The Whalen Company

PRODUCT DESIGN GUIDE

Vertical Stack Fan Coil Fixed Chassis

January 2021

Vertical Stack Fan Coil with Fixed Chassis

Category	Position	Option Digit and Description
Product Family	1	W = Whalen Fan Coil
Chassis Design	2	F = Fixed Chassis
Return Air Opening	3	C = 3 row coil D = 4 row coil E = 50/50 split coil
Unit Capacity	4, 5, 6	300 = 300 CFM (0.75-ton) 400 = 400 CFM (1.0-ton) 600 = 600 CFM (1.5-ton) 800 = 800 CFM (2.0-ton)
System Configuration	7, 8	2P = 2-pipe Heating & Cooling 4P = 4-pipe Heating & Cooling
Unit Voltage	9, 10	ET = Total Electric Heating EA = Auxuliary Electric Heating

Chassis Nomenclature

Category	Position	Option Digit and Description
Product Family	1	B = Whalen Fan Coil Chassis
Unit Capacity	2, 3	03 = 300 CFM (0.75-ton) 04 = 400 CFM (1.0-ton) 06 = 600 CFM (1.5-ton) 08 = 800 CFM (2.0-ton) 10 = 1000 CFM (2.5-ton) 12 = 1200 CFM (3.0-ton)
System Configuration	4, 5	2P = 2-pipe Heating & Cooling 4P = 4-pipe Heating & Cooling ET = Total Electric Heating EA = Auxuliary Electric Heating CO = Cooling Only HO = Heating Only
Coil Package Configuration	6, 7	20 = 2 Row Cooling Only 30 = 3 Row Cooling Only 31 = 3 Row Cooling & 1 Row Heating 32 = 3 Row Cooling & 2 Row Heating 40 = 4 Row Cooling Only 41 = 4 Row Cooling & 1 Row Heating 42 = 4 Row Cooling & 2 Row Heating 50 = 5 Row Cooling Only 51 = 5 Row Cooling & 1 Row Heating SP = 4 Row Split “50/50” Coil
Valve Actuator Opteation	8	S = Two Position F = Floating Point P = Proportional X = None
Valve Actuator Voltage	9	L = 24 VAC A = 115 VAC B = 208-230 VAC D = 265 VAC X = None
Valve Body Configuration	10, 11	20 = 2-pipe: 2-way 30 = 2-pipe: 3-way 22 = 4-pipe: Cooling 2-way; Heating 2-way 32 = 4-pipe: Cooling 3-way; Heating 2-way 23 = 4-pipe: Cooling 2-way; Heating 3-way 33 = 4-pipe: Cooling 3-way; Heating 3-way XX = None
Flow Control: 2-pipe	12, 13, 14, 15	X = None M = Manual Balancing A = Automatic Balancing P = Automatic Balancing w/ PT Ports
Flow Control: 4-pipe (if applicable)	16, 17, 18, 19	X = None M = Manual Balancing A = Automatic Balancing P = Automatic Balancing w/ PT Ports
Additional Options	20, 21	STR = Strainer STB = Strainer with Blowdown

Table 1: AHRI Performance Ratings – AHRI Standard 440

Model	CFM	GPM	Cooling Capacity			
			Coil Rows	EWT (ºF)	TC (Btu/hr)	SC (Btu/hr)
WFC300	310	1.95	3	45	9,300	6,300
WFC400	400	2.7	3	45	12,800	9,200
WFC600	600	3.9	3	45	18,800	13,600
WFC800	800	5.0	3	45	23,300	17,100

Cooling based upon 80°F DB, 67°F WB entering air temperature

Model	CFM	GPM	Cooling Capacity			
			Coil Rows	EWT (ºF)	TC (Btu/hr)	SC (Btu/hr)
WFD300	310	2.3	4	45	11,500	7,100
WFD400	390	3.1	4	45	15,200	9,800
WFD600	590	4.7	4	45	23,000	15,000
WFD800	790	5.8	4	45	27,500	19,300

Cooling based upon 80°F DB, 67°F WB entering air temperature

Features & Benefits

With The Whalen Company's vertical stack fan coil units, you can choose from multiple system configurations to meet your application.

2-pipe Fan Coil The simplest of configurations, the 2-pipe fan cycle units have one (1) supply and one (1) return riser. The supply riser provides either cold or hot water to the unit depending on the time of year. When the occupied space needs heating or cooling, the fan cycles on and off to provide comfort conditioning to the occupied space.

2-pipe Auxiliary Electric For applications where a small amount of supplemental heat is required, an auxiliary electric heater is added. When the occupied space needs cooling, the heating element is disengaged and the unit provides comfort cooling to the space.

2-pipe Total Electric For applications where space heating is accomplished solely via an electric heating element, the heating element is sized based on the particular building requirement. When the occupied space needs cooling, the heating element is disengaged and the unit provides comfort cooling to the space.

4-pipe Heating & Cooling Four-pipe heating & cooling units have two (2) supply risers and two (2) return risers. This allows either hot or cold water to enter the unit at any given time. In applications where it is necessary to heat and cool different areas of a building at the same time, due to differences in internal heat loss or heat gains, the four-pipe riser fan coil unit is the best option.

Vertical Stack Fan Coil Options

Constant Torque EC Motor Constant torque ECMs provide 5 available motor speed settings and will maintain a constant motor torque as external static pressure in the system increases. As the system static pressure increases, reduction in fan airflow with a constant torque ECM is minor.

PSC Are standard on all units. The supplied motor is available in single or 3-speed configurations.

Supply Air Grille Diffusers are constructed of aluminum with a mill finish or an optional painted finish, available in three variations: single deflection, double deflection, double deflection with opposed blade damper. Damper blades are positioned vertically and adjust easily for directing the unit discharge air.

Unfused disconnect Units are available with an optional non-fused disconnect switch, located on the unit front behind the return air panel. The disconnect switch is used to break power to the unit for safety and ease of service.

Circuit breaker Units are available with an optional circuit breaker. The circuit breaker is used to break power to the unit for safety and ease of service.

T-stat extension Low voltage wire harness ranging from 5 to 20 foot ending with 9-Pin Molex quick connector. The extension can exit the cabinet on the top or either side.

Condensate overflow The switch is designed to sense when condensate water levels in the drain pan become excessively high. When high condensate water levels are detected during cooling, the unit is shut down to prevent additional condensation entering the drain pan.

Condensate pump The internal condensate pump allows the unit to be located virtually wherever desired. The internal condensate pump serves as an effective means for disposing of condensate generated during cooling operation. A condensate pump should be designed and installed at the unit to pump condensate to a building drain.

Vibration isolation pad Vibration isolator pads dampen vibration from the fan motor. The ½" thick neoprene isolation pads are attached to the bottom of the cabinet at the factory eliminating any additional field labor.

Hot Water Coil Available on 4-pipe units only, these coils are available to provide heating in a 4-pipe system configuration.

3-way valve Available on 2-pipe and 4-pipe heating and cooling coils, these 1/2" valves are normally closed

to the coil as standard and will isolate the coil during a loss of power. Normally open configurations are simply achieved by turning the valve around. Upon response to a signal from the controller, the valve will be either fully open allowing full flow to the coil or fully closed to the coil diverting full flow to the bypass line.

Automatic flow control The automatic flow control device includes a ball valve cast in the valve body and is located on the return water pipe. The flow control valve consists of a stainless steel/brass flow cartridge and a contoured orifice plate. As the pressure drop increases, the flow cartridge will move into the contoured orifice plate to decrease the flow. This flexing action provides a constant flow, independent of pressure (2-80 psi), makes it difficult to clog and resistant to cavitation damage. This valve sets flow through the coil without any action required by a system balancer.

Manual flow control A manual flow control valve, acts as both a flow setting device and a stop valve, taking the place of a ball valve. This valve allows water flow through the unit and can be set quickly and accurately.

O.A. motorized OA damper The control can be configured to operate as a ventilation damper in a 2-position ventilation mode to provide the minimum ventilation requirements during occupied periods. This control operation still utilizes the on/off damper actuator.

Filter Units come standard with a MERV 4 one-inch glass fiber throwaway filter. High efficiency MERV 8, MERV 11 and MERV 13 throw away filters as well as a washable aluminum mesh filter are also available as an option.

Air vents Optional air vents are available for installation in each riser to vent incidental air trapped within the riser. Air vents are available in various configurations including: manual, manual piped to drain, manual piped to drain with a ball valve, or automatic.

Finished Cabinet Available for applications where drywall is not used to enclose the unit, finished cabinets, top skirts, & bottom skirts are available to conceal the unit piping and provide a finished appearance. Panels can be field painted to match the interior room color.

Table 2: Vertical Stack Fan Coil with Fixed Chassis Thermostats for Standalone Operation

				
Feature		**SC700V or SC700LV**	**Non-Programmable Digital (Honeywell TB6575 & TB8575)**	**Programmable Digital (PECO T180 & Honeywell TB7100)**
Mounting Style	Electrical Box		•	•
	Drywall	•	•	•
Display	Backlit LCD		•	
	Temperature & Setpoint		•	•
	Operating Mode		•	•
	Fan Status		•	•
	Remote Setback			
Operation	Non-programmable	•	•	•
	Programmable			•
	Sensing	Local or Remote	Local or Remote	Local or Remote
	Setpoint Range	50°F to 85°F	50°F to 90°F	50°F to 90°F
	Changeover	Automatic	Manual or Automatic	Manual or Automatic
Operating Modes	System Settings	On - Off	On - Off	On - Off
	Fan Settings	Off - Lo - Med - Hi	Off - Lo - Med - Hi	Off - Lo - Med - Hi
	Fan Speeds	3	3	3
Stages	Heating	1	1	1
	Cooling	1	1	1
Voltage	Operating Voltage	24 120 - 277 VAC	24 or 110 - 277 VAC	18 - 30 VAC
Application	System Type	2-Pipe Fan Coil or 4-Pipe Fan Coil	2 / 4-pipe Fan Coil	2 / 4-pipe Fan Coil

Multi-Protocol DDC Controller

The Whalen Company water source heat pumps are available with a factory installed multi-protocol communication module that is designed to communicate with a building automation system (BAS). The I/O Zone 583 DDC controller is designed to allow the integration of Whalen water source heat pump equipment into DDC systems. The I/O Zone 583 DDC controller has the ability to communicate through a choice of three widely used protocols: BACnet MS/TP, Johnson Controls N2, and Modbus. The protocol of choice for the particular system is selected by simply configuring DIP switches on the DDC control. This flexibility allows one controller to be used in a multitude of buildings which use any of these three common protocols. The control serves as a node of information processing between the Whalen heat pump and the DDC network. The I/O Zone 583 DDC controller is available for applications with modulating valves / fans requiring 0-10 VDC output.

Features & Benefits

- Multi-Protocol communications provides DDC system flexibility.
- Supports native BACnet MS/TP communications – the ASHRAE standard protocol for interoperability.
- Supports Johnson Controls N2 communications – for integration into Johnson Controls Metasys DDC systems.
- Supports Modbus communications for integration into Modbus DDC networks.
- Four baud rate levels offer flexible communications speeds of 9600, 19.2k, 38.4k, or 76.8k baud. Enables building operators to easily upgrade firmware in the future.
- Removable field wiring connectors for ease of field service.
- Five (5) digital outputs.
- Six (6) inputs. Hardware specs change slightly for I/O Zone 583. Main differences are number of Inputs and Outputs.
- Stand-alone or BAS integrated operational modes.

***Hardware Specification** (Hardware specs change slightly for I/O Zone 583. Main differences are number of Inputs and Outputs.)*

Power:	24Vac +-10%, 50 or 60Hz, 18VA power consumption, 26Vdc, Single Class 2 source only, 100 VA or less.
Physical size:	5-1/16" [129mm] width x 5-11/16" [144mm] height x 1-1/2" [38mm] (minimum panel depth).
Housing material:	Rugged GE C2905HG Cycoloy plastic housing – complies with UL 94 V-O.
Environmental:	0 to 130 degrees F, 10% to 95% non-condensing.
Protection:	Built-in surge transient protection circuitry. Module protected by Internal solid state Polyswitches on incoming power and network connections.
Digital Outputs:	5 digital outputs, relay contacts rated at 1 A resistive @ 24 Vac, configured as dry contact, normally open.
Universal inputs:	6 universal inputs. Inputs 1-6 configurable as thermistor or dry contact; inputs 1 and 2 also configurable as 0-5 Vdc type inputs.
Communication ports:	*Port 1:* Jumper configurable for ARCNET or EIA-485 communication. In ARCNET mode, the port speaks BACnet (at 156k bps). In EIA-485 mode, the communication protocol and baud rate desired are DIP switch selectable between BACnet MS/TP, Modbus RTU, or N2. *Rnet port:* Interface with a BACview5, BACview6 , RS sensors, or local laptop.
Optional card port:	LonWorks Option Card for connection to Free Topology LON networks (TP/FT-10 Channel).

Table 3: Physical Data Table

Component	Models					
	WFX-300	WFX-400	WFX-600	WFX-800	WFX-1000	WFX-1200
Nominal Tonnage	**0.75**	**1**	**1.5**	**2**	**2.5**	**3**
3-ROW COOLING PERFORMANCE						
Rated Airflow (CFM)	310	400	600	800	1000	1200
Entering Air Temp DB / WB (°F)	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67
Total Cooling (MBTUH)	9.3	12.8	18.8	23.3	36	41.6
Sensible Cooling (MBTUH)	6.3	9.2	13.6	17.1	24.7	29.5
Entering Water Temp (°F)	45	45	45	45	45	45
Temp Rise (°F)	10	10	10	10	10	10
Pressure Drop (ft. wg.)	6.6	12.6	23.3	22.5	12.9	13.7
3-ROW HEATING PERFORMANCE						
Heating Capacity (MBTUH)	12.5	15.4	24.7	27.4	37.7	45.9
Entering Air Temp DB (°F)	70	70	70	70	70	70
Entering Water Temp (°F)	120	120	120	120	120	120
Temp Rise (°F)	15	15	15	15	15	15
Pressure Drop (ft. wg.)	3.7	7.6	12.3	6.4	6.3	7.4
4-ROW COOLING PERFORMANCE						
Entering Air Temp DB / WB (°F)	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67
Total Cooling (MBTUH)	11.5	15.2	23.0	27.5	40.0	49.0
Sensible Cooling (MBTUH)	7.1	9.8	15.0	19.3	26.7	33.5
Entering Water Temp (°F)	45	45	45	45	45	45
Temp Rise (°F)	10	10	10	10	10	10
Pressure Drop (ft. wg.)	17	13.2	14.6	30	15.0	17.6
4-ROW HEATING PERFORMANCE						
Heating Capacity (MBTUH)	12.9	16.1	24.2	31.5	41.4	50.5
Entering Air Temp DB (°F)	70	70	70	70	70	70
Entering Water Temp (°F)	120	120	120	120	120	120
Temp Rise (°F)	15	15	15	15	15	15
Pressure Drop (ft. wg.)	8.3	4.4	5.1	8.4	7.2	8.3
DIMENSIONS (inches)	2P/4P	2P/4P	2P/4P	2P/4P		
Width (in.)	16	16	18	18	24	24
Depth (in.)	16/18	16/18	16/18	16/18	24	24
Height (in.)	88	88	88	88	88	88
OPERATING WEIGHT (lbs.)						
3-Row Coil	133	133	153	153	193	193
4-Row Coil	138	138	158	158	198	198
SHIPPING WEIGHT (lbs.)						
3-Row Coil	145	145	165	165	205	205
4-Row Coil	150	150	170	170	210	210
WATER COIL DATA						
Cooling Coil (rows)	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4
Heating Coil (rows)	0, 1	0, 1	0, 1	0, 1	0, 1	0, 1
SUPPLY FAN DATA						
Quantity	1	1	1	1	1	1
Fan Size (D x W)	7.62 x 5	8 x 5	8.5 x 7	9 x 8	9 x 6	10 x 6
Fan type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Maximum E.S.P.						
PSC Motor	0.25	0.35	0.35	0.40	0.40	0.50
ECM Motor	0.25	0.40	0.45	0.50	0.70	0.70
PSC MOTOR HP						
Voltage - 115/60/1	1/20	1/12	1/12	1/6	1/6	1/3
Voltage - 208-230/60/1	1/15	1/15	1/12	1/5	1/5	1/2
Voltage - 265/60/1	1/20	1/15	1/10	1/7	1/5	0.42
Const Torque Type D - ECM MOTOR HP	Type G	Type G	Type G	Type D	Type D	Type D
Voltage - 115/60/1	1/4	1/4	1/4	1/2	1/2	1/2
Voltage - 208-230/60/1	1/4	1/4	1/4	1/2	1/2	1/2
Voltage - 265/60/1	1/4	1/4	1/4	1/2	1/2	1/2
Type E - ECM MOTOR HP						
Voltage - 115/60/1	1/3	1/3	1/3	1/2	1/2	1/2
Voltage - 208-230/60/1	1/3	1/3	1/3	1/2	1/2	1/2
Voltage - 265/60/1	1/2	1/2	1/2	1/2	1/2	1/2
RETURN AIR PANEL						
2-Pipe System (W x H)	14 x 32	14 x 36	14 x 40	14 x 44	20 x 48	20 x 56
4-Pipe System (W x H)	14 x 36	14 x 40	14 x 44	14 x 48	20 x 48	20 x 56
SUPPLY GRILLE						
1 Grille (W x H)	14 x 8	14 x 10	14 x 14	14 x 18	Not Recommended	
2 Grille (W x H)	14 x 6	14 x 6	14 x 8	14 x 10	Not Recommended	
3 Grille (W x H)	14 x 6	14 x 6	14 x 8	14 x 10	Not Recommended	
Top Duct (W x H)	12 x 10	12 x 12	14 x 14	16 x 14	16 x 16	16 x 16
FILTERS						
Size (in.)	13.5 x 15.5 x 1	13.5 x 19.5 x 1	15.5 x 21.5 x 1	15.5 x 25.5 x 1	20.5 x 29.5 x 1	20.5 x 37.5 x 1
Quantity	1	1	1	1	1	1

Standard Range Units:

Units are designed to start in an ambient of 50°F (10°C) with entering air at 50°F (10°C), with entering water at 50°F (10°C), with nominal air flow and water flow (3.0 GPM/Ton), for initial start-up in heating and cooling mode.

Note: This is not a normal or continuous operating condition. It is assumed that such start-up is for the purpose of bringing the building space up to occupancy temperature and operating for extended periods of time.

Environment

This equipment is designed for indoor installation only. Unconditioned locations such as attics, garages, etc., generally will not provide sufficient protection against extremes in temperature and/or humidity, and equipment performance, reliability, and service life may be adversely affected.

Power supply

A voltage variation of +/-10% of nameplate voltage is acceptable.

Table 4: Unit Voltage Limitations

Voltage	Minimum	Maximum
208/230-60-1	197	252
265-60-1	239	292

Table 5: WF Continuous Operating Limits

Mode	Entering Fluid °F			
	2-Pipe		4-Pipe	
	Min	Max	Min	Max
Cooling	40	50	40	50
Heating	120	150	130	180

Table 6: WF Start-up Operating Limits

Mode	Entering Fluid °F			
	2-Pipe		4-Pipe	
	Min	Max	Min	Max
Cooling	40	65	40	65
Heating	85	150	85	180

Cooling Performance

Size (Tons)	EWT (°F)	Delta T (°F)	Cooling Performance - 80°F / 67°F				Cooling Performance - 78°F / 65°F				Cooling Performance - 75°F / 63°F			
			Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)
WFC-300	42	10	11.5	7.7	2.3	6.9	10.0	7.3	2.0	5.3	8.9	6.7	1.8	4.2
		12	10.6	7.3	1.8	4.1	9.2	6.9	1.5	3.1	8.0	6.3	1.3	2.3
		14	9.7	7.0	1.4	2.5	8.3	6.5	1.2	1.9	7.2	5.9	1.0	1.4
		16	8.8	6.6	1.1	1.6	7.5	6.2	0.9	1.2	6.4	5.6	0.8	0.8
	43	10	10.7	7.4	2.1	6.1	9.3	7.0	1.9	4.6	8.2	6.4	1.6	3.5
		12	9.8	7.0	1.6	3.6	8.5	6.6	1.4	2.6	7.3	6.0	1.2	2.0
		14	9.0	6.7	1.3	2.2	7.6	6.3	1.1	1.6	6.5	5.7	0.9	1.1
		16	8.1	6.4	1.0	1.4	6.8	6.0	0.9	1.0	5.7	5.4	0.7	0.7
	44	10	10.0	7.1	2.0	5.3	8.6	6.7	1.7	15.6	7.5	6.1	1.5	3.0
		12	9.1	6.7	1.5	3.1	7.8	6.3	1.3	9.7	6.6	5.7	1.1	1.6
		14	8.3	6.4	1.2	1.9	7.0	6.0	1.0	5.8	5.9	5.4	0.8	0.9
		16	7.5	6.1	0.9	1.2	6.2	5.7	0.8	3.5	5.1	5.1	0.6	0.5
	45	10	9.3	6.8	1.9	4.6	8.0	6.4	1.6	3.3	6.8	5.8	1.4	2.5
		12	8.4	6.5	1.4	2.6	7.1	6.1	1.2	1.9	6.0	5.5	1.0	1.3
		14	7.6	6.2	1.1	1.6	6.3	5.8	0.9	1.1	5.2	5.2	0.8	0.7
		16	6.8	5.9	0.9	1.0	5.6	5.5	0.7	0.7	4.6	4.6	0.6	0.4
	46	10	8.6	6.5	1.7	3.9	7.3	6.2	1.5	2.8	6.2	5.5	1.2	2.0
		12	7.8	6.2	1.3	2.2	6.5	5.8	1.1	1.5	5.4	5.2	0.9	1.1
		14	7.0	5.9	1.0	1.3	5.7	5.6	0.8	0.9	4.7	4.7	0.7	0.6
		16	6.2	5.6	0.8	0.8	5.0	5.0	0.6	0.5	4.0	4.0	0.5	0.3
	47	10	7.9	6.3	1.6	3.3	6.7	5.9	1.3	2.3	5.5	5.3	1.1	1.6
		12	7.1	6.0	1.2	1.9	5.9	5.6	1.0	1.3	4.8	4.8	0.8	0.8
		14	6.3	5.7	0.9	1.1	5.2	5.2	0.7	0.7	4.1	4.1	0.6	0.5
		16	5.6	5.4	0.7	0.7	4.5	4.5	0.6	0.4	3.5	3.5	0.4	0.3
	48	10	7.3	6.0	1.5	2.8	6.0	5.7	1.2	1.9	4.9	4.9	1.0	1.3
		12	6.5	5.7	1.1	1.5	5.3	5.3	0.9	1.0	4.2	4.2	0.7	0.7
		14	5.7	5.5	0.8	0.9	4.6	4.6	0.7	0.6	3.6	3.6	0.5	0.4
		16	5.1	5.1	0.6	0.5	4.0	4.0	0.5	0.3	3.1	3.1	0.4	0.2

Heating Performance - 2-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFC-300	120	15	14.1	1.9	4.7	12.5	1.7	3.7	10.9	1.4	2.8
		20	12.9	1.3	2.2	11.3	1.1	1.7	9.7	1.0	1.2
		25	11.7	0.9	1.2	10.1	0.8	0.9	8.6	0.7	0.6
		30	10.6	0.7	0.7	9.1	0.6	0.5	7.6	0.5	0.3
	130	15	17.4	2.3	7.1	15.7	2.1	5.8	14.1	1.9	4.7
		20	16.1	1.6	3.4	14.5	1.4	2.8	12.9	1.3	2.2
		25	14.9	1.2	1.9	13.3	1.1	1.5	11.7	0.9	1.2
		30	13.7	0.9	1.1	12.2	0.8	0.9	10.6	0.7	0.7
	140	15	20.6	2.8	10.0	19.0	2.5	8.5	17.4	2.3	7.1
		20	19.4	1.9	5.0	17.7	1.8	4.2	16.1	1.6	3.4
		25	18.1	1.4	2.8	16.5	1.3	2.3	14.9	1.2	1.9
		30	16.9	1.1	1.7	15.3	1.0	1.4	13.7	0.9	1.1
	150	15	23.9	3.2	13.4	22.3	3.0	11.7	20.6	2.8	10.0
		20	22.6	2.3	6.8	21.0	2.1	5.8	19.4	1.9	5.0
		25	21.4	1.7	3.9	19.7	1.6	3.3	18.1	1.4	2.8
		30	20.1	1.3	2.4	18.5	1.2	2.0	16.9	1.1	1.7

Heating Performance - 4-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFC-300	160	30	11.3	0.8	2.1	10.5	0.7	1.8	9.7	0.6	1.6
		40	10.1	0.5	0.9	9.3	0.5	0.8	8.5	0.4	0.7
		50	8.9	0.4	0.5	8.1	0.3	0.4	7.4	0.3	0.3
		60	7.8	0.3	0.3	7.1	0.2	0.2	6.4	0.2	0.2
	180	30	14.4	1.0	3.5	13.6	0.9	3.1	12.8	0.9	2.7
		40	13.2	0.7	1.6	12.4	0.6	1.4	11.6	0.6	1.3
		50	12.0	0.5	0.9	11.2	0.4	0.8	10.4	0.4	0.7
		60	10.8	0.4	0.5	10.1	0.3	0.4	9.3	0.3	0.4

Cooling Performance

Size (Tons)	EWT (°F)	Delta T (°F)	Cooling Performance - 80°F / 67°F				Cooling Performance - 78°F / 65°F				Cooling Performance - 75°F / 63°F			
			Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)
WFD-300	42	10	14.0	8.8	2.8	22.1	12.4	8.3	2.5	17.2	11.0	7.6	2.2	13.6
		12	13.1	8.4	2.2	13.4	11.5	7.9	1.9	10.3	10.1	7.2	1.7	8.0
		14	12.2	8.0	1.7	8.6	10.6	7.5	1.5	6.4	9.2	6.8	1.3	4.9
		16	11.3	7.6	1.4	5.6	9.7	7.2	1.2	4.2	8.4	6.5	1.0	3.1
	43	10	13.1	8.4	2.6	19.5	11.5	7.9	2.3	15.0	10.2	7.3	2.0	11.7
		12	12.3	8.0	2.0	11.8	10.7	7.5	1.8	8.9	9.3	6.9	1.5	6.8
		14	11.4	7.7	1.6	7.4	9.8	7.2	1.4	5.5	8.4	6.5	1.2	4.1
		16	10.5	7.3	1.3	4.9	8.9	6.8	1.1	3.5	7.6	6.1	0.9	2.5
	44	10	12.3	8.1	2.5	17.1	10.7	7.6	2.1	12.9	9.4	6.9	1.9	9.9
		12	11.4	7.7	1.9	10.2	9.9	7.2	1.6	7.6	8.5	6.5	1.4	5.7
		14	10.6	7.3	1.5	6.4	9.0	6.9	1.3	4.7	7.7	6.2	1.1	3.4
		16	9.7	7.0	1.2	4.2	8.2	6.5	1.0	2.9	6.8	5.8	0.9	2.1
	45	10	11.5	7.7	2.3	14.9	9.9	7.2	2.0	11.1	8.6	6.6	1.7	8.3
		12	10.6	7.4	1.8	8.8	9.1	6.9	1.5	6.5	7.8	6.2	1.3	4.7
		14	9.8	7.0	1.4	5.5	8.3	6.6	1.2	3.9	6.9	5.9	1.0	2.8
		16	8.9	6.7	1.1	3.5	7.4	6.2	0.9	2.4	6.1	5.5	0.8	1.6
	46	10	10.7	7.4	2.1	12.9	9.2	6.9	1.8	9.5	7.8	6.2	1.6	6.9
		12	9.8	7.0	1.6	7.6	8.3	6.6	1.4	5.4	7.0	5.9	1.2	3.8
		14	9.0	6.7	1.3	4.7	7.5	6.3	1.1	3.3	6.2	5.6	0.9	2.2
		16	8.2	6.4	1.0	3.0	6.7	6.0	0.8	2.0	5.4	5.3	0.7	1.3
	47	10	9.9	7.1	2.0	11.1	8.4	6.6	1.7	8.0	7.1	5.9	1.4	5.7
		12	9.1	6.7	1.5	6.5	7.6	6.3	1.3	4.5	6.3	5.6	1.0	3.1
		14	8.3	6.4	1.2	3.9	6.8	6.0	1.0	2.7	5.5	5.3	0.8	1.7
		16	7.5	6.1	0.9	2.4	6.0	5.7	0.8	1.6	4.7	4.7	0.6	1.0
	48	10	9.2	6.8	1.8	9.5	7.7	6.3	1.5	6.7	6.4	5.7	1.3	4.6
		12	8.3	6.5	1.4	5.4	6.9	6.0	1.2	3.7	5.6	5.3	0.9	2.4
		14	7.5	6.1	1.1	3.3	6.1	5.7	0.9	2.1	4.8	4.8	0.7	1.3
		16	6.7	5.9	0.8	2.0	5.4	5.4	0.7	1.3	4.1	4.1	0.5	0.7

Heating Performance - 2-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFD-300	120	15	14.5	1.9	10.5	12.9	1.7	8.3	11.3	1.5	6.4
		20	13.4	1.3	5.1	11.8	1.2	3.9	10.2	1.0	2.9
		25	12.3	1.0	2.7	10.7	0.9	2.1	9.1	0.7	1.5
		30	11.3	0.8	1.6	9.7	0.6	1.2	8.1	0.5	0.8
	130	15	17.8	2.4	15.8	16.1	2.2	13.0	14.5	1.9	10.5
		20	16.6	1.7	7.8	15.0	1.5	6.4	13.4	1.3	5.1
		25	15.5	1.2	4.4	13.9	1.1	3.5	12.3	1.0	2.7
		30	14.5	1.0	2.6	12.9	0.9	2.1	11.3	0.8	1.6
	140	15	21.0	2.8	22.1	19.4	2.6	18.8	17.8	2.4	15.8
		20	19.9	2.0	11.1	18.3	1.8	9.4	16.6	1.7	7.8
		25	18.8	1.5	6.4	17.2	1.4	5.3	15.6	1.2	4.4
		30	17.7	1.2	3.9	16.1	1.1	3.2	14.5	1.0	2.6
	150	15	24.3	3.2	29.5	22.6	3.0	25.7	21.0	2.8	22.1
		20	23.1	2.3	15.1	21.5	2.2	13.0	19.9	2.0	11.1
		25	22.0	1.8	8.7	20.4	1.6	7.5	18.8	1.5	6.4
		30	20.9	1.4	5.5	19.3	1.3	4.7	17.7	1.2	3.9

Heating Performance - 4-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFD-300	160	30	11.1	0.7	2.0	10.3	0.7	1.8	9.5	0.6	1.5
		40	9.9	0.5	0.9	9.1	0.5	0.8	8.4	0.4	0.7
		50	8.7	0.3	0.5	8.0	0.3	0.4	7.3	0.3	0.3
		60	7.7	0.3	0.2	7.0	0.2	0.2	6.3	0.2	0.2
	180	30	14.1	0.9	3.3	13.4	0.9	3.0	12.6	0.8	2.6
		40	12.9	0.6	1.6	12.2	0.6	1.4	11.4	0.6	1.2
		50	11.8	0.5	0.8	11.0	0.4	0.7	10.2	0.4	0.6
		60	10.6	0.4	0.5	9.9	0.3	0.4	9.2	0.3	0.3

Cooling Performance

Size (Tons)	EWT (°F)	Delta T (°F)	Cooling Performance - 80°F / 67°F				Cooling Performance - 78°F / 65°F				Cooling Performance - 75°F / 63°F			
			Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)
WFC-400	42	10	15.7	10.4	3.1	17.7	13.8	9.8	2.8	13.7	12.2	9.0	2.4	10.8
		12	14.6	9.9	2.4	10.6	12.7	9.4	2.1	8.0	11.1	8.6	1.9	6.2
		14	13.5	9.5	1.9	6.7	11.6	8.9	1.7	5.0	10.1	8.1	1.4	3.7
		16	12.4	9.1	1.5	4.3	10.6	8.5	1.3	3.2	9.0	7.7	1.1	2.3
	43	10	14.7	10.0	2.9	15.5	12.8	9.4	2.6	11.8	11.3	8.6	2.3	9.2
		12	13.6	9.5	2.3	9.2	11.8	9.0	2.0	6.9	10.2	8.2	1.7	5.2
		14	12.5	9.1	1.8	5.8	10.7	8.6	1.5	4.2	9.2	7.8	1.3	3.1
		16	11.5	8.7	1.4	3.7	9.7	8.2	1.2	2.6	8.2	7.4	1.0	1.9
	44	10	13.7	9.6	2.7	13.6	11.9	9.1	2.4	15.6	10.4	8.3	2.1	7.7
		12	12.7	9.2	2.1	8.0	10.9	8.6	1.8	9.7	9.3	7.8	1.6	4.3
		14	11.6	8.7	1.7	4.9	9.8	8.2	1.4	5.8	8.3	7.4	1.2	2.5
		16	10.6	8.4	1.3	3.1	8.8	7.8	1.1	3.5	7.3	7.0	0.9	1.5
	45	10	9.5	7.9	1.9	6.5	11.0	8.7	2.2	8.7	9.5	7.9	1.9	6.5
		12	8.4	7.5	1.4	3.6	10.0	8.3	1.7	5.0	8.4	7.5	1.4	3.6
		14	7.5	7.1	1.1	2.0	9.0	7.9	1.3	3.0	7.5	7.1	1.1	2.0
		16	6.5	6.5	0.8	1.2	8.0	7.5	1.0	1.8	6.5	6.5	0.8	1.2
	46	10	11.9	8.9	2.4	10.2	10.1	8.4	2.0	7.4	8.6	7.5	1.7	5.3
		12	10.8	8.5	1.8	5.9	9.1	8.0	1.5	4.2	7.6	7.1	1.3	2.9
		14	9.8	8.1	1.4	3.5	8.1	7.6	1.2	2.4	6.6	6.6	0.9	1.6
		16	8.8	7.7	1.1	2.2	7.2	7.2	0.9	1.5	5.7	5.7	0.7	0.9
	47	10	11.0	8.5	2.2	8.7	9.3	8.0	1.9	6.2	7.8	7.2	1.6	4.3
		12	10.0	8.1	1.7	5.0	8.3	7.6	1.4	3.4	6.8	6.8	1.1	2.3
		14	9.0	7.8	1.3	3.0	7.3	7.3	1.0	2.0	5.9	5.9	0.8	1.3
		16	8.0	7.4	1.0	1.8	6.4	6.4	0.8	1.2	5.0	5.0	0.6	0.7
	48	10	10.1	8.2	2.0	7.4	8.5	7.7	1.7	5.1	7.0	6.9	1.4	3.5
		12	9.1	7.8	1.5	4.2	7.5	7.3	1.2	2.8	6.0	6.0	1.0	1.8
		14	8.1	7.5	1.2	2.4	6.6	6.6	0.9	1.6	5.1	5.1	0.7	1.0
		16	7.2	7.1	0.9	1.5	5.7	5.7	0.7	0.9	4.3	4.3	0.5	0.5

