74	0.11	4.5	13.5	261	123	8.66	2.54	6.12	1.79	1.73	0.11	4.5	13.4
		0.2	50	199	94	7.5	2.19	5.1	1.49	1.49	0.09	3.4	10.2	219	103	7.87	2.31	5.43	1.59	1.57	0.10	3.8	11.3
	Low	0	0	209	99	7.7	2.25	5.3	1.54	1.53	0.10	3.6	10.8	184	87	7.16	2.10	4.82	1.41	1.43	0.09	3.2	9.5
		0.1	25	169	80	6.8	2.00	4.6	1.33	1.37	0.09	2.9	8.7	151	71	6.40	1.88	4.21	1.23	1.28	0.08	2.6	7.7
		0.2	50	129	61	5.8	1.71	3.8	1.10	1.16	0.07	2.2	6.5	126	59	5.72	1.68	3.69	1.08	1.14	0.07	2.1	6.3
4	High	0	0	471	222	13.4	3.92	9.9	2.91	2.67	0.17	4.5	13.3	441	208	12.84	3.76	9.47	2.78	2.57	0.16	4.1	12.3
		0.1	25	400	189	12.1	3.55	8.9	2.59	2.43	0.15	3.7	11.1	405	191	12.21	3.58	8.92	2.62	2.44	0.15	3.8	11.2
		0.2	50	308	145	10.6	3.10	7.4	2.17	2.11	0.13	2.9	8.6	382	180	11.82	3.47	8.57	2.51	2.36	0.15	3.5	10.6
	Medium	0	0	412	194	12.3	3.61	9.0	2.65	2.47	0.16	3.8	11.5	324	153	10.84	3.18	7.67	2.25	2.17	0.14	3.0	9.0
		0.1	25	350	165	11.3	3.31	8.1	2.37	2.26	0.14	3.3	9.7	301	142	10.44	3.06	7.30	2.14	2.09	0.13	2.8	8.4
		0.2	50	277	131	10.0	2.93	6.9	2.02	2.00	0.13	2.6	7.8	259	122	9.65	2.83	6.60	1.93	1.93	0.12	2.4	7.3
	Low	0	0	360	170	11.5	3.36	8.2	2.41	2.29	0.14	3.3	10.0	261	123	9.69	2.84	6.63	1.94	1.94	0.12	2.5	7.3
		0.1	25	308	145	10.6	3.10	7.4	2.17	2.11	0.13	2.9	8.6	223	105	8.91	2.61	5.96	1.75	1.78	0.11	2.1	6.3
		0.2	50	241	114	9.3	2.72	6.3	1.84	1.86	0.12	2.3	6.8	200	94	8.26	2.42	5.48	1.61	1.65	0.10	1.8	5.5
5	High	0	0	553	261	16.2	4.74	11.7	3.44	3.23	0.20	16.2	48.5	567	268	16.43	4.82	11.94	3.50	3.29	0.21	16.7	50.0
		0.1	25	471	222	14.7	4.32	10.5	3.08	2.94	0.19	13.7	40.8	506	239	15.28	4.48	11.00	3.22	3.06	0.19	14.6	43.7
		0.2	50	382	180	13.3	3.88	9.2	2.68	2.65	0.17	11.3	33.6	454	214	14.46	4.24	10.25	3.00	2.89	0.18	13.2	39.5
	Medium	0	0	474	224	14.8	4.33	10.5	3.09	2.95	0.19	13.7	41.1	539	254	15.90	4.66	11.51	3.37	3.18	0.20	15.8	47.1
		0.1	25	394	186	13.5	3.95	9.3	2.74	2.69	0.17	11.6	34.6	488	230	14.98	4.39	10.74	3.15	3.00	0.19	14.1	42.1
		0.2	50	327	154	12.3	3.60	8.3	2.43	2.46	0.15	9.8	29.2	426	201	14.00	4.10	9.83	2.88	2.80	0.18	12.4	37.2
	Low	0	0	440	208	14.2	4.17	10.0	2.94	2.85	0.18	12.8	38.3	441	208	14.25	4.18	10.05	2.95	2.85	0.18	12.9	38.4
		0.1	25	349	165	12.7	3.71	8.6	2.53	2.53	0.16	10.4	31.0	386	182	13.32	3.91	9.21	2.70	2.66	0.17	11.4	33.9
		0.2	50	239	113	10.2	3.00	6.7	1.95	2.05	0.13	7.0	20.9	327	154	12.28	3.60	8.28	2.43	2.46	0.15	9.8	29.2
6	High	0	0	717	338	20.9	6.12	15.2	4.46	4.18	0.26	11.5	34.4	745	352	21.34	6.25	15.62	4.58	4.27	0.27	12.0	35.8
		0.1	25	635	300	19.6	5.74	14.0	4.11	3.91	0.25	10.2	30.5	704	332	20.66	6.06	15.02	4.40	4.13	0.26	11.3	33.7
		0.2	50	548	259	18.2	5.34	12.8	3.74	3.65	0.23	9.0	26.8	655	309	19.87	5.82	14.31	4.19	3.97	0.25	10.5	31.4
	Medium	0	0	621	293	19.4	5.68	13.8	4.05	3.87	0.24	10.0	29.9	557	263	18.37	5.38	12.89	3.78	3.67	0.23	9.1	27.1
		0.1	25	555	262	18.3	5.37	12.9	3.77	3.67	0.23	9.1	27.1	529	250	17.92	5.25	12.47	3.66	3.58	0.23	8.7	25.9
		0.2	50	484	228	17.1	5.00	11.7	3.44	3.41	0.22	7.9	23.7	491	232	17.22	5.05	11.86	3.48	3.44	0.22	8.1	24.1
	Low	0	0	489	231	17.2	5.03	11.8	3.47	3.43	0.22	8.0	24.0	357	168	14.29	4.19	9.50	2.78	2.86	0.18	5.7	17.1
		0.1	25	444	210	16.2	4.76	11.1	3.24	3.25	0.20	7.2	21.6	322	152	13.43	3.94	8.83	2.59	2.69	0.17	5.1	15.2
		0.2	50	385	182	14.9	4.38	10.0	2.94	2.99	0.19	6.2	18.5	291	137	12.63	3.70	8.21	2.41	2.53	0.16	4.6	13.6
8	High	0	0	894	422	26.1	7.64	18.9	5.53	5.21	0.33	18.5	55.3	871	411	25.60	7.50	18.51	5.43	5.12	0.32	17.9	53.6
		0.1	25	794	375	24.1	7.06	17.3	5.07	4.82	0.30	16.0	47.8	843	398	25.05	7.34	18.08	5.30	5.01	0.32	17.2	51.4
		0.2	50	682	322	22.3	6.52	15.7	4.59	4.45	0.28	13.8	41.3	799	377	24.18	7.09	17.38	5.09	4.84	0.31	16.1	48.2
	Medium	0	0	705	333	22.6	6.63	16.0	4.69	4.53	0.29	14.3	42.6	617	291	21.14	6.20	14.65	4.29	4.23	0.27	12.6	37.6
		0.1	25	628	296	21.3	6.25	14.8	4.34	4.27	0.27	12.8	38.2	576	272	20.41	5.98	14.00	4.10	4.08	0.26	11.8	35.2
		0.2	50	535	252	19.7	5.77	13.4	3.91	3.93	0.25	11.0	32.9	530	250	19.58	5.74	13.27	3.89	3.92	0.25	10.9	32.6
	Low	0	0	545	257	19.9	5.82	13.5	3.96	3.97	0.25	11.2	33.5	399	188	16.84	4.94	11.00	3.22	3.37	0.21	8.3	24.7
		0.1	25	489	231	18.8	5.51	12.6	3.69	3.76	0.24	10.1	30.3	367	173	15.97	4.68	10.35	3.03	3.19	0.20	7.5	22.4
		0.2	50	414	195	17.2	5.05	11.3	3.31	3.45	0.22	8.6	25.8	334	158	15.03	4.41	9.66	2.83	3.01	0.19	6.7	20.1

Chilled Water- Standard Capacity Ratings (DCL - 4 Rows)

