اجهـــزة تكـيـيـف هـــواء
AIR CONDITIONING EQUIPMENT

Fan Coil Units for District Cooling

Range 600 to 2400 cfm
(283 to 1133 l/s)

Bulletin # 064/2008 (NEW)

ISO 9001
BUREAU VERITAS
Certification

SKM Fan Coil Units
District Cooling

Contents

Legend

The following legends are used throughout this manual:

AFR ..... Air Flow Rate
BEP ..... Baked Enamel Paint
cfm ..... Cubic feet per minute
dB ..... Decibels
EADB .... Entering Air Dry Bulb
EAWB .... Entering Air Wet Bulb
ET ..... Evaporating Temperature
EWT ..... Entering Water Temperature
ESP ..... External Static Pressure
Ft ..... Total Capacity Factor
ftwg ..... Feet fo Water Gauge
Fs ..... Sensible Capacity Factor
GPM .... Gallons per minute
Hz ..... Hertz
inwg ..... Inch of Water Gauge
kW ..... Kilowatts
kg ..... Kilograms
kPa ..... Kilo Pascals
LADB .... Leaving Air Dry Bulb
LAWB ... Leaving Air Wet Bulb
lbs ..... Pounds weight (British units)
l/s ..... Liters per second
MBh ..... 1000 Btuh
NC ..... Noise Criteria
OD ..... Outside Diameter
Ph ..... Phase
Pa ..... Pascals
SC ..... Sensible Capacity
SCCF .... Sensible Capacity Correction Factor
SPL ..... Sound Pressure Level
TC ..... Total Capacity
TCCF .... Total Capacity Correction Factor
TR ..... Tons of refrigeration = 12 MBH
USgpm .. US Gallons per minute
V ..... Volts
WFR ..... Water Flow Rate
WTR ..... Water Temperature Rise
WPD ..... Water Pressure Drop

Nomenclature

F C U - DCD x - 1 2 / 40 / W G

- F C U — Fan Coil Unit
- DCD — District Cooling Direct Drive
- x — C : Ceiling suspended concealed; P : Ceiling suspended with plenum; E : Ceiling suspended exposed; F : Floor mounted concealed
- 12 — Unit size nom. x 100 cfm (06,08,10,12,15,18,21 & 24)
- 40 — No. of rows for cooling coil (3, 4 or 6 rows)
- W — Chilled Water Coil
- G — G=Galvanised Finish F=Painted FInish

Introduction

Fan Coil Units for District Cooling from SKM are a complete line of fan coil units to meet most Air Conditioning requirements. For District Cooling application, entering water temperature for Fan Coil Units is expected between 42-44ºF (5.56 - 6.67ºC) and the ΔT between 14-16ºF (7.78 - 8.89ºC). High quality units are available for installation in apartments and single or multi room offices, schools, hotels, etc.

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

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

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

Deliveries on Fan Coil Units for District Cooling are reliably prompt. For those urgent jobs, these 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.

Fan Coil Units for District Cooling are especially designed for District Cooling application. Another quality product from SKM which is:

SKM AIR-CONDITIONING EQUIPMENT

Built in the Gulf...for the world.

SKM Fan Coil Units
District Cooling

General Features

Fan Coil Units for District Cooling manufacturerd by SKM have been designed with the requirment of the Middle East market foremost in consideration.

Fan Coil Units for District Cooling are ideally suited for installation in chilled water applications 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. 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

Fan Coil Units for District Cooling 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 District Cooling series fan coils the first choice as Fan Coil Units for District Cooling from SKM are: **Built in the Gulf...for the world.**

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.
- Isolating grommet for additional vibration isolation.
- Quick electrical connections.

Component Features

Coils

Cooling coils are manufactured from 5/16"(7.9mm) OD seamless copper tubes mechanically bonded to high efficiency wavy corrugated aluminium fins. 5/16"(7.9mm) OD tubes are selected due to the low flow rate of water in district cooling application. Copper fins are available as an option.

Coils are factory leak tested by air pressure at 300 psig (2068 kPa) under water. Air vent is standard. Chilled water cooling coils are available in 3, 4 and 6 rows. Coil connections are plain tube extensions supplied LH or RH as required for chilled water.

Coils are rated in accordance with ARI - 410. Fan Coil Units for District Cooling can be supplied with a maximum total of 6 rows cooling and electric heater battery.

Fan / Motor

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

Efficiency and Power Factor

SKM Fan Coil Units for District Cooling 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.

Casing

Units are constructed from high gauge galvanised steel sheet complying with ASTM-A653 and JSIG-3302 for maximum protection against corrosion. On request, as an option, electrostatic polyster powder coating on zinc coated galvanized and phosphatised sheets are available. Colors available ivory white (RAL 7032) or light grey (RAL 8019) at no extra charge. Other colors available as a further option, on request, at additional charge.

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 polyethylene foam insulation for maximum protection against sweating and corrosion. Drain pan is extended to include coil, headers and U - bends. Drain connection 3/4" (19mm) O.D. is provided for removal of condensation.

Options

The standard options available for Fan Coil Units for District Cooling includes :

Automatic Air Vent
(specify option AAV)

Electric Heaters
(specify option FEH)

Application

Electric heaters are available on all Models of Fan Coil Units for District Cooling.

1. Heating during winter without the need for a central boiler or hot water source. The chilled water is a two pipe system allowing year round temperature control.

2. Incremental heat during peak heating season when cooling coil is circulating hot water in a two pipe system and is unable to meet full heating requirements of the space.

Fan Coil Units for District Cooling 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.

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

Capacity

Maximum capacity of the electric heater is determined by the air capacity of the particular model. Table 1 shows the 2 variations available for each model in the Hi - Static fan coil units.

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
06	1 x 1.0	2 x 1.0
08	1 x 1.5	2 x 1.5
10	1 x 1.0 + 1 x 1.5	3 x 1.5
12	1 x 3.0	2 x 3.0
15	1 x 3.0	2 x 3.0
18	1 x 4.0	2 x 4.0
21	1 x 4.0	2 x 4.0
24	1 x 4.0	2 x 4.0

Table 1

Double Skin Units
(specify option DSU)

Recommended for all units installed in locations having a high temperature difference between supply air temperature and surrounding environment of the District Cooling fan coil units. This option is available for DCDP models only. Additional sound attenuation is achieved with double skinning. Cold bridges are avoided fully in the sandwich construction.

Controls

Various options on valve packages and control systems are available. Different types of temperatures and fan speed controllers are available for Field Installation. Please consult SKM for more details.

Auxillary and / or Double Insulated Drain Pans

Available for models DCDC and DCDP only to provide extended and additional protection against condensation below valve packages.

Options available :

1. Auxiliary drip lip supplied loose to be fitted on the edge of the drain pan under the valves. *Specify option ADP.*

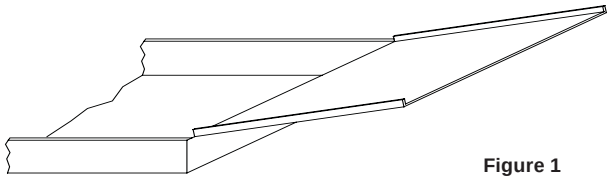


Figure 1

2. Double skin drain pan with heavy gauge galvanised steel internal & external skin. The inner and outer skins are filled with fibre glass insulation. Internal skin additionally protected with painted finish. *Specify option PDI.*

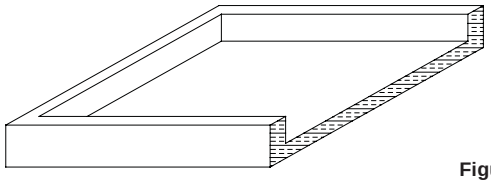


Figure 2

3. Stainless steel drain pan insulated from outside with 4mm thick polyethylene foam insulation. *Specify option SDP.*

4. Double skin drain pan with stainless steel internal skin and heavy gauge galvanized steel outer skin sandwiched between a fibre glass insulation. *Specify option PSID*.

Powder Coated Decorative Finish
(specify option BEP)

Available for models DCDF only where required for exposed installation. Model DCDE comes standard with this option. Colors available ivory white (RAL 7032) or light grey (RAL 8019). Specify with option code BEP. Optionally other RAL colors may be available. *Specify color with code BEP.*

Supply and Return Air Grille

Powder coated discharge grille and/or return grille available for DCDE & DCDF. Double deflection discharge grille available under option code GDD. Single deflection discharge or return grille available under option code RAG.

Grills are powder coated to match color of unit, if option BEP ordered or in standard aluminium finish if option BEP not required or ordered.

Discharge Plenum
(Specify option GDP)

A discharge plenum for free standing DCDF models only is available. Option BEP must be ordered with this option. Option GDP includes, in addition, a double deflection supply grille and a single deflection return air grille, powder coated in matching color. Colors available ivory white (RAL 7032) or light grey (RAL 8019). Specify with option code.

Application Flexibility

Fan Coil Units for District Cooling are available in a capacity range of 600 - 2400 cfm (283-1133 l/s), in various models having 8 sizes each. Configurations available include ceiling suspended horizontal or vertical floor mounted.

1. DCDC

Ceiling suspended, concealed application with chilled water coils.

2. DCDP

Ceiling suspended for concealed applications, includes a factory installed plenum. The plenum is lined with 1/2" glass fibre insulation. Units are supplied with 1" cleanable filter as standard.

3. DCDE

Ceiling suspended, exposed type includes basic DCDC, plus a cabinet with removable access panels lined with 1/2" fibre glass insulation. Units are supplied with 1" cleanable filter. Units are with electrostatically applied polyster powder coat and can be supplied with supply and return air grilles on request.

4. DCDF

Floor mounted, vertical supply with 1" cleanable filter. Units can be supplied with supply and return grill on request with electrostatic polyster powder coat, oven-baked. Units have a removable access panel to provide complete access to coil and motor blower section. All units can be supplied for either free or ducted air delivery.

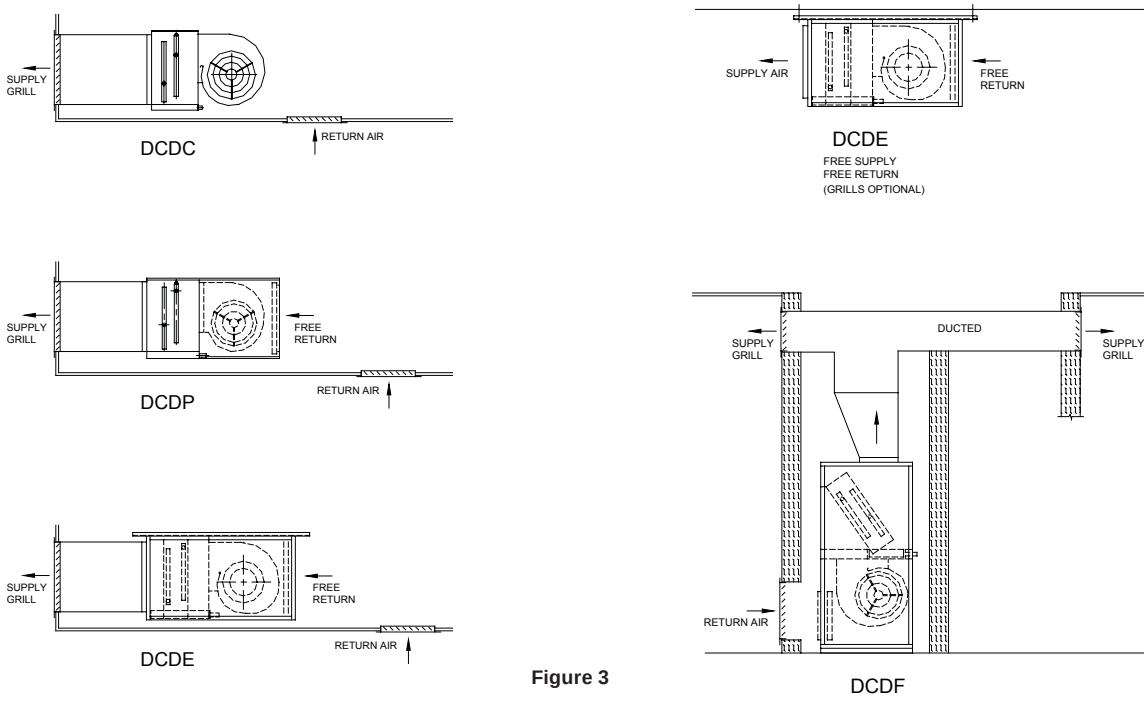


Figure 3

Physical & Electrical Data

Unit Size				06	08	10	12	15	18	21	24
Nominal Airflow Rate			cfm	600	800	1000	1200	1500	1800	2100	2400
			l/s	283	378	472	566	708	849	991	1133
Coil	Type		-	Copper tubes mechanically bonded to Hi-Efficiency wavy corrugated Aluminium Fins							
	Fin Height		inch	12	12	16	12	12	16	16	16
			mm	305	305	406	305	305	406	406	406
	Fin Length		inch	20	24	24	36	42	42	48	54
			mm	508	610	610	914	1067	1067	1219	1372
	Face Area		ft²	1.7	2.0	2.7	3.0	3.5	4.7	5.3	6.0
			m²	0.15	0.19	0.25	0.28	0.33	0.43	0.50	0.56
Fan	Type		-	Double Inlet Double Width Centrifugal Forward Curve Direct Drive							
	Code		-	7-7	7-7	9-7	7-7	7-7	9-7	9-7	9-7
	Quantity		#	1	1	1	2	2	2	2	2
Motor	Type		-	220-240V/1Ph/50-60Hz, 3 Speed Electric Motor with Permanent Split Capacitor							
	Size		Watts	147	147	147	147	147	147	245	245
	Quantity		#	1	1	1	2	2	2	2	2
	Total Power Input		Watts	245	245	267	490	490	534	754	754
Maximum Amps.	50 Hz.	Speed	High	1.5	1.6	1.7	3.0	3.2	3.4	5.2	5.2
			Medium	1.2	1.2	1.0	2.4	2.4	2.0	4.2	4.2
			Low	0.9	0.9	0.7	1.8	1.8	1.3	3.5	3.5
	60 Hz.	Speed	High	1.5	1.7	1.7	3.0	3.4	3.4	5.4	5.4
			Medium	1.1	1.2	1.0	2.2	2.3	2.0	3.8	3.8
			Low	0.8	0.9	0.6	1.6	1.7	1.3	2.8	2.8

Table 2

Nominal Capacity Ratings

Models DCDC, DCDP, DCDE & DCDF

Chilled Water Coils

Size	Nominal Airflow Rate	3 Rows				4 Rows				6 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
	cfm	MBh	MBh	gpm	ftwg	MBh	MBh	gpm	ftwg	MBh	MBh	gpm	ftwg
	l/s	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa
6	600	16.6	12.7	2.1	21.3	17.7	13.8	2.2	10.61	22.6	16.4	2.83	10.9
	283	4.9	3.7	0.1	63.8	5.2	4.1	0.1	31.7	6.6	4.8	0.2	32.6
8	800	18.6	15.5	2.3	10.0	22.1	17.8	2.8	8.23	32.2	22.7	4.03	22.3
	378	5.4	4.5	0.1	30.0	6.5	5.2	0.2	24.6	9.4	6.6	0.3	66.6
10	1000	23.6	19.6	3.0	9.2	32.5	24.2	4.1	20.54	38.1	27.4	4.76	13.3
	472	6.9	5.8	0.2	27.5	9.5	7.1	0.3	61.4	11.2	8.0	0.3	39.6
12	1200	30.4	24.2	3.8	14.2	33.2	26.6	4.2	7.39	43.0	31.8	5.38	7.7
	566	8.9	7.1	0.2	42.6	9.7	7.8	0.3	22.1	12.6	9.3	0.3	23.0
15	1500	32.7	28.0	4.1	6.3	44.7	34.4	5.6	13.66	56.5	40.8	7.07	13.7
	708	9.6	8.2	0.3	18.8	13.1	10.1	0.4	40.8	16.6	11.9	0.4	40.8
18	1800	46.9	36.9	5.9	14.9	53.5	41.5	6.7	11.3	65.7	48.2	8.21	7.9
	850	13.8	10.8	0.4	44.5	15.7	12.2	0.4	33.8	19.2	14.1	0.5	23.6
21	2100	48.9	40.8	6.1	8.3	59.6	47.2	7.5	8.35	79.8	57.5	9.97	12.1
	991	14.3	12.0	0.4	24.9	17.5	13.8	0.5	25.0	23.4	16.8	0.6	36.1
24	2400	60.8	48.4	7.6	13.2	72.7	55.7	9.1	12.76	96.7	68.0	12.08	18.3
	1133	17.8	14.2	0.5	39.3	21.3	16.3	0.6	38.1	28.3	19.9	0.8	54.6

Table 3

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 16°F (8.9°C) water temperature rise.

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

Air Flow Correction Factors

(Other than nominal air flow)

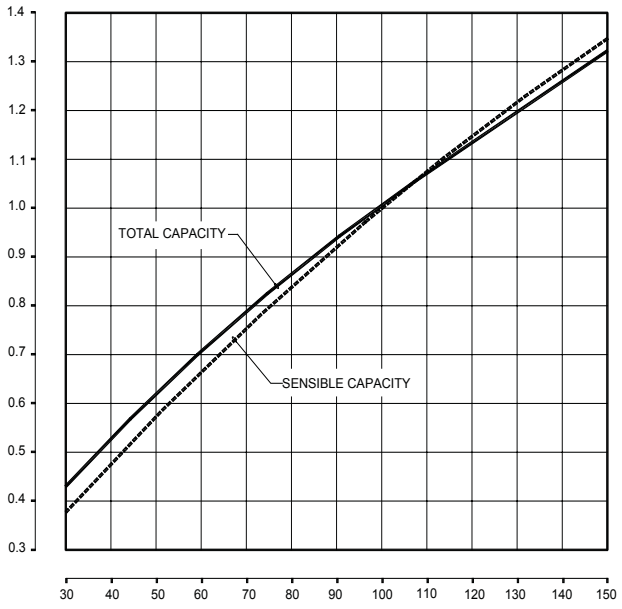


Figure 4

Actual Air Flow/Nom. Air Flow %	Total Cooling Capacity Ft	Sensible Capacity (Cooling or Heating) Fs
30	0.43	0.38
40	0.53	0.47
50	0.62	0.57
60	0.70	0.67
70	0.78	0.76
80	0.86	0.85
90	0.94	0.93
100	1.00	1.00
110	1.07	1.07
120	1.13	1.14
130	1.19	1.21
140	1.26	1.28
150	1.33	1.30

Table 4

Altitude Correction Factors

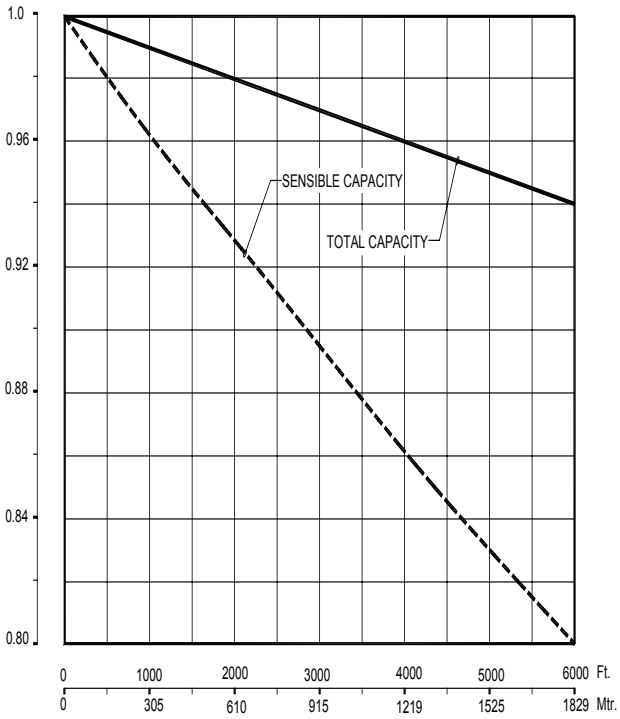


Figure 5

Elevation		Total Capacity	Sensible Capacity
ft.	m		
1000	305	0.99	0.96
2000	610	0.97	0.92
4000	1219	0.95	0.84
5000	1525	0.94	0.80
6000	1829	0.92	0.76