Heating Performance - 2-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFC-400	120	15	17.4	2.3	9.7	15.4	2.1	7.6	13.5	1.8	5.8
		20	16.0	1.6	4.6	14.0	1.4	3.5	12.1	1.2	2.6
		25	14.6	1.2	2.4	12.6	1.0	1.8	10.7	0.9	1.3
		30	13.2	0.9	1.4	11.3	0.8	1.0	9.5	0.6	0.7
	130	15	21.4	2.9	14.6	19.4	2.6	12.0	17.4	2.3	9.7
		20	19.9	2.0	7.1	17.9	1.8	5.8	16.0	1.6	4.6
		25	18.5	1.5	3.9	16.5	1.3	3.1	14.6	1.2	2.4
		30	17.1	1.1	2.3	15.2	1.0	1.8	13.2	0.9	1.4
	140	15	25.4	3.4	20.6	23.4	3.1	17.5	21.4	2.9	14.6
		20	23.9	2.4	10.3	21.9	2.2	8.6	19.9	2.0	7.1
		25	22.4	1.8	5.8	20.5	1.6	4.8	18.5	1.5	3.9
		30	21.0	1.4	3.5	19.1	1.3	2.9	17.1	1.1	2.3
	150	15	29.3	3.9	27.5	27.3	3.6	23.9	25.4	3.4	20.6
		20	27.8	2.8	14.0	25.9	2.6	12.0	23.9	2.4	10.3
		25	26.4	2.1	8.0	24.4	2.0	6.9	22.4	1.8	5.8
		30	24.9	1.7	5.0	23.0	1.5	4.2	21.0	1.4	3.5

Heating Performance - 4-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFC-400	160	30	13.3	0.9	4.6	12.4	0.8	4.0	11.5	0.8	3.4
		40	11.9	0.6	2.1	11.0	0.6	1.8	10.1	0.5	1.5
		50	10.6	0.4	1.1	9.7	0.4	0.9	8.8	0.4	0.7
		60	9.4	0.3	0.6	8.5	0.3	0.5	7.6	0.3	0.4
	180	30	17.0	1.1	7.5	16.1	1.1	6.7	15.1	1.0	5.9
		40	15.6	0.8	3.5	14.7	0.7	3.1	13.8	0.7	2.8
		50	14.2	0.6	1.9	13.3	0.5	1.7	12.4	0.5	1.4
		60	12.9	0.4	1.1	12.0	0.4	0.9	11.1	0.4	0.8

Cooling Performance

Size (Tons)	EWT (°F)	Delta T (°F)	Cooling Performance - 80°F / 67°F				Cooling Performance - 78°F / 65°F				Cooling Performance - 75°F / 63°F			
			Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)
WFD-400	42	10	18.6	11.4	3.7	13.3	16.4	10.6	3.3	10.3	14.5	9.7	2.9	8.1
		12	17.3	10.7	2.9	7.9	15.0	10.0	2.5	6.0	13.2	9.1	2.2	4.6
		14	15.9	10.1	2.3	5.0	13.7	9.4	2.0	3.7	11.9	8.5	1.7	2.8
		16	14.6	9.6	1.8	3.2	12.5	8.9	1.6	2.3	10.6	8.0	1.3	1.7
	43	10	17.5	10.8	3.5	11.7	15.2	10.1	3.0	8.9	13.4	9.2	2.7	6.9
		12	16.1	10.2	2.7	6.9	13.9	9.5	2.3	5.1	12.1	8.6	2.0	3.9
		14	14.8	9.6	2.1	4.3	12.6	8.9	1.8	3.1	10.8	8.0	1.5	2.3
		16	13.5	9.1	1.7	2.7	11.4	8.4	1.4	1.9	9.6	7.5	1.2	1.4
	44	10	16.3	10.3	3.3	10.2	14.1	9.6	2.8	15.6	12.3	8.7	2.5	5.8
		12	15.0	9.7	2.5	6.0	12.8	9.0	2.1	9.7	11.0	8.1	1.8	3.2
		14	13.7	9.2	2.0	3.7	11.6	8.5	1.7	5.8	9.8	7.6	1.4	1.9
		16	12.5	8.6	1.6	2.3	10.4	8.0	1.3	3.5	8.6	7.1	1.1	1.1
	45	10	15.2	9.8	3.0	8.8	13.1	9.1	2.6	6.5	11.2	8.2	2.2	4.8
		12	13.9	9.2	2.3	5.1	11.8	8.6	2.0	3.7	10.0	7.7	1.7	2.6
		14	12.6	8.7	1.8	3.1	10.6	8.1	1.5	2.2	8.8	7.2	1.3	1.5
		16	11.4	8.2	1.4	1.9	9.4	7.6	1.2	1.3	7.7	6.7	1.0	0.9
	46	10	14.1	9.3	2.8	7.6	12.0	8.7	2.4	5.5	10.2	7.8	2.0	4.0
		12	12.8	8.8	2.1	4.4	10.8	8.1	1.8	3.1	9.0	7.2	1.5	2.1
		14	11.6	8.3	1.7	2.6	9.6	7.7	1.4	1.8	7.8	6.8	1.1	1.2
		16	10.4	7.8	1.3	1.6	8.5	7.2	1.1	1.1	6.8	6.4	0.8	0.7
	47	10	13.0	8.9	2.6	6.5	11.0	8.2	2.2	4.6	9.2	7.3	1.8	3.2
		12	11.8	8.4	2.0	3.7	9.8	7.7	1.6	2.5	8.0	6.9	1.3	1.7
		14	10.6	7.9	1.5	2.2	8.6	7.3	1.2	1.5	6.9	6.4	1.0	0.9
		16	9.4	7.5	1.2	1.3	7.6	6.9	0.9	0.9	5.9	5.9	0.7	0.5
	48	10	12.0	8.5	2.4	5.5	10.0	7.8	2.0	3.8	8.2	6.9	1.6	2.6
		12	10.8	8.0	1.8	3.1	8.8	7.4	1.5	2.1	7.1	6.5	1.2	1.3
		14	9.6	7.5	1.4	1.8	7.7	6.9	1.1	1.2	6.0	6.0	0.9	0.7
		16	8.5	7.1	1.1	1.1	6.7	6.6	0.8	0.7	5.1	5.1	0.6	0.4

Heating Performance - 2-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFD-400	120	15	18.2	2.4	5.7	16.1	2.2	4.4	14.1	1.9	3.4
		20	16.7	1.7	2.7	14.6	1.5	2.0	12.6	1.3	1.5
		25	15.2	1.2	1.4	13.2	1.1	1.1	11.2	0.9	0.8
		30	13.8	0.9	0.8	11.8	0.8	0.6	9.9	0.7	0.4
	130	15	22.4	3.0	8.6	20.3	2.7	7.0	18.2	2.4	5.7
		20	20.8	2.1	4.2	18.8	1.9	3.4	16.7	1.7	2.7
		25	19.3	1.5	2.3	17.2	1.4	1.8	15.2	1.2	1.4
		30	17.8	1.2	1.4	15.8	1.1	1.1	13.8	0.9	0.8
	140	15	26.6	3.5	12.1	24.5	3.3	10.2	22.4	3.0	8.6
		20	25.0	2.5	6.0	22.9	2.3	5.0	20.8	2.1	4.2
		25	23.4	1.9	3.4	21.4	1.7	2.8	19.3	1.5	2.3
		30	21.9	1.5	2.0	19.9	1.3	1.7	17.8	1.2	1.3
	150	15	30.8	4.1	16.2	28.7	3.8	14.0	26.6	3.5	12.1
		20	29.2	2.9	8.2	27.1	2.7	7.0	25.0	2.5	6.0
		25	27.6	2.2	4.7	25.5	2.0	4.0	23.4	1.9	3.4
		30	26.0	1.7	2.9	24.0	1.6	2.4	21.9	1.5	2.0

Heating Performance - 4-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFD-400	160	30	13.1	0.9	4.4	12.2	0.8	3.8	11.3	0.8	3.3
		40	11.8	0.6	2.0	10.9	0.5	1.7	10.0	0.5	1.4
		50	10.5	0.4	1.0	9.6	0.4	0.9	8.7	0.3	0.7
		60	9.2	0.3	0.6	8.4	0.3	0.5	7.5	0.3	0.4
	180	30	16.7	1.1	7.2	15.8	1.1	6.5	14.9	1.0	5.8
		40	15.4	0.8	3.4	14.5	0.7	3.0	13.6	0.7	2.7
		50	14.0	0.6	1.8	13.1	0.5	1.6	12.2	0.5	1.4
		60	12.7	0.4	1.0	11.9	0.4	0.9	11.0	0.4	0.8

Cooling Performance

Size (Tons)	EWT (°F)	Delta T (°F)	Cooling Performance - 80°F / 67°F				Cooling Performance - 78°F / 65°F				Cooling Performance - 75°F / 63°F			
			Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)
WFC-600	42	10	22.9	15.3	4.6	23.7	20.2	14.5	4.0	18.4	18.0	13.3	3.6	14.6
		12	21.4	14.6	3.6	14.4	18.7	13.9	3.1	11.0	16.5	12.7	2.8	8.6
		14	20.0	14.1	2.8	9.2	17.3	13.3	2.5	6.9	15.1	12.1	2.2	5.2
		16	18.5	13.5	2.3	6.0	15.9	12.7	2.0	4.4	13.6	11.5	1.7	3.3
	43	10	21.5	14.7	4.3	20.9	18.8	13.9	3.8	16.0	16.6	12.8	3.3	12.5
		12	20.0	14.1	3.3	12.6	17.4	13.3	2.9	9.5	15.2	12.2	2.5	7.2
		14	18.6	13.5	2.7	8.0	16.0	12.8	2.3	5.9	13.8	11.6	2.0	4.4
		16	17.2	13.0	2.1	5.2	14.6	12.2	1.8	3.8	12.4	11.0	1.5	2.7
	44	10	20.1	14.1	4.0	18.3	17.5	13.4	3.5	15.6	15.3	12.2	3.1	10.6
		12	18.7	13.5	3.1	11.0	16.1	12.8	2.7	9.7	13.9	11.6	2.3	6.1
		14	17.3	13.0	2.5	6.9	14.7	12.3	2.1	5.8	12.5	11.1	1.8	3.6
		16	15.8	12.5	2.0	4.4	13.3	11.7	1.7	3.5	11.1	10.5	1.4	2.2
	45	10	18.8	13.6	3.8	16.0	16.2	12.9	3.2	11.9	14.1	11.7	2.8	8.9
		12	17.4	13.0	2.9	9.5	14.8	12.3	2.5	6.9	12.6	11.1	2.1	5.0
		14	16.0	12.5	2.3	5.9	13.5	11.8	1.9	4.2	11.3	10.6	1.6	2.9
		16	14.6	12.0	1.8	3.8	12.1	11.3	1.5	2.6	9.9	9.9	1.2	1.7
	46	10	17.5	13.1	3.5	13.8	15.0	12.4	3.0	10.2	12.8	11.2	2.6	7.4
		12	16.1	12.5	2.7	8.1	13.6	11.8	2.3	5.8	11.4	10.6	1.9	4.1
		14	14.7	12.0	2.1	5.0	12.2	11.3	1.8	3.5	10.1	10.1	1.4	2.3
		16	13.3	11.5	1.7	3.1	10.9	10.8	1.4	2.1	8.8	8.8	1.1	1.4
	47	10	16.2	12.6	3.2	11.9	13.8	11.9	2.8	8.6	11.6	10.7	2.3	6.1
		12	14.8	12.1	2.5	6.9	12.4	11.4	2.1	4.8	10.2	10.2	1.7	3.3
		14	13.5	11.6	1.9	4.2	11.1	10.9	1.6	2.8	8.9	8.9	1.3	1.8
		16	12.1	11.1	1.5	2.6	9.8	9.8	1.2	1.7	7.6	7.6	1.0	1.0
	48	10	15.0	12.1	3.0	10.1	12.6	11.4	2.5	7.2	10.4	10.3	2.1	4.9
		12	13.6	11.6	2.3	5.8	11.2	10.9	1.9	4.0	9.1	9.1	1.5	2.6
		14	12.3	11.1	1.8	3.5	9.9	9.9	1.4	2.3	7.8	7.8	1.1	1.4
		16	11.0	10.7	1.4	2.1	8.7	8.7	1.1	1.3	6.6	6.6	0.8	0.8

Heating Performance - 2-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFC-600	120	15	27.8	3.7	15.5	24.7	3.3	12.3	21.6	2.9	9.4
		20	25.8	2.6	7.5	22.7	2.3	5.8	19.6	2.0	4.3
		25	23.7	1.9	4.1	20.6	1.7	3.1	17.6	1.4	2.2
		30	21.7	1.4	2.4	18.7	1.2	1.8	15.7	1.0	1.2
	130	15	34.0	4.5	23.2	30.9	4.1	19.2	27.8	3.7	15.5
		20	31.9	3.2	11.5	28.8	2.9	9.4	25.8	2.6	7.5
		25	29.9	2.4	6.5	26.8	2.1	5.2	23.7	1.9	4.1
		30	27.8	1.9	3.9	24.8	1.7	3.1	21.7	1.4	2.4
	140	15	40.2	5.4	32.5	37.1	4.9	27.6	22.5	3.0	10.2
		20	38.1	3.8	16.4	35.0	3.5	13.9	31.9	3.2	11.5
		25	36.1	2.9	9.4	33.0	2.6	7.9	29.9	2.4	6.5
		30	34.0	2.3	5.8	30.9	2.1	4.8	27.9	1.9	3.9
	150	15	46.4	6.2	43.2	43.3	5.8	37.6	40.2	5.4	32.4
		20	44.3	4.4	22.2	41.2	4.1	19.2	38.1	3.8	16.4
		25	42.2	3.4	12.9	39.1	3.1	11.1	36.0	2.9	9.4
		30	40.2	2.7	8.1	37.1	2.5	6.9	34.0	2.3	5.8

Heating Performance - 4-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFC-600	160	30	20.4	1.4	11.1	19.1	1.3	9.7	17.7	1.2	8.3
		40	18.5	0.9	5.2	17.2	0.9	4.4	15.8	0.8	3.7
		50	16.7	0.7	2.7	15.3	0.6	2.3	14.0	0.6	1.9
		60	14.8	0.5	1.5	13.5	0.5	1.2	12.2	0.4	1.0
	180	30	25.9	1.7	17.9	24.6	1.6	16.1	23.2	1.5	14.3
		40	24.0	1.2	8.7	22.7	1.1	7.7	21.3	1.1	6.8
		50	22.1	0.9	4.7	20.8	0.8	4.1	19.4	0.8	3.6
		60	20.3	0.7	2.7	18.9	0.6	2.4	17.6	0.6	2.1

Cooling Performance

Size (Tons)	EWT (°F)	Delta T (°F)	Cooling Performance - 80°F / 67°F				Cooling Performance - 78°F / 65°F				Cooling Performance - 75°F / 63°F			
			Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)
WFD-600	42	10	28.1	17.2	5.6	15.4	24.7	16.2	4.9	11.9	22.0	14.8	4.4	9.5
		12	26.2	16.4	4.4	9.3	22.9	15.3	3.8	7.1	20.2	14.0	3.4	5.5
		14	24.4	15.5	3.5	5.9	21.1	14.5	3.0	4.4	18.3	13.1	2.6	3.4
		16	22.5	14.8	2.8	3.9	19.3	13.7	2.4	2.8	16.6	12.4	2.1	2.1
	43	10	26.3	16.4	5.3	13.6	23.1	15.4	4.6	10.4	20.3	14.1	4.1	8.1
		12	24.5	15.6	4.1	8.1	21.3	14.6	3.5	6.1	18.5	13.2	3.1	4.7
		14	22.7	14.8	3.2	5.1	19.5	13.8	2.8	3.8	16.7	12.4	2.4	2.8
		16	20.9	14.1	2.6	3.3	17.7	13.1	2.2	2.4	15.0	11.7	1.9	1.7
	44	10	24.6	15.7	4.9	11.9	21.4	14.7	4.3	15.6	18.7	13.3	3.7	6.9
		12	22.8	14.9	3.8	7.1	19.7	13.9	3.3	9.7	16.9	12.5	2.8	3.9
		14	21.0	14.1	3.0	4.4	17.9	13.1	2.6	5.8	15.2	11.8	2.2	2.3
		16	19.3	13.4	2.4	2.8	16.2	12.4	2.0	3.5	13.5	11.1	1.7	1.4
	45	10	23.0	15.0	4.6	10.3	19.9	14.0	4.0	7.7	17.2	12.6	3.4	5.8
		12	21.2	14.2	3.5	6.1	18.1	13.2	3.0	4.4	15.4	11.9	2.6	3.2
		14	19.4	13.5	2.8	3.8	16.4	12.5	2.3	2.7	13.7	11.2	2.0	1.9
		16	17.7	12.8	2.2	2.4	14.7	11.8	1.8	1.6	12.0	10.5	1.5	1.1
	46	10	21.4	14.3	4.3	8.9	18.3	13.3	3.7	6.6	15.6	12.0	3.1	4.8
		12	19.6	13.5	3.3	5.2	16.6	12.6	2.8	3.7	13.9	11.2	2.3	2.6
		14	17.9	12.8	2.6	3.2	14.9	11.9	2.1	2.2	12.2	10.6	1.7	1.5
		16	16.2	12.2	2.0	2.0	13.2	11.3	1.7	1.3	10.6	9.9	1.3	0.9
	47	10	19.8	13.6	4.0	7.7	16.8	12.7	3.4	5.5	14.1	11.3	2.8	3.9
		12	18.1	12.9	3.0	4.4	15.1	12.0	2.5	3.1	12.4	10.6	2.1	2.1
		14	16.4	12.2	2.3	2.7	13.4	11.3	1.9	1.8	10.8	10.0	1.5	1.2
		16	14.7	11.6	1.8	1.7	11.8	10.7	1.5	1.1	9.2	9.2	1.2	0.7
	48	10	18.3	13.0	3.7	6.5	15.3	12.1	3.1	4.6	12.7	10.8	2.5	3.2
		12	16.6	12.3	2.8	3.7	13.7	11.4	2.3	2.5	11.0	10.1	1.8	1.7
		14	14.9	11.7	2.1	2.2	12.0	10.8	1.7	1.4	9.4	9.4	1.3	0.9
		16	13.3	11.1	1.7	1.3	10.5	10.2	1.3	0.8	8.0	8.0	1.0	0.5

Heating Performance - 2-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFD-600	120	15	27.3	3.6	6.5	24.2	3.2	5.1	21.2	2.8	3.9
		20	25.2	2.5	3.1	22.1	2.2	2.4	19.0	1.9	1.8
		25	23.0	1.8	1.7	20.0	1.6	1.2	17.0	1.4	0.9
		30	21.0	1.4	1.0	18.0	1.2	0.7	15.0	1.0	0.5
	130	15	33.5	4.5	9.8	30.4	4.1	8.0	27.3	3.6	6.5
		20	31.3	3.1	4.8	28.2	2.8	3.9	25.2	2.5	3.1
		25	29.1	2.3	2.7	26.1	2.1	2.1	23.0	1.8	1.7
		30	27.0	1.8	1.6	24.0	1.6	1.2	21.0	1.4	1.0
	140	15	39.7	5.3	13.7	36.6	4.9	11.6	33.5	4.5	9.8
		20	37.5	3.7	6.9	34.4	3.4	5.8	31.3	3.1	4.8
		25	35.3	2.8	3.9	32.2	2.6	3.2	29.1	2.3	2.7
		30	33.1	2.2	2.4	30.1	2.0	2.0	27.0	1.8	1.6
	150	15	45.9	6.1	18.3	42.8	5.7	15.9	39.7	5.3	13.7
		20	43.6	4.4	9.3	40.6	4.1	8.0	37.5	3.7	6.9
		25	41.4	3.3	5.4	38.4	3.1	4.6	35.3	2.8	3.9
		30	39.3	2.6	3.3	36.2	2.4	2.8	33.1	2.2	2.4

Heating Performance - 4-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFD-600	160	30	20.2	1.3	10.9	18.9	1.3	9.5	17.5	1.2	8.2
		40	18.3	0.9	5.0	17.0	0.8	4.3	15.6	0.8	3.7
		50	16.5	0.7	2.6	15.2	0.6	2.2	13.8	0.6	1.8
		60	14.7	0.5	1.4	13.4	0.4	1.2	12.0	0.4	1.0
	180	30	25.7	1.7	17.6	24.3	1.6	15.7	22.9	1.5	14.0
		40	23.8	1.2	8.5	22.4	1.1	7.5	21.1	1.1	6.7
		50	21.9	0.9	4.6	20.6	0.8	4.1	19.2	0.8	3.5
		60	20.1	0.7	2.7	18.7	0.6	2.3	17.4	0.6	2.0

Cooling Performance

Size (Tons)	EWT (°F)	Delta T (°F)	Cooling Performance - 80°F / 67°F				Cooling Performance - 78°F / 65°F				Cooling Performance - 75°F / 63°F			
			Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)
WFC-800	42	10	28.7	19.2	5.7	15.8	25.1	18.2	5.0	12.1	22.2	16.7	4.4	9.5
		12	26.5	18.3	4.4	9.3	22.9	17.3	3.8	7.0	20.1	15.7	3.3	5.4
		14	24.3	17.4	3.5	5.8	20.8	16.4	3.0	4.2	17.9	14.9	2.6	3.2
		16	22.2	16.6	2.8	3.7	18.8	15.6	2.3	2.6	15.9	14.1	2.0	1.9
	43	10	26.9	18.4	5.4	13.8	23.4	17.4	4.7	10.5	20.5	15.9	4.1	8.0
		12	24.7	17.6	4.1	8.1	21.2	16.6	3.5	6.0	18.3	15.0	3.1	4.5
		14	22.5	16.7	3.2	5.0	19.1	15.7	2.7	3.6	16.3	14.2	2.3	2.6
		16	20.4	15.9	2.6	3.1	17.1	14.9	2.1	2.2	14.3	13.4	1.8	1.5
	44	10	25.1	17.7	5.0	12.0	21.6	16.7	4.3	15.6	18.8	15.2	3.8	6.8
		12	22.9	16.9	3.8	7.0	19.5	15.9	3.3	9.7	16.7	14.4	2.8	3.7
		14	20.8	16.0	3.0	4.2	17.5	15.1	2.5	5.8	14.6	13.6	2.1	2.1
		16	18.7	15.3	2.3	2.6	15.5	14.3	1.9	3.5	12.8	12.8	1.6	1.2
	45	10	23.3	17.0	4.7	10.4	19.9	16.1	4.0	7.6	17.1	14.5	3.4	5.6
		12	21.2	16.2	3.5	6.0	17.9	15.2	3.0	4.3	15.0	13.7	2.5	3.0
		14	19.1	15.4	2.7	3.6	15.9	14.5	2.3	2.5	13.1	13.0	1.9	1.7
		16	17.1	14.7	2.1	2.2	14.0	13.8	1.7	1.5	11.3	11.3	1.4	1.0
	46	10	21.6	16.4	4.3	8.9	18.3	15.4	3.7	6.4	15.5	13.9	3.1	4.6
		12	19.5	15.6	3.2	5.1	16.3	14.6	2.7	3.5	13.5	13.1	2.2	2.4
		14	17.5	14.8	2.5	3.0	14.3	13.9	2.0	2.0	11.6	11.6	1.7	1.3
		16	15.5	14.1	1.9	1.8	12.5	12.5	1.6	1.2	9.9	9.9	1.2	0.7
	47	10	19.9	15.7	4.0	7.6	16.7	14.8	3.3	5.4	13.9	13.3	2.8	3.7
		12	17.9	15.0	3.0	4.3	14.7	14.0	2.5	2.9	12.0	12.0	2.0	1.9
		14	15.9	14.2	2.3	2.5	12.8	12.8	1.8	1.6	10.2	10.2	1.5	1.0
		16	14.0	13.6	1.8	1.5	11.1	11.1	1.4	0.9	8.6	8.6	1.1	0.6
	48	10	18.3	15.1	3.7	6.4	15.2	14.2	3.0	4.4	12.4	12.4	2.5	2.9
		12	16.3	14.4	2.7	3.5	13.2	13.2	2.2	2.3	10.5	10.5	1.8	1.5
		14	14.4	13.7	2.1	2.0	11.4	11.4	1.6	1.3	8.8	8.8	1.3	0.8
		16	12.6	12.6	1.6	1.2	9.8	9.8	1.2	0.7	7.4	7.4	0.9	0.4

Heating Performance - 2-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFC-800	120	15	31.1	4.1	8.2	27.4	3.7	6.4	23.8	3.2	4.8
		20	28.2	2.8	3.8	24.6	2.5	2.9	21.0	2.1	2.1
		25	25.4	2.0	2.0	21.9	1.8	1.5	18.4	1.5	1.0
		30	22.8	1.5	1.1	19.4	1.3	0.8	16.1	1.1	0.6
	130	15	38.3	5.1	12.5	34.7	4.6	10.3	31.1	4.1	8.2
		20	35.4	3.5	6.0	31.8	3.2	4.8	28.2	2.8	3.8
		25	32.5	2.6	3.2	28.9	2.3	2.6	25.4	2.0	2.0
		30	29.8	2.0	1.9	26.3	1.8	1.5	22.8	1.5	1.1
	140	15	45.6	6.1	17.8	42.0	5.6	15.0	38.3	5.1	12.5
		20	42.6	4.3	8.7	39.0	3.9	7.3	35.4	3.5	6.0
		25	39.7	3.2	4.8	36.1	2.9	4.0	32.5	2.6	3.2
		30	36.9	2.5	2.9	33.3	2.2	2.4	29.8	2.0	1.9
	150	15	52.9	7.1	23.9	49.3	6.6	20.7	45.6	6.1	17.8
		20	49.9	5.0	12.0	46.3	4.6	10.3	42.6	4.3	8.7
		25	46.9	3.8	6.8	43.3	3.5	5.8	39.7	3.2	4.8
		30	44.1	2.9	4.1	40.5	2.7	3.5	36.9	2.5	2.9

Heating Performance - 4-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFC-800	160	30	25.9	1.7	22.6	24.2	1.6	19.7	22.4	1.5	17.0
		40	23.6	1.2	10.6	21.9	1.1	9.1	20.1	1.0	7.7
		50	21.3	0.9	5.5	19.6	0.8	4.7	17.9	0.7	3.9
		60	19.1	0.6	3.1	17.4	0.6	2.5	15.7	0.5	2.1
	180	30	32.8	2.2	36.4	31.1	2.1	32.6	29.3	2.0	29.1
		40	30.5	1.5	17.7	28.8	1.4	15.7	27.0	1.4	13.9
		50	28.2	1.1	9.7	26.5	1.1	8.5	24.8	1.0	7.5
		60	25.9	0.9	5.7	24.2	0.8	5.0	22.5	0.7	4.3

Cooling Performance

Size (Tons)	EWT (°F)	Delta T (°F)	Cooling Performance - 80°F / 67°F				Cooling Performance - 78°F / 65°F				Cooling Performance - 75°F / 63°F			
			Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)
WFD-800	42	10	33.7	21.9	6.7	21.6	29.6	20.7	5.9	16.7	26.3	19.0	5.3	13.1
		12	31.3	20.8	5.2	12.9	27.2	19.6	4.5	9.8	23.8	17.9	4.0	7.5
		14	28.9	19.8	4.1	8.1	24.8	18.6	3.5	6.0	21.5	16.9	3.1	4.5
		16	26.5	18.9	3.3	5.2	22.5	17.7	2.8	3.8	19.2	16.0	2.4	2.7
	43	10	31.6	21.0	6.3	19.0	27.6	19.8	5.5	14.4	24.2	18.1	4.8	11.2
		12	29.2	20.0	4.9	11.2	25.2	18.8	4.2	8.4	21.8	17.1	3.6	6.3
		14	26.8	19.0	3.8	7.0	22.8	17.8	3.3	5.1	19.5	16.1	2.8	3.7
		16	24.5	18.1	3.1	4.4	20.6	16.9	2.6	3.1	17.3	15.2	2.2	2.2
	44	10	29.5	20.1	5.9	16.6	25.6	18.9	5.1	15.6	22.2	17.2	4.4	9.4
		12	27.1	19.1	4.5	9.7	23.2	18.0	3.9	9.7	19.9	16.2	3.3	5.2
		14	24.8	18.2	3.5	6.0	20.9	17.1	3.0	5.8	17.6	15.3	2.5	3.0
		16	22.5	17.3	2.8	3.8	18.7	16.2	2.3	3.5	15.4	14.5	1.9	1.8
	45	10	27.5	19.3	5.5	14.4	23.6	18.1	4.7	10.6	20.3	16.4	4.1	7.8
		12	25.1	18.3	4.2	8.3	21.3	17.2	3.6	6.0	18.0	15.5	3.0	4.3
		14	22.8	17.4	3.3	5.0	19.1	16.3	2.7	3.5	15.8	14.6	2.3	2.4
		16	20.6	16.6	2.6	3.1	16.9	15.5	2.1	2.1	13.7	13.7	1.7	1.4
	46	10	25.5	18.5	5.1	12.4	21.7	17.4	4.3	9.0	18.4	15.6	3.7	6.4
		12	23.2	17.6	3.9	7.1	19.4	16.5	3.2	5.0	16.2	14.8	2.7	3.5
		14	20.9	16.7	3.0	4.2	17.3	15.6	2.5	2.9	14.0	13.9	2.0	1.9
		16	18.7	15.9	2.3	2.6	15.2	14.9	1.9	1.7	12.0	12.0	1.5	1.1
	47	10	23.6	17.7	4.7	10.6	19.9	16.7	4.0	7.5	16.6	14.9	3.3	5.2
		12	21.3	16.9	3.5	6.0	17.6	15.8	2.9	4.1	14.4	14.1	2.4	2.7
		14	19.1	16.0	2.7	3.5	15.5	15.0	2.2	2.3	12.3	12.3	1.8	1.5
		16	16.9	15.3	2.1	2.1	13.5	13.5	1.7	1.4	10.4	10.4	1.3	0.8
	48	10	21.7	17.0	4.3	9.0	18.1	16.0	3.6	6.2	14.8	14.2	3.0	4.2
		12	19.5	16.2	3.2	5.0	15.9	15.1	2.7	3.3	12.7	12.7	2.1	2.1
		14	17.3	15.4	2.5	2.9	13.8	13.8	2.0	1.9	10.7	10.7	1.5	1.1
		16	15.2	14.6	1.9	1.7	11.9	11.9	1.5	1.0	8.9	8.9	1.1	0.6

Heating Performance - 2-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFD-800	120	15	35.6	4.7	10.7	31.5	4.2	8.4	27.5	3.7	6.4
		20	32.6	3.3	5.0	28.5	2.9	3.9	24.5	2.4	2.8
		25	29.6	2.4	2.7	25.6	2.0	2.0	21.7	1.7	1.4
		30	26.8	1.8	1.5	22.9	1.5	1.1	19.0	1.3	0.8
	130	15	43.8	5.8	16.2	39.7	5.3	13.3	35.6	4.7	10.7
		20	40.7	4.1	7.9	36.6	3.7	6.4	32.6	3.3	5.0
		25	37.7	3.0	4.3	33.6	2.7	3.4	29.6	2.4	2.7
		30	34.7	2.3	2.5	30.7	2.0	2.0	26.8	1.8	1.5
	140	15	51.9	6.9	22.8	47.9	6.4	19.3	43.8	5.8	16.2
		20	48.8	4.9	11.3	44.8	4.5	9.5	40.7	4.1	7.9
		25	45.8	3.7	6.4	41.7	3.3	5.3	37.7	3.0	4.3
		30	42.8	2.9	3.9	38.7	2.6	3.2	34.7	2.3	2.5
	150	15	60.1	8.0	30.5	56.0	7.5	26.5	52.0	6.9	22.8
		20	57.0	5.7	15.4	52.9	5.3	13.3	48.8	4.9	11.3
		25	53.9	4.3	8.8	49.8	4.0	7.6	45.8	3.7	6.4
		30	50.9	3.4	5.5	46.8	3.1	4.6	42.8	2.9	3.9

Heating Performance - 4-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFD-800	160	30	25.7	1.7	22.3	24.0	1.6	19.4	22.3	1.5	16.7
		40	23.4	1.2	10.4	21.7	1.1	8.9	20.0	1.0	7.6
		50	21.2	0.8	5.4	19.5	0.8	4.6	17.8	0.7	3.8
		60	18.9	0.6	3.0	17.2	0.6	2.5	15.6	0.5	2.0
	180	30	32.5	2.2	35.8	30.8	2.1	32.1	29.1	1.9	28.6
		40	30.3	1.5	17.4	28.5	1.4	15.5	26.8	1.3	13.7
		50	28.0	1.1	9.5	26.3	1.1	8.4	24.6	1.0	7.3
		60	25.7	0.9	5.6	24.0	0.8	4.9	22.3	0.7	4.2