Size	Speed	ESP		50 Hz										60 Hz									
				Air Flow Rate		Total Capacity		Sensible Capacity		Water Flow Rate		Water Pressure Drop		Air Flow 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	0	230	109	8.9	2.60	6.1	1.78	1.77	0.11	5.2	15.6	284	134	10.09	2.96	7.08	2.07	2.02	0.13	6.6	19.8
		0.1	25	172	81	7.4	2.17	4.9	1.44	1.48	0.09	3.8	11.2	230	109	8.86	2.60	6.07	1.78	1.77	0.11	5.2	15.6
		0.2	50	101	48	5.1	1.50	3.2	0.95	1.02	0.06	1.9	5.7	161	76	7.12	2.09	4.68	1.37	1.42	0.09	3.5	10.4
	Medium	0	0	218	103	8.6	2.51	5.8	1.71	1.71	0.11	4.9	14.6	258	122	9.51	2.79	6.60	1.93	1.90	0.12	5.9	17.7
		0.1	25	158	75	7.0	2.06	4.6	1.35	1.41	0.09	3.4	10.2	212	100	8.43	2.47	5.71	1.67	1.69	0.11	4.8	14.2
		0.2	50	89	42	4.6	1.35	2.9	0.85	0.92	0.06	1.6	4.7	151	71	6.84	2.00	4.46	1.31	1.37	0.09	3.2	9.7
	Low	0	0	197	93	8.1	2.36	5.4	1.59	1.61	0.10	4.4	13.1	192	91	7.93	2.32	5.32	1.56	1.59	0.10	4.3	12.7
		0.1	25	139	66	6.5	1.90	4.2	1.23	1.30	0.08	2.9	8.8	156	74	6.98	2.05	4.57	1.34	1.40	0.09	3.4	10.0
		0.2	50	66	31	3.6	1.05	2.2	0.65	0.72	0.05	1.0	3.0	111	52	5.53	1.62	3.52	1.03	1.11	0.07	2.2	6.6
3	High	0	0	353	167	12.7	3.73	8.8	2.59	2.54	0.16	10.8	32.2	358	169	12.81	3.76	8.93	2.62	2.56	0.16	11.0	32.7
		0.1	25	300	142	11.6	3.40	7.9	2.32	2.32	0.15	9.1	27.3	317	150	11.99	3.52	8.22	2.41	2.40	0.15	9.7	29.0
		0.2	50	232	109	9.9	2.89	6.5	1.92	1.97	0.12	6.8	20.2	264	125	10.71	3.14	7.19	2.11	2.14	0.14	7.9	23.5
	Medium	0	0	298	141	11.6	3.39	7.9	2.30	2.31	0.15	9.1	27.1	288	136	11.32	3.32	7.67	2.25	2.26	0.14	8.7	26.1
		0.1	25	250	118	10.3	3.03	6.9	2.02	2.07	0.13	7.4	22.1	252	119	10.40	3.05	6.95	2.04	2.08	0.13	7.5	22.3
		0.2	50	189	89	8.6	2.53	5.6	1.64	1.73	0.11	5.3	15.9	213	101	9.34	2.74	6.13	1.80	1.87	0.12	6.1	18.3
	Low	0	0	204	96	9.1	2.66	5.9	1.74	1.82	0.11	5.8	17.4	180	85	8.36	2.45	5.41	1.58	1.67	0.11	5.0	15.0
		0.1	25	164	77	7.9	2.30	5.0	1.48	1.57	0.10	4.5	13.3	148	70	7.32	2.15	4.66	1.36	1.46	0.09	3.9	11.7
		0.2	50	127	60	6.6	1.93	4.1	1.21	1.32	0.08	3.2	9.6	125	59	6.50	1.91	4.08	1.20	1.30	0.08	3.2	9.4
4	High	0	0	448	211	16.2	4.75	11.3	3.31	3.24	0.20	7.5	22.3	429	202	15.78	4.63	10.93	3.20	3.16	0.20	7.1	21.2
		0.1	25	377	178	14.6	4.27	10.0	2.92	2.91	0.18	6.1	18.3	396	187	15.01	4.40	10.31	3.02	3.00	0.19	6.5	19.4
		0.2	50	290	137	12.4	3.63	8.2	2.41	2.48	0.16	4.5	13.6	382	180	14.68	4.30	10.04	2.94	2.94	0.19	6.2	18.6
	Medium	0	0	396	187	15.0	4.40	10.3	3.02	3.00	0.19	6.5	19.4	320	151	13.16	3.86	8.82	2.59	2.63	0.17	5.1	15.2
		0.1	25	335	158	13.5	3.97	9.1	2.67	2.71	0.17	5.4	16.0	295	139	12.51	3.67	8.31	2.44	2.50	0.16	4.6	13.8
		0.2	50	265	125	11.7	3.43	7.7	2.25	2.34	0.15	4.1	12.2	251	118	11.30	3.31	7.38	2.16	2.26	0.14	3.8	11.5
	Low	0	0	349	165	13.9	4.07	9.4	2.76	2.78	0.18	5.6	16.8	256	121	11.44	3.35	7.49	2.19	2.29	0.14	3.9	11.8
		0.1	25	298	141	12.6	3.69	8.4	2.45	2.52	0.16	4.7	14.0	219	103	10.34	3.03	6.67	1.95	2.07	0.13	3.3	9.8
		0.2	50	231	109	10.7	3.14	6.9	2.03	2.14	0.14	3.5	10.4	200	94	9.74	2.86	6.22	1.82	1.95	0.12	2.9	8.8
5	High	0	0	521	246	18.4	5.38	12.9	3.77	3.67	0.23	9.1	27.1	540	255	18.72	5.49	13.19	3.87	3.74	0.24	9.4	28.1
		0.1	25	445	210	16.7	4.90	11.5	3.37	3.35	0.21	7.6	22.8	485	229	17.65	5.17	12.25	3.59	3.53	0.22	8.4	25.2
		0.2	50	362	171	14.7	4.31	9.9	2.90	2.94	0.19	6.0	18.0	441	208	16.64	4.88	11.42	3.35	3.33	0.21	7.6	22.6
	Medium	0	0	448	211	16.8	4.92	11.6	3.39	3.36	0.21	7.7	23.0	520	245	18.33	5.37	12.85	3.77	3.67	0.23	9.1	27.0
		0.1	25	376	177	15.1	4.41	10.2	2.98	3.01	0.19	6.3	18.8	468	221	17.26	5.06	11.93	3.50	3.45	0.22	8.1	24.2
		0.2	50	319	151	13.6	3.98	9.0	2.64	2.72	0.17	5.2	15.5	406	192	15.79	4.63	10.75	3.15	3.16	0.20	6.9	20.5
	Low	0	0	416	196	16.0	4.70	10.9	3.21	3.21	0.20	7.1	21.1	426	201	16.28	4.77	11.13	3.26	3.26	0.21	7.3	21.7
		0.1	25	331	156	13.9	4.07	9.3	2.71	2.78	0.18	5.4	16.2	373	176	14.98	4.39	10.10	2.96	3.00	0.19	6.2	18.6
		0.2	50	226	107	10.9	3.18	7.0	2.04	2.17	0.14	3.4	10.3	316	149	13.49	3.96	8.94	2.62	2.70	0.17	5.1	15.4
6	High	0	0	685	323	24.3	7.12	17.0	4.98	4.86	0.31	8.9	26.7	728	344	25.12	7.36	17.73	5.20	5.02	0.32	9.5	28.5
		0.1	25	608	287	22.7	6.64	15.6	4.57	4.53	0.29	7.9	23.5	686	324	24.30	7.12	17.00	4.98	4.86	0.31	9.0	26.8
		0.2	50	524	247	20.6	6.05	14.0	4.10	4.13	0.26	6.6	19.8	634	299	23.25	6.81	16.09	4.72	4.65	0.29	8.2	24.7
	Medium	0	0	600	283	22.5	6.58	15.5	4.53	4.49	0.28	7.7	23.1	550	260	21.27	6.23	14.50	4.25	4.25	0.27	7.0	20.9
		0.1	25	537	253	21.0	6.14	14.3	4.18	4.19	0.26	6.8	20.3	521	246	20.56	6.03	13.93	4.08	4.11	0.26	6.6	19.6
		0.2	50	468	221	19.2	5.63	12.9	3.77	3.84	0.24	5.8	17.4	481	227	19.55	5.73	13.14	3.85	3.91	0.25	6.0	17.9
	Low	0	0	481	227	19.6	5.73	13.1	3.85	3.91	0.25	6.0	17.9	352	166	16.03	4.70	10.43	3.06	3.21	0.20	4.2	12.4
		0.1	25	434	205	18.3	5.37	12.2	3.57	3.67	0.23	5.3	15.9	318	150	15.00	4.40	9.66	2.83	3.00	0.19	3.7	11.0
		0.2	50	376	177	16.7	4.90	11.0	3.21	3.35	0.21	4.5	13.4	288	136	14.04	4.11	8.96	2.63	2.81	0.18	3.3	9.7
8	High	0	0	852	402	30.0	8.79	21.0	6.15	5.99	0.38	14.1	42.1	860	406	30.15	8.84	21.12	6.19	6.03	0.38	14.3	42.6
		0.1	25	755	356	27.8	8.16	19.2	5.63	5.57	0.35	12.3	36.8	827	390	29.40	8.62	20.51	6.01	5.88	0.37	13.6	40.7
		0.2	50	648	306	25.6	7.50	17.3	5.07	5.12	0.32	10.5	31.4	777	367	28.27	8.29	19.59	5.74	5.65	0.36	12.7	37.8
	Medium	0	0	684	323	26.4	7.73	18.0	5.26	5.27	0.33	11.1	33.2	608	287	24.69	7.24	16.55	4.85	4.94	0.31	9.9	29.5
		0.1	25	606	286	24.7	7.22	16.5	4.84	4.93	0.31	9.8	29.4	567	268	23.76	6.96	15.77	4.62	4.75	0.30	9.2	27.4
		0.2	50	515	243	22.3	6.55	14.7	4.30	4.47	0.28	8.2	24.5	520	245	22.48	6.59	14.79	4.34	4.50	0.28	8.3	24.8
	Low	0	0	535	252	22.9	6.71	15.1	4.43	4.58	0.29	8.6	25.6	395	186	18.69	5.48	12.01	3.52	3.74	0.24	5.9	17.7
		0.1	25	478	226	21.3	6.23	13.9	4.07	4.25	0.27	7.5	22.4	364	172	17.67	5.18	11.28	3.31	3.53	0.22	5.3	15.9
		0.2	50	403	190	19.0	5.56	12.2	3.58	3.79	0.24	6.1	18.1	331	156	16.52	4.84	10.48	3.07	3.30	0.21	4.7	14.1
10	High	0	0	1017	480	35.4	10.36	24.9	7.30	7.07	0.45	7.6	22.7	1323	624	41.16	12.06	30.02					

Hot Water

Capacity Ratings (DCL - 1 Row)

Size	Speed	ESP		50 Hz								60 Hz							
				Air Flow Rate		Total Capacity		Water Flow Rate		Water Pressure Drop		Air Flow 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	0	283	134	13.02	3.82	1.30	0.08	14.02	41.92	340	160	14.18	4.16	1.42	0.09	17.41	52.06
		0.1	25	210	99	11.48	3.37	1.15	0.07	10.32	30.86	289	136	13.13	3.85	1.31	0.08	14.33	42.83
		0.2	50	121	57	8.75	2.56	0.87	0.06	5.58	16.67	205	97	11.35	3.33	1.14	0.07	10.05	30.03
	Medium	0	0	268	126	12.73	3.73	1.27	0.08	13.26	39.65	295	139	13.25	3.88	1.32	0.08	14.65	43.78
		0.1	25	192	91	11.01	3.23	1.10	0.07	9.34	27.91	252	119	12.41	3.64	1.24	0.08	12.46	37.25
		0.2	50	104	49	8.11	2.38	0.81	0.05	4.76	14.23	184	87	10.79	3.16	1.08	0.07	8.90	26.61
	Low	0	0	232	109	12.00	3.52	1.20	0.08	11.48	34.30	213	101	11.56	3.39	1.16	0.07	10.49	31.36
		0.1	25	165	78	10.24	3.00	1.02	0.06	7.89	23.59	174	82	10.50	3.08	1.05	0.07	8.37	25.01
		0.2	50	77	36	6.87	2.01	0.69	0.04	3.45	10.33	124	59	8.86	2.60	0.89	0.06	5.72	17.11
3	High	0	0	413	195	15.67	4.59	1.57	0.10	1.92	5.73	403	190	15.48	4.54	1.55	0.10	1.89	5.64
		0.1	25	363	171	14.72	4.31	1.47	0.09	1.76	5.27	366	173	14.78	4.33	1.48	0.09	1.77	5.30
		0.2	50	287	135	13.17	3.86	1.32	0.08	1.54	4.60	314	148	13.73	4.02	1.37	0.09	1.61	4.83
	Medium	0	0	337	159	14.19	4.16	1.42	0.09	1.68	5.03	321	151	13.87	4.07	1.39	0.09	1.64	4.89
		0.1	25	289	136	13.21	3.87	1.32	0.08	1.54	4.62	280	132	13.02	3.82	1.30	0.08	1.52	4.54
		0.2	50	223	105	11.74	3.44	1.17	0.07	1.36	4.08	236	111	12.05	3.53	1.20	0.08	1.40	4.18
	Low	0	0	224	106	11.76	3.45	1.18	0.07	1.37	4.09	196	92	11.04	3.24	1.10	0.07	1.29	3.86
		0.1	25	179	84	10.56	3.10	1.06	0.07	1.24	3.71	157	74	9.88	2.90	0.99	0.06	1.18	3.53
		0.2	50	135	64	9.11	2.67	0.91	0.06	1.12	3.34	129	61	8.89	2.60	0.89	0.06	1.10	3.29
4	High	0	0	521	246	21.76	6.38	2.18	0.14	8.67	25.92	470	222	20.78	6.09	2.08	0.13	7.78	23.25
		0.1	25	452	213	20.40	5.98	2.04	0.13	7.45	22.27	428	202	19.87	5.82	1.99	0.13	7.02	20.98
		0.2	50	353	167	18.18	5.33	1.82	0.11	5.75	17.20	392	185	19.07	5.59	1.91	0.12	6.40	19.12
	Medium	0	0	447	211	20.29	5.95	2.03	0.13	7.36	22.00	332	157	17.68	5.18	1.77	0.11	5.42	16.19
		0.1	25	385	182	18.92	5.54	1.89	0.12	6.28	18.77	311	147	17.21	5.04	1.72	0.11	5.11	15.28
		0.2	50	305	144	17.07	5.00	1.71	0.11	5.02	15.01	274	129	16.32	4.78	1.63	0.10	4.57	13.66
	Low	0	0	381	180	18.83	5.52	1.88	0.12	6.21	18.57	272	128	16.27	4.77	1.63	0.10	4.54	13.58
		0.1	25	331	156	17.66	5.18	1.77	0.11	5.40	16.15	231	109	15.15	4.44	1.51	0.10	3.93	11.76
		0.2	50	261	123	15.98	4.68	1.60	0.10	4.38	13.09	202	95	14.24	4.17	1.42	0.09	3.49	10.44
5	High	0	0	641	302	23.88	7.00	2.39	0.15	4.09	12.22	646	305	23.96	7.02	2.40	0.15	4.12	12.30
		0.1	25	544	257	22.23	6.51	2.22	0.14	3.54	10.58	564	266	22.57	6.62	2.26	0.14	3.65	10.91
		0.2	50	437	206	20.23	5.93	2.02	0.13	2.96	8.86	491	232	21.27	6.23	2.13	0.13	3.25	9.72
	Medium	0	0	547	258	22.28	6.53	2.23	0.14	3.56	10.63	583	275	22.90	6.71	2.29	0.14	3.76	11.23
		0.1	25	442	209	20.32	5.96	2.03	0.13	2.99	8.94	533	252	22.03	6.46	2.20	0.14	3.48	10.40
		0.2	50	352	166	18.55	5.44	1.86	0.12	2.55	7.62	470	222	20.86	6.11	2.09	0.13	3.14	9.38
	Low	0	0	499	235	21.42	6.28	2.14	0.14	3.30	9.86	476	225	20.98	6.15	2.10	0.13	3.17	9.47
		0.1	25	398	188	19.47	5.71	1.95	0.12	2.77	8.28	417	197	19.84	5.82	1.98	0.13	2.86	8.56
		0.2	50	271	128	16.50	4.83	1.65	0.10	2.11	6.32	352	166	18.55	5.44	1.86	0.12	2.55	7.62
6	High	0	0	797	376	30.87	9.05	3.09	0.19	3.84	11.48	782	369	30.61	8.97	3.06	0.19	3.78	11.29
		0.1	25	704	332	29.26	8.57	2.93	0.18	3.45	10.32	742	350	29.92	8.77	2.99	0.19	3.61	10.79
		0.2	50	605	285	27.40	8.03	2.74	0.17	3.05	9.12	696	328	29.11	8.53	2.91	0.18	3.42	10.23
	Medium	0	0	666	314	28.57	8.37	2.86	0.18	3.30	9.87	574	271	26.80	7.86	2.68	0.17	2.93	8.76
		0.1	25	597	282	27.24	7.98	2.72	0.17	3.02	9.03	545	257	26.24	7.69	2.62	0.17	2.82	8.44
		0.2	50	520	245	25.76	7.55	2.58	0.16	2.73	8.17	512	242	25.60	7.50	2.56	0.16	2.70	8.08
	Low	0	0	506	239	25.48	7.47	2.55	0.16	2.68	8.01	368	174	22.20	6.51	2.22	0.14	2.14	6.41
		0.1	25	464	219	24.62	7.22	2.46	0.16	2.53	7.56	330	156	21.00	6.15	2.10	0.13	1.98	5.91
		0.2	50	406	192	23.30	6.83	2.33	0.15	2.31	6.91	297	140	19.85	5.82	1.99	0.13	1.83	5.47
8	High	0	0	996	470	37.81	11.08	3.78	0.24	6.00	17.92	889	420	35.91	10.53	3.59	0.23	5.34	15.98
		0.1	25	890	420	35.93	10.53	3.59	0.23	5.35	15.99	869	410	35.54	10.42	3.55	0.22	5.23	15.62
		0.2	50	765	361	33.59	9.85	3.36	0.21	4.63	13.84	838	395	34.98	10.25	3.50	0.22	5.05	15.08
	Medium	0	0	750	354	33.28	9.75	3.33	0.21	4.54	13.57	638	301	31.02	9.09	3.10	0.20	3.93	11.74
		0.1	25	675	319	31.76	9.31	3.18	0.20	4.12	12.31	596	281	30.17	8.84	3.02	0.19	3.72	11.11
		0.2	50	579	273	29.81	8.74	2.98	0.19	3.63	10.85	550	260	29.20	8.56	2.92	0.18	3.49	10.42
	Low	0	0	563	266	29.48	8.64	2.95	0.19	3.55	10.61	406	192	25.75	7.55	2.58	0.16	2.77	8.27
		0.1	25	512	242	28.37	8.31	2.84	0.18	3.30	9.86	374	176	24.84	7.28	2.48	0.16	2.60	7.78
		0.2	50	437	206	26.57	7.79	2.66	0.17	2.93	8.74	340	160	23.79	6.97	2.38	0.15	2.42	7.24
10	High	0	0	1265	597	49.92	14.63	4.99	0.31	25.61	76.54	1508	712	54.54	15.98	5.45	0.34	32.54	97.27
		0.1	25	1073	506	45.77	13.42	4.58	0.29	20.33	60.76	1426	673	53.01	15.54	5.30	0.33	30.11	90.02
		0.2	50	863	407	41.30	12.11	4.13	0.26	15.57	46.53	1326	626	51.14	14.99	5.11	0.32	27.32	81.66
	Medium	0	0	1080	510	45.93	13.46	4.59	0.29	20.51	61.31	1120	529	46.82	13.72	4.68	0.30	21.58	64.51
		0.1	25	874	412	41.52	12.17	4.15	0.26	15.78	47.17	1063	502	45.54	13.35	4.55	0.29	20.06	59.97
		0.2	50	698	329	37.79	11.08	3.78	0.24	12.43	37.15	988	466	43.84	12.85	4.38	0.28	18.16	54.28
	Low	0	0	987	466	43.82	12.84	4.38	0.28	18.13	54.21	714	337	38.14	11.18	3.81	0.24	12.72	38.03
		0.1	25	785	370	39.68	11.63	3.97	0.25	14.06	42.02	644	304	36.56	10.72	3.66	0.23	11.45	34.23
		0.2	50	535	252	33.62	9.85	3.36	0.21	9.34	27.91	582	275	35.03	10.27	3.50	0.22	10.31	30.83
12	High	0	0	1579	745	64.30	18.85	6.43	0.41	23.35	69.79	1558	735	63.85	18.71	6.38	0.40	22.91	68.49
		0.1	25	1395	658	60.22	17.65	6.02	0.38	19.63	58.67	1478	697	62.09	18.20	6.21	0.39	21.27	63.59
		0.2	50	1198	565	56.01	16.42	5.60	0.35	16.25	48.								