Table 5

Sound Data

50 Hz

Sound Power Level dB(A)

Size	Speed	3 Rows								4 Rows								6 Rows							
		125	250	500	1 K	2 K	4 K	8 K	A	125	250	500	1 K	2 K	4 K	8 K	A	125	250	500	1 K	2 K	4 K	8 K	A
6	High	53.6	55.4	59.4	62.8	59.1	57.2	51.3	**66.8**	53.7	55.5	59.4	62.8	59.0	57.1	51.2	**66.8**	53.8	55.6	59.4	62.8	59.0	57.1	51.2	**66.8**
	Medium	51.1	52.2	56.9	59.4	55.5	53.0	46.4	**63.5**	51.3	52.4	57.0	59.4	53.2	53.1	46.5	**63.3**	51.5	52.5	57.0	59.4	55.7	53.2	46.5	**63.7**
	Low	45.8	46.3	52.8	49.4	48.5	45.0	36.5	**56.7**	46.3	46.6	53.0	54.0	49.0	45.6	37.2	**58.2**	46.9	47.2	53.3	54.5	49.8	46.4	37.2	**58.7**
8	High	49.3	61.5	60.4	62.1	60.7	58.1	51.6	**67.9**	49.3	61.5	60.3	62.1	60.6	58.0	51.5	**67.9**	49.2	61.4	60.2	62.1	60.5	57.9	51.5	**67.8**
	Medium	49.0	56.1	57.2	58.2	55.4	52.8	45.0	**63.5**	49.0	56.0	57.2	58.3	55.5	52.8	44.9	**63.5**	48.9	56.1	57.3	58.4	55.6	52.8	44.9	**63.6**
	Low	43.2	52.6	53.8	53.8	49.7	46.0	36.7	**59.1**	43.4	52.8	53.8	54.0	50.0	46.1	37.0	**59.3**	43.7	53.1	53.9	54.3	50.6	46.3	37.0	**59.6**
10	High	46.6	60.0	61.3	62.8	59.9	57.8	45.6	**67.7**	46.2	59.5	60.8	62.2	59.2	57.2	44.1	**67.2**	44.0	56.6	57.9	59.2	56.4	54.4	45.1	**64.3**
	Medium	45.0	55.1	58.3	53.8	55.8	52.0	40.6	**62.6**	44.6	54.6	57.8	53.2	55.1	51.4	40.1	**62.0**	42.4	51.7	54.9	50.2	52.3	48.6	40.1	**59.2**
	Low	43.0	51.1	54.3	53.3	49.2	47.0	35.5	**58.9**	42.6	50.6	53.8	52.7	48.5	46.4	35.0	**58.3**	40.4	47.7	50.9	49.7	45.7	43.6	35.0	**55.4**
12	High	54.6	56.4	60.4	63.8	60.1	58.2	52.3	**67.8**	54.7	56.5	60.4	63.8	60.0	58.1	52.2	**67.8**	54.8	56.6	60.4	63.8	60.0	58.1	52.2	**67.8**
	Medium	52.1	53.2	57.9	60.4	56.5	54.0	47.4	**64.5**	52.3	53.4	58.0	60.4	54.2	54.1	47.5	**64.3**	52.5	53.5	58.0	60.4	56.7	54.2	47.5	**64.7**
	Low	46.8	47.3	53.8	50.4	49.5	46.0	37.5	**57.7**	47.3	47.6	54.0	55.0	50.0	46.6	38.2	**59.2**	47.9	48.2	54.3	55.5	50.8	47.4	38.2	**59.7**
15	High	50.3	62.5	61.4	63.1	61.7	59.1	52.6	**68.9**	50.3	62.5	61.3	63.1	61.6	59.0	52.5	**68.9**	50.2	62.4	61.2	63.1	61.5	58.9	52.5	**68.8**
	Medium	50.0	57.1	58.2	59.2	56.4	53.8	46.0	**64.5**	50.0	57.0	58.2	59.3	56.5	53.8	45.9	**64.5**	49.9	57.1	58.3	59.4	56.6	53.8	45.9	**64.6**
	Low	44.2	53.6	54.8	54.8	50.7	47.0	37.7	**60.1**	44.4	53.8	54.8	55.0	51.0	47.1	38.0	**60.3**	44.7	54.1	54.9	55.3	51.6	47.3	38.0	**60.6**
18	High	47.6	61.0	62.3	63.8	60.9	58.8	46.6	**68.7**	47.2	60.5	61.8	63.2	60.2	58.2	45.1	**68.2**	45.0	57.6	58.9	60.2	57.4	55.4	46.1	**65.3**
	Medium	46.0	56.1	59.3	54.8	56.8	53.0	41.6	**63.6**	45.6	55.6	58.8	54.2	56.1	52.4	41.1	**63.0**	43.4	52.7	55.9	51.2	53.3	49.6	41.1	**60.2**
	Low	44.0	52.1	55.3	54.3	50.2	48.0	36.5	**59.9**	43.6	51.6	54.8	53.7	49.5	47.4	36.0	**59.3**	41.4	48.7	51.9	50.7	46.7	44.6	36.0	**56.4**
21	High	58.3	63.5	64.5	66.3	68.5	68.4	58.7	**73.9**	58.2	63.4	64.1	65.8	67.9	67.7	57.9	**73.4**	58.1	63.3	63.3	65.0	67.0	66.4	57.9	**72.6**
	Medium	56.8	60.0	66.1	64.8	67.3	66.8	56.8	**72.8**	56.7	59.8	65.2	64.5	66.9	66.3	56.3	**72.3**	56.6	59.4	63.4	63.9	66.2	65.4	56.3	**71.5**
	Low	54.4	58.0	65.7	62.7	65.2	64.2	53.8	**71.0**	54.5	58.1	65.3	62.6	65.1	64.0	53.7	**70.8**	54.6	58.1	64.6	62.5	64.9	63.7	53.7	**70.5**
24	High	59.6	64.5	65.6	67.2	69.3	69.5	60.0	**74.9**	58.4	63.6	64.9	66.8	69.0	69.1	59.6	**74.5**	58.3	63.5	64.2	65.9	68.1	67.9	59.6	**73.6**
	Medium	56.9	60.4	67.8	65.4	67.9	67.6	57.8	**73.7**	56.9	60.2	67.1	65.2	67.6	67.2	57.3	**73.3**	56.8	59.9	65.5	64.6	67.0	66.5	57.3	**72.5**
	Low	54.4	58.0	66.1	62.8	65.3	64.4	54.0	**71.2**	54.4	58.0	66.0	62.8	65.2	64.3	53.9	**71.1**	54.5	58.1	65.5	62.7	65.1	64.1	53.9	**70.9**

Table 6

*** Based on 0.2 in.Wg (50 Pa) External Static Pressure**

Casing Attenuation

	125	250	500	1000	2000	4000	8000
DCDP, DCDE, DCDF	0	1	2	3	5	4	4
DCDC	0	0	0	0	0	0	0

Sound Data

60 Hz

Sound Power Level dB(A)

Size	Speed	3 Rows								4 Rows								6 Rows							
		125	250	500	1 K	2 K	4 K	8 K	A	125	250	500	1 K	2 K	4 K	8 K	A	125	250	500	1 K	2 K	4 K	8 K	A
6	High	48.3	56.0	59.2	60.6	54.5	50.9	42.0	**64.6**	48.3	56.0	59.2	60.6	54.5	50.9	42.0	**64.6**	48.0	55.7	58.9	60.2	54.2	50.7	41.0	**64.3**
	Medium	45.6	50.4	52.4	52.8	46.9	43.2	34.6	**57.7**	46.4	48.3	52.6	53.0	53.2	43.5	35.0	**58.6**	47.7	49.3	53.0	53.5	47.8	44.1	34.0	**58.2**
	Low	38.9	47.3	47.7	45.8	37.2	32.2	22.9	**52.2**	39.0	47.3	47.7	45.9	37.4	32.4	23.1	**52.2**	39.0	47.4	47.9	46.2	37.8	32.9	22.1	**52.4**
8	High	47.8	60.1	59.5	61.2	59.2	56.4	49.8	**66.7**	47.9	60.3	59.5	61.3	59.3	56.4	49.8	**66.8**	47.9	60.7	59.6	61.5	59.4	56.5	49.8	**67.0**
	Medium	47.6	53.1	56.8	56.5	53.1	50.6	41.4	**61.8**	47.2	52.6	56.3	56.0	52.6	50.1	41.1	**62.3**	46.3	51.6	55.3	55.0	51.6	49.2	40.1	**60.3**
	Low	38.1	46.3	50.8	49.7	45.6	42.3	30.9	**55.0**	37.8	46.3	50.8	49.9	45.5	42.2	30.9	**55.0**	37.4	46.4	50.8	50.2	45.3	42.0	29.9	**55.1**
10	High	48.0	59.1	60.8	62.9	60.0	58.1	45.8	**67.5**	48.1	59.1	60.8	62.9	60.0	58.1	45.9	**67.6**	48.0	59.1	60.8	62.9	60.0	58.1	44.9	**67.5**
	Medium	47.7	52.2	58.1	58.1	53.8	52.1	38.1	**62.8**	47.4	51.6	57.6	57.5	53.3	51.7	37.8	**62.3**	46.4	50.3	56.4	56.2	52.1	50.6	36.1	**61.1**
	Low	38.2	45.5	51.9	51.1	46.2	43.5	28.4	**55.9**	38.0	45.4	51.9	51.2	46.1	43.4	28.5	**55.9**	37.5	45.2	51.8	51.3	45.7	43.2	27.0	**55.8**
12	High	49.3	57.0	60.2	61.6	55.5	51.9	43.0	**65.6**	49.3	57.0	60.2	61.6	55.5	51.9	43.0	**65.6**	49.0	56.7	59.9	61.2	55.2	51.7	43.0	**65.2**
	Medium	46.6	51.4	53.4	53.8	47.9	44.2	35.6	**58.7**	47.4	49.3	53.6	54.0	54.2	44.5	36.0	**59.6**	48.7	50.3	54.0	54.5	48.8	45.1	36.0	**59.2**
	Low	39.9	48.3	48.7	46.8	41.3	36.6	27.0	**53.4**	40.0	48.3	48.7	46.9	38.4	33.4	24.1	**53.2**	40.0	48.4	48.9	47.2	38.8	33.9	24.1	**53.4**
15	High	48.8	61.1	60.5	62.2	60.2	56.4	50.8	**67.6**	48.9	61.3	60.5	62.3	60.3	57.4	47.8	**67.7**	48.9	61.7	60.6	62.5	60.4	57.5	50.8	**68.0**
	Medium	48.6	54.1	57.8	57.2	54.1	51.6	42.4	**62.7**	48.2	53.6	57.3	57.0	53.6	51.1	42.1	**62.3**	47.3	52.6	56.3	56.0	52.6	50.2	42.1	**61.3**
	Low	39.1	47.3	51.8	50.7	46.6	43.3	31.9	**56.0**	38.8	47.3	51.8	50.9	46.5	43.2	31.9	**56.1**	38.4	47.4	51.8	51.2	46.3	43.0	31.9	**56.1**
18	High	49.0	60.1	61.8	63.9	61.0	59.1	46.8	**68.5**	49.1	60.1	61.8	63.9	61.0	59.1	46.9	**68.6**	49.0	60.1	61.8	63.9	61.0	59.1	45.9	**68.5**
	Medium	48.7	53.2	59.1	59.1	54.8	53.1	39.1	**63.8**	48.4	52.6	58.6	58.5	54.3	52.7	38.8	**63.3**	47.4	51.3	57.4	57.2	53.1	51.6	37.1	**62.1**
	Low	39.2	46.5	52.9	52.1	47.2	44.5	29.4	**56.9**	39.0	46.4	52.9	52.2	47.1	44.4	29.5	**56.9**	38.5	46.2	52.8	52.3	46.7	44.2	28.0	**56.8**
21	High	52.0	63.1	64.1	67.2	65.4	64.4	53.7	**72.2**	52.1	63.0	64.0	67.1	65.2	64.1	53.3	**72.0**	51.8	63.1	64.0	67.1	64.8	63.6	53.3	**71.9**
	Medium	49.1	60.3	62.0	64.1	61.2	59.3	47.0	**68.8**	49.0	60.0	61.7	63.8	60.9	59.0	46.8	**68.5**	48.3	59.1	60.8	62.9	60.0	58.2	46.8	**67.6**
	Low	39.0	50.0	53.7	54.1	50.8	48.2	36.5	**59.0**	39.0	50.0	53.7	54.1	50.8	48.2	36.5	**59.0**	39.0	50.0	53.7	54.1	50.8	48.2	36.5	**59.0**
24	High	51.9	63.2	64.3	67.4	65.7	64.8	54.3	**72.4**	52.0	63.1	64.2	67.3	65.6	64.6	54.0	**72.3**	52.1	63.0	64.0	67.1	65.2	64.1	54.0	**72.1**
	Medium	49.7	61.0	62.7	64.8	61.9	60.0	47.5	**69.5**	49.6	60.8	62.5	64.6	61.7	59.8	47.4	**69.2**	49.1	60.2	61.9	64.0	61.1	59.2	47.4	**68.7**
	Low	39.0	50.0	53.6	54.1	50.8	48.2	36.5	**58.9**	39.0	50.0	53.7	54.1	50.8	48.2	36.5	**59.0**	39.0	50.0	53.7	54.1	50.8	48.2	36.5	**59.0**

Table 7

*** Based on 0.2 in.Wg (50 Pa) External Static Pressure**

Casing Attenuation

	125	250	500	1000	2000	4000	8000
DCDP, DCDE, DCDF	0	1	2	3	5	4	4
DCDC	0	0	0	0	0	0	0

Air Delivery (50 Hz)

Model DCDC

	Size	06	08	10	12	15	18	21	24
Nom AFR	cfm	600	800	1000	1200	1500	1800	2100	2400
	l/s	283	378	472	566	708	849	991	1133

Speed	DCDC		3 Rows				4 Rows				6 Rows			
			External Static Pressure											
		inwg	0.1	0.2	0.3	0.4	0.1	0.2	0.3	0.4	0.1	0.2	0.3	0.4
		Pa	25	50	75	100	25	50	75	100	25	50	75	100
High	06	cfm	700	680	659	632	693	674	652	623	653	634	613	584
		l/s	330	321	311	298	327	318	308	294	308	299	289	276
	08	cfm	807	774	749	726	796	767	743	719	778	753	731	705
		l/s	381	365	354	342	375	362	351	339	367	356	345	333
	10	cfm	1088	1041	970	881	1076	1023	949	860	1007	954	885	802
		l/s	513	491	458	416	508	483	448	406	475	450	417	378
	12	cfm	1359	1320	1277	1221	1345	1306	1260	1201	1285	1246	1198	1136
		l/s	641	623	603	576	635	616	595	567	607	588	565	536
	15	cfm	1576	1522	1477	1427	1555	1506	1462	1409	1520	1476	1430	1371
		l/s	744	718	697	673	734	711	690	665	717	697	675	647
	18	cfm	1973	1876	1740	1576	1946	1839	1701	1537	1917	1793	1647	1484
		l/s	931	885	821	744	918	868	803	725	905	846	777	700
	21	cfm	2685	2481	2252	1998	2600	2398	2174	1931	2336	2161	1967	1753
		l/s	1267	1171	1063	943	1227	1132	1026	911	1102	1020	928	827
	24	cfm	2659	2508	2309	2073	2612	2450	2249	2015	2484	2318	2121	1898
		l/s	1255	1184	1090	978	1233	1156	1061	951	1172	1094	1001	896
Medium	06	cfm	525	508	490	466	522	505	487	461	481	466	448	424
		l/s	248	240	231	220	246	238	230	217	227	220	212	200
	08	cfm	610	596	581	562	607	593	578	558	602	588	572	551
		l/s	288	281	274	265	287	280	273	263	284	278	270	260
	10	cfm	712	729	721	685	716	730	717	678	693	703	687	647
		l/s	336	344	340	323	338	344	338	320	327	332	324	305
	12	cfm	1040	1007	969	916	1032	1000	960	904	951	921	883	829
		l/s	491	475	457	432	487	472	453	426	449	435	417	391
	15	cfm	1246	1218	1184	1141	1239	1210	1176	1130	1226	1196	1158	1107
		l/s	588	575	559	538	585	571	555	533	579	564	546	523
	18	cfm	1430	1442	1400	1311	1437	1438	1388	1293	1404	1393	1334	1237
		l/s	675	681	661	619	678	679	655	610	663	657	629	584
	21	cfm	2418	2289	2111	1896	2377	2235	2053	1842	2145	2023	1865	1678
		l/s	1141	1080	996	895	1122	1055	969	869	1012	955	880	792
	24	cfm	2277	2231	2114	1935	2271	2207	2077	1893	2209	2122	1981	1798
		l/s	1074	1053	998	913	1072	1042	980	893	1042	1002	935	848
Low	06	cfm	398	389	365	332	398	387	362	329	382	369	345	313
		l/s	188	184	172	157	188	183	171	155	180	174	163	148
	08	cfm	490	471	450	427	488	469	448	425	483	464	443	420
		l/s	231	222	213	202	230	221	211	200	228	219	209	198
	10	cfm	468	464	475	454	466	465	475	452	455	457	465	439
		l/s	221	219	224	214	220	219	224	213	215	216	219	207
	12	cfm	780	757	708	641	779	752	701	634	760	728	676	611
		l/s	368	357	334	302	368	355	331	299	359	344	319	288
	15	cfm	970	932	890	843	964	926	884	836	953	914	872	824
		l/s	458	440	420	398	455	437	417	395	450	432	412	389
	18	cfm	986	1007	1005	923	986	1009	1001	913	905	925	921	844
		l/s	465	475	474	436	465	476	472	431	427	436	434	398
	21	cfm	1890	1879	1824	1723	1890	1870	1805	1698	1851	1816	1739	1627
		l/s	892	887	861	813	892	883	852	801	873	857	821	768
	24	cfm	1884	1889	1859	1778	1886	1887	1847	1759	1852	1843	1792	1696
		l/s	889	892	877	839	890	890	872	830	874	870	846	800

Table 8

Air Delivery (50 Hz)

Model DCDP, DCDE, DCDF

	Size	06	08	10	12	15	18	21	24
Nom AFR	cfm	600	800	1000	1200	1500	1800	2100	2400
	l/s	283	378	472	566	708	849	991	1133