Cooling Performance

Size (Tons)	EWT (°F)	Delta T (°F)	Cooling Performance - 80°F / 67°F				Cooling Performance - 78°F / 65°F				Cooling Performance - 75°F / 63°F			
			Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)
WFC-1000	42	10	43.9	28.1	8.8	19.2	38.7	26.5	7.7	14.9	34.4	24.4	6.9	11.8
		12	41.0	26.8	6.8	11.6	35.8	25.2	6.0	8.9	31.5	23.1	5.3	6.9
		14	38.1	25.6	5.4	7.4	32.9	24.0	4.7	5.5	28.7	21.8	4.1	4.2
		16	35.2	24.4	4.4	4.8	30.1	22.9	3.8	3.5	25.9	20.6	3.2	2.6
	43	10	41.2	26.9	8.2	16.9	36.1	25.4	7.2	13.0	31.8	23.2	6.4	10.1
		12	38.3	25.7	6.4	10.2	33.2	24.1	5.5	7.6	29.0	21.9	4.8	5.8
		14	35.5	24.5	5.1	6.4	30.4	23.0	4.3	4.7	26.1	20.8	3.7	3.5
		16	32.6	23.3	4.1	4.1	27.7	21.8	3.5	3.0	23.4	19.6	2.9	2.1
	44	10	38.6	25.8	7.7	14.8	33.5	24.3	6.7	15.6	29.3	22.1	5.9	8.5
		12	35.7	24.6	6.0	8.8	30.7	23.1	5.1	9.7	26.5	20.9	4.4	4.8
		14	32.9	23.4	4.7	5.5	28.0	22.0	4.0	5.8	23.7	19.8	3.4	2.9
		16	30.1	22.3	3.8	3.5	25.3	20.9	3.2	3.5	21.0	18.7	2.6	1.7
	45	10	36.0	24.7	7.2	12.9	31.1	23.2	6.2	9.6	26.8	21.0	5.4	7.2
		12	33.2	23.5	5.5	7.6	28.3	22.1	4.7	5.5	24.0	19.9	4.0	4.0
		14	30.4	22.4	4.3	4.7	25.6	21.0	3.7	3.3	21.3	18.8	3.0	2.3
		16	27.7	21.4	3.5	3.0	22.9	20.0	2.9	2.0	18.8	17.8	2.3	1.4
	46	10	33.5	23.7	6.7	11.2	28.6	22.2	5.7	8.2	24.4	20.0	4.9	5.9
		12	30.7	22.6	5.1	6.5	25.9	21.1	4.3	4.6	21.7	18.9	3.6	3.3
		14	27.9	21.5	4.0	4.0	23.2	20.1	3.3	2.7	19.1	17.9	2.7	1.8
		16	25.3	20.5	3.2	2.5	20.7	19.1	2.6	1.7	16.6	16.6	2.1	1.1
	47	10	31.0	22.7	6.2	9.6	26.3	21.3	5.3	6.9	22.1	19.1	4.4	4.9
		12	28.3	21.6	4.7	5.5	23.6	20.2	3.9	3.8	19.4	18.0	3.2	2.6
		14	25.6	20.6	3.7	3.3	21.0	19.2	3.0	2.2	16.9	16.9	2.4	1.4
		16	23.0	19.6	2.9	2.1	18.5	18.3	2.3	1.3	14.5	14.5	1.8	0.8
	48	10	28.6	21.8	5.7	8.2	24.0	20.4	4.8	5.7	19.8	18.2	4.0	3.9
		12	25.9	20.7	4.3	4.6	21.3	19.4	3.6	3.2	17.2	17.2	2.9	2.1
		14	23.3	19.8	3.3	2.8	18.8	18.4	2.7	1.8	14.7	14.7	2.1	1.1
		16	20.7	18.8	2.6	1.7	16.4	16.4	2.0	1.0	12.5	12.5	1.6	0.6

Heating Performance - 2-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFC-1000	120	15	42.5	5.7	8.0	37.7	5.0	6.3	32.9	4.4	4.8
		20	39.0	3.9	3.8	34.2	3.4	2.9	29.4	2.9	2.2
		25	35.6	2.8	2.0	30.9	2.5	1.5	26.2	2.1	1.1
		30	32.4	2.2	1.2	27.7	1.8	0.8	23.1	1.5	0.6
	130	15	52.2	7.0	12.1	47.4	6.3	9.9	42.5	5.7	8.0
		20	48.6	4.9	5.9	43.8	4.4	4.8	39.0	3.9	3.8
		25	45.2	3.6	3.3	40.4	3.2	2.6	35.6	2.8	2.0
		30	41.8	2.8	1.9	37.0	2.5	1.5	32.3	2.2	1.2
	140	15	61.9	8.3	17.0	57.1	7.6	14.4	52.2	7.0	12.1
		20	58.3	5.8	8.5	53.5	5.3	7.1	48.7	4.9	5.9
		25	54.8	4.4	4.8	50.0	4.0	4.0	45.2	3.6	3.3
		30	51.3	3.4	2.9	46.6	3.1	2.4	41.8	2.8	1.9
	150	15	71.6	9.5	22.7	66.8	8.9	19.7	61.9	8.3	17.0
		20	68.0	6.8	11.5	63.2	6.3	9.9	58.3	5.8	8.5
		25	64.4	5.2	6.6	59.6	4.8	5.7	54.8	4.4	4.8
		30	60.9	4.1	4.1	56.1	3.7	3.5	51.3	3.4	2.9

Heating Performance - 4-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFC-1000	160	30	38.0	2.5	15.7	35.5	2.4	13.7	33.0	2.2	11.9
		40	35.0	1.8	7.5	32.6	1.6	6.5	30.1	1.5	5.5
		50	32.1	1.3	4.0	29.6	1.2	3.4	27.1	1.1	2.9
		60	29.1	1.0	2.3	26.7	0.9	1.9	24.2	0.8	1.6
	180	30	47.9	3.2	24.9	45.4	3.0	22.4	42.9	2.9	20.1
		40	44.9	2.2	12.3	42.4	2.1	11.0	40.0	2.0	9.8
		50	41.9	1.7	6.9	39.5	1.6	6.1	37.0	1.5	5.4
		60	39.0	1.3	4.1	36.5	1.2	3.6	34.1	1.1	3.2

Cooling Performance

Size (Tons)	EWT (°F)	Delta T (°F)	Cooling Performance - 80°F / 67°F				Cooling Performance - 78°F / 65°F				Cooling Performance - 75°F / 63°F			
			Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)
WFD-1000	42	10	48.7	30.5	9.7	22.3	43.0	28.8	8.6	17.3	38.3	26.4	7.7	13.7
		12	45.6	29.1	7.6	13.5	39.9	27.3	6.6	10.3	35.1	25.0	5.9	8.0
		14	42.5	27.7	6.1	8.6	36.8	26.0	5.3	6.5	32.1	23.6	4.6	4.9
		16	39.4	26.4	4.9	5.7	33.8	24.7	4.2	4.2	29.0	22.3	3.6	3.1
	43	10	45.8	29.2	9.1	19.6	40.1	27.5	8.0	15.1	35.4	25.1	7.1	11.8
		12	42.6	27.8	7.1	11.8	37.0	26.1	6.2	8.9	32.3	23.7	5.4	6.8
		14	39.6	26.5	5.7	7.5	34.0	24.8	4.9	5.5	29.3	22.4	4.2	4.1
		16	36.5	25.2	4.6	4.9	31.0	23.6	3.9	3.5	26.3	21.2	3.3	2.5
	44	10	42.8	27.9	8.6	17.2	37.3	26.2	7.5	15.6	32.6	23.9	6.5	10.0
		12	39.8	26.6	6.6	10.3	34.3	24.9	5.7	9.7	29.6	22.5	4.9	5.7
		14	36.7	25.3	5.2	6.5	31.3	23.7	4.5	5.8	26.6	21.3	3.8	3.4
		16	33.7	24.1	4.2	4.2	28.4	22.5	3.5	3.5	23.7	20.1	3.0	2.1
	45	10	40.0	26.7	8.0	15.0	34.6	25.0	6.9	11.2	29.9	22.7	6.0	8.4
		12	37.0	25.4	6.2	8.9	31.6	23.8	5.3	6.5	26.9	21.4	4.5	4.7
		14	34.0	24.2	4.9	5.5	28.6	22.6	4.1	3.9	24.0	20.2	3.4	2.8
		16	31.0	23.1	3.9	3.5	25.8	21.5	3.2	2.4	21.2	19.1	2.6	1.6
	46	10	37.2	25.5	7.4	13.0	31.9	23.9	6.4	9.5	27.3	21.6	5.5	7.0
		12	34.2	24.3	5.7	7.6	29.0	22.7	4.8	5.5	24.3	20.4	4.1	3.9
		14	31.3	23.2	4.5	4.7	26.1	21.6	3.7	3.3	21.5	19.2	3.1	2.2
		16	28.4	22.0	3.6	3.0	23.3	20.5	2.9	2.0	18.7	18.1	2.3	1.3
	47	10	34.5	24.4	6.9	11.2	29.3	22.9	5.9	8.0	24.7	20.5	4.9	5.7
		12	31.6	23.3	5.3	6.5	26.4	21.7	4.4	4.5	21.8	19.3	3.6	3.1
		14	28.7	22.2	4.1	3.9	23.6	20.6	3.4	2.7	19.0	18.3	2.7	1.7
		16	25.8	21.1	3.2	2.4	20.9	19.6	2.6	1.6	16.4	16.4	2.0	1.0
	48	10	31.9	23.4	6.4	9.5	26.8	21.9	5.4	6.7	22.2	19.5	4.4	4.6
		12	29.0	22.3	4.8	5.5	23.9	20.8	4.0	3.7	19.4	18.4	3.2	2.4
		14	26.1	21.2	3.7	3.3	21.2	19.7	3.0	2.1	16.7	16.7	2.4	1.3
		16	23.4	20.2	2.9	2.0	18.5	18.5	2.3	1.3	14.1	14.1	1.8	0.7

Heating Performance - 2-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFD-1000	120	15	46.7	6.2	9.1	41.4	5.5	7.2	36.2	4.8	5.5
		20	43.0	4.3	4.3	37.8	3.8	3.4	32.6	3.3	2.5
		25	39.5	3.2	2.3	34.3	2.7	1.8	29.2	2.3	1.3
		30	36.0	2.4	1.4	31.0	2.1	1.0	25.9	1.7	0.7
	130	15	57.2	7.6	13.6	51.9	6.9	11.2	46.7	6.2	9.1
		20	53.5	5.4	6.7	48.3	4.8	5.5	43.0	4.3	4.3
		25	49.9	4.0	3.7	44.7	3.6	3.0	39.5	3.2	2.3
		30	46.4	3.1	2.2	41.2	2.7	1.8	36.1	2.4	1.4
	140	15	67.7	9.0	19.1	62.4	8.3	16.2	57.2	7.6	13.6
		20	64.0	6.4	9.6	58.7	5.9	8.1	53.5	5.4	6.7
		25	60.3	4.8	5.5	55.1	4.4	4.6	49.9	4.0	3.7
		30	56.7	3.8	3.4	51.5	3.4	2.8	46.3	3.1	2.2
	150	15	78.2	10.4	25.5	73.0	9.7	22.2	67.7	9.0	19.1
		20	74.5	7.4	13.0	69.2	6.9	11.2	64.0	6.4	9.6
		25	70.8	5.7	7.5	65.6	5.2	6.5	60.3	4.8	5.5
		30	67.2	4.5	4.7	62.0	4.1	4.0	56.7	3.8	3.4

Heating Performance - 4-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFD-1000	160	30	37.6	2.5	15.4	35.2	2.3	13.5	32.8	2.2	11.7
		40	34.7	1.7	7.4	32.3	1.6	6.4	29.8	1.5	5.4
		50	31.8	1.3	4.0	29.3	1.2	3.4	26.9	1.1	2.8
		60	28.9	1.0	2.3	26.4	0.9	1.9	24.0	0.8	1.6
	180	30	47.4	3.2	24.5	45.0	3.0	22.0	42.5	2.8	19.7
		40	44.5	2.2	12.1	42.0	2.1	10.8	39.6	2.0	9.6
		50	41.6	1.7	6.8	39.1	1.6	6.0	36.7	1.5	5.3
		60	38.6	1.3	4.1	36.2	1.2	3.6	33.8	1.1	3.1

Cooling Performance

Size (Tons)	EWT (°F)	Delta T (°F)	Cooling Performance - 80°F / 67°F				Cooling Performance - 78°F / 65°F				Cooling Performance - 75°F / 63°F			
			Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)
WFC-1200	42	10	50.8	33.3	10.2	20.5	44.7	31.6	8.9	15.9	39.8	29.0	8.0	12.5
		12	47.4	31.9	7.9	12.3	41.3	30.1	6.9	9.4	36.4	27.5	6.1	7.3
		14	43.9	30.5	6.3	7.8	38.0	28.7	5.4	5.8	33.0	26.1	4.7	4.4
		16	40.6	29.1	5.1	5.1	34.7	27.4	4.3	3.7	29.7	24.8	3.7	2.7
	43	10	47.7	32.0	9.5	18.0	41.7	30.3	8.3	13.8	36.8	27.7	7.4	10.7
		12	44.3	30.6	7.4	10.8	38.3	28.9	6.4	8.1	33.4	26.3	5.6	6.1
		14	40.9	29.2	5.8	6.8	35.0	27.5	5.0	5.0	30.1	24.9	4.3	3.7
		16	37.6	27.9	4.7	4.4	31.8	26.3	4.0	3.1	26.9	23.6	3.4	2.2
	44	10	44.6	30.7	8.9	15.8	38.7	29.0	7.7	15.6	33.8	26.5	6.8	9.1
		12	41.2	29.4	6.9	9.4	35.4	27.7	5.9	9.7	30.5	25.1	5.1	5.1
		14	37.9	28.1	5.4	5.8	32.2	26.4	4.6	5.8	27.3	23.8	3.9	3.0
		16	34.7	26.8	4.3	3.7	29.1	25.2	3.6	3.5	24.2	22.6	3.0	1.8
	45	10	41.6	29.5	8.3	13.7	35.9	27.9	7.2	10.2	30.9	25.3	6.2	7.6
		12	38.3	28.2	6.4	8.1	32.6	26.6	5.4	5.8	27.7	23.9	4.6	4.2
		14	35.0	26.9	5.0	5.0	29.4	25.3	4.2	3.5	24.5	22.7	3.5	2.4
		16	31.8	25.7	4.0	3.1	26.4	24.1	3.3	2.2	21.6	21.5	2.7	1.4
	46	10	38.7	28.4	7.7	11.9	33.0	26.7	6.6	8.7	28.2	24.1	5.6	6.3
		12	35.4	27.1	5.9	6.9	29.8	25.5	5.0	4.9	25.0	22.9	4.2	3.4
		14	32.2	25.9	4.6	4.2	26.7	24.3	3.8	2.9	21.9	21.7	3.1	1.9
		16	29.1	24.7	3.6	2.6	23.8	23.2	3.0	1.7	19.0	19.0	2.4	1.1
	47	10	35.8	27.2	7.2	10.2	30.3	25.7	6.1	7.3	25.4	23.1	5.1	5.1
		12	32.6	26.0	5.4	5.8	27.2	24.4	4.5	4.1	22.3	21.8	3.7	2.7
		14	29.4	24.9	4.2	3.5	24.1	23.3	3.4	2.4	19.4	19.4	2.8	1.5
		16	26.4	23.8	3.3	2.2	21.2	21.2	2.7	1.4	16.7	16.7	2.1	0.9
	48	10	33.0	26.2	6.6	8.6	27.6	24.6	5.5	6.1	22.8	22.0	4.6	4.1
		12	29.9	25.0	5.0	4.9	24.6	23.5	4.1	3.3	19.8	19.8	3.3	2.2
		14	26.8	23.9	3.8	2.9	21.6	21.6	3.1	1.9	17.0	17.0	2.4	1.2
		16	23.8	22.8	3.0	1.8	18.9	18.9	2.4	1.1	14.4	14.4	1.8	0.6

Heating Performance - 2-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFC-1200	120	15	51.8	6.9	9.4	45.9	6.1	7.4	40.0	5.3	5.6
		20	47.5	4.8	4.5	41.7	4.2	3.4	35.9	3.6	2.6
		25	43.4	3.5	2.4	37.7	3.0	1.8	32.0	2.6	1.3
		30	39.5	2.6	1.4	33.9	2.3	1.0	28.3	1.9	0.7
	130	15	63.6	8.5	14.2	57.7	7.7	11.7	51.8	6.9	9.4
		20	59.2	5.9	7.0	53.4	5.3	5.6	47.5	4.8	4.5
		25	55.0	4.4	3.8	49.2	3.9	3.1	43.4	3.5	2.4
		30	50.9	3.4	2.3	45.2	3.0	1.8	39.5	2.6	1.4
	140	15	75.4	10.1	20.0	69.5	9.3	17.0	63.6	8.5	14.2
		20	71.0	7.1	10.0	65.1	6.5	8.4	59.3	5.9	7.0
		25	66.7	5.3	5.6	60.9	4.9	4.7	55.0	4.4	3.8
		30	62.5	4.2	3.4	56.7	3.8	2.8	50.9	3.4	2.3
	150	15	87.2	11.6	26.8	81.3	10.8	23.3	75.4	10.1	20.0
		20	82.8	8.3	13.6	76.9	7.7	11.7	71.0	7.1	10.0
		25	78.5	6.3	7.8	72.6	5.8	6.7	66.7	5.3	5.6
		30	74.2	4.9	4.9	68.4	4.6	4.1	62.5	4.2	3.4

Heating Performance - 4-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFC-1200	160	30	43.0	2.9	25.4	40.2	2.7	22.3	37.4	2.5	19.3
		40	39.7	2.0	12.2	36.9	1.8	10.6	34.1	1.7	9.0
		50	36.4	1.5	6.6	33.7	1.3	5.6	30.9	1.2	4.7
		60	33.2	1.1	3.8	30.4	1.0	3.2	27.7	0.9	2.6
	180	30	54.1	3.6	40.3	51.3	3.4	36.3	48.5	3.2	32.4
		40	50.8	2.5	20.0	48.0	2.4	17.9	45.2	2.3	15.9
		50	47.5	1.9	11.2	44.8	1.8	9.9	42.0	1.7	8.7
		60	44.3	1.5	6.8	41.5	1.4	5.9	38.7	1.3	5.2

Cooling Performance

Size (Tons)	EWT (°F)	Delta T (°F)	Cooling Performance - 80°F / 67°F				Cooling Performance - 78°F / 65°F				Cooling Performance - 75°F / 63°F			
			Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)	Total Capacity	Sensible Capacity	GPM	Pressure Drop (Ft)
WFD-1200	42	10	59.7	38.0	11.9	26.1	52.6	35.9	10.5	20.3	46.9	33.0	9.4	16.1
		12	55.8	36.3	9.3	15.8	48.8	34.2	8.1	12.1	43.1	31.3	7.2	9.4
		14	52.0	34.7	7.4	10.1	45.1	32.6	6.4	7.6	39.3	29.7	5.6	5.8
		16	48.2	33.1	6.0	6.6	41.4	31.1	5.2	4.9	35.6	28.1	4.4	3.6
	43	10	56.0	36.4	11.2	23.0	49.1	34.4	9.8	17.6	43.4	31.5	8.7	13.8
		12	52.2	34.8	8.7	13.9	45.4	32.8	7.6	10.5	39.6	29.8	6.6	8.0
		14	48.5	33.2	6.9	8.8	41.7	31.2	6.0	6.5	35.9	28.2	5.1	4.8
		16	44.7	31.7	5.6	5.7	38.0	29.7	4.8	4.1	32.3	26.7	4.0	3.0
	44	10	52.5	34.9	10.5	20.1	45.7	32.9	9.1	15.6	40.0	30.0	8.0	11.7
		12	48.7	33.3	8.1	12.1	42.0	31.3	7.0	9.7	36.2	28.4	6.0	6.7
		14	45.0	31.8	6.4	7.6	38.3	29.8	5.5	5.8	32.6	26.9	4.7	4.0
		16	41.3	30.4	5.2	4.9	34.8	28.4	4.3	3.5	29.1	25.4	3.6	2.4
	45	10	49.0	33.5	9.8	17.6	42.3	31.5	8.5	13.1	36.6	28.5	7.3	9.8
		12	45.3	31.9	7.5	10.4	38.7	30.0	6.4	7.6	33.0	27.0	5.5	5.5
		14	41.6	30.5	5.9	6.5	35.1	28.6	5.0	4.6	29.4	25.6	4.2	3.2
		16	38.0	29.1	4.8	4.1	31.6	27.2	4.0	2.9	26.0	24.2	3.2	1.9
	46	10	45.6	32.1	9.1	15.2	39.1	30.1	7.8	11.2	33.4	27.2	6.7	8.2
		12	41.9	30.6	7.0	8.9	35.5	28.7	5.9	6.4	29.8	25.7	5.0	4.5
		14	38.3	29.2	5.5	5.5	32.0	27.3	4.6	3.8	26.3	24.4	3.8	2.6
		16	34.8	27.9	4.4	3.5	28.6	26.0	3.6	2.3	23.0	23.0	2.9	1.5
	47	10	42.3	30.7	8.5	13.1	35.9	28.9	7.2	9.4	30.2	25.9	6.0	6.7
		12	38.7	29.3	6.4	7.6	32.4	27.5	5.4	5.3	26.7	24.5	4.5	3.6
		14	35.1	28.0	5.0	4.6	28.9	26.2	4.1	3.1	23.3	23.2	3.3	2.0
		16	31.7	26.7	4.0	2.9	25.6	24.9	3.2	1.9	20.1	20.1	2.5	1.2
	48	10	39.0	29.5	7.8	11.2	32.8	27.6	6.6	7.9	27.2	24.7	5.4	5.4
		12	35.5	28.1	5.9	6.4	29.3	26.3	4.9	4.4	23.7	23.4	4.0	2.9
		14	32.0	26.8	4.6	3.8	26.0	25.0	3.7	2.5	20.5	20.5	2.9	1.6
		16	28.6	25.6	3.6	2.3	22.7	22.7	2.8	1.5	17.4	17.4	2.2	0.9

Heating Performance - 2-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFD-1200	120	15	56.9	7.6	10.5	50.5	6.7	8.3	44.1	5.9	6.3
		20	52.5	5.2	5.0	46.1	4.6	3.9	39.8	4.0	2.9
		25	48.2	3.9	2.7	41.9	3.4	2.1	35.6	2.9	1.5
		30	44.0	2.9	1.6	37.8	2.5	1.2	31.7	2.1	0.8
	130	15	69.6	9.3	15.8	63.2	8.4	13.0	56.9	7.6	10.5
		20	65.2	6.5	7.8	58.8	5.9	6.3	52.5	5.2	5.0
		25	60.8	4.9	4.3	54.5	4.4	3.5	48.2	3.9	2.7
		30	56.5	3.8	2.6	50.2	3.3	2.1	44.0	2.9	1.6
	140	15	82.4	11.0	22.1	76.0	10.1	18.8	69.6	9.3	15.8
		20	77.9	7.8	11.1	71.6	7.2	9.4	65.2	6.5	7.8
		25	73.5	5.9	6.3	67.1	5.4	5.3	60.8	4.9	4.3
		30	69.2	4.6	3.9	62.8	4.2	3.2	56.5	3.8	2.6
	150	15	95.2	12.7	29.5	88.8	11.8	25.7	82.4	11.0	22.1
		20	90.7	9.1	15.1	84.3	8.4	13.0	77.9	7.8	11.1
		25	86.3	6.9	8.7	79.9	6.4	7.5	73.5	5.9	6.3
		30	81.9	5.5	5.4	75.5	5.0	4.6	69.2	4.6	3.9

Heating Performance - 4-Pipe

Size (Tons)	EWT (°F)	Delta T (°F)	Heating Entering Air - 65°F			Heating Entering Air - 70°F			Heating Entering Air - 75°F		
			Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)	Total Capacity	GPM	Pressure Drop (Ft)
WFD-1200	160	30	42.5	2.8	24.9	39.8	2.7	21.8	37.0	2.5	18.9
		40	39.3	2.0	12.0	36.6	1.8	10.4	33.8	1.7	8.9
		50	36.1	1.4	6.5	33.3	1.3	5.5	30.6	1.2	4.6
		60	32.9	1.1	3.7	30.1	1.0	3.1	27.4	0.9	2.6
	180	30	53.5	3.6	39.5	50.8	3.4	35.5	48.0	3.2	31.8
		40	50.3	2.5	19.6	47.5	2.4	17.5	44.8	2.2	15.6
		50	47.1	1.9	11.0	44.3	1.8	9.7	41.6	1.7	8.6
		60	43.8	1.5	6.6	41.1	1.4	5.8	38.4	1.3	5.1

Table 7: WFC PSC Blower Performance Table

Unit		Fan Option		CFM at External Static Pressure (in wg.)												
		Option	Speed	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.60	0.70
300	3 Row	STD	HI	351	334	319	305	294	283							
			MED	312	296	282	270	260								
			LO	225	211	200										
		HS	HI	453	438	423	408	393	378	362						
			MED	358	347	335	323	311	299	287						
			LO	265	253	243	235	229	224							
	4 Row	STD	HI	334	319	305	293	283	275							
			MED	299	284	272	261	253								
			LO	218	206	196										
		HS	HI	429	414	399	383	368	352	337						
			MED	346	334	323	311	298	286	274						
			LO	258	247	238	231	225	222							
400	3 Row	STD	HI	479	467	456	444	433	421	410	399					
			MED	358	351	345	339	334	330	326						
			LO	280	273	266	259									
		HS	HI	591	582	571	555	536	514	488	459					
			MED	495	479	462	444	425	405	384	362					
			LO	341	323	305	287	269	250							
	4 Row	STD	HI	466	454	443	431	420	408	397	386					
			MED	354	347	341	336	331	327							
			LO	277	270	263	256									
		HS	HI	575	561	543	522	497	469	438	402					
			MED	476	459	441	422	401	380	358	335					
			LO	330	312	294	276	257	239							
600	3 Row	STD	HI	626	618	606	591	572	549	524	494					
			MED	528	512	495	477	458	438	417						
			LO	358	341	323	305	287	268							
		HS	HI	790	758	723	685	644	600	553	504	451	395	337		
			MED	635	616	593	567	537	504	468	428	385				
			LO	448	430	412	393	374	354							
	4 Row	STD	HI	617	605	589	570	548	521	492	459					
			MED	516	499	481	462	442	421	399						
			LO	351	333	315	297	279	261							
		HS	HI	737	700	661	618	572	524	472	418	361	300	237		
			MED	614	591	564	534	501	464	424	381	334				
			LO	437	419	401	382	362	342							
800	3 Row	STD	HI	832	805	774	740	703	664	621	576	528				
			MED	652	636	617	594	568	539	506	470	430				
			LO	457	440	422	404	385	365	345						
		HS	HI	923	898	870	840	808	773	736	696	655	610	564		
			MED	816	799	779	758	734	709	681	651	620	586			
			LO	552	545	536	526	514	500	484						
	4 Row	STD	HI	800	769	734	697	657	614	569	520	468				
			MED	640	622	600	575	546	514	479	440	398				
			LO	451	433	415	396	377	357	337						
		HS	HI	888	860	829	796	760	722	682	639	594	546	496		
			MED	797	777	756	732	706	678	648	616	582	546			
			LO	549	541	531	519	506	491	475						
1000	3 Row	STD	HI	981	962	941	918	892	864	834	801	766				
			MED	846	834	819	803	784	763	740						
			LO	558	553	546	537	527								
		HS	HI	1214	1199	1183	1165	1146	1125	1102	1078	1052	1025	996	933	864
			MED	1006	994	981	967	952	935	917	898	878	857			
			LO	855	834	813	791	769	746	723	699					
	4 Row	STD	HI	969	949	927	902	875	845	813	779	742				
			MED	840	825	810	792	772	750	725						
			LO	557	551	544	534	524								
		HS	HI	1199	1183	1165	1146	1125	1102	1078	1052	1025	996	965	899	827
			MED	998	985	971	956	939	922	903	883	862	840			
			LO	843	822	800	778	755	732	709	685					
1200	3 Row	STD	HI	1171	1162	1151	1138	1122	1105	1085	1063	1039	1012	984		
			MED	1019	1008	995	981	965	948	930	911	890				
			LO	843	835	825	813	800	785							
		HS	HI	Not Available; See Constant Torque EC Motor												
			MED													
			LO													
	4 Row	STD	HI	1166	1155	1143	1129	1112	1093	1072	1048	1023	995	966		
			MED	1014	1002	988	974	958	940	921	901	880				
			LO	841	832	821	809	795	780							
		HS	HI	Not Available; See Constant Torque EC Motor												
			MED													
			LO													

Table 8: WFX Constant Torque ECM Blower Performance Table

Unit	Rated CFM	Fan Option		CFM at External Static Pressure (in wg.)											
		Option	Speed	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.60
300 (0.75)	300	EC Constant Torque	HI	408	393	378	363	349	335	320					
			MED HI1	338	323	307	292	277	262	247					
			MED	299	282	264	247	231							
			MED LO	254	233	212	192								
			LOW2	238	209										
400 (1.0)	400	EC Constant Torque	HI	437	422	408	394	380	366	353					
			MED HI1	431	417	402	388	375	361	348					
			MED	389	374	359	344	330							
			MED LO	349	332	315	298	281	265	249					
			LOW2	254	233										
600 (1.5)	600	EC Constant Torque	HI	752	735	717	698	679	660	639	619	597			
			MED HI1	679	657	634	612	590	568	546	524	503			
			MED	620	594	569	544	520	497	475					
			MED LO	543	511	480	451								
			LOW2	487	455										
800 (2.0)	800	EC Constant Torque	HI	839	822	804	785	766	747	726	706	684	662		
			MED HI1	807	790	772	753	734	714	694	673	652	630		
			MED	722	700	677	655	633	611	589					
			MED LO	608	582	556	532								
			LOW2	487	455										
1000 (2.5)	1000	EC Constant Torque	HI	1034	1017	999	982	965	949	933	917	902	887	844	817
			MED HI1	--	--	--	--	--	--	--	--	--	--		
			MED	873	853	833	814	795	777	760	744	728	713		
			MED LO	--	--	--	--	--	--	--	--				
			LOW2	704	679	656	633	611	590	570	551				
1200 (3.0)	1200	EC Constant Torque	HI	1212	1196	1181	1166	1151	1136	1122	1108	1095	1082	1044	1021
			MED HI1	--	--	--	--	--	--	--	--	--	--		
			MED	1027	1010	992	975	959	943	927	911	896	881		
			MED LO	--	--	--	--	--	--	--	--				
			LOW2	798	777	756	736	716	697	679	662				

Table 9: WFX Electrical Data – Standard PSC Motor

Size (Tons)	Supply Blower Motor			Electric Heat			Single Point Power		Dual Point Power			
	Voltage	FLA	HP	Voltage	kW	Amps	MCA	MOPD	Unit MCA	Unit MOPD	E-Heat MCA	E-Heat MOPD
WFX-300	115/1/60	0.7	1/20	115/1/60	0.0	0.0	0.9	15	NA	NA	NA	NA
					1.0	8.7	11.7	15	0.9	15	10.9	15
					1.5	13.0	17.2	20	0.9	15	16.3	20
					2.0	17.4	22.6	25	0.9	15	21.7	25
					2.5	21.7	28.1	30	0.9	15	27.2	30
					3.0	26.1	NA	NA	0.9	15	32.6	35
	208-230/1/60	0.6	1/15	208/1/60	0.0	0.0	0.8	15	NA	NA	NA	NA
					1.0	4.8	6.8	15	0.8	15	6.0	15
					1.5	7.2	9.8	15	0.8	15	9.0	15
					2.0	9.6	12.8	15	0.8	15	12.0	15
					2.5	12.0	15.8	20	0.8	15	15.0	20
					3.0	14.4	18.8	20	0.8	15	18.0	20
				230/1/60	0.0	0.0	0.8	15	NA	NA	NA	NA
					1.0	4.3	6.2	15	0.8	15	5.4	15
					1.5	6.5	8.9	15	0.8	15	8.2	15
					2.0	8.7	11.6	15	0.8	15	10.9	15
					2.5	10.9	14.3	15	0.8	15	13.6	15
					3.0	13.0	17.1	20	0.8	15	16.3	20
	265/1/60	0.5	1/20	265/1/60	0.0	0.0	0.6	15	NA	NA	NA	NA
					1.0	3.8	5.3	15	0.6	15	4.7	15
					1.5	5.7	7.7	15	0.6	15	7.1	15
					2.0	7.5	10.1	15	0.6	15	9.4	15
					2.5	9.4	12.4	15	0.6	15	11.8	15
					3.0	11.3	14.8	15	0.6	15	14.2	15
WFX-400	115/1/60	1.0	1/15	115/1/60	0.0	0.0	1.3	15	NA	NA	NA	NA
					1.0	8.7	12.1	15	1.3	15	10.9	15
					1.5	13.0	17.6	20	1.3	15	16.3	20
					2.0	17.4	23.0	25	1.3	15	21.7	25
					2.5	21.7	28.4	30	1.3	15	27.2	30
					3.0	26.1	NA	NA	1.3	15	32.6	35
					3.5	30.4	NA	NA	1.3	15	38.0	40
					4.0	34.8	NA	NA	1.3	15	43.5	45
	208-230/1/60	0.6	1/15	208/1/60	0.0	0.0	0.8	15	NA	NA	NA	NA
					1.0	4.8	6.8	15	0.8	15	6.0	15
					1.5	7.2	9.8	15	0.8	15	9.0	15
					2.0	9.6	12.8	15	0.8	15	12.0	15
					2.5	12.0	15.8	20	0.8	15	15.0	20
					3.0	14.4	18.8	20	0.8	15	18.0	20
					3.5	16.8	21.8	25	0.8	15	21.0	25
					4.0	19.2	24.8	25	0.8	15	24.0	25
				230/1/60	0.0	0.0	0.8	15	NA	NA	NA	NA
					1.0	4.3	6.2	15	0.8	15	5.4	15
					1.5	6.5	8.9	15	0.8	15	8.2	15
					2.0	8.7	11.6	15	0.8	15	10.9	15
					2.5	10.9	14.3	15	0.8	15	13.6	15
					3.0	13.0	17.1	20	0.8	15	16.3	20
					3.5	15.2	19.8	20	0.8	15	19.0	20
					4.0	17.4	22.5	25	0.8	15	21.7	25
	265/1/60	0.5	1/12	265/1/60	0.0	0.0	0.6	15	NA	NA	NA	NA
					1.0	3.8	5.3	15	0.6	15	4.7	15
					1.5	5.7	7.7	15	0.6	15	7.1	15
					2.0	7.5	10.1	15	0.6	15	9.4	15
					2.5	9.4	12.4	15	0.6	15	11.8	15
					3.0	11.3	14.8	15	0.6	15	14.2	15
					3.5	13.2	17.1	20	0.6	15	16.5	20
					4.0	15.1	19.5	20	0.6	15	18.9	20