District Cooling FCU Models



Nominal Capacity Ratings

Models: DCCL and DCCE

Chilled Water Coils

Size	Nominal Airflow Rate	2 Rows				3 Rows				4 Rows			
		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
		MBh	MBh	gpm	ftwg	MBh	MBh	gpm	ftwg	MBh	MBh	gpm	ftwg
		kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa
2	200	2.4	2.4	0.3	0.3	5.0	4.2	0.6	1.5	6.4	4.9	0.8	2.9
	94.4	0.7	0.7	0.0	0.9	1.5	1.2	0.0	4.3	1.9	1.4	0.1	8.6
3	300	3.2	3.2	0.4	0.6	7.1	6.0	0.9	3.0	9.2	7.1	1.2	5.9
	141.6	0.9	0.9	0.0	1.6	2.1	1.8	0.1	8.9	2.7	2.1	0.1	17.6
4	400	4.7	4.7	0.6	1.3	9.2	7.9	1.2	2.1	11.9	9.3	1.5	4.1
	188.8	1.4	1.4	0.0	4.0	2.7	2.3	0.1	6.3	3.5	2.7	0.1	12.3
5	500	5.5	5.5	0.7	1.7	12.3	10.1	1.5	9.5	14.1	11.3	1.8	5.4
	236.0	1.6	1.6	0.0	5.0	3.6	3.0	0.1	28.3	4.1	3.3	0.1	16.1
6	600	7.8	7.8	1.0	3.9	14.8	12.2	1.9	5.8	17.6	13.9	2.2	4.8
	283.2	2.3	2.3	0.1	11.6	4.3	3.6	0.1	17.5	5.2	4.1	0.1	14.3
8	800	10.3	10.3	1.3	6.9	20.2	16.3	2.5	11.1	23.6	18.4	2.9	8.8
	377.5	3.0	3.0	0.1	20.7	5.9	4.8	0.2	33.1	6.9	5.4	0.2	26.2
10	1000	11.8	11.8	1.5	3.3	23.8	19.8	3.0	7.7	27.4	22.2	3.4	4.4
	471.9	3.4	3.4	0.1	10.0	7.0	5.8	0.2	23.0	8.0	6.5	0.2	13.1
12	1200	15.0	15.0	1.9	3.1	28.6	23.9	3.6	4.7	34.2	27.3	4.3	3.9
	566.3	4.4	4.4	0.1	9.2	8.4	7.0	0.2	14.1	10.0	8.0	0.3	11.7

Table 19

Notes:

Chilled water capacity ratings are based on nominal air flow rate; air entering temperature DB/WB (78/65)°F (25.6/18.3°C), 42°F (5.5°C) entering chilled water temperature and 58°F (14.4°C) leaving water temperature.

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

Air Flow Rates (50 Hz)

Model DCCL

Model DCCL			Size	02	03	04	05	06	08	10	12	
			Nom	cfm	200	300	400	500	600	800	1000	1200
			AFR	l/s	94	142	189	236	283	378	472	566
Speed	DCCL DCFB		2 Rows			3 Rows			4Rows			
			External Static Pressure									
		inwg	0	0.1	0.2	0	0.1	0.2	0	0.1	0.2	
		Pa	0	25	50	0	25	50	0	25	50	
High	02	cfm	279	207	122	266	198	118	254	190	114	
		l/s	132	98	58	125	93	56	120	89	54	
	03	cfm	408	358	283	395	343	269	383	329	256	
		l/s	193	169	133	187	162	127	181	155	121	
	04	cfm	515	446	348	499	429	333	483	412	319	
		l/s	243	211	164	236	202	157	228	195	151	
	05	cfm	629	534	432	598	509	412	572	488	396	
		l/s	297	252	204	282	240	195	270	230	187	
06	cfm	787	696	598	760	673	579	735	651	562		
	l/s	371	328	282	358	317	273	347	307	265		
08	cfm	983	878	755	949	846	727	917	816	702		
	l/s	464	414	356	448	399	343	433	385	331		
10	cfm	1237	1053	850	1174	1001	811	1120	957	776		
	l/s	584	497	401	554	473	383	529	452	366		
12	cfm	1556	1377	1184	1500	1328	1144	1449	1284	1107		
	l/s	734	650	559	708	627	540	684	606	523		
Medium	02	cfm	264	191	107	252	183	104	241	175	101	
		l/s	125	90	50	119	86	49	114	82	48	
	03	cfm	334	287	222	325	278	214	317	269	206	
		l/s	158	135	105	153	131	101	150	127	97	
	04	cfm	443	381	303	431	370	294	421	359	285	
		l/s	209	180	143	204	175	139	199	170	135	
	05	cfm	538	437	350	512	420	341	490	405	334	
		l/s	254	206	165	242	198	161	231	191	157	
06	cfm	661	592	517	646	579	505	632	566	494		
	l/s	312	280	244	305	273	238	298	267	233		
08	cfm	746	670	575	731	655	560	717	640	547		
	l/s	352	316	271	345	309	264	338	302	258		
10	cfm	1058	862	693	1006	827	675	960	798	660		
	l/s	499	407	327	475	390	319	453	376	312		
12	cfm	1313	1176	1025	1281	1147	1000	1250	1119	976		
	l/s	620	555	484	604	541	472	590	528	461		
Low	02	cfm	230	165	82	221	158	80	213	153	79	
		l/s	108	78	38	104	75	38	101	72	37	
	03	cfm	223	179	136	218	176	135	214	173	133	
		l/s	105	84	64	103	83	64	101	81	63	
	04	cfm	379	330	261	372	322	254	366	315	248	
		l/s	179	156	123	176	152	120	173	149	117	
	05	cfm	493	393	271	472	376	260	454	362	251	
		l/s	232	186	128	223	178	123	214	171	118	
06	cfm	505	463	405	500	456	398	494	450	392		
	l/s	238	218	191	236	215	188	233	213	185		
08	cfm	561	511	437	556	504	429	550	497	422		
	l/s	265	241	206	262	238	203	260	234	199		
10	cfm	971	774	533	928	741	511	891	710	492		
	l/s	458	365	251	438	350	241	420	335	232		
12	cfm	1006	921	805	995	908	791	983	894	777		
	l/s	475	435	380	469	428	373	464	422	367		

Table 21

Air Flow Rates (50 Hz)

Model DCCE

	Size	02	03	04	05	06	08	10	12
Nom	cfm	200	300	400	500	600	800	1000	1200
AFR	l/s	94	142	189	236	283	378	472	566

Speed	DCCE DCFE		2 Rows			3 Rows			4Rows			
			inwg	External Static Pressure								
				0	0.1	0.2	0	0.1	0.2	0	0.1	0.2
				Pa	0	25	50	0	25	50	0	25
High	02	cfm	247	169	77	235	162	76	224	155	75	
		l/s	116	80	36	111	76	36	106	73	35	
	03	cfm	387	326	237	373	310	225	360	297	215	
		l/s	183	154	112	176	146	106	170	140	101	
	04	cfm	486	404	291	469	387	279	452	371	268	
		l/s	229	190	137	221	182	132	213	175	126	
	05	cfm	584	486	378	557	464	362	532	445	348	
		l/s	276	230	179	263	219	171	251	210	164	
06	cfm	744	651	550	719	629	532	696	609	517		
	l/s	351	307	259	339	297	251	329	287	244		
08	cfm	935	822	691	901	791	665	871	764	642		
	l/s	441	388	326	425	373	314	411	360	303		
10	cfm	1152	959	745	1094	913	712	1045	873	683		
	l/s	543	452	352	516	431	336	493	412	322		
12	cfm	1473	1287	1088	1420	1242	1052	1371	1202	1019		
	l/s	695	607	513	670	586	496	647	567	481		
Medium	02	cfm	231	152	64	220	146	64	211	140	64	
		l/s	109	72	30	104	69	30	99	66	30	
	03	cfm	313	259	182	305	250	175	296	242	170	
		l/s	148	122	86	144	118	83	140	114	80	
	04	cfm	416	346	261	404	336	253	393	326	246	
		l/s	196	163	123	191	158	119	185	154	116	
	05	cfm	489	393	320	467	380	315	449	368	311	
		l/s	231	185	151	221	179	149	212	174	147	
06	cfm	630	558	478	615	545	467	601	532	457		
	l/s	297	263	226	290	257	221	284	251	216		
08	cfm	712	628	522	697	613	508	683	598	496		
	l/s	336	296	246	329	289	240	322	282	234		
10	cfm	964	776	637	920	750	627	882	727	619		
	l/s	455	366	300	434	354	296	416	343	292		
12	cfm	1250	1106	949	1219	1079	925	1190	1053	904		
	l/s	590	522	448	575	509	437	561	497	427		
Low	02	cfm	201	127	0	193	123	0	187	119	0	
		l/s	95	60	0	91	58	0	88	56	0	
	03	cfm	202	158	119	198	156	118	194	153	117	
		l/s	95	75	56	93	73	55	92	72	55	
	04	cfm	358	299	220	351	292	215	343	285	210	
		l/s	169	141	104	166	138	102	162	135	99	
	05	cfm	447	338	202	428	324	195	412	312	189	
		l/s	211	160	95	202	153	92	194	147	89	
06	cfm	487	437	372	481	431	366	475	424	360		
	l/s	230	206	175	227	203	173	224	200	170		
08	cfm	540	478	393	534	471	386	527	463	380		
	l/s	255	226	185	252	222	182	249	219	179		
10	cfm	882	666	397	843	638	383	809	612	371		
	l/s	416	315	187	398	301	181	382	289	175		
12	cfm	970	870	739	957	856	725	944	842	712		
	l/s	458	411	349	452	404	342	446	397	336		