Speed	DCDP DCDE DCDF		3 Rows				4 Rows				6 Rows			
			External Static Pressure											
		inwg	0.1	0.2	0.3	0.4	0.1	0.2	0.3	0.4	0.1	0.2	0.3	0.4
		Pa	25	50	75	100	25	50	75	100	25	50	75	100
High	06	cfm	686	667	643	613	680	660	636	604	642	622	597	566
		l/s	324	315	304	289	321	312	300	285	303	294	282	267
	08	cfm	785	759	736	711	777	753	730	704	763	741	718	689
		l/s	371	358	347	336	367	355	345	332	360	350	339	325
	10	cfm	1061	1002	924	835	1046	983	906	817	979	920	848	766
		l/s	501	473	436	394	493	464	428	386	462	434	400	361
	12	cfm	1331	1291	1241	1178	1317	1276	1223	1156	1259	1216	1162	1094
		l/s	628	609	586	556	622	602	577	546	594	574	548	516
	15	cfm	1536	1490	1445	1388	1519	1476	1429	1368	1490	1447	1394	1327
		l/s	725	703	682	655	717	696	674	645	703	683	658	626
	18	cfm	1914	1798	1655	1491	1882	1761	1618	1456	1843	1713	1568	1409
		l/s	903	848	781	703	888	831	763	687	870	808	740	665
	21	cfm	2525	2319	2095	1856	2447	2246	2030	1800	2221	2047	1856	1652
		l/s	1191	1094	989	876	1155	1060	958	850	1048	966	876	780
	24	cfm	2560	2387	2181	1948	2508	2331	2127	1898	2383	2209	2013	1798
		l/s	1208	1127	1029	919	1183	1100	1004	896	1124	1042	950	848
Medium	06	cfm	517	501	481	454	514	498	478	449	475	460	441	414
		l/s	244	236	227	214	243	235	225	212	224	217	208	196
	08	cfm	604	590	574	553	601	587	571	549	596	582	565	541
		l/s	285	278	271	261	284	277	270	259	281	275	266	255
	10	cfm	721	730	711	669	724	728	706	661	699	700	676	631
		l/s	340	344	336	315	341	344	333	312	330	331	319	298
	12	cfm	1023	990	947	887	1016	982	937	875	938	906	863	806
		l/s	483	467	447	419	480	463	442	413	443	428	407	380
	15	cfm	1231	1202	1165	1116	1224	1194	1155	1104	1211	1178	1135	1081
		l/s	581	567	550	526	578	563	545	521	571	556	536	510
	18	cfm	1442	1430	1369	1268	1444	1422	1354	1251	1406	1374	1301	1199
		l/s	681	675	646	599	681	671	639	590	663	648	614	566
	21	cfm	2331	2177	1990	1779	2282	2124	1938	1731	2075	1938	1775	1593
		l/s	1100	1027	939	839	1077	1002	914	817	979	915	838	752
	24	cfm	2258	2175	2030	1841	2242	2144	1992	1802	2169	2056	1901	1716
		l/s	1066	1026	958	869	1058	1012	940	850	1023	970	897	810
Low	06	cfm	397	384	358	324	396	381	355	321	380	364	338	306
		l/s	187	181	169	153	187	180	167	152	179	172	160	144
	08	cfm	485	466	445	421	482	463	442	419	478	459	438	414
		l/s	229	220	210	199	228	219	209	198	225	216	207	195
	10	cfm	465	466	474	448	464	467	474	445	454	459	464	433
		l/s	219	220	224	211	219	220	224	210	214	217	219	204
	12	cfm	776	744	691	625	773	738	684	618	753	715	661	596
		l/s	366	351	326	295	365	348	323	291	355	337	312	281
	15	cfm	957	918	876	828	951	912	870	822	940	901	858	810
		l/s	451	433	413	391	449	431	411	388	443	425	405	382
	18	cfm	987	1012	993	899	988	1014	987	889	905	929	911	827
		l/s	466	478	469	424	466	478	466	419	427	438	430	390
	21	cfm	1889	1856	1780	1665	1885	1842	1758	1639	1838	1783	1692	1572
		l/s	891	876	840	786	889	869	830	773	867	841	798	742
	24	cfm	1889	1881	1830	1733	1890	1875	1815	1712	1853	1827	1758	1651
		l/s	891	888	864	818	892	885	857	808	874	862	829	779

Table 9

Air Delivery (60 Hz)

Model DCDC

	Size	06	08	10	12	15	18	21	24
Nom	cfm	600	800	1000	1200	1500	1800	2100	2400
AFR	l/s	283	378	472	566	708	849	991	1133

Speed	DCDC		3 Rows				4 Rows				6 Rows			
			External Static Pressure											
		inwg	0.1	0.2	0.3	0.4	0.1	0.2	0.3	0.4	0.1	0.2	0.3	0.4
		Pa	25	50	75	100	25	50	75	100	25	50	75	100
High	06	cfm	572	585	586	578	577	587	585	574	553	559	555	543
		l/s	270	276	277	273	272	277	276	271	261	264	262	256
	08	cfm	742	730	718	704	739	727	715	701	733	721	708	693
		l/s	350	345	339	332	349	343	337	331	346	340	334	327
	10	cfm	981	987	991	988	982	988	991	986	928	933	935	928
		l/s	463	466	468	466	463	466	468	465	438	440	441	438
	12	cfm	1132	1151	1148	1126	1140	1152	1143	1117	1115	1117	1101	1070
		l/s	534	543	542	531	538	544	539	527	526	527	520	505
	15	cfm	1472	1449	1424	1395	1465	1442	1416	1385	1450	1426	1398	1365
		l/s	695	684	672	658	691	680	668	654	684	673	660	644
	18	cfm	1797	1809	1814	1805	1800	1811	1813	1799	1865	1870	1859	1828
		l/s	848	853	856	852	850	855	856	849	880	883	877	863
	21	cfm	2868	2801	2705	2582	2837	2758	2653	2524	2521	2457	2368	2259
			1353	1322	1277	1218	1339	1301	1252	1191	1190	1159	1118	1066
	24	cfm	2637	2612	2564	2488	2630	2598	2542	2457	2564	2522	2454	2360
		l/s	1245	1232	1210	1174	1241	1226	1200	1159	1210	1190	1158	1114
Medium	06	cfm	446	432	411	386	445	430	408	383	411	396	377	353
		l/s	211	204	194	182	210	203	193	181	194	187	178	167
	08	cfm	572	554	535	515	569	551	532	512	563	545	526	506
		l/s	270	261	252	243	269	260	251	242	266	257	248	239
	10	cfm	626	588	588	618	620	586	591	622	592	564	571	603
		l/s	295	278	278	292	293	277	279	293	279	266	270	284
	12	cfm	887	856	812	761	883	850	805	754	815	783	742	694
		l/s	419	404	383	359	417	401	380	356	384	369	350	328
	15	cfm	1166	1128	1089	1048	1158	1121	1081	1040	1142	1105	1066	1025
		l/s	550	533	514	494	546	529	510	491	539	521	503	484
	18	cfm	1202	1155	1182	1247	1192	1155	1191	1255	1149	1125	1171	1229
		l/s	567	545	558	589	562	545	562	592	542	531	553	580
	21	cfm	2124	2108	2072	2018	2121	2099	2059	2000	1905	1888	1854	1803
		l/s	1002	995	978	952	1001	991	972	944	899	891	875	851
	24	cfm	1943	1945	1930	1897	1944	1943	1925	1888	1907	1901	1878	1837
		l/s	917	918	911	895	918	917	908	891	900	897	886	867
Low	06	cfm	332	307	279	250	330	305	277	249	315	291	265	238
		l/s	157	145	132	118	156	144	131	117	149	137	125	112
	08	cfm	459	433	409	384	456	431	406	382	450	426	402	378
		l/s	217	204	193	181	215	203	192	180	213	201	190	179
	10	cfm	534	456	400	369	526	452	398	368	507	438	388	360
		l/s	252	215	189	174	248	213	188	173	239	207	183	170
	12	cfm	646	595	541	485	641	590	537	482	621	572	521	467
		l/s	305	281	255	229	302	279	253	227	293	270	246	221
	15	cfm	905	855	807	759	898	849	801	754	884	837	790	745
		l/s	427	403	381	358	424	400	378	356	417	395	373	351
	18	cfm	1051	916	823	775	1035	906	818	773	957	838	755	711
		l/s	496	432	388	366	488	428	386	365	452	396	356	336
	21	cfm	1432	1437	1441	1435	1433	1438	1441	1433	1405	1411	1412	1401
		l/s	676	678	680	677	676	678	680	676	663	666	666	661
	24	cfm	1433	1435	1440	1439	1432	1435	1440	1438	1404	1408	1413	1408
		l/s	676	677	680	679	676	677	680	679	663	665	667	665

Table 10

Air Delivery (60 Hz)

Model DCDP, DCDE, DCDF

	Size	06	08	10	12	15	18	21	24
Nom AFR	cfm	600	800	1000	1200	1500	1800	2100	2400
	l/s	283	378	472	566	708	849	991	1133

Speed	DCDP DCDE DCDF		3 Rows				4 Rows				6 Rows			
			External Static Pressure											
		inwg	0.1	0.2	0.3	0.4	0.1	0.2	0.3	0.4	0.1	0.2	0.3	0.4
		Pa	25	50	75	100	25	50	75	100	25	50	75	100
High	06	cfm	581	587	583	570	583	587	581	566	558	558	550	534
		l/s	274	277	275	269	275	277	274	267	263	264	260	252
	08	cfm	735	724	711	696	732	721	707	692	726	714	701	684
		l/s	347	341	335	328	346	340	334	327	343	337	331	323
	10	cfm	984	990	991	982	986	991	989	978	931	935	933	921
		l/s	464	467	467	463	465	468	467	461	439	441	440	434
	12	cfm	1147	1151	1136	1106	1150	1149	1130	1095	1119	1110	1086	1049
		l/s	541	543	536	522	543	542	533	517	528	524	512	495
	15	cfm	1457	1433	1406	1374	1450	1425	1397	1364	1434	1408	1378	1342
		l/s	688	676	664	648	684	673	659	643	677	665	650	633
	18	cfm	1804	1813	1811	1789	1807	1814	1807	1780	1870	1865	1842	1799
		l/s	851	856	854	844	853	856	853	840	882	880	869	849
	21	cfm	2808	2719	2605	2470	2767	2670	2551	2413	2473	2393	2293	2177
		l/s	1325	1283	1229	1165	1306	1260	1204	1139	1167	1129	1082	1027
	24	cfm	2620	2581	2516	2421	2609	2562	2489	2387	2537	2480	2397	2291
		l/s	1237	1218	1187	1143	1231	1209	1174	1126	1197	1170	1131	1081
Medium	06	cfm	442	426	404	379	440	423	401	376	407	391	371	347
		l/s	209	201	191	179	208	200	189	177	192	185	175	164
	08	cfm	565	547	528	508	562	544	525	505	557	539	520	500
		l/s	267	258	249	240	265	257	248	238	263	254	245	236
	10	cfm	612	585	594	627	607	584	597	630	582	562	578	610
		l/s	289	276	280	296	287	275	282	298	275	265	273	288
	12	cfm	876	841	795	744	871	834	788	737	805	770	728	681
		l/s	414	397	375	351	411	394	372	348	380	363	344	321
	15	cfm	1148	1111	1071	1030	1140	1103	1064	1023	1125	1088	1049	1008
		l/s	542	524	506	486	538	520	502	483	531	513	495	476
	18	cfm	1180	1156	1204	1263	1172	1158	1214	1267	1135	1132	1194	1236
		l/s	557	545	568	596	553	547	573	598	536	534	563	583
	21	cfm	2116	2088	2042	1978	2110	2077	2026	1959	1898	1872	1829	1772
		l/s	998	985	964	933	995	980	956	924	896	883	863	836
	24	cfm	1946	1940	1917	1876	1946	1937	1910	1866	1907	1893	1862	1814
		l/s	918	915	905	885	918	914	901	880	900	893	879	856
Low	06	cfm	327	302	275	247	326	300	273	246	311	287	262	236
		l/s	155	143	130	117	154	142	129	116	147	135	123	111
	08	cfm	452	427	403	380	449	425	401	378	444	420	397	374
		l/s	213	202	190	179	212	201	189	178	210	198	187	177
	10	cfm	517	447	396	367	511	443	394	366	494	431	385	359
		l/s	244	211	187	173	241	209	186	173	233	203	181	169
	12	cfm	635	585	532	478	630	581	528	475	611	563	513	462
		l/s	299	276	251	226	297	274	249	224	288	266	242	218
	15	cfm	888	841	794	748	882	835	789	743	869	824	779	734
		l/s	419	397	375	353	416	394	372	351	410	389	368	346
	18	cfm	1015	895	813	771	1001	887	808	770	930	823	747	708
		l/s	479	422	383	364	472	418	382	363	439	388	353	334
	21	cfm	1433	1439	1440	1430	1434	1440	1440	1426	1407	1412	1410	1394
		l/s	676	679	680	675	677	679	679	673	664	666	665	658
	24	cfm	1432	1436	1441	1436	1433	1437	1441	1435	1405	1410	1413	1404
		l/s	676	678	680	678	676	678	680	677	663	665	667	663

Table 11

Chilled Water

Capacity Ratings (DCDP - 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	Btuh	kW	Btuh	kW	gpm	l/s	ftwg	kPa	cfm	l/s	Btuh	kW	Btuh	kW	gpm	l/s	ftwg	kPa
6	High	0.1	25	686	324	18987	5.6	14397	4.2	2.37	0.15	27.2	81.3	581	274	16051	4.7	12372	3.6	2.01	0.13	20.2	60.4
		0.2	50	667	315	18494	5.4	14048	4.1	2.31	0.15	26.0	77.6	587	277	16207	4.8	12485	3.7	2.03	0.13	20.6	61.5
		0.3	75	643	303	17774	5.2	13569	4.0	2.22	0.14	24.2	72.3	583	275	16103	4.7	12409	3.6	2.01	0.13	20.3	60.8
	Medium	0.1	25	517	244	14597	4.3	11243	3.3	1.82	0.12	17.1	51.1	442	209	13350	3.9	10074	3.0	1.67	0.11	14.6	43.6
		0.2	50	501	236	14291	4.2	10981	3.2	1.79	0.11	16.5	49.2	426	201	13138	3.9	9842	2.9	1.64	0.10	14.2	42.4
		0.3	75	481	227	13940	4.1	10663	3.1	1.74	0.11	15.8	47.1	404	191	12867	3.8	9533	2.8	1.61	0.10	13.7	40.9
	Low	0.1	25	397	187	12786	3.8	9435	2.8	1.60	0.10	13.5	40.4	327	154	11898	3.5	8420	2.5	1.49	0.09	11.9	35.6
		0.2	50	384	181	12641	3.7	9256	2.7	1.58	0.10	13.3	39.6	302	143	11501	3.4	8021	2.4	1.44	0.09	11.2	33.5
		0.3	75	358	169	12330	3.6	8888	2.6	1.54	0.10	12.7	37.9	275	130	11003	3.2	7559	2.2	1.38	0.09	10.4	31.0
8	High	0.1	25	785	370	18302	5.4	15259	4.5	2.29	0.14	9.8	29.2	735	347	17449	5.1	14500	4.3	2.18	0.14	9.0	26.9
		0.2	50	759	358	17847	5.2	14861	4.4	2.23	0.14	9.4	28.0	724	342	17271	5.1	14336	4.2	2.16	0.14	8.8	26.4
		0.3	75	736	347	17465	5.1	14515	4.3	2.18	0.14	9.0	26.9	711	336	17067	5.0	14143	4.2	2.13	0.13	8.6	25.8
	Medium	0.1	25	604	285	15543	4.6	12594	3.7	1.94	0.12	7.3	21.9	565	267	15040	4.4	12038	3.5	1.88	0.12	6.9	20.7
		0.2	50	590	278	15361	4.5	12394	3.6	1.92	0.12	7.2	21.4	547	258	14813	4.3	11780	3.5	1.85	0.12	6.7	20.1
		0.3	75	574	271	15153	4.4	12165	3.6	1.89	0.12	7.0	20.9	528	249	14574	4.3	11507	3.4	1.82	0.11	6.5	19.5
	Low	0.1	25	485	229	14029	4.1	10887	3.2	1.75	0.11	6.1	18.3	452	213	13601	4.0	10402	3.1	1.70	0.11	5.8	17.3
		0.2	50	466	220	13784	4.0	10609	3.1	1.72	0.11	5.9	17.7	427	202	13261	3.9	10026	2.9	1.66	0.10	5.5	16.5
		0.3	75	445	210	13506	4.0	10297	3.0	1.69	0.11	5.7	17.1	403	190	12916	3.8	9657	2.8	1.61	0.10	5.3	15.8
10	High	0.1	25	1061	501	24663	7.2	20567	6.0	3.08	0.19	10.0	29.8	984	464	23329	6.8	19393	5.7	2.92	0.18	9.0	27.0
		0.2	50	1002	473	23628	6.9	19664	5.8	2.95	0.19	9.2	27.6	990	467	23428	6.9	19483	5.7	2.93	0.18	9.1	27.2
		0.3	75	924	436	22389	6.6	18505	5.4	2.80	0.18	8.4	25.1	991	468	23444	6.9	19498	5.7	2.93	0.18	9.1	27.2
	Medium	0.1	25	721	340	19645	5.8	15587	4.6	2.46	0.15	6.7	19.9	612	289	18256	5.4	14008	4.1	2.28	0.14	5.9	17.5
		0.2	50	730	344	19757	5.8	15716	4.6	2.47	0.16	6.7	20.1	585	276	17896	5.3	13604	4.0	2.24	0.14	5.7	16.9
		0.3	75	711	336	19520	5.7	15444	4.5	2.44	0.15	6.6	19.7	594	280	18017	5.3	13740	4.0	2.25	0.14	5.7	17.1
	Low	0.1	25	465	219	16061	4.7	11700	3.4	2.01	0.13	4.7	13.9	517	244	16915	5.0	12555	3.7	2.11	0.13	5.1	15.3
		0.2	50	466	220	16077	4.7	11717	3.4	2.01	0.13	4.7	14.0	447	211	15736	4.6	11391	3.3	1.97	0.12	4.5	13.4
		0.3	75	474	224	16217	4.8	11852	3.5	2.03	0.13	4.7	14.2	396	187	14715	4.3	10466	3.1	1.84	0.12	4.0	11.9
12	High	0.1	25	1331	628	33946	10.0	26640	7.8	4.24	0.27	17.3	51.8	1147	541	29051	8.5	23225	6.8	3.63	0.23	13.1	39.2
		0.2	50	1291	609	32864	9.6	25897	7.6	4.11	0.26	16.3	48.9	1151	543	29149	8.5	23297	6.8	3.64	0.23	13.2	39.5
		0.3	75	1241	586	31504	9.2	24961	7.3	3.94	0.25	15.2	45.3	1136	536	28779	8.4	23026	6.8	3.60	0.23	12.9	38.6
	Medium	0.1	25	1023	483	26276	7.7	21079	6.2	3.28	0.21	11.0	32.8	876	413	23974	7.0	18858	5.5	3.00	0.19	9.3	27.9
		0.2	50	990	467	25656	7.5	20547	6.0	3.21	0.20	10.5	31.5	841	397	23528	6.9	18359	5.4	2.94	0.19	9.0	27.0
		0.3	75	947	447	24935	7.3	19881	5.8	3.12	0.20	10.0	29.9	795	375	22951	6.7	17709	5.2	2.87	0.18	8.6	25.8
	Low	0.1	25	776	366	22716	6.7	17440	5.1	2.84	0.18	8.5	25.4	635	300	20926	6.1	15399	4.5	2.62	0.17	7.3	21.9
		0.2	50	744	351	22323	6.5	16985	5.0	2.79	0.18	8.2	24.6	585	276	20211	5.9	14632	4.3	2.53	0.16	6.9	20.6
		0.3	75	691	326	21660	6.4	16223	4.8	2.71	0.17	7.8	23.3	532	251	19360	5.7	13775	4.0	2.42	0.15	6.4	19.1
15	High	0.1	25	1536	725	33315	9.8	28580	8.4	4.16	0.26	6.5	19.5	1457	688	31907	9.4	27378	8.0	3.99	0.25	6.0	18.0
		0.2	50	1490	703	32483	9.5	27877	8.2	4.06	0.26	6.2	18.6	1433	676	31499	9.2	27018	7.9	3.94	0.25	5.9	17.6
		0.3	75	1445	682	31702	9.3	27198	8.0	3.96	0.25	6.0	17.8	1406	663	31051	9.1	26616	7.8	3.88	0.24	5.8	17.2
	Medium	0.1	25	1231	581	28383	8.3	24073	7.1	3.55	0.22	4.9	14.6	1148	542	27234	8.0	22891	6.7	3.40	0.21	4.6	13.6
		0.2	50	1202	567	27974	8.2	23659	6.9	3.50	0.22	4.8	14.3	1111	524	26741	7.8	22367	6.6	3.34	0.21	4.4	13.2
		0.3	75	1165	550	27465	8.1	23133	6.8	3.43	0.22	4.6	13.8	1071	505	26216	7.7	21799	6.4	3.28	0.21	4.3	12.7
	Low	0.1	25	957	452	24752	7.3	20172	5.9	3.09	0.20	3.8	11.5	888	419	23867	7.0	19171	5.6	2.98	0.19	3.6	10.8
		0.2	50	918	433	24253	7.1	19608	5.8	3.03	0.19	3.7	11.1	841	397	23254	6.8	18477	5.4	2.91	0.18	3.4	10.3
		0.3	75	876	413	23712	7.0	18995	5.6	2.96	0.19	3.6	10.6	794	375	22619	6.6	17773	5.2	2.83	0.18	3.3	9.8
18	High	0.1	25	1914	903	50066	14.7	39086	11.5	6.26	0.39	16.7	50.0	1804	851	47042	13.8	36998	10.8	5.88	0.37	15.0	44.7
		0.2	50	1798	848	46882	13.7	36885	10.8	5.86	0.37	14.9	44.5	1813	856	47283	13.9	37167	10.9	5.91	0.37	15.1	45.1
		0.3	75	1655	781	43317	12.7	34282	10.1	5.41	0.34	12.9	38.6	1811	855	47230	13.8	37129	10.9	5.90	0.37	15.1	45.0
	Medium	0.1	25	1442	680	39097	11.5	30756	9.0	4.89	0.31	10.8	32.2	1180	557	35571	10.4	26965	7.9	4.45	0.28	9.1	27.2
		0.2	50	1430	675	38902	11.4	30571	9.0	4.86	0.31	10.7	31.9	1156	546	35279	10.3	26624	7.8	4.41	0.28	9.0	26.8
		0.3	75	1369	646	37974	11.1	29651	8.7	4.75	0.30	10.2	30.6	1204	568	35863	10.5	27305	8.0	4.48	0.28	9.2	27.6
	Low	0.1	25	987	466	33130	9.7	24177	7.1	4.14	0.26	8.0	24.0	1015	479	33504	9.8	24593	7.2	4.19	0.26	8.2	24.5
		0.2	50	1012	478	33464	9.8	24549	7.2	4.18	0.26	8.2	24.4	895	422	31805	9.3	22766	6.7	3.98	0.25	7.5	22.3
		0.3	75	993	469	33212	9.7	24267	7.1	4.15	0.26	8.1	24.1	813	384	30450	8.9	21426	6.3	3.81	0.24	6.9	20.7
21	High	0.1	25	2525	1192	59006	17.3	48167	14.1	7.38	0.47	11.6	34.8	2808	1325	65150	19.1	52747	15.5	8.14	0.51	13.9	41.5
		0.2	50	2319	1094	53884	15.8	44530	13.1	6.74	0.42	9.9	29.6	2719	1283	63412	18.6	51391	15.1	7.93	0.50	13.2	39.6
		0.3	75	2095	989	48837	14.3	40717	11.9	6.10	0.39	8.3	24.8	2605	1229	60905	17.9	49533	14.5	7.61	0.48	12.3	36.8
	Medium	0.1	25	2331	1100	54183	15.9	44743	13.1	6.77	0.43	10.0	29.9	2116	999	49219	14.4	41042	12.0	6.15	0.39	8.4	25.2
		0.2	50	2177	1027	50435	14.8	42025	12.3	6.30	0.40	8.8	26.3	2088	985	48711	14.3	40609	11.9	6.09	0.38	8.3	24.7
		0.3	75	1990	939	47022	13.8	39116	11.5	5.88	0.37	7.8	23.2	2042	964	47903	14.0	39904	11.7	5.99	0.38	8.0	24.0
	Low	0.1	25	1889	891	45402	13.3	37611	11.0	5.68	0.36	7.3	21.8	1433	676	39177	11.5	31045	9.1	4.90	0.31	5.6	16.8
		0.2	50	1856	876	44898	13.2	37126	10.9	5.61	0.35	7.2	21.4	1439	679	39252	11.5	31131	9.1	4.91	0.31	5.6	16.8
		0.3	75	1780	840	43776	12.8	36018	10.6	5.47	0.35	6.8	20.4	1440	680	39264	11.5	31145	9.1	4.91	0.31	5.6	16.9
24	High	0.1	25	2560	1208	65129	19.1	51383	15.1	8.14	0.51	14.9	44.4	2620	1236	66760	19.6	52503	15.4	8.35	0.53	15.5	46.4
		0.2	50	2387	1126	60479	17.7	48153	14.1	7.56	0.48	13.0	38.9	2581	1218	65700	19.3	51775	15.2	8.21	0.52	15.1	45.1
		0.3	75	2181	1029	55410	16.2	44442	13.0	6.93	0.44	11.1	33.3	2516	1187	63931	18.7	50559	14.8	7.99	0.50	14.4	43.0
	Medium	0.1	25	2258	1066	57218	16.8	45802	13.4	7.15	0.45	11.8	35.3	1946	918	50711	14.9	40557	11.9	6.34	0.40	9.5	28.5
		0.2	50	2175	1026	55277	16.2	44339	13.0	6.91	0.44	11.1	33.2	1940	915	50608	14.8	40463	11.9	6.33	0.40	9.5	28.4
		0.3	75	2030	958	52242	15.3	41898	12.3	6.53	0.41	10.0	30.0	1917	905	50223	14.7	40107	11.8	6.28	0.40	9.4	28.0
	Low	0.1	25	1889	891	49800	14.6	39691	11.6	6.23	0.39	9.2	27.6	1432	676	43954	12.9	33167	9.7	5.49	0.35	7.4	22.1
		0.2	50	1881	888	49689	14.6	39575	11.6	6.21	0.39	9.2	27.4	1436	678	44003	12.9	33224	9.7	5.50	0.35	7.4	22.1
		0.3	75	1830	864	48986	14.4	38837	11.4	6.12	0.39	9.0	26.8	1441	680	44066	12.9	33296	9.8	5.51	0.35	7.4	22.2