WFX Electrical Data – Standard PSC Motor

Size (Tons)	Supply Blower Motor			Electric Heat			Single Point Power		Dual Point Power			
	Voltage	FLA	HP	Voltage	kW	Amps	MCA	MOPD	Unit MCA	Unit MOPD	E-Heat MCA	E-Heat MOPD
WFX-600	115/1/60	1.6	1/12	115/1/60	0.0	0.0	2.0	15	NA	NA	NA	NA
					1.0	8.7	12.9	15	2.0	15	10.9	15
					1.5	13.0	18.3	20	2.0	15	16.3	20
					2.0	17.4	23.7	25	2.0	15	21.7	25
					2.5	21.7	29.2	30	2.0	15	27.2	30
					3.0	26.1	NA	NA	2.0	15	32.6	35
					3.5	30.4	NA	NA	2.0	15	38.0	40
					4.0	34.8	NA	NA	2.0	15	43.5	45
					4.5	39.1	NA	NA	2.0	15	48.9	50
					5.0	43.5	NA	NA	2.0	15	54.3	55
					5.5	47.8	NA	NA	2.0	15	59.8	60
					6.0	NA	NA	NA	NA	NA	NA	NA
	208-230/1/60	0.9	1/12	208/1/60	0.0	0.0	1.1	15	NA	NA	NA	NA
					1.0	4.8	7.1	15	1.1	15	6.0	15
					1.5	7.2	10.1	15	1.1	15	9.0	15
					2.0	9.6	13.1	15	1.1	15	12.0	15
					2.5	12.0	16.2	20	1.1	15	15.0	20
					3.0	14.4	19.2	20	1.1	15	18.0	20
					3.5	16.8	22.2	25	1.1	15	21.0	25
					4.0	19.2	25.2	30	1.1	15	24.0	25
					4.5	21.6	28.2	30	1.1	15	27.0	30
					5.0	24.0	NA	NA	1.1	15	30.0	35
					5.5	26.4	NA	NA	1.1	15	33.1	35
					6.0	28.8	NA	NA	1.1	15	36.1	40
				230/1/60	0.0	0.0	1.1	15	NA	NA	NA	NA
					1.0	4.3	6.6	15	1.1	15	5.4	15
					1.5	6.5	9.3	15	1.1	15	8.2	15
					2.0	8.7	12.0	15	1.1	15	10.9	15
					2.5	10.9	14.7	15	1.1	15	13.6	15
					3.0	13.0	17.4	20	1.1	15	16.3	20
					3.5	15.2	20.2	25	1.1	15	19.0	20
					4.0	17.4	22.9	25	1.1	15	21.7	25
					4.5	19.6	25.6	30	1.1	15	24.5	25
					5.0	21.7	28.3	30	1.1	15	27.2	30
					5.5	23.9	NA	NA	1.1	15	29.9	30
					6.0	26.1	NA	NA	1.1	15	32.6	35
	265/1/60	0.8	0.15	265/1/60	0.0	0.0	1.0	15	NA	NA	NA	NA
					1.0	3.8	5.7	15	1.0	15	4.7	15
					1.5	5.7	8.1	15	1.0	15	7.1	15
					2.0	7.5	10.4	15	1.0	15	9.4	15
					2.5	9.4	12.8	15	1.0	15	11.8	15
					3.0	11.3	15.2	20	1.0	15	14.2	15
					3.5	13.2	17.5	20	1.0	15	16.5	20
					4.0	15.1	19.9	20	1.0	15	18.9	20
					4.5	17.0	22.2	25	1.0	15	21.2	25
					5.0	18.9	24.6	25	1.0	15	23.6	25
					5.5	20.8	26.9	30	1.0	15	25.9	30
					6.0	22.6	29.3	30	1.0	15	28.3	30

WFX Electrical Data – Standard PSC Motor

Size (Tons)	Supply Blower Motor			Electric Heat			Single Point Power		Dual Point Power			
	Voltage	FLA	HP	Voltage	kW	Amps	MCA	MOPD	Unit MCA	Unit MOPD	E-Heat MCA	E-Heat MOPD
WFX-800	115/1/60	2.3	1/6	115/1/60	0.0	0.0	2.9	15	NA	NA	NA	NA
					1.0	8.7	13.7	15	2.9	15	10.9	15
					1.5	13.0	19.2	20	2.9	15	16.3	20
					2.0	17.4	24.6	25	2.9	15	21.7	25
					2.5	21.7	NA	NA	2.9	15	27.2	30
					3.0	26.1	NA	NA	2.9	15	32.6	35
					3.5	30.4	NA	NA	2.9	15	38.0	40
					4.0	34.8	NA	NA	2.9	15	43.5	45
					4.5	39.1	NA	NA	2.9	15	48.9	50
					5.0	43.5	NA	NA	2.9	15	54.3	55
					5.5	47.8	NA	NA	2.9	15	59.8	60
					6.0	NA	NA	NA	NA	NA	NA	NA
					6.5	NA	NA	NA	NA	NA	NA	NA
					7.0	NA	NA	NA	NA	NA	NA	NA
					7.5	NA	NA	NA	NA	NA	NA	NA
					8.0	NA	NA	NA	NA	NA	NA	NA
	208-230/1/60	1.5	1/5	208/1/60	0.0	0.0	1.9	15	NA	NA	NA	NA
					1.0	4.8	7.9	15	1.9	15	6.0	15
					1.5	7.2	10.9	15	1.9	15	9.0	15
					2.0	9.6	13.9	15	1.9	15	12.0	15
					2.5	12.0	16.9	20	1.9	15	15.0	20
					3.0	14.4	19.9	20	1.9	15	18.0	20
					3.5	16.8	22.9	25	1.9	15	21.0	25
					4.0	19.2	25.9	30	1.9	15	24.0	25
					4.5	21.6	28.9	30	1.9	15	27.0	30
					5.0	24.0	NA	NA	1.9	15	30.0	35
					5.5	26.4	NA	NA	1.9	15	33.1	35
					6.0	28.8	NA	NA	1.9	15	36.1	40
					6.5	31.3	NA	NA	1.9	15	39.1	40
					7.0	33.7	NA	NA	1.9	15	42.1	45
					7.5	36.1	NA	NA	1.9	15	45.1	50
					8.0	38.5	NA	NA	1.9	15	48.1	50
				230/1/60	0.0	0.0	1.9	15	NA	NA	NA	NA
					1.0	4.3	7.3	15	1.9	15	5.4	15
					1.5	6.5	10.0	15	1.9	15	8.2	15
					2.0	8.7	12.7	15	1.9	15	10.9	15
					2.5	10.9	15.5	20	1.9	15	13.6	15
					3.0	13.0	18.2	20	1.9	15	16.3	20
					3.5	15.2	20.9	25	1.9	15	19.0	20
					4.0	17.4	23.6	25	1.9	15	21.7	25
					4.5	19.6	26.3	30	1.9	15	24.5	25
					5.0	21.7	29.1	30	1.9	15	27.2	30
					5.5	23.9	NA	NA	1.9	15	29.9	30
					6.0	26.1	NA	NA	1.9	15	32.6	35
					6.5	28.3	NA	NA	1.9	15	35.3	40
					7.0	30.4	NA	NA	1.9	15	38.0	40
					7.5	32.6	NA	NA	1.9	15	40.8	45
					8.0	34.8	NA	NA	1.9	15	43.5	45
	265/1/60	0.9	0.14	265/1/60	0.0	0.0	1.1	15	NA	NA	NA	NA
					1.0	3.8	5.8	15	1.1	15	4.7	15
					1.5	5.7	8.2	15	1.1	15	7.1	15
					2.0	7.5	10.6	15	1.1	15	9.4	15
					2.5	9.4	12.9	15	1.1	15	11.8	15
					3.0	11.3	15.3	20	1.1	15	14.2	15
					3.5	13.2	17.6	20	1.1	15	16.5	20
					4.0	15.1	20.0	20	1.1	15	18.9	20
					4.5	17.0	22.4	25	1.1	15	21.2	25
					5.0	18.9	24.7	25	1.1	15	23.6	25
					5.5	20.8	27.1	30	1.1	15	25.9	30
					6.0	22.6	29.4	30	1.1	15	28.3	30
					6.5	24.5	NA	NA	1.1	15	30.7	35
					7.0	26.4	NA	NA	1.1	15	33.0	35
					7.5	28.3	NA	NA	1.1	15	35.4	40
					8.0	30.2	NA	NA	1.1	15	37.7	40

WFX Electrical Data – Standard PSC Motor

Size (Tons)	Supply Blower Motor			Electric Heat			Single Point Power		Dual Point Power			
	Voltage	FLA	HP	Voltage	kW	Amps	MCA	MOPD	Unit MCA	Unit MOPD	E-Heat MCA	E-Heat MOPD
WFX-1000	115/1/60	3.0	1/5	115/1/60	0.0	0.0	3.8	15	NA	NA	NA	NA
					1.0	8.7	14.6	15	3.8	15	10.9	15
					1.5	13.0	20.1	25	3.8	15	16.3	20
					2.0	17.4	25.5	30	3.8	15	21.7	25
					2.5	21.7	NA	NA	3.8	15	27.2	30
					3.0	26.1	NA	NA	3.8	15	32.6	35
					3.5	30.4	NA	NA	3.8	15	38.0	40
					4.0	34.8	NA	NA	3.8	15	43.5	45
					4.5	39.1	NA	NA	3.8	15	48.9	50
					5.0	43.5	NA	NA	3.8	15	54.3	55
					5.5	47.8	NA	NA	3.8	15	59.8	60
					6.0	NA	NA	NA	NA	NA	NA	NA
					6.5	NA	NA	NA	NA	NA	NA	NA
					7.0	NA	NA	NA	NA	NA	NA	NA
					7.5	NA	NA	NA	NA	NA	NA	NA
					8.0	NA	NA	NA	NA	NA	NA	NA
					8.5	NA	NA	NA	NA	NA	NA	NA
					9.0	NA	NA	NA	NA	NA	NA	NA
					9.5	NA	NA	NA	NA	NA	NA	NA
					10.0	NA	NA	NA	NA	NA	NA	NA
	208-230/1/60	1.5	1/5	208/1/60	0.0	0.0	1.9	15	NA	NA	NA	NA
					1.0	4.8	7.9	15	1.9	15	6.0	15
					1.5	7.2	10.9	15	1.9	15	9.0	15
					2.0	9.6	13.9	15	1.9	15	12.0	15
					2.5	12.0	16.9	20	1.9	15	15.0	20
					3.0	14.4	19.9	20	1.9	15	18.0	20
					3.5	16.8	22.9	25	1.9	15	21.0	25
					4.0	19.2	25.9	30	1.9	15	24.0	25
					4.5	21.6	28.9	30	1.9	15	27.0	30
					5.0	24.0	NA	NA	1.9	15	30.0	35
					5.5	26.4	NA	NA	1.9	15	33.1	35
					6.0	28.8	NA	NA	1.9	15	36.1	40
					6.5	31.3	NA	NA	1.9	15	39.1	40
					7.0	33.7	NA	NA	1.9	15	42.1	45
					7.5	36.1	NA	NA	1.9	15	45.1	50
					8.0	38.5	NA	NA	1.9	15	48.1	50
					8.5	40.9	NA	NA	1.9	15	51.1	55
					9.0	43.3	NA	NA	1.9	15	54.1	55
					9.5	45.7	NA	NA	1.9	15	57.1	60
					10.0	NA	NA	NA	NA	NA	NA	NA
				230/1/60	0.0	0.0	1.9	15	NA	NA	NA	NA
					1.0	4.3	7.3	15	1.9	15	5.4	15
					1.5	6.5	10.0	15	1.9	15	8.2	15
					2.0	8.7	12.7	15	1.9	15	10.9	15
					2.5	10.9	15.5	20	1.9	15	13.6	15
					3.0	13.0	18.2	20	1.9	15	16.3	20
					3.5	15.2	20.9	25	1.9	15	19.0	20
					4.0	17.4	23.6	25	1.9	15	21.7	25
					4.5	19.6	26.3	30	1.9	15	24.5	25
					5.0	21.7	29.1	30	1.9	15	27.2	30
					5.5	23.9	NA	NA	1.9	15	29.9	30
					6.0	26.1	NA	NA	1.9	15	32.6	35
					6.5	28.3	NA	NA	1.9	15	35.3	40
					7.0	30.4	NA	NA	1.9	15	38.0	40
					7.5	32.6	NA	NA	1.9	15	40.8	45
					8.0	34.8	NA	NA	1.9	15	43.5	45
					8.5	37.0	NA	NA	1.9	15	46.2	50
					9.0	39.1	NA	NA	1.9	15	48.9	50
					9.5	41.3	NA	NA	1.9	15	51.6	55
					10.0	43.5	NA	NA	1.9	15	54.3	55
	265/1/60	1.2	1/5	265/1/60	0.0	0.0	1.5	15	NA	NA	NA	NA
					1.0	3.8	6.2	15	1.5	15	4.7	15
					1.5	5.7	8.6	15	1.5	15	7.1	15
					2.0	7.5	10.9	15	1.5	15	9.4	15
					2.5	9.4	13.3	15	1.5	15	11.8	15
					3.0	11.3	15.7	20	1.5	15	14.2	15
					3.5	13.2	18.0	20	1.5	15	16.5	20
					4.0	15.1	20.4	25	1.5	15	18.9	20
					4.5	17.0	22.7	25	1.5	15	21.2	25
					5.0	18.9	25.1	30	1.5	15	23.6	25
					5.5	20.8	27.4	30	1.5	15	25.9	30
					6.0	22.6	29.8	30	1.5	15	28.3	30
					6.5	24.5	NA	NA	1.5	15	30.7	35
					7.0	26.4	NA	NA	1.5	15	33.0	35
					7.5	28.3	NA	NA	1.5	15	35.4	40
					8.0	30.2	NA	NA	1.5	15	37.7	40
					8.5	32.1	NA	NA	1.5	15	40.1	45
					9.0	34.0	NA	NA	1.5	15	42.5	45
					9.5	35.8	NA	NA	1.5	15	44.8	45
					10.0	37.7	NA	NA	1.5	15	47.2	50

WFX Electrical Data – Standard PSC Motor

Size (Tons)	Supply Blower Motor			Electric Heat			Single Point Power		Dual Point Power			
	Voltage	FLA	HP	Voltage	kW	Amps	MCA	MOPD	Unit MCA	Unit MOPD	E-Heat MCA	E-Heat MOPD
WFX-1200	115/1/60	5.3	1/3	115/1/60	0.0	0.0	6.6	15	NA	NA	NA	NA
					1.0	8.7	17.5	20	6.6	15	10.9	15
					1.5	13.0	22.9	25	6.6	15	16.3	20
					2.0	17.4	28.4	30	6.6	15	21.7	25
					2.5	21.7	NA	NA	6.6	15	27.2	30
					3.0	26.1	NA	NA	6.6	15	32.6	35
					3.5	30.4	NA	NA	6.6	15	38.0	40
					4.0	34.8	NA	NA	6.6	15	43.5	45
					4.5	39.1	NA	NA	6.6	15	48.9	50
					5.0	43.5	NA	NA	6.6	15	54.3	55
					5.5	47.8	NA	NA	6.6	15	59.8	60
					6.0	NA	NA	NA	NA	NA	NA	NA
					6.5	NA	NA	NA	NA	NA	NA	NA
					7.0	NA	NA	NA	NA	NA	NA	NA
					7.5	NA	NA	NA	NA	NA	NA	NA
					8.0	NA	NA	NA	NA	NA	NA	NA
					8.5	NA	NA	NA	NA	NA	NA	NA
					9.0	NA	NA	NA	NA	NA	NA	NA
					9.5	NA	NA	NA	NA	NA	NA	NA
					10.0	NA	NA	NA	NA	NA	NA	NA
	208-230/1/60	2.7	1/2	208/1/60	0.0	0.0	3.4	15	NA	NA	NA	NA
					1.0	4.8	9.4	15	3.4	15	6.0	15
					1.5	7.2	12.4	15	3.4	15	9.0	15
					2.0	9.6	15.4	20	3.4	15	12.0	15
					2.5	12.0	18.4	20	3.4	15	15.0	20
					3.0	14.4	21.4	25	3.4	15	18.0	20
					3.5	16.8	24.4	25	3.4	15	21.0	25
					4.0	19.2	27.4	30	3.4	15	24.0	25
					4.5	21.6	NA	NA	3.4	15	27.0	30
					5.0	24.0	NA	NA	3.4	15	30.0	35
					5.5	26.4	NA	NA	3.4	15	33.1	35
					6.0	28.8	NA	NA	3.4	15	36.1	40
					6.5	31.3	NA	NA	3.4	15	39.1	40
					7.0	33.7	NA	NA	3.4	15	42.1	45
					7.5	36.1	NA	NA	3.4	15	45.1	50
					8.0	38.5	NA	NA	3.4	15	48.1	50
					8.5	40.9	NA	NA	3.4	15	51.1	55
					9.0	43.3	NA	NA	3.4	15	54.1	55
					9.5	45.7	NA	NA	3.4	15	57.1	60
					10.0	NA	NA	NA	NA	NA	NA	NA
				230/1/60	0.0	0.0	3.4	15	NA	NA	NA	NA
					1.0	4.3	8.8	15	3.4	15	5.4	15
					1.5	6.5	11.5	15	3.4	15	8.2	15
					2.0	8.7	14.2	15	3.4	15	10.9	15
					2.5	10.9	17.0	20	3.4	15	13.6	15
					3.0	13.0	19.7	20	3.4	15	16.3	20
					3.5	15.2	22.4	25	3.4	15	19.0	20
					4.0	17.4	25.1	30	3.4	15	21.7	25
					4.5	19.6	27.8	30	3.4	15	24.5	25
					5.0	21.7	NA	NA	3.4	15	27.2	30
					5.5	23.9	NA	NA	3.4	15	29.9	30
					6.0	26.1	NA	NA	3.4	15	32.6	35
					6.5	28.3	NA	NA	3.4	15	35.3	40
					7.0	30.4	NA	NA	3.4	15	38.0	40
					7.5	32.6	NA	NA	3.4	15	40.8	45
					8.0	34.8	NA	NA	3.4	15	43.5	45
					8.5	37.0	NA	NA	3.4	15	46.2	50
					9.0	39.1	NA	NA	3.4	15	48.9	50
					9.5	41.3	NA	NA	3.4	15	51.6	55
					10.0	43.5	NA	NA	3.4	15	54.3	55
	265/1/60	2.3	0.42	265/1/60	0.0	0.0	2.9	15	NA	NA	NA	NA
					1.0	3.8	7.6	15	2.9	15	4.7	15
					1.5	5.7	10.0	15	2.9	15	7.1	15
					2.0	7.5	12.3	15	2.9	15	9.4	15
					2.5	9.4	14.7	15	2.9	15	11.8	15
					3.0	11.3	17.0	20	2.9	15	14.2	15
					3.5	13.2	19.4	20	2.9	15	16.5	20
					4.0	15.1	21.7	25	2.9	15	18.9	20
					4.5	17.0	24.1	25	2.9	15	21.2	25
					5.0	18.9	26.5	30	2.9	15	23.6	25
					5.5	20.8	28.8	30	2.9	15	25.9	30
					6.0	22.6	NA	NA	2.9	15	28.3	30
					6.5	24.5	NA	NA	2.9	15	30.7	35
					7.0	26.4	NA	NA	2.9	15	33.0	35
					7.5	28.3	NA	NA	2.9	15	35.4	40
					8.0	30.2	NA	NA	2.9	15	37.7	40
					8.5	32.1	NA	NA	2.9	15	40.1	45
					9.0	34.0	NA	NA	2.9	15	42.5	45
					9.5	35.8	NA	NA	2.9	15	44.8	45
					10.0	37.7	NA	NA	2.9	15	47.2	50

Table 10: WFX Electrical Data – High Static PSC Motor

Size (Tons)	Supply Blower Motor			Electric Heat			Single Point Power		Dual Point Power			
	Voltage	FLA	HP	Voltage	kW	Amps	MCA	MOPD	Unit MCA	Unit MOPD	E-Heat MCA	E-Heat MOPD
WFX-300	115/1/60	1.0	1/15	115/1/60	0.0	0.0	1.3	15	NA	NA	NA	NA
					1.0	8.7	12.1	15	1.3	15	10.9	15
					1.5	13.0	17.6	20	1.3	15	16.3	20
					2.0	17.4	23.0	25	1.3	15	21.7	25
					2.5	21.7	28.4	30	1.3	15	27.2	30
					3.0	26.1	NA	NA	1.3	15	32.6	35
	208-230/1/60	0.6	1/15	208/1/60	0.0	0.0	0.8	15	NA	NA	NA	NA
					1.0	4.8	6.8	15	0.8	15	6.0	15
					1.5	7.2	9.8	15	0.8	15	9.0	15
					2.0	9.6	12.8	15	0.8	15	12.0	15
					2.5	12.0	15.8	20	0.8	15	15.0	20
					3.0	14.4	18.8	20	0.8	15	18.0	20
				230/1/60	0.0	0.0	0.8	15	NA	NA	NA	NA
					1.0	4.3	6.2	15	0.8	15	5.4	15
					1.5	6.5	8.9	15	0.8	15	8.2	15
					2.0	8.7	11.6	15	0.8	15	10.9	15
					2.5	10.9	14.3	15	0.8	15	13.6	15
					3.0	13.0	17.1	20	0.8	15	16.3	20
	265/1/60	0.5	1/12	265/1/60	0.0	0.0	0.6	15	NA	NA	NA	NA
					1.0	3.8	5.3	15	0.6	15	4.7	15
					1.5	5.7	7.7	15	0.6	15	7.1	15
					2.0	7.5	10.1	15	0.6	15	9.4	15
					2.5	9.4	12.4	15	0.6	15	11.8	15
					3.0	11.3	14.8	15	0.6	15	14.2	15
WFX-400	115/1/60	1.6	1/12	115/1/60	0.0	0.0	2.0	15	NA	NA	NA	NA
					1.0	8.7	12.9	15	2.0	15	10.9	15
					1.5	13.0	18.3	20	2.0	15	16.3	20
					2.0	17.4	23.7	25	2.0	15	21.7	25
					2.5	21.7	29.2	30	2.0	15	27.2	30
					3.0	26.1	NA	NA	2.0	15	32.6	35
					3.5	30.4	NA	NA	2.0	15	38.0	40
					4.0	34.8	NA	NA	2.0	15	43.5	45
	208-230/1/60	0.9	1/12	208/1/60	0.0	0.0	1.1	15	NA	NA	NA	NA
					1.0	4.8	7.1	15	1.1	15	6.0	15
					1.5	7.2	10.1	15	1.1	15	9.0	15
					2.0	9.6	13.1	15	1.1	15	12.0	15
					2.5	12.0	16.2	20	1.1	15	15.0	20
					3.0	14.4	19.2	20	1.1	15	18.0	20
					3.5	16.8	22.2	25	1.1	15	21.0	25
					4.0	19.2	25.2	30	1.1	15	24.0	25
				230/1/60	0.0	0.0	1.1	15	NA	NA	NA	NA
					1.0	4.3	6.6	15	1.1	15	5.4	15
					1.5	6.5	9.3	15	1.1	15	8.2	15
					2.0	8.7	12.0	15	1.1	15	10.9	15
					2.5	10.9	14.7	15	1.1	15	13.6	15
					3.0	13.0	17.4	20	1.1	15	16.3	20
					3.5	15.2	20.2	25	1.1	15	19.0	20
					4.0	17.4	22.9	25	1.1	15	21.7	25
	265/1/60	0.8	0.15	265/1/60	0.0	0.0	1.0	15	NA	NA	NA	NA
					1.0	3.8	5.7	15	1.0	15	4.7	15
					1.5	5.7	8.1	15	1.0	15	7.1	15
					2.0	7.5	10.4	15	1.0	15	9.4	15
					2.5	9.4	12.8	15	1.0	15	11.8	15
					3.0	11.3	15.2	20	1.0	15	14.2	15
					3.5	13.2	17.5	20	1.0	15	16.5	20
					4.0	15.1	19.9	20	1.0	15	18.9	20

WFX Electrical Data – High Static PSC Motor

Size (Tons)	Supply Blower Motor			Electric Heat			Single Point Power		Dual Point Power			
	Voltage	FLA	HP	Voltage	kW	Amps	MCA	MOPD	Unit MCA	Unit MOPD	E-Heat MCA	E-Heat MOPD
WFX-600	115/1/60	2.3	1/6	115/1/60	0.0	0.0	2.9	15	NA	NA	NA	NA
					1.0	8.7	13.7	15	2.9	15	10.9	15
					1.5	13.0	19.2	20	2.9	15	16.3	20
					2.0	17.4	24.6	25	2.9	15	21.7	25
					2.5	21.7	NA	NA	2.9	15	27.2	30
					3.0	26.1	NA	NA	2.9	15	32.6	35
					3.5	30.4	NA	NA	2.9	15	38.0	40
					4.0	34.8	NA	NA	2.9	15	43.5	45
					4.5	39.1	NA	NA	2.9	15	48.9	50
					5.0	43.5	NA	NA	2.9	15	54.3	55
					5.5	47.8	NA	NA	2.9	15	59.8	60
					6.0	NA	NA	NA	NA	NA	NA	NA
	208-230/1/60	1.5	1/5	208/1/60	0.0	0.0	1.9	15	NA	NA	NA	NA
					1.0	4.8	7.9	15	1.9	15	6.0	15
					1.5	7.2	10.9	15	1.9	15	9.0	15
					2.0	9.6	13.9	15	1.9	15	12.0	15
					2.5	12.0	16.9	20	1.9	15	15.0	20
					3.0	14.4	19.9	20	1.9	15	18.0	20
					3.5	16.8	22.9	25	1.9	15	21.0	25
					4.0	19.2	25.9	30	1.9	15	24.0	25
					4.5	21.6	28.9	30	1.9	15	27.0	30
					5.0	24.0	NA	NA	1.9	15	30.0	35
					5.5	26.4	NA	NA	1.9	15	33.1	35
					6.0	28.8	NA	NA	1.9	15	36.1	40
				230/1/60	0.0	0.0	1.9	15	NA	NA	NA	NA
					1.0	4.3	7.3	15	1.9	15	5.4	15
					1.5	6.5	10.0	15	1.9	15	8.2	15
					2.0	8.7	12.7	15	1.9	15	10.9	15
					2.5	10.9	15.5	20	1.9	15	13.6	15
					3.0	13.0	18.2	20	1.9	15	16.3	20
					3.5	15.2	20.9	25	1.9	15	19.0	20
					4.0	17.4	23.6	25	1.9	15	21.7	25
					4.5	19.6	26.3	30	1.9	15	24.5	25
					5.0	21.7	29.1	30	1.9	15	27.2	30
					5.5	23.9	NA	NA	1.9	15	29.9	30
					6.0	26.1	NA	NA	1.9	15	32.6	35
	265/1/60	0.9	0.14	265/1/60	0.0	0.0	1.1	15	NA	NA	NA	NA
					1.0	3.8	5.8	15	1.1	15	4.7	15
					1.5	5.7	8.2	15	1.1	15	7.1	15
					2.0	7.5	10.6	15	1.1	15	9.4	15
					2.5	9.4	12.9	15	1.1	15	11.8	15
					3.0	11.3	15.3	20	1.1	15	14.2	15
					3.5	13.2	17.6	20	1.1	15	16.5	20
					4.0	15.1	20.0	20	1.1	15	18.9	20
					4.5	17.0	22.4	25	1.1	15	21.2	25
					5.0	18.9	24.7	25	1.1	15	23.6	25
					5.5	20.8	27.1	30	1.1	15	25.9	30
					6.0	22.6	29.4	30	1.1	15	28.3	30
WFX-800	115/1/60	3.0	1/5	115/1/60	0.0	0.0	3.8	15	NA	NA	NA	NA
					1.0	8.7	14.6	15	3.8	15	10.9	15
					1.5	13.0	20.1	25	3.8	15	16.3	20
					2.0	17.4	25.5	30	3.8	15	21.7	25
					2.5	21.7	NA	NA	3.8	15	27.2	30
					3.0	26.1	NA	NA	3.8	15	32.6	35
					3.5	30.4	NA	NA	3.8	15	38.0	40
					4.0	34.8	NA	NA	3.8	15	43.5	45
					4.5	39.1	NA	NA	3.8	15	48.9	50
					5.0	43.5	NA	NA	3.8	15	54.3	55
					5.5	47.8	NA	NA	3.8	15	59.8	60
					6.0	NA	NA	NA	NA	NA	NA	NA
					6.5	NA	NA	NA	NA	NA	NA	NA
					7.0	NA	NA	NA	NA	NA	NA	NA
					7.5	NA	NA	NA	NA	NA	NA	NA
					8.0	NA	NA	NA	NA	NA	NA	NA

WFX Electrical Data – High Static PSC Motor

Size (Tons)	Supply Blower Motor			Electric Heat			Single Point Power		Dual Point Power			
	Voltage	FLA	HP	Voltage	kW	Amps	MCA	MOPD	Unit MCA	Unit MOPD	E-Heat MCA	E-Heat MOPD
WFX-800	208-230/1/60	1.5	1/5	208/1/60	0.0	0.0	1.9	15	NA	NA	NA	NA
					1.0	4.8	7.9	15	1.9	15	6.0	15
					1.5	7.2	10.9	15	1.9	15	9.0	15
					2.0	9.6	13.9	15	1.9	15	12.0	15
					2.5	12.0	16.9	20	1.9	15	15.0	20
					3.0	14.4	19.9	20	1.9	15	18.0	20
					3.5	16.8	22.9	25	1.9	15	21.0	25
					4.0	19.2	25.9	30	1.9	15	24.0	25
					4.5	21.6	28.9	30	1.9	15	27.0	30
					5.0	24.0	NA	NA	1.9	15	30.0	35
					5.5	26.4	NA	NA	1.9	15	33.1	35
					6.0	28.8	NA	NA	1.9	15	36.1	40
					6.5	31.3	NA	NA	1.9	15	39.1	40
					7.0	33.7	NA	NA	1.9	15	42.1	45
					7.5	36.1	NA	NA	1.9	15	45.1	50
					8.0	38.5	NA	NA	1.9	15	48.1	50
				230/1/60	0.0	0.0	1.9	15	NA	NA	NA	NA
					1.0	4.3	7.3	15	1.9	15	5.4	15
					1.5	6.5	10.0	15	1.9	15	8.2	15
					2.0	8.7	12.7	15	1.9	15	10.9	15
					2.5	10.9	15.5	20	1.9	15	13.6	15
					3.0	13.0	18.2	20	1.9	15	16.3	20
					3.5	15.2	20.9	25	1.9	15	19.0	20
					4.0	17.4	23.6	25	1.9	15	21.7	25
					4.5	19.6	26.3	30	1.9	15	24.5	25
					5.0	21.7	29.1	30	1.9	15	27.2	30
					5.5	23.9	NA	NA	1.9	15	29.9	30
					6.0	26.1	NA	NA	1.9	15	32.6	35
					6.5	28.3	NA	NA	1.9	15	35.3	40
					7.0	30.4	NA	NA	1.9	15	38.0	40
					7.5	32.6	NA	NA	1.9	15	40.8	45
					8.0	34.8	NA	NA	1.9	15	43.5	45
	265/1/60	1.2	1/5	265/1/60	0.0	0.0	1.5	15	NA	NA	NA	NA
					1.0	3.8	6.2	15	1.5	15	4.7	15
					1.5	5.7	8.6	15	1.5	15	7.1	15
					2.0	7.5	10.9	15	1.5	15	9.4	15
					2.5	9.4	13.3	15	1.5	15	11.8	15
					3.0	11.3	15.7	20	1.5	15	14.2	15
					3.5	13.2	18.0	20	1.5	15	16.5	20
					4.0	15.1	20.4	25	1.5	15	18.9	20
					4.5	17.0	22.7	25	1.5	15	21.2	25
					5.0	18.9	25.1	30	1.5	15	23.6	25
					5.5	20.8	27.4	30	1.5	15	25.9	30
					6.0	22.6	29.8	30	1.5	15	28.3	30
					6.5	24.5	NA	NA	1.5	15	30.7	35
					7.0	26.4	NA	NA	1.5	15	33.0	35
					7.5	28.3	NA	NA	1.5	15	35.4	40
					8.0	30.2	NA	NA	1.5	15	37.7	40
WFX-1000	115/1/60	5.3	1/3	115/1/60	0.0	0.0	6.6	15	NA	NA	NA	NA
					1.0	8.7	17.5	20	6.6	15	10.9	15
					1.5	13.0	22.9	25	6.6	15	16.3	20
					2.0	17.4	28.4	30	6.6	15	21.7	25
					2.5	21.7	NA	NA	6.6	15	27.2	30
					3.0	26.1	NA	NA	6.6	15	32.6	35
					3.5	30.4	NA	NA	6.6	15	38.0	40
					4.0	34.8	NA	NA	6.6	15	43.5	45
					4.5	39.1	NA	NA	6.6	15	48.9	50
					5.0	43.5	NA	NA	6.6	15	54.3	55
					5.5	47.8	NA	NA	6.6	15	59.8	60
					6.0	NA	NA	NA	NA	NA	NA	NA
					6.5	NA	NA	NA	NA	NA	NA	NA
					7.0	NA	NA	NA	NA	NA	NA	NA
					7.5	NA	NA	NA	NA	NA	NA	NA
					8.0	NA	NA	NA	NA	NA	NA	NA
					8.5	NA	NA	NA	NA	NA	NA	NA
					9.0	NA	NA	NA	NA	NA	NA	NA
					9.5	NA	NA	NA	NA	NA	NA	NA
					10.0	NA	NA	NA	NA	NA	NA	NA