Table 22

Air Flow Rates (60 Hz)

Model DCCL

	Size	02	03	04	05	06	08	10	12
Nom	cfm	200	300	400	500	600	800	1000	1200
AFR	l/s	94	142	189	236	283	378	472	566

Speed	DCCL DCFB	inwg	2 Rows			3 Rows			4 Rows		
			External Static Pressure								
			0	0.1	0.2	0	0.1	0.2	0	0.1	0.2
			Pa	0	25	50	0	25	50	0	25
High	02	cfm	336	284	202	324	269	191	311	256	181
		l/s	159	134	95	153	127	90	147	121	86
	03	cfm	399	362	310	390	352	299	380	341	288
		l/s	188	171	146	184	166	141	179	161	136
	04	cfm	467	425	391	458	417	387	449	410	384
		l/s	220	201	184	216	197	183	212	194	181
	05	cfm	634	556	486	607	536	473	583	518	462
		l/s	299	262	229	287	253	223	275	244	218
06	cfm	777	738	692	766	726	679	754	714	665	
	l/s	367	348	326	361	343	320	356	337	314	
08	cfm	887	866	834	881	859	822	876	850	810	
	l/s	419	409	394	416	405	388	413	401	382	
10	cfm	1489	1407	1307	1448	1363	1261	1408	1321	1217	
	l/s	703	664	617	683	643	595	664	623	574	
12	cfm	1548	1469	1375	1522	1442	1346	1497	1417	1318	
	l/s	730	693	649	718	681	635	707	668	622	
Medium	02	cfm	292	249	182	284	240	174	276	231	168
		l/s	138	118	86	134	113	82	130	109	79
	03	cfm	319	278	234	311	272	229	304	266	224
		l/s	150	131	111	147	128	108	143	125	106
	04	cfm	331	310	274	328	307	269	326	304	264
		l/s	156	146	129	155	145	127	154	144	125
	05	cfm	578	528	466	563	513	451	550	499	437
		l/s	273	249	220	266	242	213	260	236	206
06	cfm	572	544	510	567	539	504	562	534	497	
	l/s	270	257	241	267	254	238	265	252	235	
08	cfm	636	595	548	629	588	542	623	582	535	
	l/s	300	281	259	297	278	256	294	275	253	
10	cfm	1113	1057	980	1097	1038	956	1081	1019	932	
	l/s	525	499	462	518	490	451	510	481	440	
12	cfm	1141	1084	1016	1129	1073	1002	1118	1063	988	
	l/s	538	512	479	533	507	473	528	501	466	
Low	02	cfm	211	173	125	207	169	122	203	165	120
		l/s	100	82	59	98	80	58	96	78	57
	03	cfm	195	157	130	192	155	129	188	154	128
		l/s	92	74	61	90	73	61	89	73	61
	04	cfm	272	231	202	268	228	201	265	226	201
		l/s	128	109	95	126	108	95	125	107	95
	05	cfm	472	414	350	460	404	342	449	394	334
		l/s	223	195	165	217	191	161	212	186	158
06	cfm	368	330	298	364	327	296	361	325	294	
	l/s	174	156	140	172	154	140	170	153	139	
08	cfm	406	374	341	404	372	339	402	370	337	
	l/s	192	177	161	191	176	160	189	175	159	
10	cfm	712	642	581	701	635	575	691	627	569	
	l/s	336	303	274	331	299	271	326	296	268	
12	cfm	733	657	594	725	652	590	718	647	586	
	l/s	346	310	280	342	308	278	339	305	277	

Table 24

Air Flow Rates (60 Hz)

Model DCCE

	Size	02	03	04	05	06	08	10	12
Nom	cfm	200	300	400	500	600	800	1000	1200
AFR	l/s	94	142	189	236	283	378	472	566

Speed	DCCE DCFE	inwg	2 Rows			3 Rows			4 Rows		
			External Static Pressure								
			0	0.1	0.2	0	0.1	0.2	0	0.1	0.2
			Pa	0	25	50	0	25	50	0	25
High	02	cfm	315	249	153	301	235	145	288	223	139
		l/s	149	117	72	142	111	69	136	105	66
	03	cfm	383	340	279	373	329	267	363	318	257
		l/s	181	160	131	176	155	126	171	150	121
	04	cfm	447	407	382	438	401	382	430	395	382
		l/s	211	192	180	207	189	180	203	187	180
	05	cfm	597	521	459	572	504	449	552	489	441
		l/s	281	246	217	270	238	212	261	231	208
06	cfm	759	717	666	747	705	652	736	692	638	
	l/s	358	338	314	353	333	308	347	327	301	
08	cfm	878	853	812	872	844	798	865	834	783	
	l/s	414	403	383	411	398	376	408	393	370	
10	cfm	1451	1362	1251	1410	1317	1204	1369	1274	1160	
	l/s	685	643	590	665	622	568	646	601	547	
12	cfm	1511	1427	1323	1486	1400	1293	1461	1372	1263	
	l/s	713	673	624	701	660	610	689	648	596	
Medium	02	cfm	275	221	142	266	212	136	257	203	131
		l/s	130	104	67	125	100	64	121	96	62
	03	cfm	300	258	212	293	252	208	286	246	203
		l/s	142	122	100	138	119	98	135	116	96
	04	cfm	322	296	246	319	292	241	317	288	236
		l/s	152	140	116	151	138	114	150	136	111
	05	cfm	555	500	430	541	485	415	527	471	402
		l/s	262	236	203	255	229	196	249	222	189
06	cfm	558	529	488	553	524	481	549	518	474	
	l/s	263	250	230	261	247	227	259	245	224	
08	cfm	617	573	523	610	567	517	604	561	510	
	l/s	291	271	247	288	268	244	285	265	241	
10	cfm	1088	1024	931	1071	1003	904	1054	981	879	
	l/s	513	483	439	505	473	427	497	463	415	
12	cfm	1113	1055	972	1103	1043	956	1093	1031	940	
	l/s	525	498	459	520	492	451	516	487	444	
Low	02	cfm	195	151	99	190	148	97	186	145	96
		l/s	92	71	47	90	70	46	88	68	45
	03	cfm	175	143	119	173	142	118	170	141	118
		l/s	83	68	56	82	67	56	80	66	56
	04	cfm	252	214	201	249	212	202	246	211	203
		l/s	119	101	95	118	100	95	116	99	96
	05	cfm	445	385	318	434	375	311	424	366	304
		l/s	210	181	150	205	177	147	200	173	143
06	cfm	348	314	283	346	312	281	343	310	279	
	l/s	164	148	133	163	147	133	162	146	132	
08	cfm	391	359	325	389	357	323	387	355	322	
	l/s	185	169	153	184	168	153	183	167	152	
10	cfm	677	613	551	668	606	545	660	600	540	
	l/s	319	289	260	315	286	257	311	283	255	
12	cfm	695	626	564	689	622	560	683	618	557	
	l/s	328	295	266	325	293	264	322	292	263	

Table 23

Chilled Water- District Cooling

Capacity Ratings (DCCL- 2 Rows)

Unit 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			
		in.Wg	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	0	279	132	3.34	0.98	3.34	0.98	0.42	0.03	0.54	1.61	336	159	3.72	1.09	3.72	1.09	0.46	0.03	0.65	1.96		
		0.1	25	207	98	2.86	0.84	2.86	0.84	0.36	0.02	0.41	1.22	284	134	3.37	0.99	3.37	0.99	0.42	0.03	0.55	1.64		
		0.2	50	122	58	2.67	0.78	2.31	0.68	0.33	0.02	0.36	1.08	202	95	2.83	0.83	2.83	0.83	0.35	0.02	0.4	1.2		
	Medium	0	0	264	125	3.24	0.95	3.24	0.95	0.41	0.03	0.51	1.53	292	138	3.43	1	3.43	1	0.43	0.03	0.56	1.69		
		0.1	25	191	90	3.14	0.92	3.09	0.91	0.39	0.02	0.48	1.45	249	118	3.15	0.92	3.15	0.92	0.39	0.02	0.49	1.45		
		0.2	50	107	50	2.55	0.75	2.13	0.62	0.32	0.02	0.33	1	182	86	3.08	0.9	2.99	0.88	0.39	0.02	0.47	1.4		
	Low	0	0	230	109	3.02	0.88	3.02	0.88	0.38	0.02	0.45	1.35	211	100	2.89	0.85	2.89	0.85	0.36	0.02	0.42	1.24		
		0.1	25	165	78	2.97	0.87	2.81	0.82	0.37	0.02	0.44	1.31	173	82	2.63	0.77	2.63	0.77	0.33	0.02	0.35	1.05		
		0.2	50	82	39	2.33	0.68	1.81	0.53	0.29	0.02	0.28	0.85	125	59	2.69	0.79	2.35	0.69	0.34	0.02	0.37	1.1		
3	High	0	0	408	193	4.73	1.39	4.73	1.39	0.59	0.04	1.08	3.24	399	188	4.66	1.37	4.66	1.37	0.58	0.04	1.06	3.16		
		0.1	25	358	169	4.36	1.28	4.36	1.28	0.54	0.03	0.94	2.8	362	171	4.39	1.29	4.39	1.29	0.55	0.03	0.95	2.83		
		0.2	50	283	134	3.82	1.12	3.82	1.12	0.48	0.03	0.74	2.21	310	146	4.01	1.18	4.01	1.18	0.5	0.03	0.81	2.41		
	Medium	0	0	334	158	4.18	1.23	4.18	1.23	0.52	0.03	0.87	2.6	319	151	4.08	1.2	4.08	1.2	0.51	0.03	0.83	2.48		
		0.1	25	287	135	3.85	1.13	3.85	1.13	0.48	0.03	0.75	2.24	278	131	3.79	1.11	3.79	1.11	0.47	0.03	0.73	2.18		
		0.2	50	222	105	3.9	1.14	3.69	1.08	0.49	0.03	0.77	2.3	234	110	3.99	1.17	3.82	1.12	0.5	0.03	0.8	2.39		
	Low	0	0	223	105	3.91	1.15	3.7	1.09	0.49	0.03	0.77	2.3	195	92	3.71	1.09	3.4	1	0.46	0.03	0.7	2.1		
		0.1	25	179	84	3.6	1.05	3.22	0.94	0.45	0.03	0.66	1.99	157	74	3.44	1.01	2.96	0.87	0.43	0.03	0.61	1.83		
		0.2	50	136	64	3.27	0.96	2.71	0.79	0.41	0.03	0.56	1.68	130	61	3.22	0.94	2.63	0.77	0.4	0.03	0.55	1.63		
4	High	0	0	515	243	6.64	1.95	6.64	1.95	0.83	0.05	2.44	7.28	467	220	7.19	2.11	6.93	2.03	0.9	0.06	2.8	8.38		
		0.1	25	446	210	7.01	2.05	6.72	1.97	0.88	0.06	2.68	8.02	425	201	5.93	1.74	5.93	1.74	0.74	0.05	1.99	5.96		
		0.2	50	348	164	6.2	1.82	5.69	1.67	0.77	0.05	2.15	6.44	391	185	6.55	1.92	6.15	1.8	0.82	0.05	2.38	7.11		
	Medium	0	0	443	209	6.98	2.05	6.69	1.96	0.87	0.06	2.66	7.96	331	156	6.05	1.77	5.51	1.61	0.76	0.05	2.07	6.18		
		0.1	25	381	180	6.47	1.9	6.05	1.77	0.81	0.05	2.33	6.95	310	146	5.86	1.72	5.27	1.55	0.73	0.05	1.95	5.83		
		0.2	50	303	143	5.8	1.7	5.19	1.52	0.73	0.05	1.91	5.72	274	129	5.54	1.62	4.86	1.42	0.69	0.04	1.76	5.27		
	Low	0	0	379	179	6.46	1.89	6.03	1.77	0.81	0.05	2.32	6.92	272	128	5.52	1.62	4.84	1.42	0.69	0.04	1.75	5.24		
		0.1	25	330	156	6.04	1.77	5.5	1.61	0.76	0.05	2.06	6.16	231	109	5.16	1.51	4.35	1.28	0.64	0.04	1.55	4.64		
		0.2	50	261	123	5.42	1.59	4.71	1.38	0.68	0.04	1.7	5.08	202	95	4.89	1.43	4	1.17	0.61	0.04	1.41	4.23		
5	High	0	0	629	297	7.84	2.3	7.84	2.3	0.98	0.06	3.14	9.37	634	299	7.88	2.31	7.88	2.31	0.99	0.06	3.17	9.47		
		0.1	25	534	252	8.11	2.38	7.8	2.29	1.01	0.06	3.33	9.96	556	262	7.22	2.12	7.22	2.12	0.9	0.06	2.71	8.1		
		0.2	50	432	204	7.22	2.12	6.75	1.98	0.9	0.06	2.71	8.1	486	229	7.68	2.25	7.31	2.14	0.96	0.06	3.02	9.03		
	Medium	0	0	538	254	7.08	2.07	7.08	2.07	0.88	0.06	2.61	7.81	578	273	7.4	2.17	7.4	2.17	0.93	0.06	2.83	8.47		
		0.1	25	437	206	7.26	2.13	6.8	1.99	0.91	0.06	2.74	8.18	528	249	8.05	2.36	7.74	2.27	1.01	0.06	3.29	9.84		
		0.2	50	350	165	6.55	1.92	5.88	1.72	0.82	0.05	2.28	6.8	466	220	7.51	2.2	7.1	2.08	0.94	0.06	2.9	8.68		
	Low	0	0	493	233	7.74	2.27	7.38	2.16	0.97	0.06	3.07	9.16	472	223	7.56	2.22	7.16	2.1	0.94	0.06	2.94	8.78		
		0.1	25	393	185	6.9	2.02	6.34	1.86	0.86	0.05	2.5	7.47	414	195	7.08	2.07	6.57	1.92	0.88	0.06	2.61	7.81		
		0.2	50	271	128	5.84	1.71	4.98	1.46	0.73	0.05	1.85	5.54	350	165	6.55	1.92	5.88	1.72	0.82	0.05	2.28	6.8		
6	High	0	0	787	371	13.25	3.88	11.77	3.45	1.66	0.1	9.88	29.53	777	367	13.07	3.83	11.64	3.41	1.63	0.1	9.65	28.83		
		0.1	25	696	328	11.83	3.47	10.64	3.12	1.48	0.09	8.07	24.13	738	348	12.42	3.64	11.14	3.27	1.55	0.1	8.8	26.31		
		0.2	50	598	282	10.85	3.18	9.6	2.81	1.36	0.09	6.93	20.71	692	327	11.78	3.45	10.6	3.11	1.47	0.09	8.02	23.97		
	Medium	0	0	661	312	11.45	3.36	10.26	3.01	1.43	0.09	7.62	22.78	572	270	10.63	3.12	9.33	2.73	1.33	0.08	6.68	19.96		
		0.1	25	592	279	10.8	3.17	9.54	2.79	1.35	0.09	6.87	20.53	544	257	10.41	3.05	9.04	2.65	1.3	0.08	6.43	19.22		
		0.2	50	517	244	10.2	2.99	8.76	2.57	1.28	0.08	6.21	18.55	510	241	10.15	2.97	8.69	2.55	1.27	0.08	6.15	18.38		
	Low	0	0	505	238	10.11	2.96	8.64	2.53	1.26	0.08	6.11	18.26	368	174	9.13	2.68	7.2	2.11	1.14	0.07	5.1	15.24		
		0.1	25	463	218	9.81	2.88	8.21	2.41	1.23	0.08	5.79	17.31	330	156	8.82	2.58	6.76	1.98	1.1	0.07	4.79	14.31		
		0.2	50	405	191	9.41	2.76	7.6	2.23	1.18	0.07	5.37	16.06	298	141	8.5	2.49	6.36	1.86	1.06	0.07	4.48	13.4		
8	High	0	0	983	464	19	5.57	15.43	4.52	2.38	0.15	20.49	61.23	887	419	17.44	5.11	14.24	4.17	2.18	0.14	17.59	52.58		
		0.1	25	878	414	17.25	5.06	14.11	4.14	2.16	0.14	17.24	51.54	866	409	16.99	4.98	13.94	4.09	2.12	0.13	16.79	50.18		
		0.2	50	755	356	14.86	4.35	12.41	3.64	1.86	0.12	13.22	39.53	834	394	16.32	4.78	13.48	3.95	2.04	0.13	15.63	46.73		
	Medium	0	0	746	352	14.71	4.31	12.29	3.6	1.84	0.12	12.99	38.83	836	390	13.28	3.89	10.98	3.22	1.66	0.1	10.83	32.38		
		0.1	25	670	316	13.65	4	11.36	3.33	1.71	0.11	11.37	34	595	281	12.91	3.78	10.54	3.09	1.61	0.1	10.3	30.79		
		0.2	50	575	271	12.75	3.74	10.33	3.03	1.59	0.1	10.08	30.14	548	259	12.57	3.68	10.06	2.95	1.57	0.1	9.82	29.36		
	Low	0	0	561	265	12.65	3.71	10.19	2.99	1.58	0.1	9.94	29.72	406	192	11.81	3.46	8.65	2.54	1.48	0.09	8.8	26.3		
		0.1	25	511	241	12.35	3.62	9.69	2.84	1.54	0.1	9.53	28.48	374	176	11.56	3.39	8.29	2.43	1.44	0.09	8.47	25.32		
		0.2	50	437	206	12.01	3.52	8.98	2.63	1.5	0.09	9.07	27.1	341	161	11.23	3.29	7.89	2.31	1.4	0.09	8.05	24.05		
10	High	0	0	1237	584	20.18	5.92	18	5.28	2.52	0.16	8.75	26.14	1489	703	23.83	6.98	20.87	6.12	2.98	0.19	11.77			