Table 12

Note :
Table 12 data is based on 78/65°F (25.6/18.3°C) air on-coil DBT/WBT and 42/58°F (5.5/14.4°C) entering/leaving water temperature.

Chilled Water

Capacity Ratings (DCDP - 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	Btuh	kW	Btuh	kW	gpm	l/s	ftwg	kPa	cfm	l/s	Btuh	kW	Btuh	kW	gpm	l/s	ftwg	kPa
6	High	0.1	25	686	324	15080	4.4	13175	3.9	1.88	0.12	18.1	54.1	581	274	12887	3.8	11393	3.3	1.61	0.10	13.7	41.0
		0.2	50	667	315	14641	4.3	12839	3.8	1.83	0.12	17.2	51.4	587	277	12994	3.8	11489	3.4	1.62	0.10	13.9	41.6
		0.3	75	643	303	14109	4.1	12422	3.6	1.76	0.11	16.1	48.1	583	275	12923	3.8	11425	3.4	1.62	0.10	13.8	41.2
	Medium	0.1	25	517	244	11981	3.5	10452	3.1	1.50	0.09	12.1	36.0	442	209	11122	3.3	9406	2.8	1.39	0.09	10.6	31.6
		0.2	50	501	236	11790	3.5	10227	3.0	1.47	0.09	11.7	35.0	426	201	10947	3.2	9183	2.7	1.37	0.09	10.3	30.7
		0.3	75	481	227	11557	3.4	9947	2.9	1.44	0.09	11.3	33.8	404	191	10706	3.1	8874	2.6	1.34	0.08	9.9	29.6
	Low	0.1	25	397	187	10630	3.1	8775	2.6	1.33	0.08	9.8	29.2	327	154	9800	2.9	7750	2.3	1.23	0.08	8.5	25.3
		0.2	50	384	181	10483	3.1	8590	2.5	1.31	0.08	9.5	28.5	302	143	9454	2.8	7357	2.2	1.18	0.07	7.9	23.7
		0.3	75	358	169	10184	3.0	8214	2.4	1.27	0.08	9.1	27.1	275	130	9034	2.7	6910	2.0	1.13	0.07	7.3	21.9
8	High	0.1	25	785	370	15392	4.5	14442	4.2	1.92	0.12	7.2	21.5	735	347	14709	4.3	13730	4.0	1.84	0.12	6.6	19.9
		0.2	50	759	358	15031	4.4	14070	4.1	1.88	0.12	6.9	20.6	724	342	14568	4.3	13575	4.0	1.82	0.11	6.5	19.5
		0.3	75	736	347	14724	4.3	13744	4.0	1.84	0.12	6.7	19.9	711	336	14400	4.2	13392	3.9	1.80	0.11	6.4	19.1
	Medium	0.1	25	604	285	13118	3.8	11899	3.5	1.64	0.10	5.4	16.2	565	267	12675	3.7	11356	3.3	1.58	0.10	5.1	15.3
		0.2	50	590	278	12958	3.8	11704	3.4	1.62	0.10	5.3	15.9	547	258	12472	3.7	11103	3.3	1.56	0.10	5.0	14.8
		0.3	75	574	271	12776	3.7	11481	3.4	1.60	0.10	5.2	15.5	528	249	12258	3.6	10835	3.2	1.53	0.10	4.8	14.4
	Low	0.1	25	485	229	11764	3.5	10219	3.0	1.47	0.09	4.5	13.4	452	213	11371	3.3	9738	2.9	1.42	0.09	4.2	12.6
		0.2	50	466	220	11540	3.4	9944	2.9	1.44	0.09	4.3	12.9	427	202	11061	3.2	9364	2.7	1.38	0.09	4.0	12.0
		0.3	75	445	210	11286	3.3	9634	2.8	1.41	0.09	4.2	12.4	403	190	10748	3.2	8995	2.6	1.34	0.08	3.8	11.4
10	High	0.1	25	1061	501	20727	6.1	19462	5.7	2.59	0.16	7.3	21.9	984	464	19667	5.8	18363	5.4	2.46	0.16	6.7	20.0
		0.2	50	1002	473	19906	5.8	18618	5.5	2.49	0.16	6.8	20.4	990	467	19746	5.8	18448	5.4	2.47	0.16	6.7	20.1
		0.3	75	924	436	18899	5.5	17519	5.1	2.36	0.15	6.2	18.6	991	468	19758	5.8	18462	5.4	2.47	0.16	6.7	20.1
	Medium	0.1	25	721	340	16535	4.9	14687	4.3	2.07	0.13	4.9	14.7	612	289	15275	4.5	13121	3.9	1.91	0.12	4.3	12.8
		0.2	50	730	344	16637	4.9	14813	4.3	2.08	0.13	5.0	14.8	585	276	14944	4.4	12721	3.7	1.87	0.12	4.1	12.3
		0.3	75	711	336	16421	4.8	14545	4.3	2.05	0.13	4.9	14.5	594	280	15056	4.4	12855	3.8	1.88	0.12	4.2	12.4
	Low	0.1	25	465	219	13290	3.9	10832	3.2	1.66	0.10	3.3	10.0	517	244	14053	4.1	11675	3.4	1.76	0.11	3.7	11.0
		0.2	50	466	220	13305	3.9	10848	3.2	1.66	0.10	3.3	10.0	447	211	13002	3.8	10527	3.1	1.63	0.10	3.2	9.6
		0.3	75	474	224	13428	3.9	10981	3.2	1.68	0.11	3.4	10.2	396	187	12172	3.6	9653	2.8	1.52	0.10	2.9	8.5
12	High	0.1	25	1331	628	27116	8.0	24541	7.2	3.39	0.21	11.6	34.7	1147	541	23623	6.9	21588	6.3	2.95	0.19	9.1	27.2
		0.2	50	1291	609	26234	7.7	23859	7.0	3.28	0.21	11.0	32.7	1151	543	23683	6.9	21648	6.3	2.96	0.19	9.1	27.3
		0.3	75	1241	586	25164	7.4	23014	6.8	3.15	0.20	10.2	30.4	1136	536	23459	6.9	21426	6.3	2.93	0.18	9.0	26.9
	Medium	0.1	25	1023	483	21889	6.4	19792	5.8	2.74	0.17	7.9	23.8	876	413	20108	5.9	17731	5.2	2.51	0.16	6.8	20.4
		0.2	50	990	467	21468	6.3	19326	5.7	2.68	0.17	7.7	22.9	841	397	19712	5.8	17243	5.1	2.46	0.16	6.6	19.7
		0.3	75	947	447	20941	6.1	18723	5.5	2.62	0.17	7.3	22.0	795	375	19199	5.6	16598	4.9	2.40	0.15	6.3	18.8
	Low	0.1	25	776	366	18987	5.6	16332	4.8	2.37	0.15	6.2	18.5	635	300	17355	5.1	14296	4.2	2.17	0.14	5.3	15.7
		0.2	50	744	351	18628	5.5	15880	4.7	2.33	0.15	6.0	17.8	585	276	16711	4.9	13534	4.0	2.09	0.13	4.9	14.7
		0.3	75	691	326	18024	5.3	15121	4.4	2.25	0.14	5.6	16.8	532	251	15957	4.7	12688	3.7	1.99	0.13	4.5	13.6
15	High	0.1	25	1536	725	25445	7.5	25445	7.5	3.18	0.20	4.0	12.1	1457	688	24480	7.2	24480	7.2	3.06	0.19	3.8	11.3
		0.2	50	1490	703	24880	7.3	24880	7.3	3.11	0.20	3.9	11.6	1433	676	24193	7.1	24193	7.1	3.02	0.19	3.7	11.0
		0.3	75	1445	682	24336	7.1	24336	7.1	3.04	0.19	3.7	11.1	1406	663	23873	7.0	23873	7.0	2.98	0.19	3.6	10.8
	Medium	0.1	25	1231	581	24086	7.1	22893	6.7	3.01	0.19	3.7	10.9	1148	542	23124	6.8	21752	6.4	2.89	0.18	3.4	10.2
		0.2	50	1202	567	21520	6.3	21520	6.3	2.69	0.17	3.0	8.9	1111	524	22702	6.7	21240	6.2	2.84	0.18	3.3	9.8
		0.3	75	1165	550	23317	6.8	21985	6.4	2.91	0.18	3.5	10.3	1071	505	22250	6.5	20686	6.1	2.78	0.18	3.2	9.5
	Low	0.1	25	957	452	20962	6.1	19092	5.6	2.62	0.17	2.9	8.5	888	419	20166	5.9	18108	5.3	2.52	0.16	2.7	8.0
		0.2	50	918	433	20515	6.0	18538	5.4	2.56	0.16	2.8	8.2	841	397	19607	5.8	17423	5.1	2.45	0.15	2.5	7.6
		0.3	75	876	413	20025	5.9	17934	5.3	2.50	0.16	2.6	7.9	794	375	19031	5.6	16725	4.9	2.38	0.15	2.4	7.2
18	High	0.1	25	1914	903	39859	11.7	35922	10.5	4.98	0.31	11.2	33.3	1804	851	37588	11.0	34078	10.0	4.70	0.30	10.1	30.0
		0.2	50	1798	848	37480	11.0	33983	10.0	4.69	0.30	10.0	29.9	1813	856	37765	11.1	34227	10.0	4.72	0.30	10.1	30.3
		0.3	75	1655	781	35361	10.4	31875	9.3	4.42	0.28	9.0	27.0	1811	855	37726	11.1	34194	10.0	4.72	0.30	10.1	30.2
	Medium	0.1	25	1442	680	32621	9.6	28853	8.5	4.08	0.26	7.8	23.4	1180	557	29652	8.7	25191	7.4	3.71	0.23	6.6	19.7
		0.2	50	1430	675	32478	9.5	28685	8.4	4.06	0.26	7.8	23.2	1156	546	29385	8.6	24853	7.3	3.67	0.23	6.5	19.4
		0.3	75	1369	646	31766	9.3	27832	8.2	3.97	0.25	7.5	22.3	1204	568	29918	8.8	25528	7.5	3.74	0.24	6.7	20.0
	Low	0.1	25	987	466	27430	8.0	22407	6.6	3.43	0.22	5.8	17.2	1015	479	27770	8.1	22822	6.7	3.47	0.22	5.9	17.6
		0.2	50	1012	478	27734	8.1	22778	6.7	3.47	0.22	5.9	17.5	895	422	26247	7.7	21003	6.2	3.28	0.21	5.3	15.9
		0.3	75	993	469	27503	8.1	22496	6.6	3.44	0.22	5.8	17.3	813	384	25059	7.3	19687	5.8	3.13	0.20	4.9	14.6
21	High	0.1	25	2525	1192	48059	14.1	44942	13.2	6.01	0.38	8.1	24.1	2808	1325	53620	15.7	49403	14.5	6.70	0.42	9.8	29.3
		0.2	50	2319	1094	44472	13.0	41810	12.3	5.56	0.35	7.0	21.0	2719	1283	51897	15.2	48020	14.1	6.49	0.41	9.3	27.7
		0.3	75	2095	989	41067	12.0	38536	11.3	5.13	0.32	6.1	18.3	2605	1229	49582	14.5	46194	13.5	6.20	0.39	8.5	25.5
	Medium	0.1	25	2331	1100	44667	13.1	41988	12.3	5.58	0.35	7.1	21.2	2116	999	41367	12.1	38838	11.4	5.17	0.33	6.2	18.5
		0.2	50	2177	1027	42259	12.4	39720	11.6	5.28	0.33	6.4	19.2	2088	985	40969	12.0	38435	11.3	5.12	0.32	6.1	18.2
		0.3	75	1990	939	39624	11.6	37038	10.9	4.95	0.31	5.7	17.1	2042	964	40328	11.8	37777	11.1	5.04	0.32	5.9	17.7
	Low	0.1	25	1889	891	38311	11.2	35613	10.4	4.79	0.30	5.4	16.1	1433	676	32969	9.7	29246	8.6	4.12	0.26	4.1	12.4
		0.2	50	1856	876	37897	11.1	35150	10.3	4.74	0.30	5.3	15.8	1439	679	33037	9.7	29331	8.6	4.13	0.26	4.2	12.4
		0.3	75	1780	840	36968	10.8	34087	10.0	4.62	0.29	5.1	15.1	1440	680	33047	9.7	29345	8.6	4.13	0.26	4.2	12.4
24	High	0.1	25	2560	1208	51994	15.2	47346	13.9	6.50	0.41	10.0	29.8	2620	1236	53303	15.6	48366	14.2	6.66	0.42	10.4	31.1
		0.2	50	2387	1126	48695	14.3	44563	13.1	6.09	0.38	8.9	26.5	2581	1218	52448	15.4	47702	14.0	6.56	0.41	10.1	30.2
		0.3	75	2181	1029	45600	13.4	41523	12.2	5.70	0.36	7.9	23.6	2516	1187	51046	15.0	46600	13.7	6.38	0.40	9.6	28.8
	Medium	0.1	25	2258	1066	46708	13.7	42646	12.5	5.84	0.37	8.2	24.6	1946	918	42512	12.5	38174	11.2	5.31	0.34	7.0	20.8
		0.2	50	2175	1026	45516	13.3	41436	12.1	5.69	0.36	7.9	23.5	1940	915	42440	12.4	38091	11.2	5.30	0.33	6.9	20.7
		0.3	75	2030	958	43572	12.8	39358	11.5	5.45	0.34	7.3	21.7	1917	905	42158	12.4	37768	11.1	5.27	0.33	6.9	20.5
	Low	0.1	25	1889	891	41819	12.3	37376	11.0	5.23	0.33	6.8	20.2	1432	676	36623	10.7	30963	9.1	4.58	0.29	5.3	16.0
		0.2	50	1881	888	41724	12.2	37264	10.9	5.22	0.33	6.7	20.1	1436	678	36668	10.8	31020	9.1	4.58	0.29	5.4	16.0
		0.3	75	1830	864	41119	12.1	36551	10.7	5.14	0.32	6.6	19.6	1441	680	36725	10.8	31092	9.1	4.59	0.29	5.4	16.0

Table 13

Note :
Table 13 data is based on 76/63°F (24.4/17.2°C) air on-coil DBT/WBT and 42/58°F (5.5/14.4°C) entering/leaving water temperature.