WFX Electrical Data – High Static PSC Motor

Size (Tons)	Supply Blower Motor			Electric Heat			Single Point Power		Dual Point Power			
	Voltage	FLA	HP	Voltage	kW	Amps	MCA	MOPD	Unit MCA	Unit MOPD	E-Heat MCA	E-Heat MOPD
WFX-1000	208-230/1/60	2.7	1/2	208/1/60	0.0	0.0	3.4	15	NA	NA	NA	NA
					1.0	4.8	9.4	15	3.4	15	6.0	15
					1.5	7.2	12.4	15	3.4	15	9.0	15
					2.0	9.6	15.4	20	3.4	15	12.0	15
					2.5	12.0	18.4	20	3.4	15	15.0	20
					3.0	14.4	21.4	25	3.4	15	18.0	20
					3.5	16.8	24.4	25	3.4	15	21.0	25
					4.0	19.2	27.4	30	3.4	15	24.0	25
					4.5	21.6	NA	NA	3.4	15	27.0	30
					5.0	24.0	NA	NA	3.4	15	30.0	35
					5.5	26.4	NA	NA	3.4	15	33.1	35
					6.0	28.8	NA	NA	3.4	15	36.1	40
					6.5	31.3	NA	NA	3.4	15	39.1	40
					7.0	33.7	NA	NA	3.4	15	42.1	45
					7.5	36.1	NA	NA	3.4	15	45.1	50
					8.0	38.5	NA	NA	3.4	15	48.1	50
					8.5	40.9	NA	NA	3.4	15	51.1	55
					9.0	43.3	NA	NA	3.4	15	54.1	55
					9.5	45.7	NA	NA	3.4	15	57.1	60
					10.0	NA	NA	NA	NA	NA	NA	NA
				230/1/60	0.0	0.0	3.4	15	NA	NA	NA	NA
					1.0	4.3	8.8	15	3.4	15	5.4	15
					1.5	6.5	11.5	15	3.4	15	8.2	15
					2.0	8.7	14.2	15	3.4	15	10.9	15
					2.5	10.9	17.0	20	3.4	15	13.6	15
					3.0	13.0	19.7	20	3.4	15	16.3	20
					3.5	15.2	22.4	25	3.4	15	19.0	20
					4.0	17.4	25.1	30	3.4	15	21.7	25
					4.5	19.6	27.8	30	3.4	15	24.5	25
					5.0	21.7	NA	NA	3.4	15	27.2	30
					5.5	23.9	NA	NA	3.4	15	29.9	30
					6.0	26.1	NA	NA	3.4	15	32.6	35
					6.5	28.3	NA	NA	3.4	15	35.3	40
					7.0	30.4	NA	NA	3.4	15	38.0	40
					7.5	32.6	NA	NA	3.4	15	40.8	45
					8.0	34.8	NA	NA	3.4	15	43.5	45
					8.5	37.0	NA	NA	3.4	15	46.2	50
					9.0	39.1	NA	NA	3.4	15	48.9	50
					9.5	41.3	NA	NA	3.4	15	51.6	55
					10.0	43.5	NA	NA	3.4	15	54.3	55
	265/1/60	2.3	0.42	265/1/60	0.0	0.0	2.9	15	NA	NA	NA	NA
					1.0	3.8	7.6	15	2.9	15	4.7	15
					1.5	5.7	10.0	15	2.9	15	7.1	15
					2.0	7.5	12.3	15	2.9	15	9.4	15
					2.5	9.4	14.7	15	2.9	15	11.8	15
					3.0	11.3	17.0	20	2.9	15	14.2	15
					3.5	13.2	19.4	20	2.9	15	16.5	20
					4.0	15.1	21.7	25	2.9	15	18.9	20
					4.5	17.0	24.1	25	2.9	15	21.2	25
					5.0	18.9	26.5	30	2.9	15	23.6	25
					5.5	20.8	28.8	30	2.9	15	25.9	30
					6.0	22.6	NA	NA	2.9	15	28.3	30
					6.5	24.5	NA	NA	2.9	15	30.7	35
					7.0	26.4	NA	NA	2.9	15	33.0	35
					7.5	28.3	NA	NA	2.9	15	35.4	40
					8.0	30.2	NA	NA	2.9	15	37.7	40
					8.5	32.1	NA	NA	2.9	15	40.1	45
					9.0	34.0	NA	NA	2.9	15	42.5	45
					9.5	35.8	NA	NA	2.9	15	44.8	45
					10.0	37.7	NA	NA	2.9	15	47.2	50

WFX Electrical Data – High Static PSC Motor

Size (Tons)	Supply Blower Motor			Electric Heat			Single Point Power		Dual Point Power			
	Voltage	FLA	HP	Voltage	kW	Amps	MCA	MOPD	Unit MCA	Unit MOPD	E-Heat MCA	E-Heat MOPD
WFX-1200	115/1/60	NOT AVAILABLE; SEE CT ECM							NOT AVAILABLE; SEE CT ECM			
	208-230/1/60	3.5	1/2	208/1/60	1.0	4.8	10.4	15	4.4	15	6.0	15
					1.5	7.2	13.4	15	4.4	15	9.0	15
					2.0	9.6	16.4	20	4.4	15	12.0	15
					2.5	12.0	19.4	20	4.4	15	15.0	20
					3.0	14.4	22.4	25	4.4	15	18.0	20
					3.5	16.8	25.4	30	4.4	15	21.0	25
					4.0	19.2	28.4	30	4.4	15	24.0	25
					4.5	21.6	NA	NA	4.4	15	27.0	30
					5.0	24.0	NA	NA	4.4	15	30.0	35
					5.5	26.4	NA	NA	4.4	15	33.1	35
					6.0	28.8	NA	NA	4.4	15	36.1	40
					6.5	31.3	NA	NA	4.4	15	39.1	40
					7.0	33.7	NA	NA	4.4	15	42.1	45
					7.5	36.1	NA	NA	4.4	15	45.1	50
					8.0	38.5	NA	NA	4.4	15	48.1	50
					8.5	40.9	NA	NA	4.4	15	51.1	55
					9.0	43.3	NA	NA	4.4	15	54.1	55
					9.5	45.7	NA	NA	4.4	15	57.1	60
					10.0	NA	NA	NA	NA	NA	NA	NA
				230/1/60	0.0	0.0	4.4	15	NA	NA	NA	NA
					1.0	4.3	9.8	15	4.4	15	5.4	15
					1.5	6.5	12.5	15	4.4	15	8.2	15
					2.0	8.7	15.2	20	4.4	15	10.9	15
					2.5	10.9	18.0	20	4.4	15	13.6	15
					3.0	13.0	20.7	25	4.4	15	16.3	20
					3.5	15.2	23.4	25	4.4	15	19.0	20
					4.0	17.4	26.1	30	4.4	15	21.7	25
					4.5	19.6	28.8	30	4.4	15	24.5	25
					5.0	21.7	NA	NA	4.4	15	27.2	30
					5.5	23.9	NA	NA	4.4	15	29.9	30
					6.0	26.1	NA	NA	4.4	15	32.6	35
					6.5	28.3	NA	NA	4.4	15	35.3	40
					7.0	30.4	NA	NA	4.4	15	38.0	40
					7.5	32.6	NA	NA	4.4	15	40.8	45
					8.0	34.8	NA	NA	4.4	15	43.5	45
					8.5	37.0	NA	NA	4.4	15	46.2	50
					9.0	39.1	NA	NA	4.4	15	48.9	50
					9.5	41.3	NA	NA	4.4	15	51.6	55
					10.0	43.5	NA	NA	4.4	15	54.3	55
	265/1/60	NOT AVAILABLE; SEE CT ECM							NOT AVAILABLE; SEE CT ECM			

Table 11: WFX Electrical Data – Constant Torque EC Motor

Size (Tons)	Supply Blower Motor			Electric Heat			Single Point Power		Dual Point Power			
	Voltage	FLA	HP	Voltage	kW	Amps	MCA	MOPD	Unit MCA	Unit MOPD	E-Heat MCA	E-Heat MOPD
WFX-300	115/1/60	3.7	1/4	115/1/60	0.0	0.0	4.6	15	NA	NA	NA	NA
					1.0	8.7	15.5	20	4.6	15	10.9	15
					1.5	13.0	20.9	25	4.6	15	16.3	20
					2.0	17.4	26.4	30	4.6	15	21.7	25
					2.5	21.7	NA	NA	4.6	15	27.2	30
					3.0	26.1	NA	NA	4.6	15	32.6	35
	208-230/1/60	2.2	1/4	208/1/60	0.0	0.0	2.8	15	NA	NA	NA	NA
					1.0	4.8	8.8	15	2.8	15	6.0	15
					1.5	7.2	11.8	15	2.8	15	9.0	15
					2.0	9.6	14.8	15	2.8	15	12.0	15
					2.5	12.0	17.8	20	2.8	15	15.0	20
					3.0	14.4	20.8	25	2.8	15	18.0	20
				230/1/60	0.0	0.0	2.8	15	NA	NA	NA	NA
					1.0	4.3	8.2	15	2.8	15	5.4	15
					1.5	6.5	10.9	15	2.8	15	8.2	15
					2.0	8.7	13.6	15	2.8	15	10.9	15
					2.5	10.9	16.3	20	2.8	15	13.6	15
					3.0	13.0	19.1	20	2.8	15	16.3	20
	265/1/60	2.2	1/4	265/1/60	0.0	0.0	2.8	15	NA	NA	NA	NA
					1.0	3.8	7.5	15	2.8	15	4.7	15
					1.5	5.7	9.8	15	2.8	15	7.1	15
					2.0	7.5	12.2	15	2.8	15	9.4	15
					2.5	9.4	14.5	15	2.8	15	11.8	15
					3.0	11.3	16.9	20	2.8	15	14.2	15
WFX-400	115/1/60	3.7	1/4	115/1/60	0.0	0.0	4.6	15	NA	NA	NA	NA
					1.0	8.7	15.5	20	4.6	15	10.9	15
					1.5	13.0	20.9	25	4.6	15	16.3	20
					2.0	17.4	26.4	30	4.6	15	21.7	25
					2.5	21.7	NA	NA	4.6	15	27.2	30
					3.0	26.1	NA	NA	4.6	15	32.6	35
					3.5	30.4	NA	NA	4.6	15	38.0	40
					4.0	34.8	NA	NA	4.6	15	43.5	45
	208-230/1/60	2.2	1/4	208/1/60	0.0	0.0	2.8	15	NA	NA	NA	NA
					1.0	4.8	8.8	15	2.8	15	6.0	15
					1.5	7.2	11.8	15	2.8	15	9.0	15
					2.0	9.6	14.8	15	2.8	15	12.0	15
					2.5	12.0	17.8	20	2.8	15	15.0	20
					3.0	14.4	20.8	25	2.8	15	18.0	20
					3.5	16.8	23.8	25	2.8	15	21.0	25
					4.0	19.2	26.8	30	2.8	15	24.0	25
				230/1/60	0.0	0.0	2.8	15	NA	NA	NA	NA
					1.0	4.3	8.2	15	2.8	15	5.4	15
					1.5	6.5	10.9	15	2.8	15	8.2	15
					2.0	8.7	13.6	15	2.8	15	10.9	15
					2.5	10.9	16.3	20	2.8	15	13.6	15
					3.0	13.0	19.1	20	2.8	15	16.3	20
					3.5	15.2	21.8	25	2.8	15	19.0	20
					4.0	17.4	24.5	25	2.8	15	21.7	25
	265/1/60	2.2	1/4	265/1/60	0.0	0.0	2.8	15	NA	NA	NA	NA
					1.0	3.8	7.5	15	2.8	15	4.7	15
					1.5	5.7	9.8	15	2.8	15	7.1	15
					2.0	7.5	12.2	15	2.8	15	9.4	15
					2.5	9.4	14.5	15	2.8	15	11.8	15
					3.0	11.3	16.9	20	2.8	15	14.2	15
					3.5	13.2	19.3	20	2.8	15	16.5	20
					4.0	15.1	21.6	25	2.8	15	18.9	20

WFX Electrical Data – Constant Torque EC Motor

Size (Tons)	Supply Blower Motor			Electric Heat			Single Point Power		Dual Point Power			
	Voltage	FLA	HP	Voltage	kW	Amps	MCA	MOPD	Unit MCA	Unit MOPD	E-Heat MCA	E-Heat MOPD
WFX-600	115/1/60	3.7	1/4	115/1/60	0.0	0.0	4.6	15	NA	NA	NA	NA
					1.0	8.7	15.5	20	4.6	15	10.9	15
					1.5	13.0	20.9	25	4.6	15	16.3	20
					2.0	17.4	26.4	30	4.6	15	21.7	25
					2.5	21.7	NA	NA	4.6	15	27.2	30
					3.0	26.1	NA	NA	4.6	15	32.6	35
					3.5	30.4	NA	NA	4.6	15	38.0	40
					4.0	34.8	NA	NA	4.6	15	43.5	45
					4.5	39.1	NA	NA	4.6	15	48.9	50
					5.0	43.5	NA	NA	4.6	15	54.3	55
					5.5	47.8	NA	NA	4.6	15	59.8	60
					6.0	NA	NA	NA	NA	NA	NA	NA
	208-230/1/60	2.2	1/4	208/1/60	0.0	0.0	2.8	15	NA	NA	NA	NA
					1.0	4.8	8.8	15	2.8	15	6.0	15
					1.5	7.2	11.8	15	2.8	15	9.0	15
					2.0	9.6	14.8	15	2.8	15	12.0	15
					2.5	12.0	17.8	20	2.8	15	15.0	20
					3.0	14.4	20.8	25	2.8	15	18.0	20
					3.5	16.8	23.8	25	2.8	15	21.0	25
					4.0	19.2	26.8	30	2.8	15	24.0	25
					4.5	21.6	29.8	30	2.8	15	27.0	30
					5.0	24.0	NA	NA	2.8	15	30.0	35
					5.5	26.4	NA	NA	2.8	15	33.1	35
					6.0	28.8	NA	NA	2.8	15	36.1	40
				230/1/60	0.0	0.0	2.8	15	NA	NA	NA	NA
					1.0	4.3	8.2	15	2.8	15	5.4	15
					1.5	6.5	10.9	15	2.8	15	8.2	15
					2.0	8.7	13.6	15	2.8	15	10.9	15
					2.5	10.9	16.3	20	2.8	15	13.6	15
					3.0	13.0	19.1	20	2.8	15	16.3	20
					3.5	15.2	21.8	25	2.8	15	19.0	20
					4.0	17.4	24.5	25	2.8	15	21.7	25
					4.5	19.6	27.2	30	2.8	15	24.5	25
					5.0	21.7	29.9	30	2.8	15	27.2	30
					5.5	23.9	NA	NA	2.8	15	29.9	30
					6.0	26.1	NA	NA	2.8	15	32.6	35
	265/1/60	2.2	1/4	265/1/60	0.0	0.0	2.8	15	NA	NA	NA	NA
					1.0	3.8	7.5	15	2.8	15	4.7	15
					1.5	5.7	9.8	15	2.8	15	7.1	15
					2.0	7.5	12.2	15	2.8	15	9.4	15
					2.5	9.4	14.5	15	2.8	15	11.8	15
					3.0	11.3	16.9	20	2.8	15	14.2	15
					3.5	13.2	19.3	20	2.8	15	16.5	20
					4.0	15.1	21.6	25	2.8	15	18.9	20
					4.5	17.0	24.0	25	2.8	15	21.2	25
					5.0	18.9	26.3	30	2.8	15	23.6	25
					5.5	20.8	28.7	30	2.8	15	25.9	30
					6.0	22.6	NA	NA	2.8	15	28.3	30

WFX Electrical Data – Constant Torque EC Motor

Size (Tons)	Supply Blower Motor			Electric Heat			Single Point Power		Dual Point Power			
	Voltage	FLA	HP	Voltage	kW	Amps	MCA	MOPD	Unit MCA	Unit MOPD	E-Heat MCA	E-Heat MOPD
WFX-800	115/1/60	6.4	1/2	115/1/60	0.0	0.0	8.0	15	NA	NA	NA	NA
					1.0	8.7	18.9	20	8.0	15	10.9	15
					1.5	13.0	24.3	25	8.0	15	16.3	20
					2.0	17.4	29.7	30	8.0	15	21.7	25
					2.5	21.7	NA	NA	8.0	15	27.2	30
					3.0	26.1	NA	NA	8.0	15	32.6	35
					3.5	30.4	NA	NA	8.0	15	38.0	40
					4.0	34.8	NA	NA	8.0	15	43.5	45
					4.5	39.1	NA	NA	8.0	15	48.9	50
					5.0	43.5	NA	NA	8.0	15	54.3	55
					5.5	47.8	NA	NA	8.0	15	59.8	60
					6.0	NA	NA	NA	NA	NA	NA	NA
					6.5	NA	NA	NA	NA	NA	NA	NA
					7.0	NA	NA	NA	NA	NA	NA	NA
					7.5	NA	NA	NA	NA	NA	NA	NA
					8.0	NA	NA	NA	NA	NA	NA	NA
	208-230/1/60	4.6	1/2	208/1/60	0.0	0.0	5.8	15	NA	NA	NA	NA
					1.0	4.8	11.8	15	5.8	15	6.0	15
					1.5	7.2	14.8	15	5.8	15	9.0	15
					2.0	9.6	17.8	20	5.8	15	12.0	15
					2.5	12.0	20.8	25	5.8	15	15.0	20
					3.0	14.4	23.8	25	5.8	15	18.0	20
					3.5	16.8	26.8	30	5.8	15	21.0	25
					4.0	19.2	29.8	30	5.8	15	24.0	25
					4.5	21.6	NA	NA	5.8	15	27.0	30
					5.0	24.0	NA	NA	5.8	15	30.0	35
					5.5	26.4	NA	NA	5.8	15	33.1	35
					6.0	28.8	NA	NA	5.8	15	36.1	40
					6.5	31.3	NA	NA	5.8	15	39.1	40
					7.0	33.7	NA	NA	5.8	15	42.1	45
					7.5	36.1	NA	NA	5.8	15	45.1	50
					8.0	38.5	NA	NA	5.8	15	48.1	50
				230/1/60	0.0	0.0	5.8	15	NA	NA	NA	NA
					1.0	4.3	11.2	15	5.8	15	5.4	15
					1.5	6.5	13.9	15	5.8	15	8.2	15
					2.0	8.7	16.6	20	5.8	15	10.9	15
					2.5	10.9	19.3	20	5.8	15	13.6	15
					3.0	13.0	22.1	25	5.8	15	16.3	20
					3.5	15.2	24.8	25	5.8	15	19.0	20
					4.0	17.4	27.5	30	5.8	15	21.7	25
					4.5	19.6	NA	NA	5.8	15	24.5	25
					5.0	21.7	NA	NA	5.8	15	27.2	30
					5.5	23.9	NA	NA	5.8	15	29.9	30
					6.0	26.1	NA	NA	5.8	15	32.6	35
					6.5	28.3	NA	NA	5.8	15	35.3	40
					7.0	30.4	NA	NA	5.8	15	38.0	40
					7.5	32.6	NA	NA	5.8	15	40.8	45
					8.0	34.8	NA	NA	5.8	15	43.5	45
	265/1/60	3.2	1/2	265/1/60	0.0	0.0	4.0	15	NA	NA	NA	NA
					1.0	3.8	8.7	15	4.0	15	4.7	15
					1.5	5.7	11.1	15	4.0	15	7.1	15
					2.0	7.5	13.4	15	4.0	15	9.4	15
					2.5	9.4	15.8	20	4.0	15	11.8	15
					3.0	11.3	18.2	20	4.0	15	14.2	15
					3.5	13.2	20.5	25	4.0	15	16.5	20
					4.0	15.1	22.9	25	4.0	15	18.9	20
					4.5	17.0	25.2	30	4.0	15	21.2	25
					5.0	18.9	27.6	30	4.0	15	23.6	25
					5.5	20.8	29.9	30	4.0	15	25.9	30
					6.0	22.6	NA	NA	4.0	15	28.3	30
					6.5	24.5	NA	NA	4.0	15	30.7	35
					7.0	26.4	NA	NA	4.0	15	33.0	35
					7.5	28.3	NA	NA	4.0	15	35.4	40
					8.0	30.2	NA	NA	4.0	15	37.7	40

WFX Electrical Data – Constant Torque EC Motor

Size (Tons)	Supply Blower Motor			Electric Heat			Single Point Power		Dual Point Power			
	Voltage	FLA	HP	Voltage	kW	Amps	MCA	MOPD	Unit MCA	Unit MOPD	E-Heat MCA	E-Heat MOPD
WFX-1000	115/1/60	6.4	1/2	115/1/60	0.0	0.0	8.0	15	NA	NA	NA	NA
					1.0	8.7	18.9	20	8.0	15	10.9	15
					1.5	13.0	24.3	25	8.0	15	16.3	20
					2.0	17.4	29.7	30	8.0	15	21.7	25
					2.5	21.7	NA	NA	8.0	15	27.2	30
					3.0	26.1	NA	NA	8.0	15	32.6	35
					3.5	30.4	NA	NA	8.0	15	38.0	40
					4.0	34.8	NA	NA	8.0	15	43.5	45
					4.5	39.1	NA	NA	8.0	15	48.9	50
					5.0	43.5	NA	NA	8.0	15	54.3	55
					5.5	47.8	NA	NA	8.0	15	59.8	60
					6.0	NA	NA	NA	NA	NA	NA	NA
					6.5	NA	NA	NA	NA	NA	NA	NA
					7.0	NA	NA	NA	NA	NA	NA	NA
					7.5	NA	NA	NA	NA	NA	NA	NA
					8.0	NA	NA	NA	NA	NA	NA	NA
					8.5	NA	NA	NA	NA	NA	NA	NA
					9.0	NA	NA	NA	NA	NA	NA	NA
					9.5	NA	NA	NA	NA	NA	NA	NA
					10.0	NA	NA	NA	NA	NA	NA	NA
	208-230/1/60	4.6	1/2	208/1/60	0.0	0.0	5.8	15	NA	NA	NA	NA
					1.0	4.8	11.8	15	5.8	15	6.0	15
					1.5	7.2	14.8	15	5.8	15	9.0	15
					2.0	9.6	17.8	20	5.8	15	12.0	15
					2.5	12.0	20.8	25	5.8	15	15.0	20
					3.0	14.4	23.8	25	5.8	15	18.0	20
					3.5	16.8	26.8	30	5.8	15	21.0	25
					4.0	19.2	29.8	30	5.8	15	24.0	25
					4.5	21.6	NA	NA	5.8	15	27.0	30
					5.0	24.0	NA	NA	5.8	15	30.0	35
					5.5	26.4	NA	NA	5.8	15	33.1	35
					6.0	28.8	NA	NA	5.8	15	36.1	40
					6.5	31.3	NA	NA	5.8	15	39.1	40
					7.0	33.7	NA	NA	5.8	15	42.1	45
					7.5	36.1	NA	NA	5.8	15	45.1	50
					8.0	38.5	NA	NA	5.8	15	48.1	50
					8.5	40.9	NA	NA	5.8	15	51.1	55
					9.0	43.3	NA	NA	5.8	15	54.1	55
					9.5	45.7	NA	NA	5.8	15	57.1	60
					10.0	NA	NA	NA	NA	NA	NA	NA
				230/1/60	0.0	0.0	5.8	15	NA	NA	NA	NA
					1.0	4.3	11.2	15	5.8	15	5.4	15
					1.5	6.5	13.9	15	5.8	15	8.2	15
					2.0	8.7	16.6	20	5.8	15	10.9	15
					2.5	10.9	19.3	20	5.8	15	13.6	15
					3.0	13.0	22.1	25	5.8	15	16.3	20
					3.5	15.2	24.8	25	5.8	15	19.0	20
					4.0	17.4	27.5	30	5.8	15	21.7	25
					4.5	19.6	NA	NA	5.8	15	24.5	25
					5.0	21.7	NA	NA	5.8	15	27.2	30
					5.5	23.9	NA	NA	5.8	15	29.9	30
					6.0	26.1	NA	NA	5.8	15	32.6	35
					6.5	28.3	NA	NA	5.8	15	35.3	40
					7.0	30.4	NA	NA	5.8	15	38.0	40
					7.5	32.6	NA	NA	5.8	15	40.8	45
					8.0	34.8	NA	NA	5.8	15	43.5	45
					8.5	37.0	NA	NA	5.8	15	46.2	50
					9.0	39.1	NA	NA	5.8	15	48.9	50
					9.5	41.3	NA	NA	5.8	15	51.6	55
					10.0	43.5	NA	NA	5.8	15	54.3	55
	265/1/60	3.2	1/2	265/1/60	0.0	0.0	4.0	15	NA	NA	NA	NA
					1.0	3.8	8.7	15	4.0	15	4.7	15
					1.5	5.7	11.1	15	4.0	15	7.1	15
					2.0	7.5	13.4	15	4.0	15	9.4	15
					2.5	9.4	15.8	20	4.0	15	11.8	15
					3.0	11.3	18.2	20	4.0	15	14.2	15
					3.5	13.2	20.5	25	4.0	15	16.5	20
					4.0	15.1	22.9	25	4.0	15	18.9	20
					4.5	17.0	25.2	30	4.0	15	21.2	25
					5.0	18.9	27.6	30	4.0	15	23.6	25
					5.5	20.8	29.9	30	4.0	15	25.9	30
					6.0	22.6	NA	NA	4.0	15	28.3	30
					6.5	24.5	NA	NA	4.0	15	30.7	35
					7.0	26.4	NA	NA	4.0	15	33.0	35
					7.5	28.3	NA	NA	4.0	15	35.4	40
					8.0	30.2	NA	NA	4.0	15	37.7	40
					8.5	32.1	NA	NA	4.0	15	40.1	45
					9.0	34.0	NA	NA	4.0	15	42.5	45
					9.5	35.8	NA	NA	4.0	15	44.8	45
					10.0	37.7	NA	NA	4.0	15	47.2	50

WFX Electrical Data – Constant Torque EC Motor

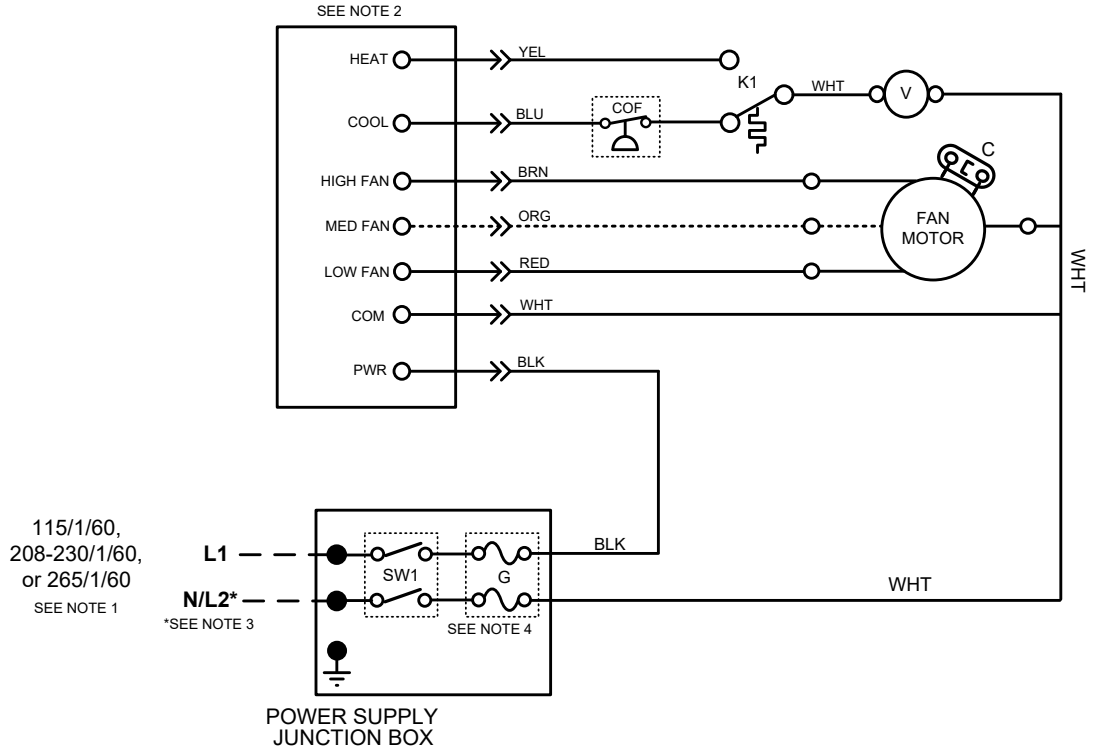
Size (Tons)	Supply Blower Motor			Electric Heat			Single Point Power		Dual Point Power			
	Voltage	FLA	HP	Voltage	kW	Amps	MCA	MOPD	Unit MCA	Unit MOPD	E-Heat MCA	E-Heat MOPD
WFX-1200	115/1/60	6.4	1/2	115/1/60	0.0	0.0	8.0	15	NA	NA	NA	NA
					1.0	8.7	18.9	20	8.0	15	10.9	15
					1.5	13.0	24.3	25	8.0	15	16.3	20
					2.0	17.4	29.7	30	8.0	15	21.7	25
					2.5	21.7	NA	NA	8.0	15	27.2	30
					3.0	26.1	NA	NA	8.0	15	32.6	35
					3.5	30.4	NA	NA	8.0	15	38.0	40
					4.0	34.8	NA	NA	8.0	15	43.5	45
					4.5	39.1	NA	NA	8.0	15	48.9	50
					5.0	43.5	NA	NA	8.0	15	54.3	55
					5.5	47.8	NA	NA	8.0	15	59.8	60
					6.0	NA	NA	NA	NA	NA	NA	NA
					6.5	NA	NA	NA	NA	NA	NA	NA
					7.0	NA	NA	NA	NA	NA	NA	NA
					7.5	NA	NA	NA	NA	NA	NA	NA
					8.0	NA	NA	NA	NA	NA	NA	NA
					8.5	NA	NA	NA	NA	NA	NA	NA
					9.0	NA	NA	NA	NA	NA	NA	NA
					9.5	NA	NA	NA	NA	NA	NA	NA
					10.0	NA	NA	NA	NA	NA	NA	NA
	208-230/1/60	4.6	1/2	208/1/60	0.0	0.0	5.8	15	NA	NA	NA	NA
					1.0	4.8	11.8	15	5.8	15	6.0	15
					1.5	7.2	14.8	15	5.8	15	9.0	15
					2.0	9.6	17.8	20	5.8	15	12.0	15
					2.5	12.0	20.8	25	5.8	15	15.0	20
					3.0	14.4	23.8	25	5.8	15	18.0	20
					3.5	16.8	26.8	30	5.8	15	21.0	25
					4.0	19.2	29.8	30	5.8	15	24.0	25
					4.5	21.6	NA	NA	5.8	15	27.0	30
					5.0	24.0	NA	NA	5.8	15	30.0	35
					5.5	26.4	NA	NA	5.8	15	33.1	35
					6.0	28.8	NA	NA	5.8	15	36.1	40
					6.5	31.3	NA	NA	5.8	15	39.1	40
					7.0	33.7	NA	NA	5.8	15	42.1	45
					7.5	36.1	NA	NA	5.8	15	45.1	50
					8.0	38.5	NA	NA	5.8	15	48.1	50
					8.5	40.9	NA	NA	5.8	15	51.1	55
					9.0	43.3	NA	NA	5.8	15	54.1	55
					9.5	45.7	NA	NA	5.8	15	57.1	60
					10.0	NA	NA	NA	NA	NA	NA	NA
				230/1/60	0.0	0.0	5.8	15	NA	NA	NA	NA
					1.0	4.3	11.2	15	5.8	15	5.4	15
					1.5	6.5	13.9	15	5.8	15	8.2	15
					2.0	8.7	16.6	20	5.8	15	10.9	15
					2.5	10.9	19.3	20	5.8	15	13.6	15
					3.0	13.0	22.1	25	5.8	15	16.3	20
					3.5	15.2	24.8	25	5.8	15	19.0	20
					4.0	17.4	27.5	30	5.8	15	21.7	25
					4.5	19.6	NA	NA	5.8	15	24.5	25
					5.0	21.7	NA	NA	5.8	15	27.2	30
					5.5	23.9	NA	NA	5.8	15	29.9	30
					6.0	26.1	NA	NA	5.8	15	32.6	35
					6.5	28.3	NA	NA	5.8	15	35.3	40
					7.0	30.4	NA	NA	5.8	15	38.0	40
					7.5	32.6	NA	NA	5.8	15	40.8	45
					8.0	34.8	NA	NA	5.8	15	43.5	45
					8.5	37.0	NA	NA	5.8	15	46.2	50
					9.0	39.1	NA	NA	5.8	15	48.9	50
					9.5	41.3	NA	NA	5.8	15	51.6	55
					10.0	43.5	NA	NA	5.8	15	54.3	55
	265/1/60	3.2	1/2	265/1/60	0.0	0.0	4.0	15	NA	NA	NA	NA
					1.0	3.8	8.7	15	4.0	15	4.7	15
					1.5	5.7	11.1	15	4.0	15	7.1	15
					2.0	7.5	13.4	15	4.0	15	9.4	15
					2.5	9.4	15.8	20	4.0	15	11.8	15
					3.0	11.3	18.2	20	4.0	15	14.2	15
					3.5	13.2	20.5	25	4.0	15	16.5	20
					4.0	15.1	22.9	25	4.0	15	18.9	20
					4.5	17.0	25.2	30	4.0	15	21.2	25
					5.0	18.9	27.6	30	4.0	15	23.6	25
					5.5	20.8	29.9	30	4.0	15	25.9	30
					6.0	22.6	NA	NA	4.0	15	28.3	30
					6.5	24.5	NA	NA	4.0	15	30.7	35
					7.0	26.4	NA	NA	4.0	15	33.0	35
					7.5	28.3	NA	NA	4.0	15	35.4	40
					8.0	30.2	NA	NA	4.0	15	37.7	40
					8.5	32.1	NA	NA	4.0	15	40.1	45
					9.0	34.0	NA	NA	4.0	15	42.5	45
					9.5	35.8	NA	NA	4.0	15	44.8	45
					10.0	37.7	NA	NA	4.0	15	47.2	50

Table 12: Additional Static Resistance

Size (Tons)	Model	Fan Speed	Filter[1]				
			MERV 4 (Fiberglass)	MERV 4 (Poly)	MERV 8	MERV 11	MERV 13
03 (0.75)	WFX	High	0.06	0.10	0.21	0.21	0.24
		Medium	0.04	0.06	0.15	0.16	0.17
		Low	0.02	0.03	0.09	0.10	0.09
04 (1.0)		High	0.04	0.06	0.14	0.15	0.15
		Medium	0.02	0.03	0.09	0.10	0.10
		Low	0.01	0.02	0.06	0.07	0.06
06 (1.5)		High	0.06	0.09	0.20	0.20	0.22
		Medium	0.04	0.05	0.13	0.14	0.14
		Low	0.02	0.02	0.07	0.08	0.07
08 (2.0)		High	0.06	0.10	0.21	0.21	0.24
		Medium	0.03	0.04	0.11	0.12	0.12
		Low	0.02	0.02	0.07	0.08	0.07
10 (2.5)		High	0.04	0.05	0.13	0.14	0.15
		Medium	0.02	0.03	0.08	0.09	0.09
		Low	0.01	0.02	0.05	0.06	0.05
12 (3.0)		High	0.04	0.06	0.14	0.15	0.15
		Medium	0.02	0.03	0.09	0.10	0.09
		Low	0.01	0.02	0.05	0.06	0.06

1 Deduct these values from the available external static pressure shown in the respective Blower Performance Tables.

Wire Diagram: Room Fan Coil



LEGEND:

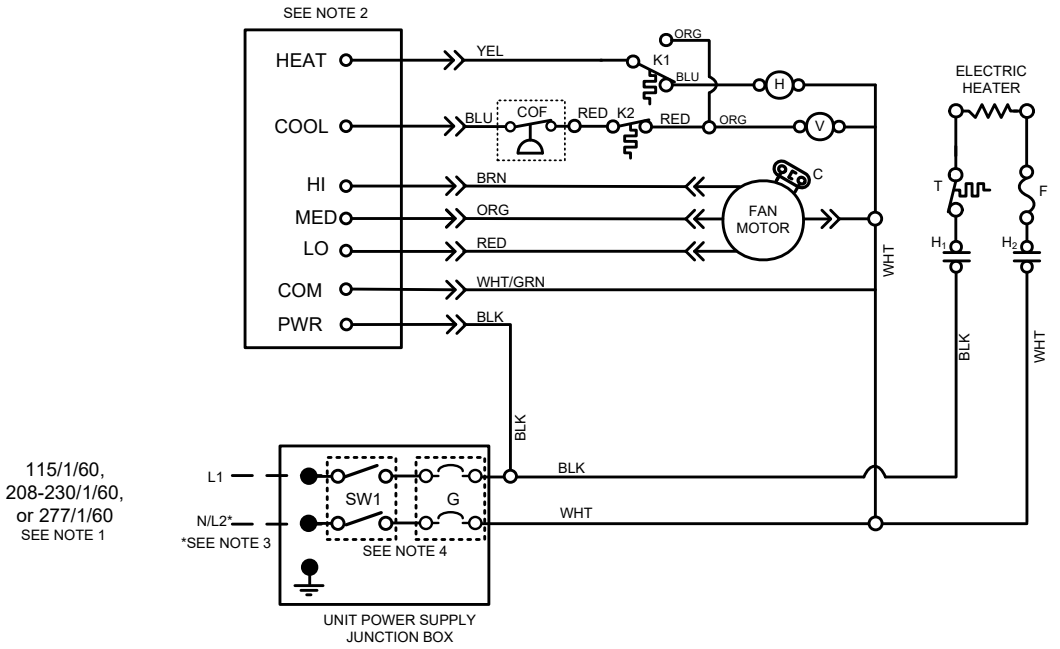
- K1 - AQUASTAT
- V - MOTORIZED VALVE
- C - CAPACITOR
- ☐ SW1 - DISCONNECT SWITCH
- ☐ G - NON-RENEWABLE FUSE
- ☐ COF - CONDENSATE OVERFLOW SWITCH
- ☐ ____ - _____

- ⟶⟩⟶ - QUICK CONNECT PLUGS
- – — — - INDICATES FIELD WIRING
- ---------- - INDICATES OPTIONAL WIRING/COMPONENT
- o - INDICATES FACTORY CONNECTION
- ● - INDICATES FIELD CONNECTION

NOTES:

1. Use copper conductors only.
2. Thermostat is field installed and may be remote mounted.
3. For 208V applications, white wire is replaced with red wire to indicate L2.
4. DPST switch for 208 applications only.