Chilled Water - District Cooling Capacity Ratings (DCCL - 3 Rows)

Unit 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			
		in.Wg	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	0	266	126	5.56	1.63	5.04	1.48	0.7	0.04	1.79	5.35	324	153	6.3	1.85	5.84	1.71	0.79	0.05	2.23	6.67		
		0.1	25	198	93	4.71	1.38	4.07	1.19	0.59	0.04	1.33	3.98	269	127	5.6	1.64	5.08	1.49	0.7	0.04	1.81	5.41		
		0.2	50	118	56	3.72	1.09	2.85	0.84	0.46	0.03	0.87	2.61	191	90	4.63	1.36	3.96	1.16	0.58	0.04	1.29	3.86		
	Medium	0	0	252	119	5.38	1.58	4.84	1.42	0.67	0.04	1.69	5.04	284	134	5.8	1.7	5.29	1.55	0.72	0.05	1.93	5.76		
		0.1	25	183	86	4.53	1.33	3.85	1.13	0.57	0.04	1.24	3.72	240	113	5.23	1.53	4.67	1.37	0.65	0.04	1.6	4.79		
		0.2	50	104	49	3.51	1.03	2.62	0.77	0.44	0.03	0.79	2.36	174	82	4.42	1.3	3.72	1.09	0.55	0.03	1.19	3.56		
	Low	0	0	221	104	4.99	1.46	4.4	1.29	0.62	0.04	1.48	4.41	207	98	4.82	1.41	4.2	1.23	0.6	0.04	1.39	4.15		
		0.1	25	158	75	4.23	1.24	3.48	1.02	0.53	0.03	1.1	3.29	169	80	4.36	1.28	3.64	1.07	0.55	0.03	1.16	3.48		
		0.2	50	80	38	3.1	0.91	2.2	0.64	0.39	0.02	0.63	1.89	122	58	3.77	1.11	2.92	0.86	0.47	0.03	0.9	2.68		
3	High	0	0	395	186	8	2.34	7.22	2.12	1	0.06	3.7	11.06	390	184	7.93	2.32	7.16	2.1	0.99	0.06	3.64	10.89		
		0.1	25	343	162	7.32	2.15	6.51	1.91	0.92	0.06	3.16	9.46	352	166	7.44	2.18	6.63	1.94	0.93	0.06	3.25	9.72		
		0.2	50	269	127	6.41	1.88	5.47	1.6	0.8	0.05	2.5	7.47	299	141	6.78	1.99	5.9	1.73	0.85	0.05	2.76	8.25		
	Medium	0	0	325	153	7.1	2.08	6.26	1.83	0.89	0.06	2.99	8.95	311	147	6.93	2.03	6.06	1.78	0.87	0.05	2.87	8.57		
		0.1	25	278	131	6.52	1.91	5.6	1.64	0.82	0.05	2.58	7.7	272	128	6.45	1.89	5.52	1.62	0.81	0.05	2.53	7.55		
		0.2	50	214	101	5.69	1.67	4.65	1.36	0.71	0.04	2.02	6.03	229	108	5.89	1.73	4.88	1.43	0.74	0.05	2.15	6.43		
	Low	0	0	218	103	5.74	1.68	4.72	1.38	0.72	0.05	2.05	6.14	192	91	5.38	1.58	4.31	1.26	0.67	0.04	1.83	5.47		
		0.1	25	176	83	5.16	1.51	4.06	1.19	0.64	0.04	1.7	5.08	155	73	4.85	1.42	3.72	1.09	0.61	0.04	1.52	4.55		
		0.2	50	135	64	4.54	1.33	3.39	0.99	0.57	0.04	1.36	4.05	129	61	4.44	1.3	3.29	0.96	0.56	0.04	1.3	3.89		
4	High	0	0	499	235	9.99	2.93	9.14	2.68	1.25	0.08	2.45	7.32	458	216	9.5	2.78	8.59	2.52	1.19	0.07	2.24	6.69		
		0.1	25	429	202	9.15	2.68	8.19	2.4	1.14	0.07	2.1	6.26	417	197	9.01	2.64	8.02	2.35	1.13	0.07	2.04	6.08		
		0.2	50	333	157	7.9	2.31	6.8	1.99	0.99	0.06	1.61	4.82	387	183	8.6	2.52	7.59	2.22	1.08	0.07	1.88	5.61		
	Medium	0	0	431	203	9.18	2.69	8.22	2.41	1.15	0.07	2.1	6.29	328	155	7.83	2.3	6.73	1.97	0.98	0.06	1.59	4.75		
		0.1	25	370	175	8.38	2.46	7.34	2.15	1.05	0.07	1.79	5.35	307	145	7.57	2.22	6.42	1.88	0.95	0.06	1.49	4.47		
		0.2	50	294	139	7.41	2.17	6.23	1.83	0.93	0.06	1.44	4.3	269	127	7.09	2.08	5.85	1.72	0.89	0.06	1.33	3.98		
	Low	0	0	372	176	8.4	2.46	7.37	2.16	1.05	0.07	1.8	5.38	268	126	7.08	2.08	5.84	1.71	0.89	0.06	1.33	3.97		
		0.1	25	322	152	7.76	2.27	6.64	1.95	0.97	0.06	1.56	4.67	228	108	6.57	1.93	5.22	1.53	0.82	0.05	1.16	3.47		
		0.2	50	254	120	6.9	2.02	5.63	1.65	0.86	0.05	1.27	3.79	201	95	6.2	1.82	4.8	1.41	0.78	0.05	1.05	3.14		
5	High	0	0	598	282	13.88	4.07	11.51	3.37	1.73	0.11	11.74	35.08	607	286	14.1	4.13	11.67	3.42	1.76	0.11	12.07	36.09		
		0.1	25	509	240	11.91	3.49	10	2.93	1.49	0.09	8.95	26.75	536	253	12.44	3.65	10.44	3.06	1.55	0.1	9.66	28.87		
		0.2	50	412	194	10.57	3.1	8.61	2.52	1.32	0.08	7.24	21.64	473	223	11.37	3.33	9.47	2.78	1.42	0.09	8.24	24.64		
	Medium	0	0	512	242	11.96	3.51	10.04	2.94	1.49	0.09	9.01	26.94	563	266	13.04	3.82	10.9	3.19	1.63	0.1	10.5	31.4		
		0.1	25	420	198	10.67	3.13	8.72	2.56	1.33	0.08	7.36	22.01	513	242	11.97	3.51	10.06	2.95	1.5	0.09	9.03	27		
		0.2	50	341	161	9.72	2.85	7.6	2.23	1.21	0.08	6.24	18.65	451	213	11.07	3.25	9.16	2.68	1.38	0.09	7.86	23.49		
	Low	0	0	472	223	11.36	3.33	9.46	2.77	1.42	0.09	8.23	24.59	460	217	11.19	3.28	9.29	2.72	1.4	0.09	8.01	23.95		
		0.1	25	376	177	10.14	2.97	8.1	2.37	1.27	0.08	6.72	20.09	404	191	10.47	3.07	8.49	2.49	1.31	0.08	7.12	21.29		
		0.2	50	260	123	8.63	2.53	6.38	1.87	1.08	0.07	5.05	15.11	342	161	9.73	2.85	7.62	2.23	1.22	0.08	6.25	18.68		
6	High	0	0	760	359	16.5	4.84	14.28	4.19	2.06	0.13	7.09	21.2	766	361	16.6	4.87	14.37	4.21	2.07	0.13	7.17	21.43		
		0.1	25	673	318	15.14	4.44	13	3.81	1.89	0.12	6.09	18.2	726	343	15.94	4.67	13.77	4.04	1.99	0.13	6.67	19.95		
		0.2	50	579	273	13.88	4.07	11.67	3.42	1.74	0.11	5.22	15.6	679	320	15.23	4.46	13.09	3.84	1.9	0.12	6.15	18.39		
	Medium	0	0	646	305	14.76	4.33	12.62	3.7	1.85	0.12	5.82	17.4	567	268	13.73	4.03	11.51	3.37	1.72	0.11	5.12	15.3		
		0.1	25	579	273	13.88	4.07	11.67	3.42	1.74	0.11	5.22	15.6	539	254	13.39	3.92	11.11	3.26	1.67	0.11	4.89	14.63		
		0.2	50	505	238	12.98	3.8	10.63	3.12	1.62	0.1	4.63	13.83	504	238	12.96	3.8	10.62	3.11	1.62	0.1	4.62	13.81		
	Low	0	0	500	236	12.91	3.79	10.56	3.1	1.61	0.1	4.59	13.72	364	172	11.14	3.26	8.54	2.5	1.39	0.09	3.53	10.55		
		0.1	25	456	215	12.38	3.63	9.93	2.91	1.55	0.1	4.26	12.72	327	154	10.55	3.09	7.93	2.32	1.32	0.08	3.2	9.58		
		0.2	50	398	188	11.62	3.41	9.07	2.66	1.45	0.09	3.81	11.38	296	140	9.99	2.93	7.39	2.17	1.25	0.08	2.91	8.69		
8	High	0	0	949	448	22.84	6.69	18.56	5.44	2.86	0.18	13.82	41.3	881	416	21.12	6.19	17.33	5.08	2.64	0.17	12.02	35.94		
		0.1	25	846	399	20.29	5.95	16.71	4.9	2.54	0.16	11.19	33.45	859	405	20.59	6.04	16.94	4.96	2.57	0.16	11.49	34.35		
		0.2	50	727	343	17.94	5.26	14.76	4.33	2.24	0.14	8.99	26.88	822	388	19.75	5.79	16.29	4.78	2.47	0.16	10.67	31.89		
	Medium	0	0	731	345	18	5.27	14.82	4.34	2.25	0.14	9.05	27.04	629	297	16.66	4.88	13.37	3.92	2.08	0.13	7.89	23.59		
		0.1	25	655	309	16.99	4.98	13.74	4.03	2.12	0.13	8.16	24.4	588	277	16.17	4.74	12.79	3.75	2.02	0.13	7.48	22.37		
		0.2	50	560	264	15.84	4.64	12.4	3.63	1.98	0.12	7.21	21.57	542	256	15.63	4.58	12.14	3.56	1.95	0.12	7.04	21.05		
	Low	0	0	556	262	15.79	4.63	12.34	3.62	1.97	0.12	7.18	21.45	404	191	13.79	4.04	10.08	2.95	1.72	0.11	5.64	16.87		
		0.1	25	504	238	15.17	4.45	11.6	3.4	1.9	0.12	6.68	19.97	372	176	13.26	3.89	9.54	2.8	1.66	0.1	5.26	15.72		
		0.2	50	429	202	14.17	4.15	10.48	3.07	1.77	0.11	5.92	17.71	339	160	12.62	3.7	8.96	2.63	1.58	0.1	4.82	14.42		
10	High	0	0	1174	554	26.37	7.73	22.21	6.51	3.3	0.21	9.19													