Chilled Water

Capacity Ratings (DCDP - 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	Btuh	kW	Btuh	kW	gpm	l/s	ftwg	kPa	cfm	l/s	Btuh	kW	Btuh	kW	gpm	l/s	ftwg	kPa
6	High	0.1	25	680	321	19580	5.7	15365	4.5	2.45	0.15	12.7	38.1	583	275	17320	5.1	13514	4.0	2.16	0.14	10.3	30.6
		0.2	50	660	311	19010	5.6	14945	4.4	2.38	0.15	12.1	36.1	587	277	17397	5.1	13585	4.0	2.17	0.14	10.3	30.9
		0.3	75	636	300	18424	5.4	14479	4.2	2.30	0.15	11.4	34.2	581	274	17279	5.1	13477	4.0	2.16	0.14	10.2	30.5
	Medium	0.1	25	514	243	16027	4.7	12300	3.6	2.00	0.13	8.9	26.7	440	208	14731	4.3	11018	3.2	1.84	0.12	7.7	23.0
		0.2	50	498	235	15743	4.6	12023	3.5	1.97	0.12	8.7	25.9	423	200	14433	4.2	10722	3.1	1.80	0.11	7.4	22.2
		0.3	75	478	226	15391	4.5	11677	3.4	1.92	0.12	8.3	24.9	401	189	14041	4.1	10333	3.0	1.76	0.11	7.1	21.1
	Low	0.1	25	396	187	13951	4.1	10244	3.0	1.74	0.11	7.0	20.9	326	154	12578	3.7	8946	2.6	1.57	0.10	5.8	17.4
		0.2	50	381	180	13675	4.0	9974	2.9	1.71	0.11	6.8	20.2	300	142	11992	3.5	8428	2.5	1.50	0.09	5.4	16.0
		0.3	75	355	168	13175	3.9	9497	2.8	1.65	0.10	6.3	18.9	273	129	11324	3.3	7863	2.3	1.42	0.09	4.8	14.5
8	High	0.1	25	777	367	21645	6.3	17333	5.1	2.71	0.17	7.9	23.6	732	345	20740	6.1	16528	4.8	2.59	0.16	7.3	21.9
		0.2	50	753	355	21157	6.2	16902	5.0	2.64	0.17	7.6	22.7	721	340	20527	6.0	16334	4.8	2.57	0.16	7.2	21.5
		0.3	75	730	344	20702	6.1	16493	4.8	2.59	0.16	7.3	21.9	707	334	20262	5.9	16089	4.7	2.53	0.16	7.0	21.0
	Medium	0.1	25	601	284	18363	5.4	14253	4.2	2.30	0.14	5.9	17.7	562	265	17691	5.2	13582	4.0	2.21	0.14	5.5	16.5
		0.2	50	587	277	18122	5.3	14012	4.1	2.27	0.14	5.8	17.3	544	257	17381	5.1	13271	3.9	2.17	0.14	5.4	16.0
		0.3	75	571	269	17845	5.2	13737	4.0	2.23	0.14	5.6	16.8	525	248	17051	5.0	12940	3.8	2.13	0.13	5.2	15.5
	Low	0.1	25	482	227	16290	4.8	12182	3.6	2.04	0.13	4.8	14.3	449	212	15681	4.6	11587	3.4	1.96	0.12	4.5	13.4
		0.2	50	463	218	15944	4.7	11841	3.5	1.99	0.13	4.6	13.8	425	201	15216	4.5	11142	3.3	1.90	0.12	4.2	12.7
		0.3	75	442	209	15546	4.6	11458	3.4	1.94	0.12	4.4	13.2	401	189	14727	4.3	10687	3.1	1.84	0.12	4.0	12.0
10	High	0.1	25	1046	494	34076	10.0	25255	7.4	4.26	0.27	22.3	66.6	986	465	32085	9.4	23879	7.0	4.01	0.25	20.0	59.9
		0.2	50	983	464	31990	9.4	23811	7.0	4.00	0.25	19.9	59.6	991	468	32247	9.5	23992	7.0	4.03	0.25	20.2	60.4
		0.3	75	906	428	29672	8.7	22127	6.5	3.71	0.23	17.5	52.2	989	467	32183	9.4	23947	7.0	4.02	0.25	20.1	60.2
	Medium	0.1	25	724	342	25494	7.5	18614	5.5	3.19	0.20	13.4	39.9	607	286	23380	6.9	16550	4.9	2.92	0.18	11.5	34.2
		0.2	50	728	344	25568	7.5	18685	5.5	3.20	0.20	13.4	40.1	584	276	22936	6.7	16130	4.7	2.87	0.18	11.1	33.1
		0.3	75	706	333	25172	7.4	18298	5.4	3.15	0.20	13.1	39.0	597	282	23190	6.8	16368	4.8	2.90	0.18	11.3	33.8
	Low	0.1	25	464	219	20252	5.9	13775	4.0	2.53	0.16	8.9	26.6	511	241	21395	6.3	14738	4.3	2.67	0.17	9.8	29.3
		0.2	50	467	220	20328	6.0	13838	4.1	2.54	0.16	9.0	26.8	443	209	19691	5.8	13322	3.9	2.46	0.16	8.5	25.3
		0.3	75	474	224	20506	6.0	13985	4.1	2.56	0.16	9.1	27.2	394	186	18254	5.4	12206	3.6	2.28	0.14	7.4	22.1
12	High	0.1	25	1317	621	35872	10.5	28821	8.5	4.48	0.28	8.5	25.4	1150	543	32148	9.4	25719	7.5	4.02	0.25	7.0	20.9
		0.2	50	1276	602	34894	10.2	28040	8.2	4.36	0.28	8.1	24.1	1149	542	32128	9.4	25701	7.5	4.02	0.25	7.0	20.9
		0.3	75	1223	577	33695	9.9	27051	7.9	4.21	0.27	7.6	22.7	1130	533	31743	9.3	25361	7.4	3.97	0.25	6.8	20.4
	Medium	0.1	25	1016	479	29567	8.7	23357	6.9	3.70	0.23	6.0	18.0	871	411	27019	7.9	20855	6.1	3.38	0.21	5.1	15.3
		0.2	50	982	463	28954	8.5	22768	6.7	3.62	0.23	5.8	17.3	834	394	26382	7.7	20218	5.9	3.30	0.21	4.9	14.7
		0.3	75	937	442	28160	8.3	21992	6.5	3.52	0.22	5.5	16.5	788	372	25587	7.5	19420	5.7	3.20	0.20	4.7	13.9
	Low	0.1	25	773	365	25326	7.4	19158	5.6	3.17	0.20	4.6	13.7	630	297	22675	6.7	16572	4.9	2.83	0.18	3.8	11.2
		0.2	50	738	348	24707	7.2	18539	5.4	3.09	0.19	4.4	13.1	581	274	21655	6.4	15633	4.6	2.71	0.17	3.5	10.4
		0.3	75	684	323	23719	7.0	17572	5.2	2.96	0.19	4.1	12.2	528	249	20457	6.0	14571	4.3	2.56	0.16	3.1	9.4
15	High	0.1	25	1519	717	45285	13.3	34776	10.2	5.66	0.36	14.0	41.8	1450	684	43132	12.6	33266	9.8	5.39	0.34	12.8	38.3
		0.2	50	1476	697	43938	12.9	33834	9.9	5.49	0.35	13.3	39.6	1425	672	42367	12.4	32722	9.6	5.30	0.33	12.4	37.1
		0.3	75	1429	674	42490	12.5	32809	9.6	5.31	0.34	12.5	37.3	1397	659	41525	12.2	32118	9.4	5.19	0.33	12.0	35.8
	Medium	0.1	25	1224	578	36955	10.8	28603	8.4	4.62	0.29	9.8	29.1	1140	538	35311	10.4	27102	7.9	4.41	0.28	9.0	26.9
		0.2	50	1194	563	36355	10.7	28062	8.2	4.54	0.29	9.5	28.3	1103	521	34618	10.2	26452	7.8	4.33	0.27	8.7	26.0
		0.3	75	1155	545	35595	10.4	27366	8.0	4.45	0.28	9.1	27.3	1064	502	33907	9.9	25772	7.6	4.24	0.27	8.4	25.0
	Low	0.1	25	951	449	31917	9.4	23812	7.0	3.99	0.25	7.5	22.5	882	416	30705	9.0	22610	6.6	3.84	0.24	7.0	21.0
		0.2	50	912	430	31235	9.2	23135	6.8	3.90	0.25	7.2	21.6	835	394	29866	8.8	21779	6.4	3.73	0.24	6.7	20.0
		0.3	75	870	411	30493	8.9	22399	6.6	3.81	0.24	6.9	20.7	789	372	29015	8.5	20952	6.1	3.63	0.23	6.4	19.0
18	High	0.1	25	1882	888	55944	16.4	43240	12.7	6.99	0.44	12.2	36.5	1807	853	53738	15.8	41638	12.2	6.72	0.42	11.4	34.0
		0.2	50	1761	831	52447	15.4	40676	11.9	6.56	0.41	10.9	32.6	1814	856	53939	15.8	41786	12.3	6.74	0.43	11.5	34.2
		0.3	75	1618	764	48990	14.4	37884	11.1	6.12	0.39	9.7	28.8	1807	853	53738	15.8	41638	12.2	6.72	0.42	11.4	34.0
	Medium	0.1	25	1444	681	45669	13.4	34804	10.2	5.71	0.36	8.5	25.5	1172	553	40871	12.0	30077	8.8	5.11	0.32	7.0	20.9
		0.2	50	1422	671	45270	13.3	34421	10.1	5.66	0.36	8.4	25.1	1158	546	40622	11.9	29830	8.7	5.08	0.32	6.9	20.7
		0.3	75	1354	639	44059	12.9	33241	9.7	5.51	0.35	8.0	23.9	1214	573	41610	12.2	30811	9.0	5.20	0.33	7.2	21.6
	Low	0.1	25	988	466	37445	11.0	26758	7.8	4.68	0.30	6.0	17.9	1001	472	37702	11.1	27000	7.9	4.71	0.30	6.1	18.1
		0.2	50	1014	479	37956	11.1	27241	8.0	4.74	0.30	6.1	18.4	887	419	35316	10.4	24819	7.3	4.41	0.28	5.4	16.2
		0.3	75	987	466	37425	11.0	26740	7.8	4.68	0.30	6.0	17.9	808	381	33458	9.8	23213	6.8	4.18	0.26	4.9	14.7
21	High	0.1	25	2447	1155	69041	20.2	54280	15.9	8.63	0.54	10.9	32.5	2767	1306	77997	22.9	60762	17.8	9.75	0.62	13.5	40.3
		0.2	50	2246	1060	63059	18.5	50011	14.7	7.88	0.50	9.2	27.6	2670	1260	75480	22.1	58887	17.3	9.44	0.60	12.7	38.1
		0.3	75	2030	958	58042	17.0	45923	13.5	7.26	0.46	8.0	23.8	2551	1204	72123	21.1	56466	16.6	9.02	0.57	11.7	35.1
	Medium	0.1	25	2282	1077	64111	18.8	50771	14.9	8.01	0.51	9.5	28.5	2110	996	59788	17.5	47400	13.9	7.47	0.47	8.4	25.1
		0.2	50	2124	1002	60104	17.6	47661	14.0	7.51	0.47	8.5	25.4	2077	980	59058	17.3	46788	13.7	7.38	0.47	8.2	24.6
		0.3	75	1938	915	56138	16.5	44257	13.0	7.02	0.44	7.5	22.5	2026	956	57957	17.0	45850	13.4	7.24	0.46	8.0	23.8
	Low	0.1	25	1885	890	55086	16.2	43310	12.7	6.89	0.43	7.3	21.7	1434	677	46975	13.8	35464	10.4	5.87	0.37	5.5	16.4
		0.2	50	1842	869	54255	15.9	42548	12.5	6.78	0.43	7.1	21.2	1440	680	47080	13.8	35569	10.4	5.88	0.37	5.5	16.4
		0.3	75	1758	830	52682	15.4	41073	12.0	6.59	0.42	6.7	20.1	1440	680	47080	13.8	35569	10.4	5.88	0.37	5.5	16.4
24	High	0.1	25	2508	1184	76086	22.3	58079	17.0	9.51	0.60	13.8	41.4	2609	1231	79312	23.3	60318	17.7	9.91	0.63	14.9	44.5
		0.2	50	2331	1100	70611	20.7	54202	15.9	8.83	0.56	12.1	36.2	2562	1209	77808	22.8	59277	17.4	9.73	0.61	14.4	43.0
		0.3	75	2127	1004	64949	19.0	49947	14.6	8.12	0.51	10.5	31.2	2489	1175	75482	22.1	57658	16.9	9.44	0.60	13.6	40.8
	Medium	0.1	25	2242	1058	68034	19.9	52309	15.3	8.50	0.54	11.3	33.9	1946	918	60943	17.9	46540	13.6	7.62	0.48	9.3	27.9
		0.2	50	2144	1012	65385	19.2	50289	14.7	8.17	0.52	10.6	31.6	1937	914	60770	17.8	46381	13.6	7.60	0.48	9.3	27.8
		0.3	75	1992	940	61832	18.1	47357	13.9	7.73	0.49	9.6	28.6	1910	901	60260	17.7	45905	13.5	7.53	0.48	9.2	27.3
	Low	0.1	25	1890	892	59886	17.6	45553	13.4	7.49	0.47	9.0	27.0	1433	676	51753	15.2	37577	11.0	6.47	0.41	7.0	20.9
		0.2	50	1875	885	59608	17.5	45291	13.3	7.45	0.47	9.0	26.8	1437	678	51826	15.2	37648	11.0	6.48	0.41	7.0	20.9
		0.3	75	1815	856	58511	17.2	44242	13.0	7.31	0.46	8.7	25.9	1441	680	51897	15.2	37719	11.1	6.49	0.41	7.0	21.0

Table 14

Note :
Table 14 data is based on 78/65°F (25.6/18.3°C) air on-coil DBT/WBT and 42/58°F (5.5/14.4°C) entering/leaving water temperature.

Chilled Water

Capacity Ratings (DCDP - 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	Btuh	kW	Btuh	kW	gpm	l/s	ftwg	kPa	cfm	l/s	Btuh	kW	Btuh	kW	gpm	l/s	ftwg	kPa
6	High	0.1	25	680	321	16348	4.8	14405	4.2	2.04	0.13	9.3	27.7	583	275	14643	4.3	12733	3.7	1.83	0.12	7.6	22.8
		0.2	50	660	311	15974	4.7	14054	4.1	2.00	0.13	8.9	26.6	587	277	14709	4.3	12801	3.8	1.84	0.12	7.7	23.0
		0.3	75	636	300	15540	4.6	13638	4.0	1.94	0.12	8.5	25.3	581	274	14610	4.3	12700	3.7	1.83	0.12	7.6	22.7
	Medium	0.1	25	514	243	13561	4.0	11575	3.4	1.70	0.11	6.7	19.9	440	208	12442	3.7	10331	3.0	1.56	0.10	5.7	17.1
		0.2	50	498	235	13319	3.9	11307	3.3	1.66	0.11	6.4	19.3	423	200	12182	3.6	10041	2.9	1.52	0.10	5.5	16.5
		0.3	75	478	226	13018	3.8	10973	3.2	1.63	0.10	6.2	18.5	401	189	11838	3.5	9660	2.8	1.48	0.09	5.2	15.6
	Low	0.1	25	396	187	11759	3.5	9573	2.8	1.47	0.09	5.2	15.5	326	154	10556	3.1	8306	2.4	1.32	0.08	4.3	12.8
		0.2	50	381	180	11516	3.4	9310	2.7	1.44	0.09	5.0	14.9	300	142	10051	3.0	7807	2.3	1.26	0.08	3.9	11.7
		0.3	75	355	168	11077	3.3	8844	2.6	1.38	0.09	4.7	13.9	273	129	9477	2.8	7263	2.1	1.18	0.07	3.5	10.6
8	High	0.1	25	777	367	18319	5.4	16378	4.8	2.29	0.14	5.9	17.6	732	345	17587	5.2	15622	4.6	2.20	0.14	5.5	16.4
		0.2	50	753	355	17925	5.3	15974	4.7	2.24	0.14	5.7	16.9	721	340	17413	5.1	15439	4.5	2.18	0.14	5.4	16.1
		0.3	75	730	344	17556	5.2	15589	4.6	2.19	0.14	5.5	16.3	707	334	17194	5.0	15207	4.5	2.15	0.14	5.3	15.7
	Medium	0.1	25	601	284	15591	4.6	13449	3.9	1.95	0.12	4.4	13.2	562	265	15010	4.4	12796	3.8	1.88	0.12	4.1	12.4
		0.2	50	587	277	15382	4.5	13215	3.9	1.92	0.12	4.3	12.9	544	257	14740	4.3	12493	3.7	1.84	0.12	4.0	12.0
		0.3	75	571	269	15144	4.4	12947	3.8	1.89	0.12	4.2	12.6	525	248	14451	4.2	12170	3.6	1.81	0.11	3.9	11.6
	Low	0.1	25	482	227	13780	4.0	11428	3.4	1.72	0.11	3.6	10.6	449	212	13243	3.9	10844	3.2	1.66	0.10	3.3	9.9
		0.2	50	463	218	13475	4.0	11094	3.3	1.68	0.11	3.4	10.2	425	201	12833	3.8	10411	3.1	1.60	0.10	3.1	9.4
		0.3	75	442	209	13126	3.9	10719	3.1	1.64	0.10	3.3	9.8	401	189	12405	3.6	9968	2.9	1.55	0.10	3.0	8.8
10	High	0.1	25	1046	494	27445	8.0	23138	6.8	3.43	0.22	15.2	45.4	986	465	25956	7.6	21931	6.4	3.24	0.20	13.8	41.2
		0.2	50	983	464	25885	7.6	21872	6.4	3.24	0.20	13.7	41.0	991	468	26076	7.6	22031	6.5	3.26	0.21	13.9	41.5
		0.3	75	906	428	24332	7.1	20454	6.0	3.04	0.19	12.3	36.7	989	467	26028	7.6	21991	6.5	3.25	0.21	13.8	41.4
	Medium	0.1	25	724	342	21412	6.3	17356	5.1	2.68	0.17	9.8	29.3	607	286	19583	5.7	15346	4.5	2.45	0.15	8.4	25.1
		0.2	50	728	344	21475	6.3	17424	5.1	2.68	0.17	9.9	29.5	584	276	19200	5.6	14939	4.4	2.40	0.15	8.1	24.2
		0.3	75	706	333	21136	6.2	17052	5.0	2.64	0.17	9.6	28.7	597	282	19419	5.7	15170	4.5	2.43	0.15	8.3	24.7
	Low	0.1	25	464	219	16926	5.0	12676	3.7	2.12	0.13	6.5	19.4	511	241	17887	5.2	13594	4.0	2.24	0.14	7.1	21.4
		0.2	50	467	220	16989	5.0	12735	3.7	2.12	0.13	6.5	19.5	443	209	16460	4.8	12247	3.6	2.06	0.13	6.2	18.4
		0.3	75	474	224	17139	5.0	12875	3.8	2.14	0.14	6.6	19.8	394	186	15268	4.5	11200	3.3	1.91	0.12	5.4	16.2
12	High	0.1	25	1317	621	30159	8.8	27163	8.0	3.77	0.24	6.2	18.6	1150	543	27221	8.0	24306	7.1	3.40	0.21	5.2	15.5
		0.2	50	1276	602	29399	8.6	26452	7.8	3.67	0.23	6.0	17.8	1149	542	27206	8.0	24289	7.1	3.40	0.21	5.2	15.5
		0.3	75	1223	577	28457	8.3	25542	7.5	3.56	0.22	5.6	16.8	1130	533	26895	7.9	23970	7.0	3.36	0.21	5.1	15.2
	Medium	0.1	25	1016	479	25104	7.4	22072	6.5	3.14	0.20	4.5	13.5	871	411	22933	6.7	19664	5.8	2.87	0.18	3.8	11.5
		0.2	50	982	463	24588	7.2	21509	6.3	3.07	0.19	4.3	13.0	834	394	22381	6.6	19042	5.6	2.80	0.18	3.7	11.0
		0.3	75	937	442	23913	7.0	20763	6.1	2.99	0.19	4.1	12.3	788	372	21684	6.4	18264	5.4	2.71	0.17	3.5	10.4
	Low	0.1	25	773	365	21453	6.3	18007	5.3	2.68	0.17	3.4	10.2	630	297	19117	5.6	15479	4.5	2.39	0.15	2.8	8.3
		0.2	50	738	348	20909	6.1	17404	5.1	2.61	0.16	3.3	9.7	581	274	18240	5.4	14571	4.3	2.28	0.14	2.6	7.6
		0.3	75	684	323	20039	5.9	16455	4.8	2.50	0.16	3.0	9.0	528	249	17275	5.1	13576	4.0	2.16	0.14	2.3	6.9
15	High	0.1	25	1519	717	36797	10.8	32142	9.4	4.60	0.29	9.7	28.9	1450	684	35342	10.4	30875	9.1	4.42	0.28	9.0	26.9
		0.2	50	1476	697	35878	10.5	31348	9.2	4.48	0.28	9.3	27.7	1425	672	34840	10.2	30424	8.9	4.35	0.27	8.8	26.3
		0.3	75	1429	674	34919	10.2	30495	8.9	4.36	0.28	8.8	26.4	1397	659	34290	10.1	29922	8.8	4.29	0.27	8.5	25.5
	Medium	0.1	25	1224	578	31186	9.1	26911	7.9	3.90	0.25	7.2	21.6	1140	538	29823	8.7	25487	7.5	3.73	0.24	6.7	19.9
		0.2	50	1194	563	30692	9.0	26401	7.7	3.84	0.24	7.0	21.0	1103	521	29244	8.6	24864	7.3	3.66	0.23	6.4	19.2
		0.3	75	1155	545	30062	8.8	25741	7.5	3.76	0.24	6.8	20.2	1064	502	28643	8.4	24209	7.1	3.58	0.23	6.2	18.6
	Low	0.1	25	951	449	26927	7.9	22310	6.5	3.37	0.21	5.6	16.6	882	416	25873	7.6	21134	6.2	3.23	0.20	5.2	15.5
		0.2	50	912	430	26333	7.7	21648	6.3	3.29	0.21	5.4	16.0	835	394	25136	7.4	20323	6.0	3.14	0.20	4.9	14.7
		0.3	75	870	411	25687	7.5	20928	6.1	3.21	0.20	5.1	15.3	789	372	24390	7.2	19515	5.7	3.05	0.19	4.7	14.0
18	High	0.1	25	1882	888	46097	13.5	40242	11.8	5.76	0.36	8.7	25.9	1807	853	44664	13.1	38911	11.4	5.58	0.35	8.2	24.5
		0.2	50	1761	831	43819	12.8	38105	11.2	5.48	0.35	7.9	23.7	1814	856	44794	13.1	39034	11.4	5.60	0.35	8.2	24.6
		0.3	75	1618	764	41350	12.1	35644	10.5	5.17	0.33	7.1	21.4	1807	853	44664	13.1	38911	11.4	5.58	0.35	8.2	24.5
	Medium	0.1	25	1444	681	38581	11.3	32705	9.6	4.82	0.30	6.3	18.9	1172	553	34435	10.1	28110	8.2	4.30	0.27	5.2	15.4
		0.2	50	1422	671	38242	11.2	32335	9.5	4.78	0.30	6.2	18.6	1158	546	34218	10.0	27870	8.2	4.28	0.27	5.1	15.3
		0.3	75	1354	639	37204	10.9	31195	9.1	4.65	0.29	5.9	17.7	1214	573	35081	10.3	28830	8.5	4.39	0.28	5.3	16.0
	Low	0.1	25	988	466	31436	9.2	24869	7.3	3.93	0.25	4.4	13.1	1001	472	31661	9.3	25105	7.4	3.96	0.25	4.5	13.3
		0.2	50	1014	479	31883	9.3	25340	7.4	3.99	0.25	4.5	13.5	887	419	29591	8.7	22988	6.7	3.70	0.23	4.0	11.8
		0.3	75	987	466	31420	9.2	24851	7.3	3.93	0.25	4.4	13.1	808	381	27999	8.2	21442	6.3	3.50	0.22	3.6	10.7
21	High	0.1	25	2447	1155	57001	16.7	50668	14.9	7.13	0.45	7.7	23.1	2767	1306	64439	18.9	56700	16.6	8.05	0.51	9.6	28.7
		0.2	50	2246	1060	52939	15.5	47058	13.8	6.62	0.42	6.8	20.2	2670	1260	62073	18.2	54841	16.1	7.76	0.49	9.0	26.9
		0.3	75	2030	958	49043	14.4	43313	12.7	6.13	0.39	5.9	17.7	2551	1204	59289	17.4	52591	15.4	7.41	0.47	8.3	24.8
	Medium	0.1	25	2282	1077	53634	15.7	47695	14.0	6.70	0.42	6.9	20.7	2110	996	50436	14.8	44686	13.1	6.30	0.40	6.2	18.6
		0.2	50	2124	1002	50686	14.9	44928	13.2	6.34	0.40	6.3	18.7	2077	980	49855	14.6	44118	12.9	6.23	0.39	6.1	18.2
		0.3	75	1938	915	47499	13.9	41753	12.2	5.94	0.37	5.6	16.7	2026	956	48973	14.4	43245	12.7	6.12	0.39	5.9	17.6
	Low	0.1	25	1885	890	46637	13.7	40861	12.0	5.83	0.37	5.4	16.2	1434	677	39744	11.7	33312	9.8	4.97	0.31	4.1	12.2
		0.2	50	1842	869	45950	13.5	40140	11.8	5.74	0.36	5.3	15.7	1440	680	39835	11.7	33413	9.8	4.98	0.31	4.1	12.2
		0.3	75	1758	830	44638	13.1	38736	11.4	5.58	0.35	5.0	15.0	1440	680	39835	11.7	33413	9.8	4.98	0.31	4.1	12.2
24	High	0.1	25	2508	1184	61670	18.1	53583	15.7	7.71	0.49	9.5	28.5	2609	1231	64106	18.8	55559	16.3	8.01	0.51	10.2	30.5
		0.2	50	2331	1100	58106	17.0	50378	14.8	7.26	0.46	8.6	25.6	2562	1209	62884	18.4	54605	16.0	7.86	0.50	9.9	29.5
		0.3	75	2127	1004	54412	16.0	46811	13.7	6.80	0.43	7.6	22.8	2489	1175	61269	18.0	53233	15.6	7.66	0.48	9.4	28.2
	Medium	0.1	25	2242	1058	56445	16.5	48807	14.3	7.06	0.45	8.1	24.3	1946	918	51424	15.1	43724	12.8	6.43	0.41	6.9	20.6
		0.2	50	2144	1012	54706	16.0	47104	13.8	6.84	0.43	7.7	23.0	1937	914	51281	15.0	43572	12.8	6.41	0.40	6.9	20.5
		0.3	75	1992	940	52163	15.3	44504	13.0	6.52	0.41	7.1	21.2	1910	901	50855	14.9	43116	12.6	6.36	0.40	6.8	20.2
	Low	0.1	25	1890	892	50541	14.8	42778	12.5	6.32	0.40	6.7	20.0	1433	676	43516	12.8	35033	10.3	5.44	0.34	5.1	15.4
		0.2	50	1875	885	50307	14.7	42526	12.5	6.29	0.40	6.6	19.8	1437	678	43579	12.8	35102	10.3	5.45	0.34	5.2	15.4
		0.3	75	1815	856	49375	14.5	41518	12.2	6.17	0.39	6.4	19.2	1441	680	43643	12.8	35172	10.3	5.46	0.34	5.2	15.4