42P01--a.vsd
8 April 2011



LEGEND:

- K2 - TEMPERATURE SENSOR FOR COOLING
- H - ELECTRIC HEAT RELAY
- V - WATER VALVE
- C - CAPACITOR
- F - THERMAL CUTOFF
- K1 - TEMPERATURE SENSOR FOR ELECTRIC HEAT OR HOT WATER
- ☐ SW1 - DISCONNECT SWITCH
- T - TEMPERATURE LIMIT
- ⟫ - QUICK CONNECT PLUGS
- – — — - INDICATES FIELD WIRING
- ---------- - INDICATES OPTIONAL WIRING/COMPONENT
- o - INDICATES FACTORY CONNECTION
- ● - INDICATES FIELD CONNECTION
- ☐ G - CIRCUIT BREAKER
- ☐ COF - CONDENSATE OVERFLOW SWITCH
- ☐ ____ - _____

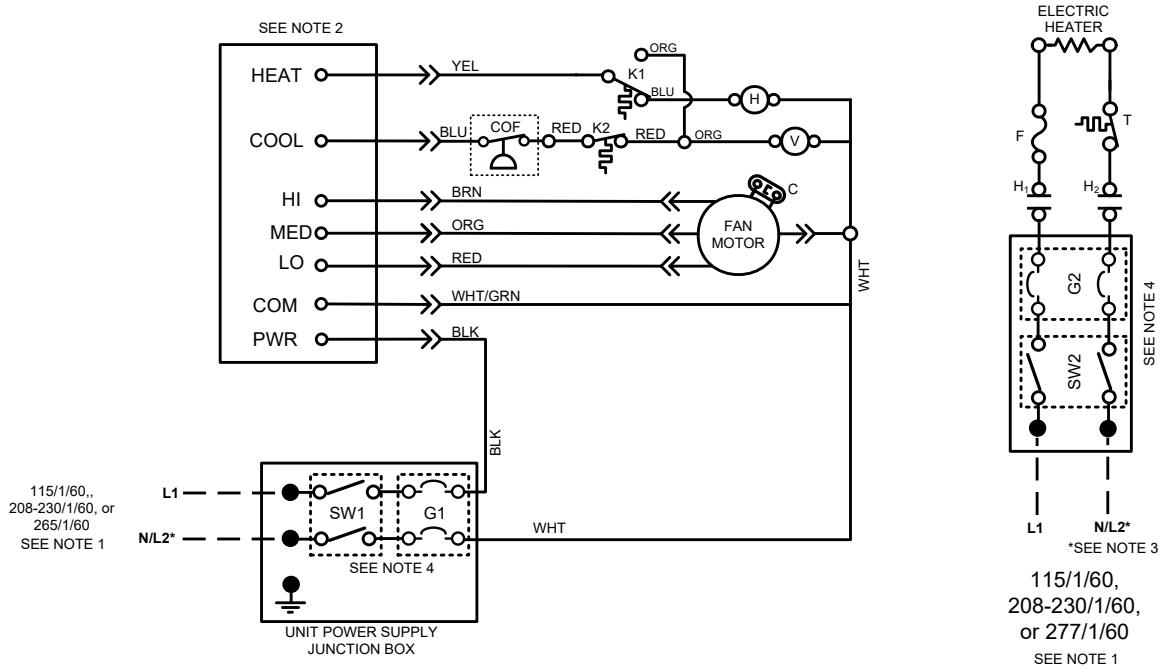
NOTES:

1. Use copper conductors only.
2. Thermostat is field installed and may be remote mounted.
3. For 208V applications, white wire is replaced with red wire to indicate L2.
4. DPST switch for 208 applications only.

4AE01--3d.vsd

18 March, 2015

Wire Diagram: 2-Pipe Auxiliary Electric Heat Vertical Fan Coil



LEGEND:

- K2 - TEMPERATURE SENSOR FOR COOLING
- H - ELECTRIC HEAT RELAY
- V - WATER VALVE
- C - CAPACITOR
- F - THERMAL CUTOFF
- ☐ G1 - OVERCURRENT PROTECTION (See Note 5)
- ☐ G2 - OVERCURRENT PROTECTION (See Note 5)
- ☐ SW1 - DISCONNECT SWITCH
- ☐ SW2 - DISCONNECT SWITCH

- K1 - TEMPERATURE SENSOR FOR ELECTRIC HEAT OR HOT WATER
- T - TEMPERATURE LIMIT
- ⟫ - QUICK CONNECT PLUGS
- – – – - INDICATES FIELD WIRING
- ---------- - INDICATES OPTIONAL WIRING/COMPONENT
- o - INDICATES FACTORY CONNECTION
- ● - INDICATES FIELD CONNECTION
- ☐ COF - CONDENSATE OVERFLOW SWITCH
- ☐ ____ - _____

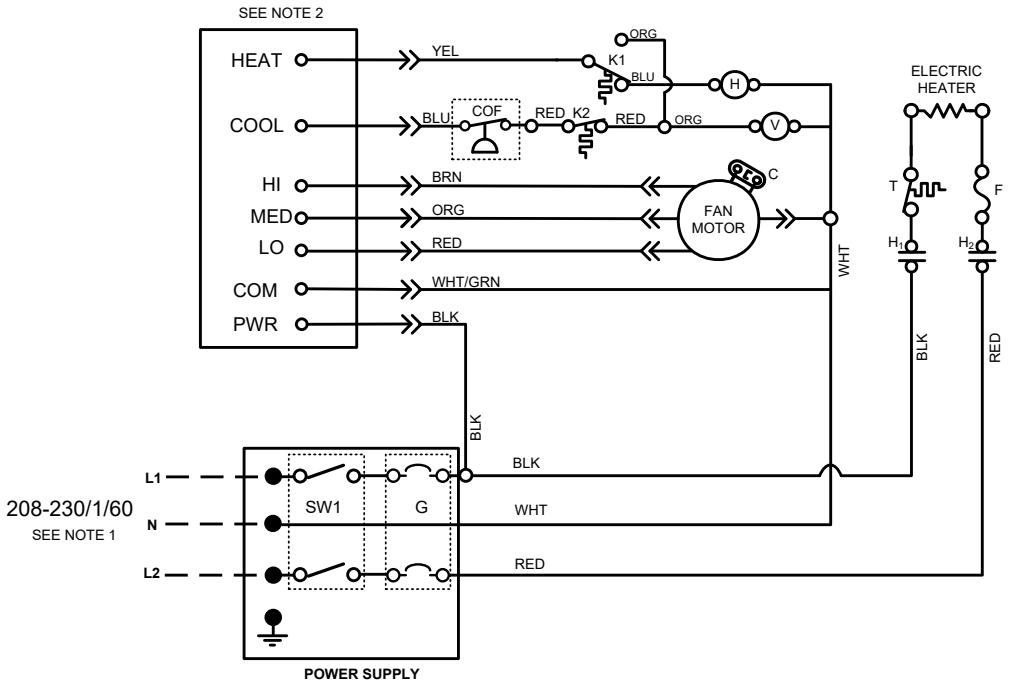
NOTES:

1. Use copper conductors only.
2. Thermostat is field installed and may be remote mounted.
3. For 208V applications, white wire is replaced with red wire to indicate L2.
4. DPST switch for 208 applications only.
5. G replaces SW

4AE02--3d.vsd

19 March, 2015

Wire Diagram: 2-Pipe Auxiliary Electric Heat Vertical Fan Coil



LEGEND:

K2	- TEMPERATURE SENSOR FOR COOLING	T	- TEMPERATURE LIMIT
H	- ELECTRIC HEAT RELAY	⟫	- QUICK CONNECT PLUGS
V	- WATER VALVE	– – –	- INDICATES FIELD WIRING
C	- CAPACITOR	----------	- INDICATES OPTIONAL WIRING/COMPONENT
F	- THERMAL CUTOFF	O	- INDICATES FACTORY CONNECTION
K1	- TEMPERATURE SENSOR FOR ELECTRIC HEAT OR HOT WATER	●	- INDICATES FIELD CONNECTION
☐ SW1	- DISCONNECT SWITCH	☐ G	- CIRCUIT BREAKER
		☐ COF	- CONDENSATE OVERFLOW SWITCH
		☐ ____	- _____

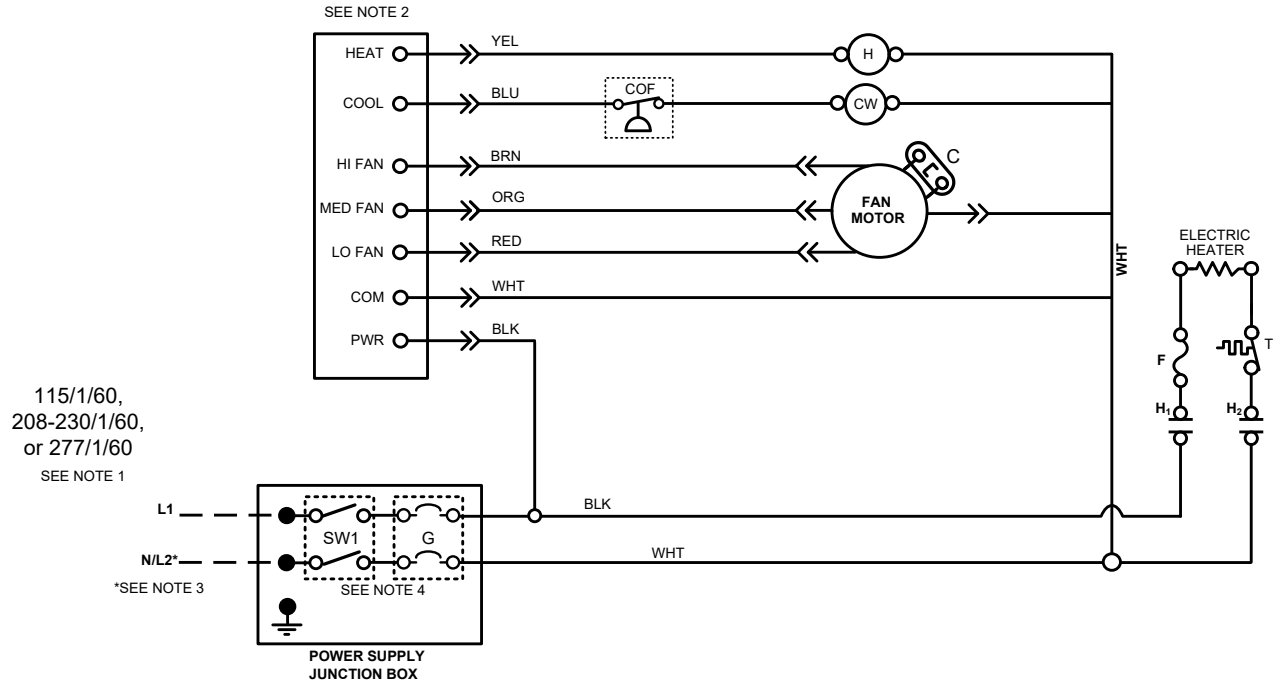
NOTES:

1. Use copper conductors only.
2. Thermostat is field installed and may be remote mounted.
3. For 208V applications, white wire is replaced with red wire to indicate L2.
4. DPST switch for 208 applications only.

4AE03--3d.vsd

19 March, 2015

Wire Diagram: 2-Pipe Auxiliary Electric Heat Vertical Fan Coil



LEGEND:

H	- ELECTRIC HEAT RELAY
CW	- CHILLED WATER VALVE
C	- CAPACITOR
F	- THERMAL CUTOFF
T	- TEMPERATURE LIMIT
SW1	- DISCONNECT SWITCH

- QUICK CONNECT PLUGS
- INDICATES FIELD WIRING
- INDICATES OPTIONAL WIRING/COMPONENT
- INDICATES FACTORY CONNECTION
- INDICATES FIELD CONNECTION

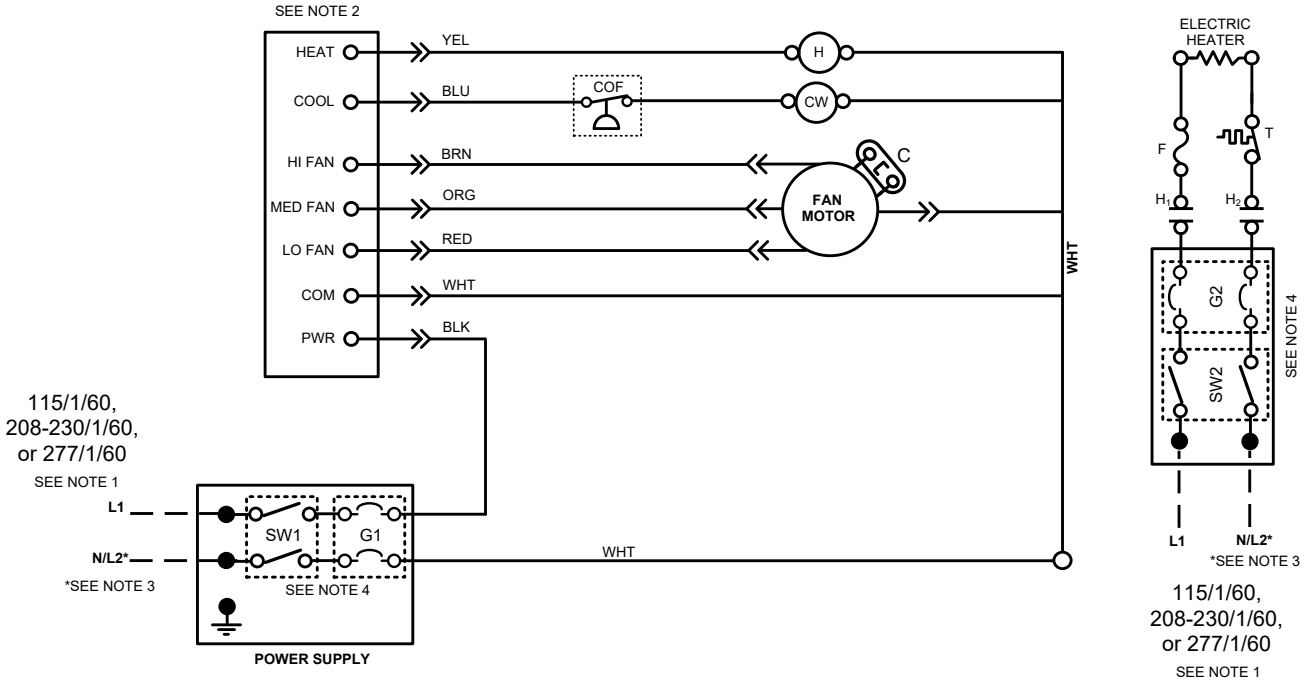
G	- CIRCUIT BREAKER
COF	- CONDENSATE OVERFLOW SWITCH
____	- _____

NOTES:

1. Use copper conductors only.
2. Thermostat is field installed and may be remote mounted.
3. For 208V applications, white wire is replaced with red wire to indicate L2.
4. DPST switch for 208 applications only.

4ET01--3d.vsd

19 March, 2015



LEGEND:

- H - ELECTRIC HEAT RELAY
- CW - CHILLED WATER VALVE
- C - CAPACITOR
- F - THERMAL CUTOFF
- T - TEMPERATURE LIMIT
- ☐ SW1 - DISCONNECT SWITCH
- ☐ SW2 - DISCONNECT SWITCH

- ⟶⟶ - QUICK CONNECT PLUGS
- – — – - INDICATES FIELD WIRING
- ---------- - INDICATES OPTIONAL WIRING/COMPONENT
- ○ - INDICATES FACTORY CONNECTION
- ● - INDICATES FIELD CONNECTION
- ☐ G1 - CIRCUIT BREAKER
- ☐ G2 - CIRCUIT BREAKER
- ☐ COF - CONDENSATE OVERFLOW SWITCH
- ☐ ____ - _____

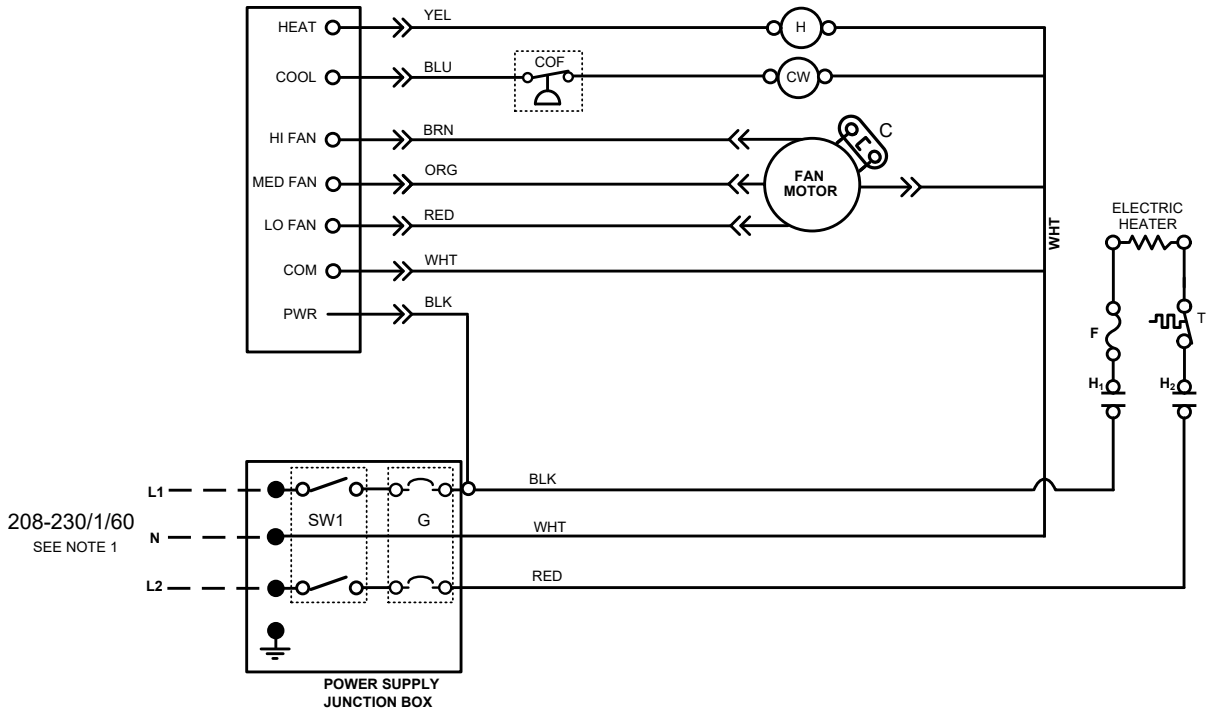
NOTES:

1. Use copper conductors only.
2. Thermostat is field installed and may be remote mounted.
3. For 208V applications, white wire is replaced with red wire to indicate L2.
4. DPST switch for 208 applications only.

4ET02--3d.vsd

19 March, 2015

Wire Diagram: 2-Pipe Auxiliary Electric Heat Vertical Fan Coil



LEGEND:

H	- ELECTRIC HEAT RELAY
CW	- CHILLED WATER VALVE
C	- CAPACITOR
F	- THERMAL CUTOFF
T	- TEMPERATURE LIMIT
☐ SW1	- DISCONNECT SWITCH

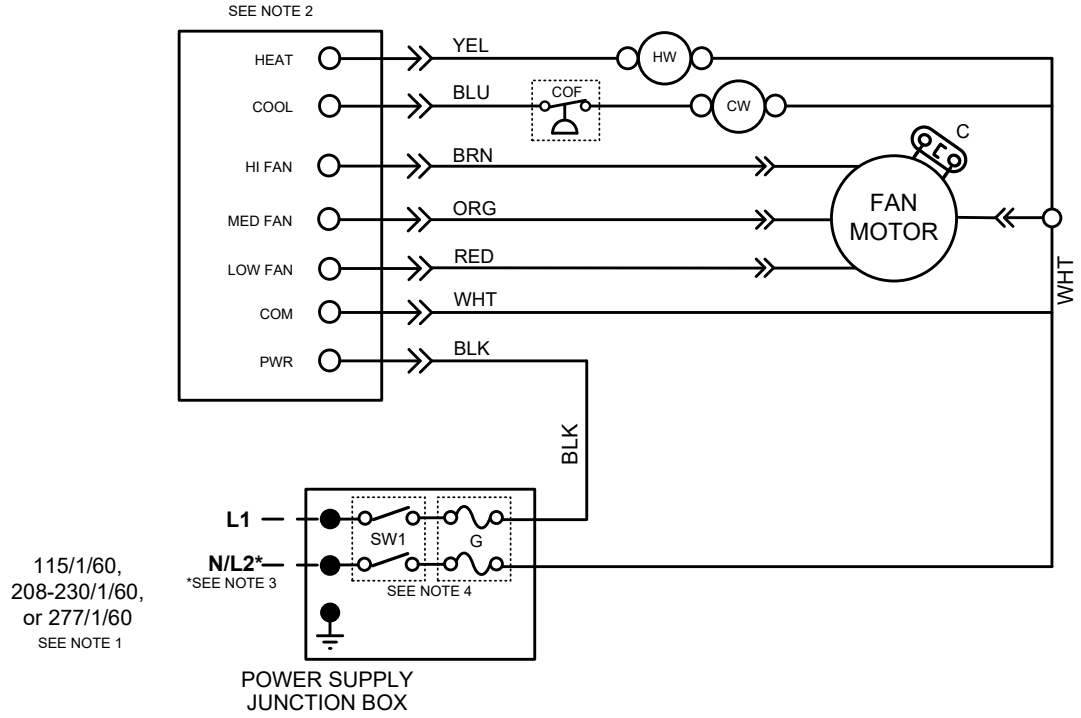
⟫⟪	- QUICK CONNECT PLUGS
— — —	- INDICATES FIELD WIRING
----------	- INDICATES OPTIONAL WIRING/COMPONENT
o	- INDICATES FACTORY CONNECTION
●	- INDICATES FIELD CONNECTION
☐ G	- CIRCUIT BREAKER
☐ COF	- CONDENSATE OVERFLOW SWITCH
☐ ____	- _____

NOTES:

1. Use copper conductors only.
2. Thermostat is field installed and may be remote mounted.
3. For 208V applications, white wire is replaced with red wire to indicate L2.
4. DPST switch for 208 applications only.

4ET03--3d.vsd

19 March, 2015



LEGEND:

- HW - HOT WATER VALVE
- CW - CHILLED WATER VALVE
- C - CAPACITOR
- ☐ SW1 - DISCONNECT SWITCH
- ☐ G - NON-RENEWABLE FUSE
- ☐ COF - CONDENSATE OVERFLOW SWITCH
- ☐ ____ - _____

- ⟶⟶ - QUICK CONNECT PLUGS
- – — — - INDICATES FIELD WIRING
- ---------- - INDICATES OPTIONAL WIRING/COMPONENT
- o - INDICATES FACTORY CONNECTION
- ● - INDICATES FIELD CONNECTION

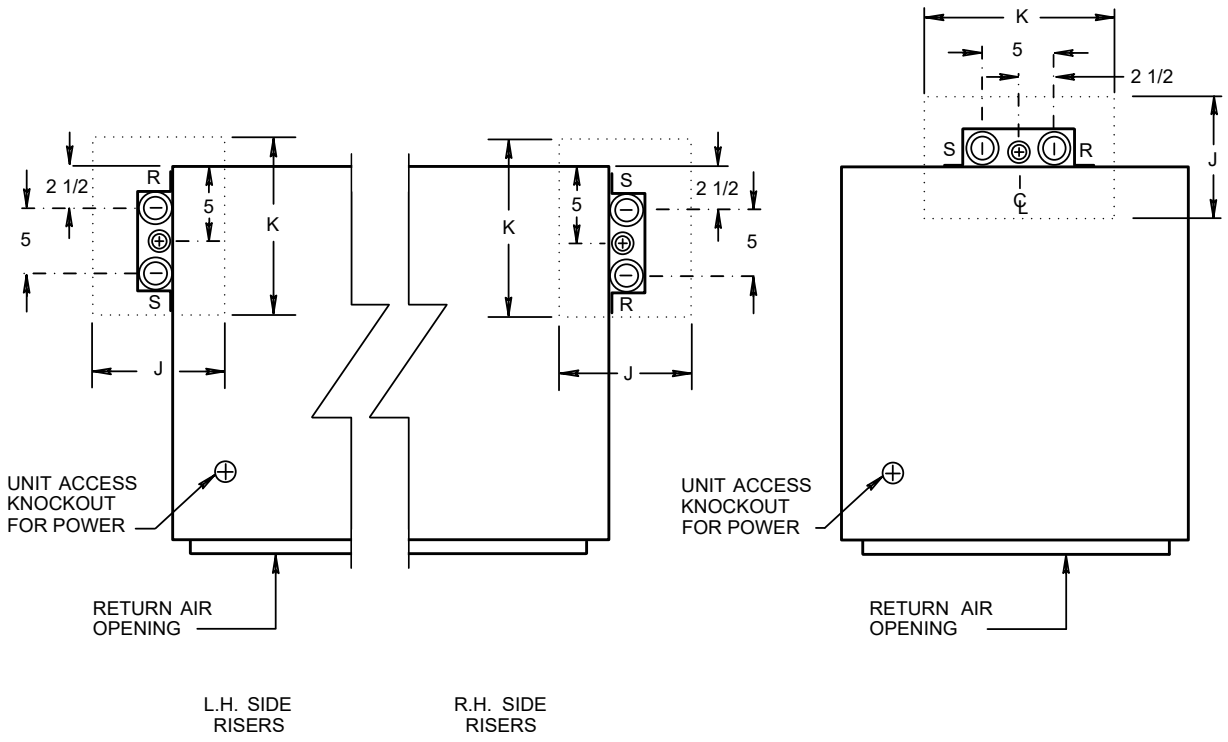
NOTES:

1. Use copper conductors only.
2. Thermostat is field installed and may be remote mounted.
3. For 208V applications, white wire is replaced with red wire to indicate L2.
4. DPST switch for 208 applications only.

44P01--3c.vsd

10 December 2013

2 Pipe Units with P-Trap Drain Pan



SIDE RISERS

REAR RISERS

Notes:

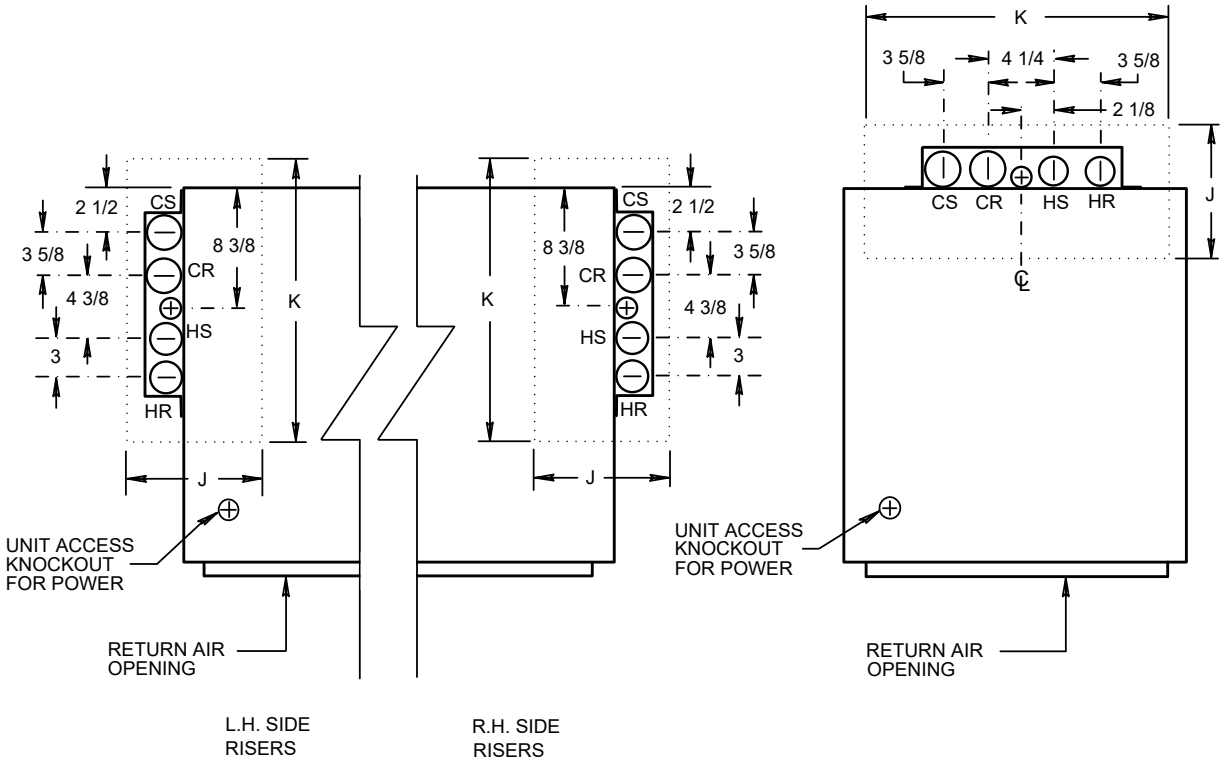
1. "Riser size" refers to the larger of the supply and return risers on each unit.
2. Risers are protected by a steel riser cover extending the height of the cabinet.
3. Riser spacing shown accomodates 2" risers with 1/2" armaflex insulation (standard) and a 1" condensate drain riser with **optional** 3/8" armaflex insulation.

RECOMENDED SLEEVE SIZE

RISER SIZE	MINIMUM J	MINIMUM K
3/4	6	10
1	6	10
1 1/4	6	10
1 1/2	6	10
2	6	10

All dimensions in inches.