Chilled Water- District Cooling Capacity Ratings (DCCL - 4 Rows)

78/65, 42/58 ---2.Rows

Unit 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			
		in.Wg	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	0	254	120	7.04	2.06	5.74	1.68	0.88	0.06	3.39	10.13	311	147	7.97	2.34	6.7	1.96	1	0.06	4.22	12.62		
		0.1	25	190	90	5.97	1.75	4.63	1.36	0.75	0.05	2.53	7.57	256	121	7.07	2.07	5.77	1.69	0.88	0.06	3.42	10.22		
		0.2	50	114	54	4.48	1.31	3.19	0.94	0.56	0.04	1.52	4.56	181	85	5.8	1.7	4.47	1.31	0.73	0.05	2.41	7.19		
	Medium	0	0	241	114	6.83	2	5.52	1.62	0.85	0.05	3.21	9.61	276	130	7.4	2.17	6.11	1.79	0.92	0.06	3.7	11.05		
		0.1	25	175	83	5.69	1.67	4.36	1.28	0.71	0.04	2.33	6.95	231	109	6.67	1.96	5.35	1.57	0.83	0.05	3.08	9.21		
		0.2	50	101	48	4.18	1.23	2.93	0.86	0.52	0.03	1.35	4.03	168	79	5.56	1.63	4.23	1.24	0.7	0.04	2.23	6.67		
	Low	0	0	213	101	6.37	1.87	5.04	1.48	0.8	0.05	2.84	8.49	203	96	6.2	1.82	4.87	1.43	0.78	0.05	2.71	8.09		
		0.1	25	153	72	5.28	1.55	3.95	1.16	0.66	0.04	2.03	6.08	165	78	5.5	1.61	4.17	1.22	0.69	0.04	2.19	6.55		
		0.2	50	79	37	3.61	1.06	2.44	0.72	0.45	0.03	1.04	3.11	120	57	4.61	1.35	3.31	0.97	0.58	0.04	1.6	4.79		
3	High	0	0	383	181	10.25	3	8.39	2.46	1.28	0.08	7.18	21.47	380	179	10.19	2.99	8.34	2.44	1.27	0.08	7.11	21.25		
		0.1	25	329	155	9.27	2.72	7.46	2.19	1.16	0.07	6.01	17.96	341	161	9.48	2.78	7.66	2.25	1.18	0.07	6.25	18.68		
		0.2	50	256	121	8.05	2.36	6.21	1.82	1.01	0.06	4.69	14.01	288	136	8.58	2.52	6.76	1.98	1.07	0.07	5.25	15.68		
	Medium	0	0	317	150	9.06	2.66	7.25	2.13	1.13	0.07	5.78	17.27	304	143	8.85	2.59	7.03	2.06	1.11	0.07	5.53	16.54		
		0.1	25	269	127	8.27	2.42	6.44	1.89	1.03	0.07	4.91	14.68	266	126	8.22	2.41	6.39	1.87	1.03	0.06	4.86	14.53		
		0.2	50	206	97	7.16	2.1	5.32	1.56	0.89	0.06	3.81	11.37	224	106	7.5	2.2	5.65	1.66	0.94	0.06	4.13	12.34		
	Low	0	0	214	101	7.31	2.14	5.47	1.6	0.91	0.06	3.95	11.81	188	89	6.79	1.99	4.98	1.46	0.85	0.05	3.47	10.36		
		0.1	25	173	82	6.46	1.89	4.68	1.37	0.81	0.05	3.17	9.48	154	73	6	1.76	4.28	1.25	0.75	0.05	2.78	8.32		
		0.2	50	133	63	5.49	1.61	3.84	1.12	0.69	0.04	2.38	7.12	128	60	5.36	1.57	3.73	1.09	0.67	0.04	2.28	6.83		
4	High	0	0	483	228	12.72	3.73	10.55	3.09	1.59	0.1	4.67	13.97	449	212	12.14	3.56	9.97	2.92	1.52	0.1	4.31	12.88		
		0.1	25	412	194	11.54	3.38	9.35	2.74	1.44	0.09	3.93	11.76	410	193	11.5	3.37	9.31	2.73	1.44	0.09	3.91	11.7		
		0.2	50	319	151	10	2.93	7.75	2.27	1.25	0.08	3.05	9.13	384	181	11.08	3.25	8.88	2.6	1.39	0.09	3.66	10.95		
	Medium	0	0	421	199	11.68	3.42	9.5	2.78	1.46	0.09	4.02	12.03	326	154	10.12	2.97	7.88	2.31	1.26	0.08	3.12	9.32		
		0.1	25	359	169	10.68	3.13	8.45	2.48	1.33	0.08	3.43	10.25	304	143	9.73	2.85	7.48	2.19	1.22	0.08	2.91	8.7		
		0.2	50	285	134	9.38	2.75	7.14	2.09	1.17	0.07	2.73	8.15	264	125	8.97	2.63	6.74	1.98	1.12	0.07	2.52	7.53		
	Low	0	0	366	173	10.79	3.16	8.57	2.51	1.35	0.09	3.49	10.45	265	125	8.99	2.63	6.76	1.98	1.12	0.07	2.53	7.56		
		0.1	25	315	149	9.93	2.91	7.68	2.25	1.24	0.08	3.01	9.01	226	107	8.21	2.41	6.02	1.76	1.03	0.06	2.15	6.43		
		0.2	50	248	117	8.65	2.54	6.44	1.89	1.08	0.07	2.36	7.07	201	95	7.68	2.25	5.53	1.62	0.96	0.06	1.91	5.72		
5	High	0	0	572	270	14.84	4.35	12.31	3.61	1.85	0.12	5.87	17.55	583	275	15.06	4.41	12.51	3.67	1.88	0.12	6.03	18.02		
		0.1	25	488	230	13.29	3.9	10.86	3.18	1.66	0.1	4.83	14.44	518	244	13.82	4.05	11.37	3.33	1.73	0.11	5.18	15.48		
		0.2	50	396	187	11.77	3.45	9.3	2.73	1.47	0.09	3.89	11.64	462	218	12.85	3.77	10.42	3.05	1.61	0.1	4.55	13.61		
	Medium	0	0	490	231	13.33	3.91	10.89	3.19	1.67	0.11	4.85	14.51	550	260	14.41	4.22	11.93	3.5	1.8	0.11	5.58	16.67		
		0.1	25	405	191	11.92	3.49	9.45	2.77	1.49	0.09	3.98	11.9	499	235	13.48	3.95	11.05	3.24	1.69	0.11	4.96	14.81		
		0.2	50	334	158	10.73	3.14	8.23	2.41	1.34	0.08	3.3	9.87	437	206	12.44	3.65	9.99	2.93	1.56	0.1	4.3	12.84		
	Low	0	0	454	214	12.72	3.73	10.28	3.01	1.59	0.1	4.47	13.36	449	212	12.64	3.7	10.2	2.99	1.58	0.1	4.42	13.2		
		0.1	25	362	171	11.21	3.28	8.71	2.55	1.4	0.09	3.57	10.67	394	186	11.74	3.44	9.27	2.72	1.47	0.09	3.87	11.58		
		0.2	50	251	118	9.09	2.67	6.67	1.95	1.14	0.07	2.46	7.36	334	158	10.73	3.14	8.23	2.41	1.34	0.08	3.3	9.87		
6	High	0	0	735	347	19.24	5.64	15.93	4.67	2.41	0.15	5.59	16.72	754	356	19.61	5.75	16.26	4.77	2.45	0.15	5.78	17.29		
		0.1	25	651	307	17.73	5.2	14.48	4.25	2.22	0.14	4.84	14.45	714	337	18.85	5.53	15.57	4.56	2.36	0.15	5.39	16.12		
		0.2	50	562	265	16.25	4.76	12.98	3.8	2.03	0.13	4.14	12.38	665	314	17.98	5.27	14.72	4.32	2.25	0.14	4.95	14.81		
	Medium	0	0	632	298	17.41	5.1	14.16	4.15	2.18	0.14	4.68	13.99	562	265	16.25	4.76	12.98	3.8	2.03	0.13	4.14	12.38		
		0.1	25	566	267	16.31	4.78	13.04	3.82	2.04	0.13	4.17	12.46	534	252	15.79	4.63	12.5	3.66	1.97	0.12	3.94	11.77		
		0.2	50	494	233	15.13	4.44	11.82	3.46	1.89	0.12	3.65	10.91	497	235	15.18	4.45	11.87	3.48	1.9	0.12	3.67	10.97		
	Low	0	0	494	233	15.13	4.44	11.82	3.46	1.89	0.12	3.65	10.91	361	170	12.7	3.72	9.41	2.76	1.59	0.1	2.67	7.99		
		0.1	25	450	212	14.38	4.22	11.05	3.24	1.8	0.11	3.33	9.97	325	153	11.91	3.49	8.7	2.55	1.49	0.09	2.39	7.14		
		0.2	50	392	185	13.32	3.9	10	2.93	1.67	0.11	2.91	8.7	294	139	11.24	3.29	8.08	2.37	1.4	0.09	2.15	6.44		
8	High	0	0	917	433	25.26	7.4	20.26	5.94	3.16	0.2	9.91	29.62	876	413	24.14	7.07	19.42	5.69	3.02	0.19	9.14	27.32		
		0.1	25	816	385	22.85	6.7	18.32	5.37	2.86	0.18	8.3	24.8	850	401	23.55	6.9	18.93	5.55	2.94	0.19	8.75	26.17		
		0.2	50	702	331	20.74	6.08	16.33	4.79	2.59	0.16	6.99	20.88	810	382	22.73	6.66	18.21	5.34	2.84	0.18	8.22	24.57		
	Medium	0	0	717	338	21	6.16	16.59	4.86	2.63	0.17	7.14	21.35	623	294	19.41	5.69	14.98	4.39	2.43	0.15	6.21	18.56		
		0.1	25	640	302	19.69	5.77	15.27	4.47	2.46	0.16	6.37	19.04	582	275	18.73	5.49	14.28	4.18	2.34	0.15	5.83	17.42		
		0.2	50	547	258	18.14	5.32	13.67	4.01	2.27	0.14	5.51	16.46	535	252	17.93	5.26	13.46	3.95	2.24	0.14	5.39	16.13		
	Low	0	0	550	260	18.19	5.33	13.72	4.02	2.27	0.14	5.53	16.54	402	190	15.36	4.5	10.99	3.22	1.92	0.12	4.1	12.25		
		0.1	25	497	235	17.26	5.06	12.79	3.75	2.16	0.14	5.04	15.07	370	175	14.61	4.28	10.34	3.03	1.83	0.12	3.75	11.22		
		0.2	50	422	199	15.79	4.63	11.39	3.34	1.97	0.12	4.31	12.88	337	159	13.76	4.03	9.63	2.82	1.72	0.11	3.37	10.08		
10	High	0	0	1120	529	28.49	8.35	23.85	6.99	3.56	0.22	4.69	14.03	1408	664	35	10.26	29.14	8.54						