Table 15

Note :
Table 15 data is based on 76/63°F (24.4/17.2°C) air on-coil DBT/WBT and 42/58°F (5.5/14.4°C) entering/leaving water temperature.

Chilled Water

Capacity Ratings (DCDP - 6 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	Btuh	kW	Btuh	kW	gpm	l/s	ftwg	kPa	cfm	l/s	Btuh	kW	Btuh	kW	gpm	l/s	ftwg	kPa
6	High	0.1	25	642	303	23850	7.0	17359	5.1	2.98	0.19	12.0	35.8	558	263	21499	6.3	15459	4.5	2.69	0.17	10.0	29.8
		0.2	50	622	294	23266	6.8	16898	5.0	2.91	0.18	11.5	34.2	558	263	21499	6.3	15459	4.5	2.69	0.17	10.0	29.8
		0.3	75	597	282	22558	6.6	16330	4.8	2.82	0.18	10.8	32.4	550	260	21287	6.2	15282	4.5	2.66	0.17	9.8	29.3
	Medium	0.1	25	475	224	19333	5.7	13636	4.0	2.42	0.15	8.3	24.7	407	192	17529	5.1	12125	3.6	2.19	0.14	7.0	20.8
		0.2	50	460	217	18944	5.6	13306	3.9	2.37	0.15	8.0	23.8	391	185	17084	5.0	11759	3.5	2.14	0.13	6.6	19.9
		0.3	75	441	208	18444	5.4	12886	3.8	2.31	0.15	7.6	22.7	371	175	16510	4.8	11296	3.3	2.06	0.13	6.3	18.7
	Low	0.1	25	380	179	16771	4.9	11505	3.4	2.10	0.13	6.4	19.2	311	147	14639	4.3	9839	2.9	1.83	0.12	5.1	15.1
		0.2	50	364	172	16304	4.8	11132	3.3	2.04	0.13	6.1	18.3	287	135	13813	4.1	9221	2.7	1.73	0.11	4.6	13.7
		0.3	75	338	160	15513	4.6	10509	3.1	1.94	0.12	5.6	16.7	262	124	12895	3.8	8551	2.5	1.61	0.10	4.0	12.1
8	High	0.1	25	763	360	30734	9.0	21630	6.3	3.84	0.24	20.5	61.2	726	343	29304	8.6	20632	6.1	3.66	0.23	18.8	56.3
		0.2	50	741	350	29874	8.8	21033	6.2	3.73	0.24	19.5	58.2	714	337	28857	8.5	20315	6.0	3.61	0.23	18.3	54.8
		0.3	75	718	339	29004	8.5	20420	6.0	3.63	0.23	18.5	55.3	701	331	28383	8.3	19975	5.9	3.55	0.22	17.8	53.2
	Medium	0.1	25	596	281	24985	7.3	17404	5.1	3.12	0.20	14.2	42.5	557	263	23922	7.0	16530	4.9	2.99	0.19	13.2	39.4
		0.2	50	582	275	24603	7.2	17090	5.0	3.08	0.19	13.8	41.4	539	254	23431	6.9	16126	4.7	2.93	0.18	12.7	38.0
		0.3	75	565	267	24140	7.1	16710	4.9	3.02	0.19	13.4	40.0	520	245	22908	6.7	15697	4.6	2.86	0.18	12.2	36.5
	Low	0.1	25	478	226	21720	6.4	14737	4.3	2.71	0.17	11.1	33.2	444	210	20713	6.1	13938	4.1	2.59	0.16	10.2	30.5
		0.2	50	459	217	21164	6.2	14294	4.2	2.65	0.17	10.6	31.7	420	198	19966	5.9	13360	3.9	2.50	0.16	9.6	28.6
		0.3	75	438	207	20529	6.0	13795	4.0	2.57	0.16	10.1	30.1	397	187	19218	5.6	12789	3.8	2.40	0.15	9.0	26.8
10	High	0.1	25	979	462	37394	11.0	26928	7.9	4.67	0.29	12.8	38.3	931	439	36014	10.6	25826	7.6	4.50	0.28	12.0	35.9
		0.2	50	920	434	35705	10.5	25577	7.5	4.46	0.28	11.8	35.3	935	441	36127	10.6	25917	7.6	4.52	0.28	12.1	36.1
		0.3	75	848	400	33741	9.9	23966	7.0	4.22	0.27	10.7	32.0	933	440	36071	10.6	25872	7.6	4.51	0.28	12.0	36.0
	Medium	0.1	25	699	330	29795	8.7	20668	6.1	3.72	0.23	8.6	25.7	582	275	26496	7.8	17986	5.3	3.31	0.21	7.0	20.9
		0.2	50	700	330	29823	8.7	20691	6.1	3.73	0.24	8.6	25.7	562	265	25889	7.6	17508	5.1	3.24	0.20	6.7	20.1
		0.3	75	676	319	29173	8.6	20152	5.9	3.65	0.23	8.3	24.7	578	273	26375	7.7	17891	5.2	3.30	0.21	6.9	20.7
	Low	0.1	25	454	214	22277	6.5	14779	4.3	2.78	0.18	5.2	15.4	494	233	23686	6.9	15823	4.6	2.96	0.19	5.7	17.1
		0.2	50	459	217	22459	6.6	14912	4.4	2.81	0.18	5.2	15.6	431	203	21423	6.3	14160	4.2	2.68	0.17	4.8	14.4
		0.3	75	464	219	22639	6.6	15044	4.4	2.83	0.18	5.3	15.8	385	182	19616	5.8	12874	3.8	2.45	0.15	4.1	12.3
12	High	0.1	25	1259	594	44761	13.1	33135	9.7	5.60	0.35	8.3	24.7	1119	528	40775	12.0	29954	8.8	5.10	0.32	7.0	20.9
		0.2	50	1216	574	43491	12.8	32142	9.4	5.44	0.34	7.9	23.5	1110	524	40532	11.9	29755	8.7	5.07	0.32	6.9	20.7
		0.3	75	1162	548	41957	12.3	30915	9.1	5.24	0.33	7.4	22.0	1086	512	39889	11.7	29224	8.6	4.99	0.31	6.7	20.1
	Medium	0.1	25	938	443	36078	10.6	25999	7.6	4.51	0.28	5.6	16.9	805	380	32701	9.6	23107	6.8	4.09	0.26	4.7	14.2
		0.2	50	906	428	35273	10.3	25307	7.4	4.41	0.28	5.4	16.2	770	363	31790	9.3	22332	6.6	3.97	0.25	4.5	13.5
		0.3	75	863	407	34184	10.0	24374	7.1	4.27	0.27	5.1	15.3	728	344	30665	9.0	21393	6.3	3.83	0.24	4.2	12.6
	Low	0.1	25	753	355	31340	9.2	21954	6.4	3.92	0.25	4.4	13.1	611	288	27298	8.0	18669	5.5	3.41	0.22	3.4	10.3
		0.2	50	715	337	30310	8.9	21099	6.2	3.79	0.24	4.1	12.4	563	266	25781	7.6	17491	5.1	3.22	0.20	3.1	9.3
		0.3	75	661	312	28788	8.4	19855	5.8	3.60	0.23	3.8	11.3	513	242	24141	7.1	16238	4.8	3.02	0.19	2.8	8.3
15	High	0.1	25	1490	703	56149	16.5	40502	11.9	7.02	0.44	13.5	40.3	1434	677	54013	15.8	39013	11.4	6.75	0.43	12.6	37.7
		0.2	50	1447	683	54504	16.0	39357	11.5	6.81	0.43	12.8	38.3	1408	664	53041	15.6	38328	11.2	6.63	0.42	12.2	36.5
		0.3	75	1394	658	52524	15.4	37962	11.1	6.57	0.41	12.0	35.8	1378	650	51941	15.2	37546	11.0	6.49	0.41	11.8	35.1
	Medium	0.1	25	1211	571	46772	13.7	33570	9.8	5.85	0.37	9.8	29.2	1125	531	44431	13.0	31649	9.3	5.55	0.35	8.9	26.6
		0.2	50	1178	556	45863	13.4	32829	9.6	5.73	0.36	9.4	28.2	1088	513	43449	12.7	30831	9.0	5.43	0.34	8.6	25.6
		0.3	75	1135	536	44700	13.1	31871	9.3	5.59	0.35	9.0	26.9	1049	495	42424	12.4	29971	8.8	5.30	0.33	8.2	24.6
	Low	0.1	25	940	444	39559	11.6	27564	8.1	4.94	0.31	7.3	21.7	869	410	37643	11.0	25974	7.6	4.71	0.30	6.7	19.9
		0.2	50	901	425	38514	11.3	26695	7.8	4.81	0.30	6.9	20.7	824	389	36389	10.7	24948	7.3	4.55	0.29	6.3	18.7
		0.3	75	858	405	37341	10.9	25725	7.5	4.67	0.29	6.6	19.6	779	368	35087	10.3	23903	7.0	4.39	0.28	5.9	17.5
18	High	0.1	25	1843	870	66888	19.6	49147	14.4	8.36	0.53	8.2	24.4	1870	882	67678	19.8	49768	14.6	8.46	0.53	8.3	24.9
		0.2	50	1713	808	63229	18.5	46208	13.5	7.90	0.50	7.4	22.1	1865	880	67531	19.8	49653	14.6	8.44	0.53	8.3	24.8
		0.3	75	1568	740	59372	17.4	43006	12.6	7.42	0.47	6.6	19.8	1842	869	66859	19.6	49124	14.4	8.36	0.53	8.2	24.4
	Medium	0.1	25	1406	663	55222	16.2	39478	11.6	6.90	0.44	5.8	17.4	1135	536	48166	14.1	33506	9.8	6.02	0.38	4.6	13.6
		0.2	50	1374	648	54407	16.0	38782	11.4	6.80	0.43	5.7	16.9	1132	534	48085	14.1	33438	9.8	6.01	0.38	4.6	13.6
		0.3	75	1301	614	52542	15.4	37190	10.9	6.57	0.41	5.3	15.9	1194	563	49755	14.6	34828	10.2	6.22	0.39	4.8	14.5
	Low	0.1	25	905	427	41406	12.1	28093	8.2	5.18	0.33	3.5	10.4	930	439	42198	12.4	28707	8.4	5.27	0.33	3.6	10.8
		0.2	50	929	438	42166	12.4	28682	8.4	5.27	0.33	3.6	10.8	823	388	38686	11.3	26025	7.6	4.84	0.31	3.1	9.3
		0.3	75	911	430	41598	12.2	28241	8.3	5.20	0.33	3.5	10.5	747	353	36082	10.6	24070	7.1	4.51	0.28	2.7	8.2
21	High	0.1	25	2221	1048	84326	24.7	60671	17.8	10.54	0.67	13.3	39.8	2473	1167	94105	27.6	67419	19.8	11.76	0.74	16.2	48.4
		0.2	50	2047	966	77840	22.8	56095	16.4	9.73	0.61	11.6	34.6	2393	1129	91015	26.7	65288	19.1	11.38	0.72	15.3	45.6
		0.3	75	1856	876	71859	21.1	51516	15.1	8.98	0.57	10.0	30.0	2293	1082	87114	25.5	62602	18.4	10.89	0.69	14.1	42.2
	Medium	0.1	25	2075	979	78849	23.1	56818	16.7	9.86	0.62	11.8	35.4	1898	896	73048	21.4	52473	15.4	9.13	0.58	10.3	30.9
		0.2	50	1938	915	74202	21.8	53392	15.7	9.28	0.59	10.6	31.8	1872	883	72309	21.2	51880	15.2	9.04	0.57	10.2	30.3
		0.3	75	1775	838	69614	20.4	49692	14.6	8.70	0.55	9.5	28.4	1829	863	71104	20.8	50905	14.9	8.89	0.56	9.9	29.5
	Low	0.1	25	1838	867	71356	20.9	51108	15.0	8.92	0.56	9.9	29.6	1407	664	59832	17.5	41537	12.2	7.48	0.47	7.3	21.7
		0.2	50	1783	841	69833	20.5	49871	14.6	8.73	0.55	9.5	28.5	1412	666	59966	17.6	41649	12.2	7.50	0.47	7.3	21.8
		0.3	75	1692	798	67374	19.8	47844	14.0	8.42	0.53	9.0	26.8	1410	665	59913	17.6	41604	12.2	7.49	0.47	7.3	21.8
24	High	0.1	25	2383	1125	95977	28.1	67480	19.8	12.00	0.76	18.0	53.9	2537	1197	102327	30.0	71779	21.0	12.79	0.81	20.2	60.4
		0.2	50	2209	1042	89086	26.1	62724	18.4	11.14	0.70	15.8	47.2	2480	1170	99964	29.3	70185	20.6	12.50	0.79	19.4	57.9
		0.3	75	2013	950	81998	24.0	57626	16.9	10.25	0.65	13.7	40.8	2397	1131	96548	28.3	67869	19.9	12.07	0.76	18.2	54.5
	Medium	0.1	25	2169	1024	87573	25.7	61658	18.1	10.95	0.69	15.3	45.8	1907	900	78534	23.0	55013	16.1	9.82	0.62	12.6	37.8
		0.2	50	2056	970	83480	24.5	58716	17.2	10.44	0.66	14.1	42.1	1893	893	78098	22.9	54676	16.0	9.76	0.62	12.5	37.4
		0.3	75	1901	897	78346	23.0	54868	16.1	9.79	0.62	12.6	37.6	1862	879	77144	22.6	53936	15.8	9.64	0.61	12.3	36.6
	Low	0.1	25	1853	874	76872	22.5	53724	15.8	9.61	0.61	12.2	36.4	1405	663	64318	18.9	43538	12.8	8.04	0.51	8.9	26.6
		0.2	50	1827	862	76092	22.3	53113	15.6	9.51	0.60	12.0	35.7	1410	665	64464	18.9	43654	12.8	8.06	0.51	8.9	26.7
		0.3	75	1758	830	74136	21.7	51539	15.1	9.27	0.58	11.4	34.1	1413	667	64551	18.9	43724	12.8	8.07	0.51	8.9	26.7

Table 16

Note :
Table 16 data is based on 78/65°F (25.6/18.3°C) air on-coil DBT/WBT and 42/58°F (5.5/14.4°C) entering/leaving water temperature.