DRAWING NUMBER 408d-PT
JANUARY 2017



Notes:

1. "Riser size" refers to the larger of the supply and return risers on each unit.
2. Risers are protected by a steel riser cover extending the height of the cabinet. Risers are clamped to help prevent movement during shipment and jobsite handling.

RISER SIZE	MINIMUM J	MINIMUM K
3/4	6	16
1	6	16
1 1/4	6	16
1 1/2	6	16
2	6	16
2 1/2	8	17

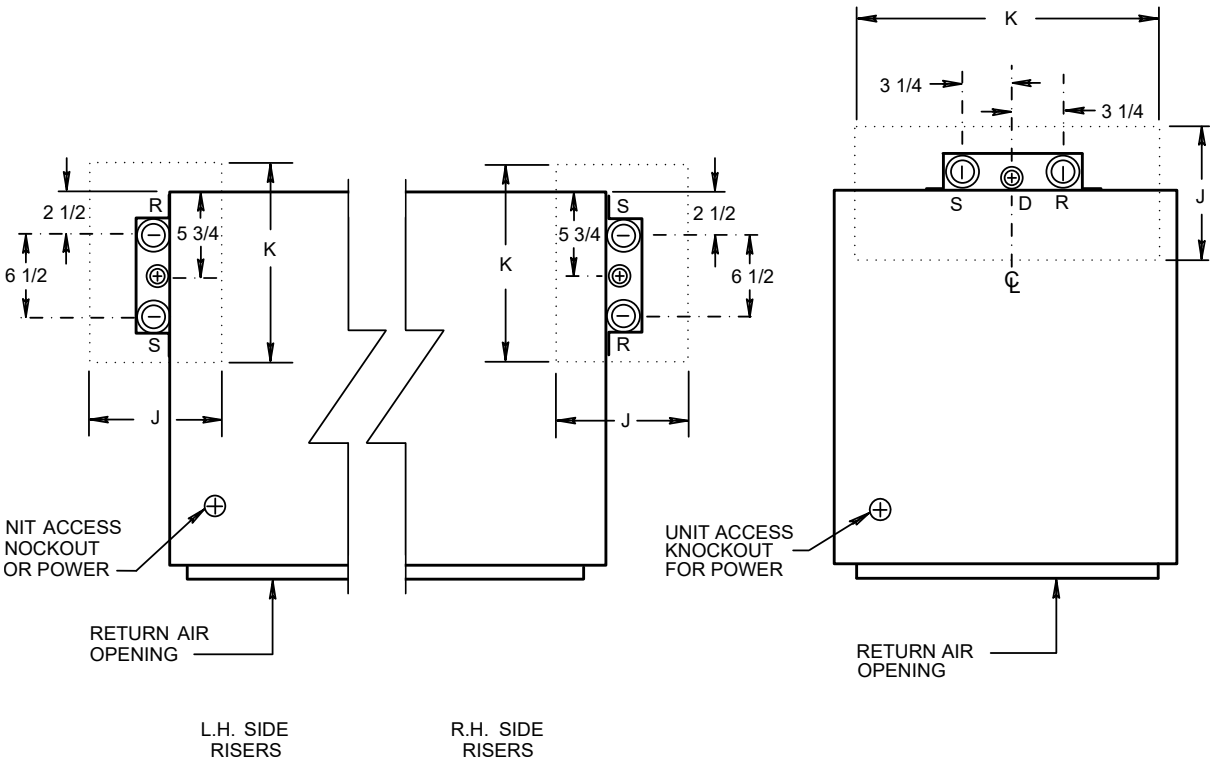
All dimensions in inches.

DRAWING NUMBER 409e-PT

JANUARY 2017

The Whalen Company

2 Pipe Units with Internal Drain Pan Split Riser Location



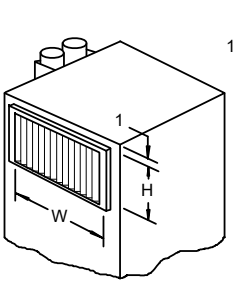
Notes:

1. "Riser size" refers to the larger of the supply and return risers on each unit.
2. Risers are protected by a steel riser cover extending the height of the cabinet. Risers are clamped to help prevent movement during shipment and jobsite handling.

RISER SIZE	MINIMUM J	MINIMUM K
3/4	6	12
1	6	12
1 1/4	6	12
1 1/2	6	12
2	6	12
2 1/2	8	14
3	8	14

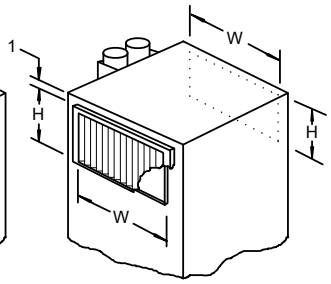
DRAWING NUMBER 408f-PT-VIC

JANUARY 2017



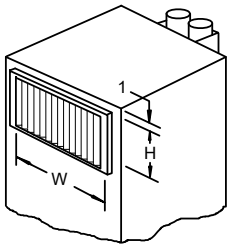
TYPE F
(FRONT)

SINGLE DEFLECTION
DOUBLE DEFLECTION



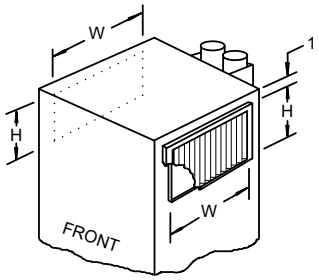
TYPE F-B
(FRONT & BACK)

SINGLE DEFLECTION
DOUBLE DEFLECTION



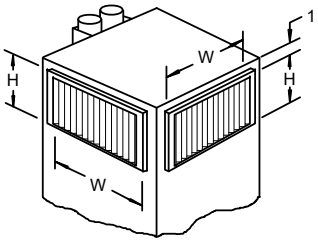
TYPE F
(FRONT)

SINGLE DEFLECTION
DOUBLE DEFLECTION



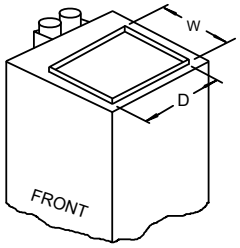
TYPE L-R
(LEFT & RIGHT)

SINGLE DEFLECTION
DOUBLE DEFLECTION



TYPE F-R
(FRONT & RIGHT)

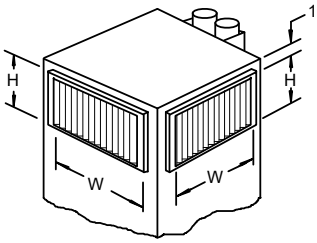
SINGLE DEFLECTION
DOUBLE DEFLECTION



TYPE T
(TOP DUCTED)

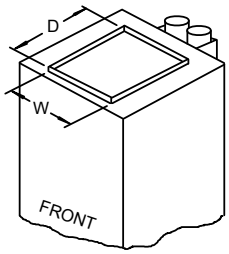
CONSULT FACTORY FOR
DIMENSIONS NOT SHOWN

LH SIDE RISER UNITS SHOWN ABOVE
See Drawing No. 411PV for plan views.



TYPE F-R
(FRONT & RIGHT)

SINGLE DEFLECTION
DOUBLE DEFLECTION



TYPE T
(TOP DUCTED)

CONSULT FACTORY FOR
DIMENSIONS NOT SHOWN

REAR RISER UNITS SHOWN ABOVE
See Drawing No. 411PV for plan views.

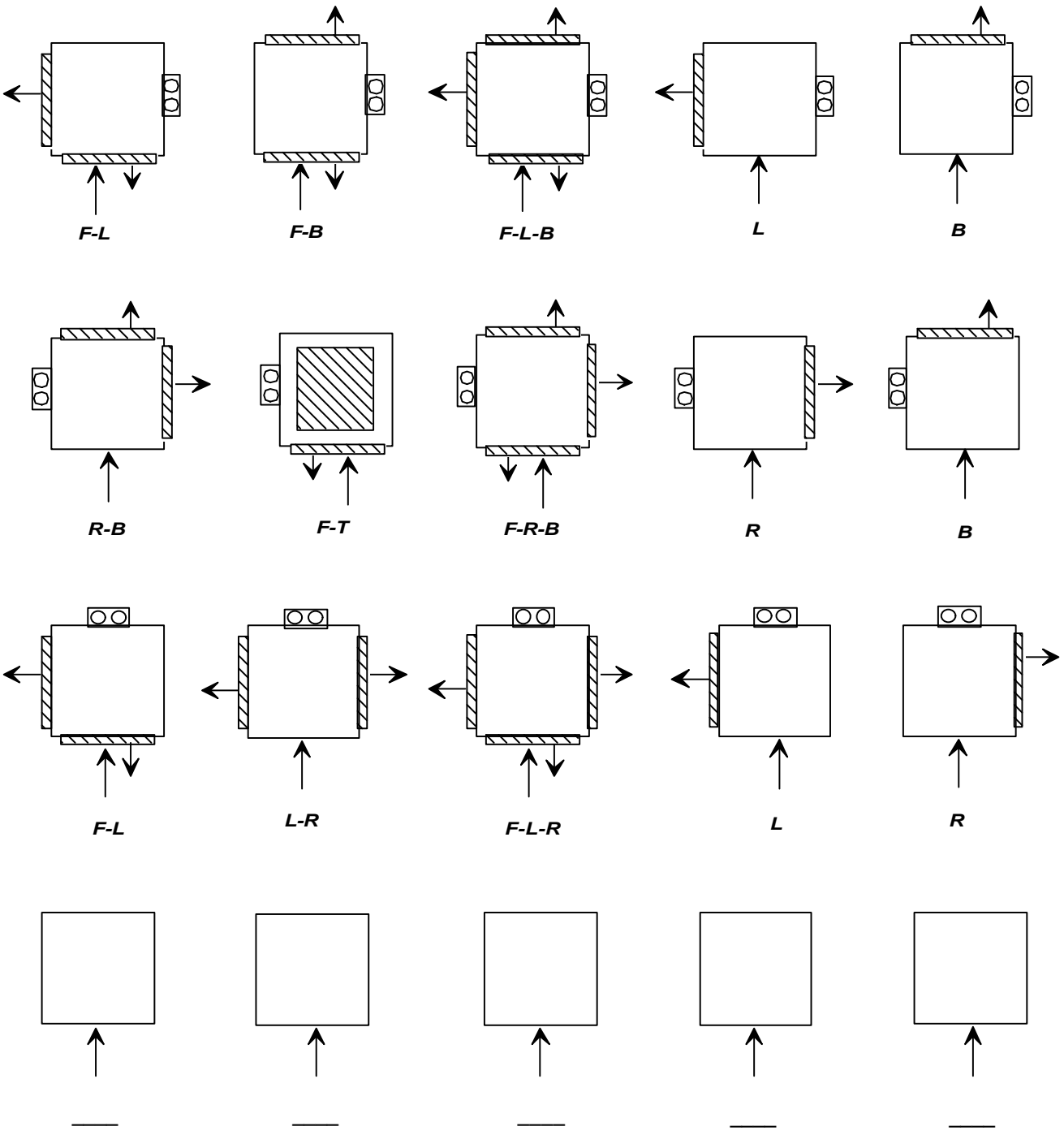
Notes:

1. All standard Whalen supply grilles and registers are fabricated of clear anodized aluminum.
2. See unit schedule for discharge types. Optional supply registers are available with either parallel or opposed blade dampers at extra cost.
3. Supply and return air grilles are shipped loose, for installation after drywall installation is complete.
4. Listed grille and register dimensions are for the grille opening size. All grilles are centered.
5. Unless otherwise noted, the front grille blades will be vertical, as drawn.
6. Avoid combining ducted (Type T) discharge with unit mounted registers. This combination can increase the noise level at the unit.
7. Where Type T is combined with Type F, B, L or R, grille height will be that of a two-grille discharge.

UNIT SIZE	1 Grille Type (F,B,L,R)		2 Grille Type (F-B, F-L, F-R, L-R, B-L, B-R)		3 Grille Type (F-L-R, F-B-R, F-B-L)		Top Ducted Type (T)	
	W	H	W	H	W	H	W	D
300	14	8	14	6	14	6	12	10
400	14	10	14	6	14	6	12	12
600	14	14	14	8	14	8	14	14
800	14	18	14	10	14	10	16	14
1000	20	18	20	10	20	6	16	16
1200	NOT AVAILABLE		20	10	20	6	16	16

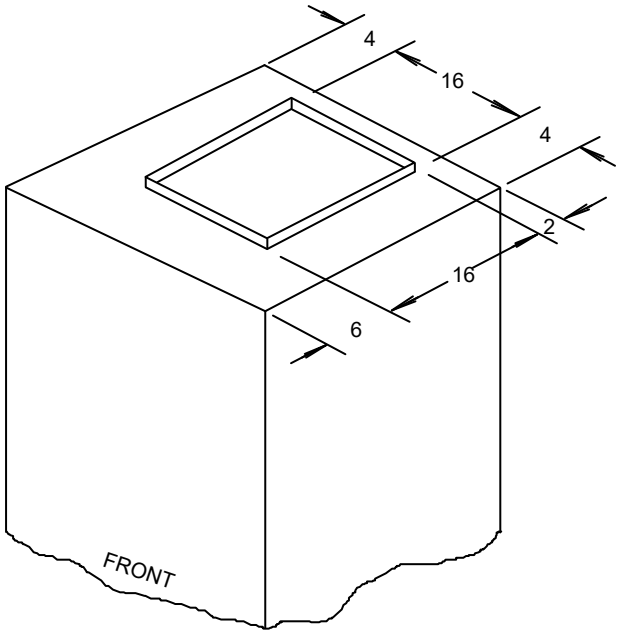
All dimensions in inches.

DRAWING NUMBER 411e
MARCH 2018



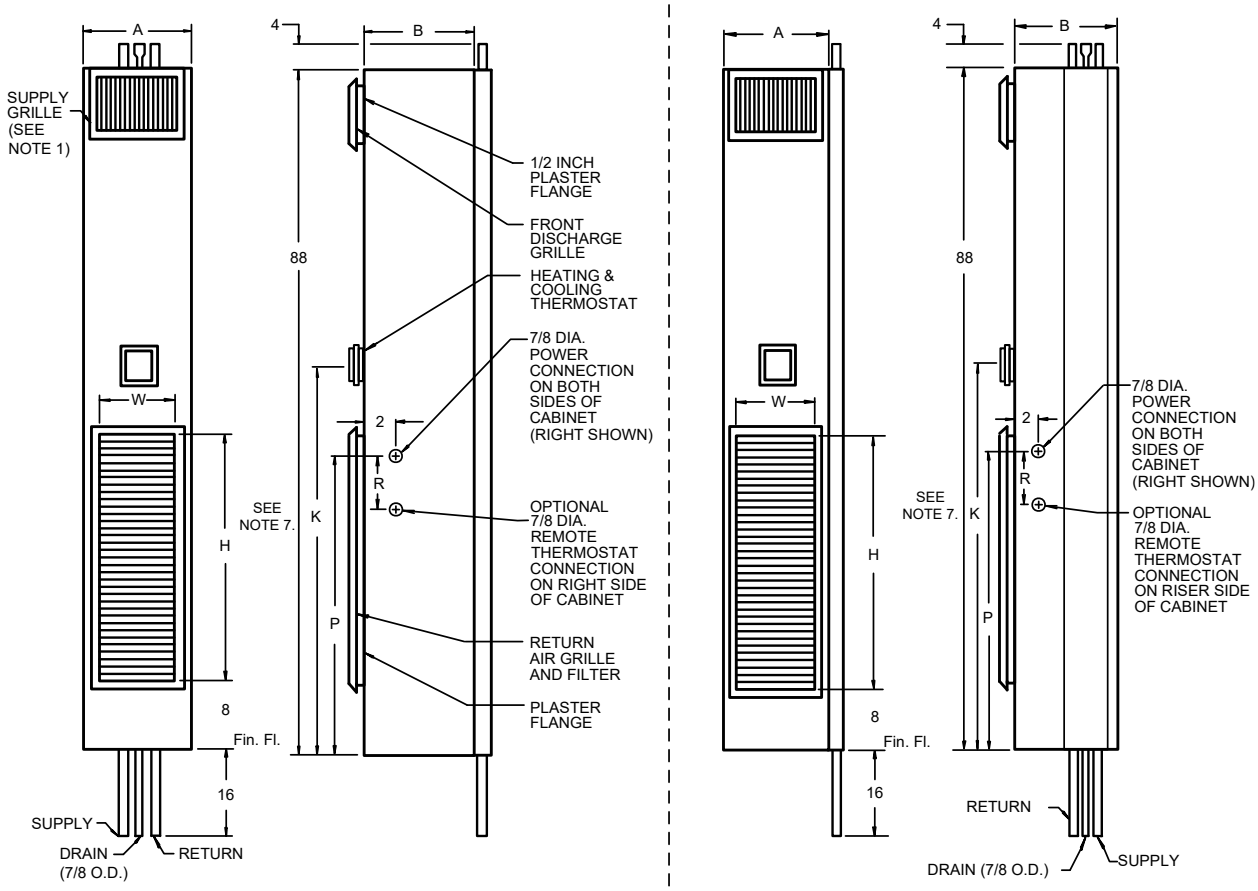
LARGE ARROW REPRESENTS RETURN AIR LOCATION AND SMALL ARROWS REPRESENT DISCHARGE LOCATION.

B = BACK OR REAR L = LEFT R = RIGHT F = FRONT T = TOP



TYPE T
(TOP DUCTED)

2 Pipe and Optional Electric Heat, 3 or 4 Row Cooling Coils with Internal Drain Pan



FRONT VIEW
REAR RISERS

RIGHT SIDE VIEW
REAR RISERS

FRONT VIEW
RH SIDE RISERS SHOWN
LH SIDE RISERS OPPOSITE

RIGHT SIDE VIEW
RH SIDE RISERS SHOWN
LH SIDE RISERS OPPOSITE

NOTES:

1. See drawing number 411 for supply grille or register options. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include two ball valves inside the cabinet.
5. See drawing number 408-PT for detailed riser dimensions and plan views.
6. Remote thermostat is located on riser side for left or right side riser units. For rear risers, connection will be on right hand side of unit.
7. 48" thermostat height is standard on WF* 300-400 units. Remote thermostat is required on WF* 600 - 800 units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	R
WF*-300-##	300	16	16	14	32	48	34	5
WF*-400-##	400	16	16	14	36	48	38	5
WF*-600-##	600	18	16	14	40	52	41	5
WF*-800-##	800	18	16	14	44	56	45	9

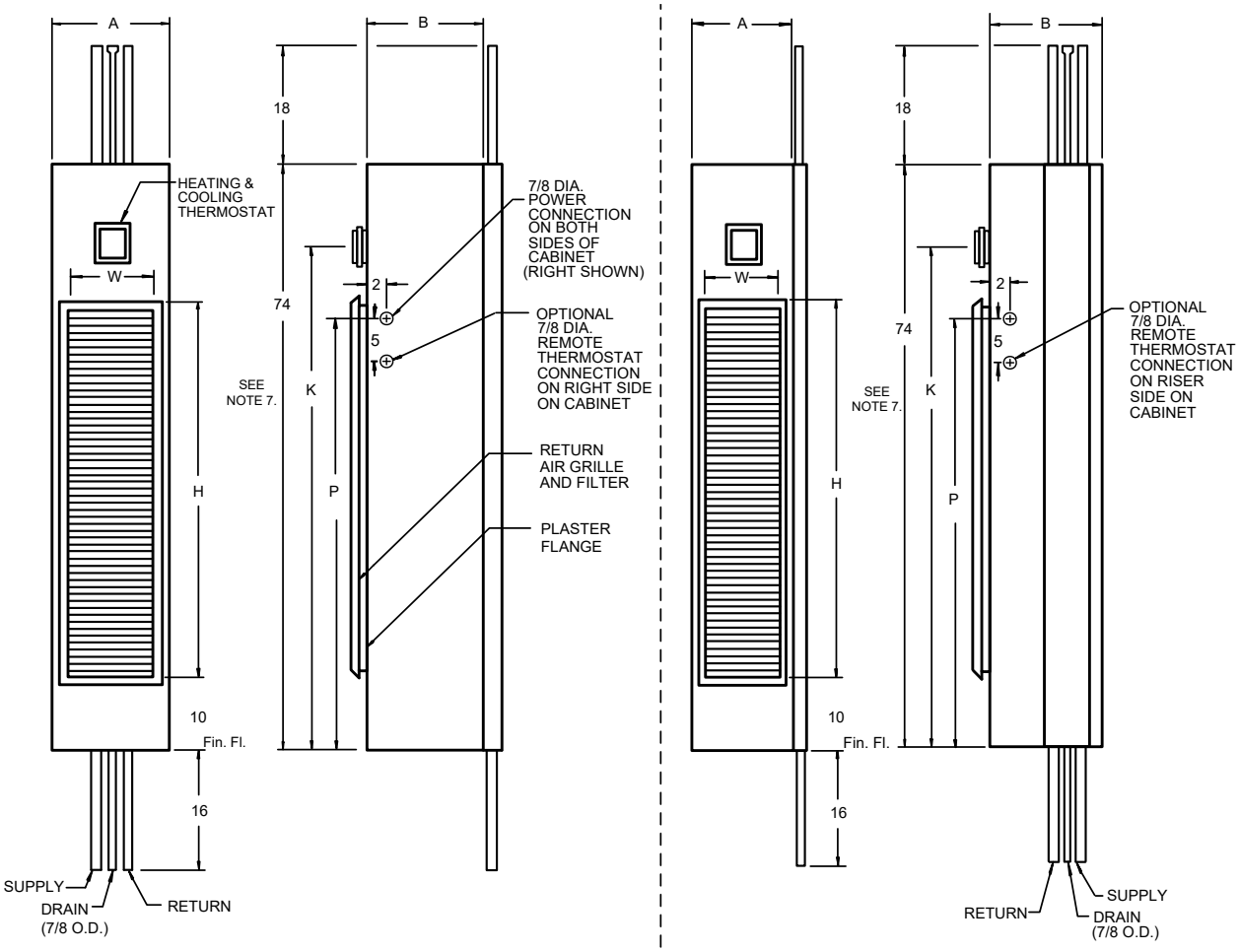
All dimensions in inches.

* C = 3 ROW
D = 4 ROW
= 2P, ET or AE

DRAWING NUMBER 401F-PT

MAY 2013

2 Pipe and Optional Electric Heat, 1000 and 1200 CFM Units with Internal Drain Pan, 3 or 4 Row Cooling Coils



FRONT VIEW
REAR RISERS

RIGHT SIDE VIEW
REAR RISERS

FRONT VIEW
RH SIDE RISERS SHOWN
LH SIDE RISERS OPPOSITE

RIGHT SIDE VIEW
RH SIDE RISERS SHOWN
LH SIDE RISERS OPPOSITE

NOTES:

1. See drawing number 411-V-K for top discharge dimensions. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include four ball valves inside the cabinet.
5. See drawing number 408-PT for detailed riser dimensions and plan views.
6. Remote thermostat is located on riser side for left or right side riser units. For rear risers, connection will be on right hand side of unit.
7. Remote thermostat is required on units for 48" thermostat height.

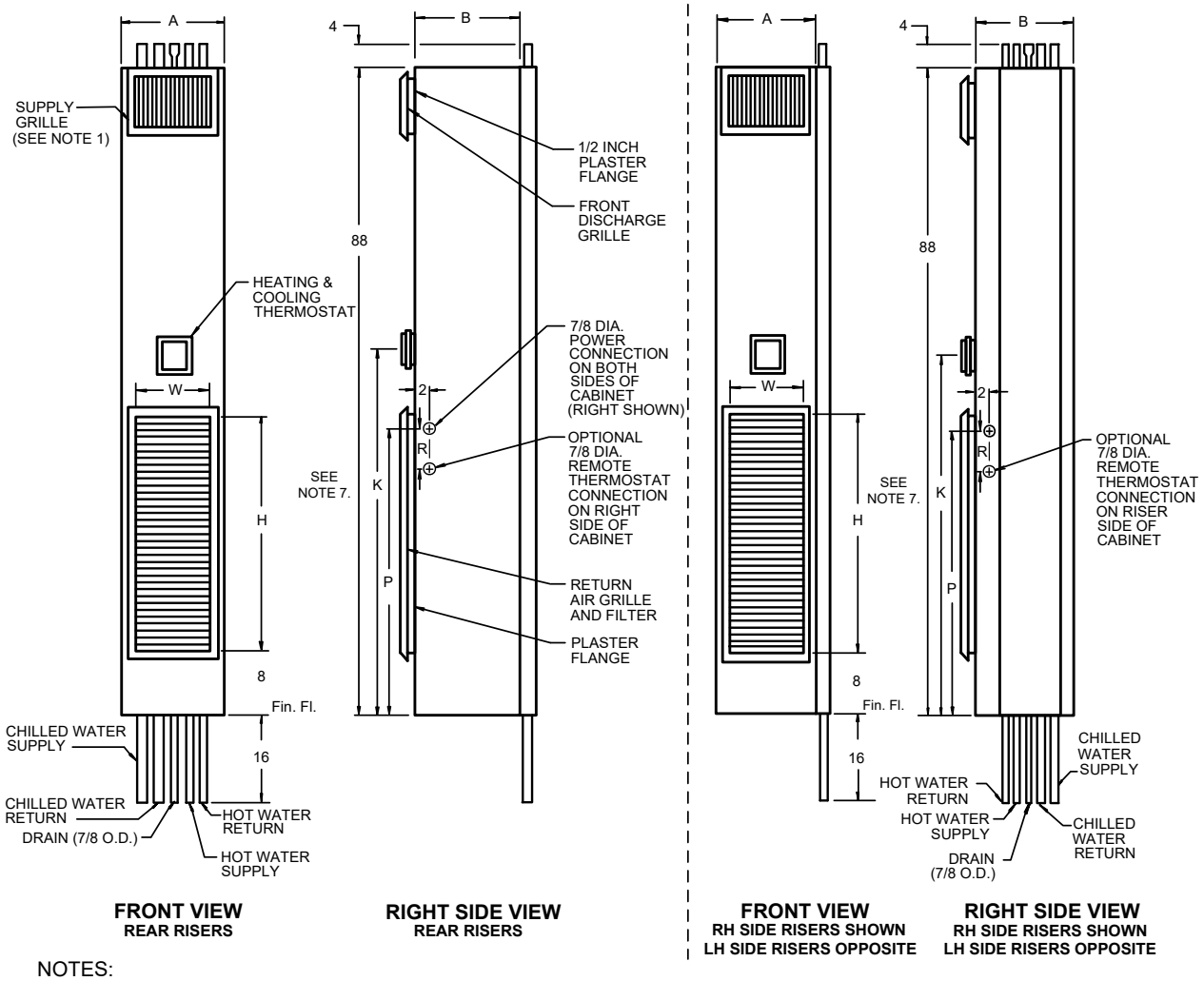
UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P
WF*-1000-##	1000	24	24	20	48	62	51
WF*-1200-##	1200	24	24	20	56	70	59

All dimensions in inches.

* C = 3 ROW
* D = 4 ROW
= 2P, ET or AE

DRAWING NUMBER 401F-K-PT
MAY 2013

4 Pipe with Internal Drain Pan, 3 or 4 Row Cooling Coils



FRONT VIEW
REAR RISERS

RIGHT SIDE VIEW
REAR RISERS

FRONT VIEW
RH SIDE RISERS SHOWN
LH SIDE RISERS OPPOSITE

RIGHT SIDE VIEW
RH SIDE RISERS SHOWN
LH SIDE RISERS OPPOSITE

NOTES:

1. See drawing number 411 for supply grille or register options. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include four ball valves inside the cabinet.
5. See drawing number 409-PT for detailed riser dimensions and plan views.
6. Remote thermostat is located on riser side of cabinet for left or right side riser units. For rear risers, connection will be on right hand side of unit.
7. 48" thermostat height is standard on WF* 300 units. Remote thermostat is required on WF* 400 - 800 units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	R
WF*-300-4P	300	16	18	14	36	48	38	5
WF*-400-4P	400	16	18	14	40	52	42	5
WF*-600-4P	600	18	18	14	44	56	45	5
WF*-800-4P	800	18	18	14	48	60	49	9

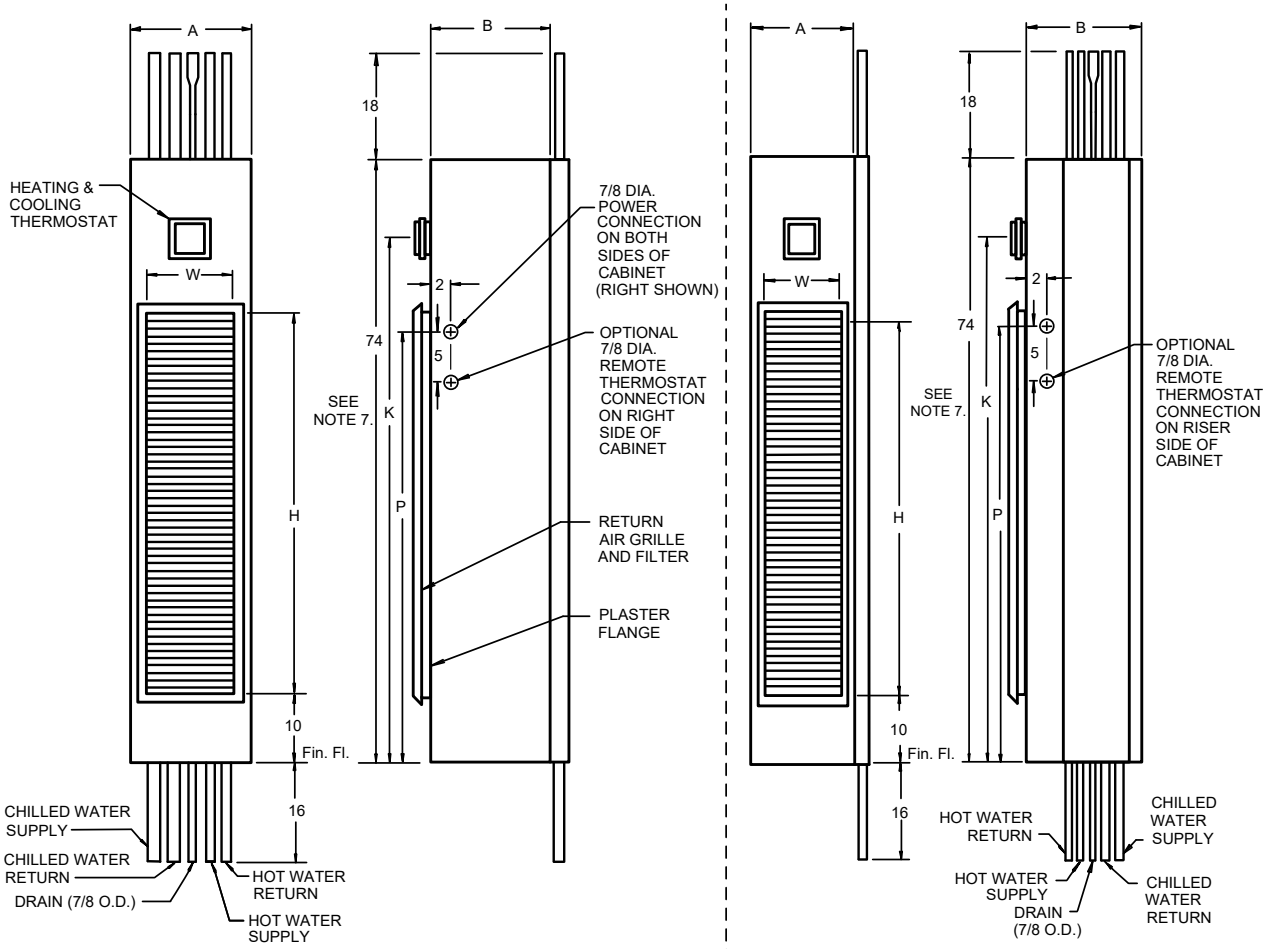
* C = 3 ROW
* D = 4 ROW

All dimensions in inches.

DRAWING NUMBER 403E-PT

MARCH 2013

4 Pipe 1000 and 1200 CFM Units with Internal Drain Pan, 3 or 4 Row Cooling Coils



FRONT VIEW
REAR RISERS SHOWN

RIGHT SIDE VIEW
REAR RISERS SHOWN

FRONT VIEW
RH SIDE RISERS SHOWN
LH SIDE RISERS OPPOSITE

RIGHT SIDE VIEW
RH SIDE RISERS SHOWN
LH SIDE RISERS OPPOSITE

NOTES:

1. **See drawing number 411-V-K for top discharge dimensions. The return air grille is always on the front of the unit.**
2. **Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.**
3. **Return air grille is extruded aluminum.**
4. **Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include four ball valves inside the cabinet.**
5. **See drawing number 409-PT for detailed riser dimensions and plan views.**
6. **Remote thermostat is located on riser side of cabinet for left or right side riser units. For rear risers, connection will be on right hand side of unit.**
7. **Remote thermostat is required on units for 48" thermostat height.**

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P
WF*-1000-4P	1000	24	24	20	48	62	51
WF*-1200-4P	1200	24	24	20	56	70	59

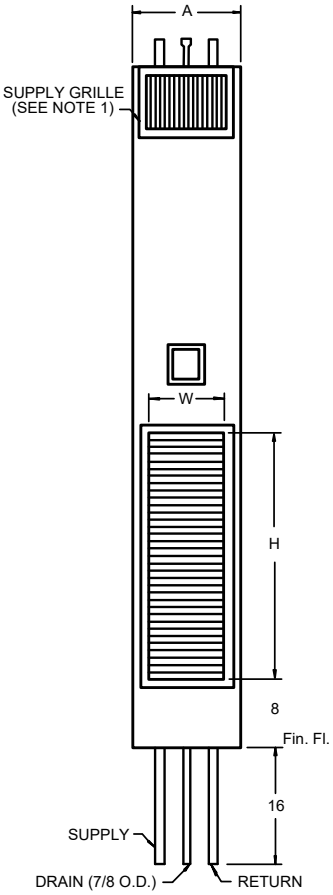
All dimensions in inches.