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:

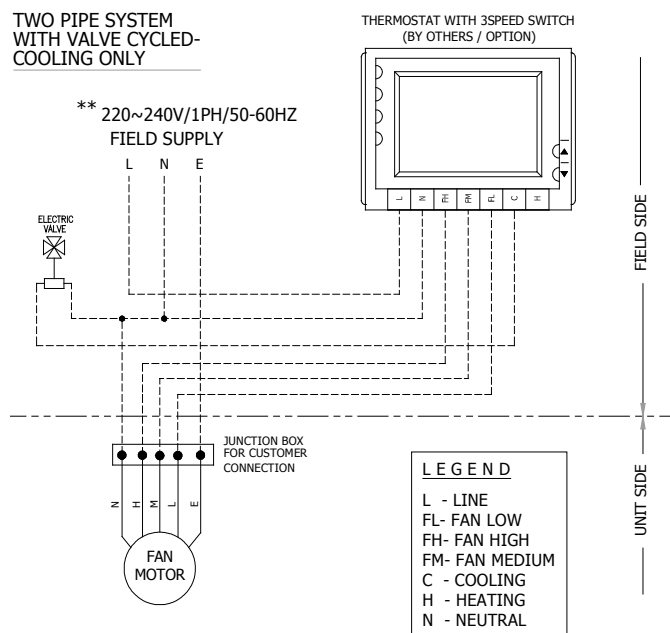
Four pipe system with valve cycled

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.

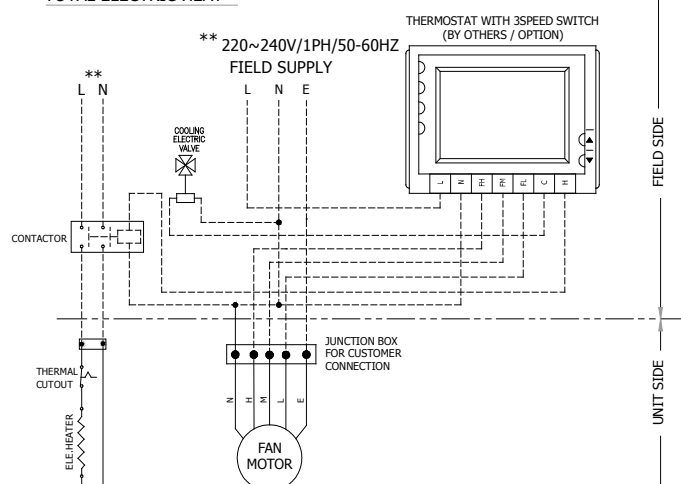
The fan runs as per the setting of fan mode (Hi-Med-Low-Auto).

*Not applicable for district cooling

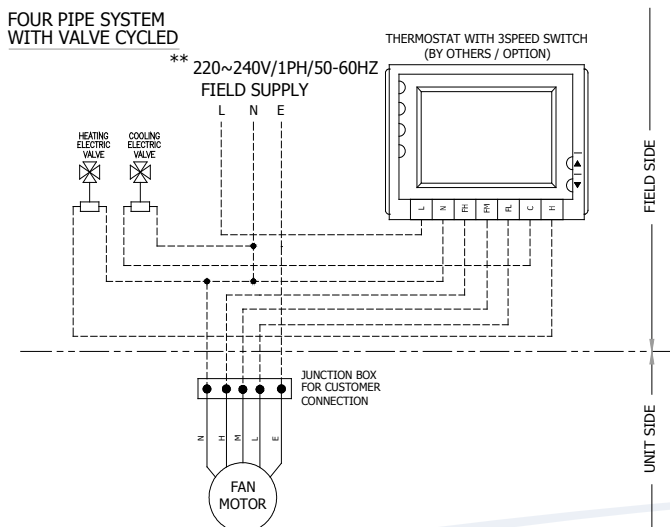
TWO PIPE SYSTEM
WITH VALVE CYCLED-
COOLING ONLY



TWO PIPE SYSTEM WITH
TOTAL ELECTRIC HEAT



FOUR PIPE SYSTEM
WITH VALVE CYCLED



Selection

Selection Considerations

In selecting Lo - 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 & 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 Lo - 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. 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 Lo - Static 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.6. 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

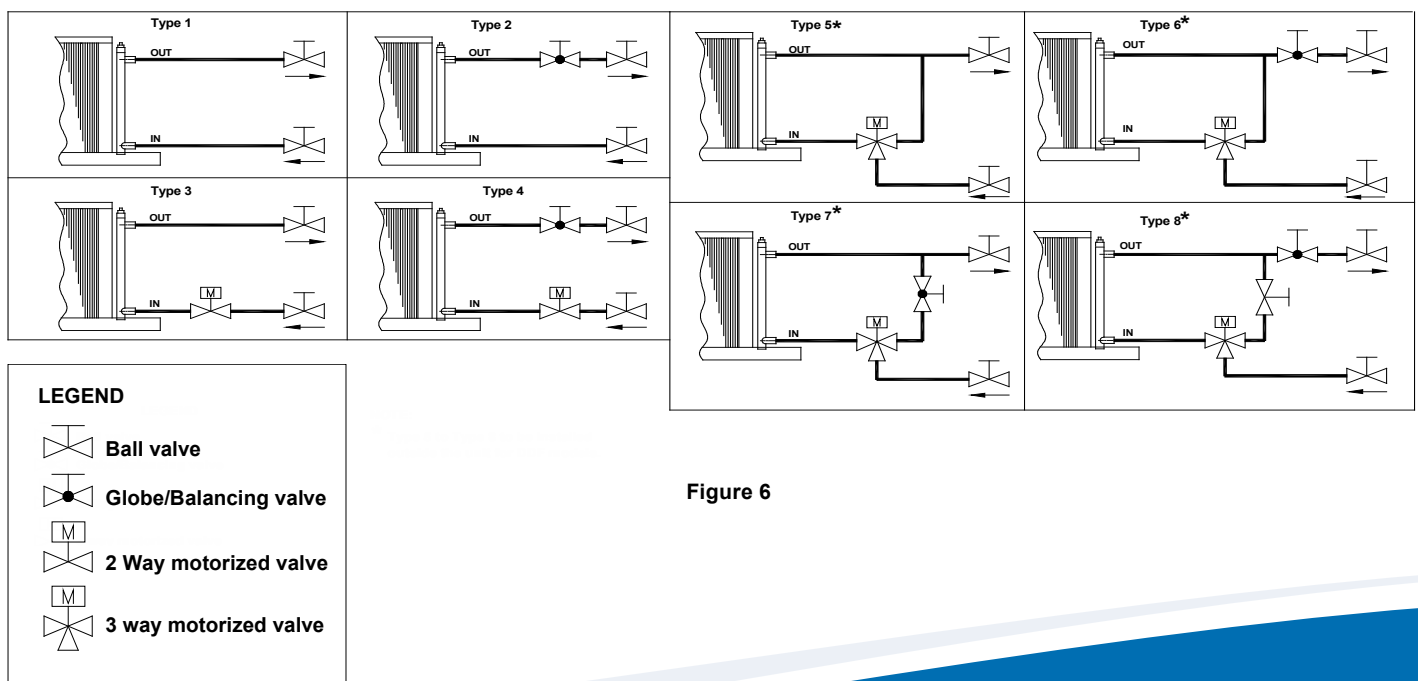
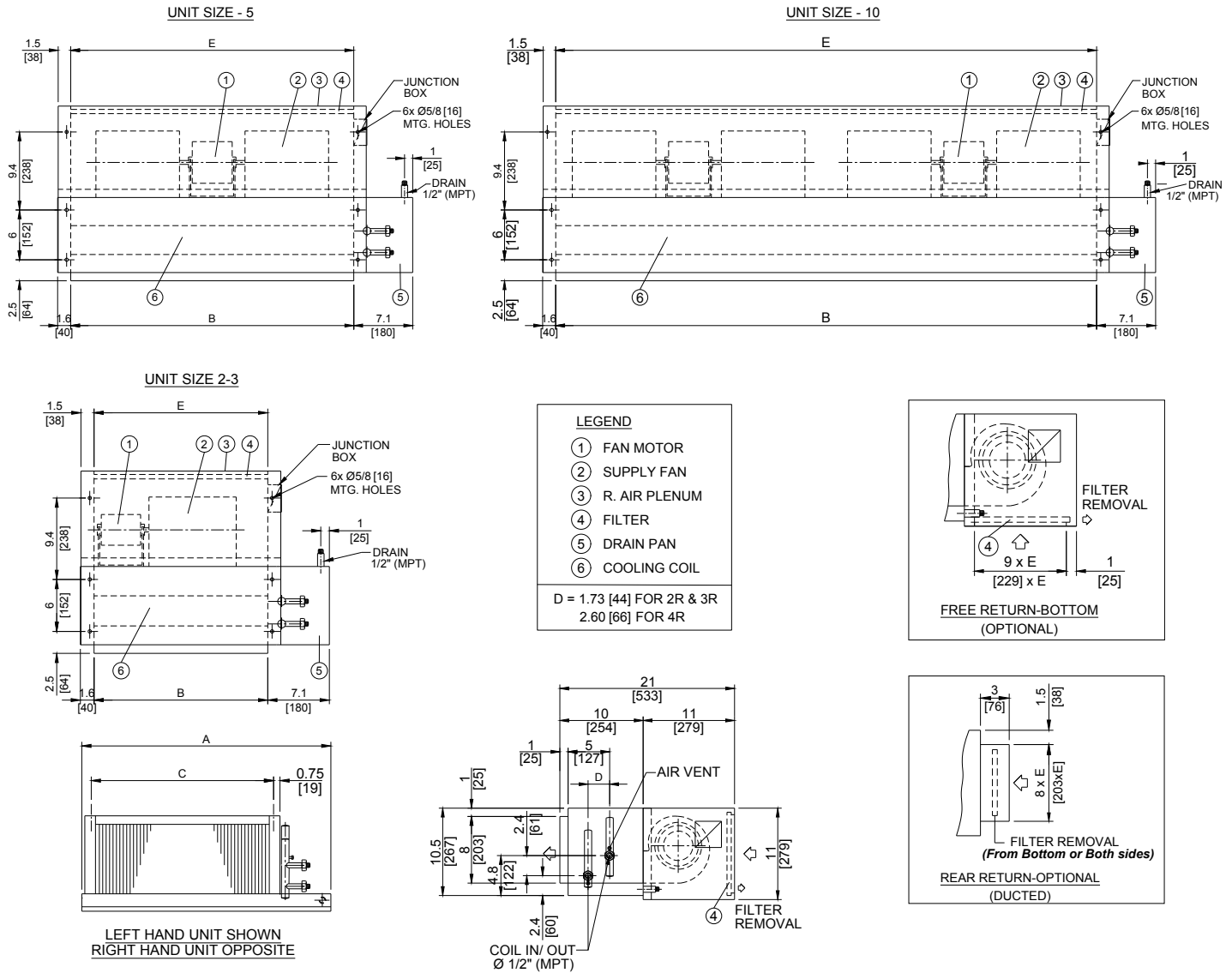