Chilled Water

Capacity Ratings (DCDP - 6 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	Btuh	kW	Btuh	kW	gpm	l/s	ftwg	kPa	cfm	l/s	Btuh	kW	Btuh	kW	gpm	l/s	ftwg	kPa
6	High	0.1	25	642	303	20282	5.9	16270	4.8	2.54	0.16	9.0	26.9	558	263	18348	5.4	14495	4.3	2.29	0.14	7.5	22.5
		0.2	50	622	294	19807	5.8	15842	4.6	2.48	0.16	8.6	25.8	558	263	18348	5.4	14495	4.3	2.29	0.14	7.5	22.5
		0.3	75	597	282	19229	5.6	15313	4.5	2.40	0.15	8.2	24.5	550	260	18171	5.3	14328	4.2	2.27	0.14	7.4	22.1
	Medium	0.1	25	475	224	16523	4.8	12763	3.7	2.07	0.13	6.3	18.7	407	192	14978	4.4	11318	3.3	1.87	0.12	5.3	15.7
		0.2	50	460	217	16189	4.8	12448	3.7	2.02	0.13	6.0	18.1	391	185	14596	4.3	10969	3.2	1.82	0.12	5.0	15.0
		0.3	75	441	208	15762	4.6	12047	3.5	1.97	0.12	5.8	17.2	371	175	14104	4.1	10527	3.1	1.76	0.11	4.7	14.2
	Low	0.1	25	380	179	14327	4.2	10727	3.1	1.79	0.11	4.9	14.6	311	147	12505	3.7	9142	2.7	1.56	0.10	3.8	11.5
		0.2	50	364	172	13928	4.1	10370	3.0	1.74	0.11	4.6	13.9	287	135	11835	3.5	8574	2.5	1.48	0.09	3.5	10.4
		0.3	75	338	160	13251	3.9	9777	2.9	1.66	0.10	4.2	12.7	262	124	11117	3.3	7973	2.3	1.39	0.09	3.1	9.3
8	High	0.1	25	763	360	25394	7.4	19881	5.8	3.17	0.20	14.6	43.7	726	343	24381	7.2	19034	5.6	3.05	0.19	13.6	40.7
		0.2	50	741	350	24765	7.3	19366	5.7	3.10	0.20	14.0	41.8	714	337	24078	7.1	18769	5.5	3.01	0.19	13.3	39.8
		0.3	75	718	339	24179	7.1	18857	5.5	3.02	0.19	13.4	40.1	701	331	23756	7.0	18485	5.4	2.97	0.19	13.0	38.9
	Medium	0.1	25	596	281	21277	6.2	16234	4.8	2.66	0.17	10.7	32.0	557	263	20383	6.0	15406	4.5	2.55	0.16	9.9	29.7
		0.2	50	582	275	20958	6.1	15938	4.7	2.62	0.17	10.4	31.2	539	254	19968	5.9	15021	4.4	2.50	0.16	9.6	28.6
		0.3	75	565	267	20567	6.0	15576	4.6	2.57	0.16	10.1	30.2	520	245	19525	5.7	14614	4.3	2.44	0.15	9.2	27.5
	Low	0.1	25	478	226	18518	5.4	13701	4.0	2.31	0.15	8.4	25.1	444	210	17666	5.2	12944	3.8	2.21	0.14	7.7	23.1
		0.2	50	459	217	18047	5.3	13280	3.9	2.26	0.14	8.0	24.0	420	198	17034	5.0	12396	3.6	2.13	0.13	7.2	21.7
		0.3	75	438	207	17511	5.1	12808	3.8	2.19	0.14	7.6	22.7	397	187	16402	4.8	11859	3.5	2.05	0.13	6.8	20.3
10	High	0.1	25	979	462	31803	9.3	25208	7.4	3.98	0.25	9.6	28.8	931	439	30669	9.0	24182	7.1	3.83	0.24	9.0	27.0
		0.2	50	920	434	30414	8.9	23949	7.0	3.80	0.24	8.9	26.6	935	441	30763	9.0	24267	7.1	3.85	0.24	9.1	27.2
		0.3	75	848	400	28779	8.4	22431	6.6	3.60	0.23	8.1	24.2	933	440	30716	9.0	24225	7.1	3.84	0.24	9.1	27.1
	Medium	0.1	25	699	330	25437	7.5	19292	5.7	3.18	0.20	6.5	19.4	582	275	22619	6.6	16734	4.9	2.83	0.18	5.3	15.8
		0.2	50	700	330	25459	7.5	19314	5.7	3.18	0.20	6.5	19.5	562	265	22101	6.5	16279	4.8	2.76	0.17	5.1	15.2
		0.3	75	676	319	24905	7.3	18799	5.5	3.11	0.20	6.3	18.7	578	273	22516	6.6	16643	4.9	2.81	0.18	5.2	15.7
	Low	0.1	25	454	214	19030	5.6	13702	4.0	2.38	0.15	3.9	11.7	494	233	20226	5.9	14685	4.3	2.53	0.16	4.3	13.0
		0.2	50	459	217	19184	5.6	13827	4.1	2.40	0.15	4.0	11.8	431	203	18337	5.4	13136	3.9	2.29	0.14	3.7	10.9
		0.3	75	464	219	19336	5.7	13951	4.1	2.42	0.15	4.0	12.0	385	182	16933	5.0	11993	3.5	2.12	0.13	3.2	9.5
12	High	0.1	25	1259	594	38021	11.1	31100	9.1	4.75	0.30	6.2	18.5	1119	528	34797	10.2	28155	8.3	4.35	0.27	5.3	15.8
		0.2	50	1216	574	37003	10.9	30187	8.9	4.63	0.29	5.9	17.6	1110	524	34598	10.1	27968	8.2	4.32	0.27	5.2	15.7
		0.3	75	1162	548	35761	10.5	29052	8.5	4.47	0.28	5.6	16.6	1086	512	34069	10.0	27471	8.1	4.26	0.27	5.1	15.2
	Medium	0.1	25	938	443	30881	9.1	24420	7.2	3.86	0.24	4.3	12.8	805	380	28000	8.2	21653	6.4	3.50	0.22	3.6	10.8
		0.2	50	906	428	30196	8.9	23760	7.0	3.77	0.24	4.1	12.3	770	363	27212	8.0	20912	6.1	3.40	0.21	3.4	10.2
		0.3	75	863	407	29270	8.6	22868	6.7	3.66	0.23	3.9	11.6	728	344	26243	7.7	20010	5.9	3.28	0.21	3.2	9.6
	Low	0.1	25	753	355	26823	7.9	20549	6.0	3.35	0.21	3.3	10.0	611	288	23355	6.9	17411	5.1	2.92	0.18	2.6	7.8
		0.2	50	715	337	25937	7.6	19728	5.8	3.24	0.20	3.1	9.4	563	266	22122	6.5	16321	4.8	2.77	0.17	2.4	7.1
		0.3	75	661	312	24619	7.2	18534	5.4	3.08	0.19	2.9	8.6	513	242	20801	6.1	15169	4.5	2.60	0.16	2.1	6.4
15	High	0.1	25	1490	703	46802	13.7	37534	11.0	5.85	0.37	9.8	29.2	1434	677	45301	13.3	36274	10.6	5.66	0.36	9.2	27.6
		0.2	50	1447	683	45645	13.4	36565	10.7	5.71	0.36	9.4	27.9	1408	664	44626	13.1	35696	10.5	5.58	0.35	9.0	26.9
		0.3	75	1394	658	44267	13.0	35387	10.4	5.53	0.35	8.9	26.5	1378	650	43861	12.9	35035	10.3	5.48	0.35	8.7	26.0
	Medium	0.1	25	1211	571	39852	11.7	31445	9.2	4.98	0.31	7.4	22.0	1125	531	37906	11.1	29635	8.7	4.74	0.30	6.7	20.1
		0.2	50	1178	556	39098	11.5	30748	9.0	4.89	0.31	7.1	21.3	1088	513	37082	10.9	28859	8.5	4.64	0.29	6.5	19.4
		0.3	75	1135	536	38129	11.2	29845	8.8	4.77	0.30	6.8	20.3	1049	495	36219	10.6	28042	8.2	4.53	0.29	6.2	18.6
	Low	0.1	25	940	444	33779	9.9	25749	7.6	4.22	0.27	5.5	16.4	869	410	32144	9.4	24230	7.1	4.02	0.25	5.0	15.0
		0.2	50	901	425	32887	9.6	24918	7.3	4.11	0.26	5.2	15.7	824	389	31069	9.1	23250	6.8	3.88	0.25	4.7	14.2
		0.3	75	858	405	31885	9.4	23991	7.0	3.99	0.25	5.0	14.8	779	368	29957	8.8	22253	6.5	3.74	0.24	4.4	13.3
18	High	0.1	25	1843	870	56918	16.7	46133	13.5	7.11	0.45	6.1	18.3	1870	882	57556	16.9	46708	13.7	7.19	0.45	6.3	18.7
		0.2	50	1713	808	53940	15.8	43398	12.7	6.74	0.43	5.6	16.7	1865	880	57436	16.8	46601	13.7	7.18	0.45	6.2	18.6
		0.3	75	1568	740	50746	14.9	40386	11.8	6.34	0.40	5.0	15.0	1842	869	56894	16.7	46112	13.5	7.11	0.45	6.1	18.3
	Medium	0.1	25	1406	663	47245	13.9	37036	10.9	5.91	0.37	4.4	13.2	1135	536	41198	12.1	31319	9.2	5.15	0.32	3.5	10.4
		0.2	50	1374	648	46553	13.6	36371	10.7	5.82	0.37	4.3	12.8	1132	534	41128	12.1	31254	9.2	5.14	0.32	3.5	10.3
		0.3	75	1301	614	44961	13.2	34846	10.2	5.62	0.35	4.0	12.1	1194	563	42564	12.5	32587	9.6	5.32	0.34	3.7	11.0
	Low	0.1	25	905	427	35431	10.4	26170	7.7	4.43	0.28	2.7	7.9	930	439	36086	10.6	26743	7.8	4.51	0.28	2.7	8.2
		0.2	50	929	438	36059	10.6	26720	7.8	4.51	0.28	2.7	8.2	823	388	33247	9.7	24274	7.1	4.16	0.26	2.4	7.1
		0.3	75	911	430	35589	10.4	26307	7.7	4.45	0.28	2.7	8.0	747	353	31154	9.1	22485	6.6	3.89	0.25	2.1	6.3
21	High	0.1	25	2221	1048	70296	20.6	56208	16.5	8.79	0.55	9.7	28.9	2473	1167	77811	22.8	62172	18.2	9.73	0.61	11.6	34.6
		0.2	50	2047	966	65785	19.3	52343	15.3	8.22	0.52	8.6	25.7	2393	1129	75170	22.0	60178	17.6	9.40	0.59	10.9	32.5
		0.3	75	1856	876	61198	17.9	48237	14.1	7.65	0.48	7.6	22.6	2293	1082	72278	21.2	57848	17.0	9.03	0.57	10.1	30.3
	Medium	0.1	25	2075	979	66487	19.5	52956	15.5	8.31	0.52	8.8	26.2	1898	896	62180	18.2	49131	14.4	7.77	0.49	7.8	23.2
		0.2	50	1938	915	63127	18.5	49986	14.7	7.89	0.50	8.0	23.9	1872	883	61571	18.1	48577	14.2	7.70	0.49	7.6	22.8
		0.3	75	1775	838	59340	17.4	46523	13.6	7.42	0.47	7.2	21.4	1829	863	60575	17.8	47664	14.0	7.57	0.48	7.4	22.2
	Low	0.1	25	1838	867	60783	17.8	47855	14.0	7.60	0.48	7.5	22.3	1407	664	51079	15.0	38776	11.4	6.38	0.40	5.5	16.4
		0.2	50	1783	841	59522	17.5	46692	13.7	7.44	0.47	7.2	21.5	1412	666	51193	15.0	38883	11.4	6.40	0.40	5.5	16.5
		0.3	75	1692	798	57471	16.8	44778	13.1	7.18	0.45	6.8	20.2	1410	665	51147	15.0	38840	11.4	6.39	0.40	5.5	16.4
24	High	0.1	25	2383	1125	79164	23.2	61958	18.2	9.90	0.62	12.8	38.3	2537	1197	84290	24.7	65843	19.3	10.54	0.66	14.3	42.8
		0.2	50	2209	1042	73935	21.7	57788	16.9	9.24	0.58	11.4	34.0	2480	1170	82366	24.1	64396	18.9	10.30	0.65	13.8	41.1
		0.3	75	2013	950	69087	20.3	53503	15.7	8.64	0.54	10.1	30.1	2397	1131	79620	23.3	62308	18.3	9.95	0.63	13.0	38.7
	Medium	0.1	25	2169	1024	72916	21.4	56903	16.7	9.11	0.58	11.1	33.1	1907	900	66588	19.5	51232	15.0	8.32	0.53	9.4	28.2
		0.2	50	2056	970	70121	20.6	54433	16.0	8.77	0.55	10.4	30.9	1893	893	66261	19.4	50934	14.9	8.28	0.52	9.4	28.0
		0.3	75	1901	897	66448	19.5	51104	15.0	8.31	0.52	9.4	28.1	1862	879	65540	19.2	50274	14.7	8.19	0.52	9.2	27.5
	Low	0.1	25	1853	874	65333	19.2	50083	14.7	8.17	0.52	9.1	27.3	1405	663	54840	16.1	40464	11.9	6.85	0.43	6.7	20.0
		0.2	50	1827	862	64733	19.0	49531	14.5	8.09	0.51	9.0	26.9	1410	665	54964	16.1	40574	11.9	6.87	0.43	6.7	20.1
		0.3	75	1758	830	63146	18.5	48067	14.1	7.89	0.50	8.6	25.7	1413	667	55038	16.1	40641	11.9	6.88	0.43	6.7	20.2

Table 17

Note :
Table 17 data is based on 76/63°F (24.4/17.2°C) air on-coil DBT/WBT and 42/58°F (5.5/14.4°C) entering/leaving water temperature.

Control System Description

Typical Wiring Diagram

Two pipe system with valve cycled cooling only.

Thermostat cycles an electric 2-way or 3-way motorized valve. The fan runs as per the setting of Fan mode (On-Auto) and Fan speed (Hi-Med-Low).

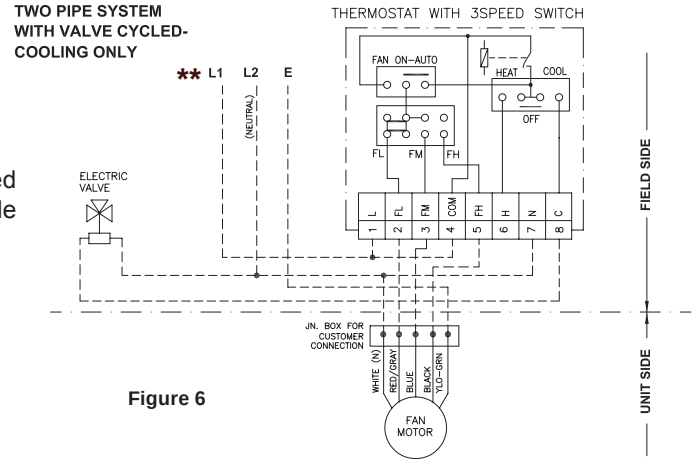


Figure 6

Two pipe system with total electric heat

The thermostat opens an electric 2-way or 3-way motorized valve on cooling coil or closes the electric heating circuit for heating depending on which is required to satisfy the thermostat setting. The thermostat with manual selector switch for Heat-Off-Cool, Fan On-Auto and Hi-Med-Low speed allows to set the switches at the desired positions.

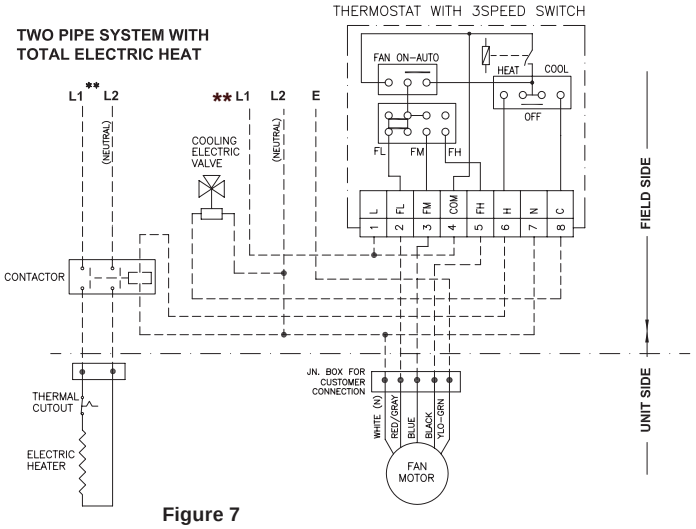


Figure 7

**** Typical wiring diagram with ON/OFF valves are shown. Wiring Diagram with modulating valves & suitable controllers are available upon request.***

***** Provide overcurrent, earth fault protection, short circuit and disconnect means as required by local & National Electric Code.***

Notes :

1. The max amps as tabulated (refer page 6, table 2) are max. total amps per unit at worst condition.
2. Full load inductive current (amps.) rating of 3-speed switch must be greater than the maximum amps.
3. Maximum allowable fuse rating for any unit size must not exceed 15 amps/250 volts AC.
4. A separate power feeder is required for units supplied with optional factory installed electric heaters.
5. The units are suitable for electrical system where voltage supplied to the terminals is not below or above 10% of the listed voltage.

Selection

Selection Considerations

In selecting Fan Coil Units for District Cooling for a specific application, the factors to be considered should include:

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

Once a particular model or models in the Fan Coil Units for District Cooling 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 total and sensible cooling or outlet temperatures 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 that required.
2. Apply correction factors to selected unit and find out the actual total and sensible cooling capacity.
3. Repeat step 1 if required parameter is not met with actual values obtained from initially selected unit.