*** C = 3 ROW**
*** D = 4 ROW**

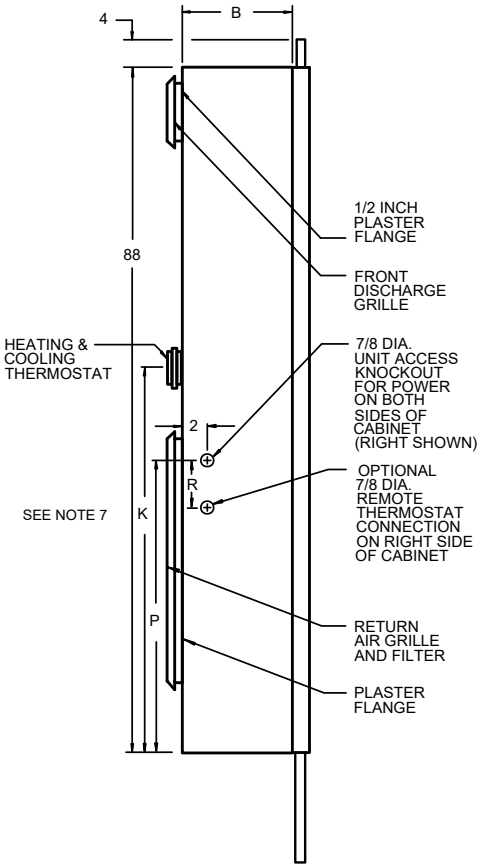
DRAWING NUMBER 403E-K-PT

MAY 2013

2 Pipe and Optional Electric Heat 3 or 4 Row Cooling Coils with Internal Drain Pan Rear Riser Split Locations



FRONT VIEW
REAR RISERS SHOWN



RIGHT SIDE VIEW
REAR RISERS SHOWN

NOTES:

1. See drawing number 411 for supply grille or register options. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include two ball valves inside the cabinet.
5. See drawing number 408-PT-VIC for detailed riser dimensions and plan views.
6. Remote thermostat connection is located on the right hand side of cabinet for rear riser units.
7. 48" thermostat height is standard on WF* 300-400 units. Remote thermostat is required on WF* 600 - 800 units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	R
WF*-300-##	300	16	16	14	32	48	34	5
WF*-400-##	400	16	16	14	36	48	38	5
WF*-600-##	600	18	16	14	40	52	41	5
WF*-800-##	800	18	16	14	44	56	45	9

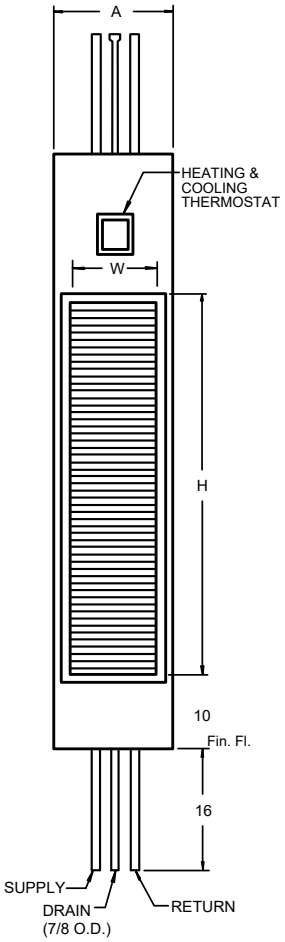
All dimensions in inches.

* C = 3 ROW
D = 4 ROW
= 2P, ET or AE

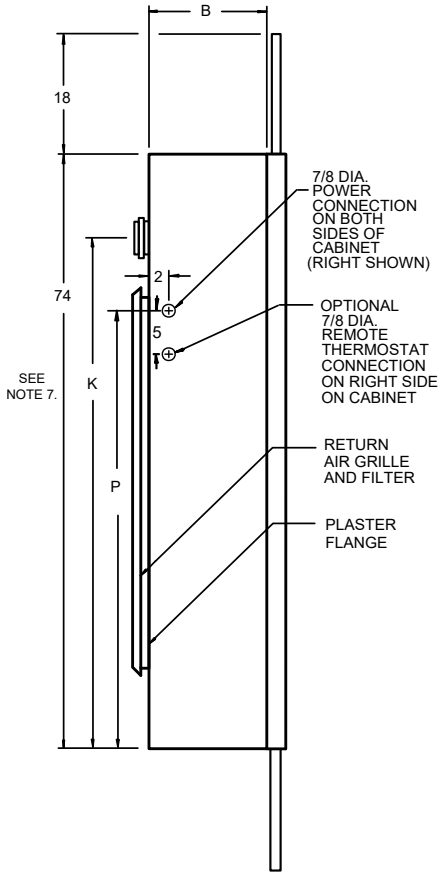
DRAWING NUMBER 401D-PT-R-VIC

MAY 2013

2 Pipe and Optional Electric Heat 3 or 4 Row Cooling Coils with Internal Drain Pan, 1000 & 1200 CFM Rear Riser Split



FRONT VIEW
REAR RISERS



RIGHT SIDE VIEW
REAR RISERS

NOTES:

1. See drawing number 411-V-K for top discharge dimensions. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include four ball valves inside the cabinet.
5. See drawing number 408-PT-VIC for detailed riser dimensions and plan views.
6. Remote thermostat connection is located on the right hand side of cabinet for rear riser units.
7. Remote thermostat is required on units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P
WF*-1000-##	1000	24	24	20	48	62	51
WF*-1200-##	1200	24	24	20	56	70	59

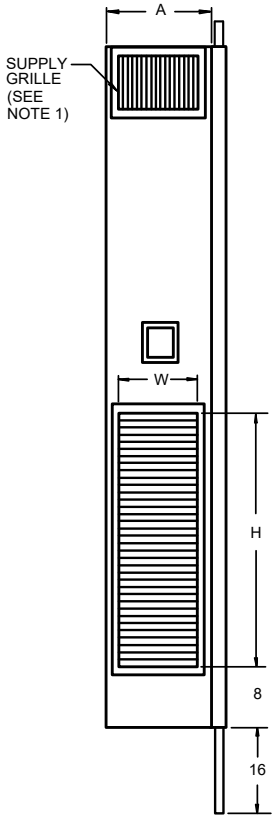
All dimensions in inches.

* C = 3 ROW
* D = 4 ROW
= 2P, ET or AE

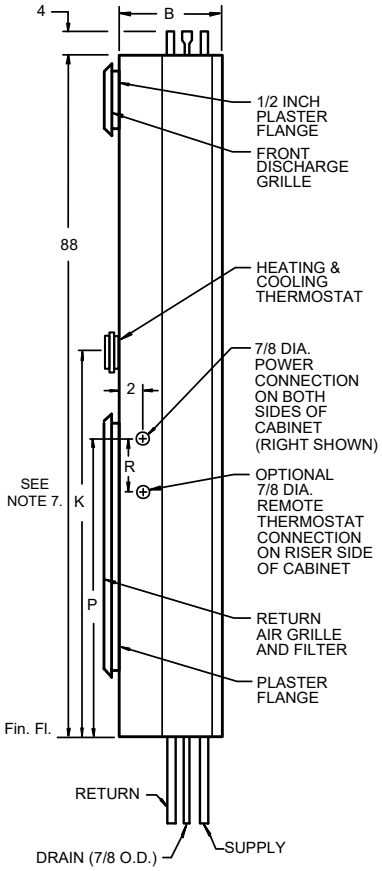
DRAWING NUMBER 401-K-PT-R-VIC

MAY 2013

2 Pipe and Optional Electric Heat 3 or 4 Row Cooling Coils with Internal Drain Pan Side Split Riser Locations



FRONT VIEW
RH SIDE RISERS SHOWN
LH SIDE RISERS OPPOSITE



RIGHT SIDE VIEW
RH SIDE RISERS SHOWN
LH SIDE RISERS OPPOSITE

NOTES:

1. See drawing number 411 for supply grille or register options. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include two ball valves inside the cabinet.
5. See drawing number 408-PT-VIC for detailed riser dimensions and plan views.
6. Remote thermostat is located on riser side for left or right side riser units.
7. 48" thermostat height is standard on WF* 300-400 units. Remote thermostat is required on WF* 600 - 800 units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	R
WF*-300-##	300	16	16	14	32	48	34	5
WF*-400-##	400	16	16	14	36	48	38	5
WF*-600-##	600	18	16	14	40	52	41	5
WF*-800-##	800	18	16	14	44	56	45	9

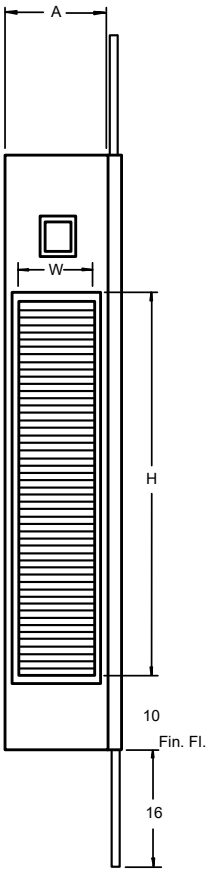
All dimensions in inches.

* C = 3 ROW
D = 4 ROW
= 2P, ET or AE

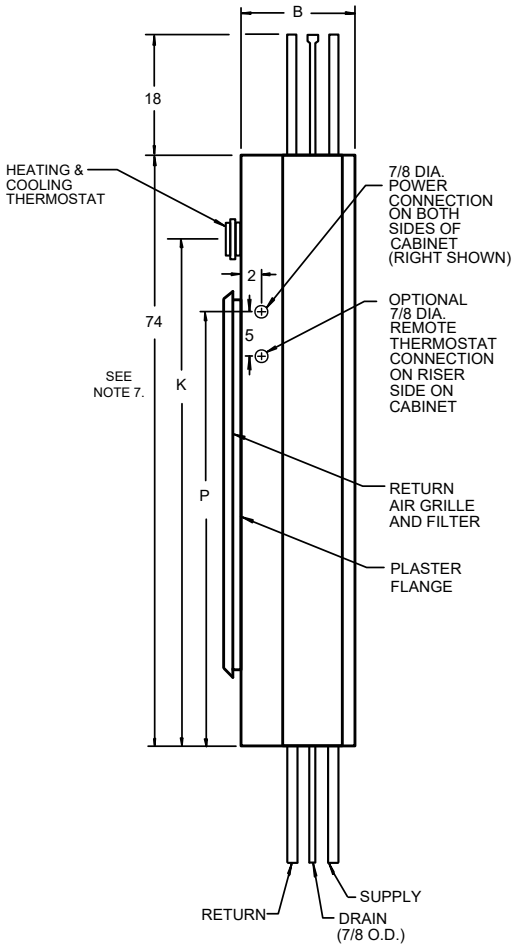
DRAWING NUMBER 401-PT-S-VIC

MAY 2013

2 Pipe and Optional Electric Heat 3 or 4 Row Cooling Coils with Internal Drain Pan 1000 or 1200 CFM Side Split Riser



FRONT VIEW
RH SIDE RISERS SHOWN
LH SIDE RISERS OPPOSITE



RIGHT SIDE VIEW
RH SIDE RISERS SHOWN
LH SIDE RISERS OPPOSITE

NOTES:

1. See drawing number 411-V-K for top discharge dimensions. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include four ball valves inside the cabinet.
5. See drawing number 408-PT-VIC for detailed riser dimensions and plan views.
6. Remote thermostat is located on riser side for left or right side riser units.
7. Remote thermostat is required on units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P
WF*-1000-##	1000	24	24	20	48	62	51
WF*-1200-##	1200	24	24	20	56	70	59

All dimensions in inches.

* C = 3 ROW
* D = 4 ROW
= 2P, ET or AE

DRAWING NUMBER 401-K-PT-S-VIC

MAY 2013

Mechanical Specifications

TWO PIPE OR FOUR PIPE ROOM FAN-COIL UNIT

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Two Pipe, Two Pipe “Cooling Only”, or Four Pipe Room Fan-Coil Unit

B. Two Pipe Room Fan-Coil Unit with (Auxiliary or Total) (CHOSE ONE) Electric Heat

1.02 RELATED SECTIONS

1.03 REFERENCES

A. ETL listed under Underwriters Laboratories Standard for Safety UL 1995 4th Ed/CSA C22.2 No.236 4th Ed.

B. ANSI/AHRI Standard 440.

1.04 DELIVERY, STORAGE AND HANDLING

A. Manufacturer to deliver products to site by floor or customer specific request. Units to be stored, protect from the weather and construction debris prior to installation. Units must be individually packaged. Units must be tagged with site location, model number and configuration.

1.05 ENVIRONMENTAL REQUIREMENTS

A. Protect units from construction debris by covering all openings prior to start-up of the equipment. Units must not be used for heating, cooling, or ventilation prior to the start-up of equipment for permanent use. Use of the equipment for the temporary heating, cooling or ventilation is prohibited.

PART 2 PRODUCTS

2.01 TYPE

A. The fan-coil unit shall be of the factory assembled, integral fan type with hydronic cooling/heating coil, and/or electric heating element, integral supply, return and drain risers and all accessories.

a. ALTERNATE: Provide a slide out, removable hydronic chassis design that is not screwed or fastened to the cabinet. Chassis shall be base mounted and utilize a slide rail permitting removal by simply disconnecting two hoses and a polarized electrical plug. Designs simply incorporating hoses and multiple coil/chassis fastening devices are unacceptable. The chassis shall be shipped separately from the fan-coil cabinets to prevent exposure to, and fouling from finishing work.

2.02 CAPACITY

A. Shall be as indicated on the drawings or specifications, which are based on Whalen units.

2.03 CABINETS

A. The one-piece unit cabinet shall be fabricated of reinforced 22 gauge continuous G90 galvanized steel with front panel attached via button-lock seaming to prevent air leakage. All internal assemblies shall be welded and treated to prevent corrosion.

B. The cabinet shall be insulated with 1/2-inch thick 2-pound density thermal and acoustical fiberglass insulation having an integral water repellent, fungi and bacteria resistant barrier conforming to NFPA90A.

   a. (OPTION 1) 1/2-inch thick elastomeric closed cell foam insulation. Insulation shall conform to NFPA 90A for fire, smoke and melting, and comply with a 25/50 Flame Spread and Smoke Developed Index per ASTM E-84 or UL 723.

   b. (OPTION 2) 1/2-inch thick 1 1/2-pound density thermal and acoustical fiberglass insulation having an aluminum foil-faced coating conforming to NFPA90A.

C. The cabinets shall be designed for direct attachment of gypsum wallboard.

D. The cabinet shall allow the placement of vertical risers on any side not being used for service access or discharge air openings.

E. The cabinet will have slots with edge protectors to accommodate movement of the risers with the isolation valves affixed. The slots shall remain covered with insulation to minimize air infiltration.

F. Cabinet return and discharge air openings shall be factory cut and flanged on all sides. All insulation located behind cabinet openings must be removed by the unit manufacturer prior to shipment. Knockouts for field cutting are unacceptable.

2.04 COIL

A. The coil shall incorporate a manual air vent and be constructed of seamless copper tubing mechanically expanded into aluminum plate. Coil assembly shall be tested at the factory at not less than 320 PSIG.

2.05 FACTORY HYDRONIC PIPING

A. The hydronic control valve shall be an electric two-way, two-position type with a 25-psi minimum shut-off differential and utilize fully removable power assemblies. Units to include one two-position control valve for chilled-water or heating coil in addition to a quantity of two ball valves with a two-piece, bronze body with full-port, chrome-plated bronze ball; with PTFE or TFE seats. Flexible high-pressure stainless steel hose kits to connect coil to risers

   a. (OPTION 1) Balancing Valves: Bronze body, ball type; 125-psig (860-kPa) working pressure, 250-deg F (121-deg C) maximum operating temperature; with calibrated orifice or venturi, connections for portable differential pressure and temperature meter with integral seals, threaded ends, and equipped with a memory stop to retain set position.

b. (OPTION 2) Automatic Flow-Control Valve: Brass or ferrous-metal body; 300-psig (2070-kPa) working pressure at 250 deg F (121 deg C), with removable, corrosion-resistant, tamperproof, self-cleaning piston spring. Valve to be factory set to maintain constant indicated flow over operating range of valve.

c. (OPTION 3) Automatic Flow-Control Valve: Brass or ferrous-metal body; to include one or more precision sculptured brass or polyphenylsulfone orifi with an elastomeric diaphragm. Each valve will automatically control flow to within +/- 10% of its rated flow, over a temperature range of 32 to 225ºF, and a pressure differential range of 2 to 80 psid.

d. (OPTION 4) Y-Pattern Hydronic Strainers: Brass or ferrous-metal body (ASTM A 126, Class B); 125-psig (860-kPa) working pressure; with threaded connections, bolted cover, perforated stainless-steel basket, and bottom drain connection. Valve to include connection for hose-bib, full-port, ball-type blowdown valve in drain connection.

2.06 RISERS

A. The unit shall incorporate a factory assembled type “M” copper supply, return and drain risers of suitable length to reach floor-to-floor without additional contractor furnished material. All risers shall be protected by a galvanized steel pipe chase the length of the cabinet. The supply and return risers shall be insulated the length of the cabinet with ½” thick Armaflex or equal closed cell insulation. The drain riser shall be factory insulated with 3/8” thick Armaflex or equal closed cell insulation the length of the cabinet.

a. (OPTION 1) The unit shall incorporate a factory assembled type “L” copper supply, return and drain risers of suitable length to reach floor-to-floor without additional contractor furnished material.

b. (OPTION 2) The supply, return and drain riser extensions shall be factory-insulated with ½ inch Armaflex or equal on the chilled water and hot water riser and 3/8 inch Armaflex or equal on the drain riser.

2.07 DRAIN PAN

A. Drain pan shall collect and drain condensate that may form from any component internal to the fan-coil unit and shall be fabricated of welded and soldered 20 Ga. 304 stainless steel. The copper condensate drain shall be rolled and soldered into the pan.

2.08 FANS

A. The fan shall be slow speed forward curved centrifugal type, and shall be accessible for removal and maintenance through the return air opening.

2.09 MOTORS

A. Motor shall be of the permanent split capacitor (PSC) type, suitable for the current characteristics shown on the drawings, and shall have built-in thermal overload protection. Motors shall be two-speed type with 1050 RPM maximum.

B. (OPTION 1) Motors shall be electronically commutated high-efficiency, programmable brushless DC, totally enclosed, permanently lubricated sleeve bearing, type with automatic reset integral thermal overload protection and resiliently mounted. The ECM fan motor shall provide soft starting and maintain constant torque output over its operating range.

2.10 SUPPLY GRILLES

A. (STANDARD) The supply grilles shall be of the single deflection type fabricated of clear anodized aluminum. All supply openings shall be painted black with a damper assembly and sight baffle provided when one unit is serving two separate rooms.

(OPTION 1) The supply grilles shall be of the single deflection type fabricated of (factory white painted extruded aluminum) or (custom painted extruded aluminum). (SELECT ONE) All supply openings shall be painted black with a damper assembly and sight baffle provided when one unit is serving two separate rooms.

(OPTION 2) The supply grilles shall be of the double deflection type fabricated of (clear anodized extruded aluminum), (factory white painted extruded aluminum) or (custom painted extruded aluminum). (SELECT ONE) All supply openings shall be painted black with a damper assembly and sight baffle provided when one unit is serving two separate rooms.

(OPTION) Insulated Sight Baffle - Sound insulation shall be furnished on the sight baffle to limit the transmission of sound between two rooms utilizing the same unit.

B. Steel grilles are not acceptable.

2.11 RETURN AIR PANEL

A. (STANDARD) Standard Return Air Grille – The return air opening shall be covered with a clear anodized extruded aluminum return air grille that is attached directly to the unit with two screws.

(OPTION 1) The return air opening shall be covered with a factory white painted extruded aluminum return air grille that is attached directly to the unit with two screws.

(OPTION 2) The return air opening shall be covered with a custom painted extruded aluminum return air grille that is attached directly to the unit with two screws.

(OPTION 3) Hinged Return Air Grille – The return air opening shall be covered with a clear anodized extruded aluminum hinged return air grille that is attached directly to the unit with two screws and contains quick removal fasteners for easy filter maintenance.

(OPTION 4) The return air opening shall be covered with a factory white painted extruded aluminum hinged return air grille that is attached directly to the unit with two screws and incorporates quick removal fasteners for easy filter maintenance.

(OPTION 5) The return air opening shall be covered with an aluminum or factory-white finished hinged air grille that is attached directly to the unit with two screws and contains quick removal fasteners for easy filter maintenance. The lower portion of the door shall be louvered, and the upper portion shall be blank, or provided with an optional hole for a panel-mounted thermostat.

B. A second return air opening shall be included when one unit is serving two separate rooms. The second opening shall be located on the rear of the unit and allow the return air to pass through the cooling/heating coil prior to entering the conditioned space.

2.12 FILTERS

A. Standard filter shall be 1" thick disposable fiberglass media, MERV 4.

a. (OPTION 1) Filters shall be 1" thick disposable pleated media, MERV 8.

b. (OPTION 2) Filters shall be 1" thick disposable pleated media, MERV 11.

b. (OPTION 3) Filters shall be 1" thick disposable pleated media, MERV 13.

d. (OPTION 4) Filters shall be 1" thick permanent aluminum cleanable media, MERV 4.

2.13 OUTDOOR AIR

A. (OPTION 1) Each unit includes an Outdoor Air (OA) opening, located on the (right) or (left) (SELECT ONE) side of cabinet and manual block-off damper.

B. (OPTION 2) Each unit includes an Outdoor Air (OA) opening, located on the (right) or (left) (SELECT ONE) side of cabinet and a motorized outdoor air damper to restrict airflow when the unit is not in the heating or cooling mode.

2.14 POWER SUPPLY

A. Two Pipe, Two Pipe "Cooling Only", or Four Pipe Room Fan-Coil Unit

a. The unit manufacturer shall furnish a (115/1/60 or 208/1/60 or 265/1/60) (SELECT ONE) single source single point power connection for the fan. Power connections are made to the unit junction box through a 7/8" knockout located on both the left and right sides of the unit as shown on the drawings.

b. (Option 1) The unit manufacturer shall furnish a 265/1/60 volt single source single point power connection for the fan including a control circuit transformer for a 24-volt thermostat. Power connections are made to the unit junction box through a 7/8" knockout located on both the left and right sides of the unit as shown on the drawings.

B. Two Pipe Room Fan-Coil Unit with (Auxiliary or Total) (CHOSE ONE) Electric Heat

a. The unit manufacturer shall furnish a separate line voltage power connection for the fan and electric heating element. The fan coil unit shall operate at 115 volts and the electric heat elements shall operate at (208/1/60 or 265/1/60) (SELECT ONE). Power connections are made to the unit junction box through 7/8" knockouts located on both the left and right sides of the unit as shown on the drawings.

b. (Option 1) The unit manufacturer shall furnish a (115/1/60 or 208/1/60 or 265/1/60) (SELECT ONE) single source single point power connection for the fan and electric heating element. Power connections are made to the unit junction box through a 7/8" knockout located on both the left and right sides of the unit as shown on the drawings.

c. (Option 2) The unit manufacturer shall furnish a 115/230 volt three wire single source single point power connection for the fan and electric heating element. The electric heat elements shall operate at 230/1/60 and the fan shall operate at 115/1/60. Power connections are made to the unit junction box through a 7/8" knockout located on both the left and right sides of the unit as shown on the drawings.

d. (Option 3) The unit manufacturer shall furnish a 265/1/60 volt single source single point power connection for the fan and electric heating element including a control circuit transformer for a 24-volt thermostat. Power connections are made to the unit junction box through a 7/8" knockout located on both the left and right sides of the unit as shown on the drawings.

2.14 DISCONNECT

A. (OPTION 1) Each unit shall include a non-fused disconnect switch, factory mounted and wired.

(OPTION 2) Each unit shall include a supplemental overcurrent protector (circuit breaker), factory mounted and wired.

2.15 CONTROLS

A. Two Pipe, Two Pipe "Cooling Only", or Four Pipe Room Fan-Coil Unit

a. (STANDARD) The unit manufacturer shall furnish a (115/1/60 or 208/1/60 or 265/1/60) (SELECT ONE) wall thermostat for field mounting on the front of the unit after the wall is finished. The thermostat shall plug into the unit through a polarized male-female plug. The thermostat shall be of the automatic changeover type, and shall incorporate a HI-MED-LO fan speed switch.

b. (OPTION 1) The unit manufacturer shall furnish a 24-volt thermostat that shall plug into the unit through a polarized male-female plug. The thermostat shall be of the automatic changeover type and incorporate a HI-MED-LO fan speed switch.

c. (OPTION 2) The unit manufacturer shall furnish a (24-volt or 115-volt) (SELECT ONE) thermostat for remote mounting. The unit shall be provided with a junction box for connection of the thermostat field wiring to the top or bottom of the unit as shown in the drawings. The thermostat shall be of the automatic changeover type and incorporate a HI-MED-LO fan speed switch.

d. (OPTION 3) The unit manufacturer shall be furnish a 115-volt factory wired remote thermostat with 6 feet of flexible conduit connected to the top of the unit. The thermostat that shall plug into the factory furnished junction box through a polarized male-female plug. The thermostat shall be of the automatic changeover type and incorporate a HI-MED-LO fan speed switch.

B. Two Pipe Room Fan-Coil Unit with (Auxiliary or Total) (CHOSE ONE) Electric Heat

a. (STANDARD) The unit manufacturer shall furnish a (115/1/60 or 208/1/60 or 265/1/60) (SELECT ONE) wall thermostat for field mounting on the front of the unit after the wall is finished. The thermostat shall plug into the unit through a polarized male-female plug. The thermostat shall be of the automatic changeover type, and shall incorporate a HI-MED-LO fan speed switch.

b. (OPTION 1) The unit manufacturer shall furnish a 24-volt thermostat that shall plug into the unit through a polarized male-female plug. The thermostat shall be of the automatic changeover type and incorporate a HI-MED-LO fan speed switch. The unit manufacturer shall also furnish a factory mounted and wired electric heat lockout aquastat to prevent electric heat when hot water heat is available.

c. (OPTION 2) The unit manufacturer shall furnish a (24-volt or 115-volt) (SELECT ONE) thermostat for remote mounting. The unit shall be provided with a junction box for connection of the thermostat field wiring to the top or bottom of the unit as shown in the drawings. The thermostat shall be of the automatic changeover type and incorporate a HI-MED-LO fan speed switch. The unit manufacturer shall also furnish a factory mounted and wired electric heat lockout aquastat to prevent electric heat when hot water heat is available.

d. (OPTION 3) The unit manufacturer shall be furnish a 115-volt factory wired remote thermostat with 6 feet of flexible conduit connected to the top of the unit. The thermostat that shall plug into the factory furnished junction box through a polarized male-female plug. The thermostat shall be of the automatic changeover type and incorporate a HI-MED-LO fan speed switch. The unit manufacturer shall also furnish a factory mounted and wired electric heat lockout aquastat to prevent electric heat when hot water heat is available

C. Others shall install thermostat by plugging into the control wiring with a polarized male-female plug after the walls are finished when unit mounted or attaching to color coded pigtails when remote mounted.

2.16 SPARE PARTS

A. (ADD ANY SPARE PART REQUIREMENT HERE)

PART 3 EXECUTION

3.01 INSTALLATION

A. Furnish as shown on the drawings and as specified herein, with capacity and electrical characteristics as scheduled. Units shall be Room Fan Coil as manufactured by The Whalen Company of Easton, MD.

B. Install in accordance with manufacturer's installation instructions. Install units plumb and level, and maintain manufacturer's recommended clearances for the unit and accessories.

The Whalen Company

Limited Express Warranty

Room Fan Coil Standard Warranty

The Whalen Company warrants to the purchaser each water-to-air heat pump to be free from original defects in materials and workmanship.

Where inspection by an authorized representative of The Whalen Company confirms such defects to be present, for a period of eighteen months from date of shipment, Whalen will furnish replacement components or materials to the original purchaser without charge.

This Limited Express Warranty is intended to cover original equipment defects only and does not cover or apply to: (1) Air filters, refrigerant, fluids, oil; (2) Equipment relocated after initial installation; (3) Any portion or component of any system that is not supplied by The Whalen Company, regardless of the cause of the failure of such portion or component; (4) Equipment on which the unit identification tags or labels have been removed or modified; (5) Equipment which have defects or damage which result from improper installation, wiring, electrical imbalance characteristics or maintenance; or are caused by accident, misuse or abuse, fire, flood, acts of God, alteration or misapplication of the product; (6) Equipment used as temporary heating or cooling while the facility is still under construction is considered misuse and as such, will void all warranty coverage regardless of the cause of failure; (7) Equipment which have defects or damage which result from a contaminated or corrosive air or liquid supply, operation at abnormal temperatures, or unauthorized opening of refrigerant circuit; (8) Mold, fungus or bacteria damages; (9) Equipment subjected to corrosion or abrasion; (10) Equipment manufactured or supplied by others; (11) Equipment which have been operated in any manner contrary to The Whalen Company printed instructions; or (12) Equipment which have defects, damage or insufficient performance as a result of insufficient or incorrect system design or the improper application of The Whalen Company products.

The Whalen Company neither assumes nor authorizes any person to assume for it any obligation or warranty other than those stated herein.

This Limited Express Warranty does not cover labor charges associated with making repairs, inspection and diagnosis of malfunctions, all field labor in connection with repair or replacement of parts, all field labor in connection with removal and transportation to and from a repair facility and all field labor in connection with reinstallation after repairs are completed. However, The Whalen Company at its sole discretion may provide a labor allowance in cases of DOA (Dead on Arrival) equipment for replacement or repair of defective components within 30-days of start-up or 90-days from factory shipment, whichever comes first. After this period only the Limited Express Warranty will apply. Labor will be paid per The Whalen Company Warranty Labor Allowance schedule.

Replacement or repair under this warranty will not extend the warranty time periods defined above. Whalen shall not, in any event, have any liability under this warranty unless and until it has been paid in full for the equipment supplied. The warranty period shall commence on the date of shipment, however, whether or not payment has been made.

This warranty applies only to Whalen heat pump installations in the fifty United States and in Canada. There are no warranties outside those areas.

The Whalen Company has no liability for incidental or consequential damages arising out of the ownership, use or operation of Whalen heat pumps.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. NO IMPLIED WARRANTY OR MERCHANTABILITY SHALL ACCOMPANY THE SALE OF THIS EQUIPMENT, AND THIS EXPRESS WARRANTY IS INTENDED TO AND DOES REPLACE ANY IMPLIED WARRANTY OF MERCHANTABILITY.

This warranty, its limitations and its exclusions are to be governed by the laws of Maryland. Although some warranties may vary in their effect and coverage from locality to locality, this warranty, its effects, coverage and remedies are only those available in Maryland.

Rev: 12/2020

The Whalen Company Limited Express Warranty Room Fan Coil Two Year Warranty

The Whalen Company warrants to the purchaser each fan coil unit to be free from original defects in materials and workmanship.

Where inspection by an authorized representative of The Whalen Company confirms such defects to be present, for a period of twenty four months from date of shipment, Whalen will furnish replacement components or materials to the original purchaser without charge.

This Limited Express Warranty is intended to cover original equipment defects only and does not cover or apply to: (1) Air filters, refrigerant, fluids, oil; (2) Equipment relocated after initial installation; (3) Any portion or component of any system that is not supplied by The Whalen Company, regardless of the cause of the failure of such portion or component; (4) Equipment on which the unit identification tags or labels have been removed or modified; (5) Equipment which have defects or damage which result from improper installation, wiring, electrical imbalance characteristics or maintenance; or are caused by accident, misuse or abuse, fire, flood, acts of God, alteration or misapplication of the product; (6) Equipment used as temporary heating or cooling while the facility is still under construction is considered misuse and as such, will void all warranty coverage regardless of the cause of failure; (7) Equipment which have defects or damage which result from a contaminated or corrosive air or liquid supply, operation at abnormal temperatures, or unauthorized opening of refrigerant circuit; (8) Mold, fungus or bacteria damages; (9) Equipment subjected to corrosion or abrasion; (10) Equipment manufactured or supplied by others; (11) Equipment which have been operated in any manner contrary to The Whalen Company printed instructions; or (12) Equipment which have defects, damage or insufficient performance as a result of insufficient or incorrect system design or the improper application of The Whalen Company products.

The Whalen Company neither assumes nor authorizes any person to assume for it any obligation or warranty other than those stated herein.

This Limited Express Warranty does not cover labor charges associated with making repairs, inspection and diagnosis of malfunctions, all field labor in connection with repair or replacement of parts, all field labor in connection with removal and transportation to and from a repair facility and all field labor in connection with reinstallation after repairs are completed. However, The Whalen Company at its sole discretion may provide a labor allowance in cases of DOA (Dead on Arrival) equipment for replacement or repair of defective components within 30-days of start-up or 90-days from factory shipment, whichever comes first. After this period only the Limited Express Warranty will apply. Labor will be paid per The Whalen Company Warranty Labor Allowance schedule.

Replacement or repair under this warranty will not extend the warranty time periods defined above. Whalen shall not, in any event, have any liability under this warranty unless and until it has been paid in full for the equipment supplied. The warranty period shall commence on the date of shipment, however, whether or not payment has been made.

This warranty applies only to Whalen fan coil unit installations in the fifty United States and in Canada. There are no warranties outside those areas.

The Whalen Company has no liability for incidental or consequential damages arising out of the ownership, use, or operation of Whalen fan coil units.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. NO IMPLIED WARRANTY OR MERCHANTABILITY SHALL ACCOMPANY THE SALE OF THIS EQUIPMENT, AND THIS EXPRESS WARRANTY IS INTENDED TO AND DOES REPLACE ANY IMPLIED WARRANTY OF MERCHANTABILITY.

This warranty, its limitations and its exclusions are to be governed by the laws of Maryland. Although some warranties may vary in their effect and coverage from locality to locality, this warranty, its effects, coverage, and remedies are only those available in Maryland.

Rev: 12/2020

Vertical Stack Fan Coil with Fixed Chassis Design Guide Revision Table

Date	Description
1/27/2021	Updated Electrical Data, Cabinet Drawings, Warranty Certificates
6/2016	New Release of document

The Whalen Company

8900 Glebe Park Drive
Easton, MD 21601
Tel, 410.822.9200 • 410.822.8926
whalencompany.com
www.whalencompany.com

rev-01-2021