Figure 6

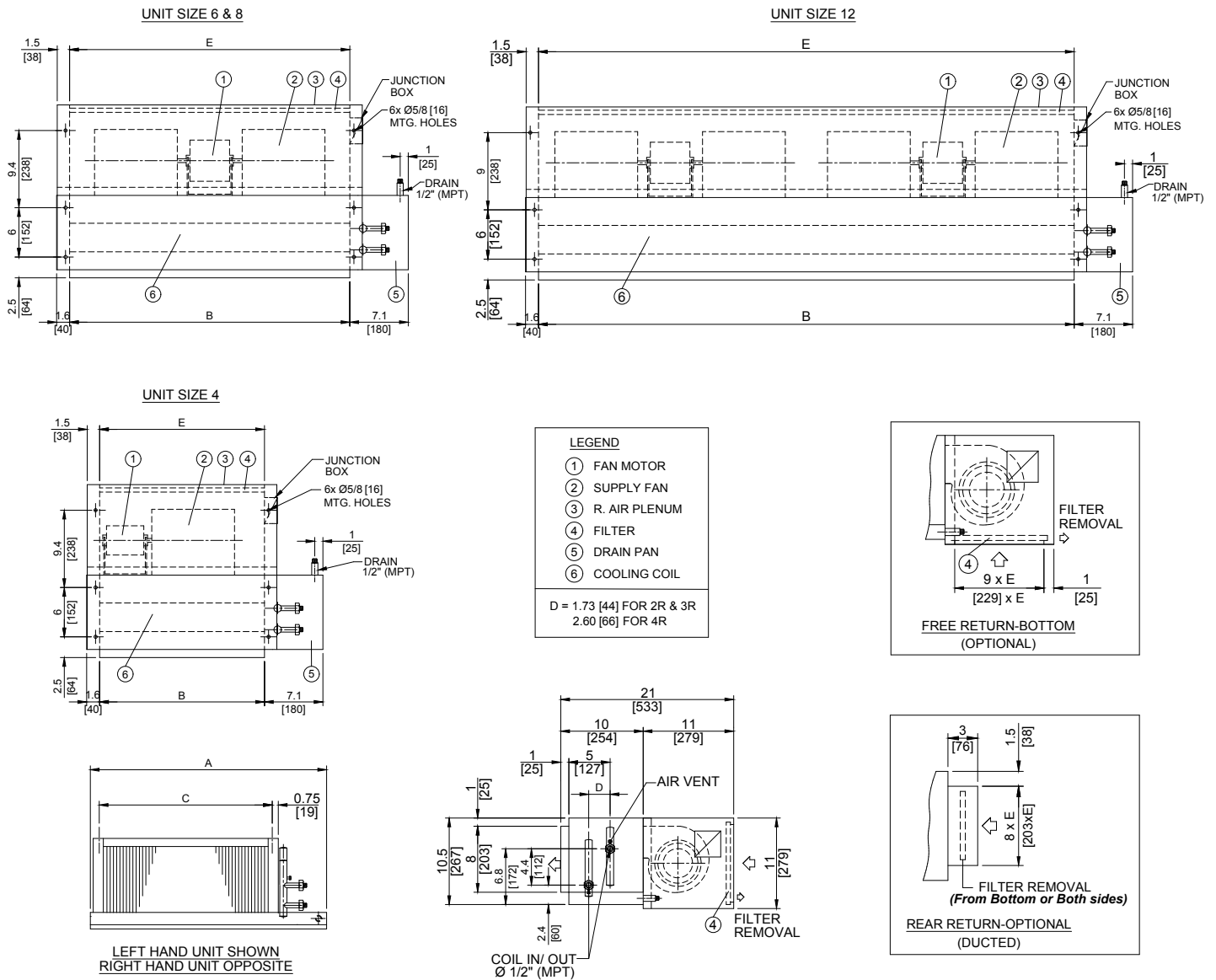
Dimensional Data DCL & DCCL Models



DCL/DCCL	A		B		C		E	
2	28.7	[728]	20	[508]	21	[533]	20	[508]
3	32.7	[830]	24	[610]	25	[635]	24	[610]
5	42.7	[1084]	34	[864]	35	[889]	35	[889]
10	73.7	[1871]	65	[1651]	66	[1676]	66	[1676]

ALL DIMENSIONS ARE IN INCHES [MM]

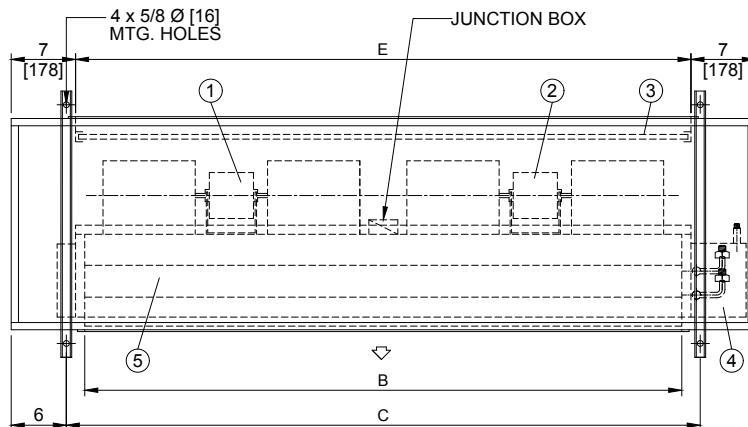
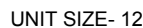
Dimensional Data DCL & DCCL Models



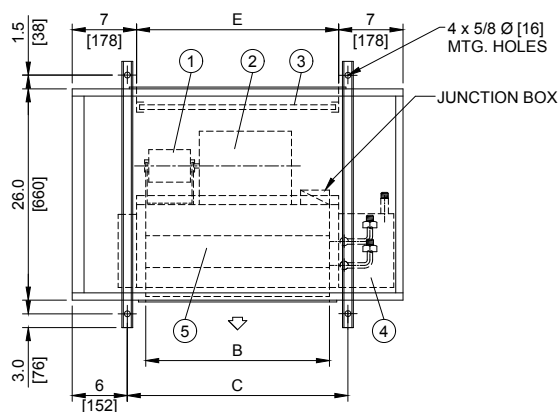
DCL/DCCL	A		B		C		E	
4	32.7	[830]	24	[610]	25	[635]	24	[610]
6	42.7	[1084]	34	[864]	35	[889]	35	[889]
8	48.7	[1236]	40	[1016]	41	[1041]	41	[1041]
12	73.7	[1871]	65	[1651]	66	[1676]	66	[1676]

ALL DIMENSIONS ARE IN INCHES [MM]

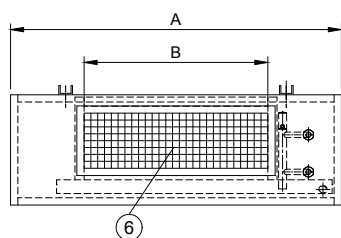
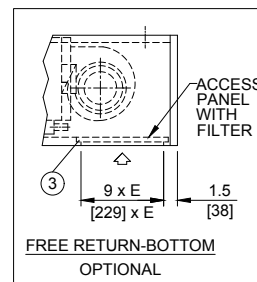
UNIT SIZE - 6 & 8



UNIT SIZE - 4



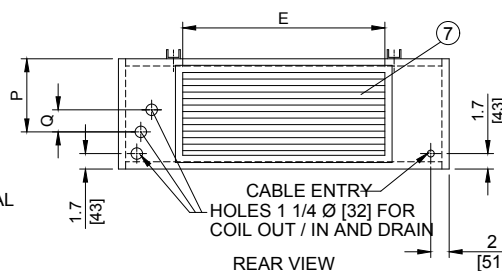
- ① FAN MOTOR
- ② SUPPLY FAN
- ③ FLAT FILTER
- ④ DRAIN PAN
- ⑤ COOLING COIL
- ⑥ DOUBLE DEFLECTION GRILL
- ⑦ RETURN AIR GRILL



The top view diagram shows the following dimensions and components:

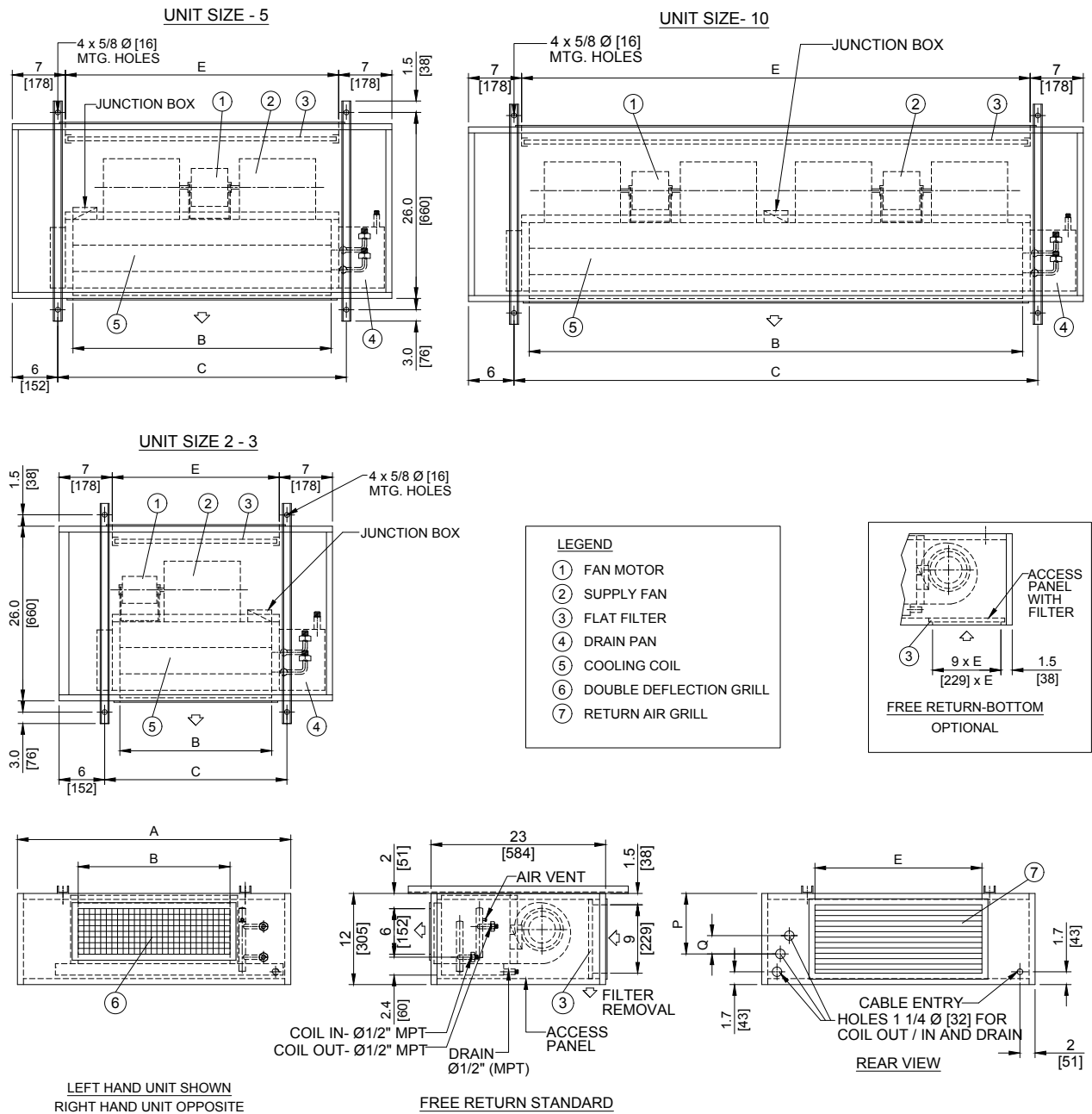
- Dimensions:**
 - Total width: 23 [584]
 - Total height: 15 [38]
 - Internal width (excluding side panels): 12 [305]
 - Side panel thickness: 2 [51]
 - Distance from left edge to coil centerline: 6 [152]
 - Coil offset from centerline: 2.4 [60]
 - Distance from right edge to filter removal point: 9 [229]
- Components and Labels:**
 - AIR VENT
 - FILTER REMOVAL (indicated by a circle with the number 3)
 - ACCESS PANEL
 - DRAIN Ø1/2" (MPT)
 - COIL IN- Ø1/2" MPT
 - COIL OUT- Ø1/2" MPT

FREE RETURN STANDARD



DCE/DCCE	A		B		C		E		P		Q	
2	36	[914]	20	[508]	24	[610]	22	[559]	8.4	[214]	4.8	[121]
3	40	[1016]	24	[610]	28	[711]	26	[660]	8.4	[214]	4.8	[121]
5	50	[1270]	34	[864]	38	[965]	36	[914]	8.4	[214]	4.8	[121]
10	81	[2057]	65	[1651]	69	[1753]	67	[1702]	8.4	[214]	4.8	[121]

Dimensional Data DCE & DCCE Models



ALL DIMENSIONS ARE IN INCHES [MM]

DCE/DCCE	A		B		C		E		P		Q	
4	40	[1016]	24	[610]	28	[711]	26	[660]	8.4	[214]	4.8	[121]
6	50	[1270]	34	[864]	38	[965]	36	[914]	8.4	[214]	4.8	[121]
8	56	[1422]	40	[1016]	44	[1188]	42	[1067]	8.4	[214]	4.8	[121]
12	81	[2057]	65	[1651]	69	[1753]	67	[1702]	8.4	[214]	4.8	[121]

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 0.2 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 °F (35°C) 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 suspended 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 0.2" 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 airflow). Coil connections shall be MPT type. Optional FPT connections shall be provided if so specified. Coil shall be certified in accordance with AHRI - 410 (DCL / DCE) 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.

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 as an option:

- Double skin casing for locations having a high temperature difference between supply air temperature and surrounding environment of the unit. (DCL & DCCL 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 / 50/60 Hz.

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).

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