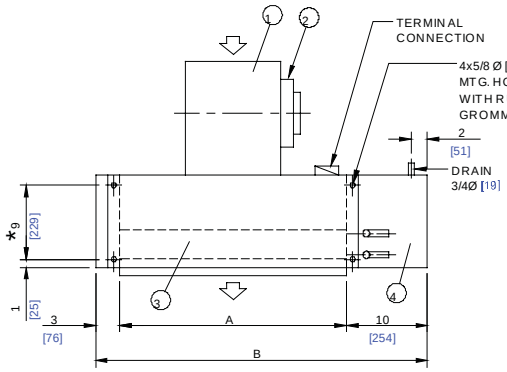
Machine Weight

Model	Number of Rows	Machine Weight	Unit Size							
			06	08	10	12	15	18	21	24
DCDC	3R	lbs	43	47	58	62	82	105	110	120
		kg	19.5	21.4	26.4	28.2	37.3	47.7	50	54.5
	4R	lbs	46	50	63	66	87	112	118	128
		kg	20.9	22.7	28.6	30	39.5	50.9	53.6	58.2
	6R	lbs	52	57	72	77	99	127	137	154
		kg	23.6	25.9	32.7	35	45	57.7	62.3	70
DCDP	3R	lbs	60	67	82	87	109	134	141	155
		kg	27.3	30.5	37.3	39.5	49.5	60.9	64.1	70.5
	4R	lbs	63	70	86	91	114	141	148	162
		kg	28.6	31.8	39.1	41.4	51.8	64.1	67.3	73.6
	6R	lbs	68	77	95	102	126	156	167	188
		kg	30.9	35	43.2	46.4	57.3	70.9	75.9	85.5
DCDF	3R	lbs	90	97	109	119	145	179	192	208
		kg	40.9	44.1	49.5	54.1	65.9	81.4	87.3	94.5
	4R	lbs	93	100	114	123	150	186	199	216
		kg	42.3	45.5	51.8	55.9	68.2	84.5	90.5	98.2
	6R	lbs	99	107	122	134	162	201	218	242
		kg	45	48.6	55.5	60.9	73.6	91.4	99.1	110
DCDE	3R	lbs	80	86	98	107	132	163	174	188
		kg	36.4	39.1	44.5	48.6	60	74.1	79.1	85.5
	4R	lbs	83	89	102	111	137	170	181	196
		kg	37.7	40.5	46.4	50.5	62.3	77.3	82.3	89.1
	6R	lbs	86	96	117	122	149	185	200	222
		kg	39.1	43.6	53.2	55.5	67.7	84.1	90.9	100.9

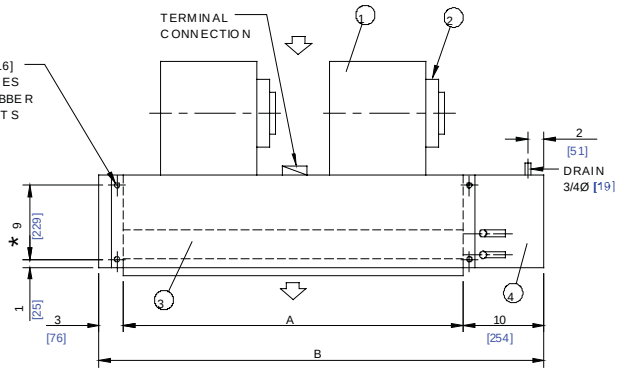
Table 18

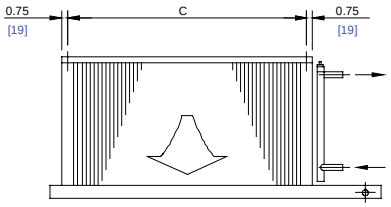
Dimensional Data DCDC Models

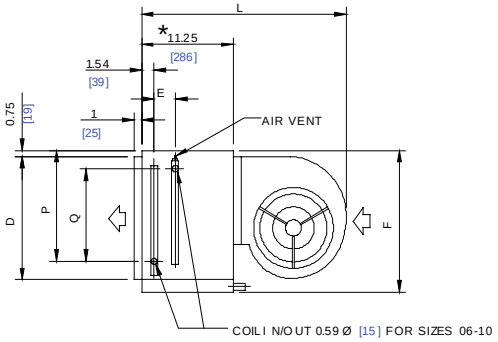
UNIT SIZE 06 -10



UNIT SIZE 12 - 24







LEFT HAND UNIT SHOWN
RIGHT HAND UNIT OPPOSITE

LEGEND
1. SUPPLY FAN
2. FAN MOTOR
3. COOLING COIL
4. DRAIN PAN

E = 1.50" [38] FOR 3R
2.24" [57] FOR 4R
3.74" [95] FOR 6R

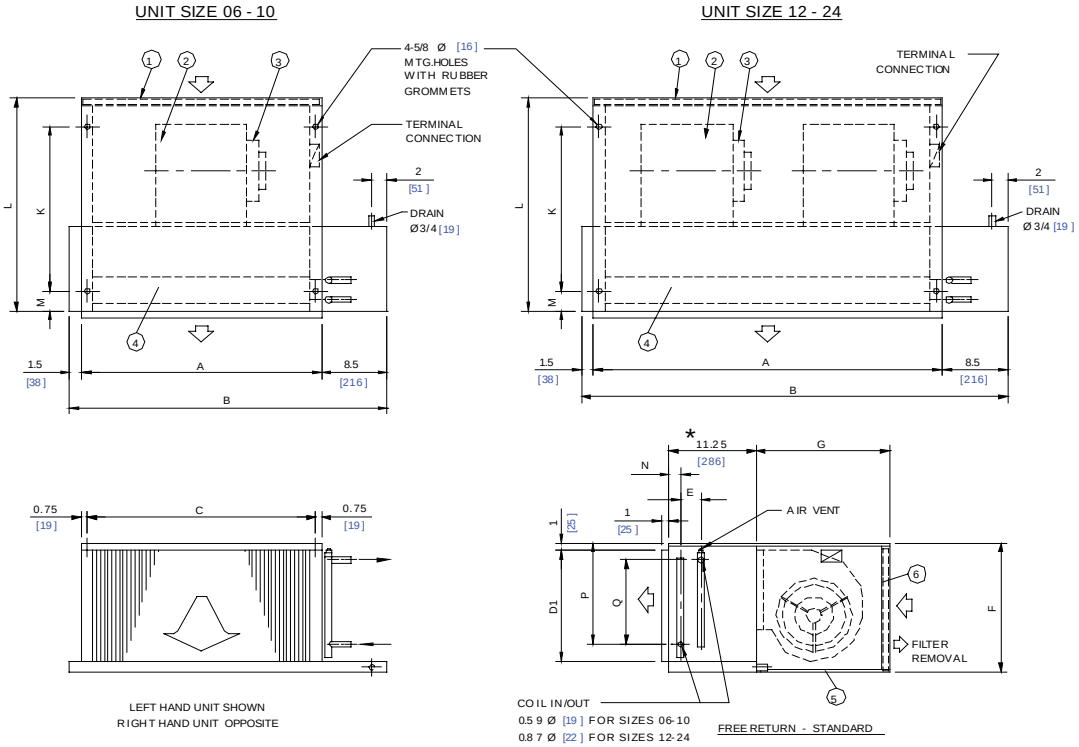
* ADD 1.75 [45] FOR 6 ROW
* ADD 1.75 [45] FOR 3 & 4 ROW WITH HEATER
* ADD 3.85 [98] FOR 6 ROW WITH HEATER

ALL DIMENSIONS ARE IN INCHES [MM]

DCDC UNIT SIZE	A		B		C		D		F		L		P		Q	
	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM
06	20	508	33	838	21.5	546	12	305	15	381	26.75	679	12	305	9.6	244
08	24	610	37	940	25.5	648	12	305	15	381	26.75	679	12	305	9.6	244
10	24	610	37	940	25.5	648	15	381	17.25	438	29	737	13.5	343	11.25	286
12	36	914	49	1245	37.5	952	12	305	15	381	26.75	679	12	305	9.6	244
15	42	1067	55	1397	43.5	1105	12	305	15	381	26.75	679	12	305	9.6	244
18	42	1067	55	1397	43.5	1105	15	381	17.25	438	29	737	13.5	343	11.25	286
21	48	1219	61	1549	49.5	1257	15	381	17.25	438	29	737	13.5	343	11.25	286
24	54	1372	67	1702	55.5	1410	15	381	17.25	438	29	737	13.5	343	11.25	286

Table 19

Dimensional Data DCDP Models



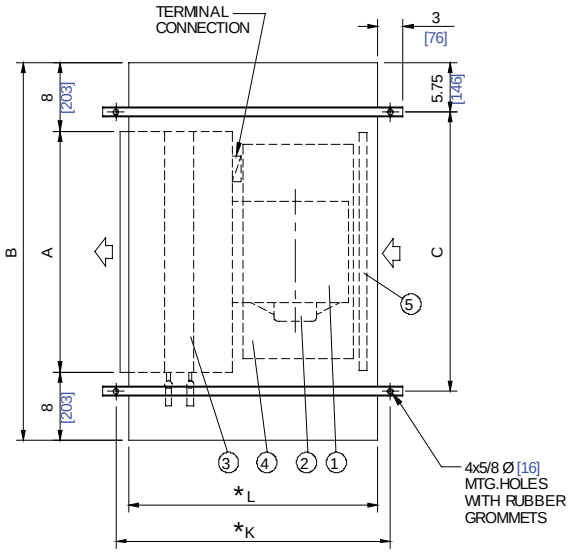
ALL DIMENSIONS ARE IN INCHES [MM]

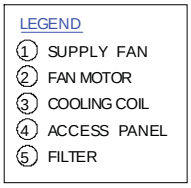
DCDP UNIT MODEL	A		B		C		D		D1		F		G		P		Q	
	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM
06	23	584	33	838	21.5	546	12	305	12.48	317	15	381	16.42	417	12	305	9.6	244
08	27	686	37	940	25.5	648	12	305	12.48	317	15	381	16.42	417	12	305	9.6	244
10	27	686	37	940	25.5	648	14.5	368	14.84	377	17.32	440	18.67	474	13.5	343	11.25	286
12	39	991	49	1245	37.5	952	12	305	12.48	317	15	381	16.42	417	12	305	9.6	244
15	45	1143	55	1397	43.5	1105	12	305	12.48	317	15	381	16.42	417	12	305	9.6	244
18	45	1143	55	1397	43.5	1105	14.5	368	14.84	377	17.32	440	18.67	474	13.5	343	11.25	286
21	51	1295	61	1549	49.5	1257	14.5	368	14.84	377	17.32	440	18.67	474	13.5	343	11.25	286
24	57	1448	67	1702	55.5	1410	14.5	368	14.84	377	17.32	440	18.67	474	13.5	343	11.25	286

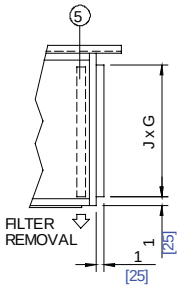
DCDP UNIT MODEL	DIMENSIONS FOR	K		L		M		N	
		INCH	MM	INCH	MM	INCH	MM	INCH	MM
06 08 12 15	3R / 4R	22	559	27.68	703	2.64	67	1.54	39
	3R / 4R + HEATER	21.78	553	29.41	747	4.61	117	3.50	89
	6R	23.74	603	29.41	747	2.64	67	1.54	39
	6R + HEATER	23.86	606	31.50	800	4.61	117	3.50	89
10 18 21 24	3R / 4R	26.12	663	29.93	760	0.79	20	1.54	39
	3R / 4R + HEATER	26.82	681	31.66	804	1.82	46	2.56	65
	6R	27.84	707	31.66	804	0.79	20	1.54	39
	6R + HEATER	27.84	707	33.75	857	2.88	73	3.63	92

Table 20

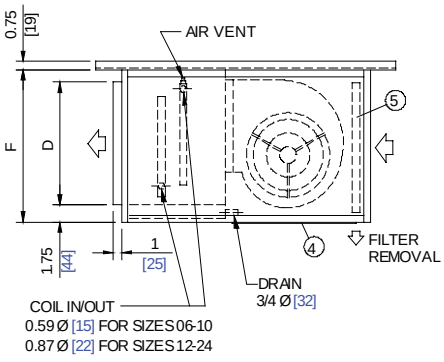
Dimensional Data DCDE Models



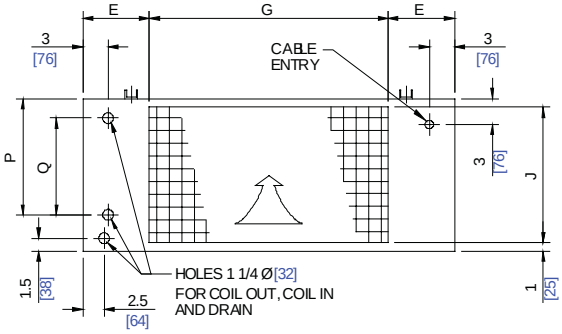




REAR RETURN-OPTIONAL
(DUCTED)



FREE RETURN-STANDARD



LEFT HAND UNIT SHOWN
RIGHT HAND UNIT OPPOSITE

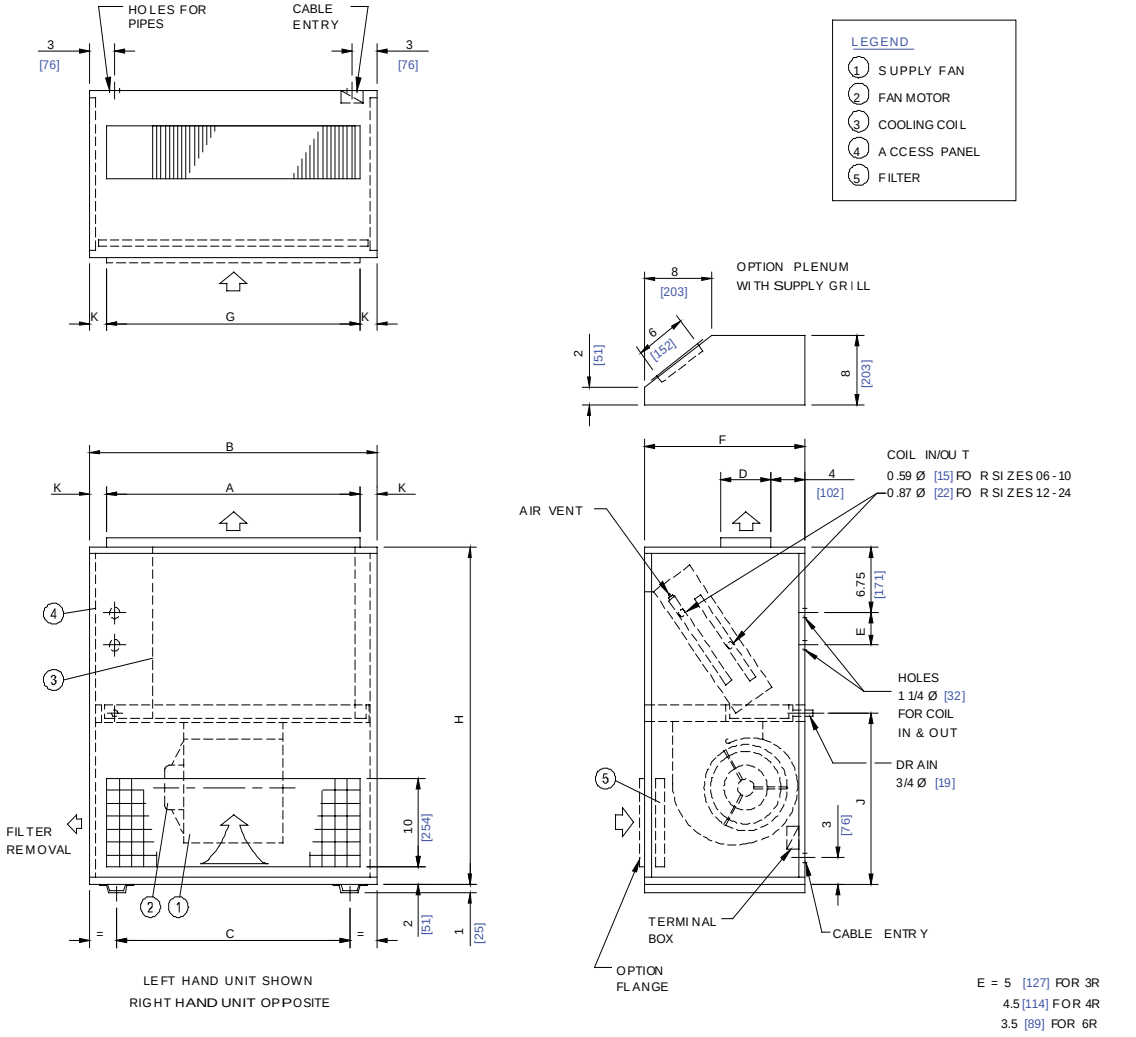
* ADD 1.75 [45] FOR 6 ROW

ALL DIMENSIONS ARE IN INCHES [MM]

DCDE UNIT SIZE	A		B		C		D		E		F		G		J		*K		*L		P		Q	
	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM
06	20	508	36	914	24.5	622	12	305	7.5	190	15	381	21	533	12	305	31.75	806	28.75	730	12	305	9.6	244
08	24	610	40	1016	28.5	724	12	305	7.5	190	15	381	25	635	12	305	31.75	806	28.75	730	12	305	9.6	244
10	24	610	40	1016	28.5	724	15	381	7.5	190	18.5	470	25	635	16	406	34	864	31	787	13.5	343	11.25	286
12	36	914	52	1321	40.5	1029	12	305	7.5	190	15	381	37	940	12	305	31.75	806	28.75	730	12	305	9.6	244
15	42	1067	58	1473	46.5	1181	12	305	7.5	190	15	381	43	1092	12	305	31.75	806	28.75	730	12	305	9.6	244
18	42	1067	58	1473	46.5	1181	15	381	7.5	190	18.5	470	43	1092	16	406	34	864	31	787	13.5	343	11.25	286
21	48	1219	64	1626	52.5	1333	15	381	7.5	190	18.5	470	49	1245	16	406	34	864	31	787	13.5	343	11.25	286
24	54	1372	70	1778	58.5	1486	15	381	7.5	190	18.5	470	55	1397	16	406	34	864	31	787	13.5	343	11.25	286

Table 21

Dimensional Data DCDF Models



ALL DIMENSIONS ARE IN INCHES [MM]

DCDF UNIT SIZE	A		B		C		D		F		G		H		J		K	
	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM
06	26	660	30	762	23.5	597	6	152	18	457	26	660	30	762	16	406	2	51
08	30	762	34	864	27.5	698	6	152	18	457	30	762	30	762	16	406	2	51
10	30	762	34	864	27.5	698	6	152	21	533	30	762	38.5	978	19.5	495	2	51
12	42	1067	46	1168	39.5	1003	6	152	18	457	42	1067	30	762	16	406	2	51
15	48	1219	52	1321	45.5	1156	6	152	18	457	48	1219	30	762	16	406	2	51
18	48	1219	52	1321	45.5	1156	6	152	21	533	48	1219	38.5	978	19.5	495	2	51
21	54	1372	58	1473	51.5	1308	6	152	21	533	54	1372	38.5	978	19.5	495	2	51
24	60	1524	64	1626	57.5	1460	6	152	21	533	60	1524	38.5	978	19.5	495	2	51

Table 22

GUIDE SPECIFICATIONS

Fan Coil Units for District Cooling type and size shall be as indicated on the equipment schedule. Units shall be blow-thru arrangement. Units configurations shall be horizontal (suitable for ceiling suspended) or vertical (floor mounted), suitable for concealed or exposed applications with or without inlet plenum. Units shall be able to handle external static pressure up to 0.4 in W.G..Units shall be installed at site as per Installation, Operation & Maintenance Manual.

Basic Unit and Cabinet

Fan Coil Units for District Cooling shall include casing, fan/s, motor/s, coil, drain pan, inlet plenum and air filter (with exception of DCDC units for 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 ½" thick fiberglass insulation.

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

Fan

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 0.4" 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/50/60Hz, 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 5/16" O.D. 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, shall be provided as indicated on the equipment schedule. All 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 sweat type. Optional MPT or FPT connections shall be provided if so specified. Coil shall be rated in accordance with ARI - 410 and tested by compressed air under water to the pressure of 300 psig. Unit shall be equipped with a maximum total 6 - row coil and electric heater battery.

Drain Pan

Drain pan shall be constructed from 1 mm thick zinc coated steel sheets, shall be painted, irrespective of the type of finish for unit casing, and insulated from outside with 4 mm 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 plane and drain connection shall be ¾" O.D. sweat copper pipe. Auxiliary drip lip shall be supplied loose for field installation if so specified.

Filter

Air filter shall be 1" thick washable aluminum media with Average dust arrestance 54 % based on ASHRAE test # 52/76. 1" thick washable or disposable synthetic media shall be provided if so specified. Air filter is standard for all SKM Fan Coil Units for District Cooling with exception of the DCDC units. Filter removal shall be as shown on attached drawings.

Options

Following shall be provided if so specified :

- Single deflection return air grill and double deflection supply air grill for exposed units.
- Discharge plenum for free standing units (Floor mounted units).
- Double skin drain pan.
- Double skin casing for locations having a high temperature difference between supply air temperature and surrounding environment of the unit.

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 sheet 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 wounded around tabular 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 factory installed or field installed by customer if so specified. As indicated on the equipment schedule, Valve Packages shall consist of various combinations of gate or stop valves, double regulating valves, 2-way motorized valves and 3-way motorized valves.

Thermostat

Thermostat shall be field installed by customer, wall mounted and decorative type. Cooling and / or heating thermostat with 3-speed switch, with H/C change over shall be provided as indicated on the equipment schedule.

NOTES: