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COMMERCIAL

TRANQUILITY® (SB) COMPACT HIGH-CAPACITY SERIES

PRODUCT CATALOG

Part#: LC3008 | Revised: December 19, 2024

Models: SB 072-300
60Hz - R-454B

Table of Contents

Models:
SB
072-300

3 Introduction
4 Features, Options, and Accessories
5 iGate 2 Communicating Controls Powered by CXM2
6 Communicating (AWC) Thermostat
7 myUplink: Web and Mobile Interface
8 Selection Procedure
11 Model Nomenclature
12 Performance Data: AHRI/ASHRAE/ISO 13256-1
14 Performance Data: Selection Notes
15 Performance Data
29 SB Performance Data: Correction Tables
30 Antifreeze Correction Table
32 Blower Performance
53 Physical Data
54 Waterside Economizer (WSE) Data
55 Waterside Economizer (WSE) Data Entering Air Corrections
58 Waterside Economizer (WSE) Data Cooling Corrections
60 Waterside Economizer (WSE) Data Airflow Ratings
62 SB 072-120 Horizontal Dimensional Data
63 SB 072-120 Horizontal with WSE Dimensional Data
64 SB 072-120 Vertical Dimensional Data
65 SB 072-120 Vertical with WSE Dimensional Data
66 SB 168-240 Vertical Dimensional Data
67 SB 168-240 Vertical with WSE Dimensional Data
68 SB 300 Vertical Dimensional Data
69 SB 300 Vertical with WSE Dimensional Data
70 Minimum Installation Area
71 Electrical Data: Standard
72 Electrical Data: Dual Point Power
74 Blower Motor Variable Frequency Drive
76 Engineering Specifications
84 Revision History

THE TRANQUILITY® (SB) COMPACT HIGH-CAPACITY SERIES

The Tranquility® (SB) Compact High-Capacity Series raises the bar for water-source heat pump efficiencies, features and application flexibility. Not only does the Tranquility SB exceed ASHRAE 90.1 efficiencies, but it also uses R-454B low Global Warming Potential (GWP) refrigerant, making it an extremely environmentally friendly space conditioning product solution. Tranquility SB is eligible for additional LEED® (Leadership in Energy and Environmental Design) points due to its innovative and environmentally-conscious design. With one of the smallest cabinets in the industry, the Tranquility SB easily fits into tight spaces including standard doorways. Designed to be backward compatible with older water-source heat pumps, the Tranquility SB heat pump is packed full of the innovation you have come to expect from the experts at ClimateMaster.

Available in sizes 6 tons (21.1 kW) through 25 tons (87.9 kW) with multiple cabinet configurations, the Tranquility SB offers a wide range of units designed for most applications. The Tranquility SB has an extended range refrigerant circuit, capable of ground-loop (geothermal) applications (may require optional extended range insulation), ground-water (geothermal) applications, as well as water-loop (boiler-tower) applications. Microprocessor controls, galvanized-steel cabinet, galvanized-steel with epoxy powder-coated drain pan and TXV refrigerant-metering device are just some of the features of the flexible Tranquility SB.

Recent EPA mandates require an industry transition to low-GWP refrigerants, such as R-454B which is a gas that is classified as having low-toxicity, low-flammability rating. Due to these characteristics, R-454B systems charged with over 62 ounces of refrigerant must contain an integrated Refrigerant Detection System (RDS). In the unlikely event of a system-refrigerant leak, the RDS shuts down compressor operation and runs the unit blower motor to disperse any concentration of leaked refrigerant in compliance with UL 60335-2-40 safety standards.

Options such as a coated air coil, DDC controls, and dual-point power allow customized design solutions. Optional variable-frequency blower motor controls or blower motor/sheave drive packages expand the operating range and help overcome some of the challenges associated with ductwork for retrofit installations. A a sound-absorbing UltraQuiet package makes a great unit even better.

iGate® 2 technology provides technicians an interface into the operation of the system in real time without the need for hard tooling. On-board advanced controls communicate the key operating system temperatures enabling technicians to startup, commission, and service the equipment remotely via the cloud by smart phone or website. Communication can also be done at the unit via a communicating thermostat or handheld service tool. Not only does iGate 2 monitor current performance, it also allows the functionality to make system adjustments and captures operating conditions at time of fault. All this information is displayed in an easy-to-read format maximizing the usability of the experience.

Waterside Economizers (WSE) take advantage of cool loop-water temperatures and can provide for free cooling. In shoulder seasons, lower building loop temperatures can be leveraged when there is cooling demand by adding a factory installed hydronic coil. The WSE option meets IECC section C403.3.1 and is a requirement in many states.

The Tranquility SB Series water-source heat pumps are designed to meet the challenges of today's HVAC demands with one of the most innovative products available on the market.

Features, Options, and Accessories

Models:
SB
072-300

FEATURES

- Horizontal sizes 072 (6 Tons, 21.1 kW) through 120 (10 Tons, 35.2 kW)
- Vertical sizes 072 (6 Tons, 21.1 kW) through 300 (25 Tons, 87.9 kW)
- Environmentally-friendly R-454B low-GWP refrigerant
- Refrigerant Detection System (RDS) (required for all sizes)
- Horizontal configurations with left or right return-air and straight or back supply-air discharge. Discharge is field convertible. Field conversion uses all existing parts, including panels and belts
- Vertical configurations with front or back return and top, front, or back discharge. Fan discharge on vertical unit sizes 072-120 is field convertible. Field conversion uses all existing parts, including panels and belts
- Electric power entry points from either side of the front
- Configurable water connections for left or right handling on horizontal units
- Dual refrigeration circuits (all sizes)
- Exceeds ASHRAE 90.1 efficiencies
- Galvanized-steel cabinet construction
- Insulated divider and separate compressor/air-handler compartments
- TXV metering device
- Standard hanger brackets for horizontal units
- Premium-duty motor that is VFD compatible
- CXM2 Communicating Controls:
  - Multiple communication pathways for unit access and diagnosis:
    - Cloud-based remote monitoring via Wi-Fi communicating color-touchscreen thermostat
    - Connect directly to the system with a handheld service tool
  - Provides real-time unit operating conditions
  - Reduces startup, commissioning, and service time by providing key system temperatures electronically
  - Captures operating conditions in the event of a safety shutdown

OPTIONS

- Variable Frequency Drive (VFD) fan-motor controls (single-zone VAV compatible)
- Blower motor/sheave drive packages
- BACnet, Modbus, and Johnson Controls N2 compatibility options for Building Management Systems (BMS)
- Sound-absorbing UltraQuiet package
- Coated air coil
- Dual-point power
- Waterside Economizer (WSE): requires the standard CXM2 and heat-pump thermostat with two-stage cooling
- Extended-range insulation for geothermal applications
- Factory-configurable water connections for left or right handling on vertical units
- Motorized and modulating water valves for ultimate part-load operation (Vertical units)

ACCESSORIES

- iGate 2 communicating (AWC) thermostat with color touchscreen
- Wide variety of thermostat options to meet your application needs
- Braided-hose kits in various lengths with optional water valve, PT plugs, blowdown valve, flow regulator, and strainer
- Externally-mounted manual and motorized water valves
- 1-inch Merv 8 filter
- 2-inch Merv 8 or 13 filters
- Aesthetically-pleasing wall sensors for connection to BMS (MPC) controls

iGATE 2 COMMUNICATION – CLOUD CONNECTED, WEB-ENABLED INFORMATION GATEWAY TO MONITOR, CONTROL, AND DIAGNOSE YOUR SYSTEM

iGate 2 Communication – Cloud connected, web-enabled information gateway to monitor, control, and diagnose your system.

The Tranquility SB is equipped with industry-first, iGate 2 communication information gateway that allows users to interact with their water-source system in easy to read clear language.

Monitor/Configure – Installers can configure from the myUplink PRO website, mobile app, AWC Thermostat, or diagnostic tool, including: Unit family, size, accessory configuration, and demand reduction (optional, to limit unit operation during peak times). Users can look up the current system status: temperature sensor readings and operational status of the blower.

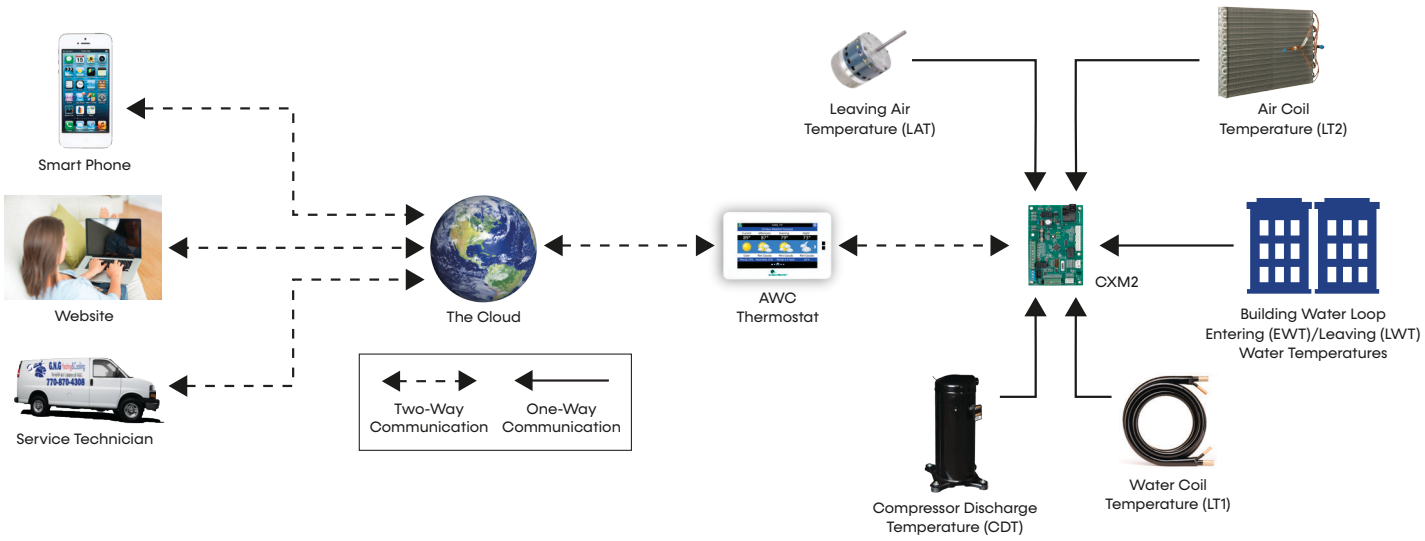
Precise Control – The new CXM2 enables intelligent, two-way communication between the CXM2 and smart components like the AWC Thermostat and diagnostic tool. CXM2 Communicating Controls uses information received from the temperature sensors to precisely control operation to deliver high efficiency, reliability and increased comfort.

Diagnostics – iGate 2 takes diagnosing water source heat pump units to a next level of simplicity, by providing a dashboard of system and fault information, in clear language, on the AWC Thermostat, handheld service tool and the web portal/mobile app on the internet.

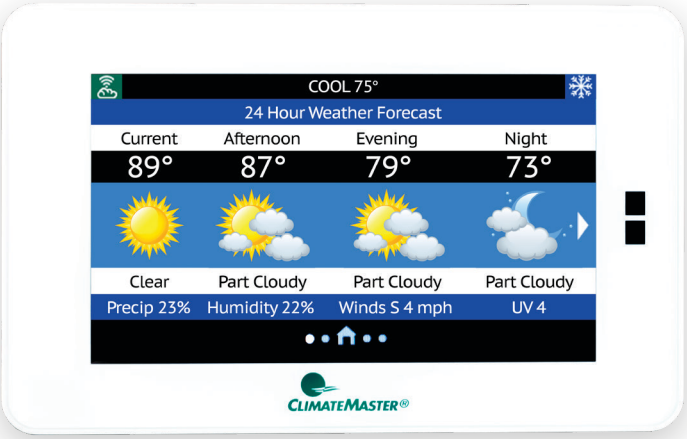
iGate 2 Service Warnings notify the homeowner and contractor of a fault and displays fault descriptions by app notifications/email with possible causes. Additionally, the current system status can be viewed graphically on the web portal and mobile app.

In iGate 2 Service Mode, the service personnel can access fault description, possible causes and most importantly, the conditions (temp, flow, i/o conditions, configuration) at the time of the fault. Manual Operation mode allows the service personnel to manually command operation for any of the thermostat outputs, blower speed, to help troubleshoot specific components. This operation can either be conducted at the unit with a communicating thermostat/diagnostic tool or remotely with mobile app/website when the AWC Thermostat controls are used.

With an iGate 2 communicating system, users and contractors have a web-enabled gateway to system information never before available and exclusive to ClimateMaster products.



iGATE 2 COMMUNICATION – CLOUD CONNECTED, WEB-ENABLED INFORMATION GATEWAY TO MONITOR, CONTROL, AND DIAGNOSE YOUR SYSTEM



The iGate 2 Communicating (AWC) Thermostat is innovating the future of comfort technology, one building at a time. The inspired design of the touch screen interface allows you to see real-time data for the efficiency and health of your system, with early warnings for potential system faults. The cloud based information gateway allows technicians to remotely diagnose system issues before occupants even know there is a problem. Control and monitor the system in your home or business from anywhere in the world with an easy to use app on your phone.

Features with Efficiency in Mind

Touchscreen Interface
A brilliantly customizable touch screen monitor for simple control.

Seamless Integration
Between your AWC Thermostat and comfort system.

(Mobile) Remote System Control
Control temperature and schedule from anywhere in the world.

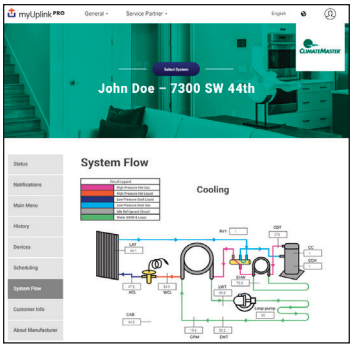
Early Fault Warnings
Alerts the building owner and the contractor of potential system faults in the future.

Remote Diagnostics
Enable the contractor to remotely diagnose system issues, adjust system settings, and reset faults.

Real-Time Operations Data and System Schematics
Access simply via the myUplink Pro Account and web portal to view system diagrams with current operating temperatures.

Revenue Stream
HVAC professionals can offer owners service contracts with remote monitoring and diagnostic capabilities without the large expense of a building management system.

HVAC Professional | User Experience



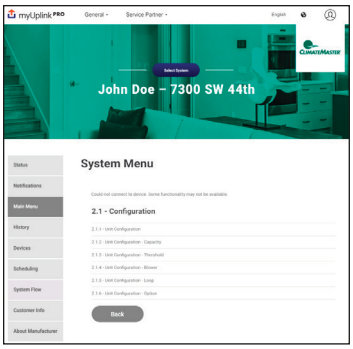
iGate 2 establishes a two-way link between the AWC Thermostat and the cloud, adding significant value for both residential and commercial customers. Our new thermostat works with your customers' Tranquility comfort systems to provide the most efficient link between their system and your services. The customizable monitoring from the myUplink PRO web portal or phone app account allows for continuous system monitoring, analysis, repair recognition, and early warnings for potential system faults that are sent to you and your customer.

myUplink PRO

Benefits

- Remote login from anywhere, anytime from any internet connected device
- View system fault history with possible root causes
- Information is available for contractors to troubleshoot and diagnose systems remotely
- Secure internet connection keeps homeowner information private
- Access thermostat(s) through Android and iPhone mobile apps

Homeowner | User Experience



iGate 2 advanced unit controls enable a two-way communication link for critical system information between the unit and the cloud. From any internet connected device or smart phone, building owners can control and monitor their systems from anywhere in the world. iGate 2 offers building owners peace of mind their systems are operating at peak performance with advanced operational performance issue notifications. HVAC professionals get notifications when systems are operating out of range. They can log in remotely to check system faults, review current operating conditions, and diagnose issues remotely. This gives the HVAC technician the upper hand when showing up to perform service, saving time which in turn, saves money.

myUplink

Benefits

- Communicates personal settings and reminders through the iGate 2 communication system
- Easy-to-use, full-color, high-resolution user interface
- Sleek, intuitive control panel
- Secure internet connection keeps your information private
- Contains unit model, serial number and your HVAC professionals contact information
- System monitoring automatically contacts HVAC system providers when service is needed

Reference Calculations

Heating	Cooling
$LWT = EWT - \frac{HE}{GPM \times Constant}$	$LWT = EWT + \frac{HR}{GPM \times Constant}$
$LAT = EAT + \frac{HC}{CFM \times 1.08}$	$LAT\ (DB) = EAT\ (DB) - \frac{SC}{CFM \times 1.08}$
	$LC = TC - SC$
	$S/T = \frac{SC}{TC}$

Constant = 500 for water, 485 for antifreeze

Conversion Table - to convert inch-pound (English) to S-I (Metric)

Airflow	Water Flow	External Static Pressure	Water Pressure Drop
Airflow (L/s) = CFM x 0.472	Water Flow (L/s) = GPM x 0.0631	ESP (Pa) = ESP (in of wg) x 249	PD (kPa) = PD (ft of hd) x 2.99

Legend and Glossary of Abbreviations

Abbreviations	Descriptions
Btuh	Btu (British Thermal Unit) per hour
BMS	Building Management System
CDT	Compressor discharge temperature
CFM	Airflow, cubic feet per minute
COP	Coefficient of performance = Btuh output/Btuh input
CT EC	Electronically commutated constant torque blower motor
CV EC	Electronically commutated constant volume blower motor
DB	Dry bulb temperature, °F
DT	Delta T
EAT	Entering air temperature
EER	Energy efficient ratio = Btuh output/Watt input
ESP	External static pressure, inches w.g.
EWT	Entering water temperature
FPT	Female pipe thread
GPM	Water flow in U.S., gallons per minute
HC	Air heating capacity, Btuh
HE	Total heat of extraction, Btuh
HR	Total heat of rejection, Btuh

Abbreviations	Descriptions
HWG	Hot water generator (desuperheater) capacity, MBtuh
kW	Total power unit input, kilowatts
LAT	Leaving air temperature, °F
LC	Latent cooling capacity, Btuh
LOC	Loss of charge
LWT	Leaving water temperature, °F
MBtuh	1,000 Btu per hour
MPT	Male pipe thread
MWV	Motorized water valve
PSC	Permanent split capacitor
RDS	Refrigerant Detection System
SC	Sensible cooling capacity, Btuh
S/T	Sensible to total cooling ratio
TC	Total cooling capacity, Btuh
TD or delta T	Temperature differential
VFD	Variable frequency drive
WB	Wet bulb temperature, °F
WPD	Waterside pressure drop, psi or feet of head
WSE	Waterside economizer

USE THE FOLLOWING SELECTION STEPS

1. Determine the actual heating and cooling loads at the desired dry bulb and wet bulb conditions.
2. Obtain the following design parameters: Entering water temperature, water flow rate in GPM, airflow in CFM, water flow pressure drop and design wet and dry bulb temperatures. Airflow CFM should be between 300 and 450 CFM per ton. Unit water pressure drop should be kept as close as possible to each other to make water balancing easier. Go to the appropriate tables and find the proper indicated water flow and water temperature.
3. Select a unit based on total and sensible cooling conditions. Select a unit which is closest to, but no larger than, the actual cooling load.
4. Enter tables at the design water flow and water temperature. Read the total and sensible cooling capacities (Note: interpolation is permissible, extrapolation is not).
5. Read the heating capacity. If it exceeds the design criteria it is acceptable. It is quite normal for water-source heat pumps to be selected on cooling capacity only since the heating output is usually greater than the cooling capacity.
6. Determine the correction factors associated with the variable factors of dry bulb and wet bulb.

   Corrected Total Cooling =
   tabulated total cooling x wet bulb correction.

   Corrected Sensible Cooling =
   tabulated sensible cooling x wet/dry bulb correction.
7. Determine the correction factor associated with antifreeze in system loop. If heating EWT is 50°F (10°C) or below you may have to use antifreeze. Calculate leaving water temperature per performance data selection notes. If antifreeze is required, use correction table for correcting total and sensible capacities.
8. Compare the corrected capacities to the load requirements. Normally if the capacities are within 10% of the loads, the equipment is acceptable. It is better to undersize than oversize, as undersizing improves humidity control, reduces sound levels and extends the life of the equipment.
9. When completed, calculate water temperature rise and assess the selection. If the units selected are not within 10% of the load calculations, then review what effect changing the GPM, water temperature and/or air flow and air temperature would have on the corrected capacities. If the desired capacity cannot be achieved, select the next larger or smaller unit and repeat the procedure. Remember, when in doubt, undersize slightly for best performance.

EXAMPLE EQUIPMENT SELECTION FOR COOLING

Step 1: Load Determination

Assume we have determined that the appropriate cooling load at the desired dry bulb 80°F and wet bulb 65°F conditions is as follows:

Total Cooling..... 90,500 Btuh
Sensible Cooling.....73,300 Btuh
Entering Air Temp.....80°F Dry Bulb / 65°F Wet Bulb

Step 2: Design Conditions

Similarly, we have also obtained the following design parameters:

Entering Water Temp (cooling)..... 90°F (32.2°C)
Entering Water Temp (heating).....60°F (15.6°C)
Water Flow (Based upon 10°F rise in temp)..18 GPM
Airflow .....2,800 CFM

Steps 3, 4, and 5: HP Selection

After making our preliminary selection (SB096), we enter the tables at design water flow and water temperature and read Total Cooling, Sensible Cooling and Heat of Rejection capacities:

Total Cooling.....93,200 Btuh

Sensible Cooling.....70,390 Btuh

Heat of Rejection .....120,100 Btuh

Airflow .....3,200 CFM

Steps 6, 7, and 8: Entering Airflow Corrections

Next, we determine our correction factors.

Airflow 2,800 ÷ 3,200 = 88% Antifreeze - None

Corrected Values		Table		Ent Air		Airflow		Corrected
Corrected Total Cooling	=	93,200	x	0.977	x	0.976	=	88,871
Corrected Sensible Cooling	=	70,390	x	1.088	x	0.933	=	71,453
Corrected Heat of Rejection	=	120,100	x	0.998	x	0.976	=	116,983

Step 9: Water Temperature Rise Calculation and Assessment

Rise = Heat of Rejection ÷ (GPM x 500)

Actual Temperature Rise 116,983 ÷ 9,000 = 13.0°F (-10°C)

When we compare the Corrected Total Cooling and Corrected Sensible Cooling figures with our load requirements stated in Step 1, we discover that our selection is within ± 10% of our sensible load requirement. Furthermore, we see that our Corrected Total Cooling figure is within 1,000 Btuh the actual indicated load.

Alternate Step 7:

If your EWT for heating is 40°F (4.4°C), then system requires antifreeze. If a solution of 15% Propylene Glycol is required, then:

Corrected Values		Table		Ent Air		Airflow		Corrected
Corrected Total Cooling	=	88,871	x	0.986	x	0.976	=	87,626
Corrected Sensible Cooling	=	71,453	x	0.986	x	0.933	=	70,452

Model Nomenclature

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
S	B	L	0	7	2	A	K	C	N	0	C	0	1	S

PRODUCT NAME
S = R-454B Refrigerant

MODEL TYPE
B = Compact High-Capacity Series

SUPPLY/RETURN CONFIGURATION

Horizontal		
Supply	Return	
	Left	Right
Straight	L	R
Back	B	P

Vertical	
Return/Supply	Option
Front/Top	F
Back/Top	C
Back/Front	G
Front/Back	H

SIZE
072
096
120
168
192
240
300

REVISION
A = Current

VOLTAGE

3 Phase 60 Hz	With RDS
208/230V	K
460V	L
575V	M

CONTROLS

Control	Standard	MPC
CXM2	C	N
CXM2 with Disconnect	W	R

STANDARD
S = Standard

BLOWER MOTOR

Belt Drive		Single-Point Power	Dual-Point Power
Standard Motor	Standard RPM	1	A
	Low RPM	2	B
	High RPM	3	C
Large Motor	Standard RPM	4	D
	High RPM	5	E
VFD		6	F

EXTENDED OPTIONS
0 = Standard, None
W = Waterside Economizer

DRAIN PAN/HEAT EXCHANGER OPTIONS
C = Standard Drain Pan, Nonplated Air Coil
S = Stainless-Steel Drain Pan, Nonplated Air Coil
E = Standard Drain Pan, E-Coated Air Coil
M = Stainless-Steel Drain Pan, E-Coated Air Coil

WATER OPTIONS

	Copper	
	Left-side Water Connection	Right-side Water Connection
None	0	Z
MWV	M	V
MOD/MWV	C	N

CABINET OPTIONS

Cabinet	UltraQuiet	Rail / Frame		
		1"	2"	1"
Extended Range	No	1	J	Q
	Yes	2	L	T
Standard Range	No	3	N	U
	Yes	4	F	V

Use ClimateMaster's selection software at https://climatemastersolutions.com/eRep/ to configure your Tranquility SB model.

Performance Data: AHRI/ASHRAE/ISO 13256-1

AHRI/ASHRAE/ISO 13256-1 English (I-P) Units

SB Horizontal and Vertical

Size	Part or Full Load	Motor Type	Rated CFM	Rated GPM	Sheave Setting (turns open)	Water Loop - Current				Ground Water - Current				Ground Loop - Current			
						Cooling 86°F		Heating 68°F		Cooling 59°F		Heating 50°F		Cooling 77°F		Heating 32°F	
						Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP
72	F	Belt Drive	2,400	18.0	2.5	71,000	14.1	92,300	5.3	77,800	20.5	76,000	4.6	74,100	15.5	58,300	3.8
	F	Belt Drive with VFD	2,400	18.0	1.0	72,000	14.5	91,400	5.4	78,000	21.6	75,000	4.7	75,200	16.3	58,000	3.9
96	F	Belt Drive	3,200	24.0	3.0	101,000	15.3	122,800	5.0	110,500	22.3	99,500	4.4	101,700	16.3	76,600	3.6
	F	Belt Drive with VFD	3,200	24.0	1.0	101,700	15.5	123,000	5.1	110,800	23.0	100,000	4.4	102,000	16.5	76,800	3.6
120	F	Belt Drive	4,000	30.0	3.0	122,000	13.7	156,000	4.6	128,000	18.1	127,000	4.0	124,500	14.3	98,500	3.4
	F	Belt Drive with VFD	4,000	30.0	1.0	124,000	13.9	156,000	4.7	128,500	18.6	127,000	4.1	125,000	14.8	98,500	3.5

Notes:
- Where dual voltages are available, ratings are based on the lower voltage setting.
- Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature.
- Heating capacities based upon 68°F DB, 59°F WB entering air temperature.
- Ground Loop Heat Pump ratings based on 15% antifreeze solution.

Tested in Accordance with AHRI/ASHRAE/ISO 13256-1 English (I-P) Units

SB Vertical

Size	Part Full	Motor Type	Rated CFM	Rated GPM	Sheave Setting (turns open)	Water Loop - Current				Ground Water - Current				Ground Loop - Current			
						Cooling 86°F		Heating 68°F		Cooling 59°F		Heating 50°F		Cooling 77°F		Heating 32°F	
						Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP
72	P	Belt Drive with VFD	1,200	18.0	1.0	35,600	14.5	44,800	5.2	39,200	21.8	36,700	4.4	37,600	18.6	32,200	4.0
96	P	Belt Drive with VFD	1,600	24.0	1.0	50,300	16.3	61,200	5.1	54,900	24.2	49,800	4.3	52,400	20.4	43,200	3.9
120	P	Belt Drive with VFD	2,000	30.0	1.0	61,000	14.8	74,800	4.7	64,500	20.0	61,200	4.1	63,500	18.0	53,000	3.8
168	F	Belt Drive	5,600	42.0	3.0	168,000	14.4	192,000	4.7	186,000	21.0	151,800	4.1	172,000	16.2	121,000	3.5
	F	Belt Drive with VFD	5,600	42.0	1.0	169,000	15.3	198,000	4.9	186,000	21.4	152,000	4.1	174,000	17.0	121,000	3.5
	P	Belt Drive with VFD	2,800	21.0	1.0	82,000	15.5	93,000	4.8	93,000	23.5	75,000	4.2	89,000	21.0	68,000	3.9
192	F	Belt Drive	6,400	48.0	3.0	187,000	14.9	220,000	5.1	201,000	21.5	181,000	4.5	194,000	16.5	139,000	3.7
	F	Belt Drive with VFD	6,400	48.0	1.0	188,000	15.2	222,000	5.2	202,000	22.0	182,000	4.5	194,000	17.0	140,000	3.7
	P	Belt Drive with VFD	3,200	24.0	1.0	93,000	16.0	110,000	5.2	100,000	24.0	89,000	4.5	99,000	21.0	76,000	4.0
240	F	Belt Drive	8,000	60.0	2.5	232,000	13.9	294,000	4.9	256,000	20.0	236,000	4.3	232,000	14.3	179,000	3.5
	F	Belt Drive with VFD	8,000	60.0	1.0	232,000	14.0	298,000	4.9	257,000	21.0	239,000	4.3	235,000	15.0	179,000	3.5
	P	Belt Drive with VFD	4,000	30.0	1.0	115,000	15.5	142,000	5.1	128,000	22.0	114,000	4.4	122,000	20.5	97,000	4.0
300	F	Belt Drive with VFD	10,000	75.0	1.0	300,000	13.3	378,000	4.6	330,000	19.1	294,000	3.9	302,000	14.3	221,000	3.1
	P	Belt Drive with VFD	5,000	37.5	1.0	149,000	14.5	183,000	4.8	168,000	23.0	147,000	4.2	155,000	18.5	129,000	3.7

Notes:
- Where dual voltages are available, ratings are based on the lower voltage setting.
- Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature.
- Heating capacities based upon 68°F DB, 59°F WB entering air temperature.
- Ground Loop Heat Pump ratings based on 15% antifreeze solution.

Performance Data: AHRI/ASHRAE/ISO 13256-1

AHRI/ASHRAE/ISO 13256-1 Metric (S-I) Units

SB Horizontal and Vertical

Size	Part or Full Load	Motor Type	Rated CFM	Rated GPM	Sheave Setting (turns open)	Water Loop - Current				Ground Water - Current				Ground Loop - Current			
						Cooling 30 °C		Heating 20 °C		Cooling 15 °C		Heating 10 °C		Cooling 25 °C		Heating 0 °C	
						Capacity Watts	EER W/W	Capacity Watts	COP	Capacity Watts	EER W/W	Capacity Watts	COP	Capacity Watts	EER W/W	Capacity Watts	COP
72	F	Belt Drive	2,400	18.0	2.5	20,809	4.1	27,052	5.3	22,802	6.0	22,274	4.6	21,717	4.5	17,087	3.8
	F	Belt Drive with VFD	2,400	18.0	1.0	21,102	4.2	26,788	5.4	22,860	6.3	21,981	4.7	22,040	4.8	16,999	3.9
96	F	Belt Drive	3,200	24.0	3.0	29,601	4.5	35,991	5.0	32,386	6.5	29,162	4.4	29,807	4.8	22,450	3.6
	F	Belt Drive with VFD	3,200	24.0	1.0	29,807	4.5	36,049	5.1	32,474	6.7	29,308	4.4	29,894	4.8	22,509	3.6
120	F	Belt Drive	4,000	30.0	3.0	35,756	4.0	45,721	4.6	37,515	5.3	37,222	4.0	36,489	4.2	28,869	3.4
	F	Belt Drive with VFD	4,000	30.0	1.0	36,342	4.1	45,721	4.7	37,661	5.5	37,222	4.1	36,635	4.3	28,869	3.5

Notes:
- Where dual voltages are available, ratings are based on the lower voltage setting.
- Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature.
- Heating capacities based upon 68°F DB, 59°F WB entering air temperature.
- Ground Loop Heat Pump ratings based on 15% antifreeze solution.

Tested in Accordance with AHRI/ASHRAE/ISO 13256-1 Metric (S-I) Units

SB Vertical

Size	Part Full	Motor Type	Rated CFM	Rated GPM	Sheave Setting (turns open)	Water Loop - Current				Ground Water - Current				Ground Loop - Current			
						Cooling 30 °C		Heating 20 °C		Cooling 15 °C		Heating 10 °C		Cooling 25 °C		Heating 0 °C	
						Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP
72	P	Belt Drive with VFD	1,200	18.0	1.0	10,434	4.2	13,130	5.2	11,489	6.4	10,756	4.4	11,020	5.5	9,437	4.0
96	P	Belt Drive with VFD	1,600	24.0	1.0	14,742	4.8	17,937	5.1	16,090	7.1	14,596	4.3	15,358	6.0	12,661	3.9
120	P	Belt Drive with VFD	2,000	30.0	1.0	17,878	4.3	21,923	4.7	18,904	5.9	17,937	4.1	18,611	5.3	15,533	3.8
168	F	Belt Drive	5,600	42.0	3.0	49,238	4.2	56,272	4.7	54,513	6.2	44,490	4.1	50,410	4.7	35,463	3.5
	F	Belt Drive with VFD	5,600	42.0	1.0	49,531	4.5	58,030	4.9	54,513	6.3	44,549	4.1	50,996	5.0	35,463	3.5
	P	Belt Drive with VFD	2,800	21.0	1.0	24,033	4.5	27,257	4.8	27,257	6.9	21,981	4.2	26,084	6.2	19,930	3.9
192	F	Belt Drive	6,400	48.0	3.0	54,807	4.4	64,478	5.1	58,910	6.3	53,048	4.5	56,858	4.8	40,739	3.7
	F	Belt Drive with VFD	6,400	48.0	1.0	55,100	4.5	65,064	5.2	59,203	6.4	53,341	4.5	56,858	5.0	41,032	3.7
	P	Belt Drive with VFD	3,200	24.0	1.0	27,257	4.7	32,239	5.2	29,308	7.0	26,084	4.5	29,015	6.2	22,274	4.0
240	F	Belt Drive	8,000	60.0	2.5	67,995	4.1	86,166	4.9	75,029	5.9	69,168	4.3	67,995	4.2	52,462	3.5
	F	Belt Drive with VFD	8,000	60.0	1.0	67,995	4.1	87,339	4.9	75,322	6.2	70,047	4.3	68,875	4.4	52,462	3.5
	P	Belt Drive with VFD	4,000	30.0	1.0	33,705	4.5	41,618	5.1	37,515	6.4	33,411	4.4	35,756	6.0	28,429	4.0
300	F	Belt Drive	10,000	75.0	1.0	87,925	3.9	110,785	4.6	96,717	5.6	86,166	3.9	88,511	4.2	64,771	3.1
	F	Belt Drive with VFD	5,000	37.5	1.0	43,669	4.2	53,634	4.8	49,238	6.7	43,083	4.2	45,428	5.4	37,808	3.7
	P	Belt Drive with VFD	5,000	37.5	1	43,669	4.2	53,634	4.8	49,238	6.7	43,083	4.2	45,428	5.4	37,808	3.7

Notes:
- Where dual voltages are available, ratings are based on the lower voltage setting.
- Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature.
- Heating capacities based upon 68°F DB, 59°F WB entering air temperature.
- Ground Loop Heat Pump ratings based on 15% antifreeze solution.

SB096

WATER/BRINE				Heating - EAT 70°F				
EWT °F	FLOW GPM	PD psi	PD ft.	HC	kW	HE	LAT	COP
50	12.0	1.7	4.0	96.7	7.17	72.2	95.9	4.0
	18.0	4.5	10.3	101.9	7.27	77.1	97.4	4.1
	24.0	7.9	18.2	104.7	7.32	79.8	98.2	4.2

For operation in the shaded area when water is used in lieu of an antifreeze solution, the LWT (Leaving Water Temperature) must be calculated. Flow must be maintained to a level such that the LWT is maintained above 42°F (5.6°C) when the JW3 jumper is not clipped (see example below). Otherwise, appropriate levels of a proper antifreeze solution should be used in systems with leaving water temperatures of 42°F (5.6°C) or below and the JW3 jumper should be clipped. This is due to the potential of the refrigerant temperature being as low as 32°F (0°C) with 40°F (4.4°C) LWT, which may lead to a nuisance cutout due to the activation of the Low Temperature Protection. JW3 should never be clipped for standard range equipment or systems without antifreeze.

Example:

At 50°F EWT (Entering Water Temperature) and 1.5 GPM/ton, a 8 ton unit has a HE of 72,200 Btuh.

To calculate LWT, rearrange the formula for HE as follows:

HE = TD x GPM x 500, where HE = Heat of Extraction (Btuh);
TD = temperature difference (EWT - LWT) and GPM = U.S. Gallons per Minute.

TD = HE / (GPM x 500)

TD = 72,200 / (12 x 500)

TD = 12°F

LWT = EWT - TD

LWT = 50 - 12 = 38°F - antifreeze must be used

In this example, a higher flow rate will be required for EWTs at or below 50°F without antifreeze.

2,400 CFM Rated Airflow

EWT °F	WPD			Cooling - EAT 80/67°F								Heating - EAT 70°F									
						3-Phase Std Motor			VFD			3-Phase Std Motor					VFD				
	FLOW GPM	PSI	FT	TC	SC	Power kW	HR	EER	Power kW	HR	EER	HC	Power kW	HE	LAT	COP	HC	Power kW	HE	LAT	COP
20	18.00	6.1	14.0	Operation Not Recommended								48.9	4.8	32.6	86.8	3.0	48.6	4.71	32.6	86.7	3.0
30	9.00	1.7	3.9	79.0	55.2	3.40	90.6	23.2	3.32	90.3	23.8	54.0	4.9	37.3	88.8	3.2	53.7	4.79	37.3	88.7	3.3
	13.50	3.3	7.7	79.1	55.6	3.22	90.1	24.5	3.13	89.8	25.2	56.3	4.9	39.5	89.7	3.4	56.0	4.83	39.5	89.5	3.4
	18.00	5.1	11.7	79.0	55.8	3.14	89.7	25.1	3.06	89.4	25.8	57.5	4.9	40.7	90.1	3.4	57.2	4.85	40.7	90.0	3.5
40	9.00	1.4	3.2	78.2	54.4	3.72	91.0	21.0	3.64	90.7	21.5	61.8	5.0	44.8	91.8	3.6	61.6	4.91	44.8	91.7	3.7
	13.50	2.8	6.3	78.8	54.9	3.50	90.8	22.5	3.42	90.5	23.1	64.6	5.0	47.4	92.9	3.8	64.3	4.96	47.4	92.8	3.8
	18.00	4.4	10.1	79.0	55.2	3.40	90.6	23.2	3.31	90.3	23.8	66.1	5.1	48.8	93.4	3.8	65.8	4.98	48.8	93.3	3.9
50	9.00	1.2	2.7	76.9	53.5	4.11	90.9	18.7	4.02	90.6	19.1	69.7	5.1	52.2	94.8	4.0	69.4	5.04	52.2	94.7	4.0
	13.50	2.4	5.5	77.9	54.1	3.84	91.0	20.3	3.76	90.7	20.7	72.9	5.2	55.2	96.0	4.1	72.6	5.08	55.2	95.9	4.2
	18.00	3.9	9.0	78.3	54.4	3.72	90.9	21.0	3.63	90.7	21.5	74.6	5.2	56.9	96.7	4.2	74.3	5.11	56.9	96.6	4.3
60	9.00	1.0	2.4	74.9	52.5	4.54	90.4	16.5	4.46	90.1	16.8	77.4	5.2	59.6	97.8	4.3	77.1	5.15	59.6	97.7	4.4
	13.50	2.1	4.9	76.3	53.2	4.24	90.8	18.0	4.16	90.5	18.4	81.0	5.3	63.0	99.2	4.5	80.7	5.21	63.0	99.1	4.5
	18.00	3.6	8.3	76.9	53.5	4.10	90.9	18.7	4.02	90.6	19.1	82.9	5.3	64.8	99.9	4.6	82.7	5.23	64.8	99.8	4.6
70	9.00	1.0	2.3	72.5	51.4	5.04	89.7	14.4	4.95	89.4	14.6	85.1	5.4	66.8	100.7	4.7	84.8	5.26	66.8	100.6	4.7
	13.50	2.0	4.7	74.2	52.1	4.70	90.2	15.8	4.62	89.9	16.1	89.0	5.4	70.6	102.3	4.8	88.7	5.32	70.6	102.2	4.9
	18.00	3.4	7.8	74.9	52.5	4.54	90.4	16.5	4.46	90.1	16.8	91.2	5.4	72.6	103.1	4.9	90.9	5.35	72.6	103.0	5.0
80	9.00	1.0	2.2	69.7	50.3	5.59	88.7	12.5	5.50	88.4	12.7	92.6	5.5	74.0	103.6	5.0	92.3	5.37	74.0	103.5	5.0
	13.50	2.0	4.6	71.6	51.0	5.22	89.4	13.7	5.13	89.1	14.0	96.9	5.5	78.1	105.3	5.2	96.6	5.42	78.1	105.2	5.2
	18.00	3.3	7.6	72.5	51.4	5.04	89.7	14.4	4.95	89.4	14.6	99.2	5.5	80.2	106.2	5.2	98.9	5.45	80.2	106.1	5.3
90	9.00	0.9	2.2	66.5	49.0	6.19	87.6	10.7	6.10	87.3	10.9	99.9	5.6	81.0	106.5	5.3	99.6	5.46	81.0	106.4	5.3
	13.50	2.0	4.5	68.6	49.8	5.79	88.3	11.8	5.70	88.0	12.0	104.5	5.6	85.4	108.2	5.5	104.2	5.52	85.4	108.1	5.5
	18.00	3.2	7.5	69.6	50.2	5.60	88.7	12.4	5.51	88.4	12.6	106.9	5.6	87.7	109.2	5.6	106.6	5.55	87.7	109.0	5.6
100	9.00	0.9	2.1	63.0	47.6	6.85	86.4	9.2	6.76	86.1	9.3	Operation Not Recommended									
	13.50	1.9	4.4	65.3	48.5	6.42	87.2	10.2	6.33	86.9	10.3										
	18.00	3.2	7.3	66.4	49.0	6.21	87.5	10.7	6.12	87.3	10.8										
110	9.00	0.9	2.0	59.3	46.1	7.56	85.1	7.8	7.47	84.8	7.9										
	13.50	1.8	4.2	61.7	47.1	7.10	85.9	8.7	7.01	85.6	8.8										
	18.00	3.1	7.1	62.8	47.6	6.88	86.3	9.1	6.79	86.0	9.3										
120	9.00	0.7	1.7	55.4	44.5	8.32	83.8	6.7	8.23	83.5	6.7										
	13.50	1.6	3.8	57.9	45.5	7.84	84.6	7.4	7.75	84.3	7.5										
	18.00	2.9	6.7	59.1	46.0	7.60	85.0	7.8	7.51	84.7	7.9										

Notes:
- Interpolation is permissible, extrapolation is not.
- All entering air conditions are 80°F (26.6°C) DB and 67°F (19.4°C) WB in cooling, and 70°F (21°C) DB in heating.
- AHRI/ISO certified conditions are 80.6°F (27°C) DB and 66.2°F (19°C) WB in cooling and 68°F (20°C) DB in heating.
- Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
- All performance data is based on the lower voltage of dual voltage units.
- Performance stated is at the rated power supply; performance may vary as the power supply varies from the rated.
- Operation below 40°F EWT is based on a 15% methanol antifreeze solution.
- Operation below 60°F EWT requires optional insulated water/refrigerant circuit.
- See performance correction tables for operating conditions other than those listed above.
- See Performance Data Selection Notes for operation in the shaded areas.

1,200 CFM Rated Airflow

EWT °F	WPD			Cooling - EAT 80/67°F					Heating - EAT 70°F				
						VFD			VFD				
	FLOW GPM	PSI	FT	TC	SC	Power kW	HR	EER	HC	Power kW	HE	LAT	COP
20	18.00	6.0	13.9	Operation Not Recommended					23.1	2.19	15.6	85.8	3.1
30	9.00	1.7	3.8	40.8	28.6	1.37	45.5	29.8	26.6	2.24	18.9	88.5	3.5
	13.50	3.3	7.6	41.1	28.8	1.32	45.6	31.2	27.2	2.25	19.5	88.9	3.5
	18.00	5.1	11.7	41.2	28.9	1.29	45.7	31.9	27.5	2.26	19.8	89.2	3.6
40	9.00	1.4	3.2	40.0	27.9	1.53	45.2	26.1	30.8	2.30	22.9	91.7	3.9
	13.50	2.7	6.3	40.2	28.1	1.47	45.3	27.3	31.5	2.32	23.6	92.3	4.0
	18.00	4.4	10.2	40.4	28.2	1.45	45.3	27.9	31.9	2.32	24.0	92.6	4.0
50	9.00	1.2	2.7	39.1	27.4	1.72	45.0	22.8	34.9	2.37	26.9	94.9	4.3
	13.50	2.4	5.5	39.4	27.6	1.65	45.0	23.9	35.8	2.38	27.7	95.5	4.4
	18.00	3.9	9.1	39.5	27.6	1.62	45.1	24.4	36.2	2.39	28.1	95.9	4.4
60	9.00	1.1	2.4	38.2	27.0	1.93	44.8	19.8	39.1	2.43	30.8	98.1	4.7
	13.50	2.1	5.0	38.5	27.1	1.86	44.9	20.8	40.0	2.44	31.7	98.8	4.8
	18.00	3.6	8.3	38.7	27.2	1.82	44.9	21.3	40.5	2.45	32.2	99.2	4.8
70	9.00	1.0	2.3	37.2	26.6	2.17	44.6	17.1	43.2	2.49	34.7	101.3	5.1
	13.50	2.0	4.7	37.5	26.7	2.09	44.7	18.0	44.3	2.51	35.8	102.1	5.2
	18.00	3.4	7.9	37.7	26.8	2.05	44.7	18.4	44.9	2.51	36.3	102.6	5.2
80	9.00	1.0	2.2	35.9	26.2	2.44	44.3	14.7	47.5	2.55	38.8	104.5	5.5
	13.50	2.0	4.6	36.4	26.3	2.35	44.4	15.5	48.7	2.57	40.0	105.5	5.6
	18.00	3.3	7.6	36.6	26.4	2.30	44.4	15.9	49.4	2.58	40.6	106.0	5.6
90	9.00	0.9	2.2	34.4	25.8	2.74	43.8	12.6	51.8	2.61	42.9	107.9	5.8
	13.50	2.0	4.5	35.0	26.0	2.64	44.0	13.2	53.2	2.63	44.3	109.0	5.9
	18.00	3.2	7.5	35.2	26.0	2.59	44.1	13.6	54.0	2.64	45.0	109.6	6.0
100	9.00	0.9	2.1	32.6	25.3	3.08	43.1	10.6	Operation Not Recommended				
	13.50	1.9	4.4	33.2	25.5	2.97	43.4	11.2					
	18.00	3.2	7.4	33.5	25.6	2.91	43.5	11.5					
110	9.00	0.9	2.0	30.4	24.6	3.45	42.2	8.8					
	13.50	1.8	4.2	31.1	24.9	3.33	42.5	9.4					
	18.00	3.1	7.2	31.5	25.0	3.27	42.7	9.6					
120	9.00	0.8	1.8	27.8	23.6	3.85	40.9	7.2					
	13.50	1.7	3.9	28.6	24.0	3.72	41.3	7.7					
	18.00	2.9	6.8	29.0	24.1	3.66	41.5	7.9					

Notes:
- Interpolation is permissible, extrapolation is not.
- All entering air conditions are 80°F (26.6°C) DB and 67°F (19.4°C) WB in cooling, and 70°F (21°C) DB in heating.
- AHRI/ISO certified conditions are 80.6°F (27°C) DB and 66.2°F (19°C) WB in cooling and 68°F (20°C) DB in heating.
- Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
- All performance data is based on the lower voltage of dual voltage units.
- Performance stated is at the rated power supply; performance may vary as the power supply varies from the rated.
- Operation below 40°F EWT is based on a 15% methanol antifreeze solution.
- Operation below 60°F EWT requires optional insulated water/refrigerant circuit.
- See performance correction tables for operating conditions other than those listed above.
- See Performance Data Selection Notes for operation in the shaded areas.

3,200 CFM Rated Airflow

EWT °F	WPD			Cooling - EAT 80/67°F								Heating - EAT 70°F									
						3-Phase Std Motor			VFD			3-Phase Std Motor					VFD				
	FLOW GPM	PSI	FT	TC	SC	Power kW	HR	EER	Power kW	HR	EER	HC	Power kW	HE	LAT	COP	HC	Power kW	HE	LAT	COP
20	24.00	9.1	20.9	Operation Not Recommended								64.6	6.6	42.2	86.7	2.9	64.5	6.52	42.2	86.6	2.9
30	12.00	2.6	5.9	107.1	74.0	4.52	122.6	23.7	4.47	122.4	24.0	71.5	6.7	48.8	88.6	3.2	71.3	6.60	48.8	88.6	3.2
	18.00	5.4	12.5	105.0	72.6	4.33	119.8	24.2	4.28	119.7	24.5	74.7	6.7	51.9	89.6	3.3	74.5	6.64	51.9	89.5	3.3
	24.00	8.3	19.2	103.7	71.7	4.26	118.2	24.3	4.21	118.0	24.6	76.5	6.7	53.6	90.1	3.3	76.3	6.66	53.6	90.0	3.4
40	12.00	2.3	5.3	108.5	75.0	4.89	125.1	22.2	4.84	125.0	22.4	82.9	6.8	59.7	91.9	3.6	82.8	6.75	59.7	91.9	3.6
	18.00	5.0	11.5	107.8	74.4	4.63	123.5	23.3	4.58	123.4	23.6	87.2	6.9	63.8	93.2	3.7	87.0	6.81	63.8	93.1	3.7
	24.00	7.7	17.7	107.1	73.9	4.52	122.5	23.7	4.46	122.3	24.0	89.6	6.9	66.0	93.9	3.8	89.4	6.84	66.0	93.8	3.8
50	12.00	2.1	4.8	108.0	75.0	5.34	126.3	20.2	5.29	126.1	20.4	95.1	7.0	71.3	95.4	4.0	94.9	6.92	71.3	95.4	4.0
	18.00	4.6	10.6	108.5	75.1	5.02	125.6	21.6	4.97	125.4	21.8	100.3	7.0	76.3	97.0	4.2	100.1	6.99	76.3	96.9	4.2
	24.00	7.1	16.5	108.4	75.0	4.87	125.1	22.3	4.82	124.9	22.5	103.3	7.1	79.1	97.8	4.3	103.1	7.03	79.1	97.8	4.3
60	12.00	1.9	4.5	106.2	74.2	5.89	126.3	18.0	5.84	126.1	18.2	107.5	7.1	83.1	99.0	4.4	107.4	7.09	83.1	99.0	4.4
	18.00	4.3	10.0	107.6	74.9	5.50	126.4	19.6	5.45	126.2	19.8	113.7	7.2	89.0	100.8	4.6	113.5	7.19	89.0	100.8	4.6
	24.00	6.7	15.5	108.1	75.0	5.32	126.2	20.3	5.27	126.0	20.5	117.1	7.3	92.3	101.8	4.7	117.0	7.24	92.3	101.8	4.7
70	12.00	1.9	4.3	103.3	72.9	6.51	125.6	15.9	6.46	125.4	16.0	120.0	7.3	95.0	102.6	4.8	119.8	7.28	95.0	102.6	4.8
	18.00	4.1	9.5	105.4	73.9	6.07	126.1	17.4	6.02	126.0	17.5	127.0	7.4	101.6	104.7	5.0	126.8	7.39	101.6	104.6	5.0
	24.00	6.4	14.7	106.3	74.3	5.86	126.3	18.2	5.81	126.1	18.3	130.8	7.5	105.2	105.7	5.1	130.6	7.45	105.2	105.7	5.1
80	12.00	1.8	4.1	99.7	71.1	7.21	124.3	13.8	7.16	124.1	13.9	132.2	7.5	106.6	106.2	5.2	132.1	7.47	106.6	106.1	5.2
	18.00	3.9	9.1	102.3	72.4	6.72	125.2	15.2	6.67	125.0	15.3	139.7	7.6	113.6	108.3	5.4	139.5	7.59	113.6	108.3	5.4
	24.00	6.1	14.0	103.5	73.0	6.48	125.6	16.0	6.43	125.4	16.1	143.6	7.7	117.3	109.5	5.5	143.4	7.65	117.3	109.4	5.5
90	12.00	1.8	4.1	95.6	68.9	7.99	122.8	12.0	7.94	122.7	12.0	143.9	7.7	117.6	109.5	5.5	143.7	7.66	117.6	109.5	5.5
	18.00	3.8	8.8	98.5	70.4	7.45	123.9	13.2	7.40	123.7	13.3	151.4	7.8	124.6	111.7	5.7	151.2	7.79	124.6	111.6	5.7
	24.00	5.9	13.6	99.8	71.1	7.19	124.4	13.9	7.14	124.2	14.0	155.2	7.9	128.2	112.8	5.8	155.0	7.85	128.2	112.8	5.8
100	12.00	1.7	4.0	91.1	66.7	8.85	121.3	10.3	8.80	121.1	10.4	Operation Not Recommended									
	18.00	3.7	8.6	94.2	68.2	8.26	122.3	11.4	8.21	122.2	11.5										
	24.00	5.7	13.2	95.7	69.0	7.97	122.9	12.0	7.92	122.7	12.1										
110	12.00	1.7	3.9	86.7	64.4	9.78	120.0	8.9	9.73	119.9	8.9										
	18.00	3.7	8.4	89.6	65.9	9.15	120.9	9.8	9.10	120.7	9.9										
	24.00	5.6	13.0	91.2	66.7	8.84	121.3	10.3	8.79	121.2	10.4										
120	12.00	1.6	3.7	82.4	62.2	10.80	119.2	7.6	10.75	119.0	7.7										
	18.00	3.6	8.3	85.2	63.6	10.12	119.7	8.4	10.06	119.5	8.5										
	24.00	5.6	12.9	86.6	64.4	9.79	120.0	8.9	9.73	119.9	8.9										

Notes:
- Interpolation is permissible, extrapolation is not.
- All entering air conditions are 80°F (26.6°C) DB and 67°F (19.4°C) WB in cooling, and 70°F (21°C) DB in heating.
- AHRI/ISO certified conditions are 80.6°F (27°C) DB and 66.2°F (19°C) WB in cooling and 68°F (20°C) DB in heating.
- Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
- All performance data is based on the lower voltage of dual voltage units.
- Performance stated is at the rated power supply; performance may vary as the power supply varies from the rated.
- Operation below 40°F EWT is based on a 15% methanol antifreeze solution.
- Operation below 60°F EWT requires optional insulated water/refrigerant circuit.
- See performance correction tables for operating conditions other than those listed above.
- See Performance Data Selection Notes for operation in the shaded areas.

1,600 CFM Rated Airflow

EWT °F	WPD			Cooling - EAT 80/67°F					Heating - EAT 70°F				
						VFD			VFD				
	FLOW GPM	PSI	FT	TC	SC	Power kW	HR	EER	HC	Power kW	HE	LAT	COP
20	24.00	8.3	19.2	Operation Not Recommended					31.0	2.95	21.0	85.9	3.1
30	12.00	2.2	5.2	55.5	38.8	1.77	61.5	31.4	35.7	3.03	25.3	88.6	3.4
	18.00	5.0	11.5	55.1	38.6	1.70	60.9	32.4	36.5	3.05	26.1	89.1	3.5
	24.00	7.7	17.8	54.9	38.4	1.67	60.6	32.9	36.9	3.05	26.5	89.3	3.5
40	12.00	2.1	4.8	56.1	39.2	1.99	62.9	28.3	41.5	3.13	30.9	92.0	3.9
	18.00	4.7	10.7	56.0	39.1	1.91	62.5	29.3	42.6	3.14	31.9	92.6	4.0
	24.00	7.2	16.7	55.9	39.1	1.87	62.3	29.9	43.2	3.15	32.4	92.9	4.0
50	12.00	2.0	4.5	56.0	39.0	2.23	63.6	25.1	47.6	3.22	36.6	95.5	4.3
	18.00	4.4	10.1	56.1	39.1	2.14	63.4	26.2	48.9	3.24	37.8	96.2	4.4
	24.00	6.8	15.8	56.1	39.1	2.10	63.3	26.8	49.6	3.25	38.5	96.6	4.5
60	12.00	1.9	4.3	55.2	38.4	2.49	63.7	22.1	53.8	3.32	42.4	99.0	4.7
	18.00	4.2	9.7	55.5	38.7	2.40	63.7	23.2	55.3	3.34	43.9	99.9	4.8
	24.00	6.5	15.0	55.7	38.8	2.35	63.7	23.7	56.1	3.35	44.6	100.4	4.9
70	12.00	1.8	4.2	53.9	37.6	2.80	63.4	19.3	59.9	3.42	48.3	102.6	5.1
	18.00	4.0	9.3	54.4	37.9	2.68	63.6	20.3	61.6	3.44	49.9	103.6	5.2
	24.00	6.3	14.4	54.6	38.1	2.63	63.6	20.8	62.5	3.46	50.7	104.1	5.3
80	12.00	1.8	4.1	52.1	36.6	3.14	62.8	16.6	66.0	3.51	54.0	106.1	5.5
	18.00	3.9	9.0	52.8	37.0	3.01	63.1	17.5	67.8	3.54	55.7	107.2	5.6
	24.00	6.0	14.0	53.1	37.2	2.95	63.2	18.0	68.8	3.56	56.6	107.7	5.7
90	12.00	1.7	4.0	50.0	35.5	3.52	62.0	14.2	71.9	3.62	59.5	109.5	5.8
	18.00	3.8	8.8	50.8	35.9	3.38	62.3	15.0	73.8	3.65	61.3	110.6	5.9
	24.00	5.9	13.6	51.1	36.1	3.32	62.5	15.4	74.8	3.67	62.3	111.2	6.0
100	12.00	1.7	4.0	47.6	34.4	3.96	61.1	12.0	Operation Not Recommended				
	18.00	3.7	8.6	48.5	34.8	3.81	61.4	12.7					
	24.00	5.8	13.3	48.9	34.9	3.73	61.6	13.1					
110	12.00	1.7	3.9	45.0	33.2	4.46	60.2	10.1					
	18.00	3.7	8.5	45.9	33.6	4.28	60.5	10.7					
	24.00	5.7	13.1	46.3	33.8	4.20	60.7	11.0					
120	12.00	1.6	3.7	42.3	32.2	5.01	59.4	8.4					
	18.00	3.6	8.3	43.2	32.5	4.82	59.6	9.0					
	24.00	5.6	12.9	43.6	32.7	4.73	59.8	9.2					

Notes:
- Interpolation is permissible, extrapolation is not.
- All entering air conditions are 80°F (26.6°C) DB and 67°F (19.4°C) WB in cooling, and 70°F (21°C) DB in heating.
- AHRI/ISO certified conditions are 80.6°F (27°C) DB and 66.2°F (19°C) WB in cooling and 68°F (20°C) DB in heating.
- Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
- All performance data is based on the lower voltage of dual voltage units.
- Performance stated is at the rated power supply; performance may vary as the power supply varies from the rated.
- Operation below 40°F EWT is based on a 15% methanol antifreeze solution.
- Operation below 60°F EWT requires optional insulated water/refrigerant circuit.
- See performance correction tables for operating conditions other than those listed above.
- See Performance Data Selection Notes for operation in the shaded areas.

4,000 CFM Rated Airflow

EWT °F	WPD			Cooling - EAT 80/67°F								Heating - EAT 70°F									
						3-Phase Std Motor			VFD			3-Phase Std Motor					VFD				
	FLOW GPM	PSI	FT	TC	SC	Power kW	HR	EER	Power kW	HR	EER	HC	Power kW	HE	LAT	COP	HC	Power kW	HE	LAT	COP
20	30.00	9.7	22.4	Operation Not Recommended								86.5	8.9	56.0	88.0	2.8	86.4	8.91	56.0	87.9	2.8
30	15.00	2.8	6.5	118.9	81.2	6.66	141.6	17.8	6.63	141.5	17.9	93.0	9.1	62.1	89.5	3.0	92.9	9.04	62.1	89.5	3.0
	22.50	5.9	13.6	113.8	76.9	6.33	135.4	18.0	6.30	135.3	18.1	96.4	9.1	65.2	90.3	3.1	96.3	9.11	65.2	90.2	3.1
	30.00	9.0	20.8	110.9	74.6	6.18	132.0	17.9	6.15	131.9	18.0	98.3	9.2	67.0	90.7	3.1	98.2	9.15	67.0	90.7	3.1
40	15.00	2.7	6.2	124.4	85.8	7.21	149.0	17.3	7.18	148.9	17.3	105.5	9.3	73.7	92.4	3.3	105.4	9.31	73.7	92.3	3.3
	22.50	5.6	12.8	121.2	83.1	6.86	144.6	17.7	6.83	144.5	17.8	110.3	9.4	78.1	93.5	3.4	110.2	9.41	78.1	93.5	3.4
	30.00	8.5	19.5	119.3	81.5	6.69	142.1	17.8	6.66	142.0	17.9	113.0	9.5	80.6	94.1	3.5	112.9	9.47	80.6	94.1	3.5
50	15.00	2.6	6.0	127.0	88.0	7.79	153.6	16.3	7.77	153.5	16.3	119.8	9.7	86.8	95.7	3.6	119.7	9.62	86.8	95.6	3.6
	22.50	5.3	12.3	125.5	86.8	7.40	150.8	17.0	7.37	150.7	17.0	125.9	9.8	92.5	97.1	3.8	125.8	9.76	92.5	97.1	3.8
	30.00	8.0	18.5	124.4	85.8	7.22	149.0	17.2	7.19	148.9	17.3	129.4	9.9	95.7	97.9	3.8	129.3	9.84	95.7	97.9	3.8
60	15.00	2.5	5.8	127.2	88.5	8.43	155.9	15.1	8.40	155.8	15.1	135.0	10.0	100.9	99.2	4.0	134.9	9.97	100.9	99.2	4.0
	22.50	5.1	11.8	127.3	88.4	7.99	154.5	15.9	7.96	154.4	16.0	142.4	10.2	107.7	100.9	4.1	142.3	10.15	107.7	100.9	4.1
	30.00	7.7	17.8	126.9	88.0	7.78	153.5	16.3	7.75	153.4	16.4	146.5	10.3	111.5	101.8	4.2	146.4	10.24	111.5	101.8	4.2
70	15.00	2.5	5.7	125.4	87.6	9.15	156.7	13.7	9.12	156.6	13.8	150.5	10.4	115.1	102.8	4.3	150.4	10.33	115.1	102.7	4.3
	22.50	5.0	11.5	126.8	88.3	8.64	156.3	14.7	8.61	156.2	14.7	158.9	10.6	122.8	104.7	4.4	158.8	10.53	122.8	104.7	4.4
	30.00	7.5	17.2	127.2	88.5	8.41	155.9	15.1	8.38	155.8	15.2	163.4	10.7	127.0	105.7	4.5	163.3	10.64	127.0	105.7	4.5
80	15.00	2.4	5.6	122.2	85.7	9.96	156.2	12.3	9.93	156.1	12.3	165.7	10.7	129.1	106.3	4.5	165.6	10.69	129.1	106.2	4.5
	22.50	4.8	11.2	124.6	87.1	9.38	156.6	13.3	9.35	156.5	13.3	174.4	10.9	137.1	108.3	4.7	174.3	10.90	137.1	108.3	4.7
	30.00	7.3	16.8	125.6	87.6	9.11	156.7	13.8	9.09	156.6	13.8	179.0	11.0	141.3	109.3	4.8	178.9	11.01	141.3	109.3	4.8
90	15.00	2.4	5.5	117.7	83.2	10.88	154.8	10.8	10.85	154.7	10.9	179.8	11.1	142.0	109.5	4.8	179.7	11.03	142.0	109.5	4.8
	22.50	4.7	10.9	120.9	85.0	10.23	155.8	11.8	10.20	155.7	11.9	188.2	11.3	149.8	111.5	4.9	188.1	11.23	149.8	111.4	4.9
	30.00	7.1	16.4	122.4	85.8	9.92	156.2	12.3	9.89	156.1	12.4	192.3	11.4	153.6	112.4	5.0	192.2	11.33	153.6	112.4	5.0
100	15.00	2.3	5.4	112.3	80.4	11.93	153.0	9.4	11.90	152.9	9.4	Operation Not Recommended									
	22.50	4.6	10.7	116.1	82.4	11.19	154.3	10.4	11.17	154.2	10.4										
	30.00	6.9	16.0	117.9	83.3	10.85	154.9	10.9	10.82	154.8	10.9										
110	15.00	2.3	5.2	106.2	77.4	13.14	151.0	8.1	13.11	150.9	8.1										
	22.50	4.5	10.4	110.4	79.4	12.30	152.4	9.0	12.28	152.3	9.0										
	30.00	6.7	15.5	112.4	80.4	11.91	153.1	9.4	11.88	153.0	9.5										
120	15.00	2.2	5.0	99.6	74.4	14.52	149.1	6.9	14.49	149.0	6.9										
	22.50	4.3	10.0	104.0	76.4	13.58	150.4	7.7	13.55	150.3	7.7										
	30.00	6.5	15.0	106.2	77.4	13.13	151.0	8.1	13.10	150.9	8.1										

Notes:
- Interpolation is permissible, extrapolation is not.
- All entering air conditions are 80°F (26.6°C) DB and 67°F (19.4°C) WB in cooling, and 70°F (21°C) DB in heating.
- AHRI/ISO certified conditions are 80.6°F (27°C) DB and 66.2°F (19°C) WB in cooling and 68°F (20°C) DB in heating.
- Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
- All performance data is based on the lower voltage of dual voltage units.
- Performance stated is at the rated power supply; performance may vary as the power supply varies from the rated.
- Operation below 40°F EWT is based on a 15% methanol antifreeze solution.
- Operation below 60°F EWT requires optional insulated water/refrigerant circuit.
- See performance correction tables for operating conditions other than those listed above.
- See Performance Data Selection Notes for operation in the shaded areas.

2,000 CFM Rated Airflow

EWT °F	WPD			Cooling - EAT 80/67°F					Heating - EAT 70°F				
						VFD			VFD				
	FLOW GPM	PSI	FT	TC	SC	Power kW	HR	EER	HC	Power kW	HE	LAT	COP
20	30.00	9.8	22.6	Operation Not Recommended					86.4	8.91	56.0	107.9	2.8
30	15.00	2.8	6.5	60.6	42.0	2.57	69.4	23.6	92.9	9.04	62.1	110.9	3.0
	22.50	5.9	13.6	59.2	40.9	2.49	67.7	23.8	96.3	9.11	65.2	112.5	3.1
	30.00	9.0	20.8	58.5	40.4	2.45	66.9	23.9	98.2	9.15	67.0	113.4	3.1
40	15.00	2.7	6.2	63.9	44.4	2.85	73.6	22.4	105.4	9.31	73.7	116.7	3.3
	22.50	5.6	12.8	63.0	43.8	2.76	72.4	22.9	110.2	9.41	78.1	118.9	3.4
	30.00	8.4	19.4	62.5	43.4	2.71	71.8	23.0	112.9	9.47	80.6	120.2	3.5
50	15.00	2.6	6.0	65.5	45.8	3.14	76.2	20.9	119.7	9.62	86.8	123.3	3.6
	22.50	5.3	12.2	65.1	45.4	3.04	75.5	21.4	125.8	9.76	92.5	126.1	3.8
	30.00	8.0	18.4	64.9	45.2	2.99	75.1	21.7	129.3	9.84	95.7	127.7	3.8
60	15.00	2.5	5.9	65.8	46.2	3.45	77.6	19.1	134.9	9.97	100.9	130.3	4.0
	22.50	5.1	11.8	65.9	46.1	3.34	77.3	19.7	142.3	10.15	107.7	133.7	4.1
	30.00	7.7	17.7	65.8	46.1	3.29	77.0	20.0	146.4	10.24	111.5	135.6	4.2
70	15.00	2.5	5.7	65.0	45.9	3.81	78.0	17.1	150.4	10.33	115.1	137.5	4.3
	22.50	5.0	11.5	65.4	46.1	3.68	78.0	17.8	158.8	10.53	122.8	141.3	4.4
	30.00	7.4	17.2	65.6	46.1	3.62	77.9	18.1	163.3	10.64	127.0	143.4	4.5
80	15.00	2.4	5.6	63.3	45.2	4.20	77.7	15.1	165.6	10.69	129.1	144.5	4.5
	22.50	4.9	11.2	64.0	45.5	4.06	77.9	15.8	174.3	10.90	137.1	148.5	4.7
	30.00	7.3	16.8	64.3	45.6	3.99	77.9	16.1	178.9	11.01	141.3	150.6	4.8
90	15.00	2.4	5.5	60.9	44.1	4.66	76.8	13.1	179.7	11.03	142.0	151.0	4.8
	22.50	4.8	11.0	61.8	44.5	4.50	77.1	13.7	188.1	11.23	149.8	154.9	4.9
	30.00	7.1	16.5	62.2	44.7	4.42	77.3	14.1	192.2	11.33	153.6	156.8	5.0
100	15.00	2.3	5.3	57.9	42.9	5.18	75.6	11.2	Operation Not Recommended				
	22.50	4.6	10.7	59.0	43.3	5.00	76.0	11.8					
	30.00	7.0	16.1	59.5	43.5	4.91	76.2	12.1					
110	15.00	2.2	5.1	54.5	41.5	5.78	74.3	9.4					
	22.50	4.5	10.4	55.7	42.0	5.58	74.7	10.0					
	30.00	6.8	15.7	56.2	42.2	5.47	74.9	10.3					
120	15.00	2.0	4.7	50.9	40.2	6.47	73.0	7.9					
	22.50	4.3	9.9	52.1	40.6	6.24	73.4	8.4					
	30.00	6.6	15.1	52.7	40.9	6.12	73.6	8.6					

Notes:
- Interpolation is permissible, extrapolation is not.
- All entering air conditions are 80°F (26.6°C) DB and 67°F (19.4°C) WB in cooling, and 70°F (21°C) DB in heating.
- AHRI/ISO certified conditions are 80.6°F (27°C) DB and 66.2°F (19°C) WB in cooling and 68°F (20°C) DB in heating.
- Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
- All performance data is based on the lower voltage of dual voltage units.
- Performance stated is at the rated power supply; performance may vary as the power supply varies from the rated.
- Operation below 40°F EWT is based on a 15% methanol antifreeze solution.
- Operation below 60°F EWT requires optional insulated water/refrigerant circuit.
- See performance correction tables for operating conditions other than those listed above.
- See Performance Data Selection Notes for operation in the shaded areas.

5,600 CFM Rated Airflow

EWT °F	WPD			Cooling - EAT 80/67°F								Heating - EAT 70°F									
						3-Phase Std Motor			VFD			3-Phase Std Motor					VFD				
	FLOW GPM	PSI	FT	TC	SC	Power kW	HR	EER	Power kW	HR	EER	HC	Power kW	HE	LAT	COP	HC	Power kW	HE	LAT	COP
20	Operation Not Recommended																				
30	21.00	1.4	3.2	194.0	140.6	7.21	218.6	26.9	7.02	218.0	27.6	112.8	11.2	74.5	86.6	2.9	112.2	11.04	74.5	86.5	3.0
	31.50	2.7	6.3	192.5	139.9	6.75	215.5	28.5	6.56	214.8	29.3	117.3	11.3	78.7	87.4	3.0	116.7	11.14	78.7	87.2	3.1
	42.00	4.5	10.3	191.0	139.3	6.56	213.4	29.1	6.37	212.7	30.0	119.8	11.4	81.0	87.8	3.1	119.2	11.19	81.0	87.7	3.1
40	21.00	1.3	3.0	193.4	140.7	8.03	220.8	24.1	7.84	220.2	24.7	131.4	11.6	91.8	89.7	3.3	130.8	11.43	91.8	89.6	3.4
	31.50	2.6	6.0	194.2	140.7	7.44	219.6	26.1	7.25	218.9	26.8	137.4	11.8	97.3	90.7	3.4	136.7	11.56	97.3	90.6	3.5
	42.00	4.2	9.8	194.0	140.6	7.18	218.5	27.0	6.99	217.9	27.7	140.7	11.8	100.4	91.2	3.5	140.1	11.63	100.4	91.1	3.5
50	21.00	1.3	2.9	190.1	139.7	9.00	220.8	21.1	8.81	220.1	21.6	151.1	12.1	109.9	92.9	3.7	150.4	11.86	109.9	92.8	3.7
	31.50	2.5	5.7	192.7	140.5	8.30	221.0	23.2	8.11	220.4	23.7	158.5	12.2	116.8	94.1	3.8	157.8	12.03	116.8	94.0	3.8
	42.00	4.1	9.3	193.5	140.7	7.99	220.8	24.2	7.80	220.1	24.8	162.6	12.3	120.6	94.8	3.9	162.0	12.13	120.6	94.7	3.9
60	21.00	1.2	2.8	184.7	137.9	10.09	219.1	18.3	9.90	218.5	18.6	171.2	12.5	128.5	96.2	4.0	170.6	12.33	128.5	96.1	4.1
	31.50	2.4	5.5	188.6	139.3	9.31	220.4	20.3	9.12	219.8	20.7	180.0	12.7	136.6	97.7	4.1	179.4	12.54	136.6	97.6	4.2
	42.00	3.9	9.0	190.3	139.8	8.95	220.8	21.3	8.76	220.2	21.7	184.9	12.8	141.0	98.5	4.2	184.2	12.66	141.0	98.4	4.3
70	21.00	1.2	2.7	177.8	135.4	11.31	216.4	15.7	11.12	215.8	16.0	191.5	13.0	147.1	99.6	4.3	190.9	12.82	147.1	99.5	4.4
	31.50	2.3	5.4	182.7	137.2	10.46	218.4	17.5	10.27	217.7	17.8	201.5	13.3	156.2	101.2	4.5	200.8	13.07	156.2	101.1	4.5
	42.00	3.8	8.8	184.9	138.0	10.05	219.2	18.4	9.86	218.6	18.8	206.8	13.4	161.1	102.1	4.5	206.2	13.20	161.1	102.0	4.6
80	21.00	1.2	2.7	170.1	132.2	12.63	213.2	13.5	12.44	212.5	13.7	211.4	13.5	165.3	102.9	4.6	210.8	13.32	165.3	102.8	4.6
	31.50	2.3	5.3	175.4	134.4	11.72	215.4	15.0	11.53	214.8	15.2	222.2	13.8	175.1	104.6	4.7	221.5	13.59	175.1	104.5	4.8
	42.00	3.8	8.7	178.0	135.5	11.28	216.5	15.8	11.09	215.9	16.1	227.9	13.9	180.3	105.6	4.8	227.2	13.74	180.3	105.5	4.8
90	21.00	1.1	2.6	161.9	128.4	14.06	209.8	11.5	13.87	209.2	11.7	230.5	14.0	182.7	106.0	4.8	229.8	13.81	182.7	105.9	4.9
	31.50	2.2	5.2	167.4	131.0	13.09	212.1	12.8	12.90	211.4	13.0	241.5	14.3	192.7	107.8	4.9	240.9	14.11	192.7	107.7	5.0
	42.00	3.7	8.5	170.2	132.2	12.62	213.2	13.5	12.43	212.6	13.7	247.2	14.5	197.9	108.8	5.0	246.6	14.27	197.9	108.7	5.1
100	21.00	1.1	2.6	153.8	124.4	15.57	206.9	9.9	15.38	206.3	10.0	Operation Not Recommended									
	31.50	2.2	5.1	159.1	127.1	14.56	208.8	10.9	14.37	208.1	11.1										
	42.00	3.6	8.4	161.9	128.4	14.06	209.8	11.5	13.87	209.2	11.7										
110	21.00	1.1	2.5	146.3	120.3	17.17	204.9	8.5	16.98	204.2	8.6										
	31.50	2.1	5.0	151.1	122.9	16.12	206.1	9.4	15.93	205.4	9.5										
	42.00	3.6	8.2	153.7	124.3	15.60	206.9	9.9	15.41	206.2	10.0										
120	21.00	1.1	2.4	139.9	116.4	18.85	204.2	7.4	18.66	203.6	7.5										
	31.50	2.1	4.8	143.9	118.9	17.75	204.5	8.1	17.56	203.8	8.2										
	42.00	3.4	8.0	146.1	120.1	17.21	204.8	8.5	17.02	204.2	8.6										

Notes:
- Interpolation is permissible, extrapolation is not.
- All entering air conditions are 80°F (26.6°C) DB and 67°F (19.4°C) WB in cooling, and 70°F (21°C) DB in heating.
- AHRI/ISO certified conditions are 80.6°F (27°C) DB and 66.2°F (19°C) WB in cooling and 68°F (20°C) DB in heating.
- Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
- All performance data is based on the lower voltage of dual voltage units.
- Performance stated is at the rated power supply; performance may vary as the power supply varies from the rated.
- Operation below 40°F EWT is based on a 15% methanol antifreeze solution.
- Operation below 60°F EWT requires optional insulated water/refrigerant circuit.
- See performance correction tables for operating conditions other than those listed above.
- See Performance Data Selection Notes for operation in the shaded areas.

2,800 CFM Rated Airflow

EWT °F	WPD			Cooling - EAT 80/67°F					Heating - EAT 70°F				
						VFD			VFD				
	FLOW GPM	PSI	FT	TC	SC	Power kW	HR	EER	HC	Power kW	HE	LAT	COP
20	Operation Not Recommended												
30	10.50	1.3	2.9	97.6	71.1	3.02	107.9	32.3	54.6	5.16	37.0	86.0	3.1
	15.75	2.4	5.6	96.9	70.3	2.79	106.4	34.7	56.8	5.22	39.0	86.7	3.2
	21.00	3.8	8.7	96.1	69.7	2.69	105.3	35.7	58.0	5.25	40.1	87.1	3.2
40	10.50	1.1	2.6	97.2	71.4	3.44	108.9	28.3	63.8	5.39	45.4	89.0	3.5
	15.75	2.1	4.9	97.7	71.3	3.14	108.4	31.1	66.7	5.46	48.1	90.0	3.6
	21.00	3.5	8.0	97.6	71.1	3.01	107.9	32.4	68.3	5.51	49.6	90.5	3.6
50	10.50	1.0	2.4	95.3	70.9	3.92	108.7	24.3	73.6	5.64	54.3	92.3	3.8
	15.75	2.0	4.5	96.7	71.3	3.58	108.9	27.0	77.3	5.73	57.7	93.5	4.0
	21.00	3.2	7.4	97.2	71.4	3.42	108.9	28.4	79.3	5.78	59.6	94.2	4.0
60	10.50	1.0	2.3	92.3	69.8	4.48	107.6	20.6	83.7	5.89	63.6	95.6	4.2
	15.75	1.9	4.3	94.4	70.6	4.09	108.4	23.1	88.0	6.00	67.5	97.0	4.3
	21.00	3.1	7.1	95.4	71.0	3.91	108.7	24.4	90.4	6.06	69.7	97.8	4.4
70	10.50	1.0	2.2	88.6	68.2	5.08	105.9	17.4	93.7	6.15	72.7	98.9	4.5
	15.75	1.8	4.2	91.2	69.4	4.67	107.1	19.5	98.6	6.28	77.1	100.5	4.6
	21.00	3.0	6.8	92.4	69.9	4.46	107.6	20.7	101.2	6.34	79.5	101.4	4.7
80	10.50	0.9	2.2	84.4	66.3	5.74	104.0	14.7	103.5	6.41	81.6	102.1	4.7
	15.75	1.8	4.2	87.2	67.6	5.30	105.3	16.5	108.6	6.55	86.2	103.8	4.9
	21.00	2.9	6.7	88.6	68.2	5.08	106.0	17.5	111.2	6.62	88.6	104.7	4.9
90	10.50	0.9	2.1	80.0	64.2	6.44	102.0	12.4	112.6	6.66	89.9	105.1	5.0
	15.75	1.8	4.1	82.9	65.6	5.98	103.3	13.9	117.6	6.80	94.4	106.8	5.1
	21.00	2.9	6.6	84.4	66.3	5.75	104.0	14.7	120.1	6.88	96.6	107.6	5.1
100	10.50	0.9	2.1	75.7	62.0	7.18	100.3	10.5	Operation Not Recommended				
	15.75	1.7	4.0	78.5	63.4	6.70	101.4	11.7					
	21.00	2.8	6.5	79.9	64.1	6.46	102.0	12.4					
110	10.50	0.9	2.0	71.8	60.0	7.96	99.0	9.0					
	15.75	1.6	3.7	74.2	61.2	7.46	99.7	9.9					
	21.00	2.7	6.3	75.6	61.9	7.22	100.2	10.5					
120	10.50	0.8	1.9	68.5	58.4	8.77	98.4	7.8					
	15.75	1.4	3.3	70.5	59.3	8.26	98.6	8.5					
	21.00	2.6	6.1	71.6	59.9	8.01	98.9	8.9					

Notes:
- Interpolation is permissible, extrapolation is not.
- All entering air conditions are 80°F (26.6°C) DB and 67°F (19.4°C) WB in cooling, and 70°F (21°C) DB in heating.
- AHRI/ISO certified conditions are 80.6°F (27°C) DB and 66.2°F (19°C) WB in cooling and 68°F (20°C) DB in heating.
- Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
- All performance data is based on the lower voltage of dual voltage units.
- Performance stated is at the rated power supply; performance may vary as the power supply varies from the rated.
- Operation below 40°F EWT is based on a 15% methanol antifreeze solution.
- Operation below 60°F EWT requires optional insulated water/refrigerant circuit.
- See performance correction tables for operating conditions other than those listed above.
- See Performance Data Selection Notes for operation in the shaded areas.

6,400 CFM Rated Airflow

EWT °F	WPD			Cooling - EAT 80/67°F								Heating - EAT 70°F									
						3-Phase Std Motor			VFD			3-Phase Std Motor					VFD				
	FLOW GPM	PSI	FT	TC	SC	Power kW	HR	EER	Power kW	HR	EER	HC	Power kW	HE	LAT	COP	HC	Power kW	HE	LAT	COP
20	Operation Not Recommended																				
30	24.00	2.2	5.0	209.8	154.7	8.30	238.1	25.3	8.29	238.1	25.3	133.0	11.9	92.6	87.2	3.3	133.0	11.85	92.6	87.2	3.3
	36.00	4.8	11.0	207.4	151.9	7.94	234.5	26.1	7.94	234.5	26.1	138.0	12.0	97.2	87.9	3.4	138.0	11.95	97.2	87.9	3.4
	48.00	7.4	17.0	205.5	150.0	7.81	232.1	26.3	7.80	232.1	26.3	140.7	12.0	99.7	88.3	3.4	140.7	12.01	99.7	88.3	3.4
40	24.00	2.1	4.8	210.2	156.9	9.02	241.0	23.3	9.02	240.9	23.3	152.2	12.2	110.4	90.0	3.6	152.2	12.24	110.4	90.0	3.6
	36.00	4.5	10.5	210.4	155.7	8.52	239.4	24.7	8.51	239.4	24.7	158.8	12.4	116.5	90.9	3.8	158.8	12.38	116.5	90.9	3.8
	48.00	7.0	16.1	209.8	154.7	8.30	238.2	25.3	8.30	238.1	25.3	162.4	12.5	119.9	91.4	3.8	162.4	12.45	119.9	91.4	3.8
50	24.00	2.0	4.7	207.3	157.0	9.93	241.2	20.9	9.93	241.2	20.9	173.0	12.7	129.8	93.0	4.0	173.0	12.67	129.8	93.0	4.0
	36.00	4.4	10.1	209.5	157.1	9.30	241.3	22.5	9.30	241.3	22.5	181.2	12.8	137.4	94.2	4.1	181.2	12.84	137.4	94.2	4.1
	48.00	6.7	15.4	210.2	156.9	9.02	241.0	23.3	9.01	240.9	23.3	185.8	12.9	141.6	94.8	4.2	185.8	12.93	141.6	94.8	4.2
60	24.00	2.0	4.6	201.9	155.4	11.01	239.5	18.3	11.00	239.5	18.4	194.8	13.1	150.0	96.1	4.4	194.8	13.11	150.0	96.1	4.4
	36.00	4.2	9.8	205.8	156.6	10.27	240.8	20.0	10.26	240.8	20.0	204.5	13.3	159.1	97.5	4.5	204.5	13.31	159.1	97.5	4.5
	48.00	6.5	15.0	207.3	157.0	9.93	241.2	20.9	9.92	241.2	20.9	209.8	13.4	164.0	98.3	4.6	209.8	13.42	164.0	98.3	4.6
70	24.00	2.0	4.5	194.7	152.6	12.23	236.4	15.9	12.23	236.4	15.9	216.8	13.6	170.5	99.3	4.7	216.8	13.56	170.5	99.3	4.7
	36.00	4.2	9.6	199.7	154.6	11.41	238.6	17.5	11.40	238.6	17.5	227.8	13.8	180.8	100.9	4.8	227.8	13.77	180.8	100.9	4.8
	48.00	6.4	14.7	201.9	155.4	11.01	239.5	18.3	11.01	239.5	18.3	233.7	13.9	186.3	101.7	4.9	233.7	13.88	186.3	101.7	4.9
80	24.00	1.9	4.5	186.2	148.8	13.60	232.6	13.7	13.59	232.6	13.7	238.5	14.0	190.8	102.4	5.0	238.5	13.97	190.8	102.4	5.0
	36.00	4.1	9.5	191.9	151.4	12.69	235.2	15.1	12.69	235.2	15.1	250.2	14.2	201.8	104.1	5.2	250.2	14.19	201.8	104.1	5.2
	48.00	6.3	14.4	194.6	152.5	12.25	236.4	15.9	12.25	236.4	15.9	256.4	14.3	207.6	105.0	5.3	256.4	14.30	207.6	105.0	5.3
90	24.00	1.9	4.4	177.0	144.5	15.09	228.4	11.7	15.08	228.4	11.7	259.1	14.3	210.1	105.4	5.3	259.1	14.34	210.1	105.4	5.3
	36.00	4.0	9.3	183.0	147.3	14.12	231.1	13.0	14.11	231.1	13.0	270.9	14.5	221.3	107.1	5.5	270.9	14.54	221.3	107.1	5.5
	48.00	6.2	14.3	185.9	148.7	13.64	232.5	13.6	13.64	232.5	13.6	277.0	14.6	227.1	108.0	5.5	277.0	14.63	227.1	108.0	5.5
100	24.00	1.9	4.3	167.5	139.9	16.69	224.4	10.0	16.69	224.4	10.0	Operation Not Recommended									
	36.00	4.0	9.2	173.5	142.8	15.67	226.9	11.1	15.66	226.9	11.1										
	48.00	6.1	14.0	176.5	144.3	15.16	228.2	11.6	15.16	228.2	11.6										
110	24.00	1.8	4.2	158.3	135.5	18.41	221.1	8.6	18.41	221.1	8.6										
	36.00	3.9	9.0	163.9	138.2	17.33	223.1	9.5	17.33	223.0	9.5										
	48.00	5.9	13.7	166.9	139.6	16.80	224.2	9.9	16.80	224.2	9.9										
120	24.00	1.7	4.0	149.9	131.6	20.23	218.9	7.4	20.23	218.9	7.4										
	36.00	3.7	8.6	154.9	133.9	19.11	220.1	8.1	19.10	220.1	8.1										
	48.00	5.7	13.2	157.6	135.1	18.55	220.9	8.5	18.55	220.8	8.5										

Notes:
- Interpolation is permissible, extrapolation is not.
- All entering air conditions are 80°F (26.6°C) DB and 67°F (19.4°C) WB in cooling, and 70°F (21°C) DB in heating.
- AHRI/ISO certified conditions are 80.6°F (27°C) DB and 66.2°F (19°C) WB in cooling and 68°F (20°C) DB in heating.
- Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
- All performance data is based on the lower voltage of dual voltage units.
- Performance stated is at the rated power supply; performance may vary as the power supply varies from the rated.
- Operation below 40°F EWT is based on a 15% methanol antifreeze solution.
- Operation below 60°F EWT requires optional insulated water/refrigerant circuit.
- See performance correction tables for operating conditions other than those listed above.
- See Performance Data Selection Notes for operation in the shaded areas.

3,200 CFM Rated Airflow

EWT °F	WPD			Cooling - EAT 80/67°F					Heating - EAT 70°F				
						VFD				VFD			
	FLOW GPM	PSI	FT	TC	SC	Power kW	HR	EER	HC	Power kW	HE	LAT	COP
20	Operation Not Recommended												
30	12.00	2.0	4.5	99.7	77.1	3.23	110.7	30.9	62.1	5.43	43.6	85.9	3.4
	18.00	4.1	9.4	94.5	73.5	2.88	104.3	32.9	64.6	5.48	45.9	86.6	3.5
	24.00	6.2	14.3	91.3	71.3	2.71	100.5	33.7	65.9	5.51	47.1	87.0	3.5
40	12.00	1.8	4.2	104.0	80.3	3.81	117.0	27.3	71.7	5.63	52.5	88.7	3.7
	18.00	3.8	8.7	101.9	78.7	3.45	113.6	29.6	74.6	5.70	55.2	89.5	3.8
	24.00	5.7	13.2	100.2	77.5	3.27	111.4	30.6	76.2	5.73	56.6	90.0	3.9
50	12.00	1.7	4.0	104.2	81.1	4.38	119.2	23.8	81.2	5.84	61.3	91.4	4.1
	18.00	3.6	8.2	104.5	80.8	4.01	118.1	26.1	84.6	5.91	64.5	92.4	4.2
	24.00	5.4	12.4	104.0	80.4	3.82	117.1	27.2	86.4	5.94	66.1	92.9	4.3
60	12.00	1.7	3.8	101.9	80.2	4.96	118.8	20.5	90.6	6.03	70.0	94.2	4.4
	18.00	3.4	7.8	103.7	80.9	4.57	119.3	22.7	94.4	6.11	73.6	95.3	4.5
	24.00	5.1	11.9	104.2	81.1	4.38	119.2	23.8	96.4	6.15	75.4	95.8	4.6
70	12.00	1.6	3.7	97.8	78.3	5.56	116.7	17.6	99.8	6.22	78.6	96.8	4.7
	18.00	3.3	7.6	100.6	79.7	5.16	118.2	19.5	103.9	6.31	82.4	98.0	4.8
	24.00	5.0	11.5	101.8	80.2	4.96	118.8	20.5	106.0	6.35	84.4	98.6	4.9
80	12.00	1.6	3.7	92.7	75.8	6.21	113.9	14.9	108.6	6.40	86.8	99.4	5.0
	18.00	3.2	7.4	96.1	77.5	5.79	115.8	16.6	112.9	6.49	90.7	100.6	5.1
	24.00	4.9	11.2	97.6	78.3	5.58	116.7	17.5	115.1	6.53	92.8	101.2	5.2
90	12.00	1.6	3.6	87.4	73.0	6.91	111.0	12.7	116.9	6.57	94.5	101.8	5.2
	18.00	3.2	7.3	90.7	74.8	6.46	112.8	14.0	121.2	6.65	98.5	103.0	5.3
	24.00	4.8	11.0	92.5	75.6	6.24	113.8	14.8	123.4	6.70	100.5	103.6	5.4
100	12.00	1.5	3.5	82.3	70.4	7.68	108.5	10.7	Operation Not Recommended				
	18.00	3.1	7.2	85.3	71.9	7.20	109.9	11.9					
	24.00	4.7	10.8	87.0	72.8	6.96	110.7	12.5					
110	12.00	1.5	3.4	78.2	68.4	8.55	107.4	9.1					
	18.00	3.0	7.0	80.5	69.5	8.02	107.9	10.0					
	24.00	4.6	10.6	81.9	70.1	7.76	108.3	10.6					
120	12.00	1.4	3.2	75.8	68.0	9.55	108.4	7.9					
	18.00	2.9	6.7	77.0	68.0	8.93	107.5	8.6					
	24.00	4.4	10.2	77.8	68.3	8.65	107.4	9.0					

Notes:
- Interpolation is permissible, extrapolation is not.
- All entering air conditions are 80°F (26.6°C) DB and 67°F (19.4°C) WB in cooling, and 70°F (21°C) DB in heating.
- AHRI/ISO certified conditions are 80.6°F (27°C) DB and 66.2°F (19°C) WB in cooling and 68°F (20°C) DB in heating.
- Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
- All performance data is based on the lower voltage of dual voltage units.
- Performance stated is at the rated power supply; performance may vary as the power supply varies from the rated.
- Operation below 40°F EWT is based on a 15% methanol antifreeze solution.
- Operation below 60°F EWT requires optional insulated water/refrigerant circuit.
- See performance correction tables for operating conditions other than those listed above.
- See Performance Data Selection Notes for operation in the shaded areas.

8,000 CFM Rated Airflow

EWT °F	WPD			Cooling - EAT 80/67°F								Heating - EAT 70°F									
						3-Phase Std Motor			VFD			3-Phase Std Motor					VFD				
	FLOW GPM	PSI	FT	TC	SC	Power kW	HR	EER	Power kW	HR	EER	HC	Power kW	HE	LAT	COP	HC	Power kW	HE	LAT	COP
20	Operation Not Recommended																				
30	30.00	1.8	4.2	249.6	187.5	11.51	288.9	21.7	11.33	288.2	22.0	162.5	16.2	107.1	86.8	2.9	161.8	16.04	107.1	86.7	3.0
	45.00	4.2	9.6	245.1	185.1	10.84	282.1	22.6	10.66	281.5	23.0	167.4	16.2	112.1	87.3	3.0	166.8	16.01	112.1	87.3	3.1
	60.00	6.5	15.1	242.1	183.5	10.53	278.1	23.0	10.35	277.4	23.4	170.2	16.2	115.0	87.7	3.1	169.6	16.01	115.0	87.6	3.1
40	30.00	1.7	3.8	252.7	189.3	12.64	295.8	20.0	12.46	295.2	20.3	184.8	16.3	129.0	89.3	3.3	184.1	16.15	129.0	89.3	3.3
	45.00	3.9	8.9	251.2	188.4	11.90	291.8	21.1	11.72	291.2	21.4	192.7	16.5	136.5	90.3	3.4	192.1	16.28	136.5	90.2	3.5
	60.00	6.1	14.0	249.8	187.6	11.55	289.2	21.6	11.37	288.6	22.0	197.2	16.6	140.7	90.8	3.5	196.6	16.37	140.7	90.7	3.5
50	30.00	1.6	3.6	251.6	189.0	13.87	298.9	18.1	13.68	298.3	18.4	212.5	16.9	154.8	92.5	3.7	211.9	16.72	154.8	92.5	3.7
	45.00	3.6	8.4	252.8	189.4	13.05	297.3	19.4	12.86	296.6	19.6	223.6	17.2	164.9	93.8	3.8	222.9	17.01	164.9	93.7	3.8
	60.00	5.7	13.2	252.7	189.3	12.66	295.9	20.0	12.48	295.3	20.3	229.8	17.4	170.6	94.5	3.9	229.2	17.19	170.6	94.5	3.9
60	30.00	1.5	3.5	247.0	187.2	15.22	298.9	16.2	15.03	298.3	16.4	243.5	17.8	182.9	96.1	4.0	242.9	17.58	182.9	96.1	4.0
	45.00	3.5	8.0	250.4	188.5	14.31	299.2	17.5	14.12	298.6	17.7	257.6	18.2	195.6	97.7	4.2	257.0	18.00	195.6	97.7	4.2
	60.00	5.4	12.6	251.6	189.0	13.87	298.9	18.1	13.69	298.3	18.4	265.5	18.4	202.6	98.7	4.2	264.9	18.24	202.6	98.6	4.3
70	30.00	1.5	3.4	239.6	184.0	16.71	296.6	14.3	16.53	296.0	14.5	276.2	18.8	212.2	99.9	4.3	275.6	18.57	212.2	99.8	4.3
	45.00	3.4	7.8	244.8	186.2	15.70	298.4	15.6	15.52	297.7	15.8	292.7	19.3	227.0	101.8	4.5	292.1	19.07	227.0	101.7	4.5
	60.00	5.3	12.1	247.0	187.1	15.22	298.9	16.2	15.04	298.3	16.4	301.9	19.5	235.2	102.9	4.5	301.2	19.34	235.2	102.8	4.6
80	30.00	1.5	3.4	229.9	179.9	18.37	292.5	12.5	18.19	291.9	12.6	308.8	19.7	241.5	103.7	4.6	308.2	19.55	241.5	103.6	4.6
	45.00	3.3	7.6	236.5	182.7	17.26	295.4	13.7	17.08	294.7	13.8	326.9	20.2	257.9	105.7	4.7	326.3	20.05	257.9	105.7	4.8
	60.00	5.1	11.8	239.5	184.0	16.73	296.5	14.3	16.55	295.9	14.5	336.5	20.5	266.7	106.9	4.8	335.9	20.30	266.7	106.8	4.9
90	30.00	1.4	3.3	218.3	174.7	20.23	287.3	10.8	20.05	286.7	10.9	339.8	20.6	269.7	107.2	4.8	339.2	20.38	269.7	107.2	4.9
	45.00	3.2	7.4	225.9	178.1	19.01	290.8	11.9	18.83	290.2	12.0	358.0	20.9	286.5	109.3	5.0	357.4	20.76	286.5	109.3	5.0
	60.00	5.0	11.6	229.6	179.7	18.42	292.4	12.5	18.24	291.8	12.6	367.1	21.1	295.2	110.4	5.1	366.5	20.90	295.2	110.3	5.1
100	30.00	1.4	3.2	205.3	168.8	22.31	281.5	9.2	22.12	280.8	9.3	Operation Not Recommended									
	45.00	3.2	7.3	213.7	172.6	20.97	285.2	10.2	20.78	284.6	10.3										
	60.00	4.9	11.4	217.7	174.5	20.32	287.1	10.7	20.14	286.4	10.8										
110	30.00	1.3	2.9	191.4	162.1	24.63	275.4	7.8	24.45	274.8	7.8										
	45.00	3.1	7.1	200.1	166.3	23.16	279.1	8.6	22.98	278.5	8.7										
	60.00	4.8	11.2	204.5	168.3	22.45	281.1	9.1	22.27	280.4	9.2										
120	30.00	1.1	2.5	176.8	154.7	27.23	269.7	6.5	27.05	269.0	6.5										
	45.00	2.9	6.7	185.7	159.2	25.62	273.1	7.2	25.44	272.5	7.3										
	60.00	4.7	10.9	190.1	161.5	24.84	274.9	7.7	24.66	274.3	7.7										

Notes:
- Interpolation is permissible, extrapolation is not.
- All entering air conditions are 80°F (26.6°C) DB and 67°F (19.4°C) WB in cooling, and 70°F (21°C) DB in heating.
- AHRI/ISO certified conditions are 80.6°F (27°C) DB and 66.2°F (19°C) WB in cooling and 68°F (20°C) DB in heating.
- Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
- All performance data is based on the lower voltage of dual voltage units.
- Performance stated is at the rated power supply; performance may vary as the power supply varies from the rated.
- Operation below 40°F EWT is based on a 15% methanol antifreeze solution.
- Operation below 60°F EWT requires optional insulated water/refrigerant circuit.
- See performance correction tables for operating conditions other than those listed above.
- See Performance Data Selection Notes for operation in the shaded areas.

4,000 CFM Rated Airflow

EWT °F	WPD			Cooling - EAT 80/67°F					Heating - EAT 70°F				
	FLOW GPM	PSI	FT	TC	SC	VFD Power kW	VFD HR	VFD EER	VFD HC	VFD Power kW	VFD HE	VFD LAT	VFD COP
20	Operation Not Recommended												
30	15.00	1.5	3.5	125.7	95.1	4.77	142.0	26.4	80.4	7.53	54.7	86.6	3.1
	22.50	3.2	7.5	122.6	92.6	4.48	137.8	27.4	83.3	7.58	57.5	87.2	3.2
	30.00	5.0	11.5	120.5	91.0	4.35	135.3	27.7	85.0	7.62	59.0	87.6	3.3
40	15.00	1.4	3.2	127.9	97.2	5.29	146.0	24.2	92.5	7.76	66.1	89.4	3.5
	22.50	3.0	6.9	126.9	96.1	4.95	143.8	25.6	96.6	7.84	69.8	90.3	3.6
	30.00	4.6	10.7	125.9	95.2	4.79	142.3	26.3	98.8	7.88	71.9	90.8	3.7
50	15.00	1.3	2.9	127.2	97.6	5.88	147.3	21.6	105.9	8.03	78.5	92.5	3.9
	22.50	2.8	6.5	127.9	97.6	5.49	146.7	23.3	111.0	8.13	83.3	93.6	4.0
	30.00	4.4	10.1	127.9	97.3	5.31	146.0	24.1	113.9	8.19	85.9	94.3	4.1
60	15.00	1.2	2.8	124.4	96.7	6.54	146.7	19.0	120.0	8.32	91.6	95.7	4.2
	22.50	2.7	6.2	126.4	97.5	6.10	147.2	20.7	126.2	8.46	97.4	97.2	4.4
	30.00	4.2	9.6	127.2	97.6	5.89	147.3	21.6	129.7	8.54	100.5	97.9	4.5
70	15.00	1.2	2.7	120.1	94.9	7.26	144.9	16.5	134.5	8.65	105.0	99.1	4.6
	22.50	2.6	6.0	123.0	96.2	6.78	146.2	18.1	141.7	8.82	111.7	100.7	4.7
	30.00	4.0	9.2	124.3	96.7	6.55	146.7	19.0	145.7	8.91	115.3	101.7	4.8
80	15.00	1.1	2.6	114.7	92.4	8.07	142.3	14.2	149.1	8.99	118.4	102.4	4.9
	22.50	2.5	5.8	118.2	94.1	7.54	144.0	15.7	157.1	9.20	125.8	104.3	5.0
	30.00	3.9	8.9	119.9	94.8	7.29	144.8	16.4	161.5	9.31	129.7	105.3	5.1
90	15.00	1.1	2.6	108.8	89.5	8.96	139.4	12.1	163.4	9.36	131.5	105.7	5.1
	22.50	2.4	5.6	112.6	91.4	8.39	141.2	13.4	172.0	9.59	139.2	107.7	5.3
	30.00	3.8	8.7	114.4	92.3	8.11	142.1	14.1	176.5	9.72	143.3	108.8	5.3
100	15.00	1.1	2.6	102.7	86.6	9.95	136.6	10.3	Operation Not Recommended				
	22.50	2.4	5.5	106.4	88.4	9.33	138.3	11.4					
	30.00	3.7	8.5	108.3	89.3	9.03	139.1	12.0					
110	15.00	1.1	2.5	96.8	83.8	11.04	134.5	8.8					
	22.50	2.4	5.4	100.3	85.4	10.37	135.7	9.7					
	30.00	3.6	8.3	102.1	86.3	10.04	136.4	10.2					
120	15.00	1.1	2.5	91.6	81.6	12.26	133.5	7.5					
	22.50	2.3	5.3	94.6	82.8	11.52	133.9	8.2					
	30.00	3.5	8.1	96.2	83.5	11.16	134.3	8.6					

Notes:
- Interpolation is permissible, extrapolation is not.
- All entering air conditions are 80°F (26.6°C) DB and 67°F (19.4°C) WB in cooling, and 70°F (21°C) DB in heating.
- AHRI/ISO certified conditions are 80.6°F (27°C) DB and 66.2°F (19°C) WB in cooling and 68°F (20°C) DB in heating.
- Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
- All performance data is based on the lower voltage of dual voltage units.
- Performance stated is at the rated power supply; performance may vary as the power supply varies from the rated.
- Operation below 40°F EWT is based on a 15% methanol antifreeze solution.
- Operation below 60°F EWT requires optional insulated water/refrigerant circuit.
- See performance correction tables for operating conditions other than those listed above.
- See Performance Data Selection Notes for operation in the shaded areas.

10,000 CFM Rated Airflow

EWT °F	WPD			Cooling - EAT 80/67°F					Heating - EAT 70°F				
						VFD				VFD			
	FLOW GPM	PSI	FT	TC	SC	Power kW	HR	EER	HC	Power kW	HE	LAT	COP
20	Operation Not Recommended												
30	37.50	2.4	5.5	335.7	253.1	16.9	393.5	20.0	212.2	22.7	134.6	89.2	2.7
	56.25	5.4	12.4	334.0	256.5	16.7	390.9	19.9	221.7	22.9	143.6	90.1	2.8
	75.00	8.4	19.4	332.0	258.3	16.7	388.8	19.4	226.9	23.0	148.5	90.9	2.9
40	37.50	2.2	5.0	333.6	247.9	17.7	394.2	18.8	249.4	23.4	169.7	92.7	3.1
	56.25	4.9	11.3	335.6	251.4	17.1	394.1	19.5	261.5	23.6	181.0	93.7	3.2
	75.00	7.6	17.6	335.7	253.5	16.9	393.4	19.9	268.2	23.7	187.2	94.6	3.3
50	37.50	2.0	4.6	327.1	242.7	19.0	391.9	16.3	287.2	24.1	204.8	96.2	3.5
	56.25	4.5	10.4	332.1	246.4	18.1	393.8	17.6	302.0	24.5	218.5	97.2	3.6
	75.00	7.0	16.2	333.9	248.1	17.7	394.2	18.8	310.2	24.6	226.1	98.3	3.7
60	37.50	1.9	4.3	317.0	237.5	20.6	387.5	16.3	325.4	25.0	240.1	99.7	3.8
	56.25	4.2	9.8	324.3	241.3	19.5	390.7	16.8	342.9	25.4	256.2	101.0	3.9
	75.00	6.6	15.2	327.5	243.0	18.9	392.0	17.2	352.6	25.7	265.1	102.3	4.0
70	37.50	1.8	4.1	304.3	232.2	22.6	381.6	13.3	364.0	25.9	275.5	103.2	4.1
	56.25	4.0	9.3	313.3	235.9	21.2	385.8	14.3	384.2	26.4	294.1	104.8	4.2
	75.00	6.3	14.5	317.4	237.7	20.6	387.6	15.4	395.5	26.7	304.4	106.4	4.3
80	37.50	1.7	4.0	289.9	226.1	24.9	374.9	12.8	402.8	26.9	311.1	106.7	4.4
	56.25	3.9	9.0	299.8	230.2	23.3	379.5	13.8	425.8	27.4	332.2	108.4	4.5
	75.00	6.1	14.0	304.6	232.1	22.6	381.7	14.8	438.6	27.7	344.0	110.1	4.6
90	37.50	1.7	3.9	274.3	219.7	27.4	367.9	12.2	441.8	27.8	347.0	110.3	4.6
	56.25	3.8	8.8	284.7	224.0	25.7	372.5	13.2	467.6	28.4	370.8	112.1	4.8
	75.00	5.9	13.7	289.8	226.1	24.9	374.9	14.2	481.9	28.7	384.0	113.9	4.9
100	37.50	1.7	3.8	258.4	212.9	30.2	361.3	8.5	Operation Not Recommended				
	56.25	3.7	8.6	268.7	217.4	28.4	365.5	9.2					
	75.00	5.8	13.4	274.0	219.7	27.5	367.8	9.9					
110	37.50	1.6	3.7	242.8	205.7	33.1	355.7	8.2					
	56.25	3.6	8.4	252.7	210.2	31.2	359.2	8.8					
	75.00	5.7	13.1	257.8	212.7	30.3	361.1	9.6					
120	37.50	1.5	3.5	228.5	198.5	36.1	351.8	6.3					
	56.25	3.5	8.1	237.3	202.9	34.2	354.0	6.8					
	75.00	5.5	12.7	242.1	205.3	33.2	355.5	7.3					

Notes:
- Interpolation is permissible, extrapolation is not.
- All entering air conditions are 80°F (26.6°C) DB and 67°F (19.4°C) WB in cooling, and 70°F (21°C) DB in heating.
- AHRI/ISO certified conditions are 80.6°F (27°C) DB and 66.2°F (19°C) WB in cooling and 68°F (20°C) DB in heating.
- Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
- All performance data is based on the lower voltage of dual voltage units.
- Performance stated is at the rated power supply; performance may vary as the power supply varies from the rated.
- Operation below 40°F EWT is based on a 15% methanol antifreeze solution.
- Operation below 60°F EWT requires optional insulated water/refrigerant circuit.
- See performance correction tables for operating conditions other than those listed above.
- See Performance Data Selection Notes for operation in the shaded areas.

5,000 CFM Rated Airflow

EWT °F	WPD			Cooling - EAT 80/67°F					Heating - EAT 70°F				
						VFD				VFD			
	FLOW GPM	PSI	FT	TC	SC	Power kW	HR	EER	HC	Power kW	HE	LAT	COP
20	Operation Not Recommended												
30	18.75	2.0	4.6	170.5	126.8	6.51	192.7	26.2	106.0	10.04	71.7	87.6	3.1
	28.13	4.3	10.0	172.2	127.5	6.13	193.1	28.1	108.2	10.10	73.8	88.0	3.1
	37.50	6.7	15.4	172.9	127.7	5.96	193.2	29.0	118.3	10.34	83.0	89.9	3.4
40	18.75	1.8	4.2	167.4	125.0	7.17	191.8	23.3	123.7	10.47	87.9	90.8	3.5
	28.13	4.0	9.2	169.6	126.3	6.71	192.5	25.3	126.6	10.54	90.7	91.4	3.5
	37.50	6.1	14.2	170.6	126.8	6.50	192.7	26.3	135.8	10.76	99.1	93.1	3.7
50	18.75	1.7	3.8	163.5	122.6	7.94	190.6	20.6	142.6	10.92	105.3	94.3	3.8
	28.13	3.7	8.5	166.2	124.3	7.41	191.5	22.4	146.3	11.02	108.8	95.0	3.9
	37.50	5.7	13.2	167.5	125.0	7.15	191.9	23.4	154.1	11.21	115.9	96.5	4.0
60	18.75	1.6	3.6	158.9	119.8	8.83	189.0	18.0	162.3	11.40	123.4	98.0	4.2
	28.13	3.5	8.0	162.1	121.8	8.22	190.1	19.7	166.9	11.51	127.6	98.8	4.2
	37.50	5.4	12.4	163.6	122.7	7.93	190.6	20.6	173.0	11.66	133.2	100.0	4.3
70	18.75	1.5	3.4	153.5	116.8	9.82	187.1	15.6	182.6	11.89	142.0	101.7	4.5
	28.13	3.3	7.6	157.2	118.9	9.14	188.4	17.2	187.9	12.01	146.9	102.7	4.6
	37.50	5.1	11.7	158.9	119.9	8.82	189.0	18.0	192.0	12.11	150.7	103.5	4.6
80	18.75	1.4	3.3	147.5	113.7	10.93	184.8	13.5	202.9	12.36	160.7	105.5	4.8
	28.13	3.2	7.3	151.6	115.8	10.18	186.3	14.9	208.9	12.50	166.2	106.6	4.9
	37.50	4.9	11.3	153.5	116.8	9.83	187.1	15.6	211.0	12.55	168.2	107.0	4.9
90	18.75	1.4	3.2	140.7	110.5	12.15	182.1	11.6	222.9	12.82	179.2	109.2	5.1
	28.13	3.1	7.1	145.2	112.6	11.34	183.9	12.8	229.4	12.96	185.2	110.4	5.2
	37.50	4.7	10.9	147.4	113.6	10.95	184.7	13.5	223.5	13.00	180.8	110.6	5.2
100	18.75	1.4	3.2	133.1	107.3	13.48	179.1	9.9	Operation Not Recommended				
	28.13	3.0	6.9	138.1	109.4	12.61	181.1	10.9					
	37.50	4.6	10.6	140.4	110.4	12.19	182.0	11.5					
110	18.75	1.3	3.0	124.9	104.1	14.92	175.8	8.4					
	28.13	2.9	6.7	130.2	106.2	14.00	177.9	9.3					
	37.50	4.5	10.4	132.8	107.2	13.54	179.0	9.8					
120	18.75	1.2	2.9	115.9	100.8	16.47	172.1	7.0					
	28.13	2.8	6.5	121.6	102.9	15.49	174.4	7.8					
	37.50	4.4	10.1	124.3	103.9	15.01	175.6	8.3					

Notes:
- Interpolation is permissible, extrapolation is not.
- All entering air conditions are 80°F (26.6°C) DB and 67°F (19.4°C) WB in cooling, and 70°F (21°C) DB in heating.
- AHRI/ISO certified conditions are 80.6°F (27°C) DB and 66.2°F (19°C) WB in cooling and 68°F (20°C) DB in heating.
- Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
- All performance data is based on the lower voltage of dual voltage units.
- Performance stated is at the rated power supply; performance may vary as the power supply varies from the rated.
- Operation below 40°F EWT is based on a 15% methanol antifreeze solution.
- Operation below 60°F EWT requires optional insulated water/refrigerant circuit.
- See performance correction tables for operating conditions other than those listed above.
- See Performance Data Selection Notes for operation in the shaded areas.

SB Performance Data: Correction Tables

Airflow Correction Table

Percent of Rated Airflow	Total Capacity	Sensible	Power	Heat of Rejection	Heating Capacity	Power	eat of Extraction
75%	0.962	0.869	0.947	0.959	0.959	1.039	0.962
81%	0.975	0.902	0.960	0.972	0.970	1.024	0.973
88%	0.988	0.934	0.972	0.984	0.981	1.009	0.985
94%	0.994	0.967	0.986	0.992	0.990	1.004	0.992
100%	1.000	1.000	1.000	1.000	1.000	1.000	1.000
106%	1.007	1.028	1.014	1.009	1.010	1.000	1.005
113%	1.014	1.056	1.028	1.017	1.020	1.001	1.010
119%	1.019	1.083	1.046	1.024	1.036	1.008	1.013
125%	1.023	1.109	1.063	1.031	1.051	1.015	1.016

SB Entering Air Correction Table Cooling

Entering Air WB°F	Total Capacity	Sensible Cooling Capacity Multiplier - Entering DB °F								Power	Heat of Rejection
		60	65	70	75	80	80.6	85	90	95	
50	0.7335	0.8825	*	*	*	*	*	*	*	*	0.9782	0.7834
55	0.8063	0.6757	0.8842	1.1119	*	*	*	*	*	*	0.9836	0.8424
60	0.8830		0.6734	0.8817	1.0918	*	*	*	*	*	0.9900	0.9301
65	0.9774			0.6682	0.8764	1.0885	1.1136	1.2949	*	*	0.9973	0.9981
66.2	0.9851			0.6177	0.8243	1.0357	1.0612	1.2452	*	*	0.9987	0.9879
67	1.0000			0.5842	0.7897	1.0000	1.0262	1.2119	*	*	1.0000	1.0000
70	1.0426				0.6609	0.8688	0.8941	1.0811	1.2916	*	1.0043	1.0420
75	1.1386					0.6517	0.6517	0.8594	1.0695	1.2838	1.0118	1.1128

* = Sensible capacity equals total capacity.
AHRI/ISO/ASHRAE 13256-1 uses entering air conditions of Cooling - 80.6°F DB/66.2°F WB, 1 and Heating - 68°F DB/59°F WB entering air temperature

Entering Air Correction Table

Entering Air DB °F	Heating Capacity	Power	Heat of Extraction
50	1.040	0.839	1.101
55	1.030	0.883	1.075
60	1.018	0.920	1.053
65	1.008	0.960	1.026
68	1.001	0.984	1.011
70	1.000	1.000	1.000
75	0.978	1.038	0.979
80	0.968	1.091	0.943

Wet Coil to Dry Coil Conversion Table

Required BHP Multiplier	Required RPM Multiplier	Air Coil Face Velocity
1.00	1.00	240
1.00	1.00	305
0.99	1.00	370
0.99	1.00	435
0.98	1.00	500
0.98	1.00	565

Antifreeze Correction Table

EWT (°F)	Antifreeze Type	Antifreeze %	Cooling			Heating		WPD
			Total Cap	Sensible Cap	Watts	Total Cap	Watts	
90	Water	0%	1.000	1.000	1.000	1.000	1.000	1.000
	Ethanol	5%	0.998	0.998	1.002	0.996	0.999	1.025
		10%	0.996	0.996	1.003	0.991	0.997	1.048
		15%	0.994	0.994	1.005	0.987	0.996	1.098
		20%	0.991	0.991	1.006	0.982	0.994	1.142
		25%	0.986	0.986	1.009	0.972	0.991	1.207
		30%	0.981	0.981	1.012	0.962	0.988	1.265
		35%	0.977	0.977	1.015	0.953	0.985	1.312
		40%	0.972	0.972	1.018	0.943	0.982	1.370
		45%	0.966	0.966	1.023	0.931	0.978	1.431
		50%	0.959	0.959	1.027	0.918	0.974	1.494
	Ethylene Glycol	5%	0.998	0.998	1.002	0.996	0.999	1.021
		10%	0.996	0.996	1.003	0.991	0.997	1.040
		15%	0.994	0.994	1.004	0.987	0.996	1.079
		20%	0.991	0.991	1.005	0.982	0.995	1.114
		25%	0.988	0.988	1.008	0.976	0.993	1.146
		30%	0.985	0.985	1.010	0.969	0.990	1.175
		35%	0.982	0.982	1.012	0.963	0.988	1.208
		40%	0.979	0.979	1.014	0.956	0.986	1.243
		45%	0.976	0.976	1.016	0.950	0.984	1.278
		50%	0.972	0.972	1.018	0.943	0.982	1.314
	Methanol	5%	0.997	0.997	1.002	0.993	0.998	1.039
		10%	0.993	0.993	1.004	0.986	0.996	1.075
		15%	0.990	0.990	1.007	0.979	0.994	1.116
		20%	0.986	0.986	1.009	0.972	0.991	1.154
		25%	0.982	0.982	1.012	0.964	0.989	1.189
		30%	0.978	0.978	1.014	0.955	0.986	1.221
		35%	0.974	0.974	1.017	0.947	0.984	1.267
		40%	0.970	0.970	1.020	0.939	0.981	1.310
		45%	0.966	0.966	1.023	0.930	0.978	1.353
		50%	0.961	0.961	1.026	0.920	0.975	1.398
	Propylene Glycol	5%	0.995	0.995	1.003	0.990	0.997	1.065
		10%	0.990	0.990	1.006	0.980	0.994	1.119
		15%	0.986	0.986	1.009	0.971	0.991	1.152
		20%	0.981	0.981	1.012	0.962	0.988	1.182
		25%	0.978	0.978	1.014	0.956	0.986	1.227
		30%	0.975	0.975	1.016	0.950	0.984	1.267
		35%	0.972	0.972	1.018	0.944	0.982	1.312
		40%	0.969	0.969	1.020	0.938	0.980	1.356
		45%	0.965	0.965	1.023	0.929	0.977	1.402
		50%	0.960	0.960	1.026	0.919	0.974	1.450

Table continued on next page

Antifreeze Correction Table

Table continued from previous page

EWT (°F)	Antifreeze Type	Antifreeze %	Cooling			Heating		WPD
			Total Cap	Sensible Cap	Watts	Total Cap	Watts	
30	Water	0%	1.000	1.000	1.000	1.000	1.000	1.000
	Ethanol	5%	0.991	0.991	1.006	0.981	0.994	1.140
		10%	0.981	0.981	1.012	0.961	0.988	1.242
		15%	0.973	0.973	1.018	0.944	0.983	1.295
		20%	0.964	0.964	1.024	0.927	0.977	1.343
		25%	0.959	0.959	1.028	0.917	0.974	1.363
		30%	0.954	0.954	1.031	0.907	0.970	1.383
		35%	0.949	0.949	1.035	0.897	0.967	1.468
		40%	0.944	0.944	1.038	0.887	0.964	1.523
		45%	0.940	0.940	1.041	0.880	0.962	1.580
		50%	0.936	0.936	1.043	0.872	0.959	1.639
	Ethylene Glycol	5%	0.997	0.997	1.002	0.993	0.998	1.040
		10%	0.993	0.993	1.004	0.986	0.996	1.075
		15%	0.990	0.990	1.006	0.980	0.994	1.122
		20%	0.987	0.987	1.008	0.973	0.992	1.163
		25%	0.983	0.983	1.011	0.966	0.990	1.195
		30%	0.979	0.979	1.013	0.958	0.987	1.225
		35%	0.976	0.976	1.016	0.951	0.985	1.279
		40%	0.972	0.972	1.018	0.943	0.982	1.324
		45%	0.969	0.969	1.021	0.937	0.980	1.371
		50%	0.966	0.966	1.023	0.930	0.978	1.419
	Methanol	5%	0.995	0.995	1.004	0.989	0.997	1.069
		10%	0.989	0.989	1.007	0.978	0.993	1.127
		15%	0.984	0.984	1.011	0.968	0.990	1.164
		20%	0.979	0.979	1.014	0.957	0.986	1.197
		25%	0.975	0.975	1.017	0.949	0.984	1.216
		30%	0.971	0.971	1.019	0.941	0.981	1.235
		35%	0.967	0.967	1.022	0.933	0.979	1.286
		40%	0.963	0.963	1.025	0.924	0.976	1.323
		45%	0.959	0.959	1.028	0.917	0.974	1.360
		50%	0.955	0.955	1.030	0.910	0.971	1.399
	Propylene Glycol	5%	0.995	0.995	1.004	0.989	0.997	1.071
		10%	0.989	0.989	1.007	0.978	0.993	1.130
		15%	0.985	0.985	1.010	0.968	0.990	1.206
		20%	0.980	0.980	1.013	0.958	0.987	1.270
		25%	0.974	0.974	1.017	0.947	0.983	1.359
		30%	0.968	0.968	1.021	0.935	0.979	1.433
		35%	0.963	0.963	1.025	0.924	0.976	1.522
		40%	0.957	0.957	1.029	0.913	0.972	1.614
		45%	0.949	0.949	1.034	0.898	0.967	1.712
		50%	0.941	0.941	1.039	0.882	0.962	1.816

SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
1,800	BHP			0.28	0.32	0.35	0.39	0.42	0.45	0.48	0.52	0.56	0.60	0.64	0.69	0.72	0.76
	Sheave/Mtr			B	B	B	A	A	A	A	A	A	C	C	C	C	C
	RPM			599	645	690	735	775	815	850	885	910	940	965	995	1015	1040
1,900	BHP			0.31	0.36	0.40	0.44	0.49	0.53	2.50	0.62	0.65	0.69	0.73	0.76	0.80	0.84
	Sheave/Mtr			B	B	A	A	A	A	A	A	C	C	C	C	C	C
	RPM			604	655	695	740	780	820	855	890	920	950	980	1005	1030	1055
2,000	BHP		0.31	0.34	0.39	0.45	0.50	0.54	0.59	0.63	0.67	0.72	0.75	0.79	0.82	0.86	0.90
	Sheave/Mtr		B	B	B	A	A	A	A	A	A	C	C	C	C	C	C
	RPM		568	615	660	705	750	785	825	860	895	930	960	990	1015	1040	1065
2,100	BHP	0.33	0.38	0.42	0.46	0.50	0.54	0.59	0.65	0.70	0.74	0.78	0.81	0.85	0.89	0.94	0.98
	Sheave/Mtr	B	B	B	A	A	A	A	A	A	A	C	C	C	C	C	C
	RPM	531	583	630	670	715	755	795	835	875	905	940	970	1000	1025	1055	1080
2,200	BHP	0.37	0.40	0.45	0.49	0.55	0.60	0.65	0.70	0.75	0.79	0.83	0.87	0.92	0.96	1.00	1.04
	Sheave/Mtr	B	B	B	A	A	A	A	A	A	C	C	C	C	C	E	E
	RPM	552	599	645	685	730	770	810	850	885	915	950	980	1010	1040	1065	1090
2,300	BHP	0.42	0.47	0.51	0.56	0.60	0.65	0.70	0.75	0.80	0.84	0.89	0.94	1.00	1.05	1.10	1.16
	Sheave/Mtr	B	B	B	A	A	A	A	A	A	C	C	C	E	E	E	E
	RPM	573	620	660	705	745	785	820	860	895	925	960	990	1020	1050	1075	1105
2,400	BHP	0.48	0.52	0.57	0.61	0.66	0.72	0.78	0.83	0.87	0.92	0.97	1.02	1.07	1.13	1.19	1.25
	Sheave/Mtr	B	B	A	A	A	A	A	A	A	C	C	E	E	E	E	E
	RPM	604	645	690	730	765	805	845	880	910	945	975	1010	1035	1065	1095	1125
2,500	BHP	0.52	0.57	0.61	0.66	0.72	0.78	0.83	0.89	0.94	1.00	1.03	1.08	1.14	1.20	1.25	1.31
	Sheave/Mtr	B	B	A	A	A	A	A	A	C	E	E	E	E	E	E	E
	RPM	620	660	700	740	780	815	850	885	920	950	985	1015	1045	1075	1100	1130
2,600	BHP	0.56	0.61	0.66	0.70	0.76	0.82	0.88	0.93	0.98	1.04	1.08	1.14	1.20	1.26	1.32	1.37
	Sheave/Mtr	B	A	A	A	A	A	A	A	C	E	E	E	E	E	E	E
	RPM	635	675	715	750	790	825	860	895	925	960	990	1020	1050	1080	1110	1135
2,700	BHP	0.61	0.66	0.71	0.76	0.82	0.87	0.93	0.98	1.04	1.10	1.15	1.21	1.27	1.33	1.39	1.45
	Sheave/Mtr	B	A	A	A	A	A	A	A	E	E	E	E	E	E	E	E
	RPM	655	695	730	770	805	840	875	905	940	970	1000	1030	1060	1090	1120	1145
2,800	BHP	0.66	0.72	0.77	0.83	0.88	0.93	0.99	1.05	1.11	1.16	1.22	1.30	1.37	1.44	1.51	1.57
	Sheave/Mtr	B	A	A	A	A	A	A	D	E	E	E	E	E	E	E	E
	RPM	670	710	750	785	815	850	885	915	950	980	1010	1040	1070	1100	1130	1155
2,900	BHP	0.71	0.77	0.82	0.87	0.93	0.98	1.04	1.10	1.16	1.22	1.30	1.36	1.43	1.50	1.57	1.63
	Sheave/Mtr	A	A	A	A	A	A	D	E	E	E	E	E	E	E	E	E
	RPM	685	725	765	795	830	860	895	925	955	985	1020	1045	1075	1105	1135	1160
3,000	BHP	0.79	0.84	0.90	0.95	1.01	1.07	1.13	1.19	1.25	1.31	1.38	1.46	1.52	1.59	1.66	
	Sheave/Mtr	A	A	A	A	A	D	D	E	E	E	E	E	E	E	E	
	RPM	710	745	780	815	850	885	915	945	975	1005	1035	1065	1090	1120	1150	

Notes:
- A, 1 = Standard RPM/Standard Blower Motor
- E, 5 = High RPM/Large Blower Motor
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
1,800	BHP			0.28	0.32	0.35	0.39	0.42	0.45	0.48	0.52	0.56	0.60	0.64	0.69	0.72	0.76
	Discrete Spd Setting			B	B	B	A	A	A	A	A	A	C	C	C	C	C
	RPM			599	645	690	735	775	815	850	885	910	940	965	995	1015	1040
1,900	BHP			0.31	0.36	0.40	0.44	0.49	0.53	2.50	0.62	0.65	0.69	0.73	0.76	0.80	0.84
	Discrete Spd Setting			B	B	A	A	A	A	A	A	C	C	C	C	C	C
	RPM			604	655	695	740	780	820	855	890	920	950	980	1005	1030	1055
2,000	BHP		0.31	0.34	0.39	0.45	0.50	0.54	0.59	0.63	0.67	0.72	0.75	0.79	0.82	0.86	0.90
	Discrete Spd Setting		B	B	B	A	A	A	A	A	A	C	C	C	C	C	C
	RPM		568	615	660	705	750	785	825	860	895	930	960	990	1015	1040	1065
2,100	BHP	0.33	0.38	0.42	0.46	0.50	0.54	0.59	0.65	0.70	0.74	0.78	0.81	0.85	0.89	0.94	0.98
	Discrete Spd Setting	B	B	B	A	A	A	A	A	A	A	C	C	C	C	C	C
	RPM	531	583	630	670	715	755	795	835	875	905	940	970	1000	1025	1055	1080
2,200	BHP	0.37	0.40	0.45	0.49	0.55	0.60	0.65	0.70	0.75	0.79	0.83	0.87	0.92	0.96	1.00	1.04
	Discrete Spd Setting	B	B	B	A	A	A	A	A	A	C	C	C	C	C	E	E
	RPM	552	599	645	685	730	770	810	850	885	915	950	980	1010	1040	1065	1090
2,300	BHP	0.42	0.47	0.51	0.56	0.60	0.65	0.70	0.75	0.80	0.84	0.89	0.94	1.00	1.05	1.10	1.16
	Discrete Spd Setting	B	B	B	A	A	A	A	A	A	C	C	C	C	C	C	C
	RPM	573	620	660	705	745	785	820	860	895	925	960	990	1020	1050	1075	1105
2,400	BHP	0.48	0.52	0.57	0.61	0.66	0.72	0.78	0.83	0.87	0.92	0.97	1.02	1.07	1.13	1.19	1.25
	Discrete Spd Setting	B	B	A	A	A	A	A	A	A	C	C	C	C	C	C	C
	RPM	604	645	690	730	765	805	845	880	910	945	975	1010	1035	1065	1095	1125
2,500	BHP	0.52	0.57	0.61	0.66	0.72	0.78	0.83	0.89	0.94	1.00	1.03	1.08	1.14	1.20	1.25	1.31
	Discrete Spd Setting	B	B	A	A	A	A	A	A	C	C	C	C	C	C	C	C
	RPM	620	660	700	740	780	815	850	885	920	950	985	1015	1045	1075	1100	1130
2,600	BHP	0.56	0.61	0.66	0.70	0.76	0.82	0.88	0.93	0.98	1.04	1.08	1.14	1.20	1.26	1.32	1.37
	Discrete Spd Setting	B	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C
	RPM	635	675	715	750	790	825	860	895	925	960	990	1020	1050	1080	1110	1135
2,700	BHP	0.61	0.66	0.71	0.76	0.82	0.87	0.93	0.98	1.04	1.10	1.15	1.21	1.27	1.33	1.39	1.45
	Discrete Spd Setting	B	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C
	RPM	655	695	730	770	805	840	875	905	940	970	1000	1030	1060	1090	1120	1145
2,800	BHP	0.66	0.72	0.77	0.83	0.88	0.93	0.99	1.05	1.11	1.16	1.22	1.30	1.37	1.44	1.51	1.57
	Discrete Spd Setting	B	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C
	RPM	670	710	750	785	815	850	885	915	950	980	1010	1040	1070	1100	1130	1155
2,900	BHP	0.71	0.77	0.82	0.87	0.93	0.98	1.04	1.10	1.16	1.22	1.30	1.36	1.43	1.50	1.57	
	Discrete Spd Setting	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C	
	RPM	685	725	765	795	830	860	895	925	955	985	1020	1045	1075	1105	1135	
3,000	BHP	0.79	0.84	0.90	0.95	1.01	1.07	1.13	1.19	1.25	1.31	1.38	1.46	1.52	1.59		
	Discrete Spd Setting	A	A	A	A	A	A	A	C	C	C	C	C	C	C		
	RPM	710	745	780	815	850	885	915	945	975	1005	1035	1065	1090	1120		

Notes:
- Motor Sheave set to 1-turn open from factory.
- Factory torque setting is A. Torque setting is field-adjustable to any torque setting listed in drive table through the ACDU01 Service Tool.
- The unit can control the blower through LAT control. Enable this setting in the field with the ACDU01 Service Tool.
- You can purchase the Advanced control panel as an accessory.
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
2,400	BHP	0.45	0.50	0.54	0.59	0.63	0.69	0.74	0.80	0.85	0.90	0.94	0.99	1.04	1.10	1.16	1.22
	Sheave/Mtr	B	B	B	B	B	A	A	A	A	A	A	A	A	A	C	C
	RPM	578	625	665	705	745	785	820	860	895	925	960	990	1020	1050	1080	1110
2,500	BHP	0.50	0.55	0.59	0.64	0.69	0.75	0.81	0.88	0.92	0.97	1.01	1.06	1.12	1.17	1.23	1.29
	Sheave/Mtr	B	B	B	B	A	A	A	A	A	A	A	A	A	C	C	C
	RPM	599	645	685	725	765	800	835	875	905	940	970	1005	1035	1060	1090	1120
2,600	BHP	0.55	0.60	0.65	0.69	0.75	0.80	0.86	0.92	0.97	1.02	1.08	1.13	1.19	1.25	1.30	1.36
	Sheave/Mtr	B	B	B	B	A	A	A	A	A	A	A	A	A	C	C	C
	RPM	625	665	705	740	780	815	850	885	920	950	985	1015	1045	1075	1100	1130
2,700	BHP	0.60	0.65	0.70	0.75	0.80	0.86	0.91	0.97	1.02	1.08	1.14	1.20	1.26	1.32	1.38	1.44
	Sheave/Mtr	B	B	B	A	A	A	A	A	A	A	A	A	C	C	C	C
	RPM	645	685	725	760	795	830	865	900	930	960	995	1025	1055	1085	1115	1140
2,800	BHP	0.65	0.71	0.76	0.82	0.87	0.93	0.98	1.04	1.10	1.16	1.21	1.28	1.36	1.43	1.50	1.56
	Sheave/Mtr	B	B	B	A	A	A	A	A	A	A	A	A	C	C	C	C
	RPM	665	705	745	780	810	845	880	910	945	975	1005	1035	1065	1095	1125	1150
2,900	BHP	0.71	0.76	0.82	0.87	0.92	0.98	1.03	1.09	1.16	1.22	1.29	1.36	1.43	1.50	1.57	1.63
	Sheave/Mtr	B	B	A	A	A	A	A	A	A	A	A	A	C	C	C	C
	RPM	685	720	760	795	825	860	890	920	955	985	1015	1045	1075	1105	1135	1160
3,000	BHP	0.78	0.84	0.89	0.95	1.00	1.06	1.12	1.18	1.24	1.30	1.37	1.43	1.50	1.58	1.64	1.71
	Sheave/Mtr	B	B	A	A	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	700	740	775	810	845	880	910	940	970	1000	1030	1055	1085	1115	1140	1170
3,100	BHP	0.85	0.91	0.96	1.02	1.08	1.14	1.22	1.29	1.36	1.44	1.50	1.57	1.63	1.70	1.76	1.82
	Sheave/Mtr	B	B	A	A	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	720	755	790	825	860	890	925	955	985	1015	1040	1070	1095	1125	1150	1175
3,200	BHP	0.93	1.00	1.07	1.14	1.20	1.26	1.32	1.38	1.44	1.51	1.57	1.64	1.70	1.78	1.85	1.92
	Sheave/Mtr	B	A	A	A	A	A	A	A	A	A	C	C	C	C	C	C
	RPM	740	775	810	845	875	905	935	965	995	1025	1050	1080	1105	1135	1160	1185
3,300	BHP	1.01	1.08	1.14	1.21	1.28	1.33	1.39	1.45	1.51	1.58	1.64	1.72	1.78	1.84	1.93	2.00
	Sheave/Mtr	B	A	A	A	A	A	A	A	A	A	C	C	C	C	C	E
	RPM	755	790	820	855	890	915	945	975	1005	1035	1060	1090	1115	1140	1170	1195
3,400	BHP	1.08	1.15	1.22	1.29	1.35	1.41	1.47	1.53	1.59	1.68	1.75	1.83	1.90	1.96	2.02	2.08
	Sheave/Mtr	A	A	A	A	A	A	A	A	A	A	C	C	C	C	E	E
	RPM	765	800	835	870	900	930	960	990	1015	1045	1070	1100	1125	1150	1175	1200

Notes:
- A, 1 = Standard RPM/Standard Blower Motor
- E, 5 = High RPM/Large Blower Motor
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

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SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
3,500	BHP	1.16	1.23	1.29	1.36	1.42	1.48	1.54	1.60	1.66	1.73	1.79	1.85	1.92	2.01	2.09	2.17
	Sheave/Mtr	A	A	A	A	A	A	A	A	A	C	C	C	C	E	E	E
	RPM	780	815	845	880	910	940	970	1000	1025	1055	1080	1105	1130	1160	1185	1210
3,600	BHP	1.24	1.30	1.37	1.44	1.51	1.58	1.65	1.72	1.78	1.86	1.92	1.98	2.06	2.13	2.21	2.29
	Sheave/Mtr	A	A	A	A	A	A	A	A	A	C	C	C	E	E	E	E
	RPM	795	825	860	890	920	950	980	1010	1035	1065	1090	1115	1145	1165	1190	1215
3,700	BHP	1.34	1.40	1.46	1.53	1.61	1.68	1.75	1.82	1.90	1.97	2.06	2.13	2.21	2.28	2.36	2.44
	Sheave/Mtr	A	A	A	A	A	A	A	A	C	C	E	E	E	E	E	E
	RPM	820	850	880	910	940	970	1000	1025	1055	1080	1110	1135	1160	1180	1205	1230
3,800	BHP	1.43	1.49	1.56	1.63	1.70	1.78	1.86	1.94	2.02	2.12	2.20	2.28	2.34	2.42	2.50	2.58
	Sheave/Mtr	A	A	A	A	A	A	A	A	E	E	E	E	E	E	E	E
	RPM	840	870	900	930	960	990	1020	1045	1070	1100	1125	1150	1170	1195	1220	1245
3,900	BHP	1.58	1.64	1.71	1.78	1.85	1.93	2.01	2.09	2.19	2.27	2.35	2.41	2.49	2.57	2.65	
	Sheave/Mtr	A	A	A	A	A	A	D	D	E	E	E	E	E	E	E	
	RPM	865	890	920	950	980	1010	1035	1060	1090	1115	1140	1160	1185	1210	1235	
4,000	BHP	1.68	1.75	1.83	1.92	2.00	2.08	2.16	2.26	2.34	2.42	2.50	2.56	2.64	2.72	2.80	
	Sheave/Mtr	A	A	A	A	D	D	D	E	E	E	E	E	E	E	E	
	RPM	885	910	940	970	1000	1025	1050	1080	1105	1130	1155	1175	1200	1225	1250	

Notes:
- A, 1 = Standard RPM/Standard Blower Motor
- E, 5 = High RPM/Large Blower Motor
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
2,400	BHP	0.45	0.50	0.54	0.59	0.63	0.69	0.74	0.80	0.85	0.90	0.94	0.99	1.04	1.10	1.16	1.22
	Discrete Spd Setting	B	B	B	B	B	A	A	A	A	A	A	A	A	A	C	C
	RPM	578	625	665	705	745	785	820	860	895	925	960	990	1020	1050	1080	1110
2,500	BHP	0.50	0.55	0.59	0.64	0.69	0.75	0.81	0.88	0.92	0.97	1.01	1.06	1.12	1.17	1.23	1.29
	Discrete Spd Setting	B	B	B	B	A	A	A	A	A	A	A	A	A	C	C	C
	RPM	599	645	685	725	765	800	835	875	905	940	970	1005	1035	1060	1090	1120
2,600	BHP	0.55	0.60	0.65	0.69	0.75	0.80	0.86	0.92	0.97	1.02	1.08	1.13	1.19	1.25	1.30	1.36
	Discrete Spd Setting	B	B	B	B	A	A	A	A	A	A	A	A	A	C	C	C
	RPM	625	665	705	740	780	815	850	885	920	950	985	1015	1045	1075	1100	1130
2,700	BHP	0.60	0.65	0.70	0.75	0.80	0.86	0.91	0.97	1.02	1.08	1.14	1.20	1.26	1.32	1.38	1.44
	Discrete Spd Setting	B	B	B	A	A	A	A	A	A	A	A	A	C	C	C	C
	RPM	645	685	725	760	795	830	865	900	930	960	995	1025	1055	1085	1115	1140
2,800	BHP	0.65	0.71	0.76	0.82	0.87	0.93	0.98	1.04	1.10	1.16	1.21	1.28	1.36	1.43	1.50	1.56
	Discrete Spd Setting	B	B	B	A	A	A	A	A	A	A	A	A	C	C	C	C
	RPM	665	705	745	780	810	845	880	910	945	975	1005	1035	1065	1095	1125	1150
2,900	BHP	0.71	0.76	0.82	0.87	0.92	0.98	1.03	1.09	1.16	1.22	1.29	1.36	1.43	1.50	1.57	1.63
	Discrete Spd Setting	B	B	A	A	A	A	A	A	A	A	A	A	C	C	C	C
	RPM	685	720	760	795	825	860	890	920	955	985	1015	1045	1075	1105	1135	1160
3,000	BHP	0.78	0.84	0.89	0.95	1.00	1.06	1.12	1.18	1.24	1.30	1.37	1.43	1.50	1.58	1.64	1.71
	Discrete Spd Setting	B	B	A	A	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	700	740	775	810	845	880	910	940	970	1000	1030	1055	1085	1115	1140	1170
3,100	BHP	0.85	0.91	0.96	1.02	1.08	1.14	1.22	1.29	1.36	1.44	1.50	1.57	1.63	1.70	1.76	1.82
	Discrete Spd Setting	B	B	A	A	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	720	755	790	825	860	890	925	955	985	1015	1040	1070	1095	1125	1150	1175
3,200	BHP	0.93	1.00	1.07	1.14	1.20	1.26	1.32	1.38	1.44	1.51	1.57	1.64	1.70	1.78	1.85	1.92
	Discrete Spd Setting	B	A	A	A	A	A	A	A	A	A	C	C	C	C	C	C
	RPM	740	775	810	845	875	905	935	965	995	1025	1050	1080	1105	1135	1160	1185
3,300	BHP	1.01	1.08	1.14	1.21	1.28	1.33	1.39	1.45	1.51	1.58	1.64	1.72	1.78	1.84	1.93	2.00
	Discrete Spd Setting	B	A	A	A	A	A	A	A	A	A	C	C	C	C	C	C
	RPM	755	790	820	855	890	915	945	975	1005	1035	1060	1090	1115	1140	1170	1195
3,400	BHP	1.08	1.15	1.22	1.29	1.35	1.41	1.47	1.53	1.59	1.68	1.75	1.83	1.90	1.96	2.02	2.08
	Discrete Spd Setting	A	A	A	A	A	A	A	A	A	A	C	C	C	C	C	C
	RPM	765	800	835	870	900	930	960	990	1015	1045	1070	1100	1125	1150	1175	1200

Notes:
- Motor Sheave set to 1-turn open from factory.
- Factory torque setting is A. Torque setting is field-adjustable to any torque setting listed in drive table through the ACDU01 Service Tool.
- The unit can control the blower through LAT control. Enable this setting in the field with the ACDU01 Service Tool.
- You can purchase the Advanced control panel as an accessory.
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

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SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
3,500	BHP	1.16	1.23	1.29	1.36	1.42	1.48	1.54	1.60	1.66	1.73	1.79	1.85	1.92	2.01	2.09	2.17
	Discrete Spd Setting	A	A	A	A	A	A	A	A	A	C	C	C	C	C	C	C
	RPM	780	815	845	880	910	940	970	1000	1025	1055	1080	1105	1130	1160	1185	1210
3,600	BHP	1.24	1.30	1.37	1.44	1.51	1.58	1.65	1.72	1.78	1.86	1.92	1.98	2.06	2.13	2.21	2.29
	Discrete Spd Setting	A	A	A	A	A	A	A	A	A	C	C	C	C	C	C	C
	RPM	795	825	860	890	920	950	980	1010	1035	1065	1090	1115	1145	1165	1190	1215
3,700	BHP	1.34	1.40	1.46	1.53	1.61	1.68	1.75	1.82	1.90	1.97	2.06	2.13	2.21	2.28	2.36	2.44
	Discrete Spd Setting	A	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C
	RPM	820	850	880	910	940	970	1000	1025	1055	1080	1110	1135	1160	1180	1205	1230
3,800	BHP	1.43	1.49	1.56	1.63	1.70	1.78	1.86	1.94	2.02	2.12	2.20	2.28	2.34	2.42	2.50	2.58
	Discrete Spd Setting	A	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C
	RPM	840	870	900	930	960	990	1020	1045	1070	1100	1125	1150	1170	1195	1220	1245
3,900	BHP	1.58	1.64	1.71	1.78	1.85	1.93	2.01	2.09	2.19	2.27	2.35	2.41	2.49	2.57	2.65	
	Discrete Spd Setting	A	A	A	A	A	A	A	A	C	C	C	C	C	C	C	
	RPM	865	890	920	950	980	1010	1035	1060	1090	1115	1140	1160	1185	1210	1235	
4,000	BHP	1.68	1.75	1.83	1.92	2.00	2.08	2.16	2.26	2.34	2.42	2.50	2.56	2.64	2.72	2.80	
	Discrete Spd Setting	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C	
	RPM	885	910	940	970	1000	1025	1050	1080	1105	1130	1155	1175	1200	1225	1250	

Notes:
- Motor Sheave set to 1-turn open from factory.
- Factory torque setting is A. Torque setting is field-adjustable to any torque setting listed in drive table through the ACDU01 Service Tool.
- The unit can control the blower through LAT control. Enable this setting in the field with the ACDU01 Service Tool.
- You can purchase the Advanced control panel as an accessory.
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
3,000	BHP	0.75	0.81	0.86	0.91	0.97	1.03	1.09	1.15	1.21	1.27	1.34	1.41	1.47	1.54	1.61	1.67
	Sheave/Mtr	B	B	B	B	B	B	A	A	A	A	A	A	A	A	A	A
	RPM	680	720	755	790	825	860	895	925	955	985	1015	1045	1070	1100	1130	1155
3,100	BHP	0.82	0.88	0.94	0.99	1.04	1.10	1.17	1.26	1.33	1.40	1.46	1.53	1.59	1.66	1.72	1.80
	Sheave/Mtr	B	B	B	B	B	A	A	A	A	A	A	A	A	A	A	C
	RPM	700	735	775	805	840	875	905	940	970	1000	1025	1055	1080	1110	1135	1165
3,200	BHP	0.90	0.96	1.03	1.10	1.17	1.23	1.29	1.35	1.41	1.47	1.55	1.61	1.68	1.74	1.81	1.89
	Sheave/Mtr	B	B	B	B	B	A	A	A	A	A	A	A	A	A	A	C
	RPM	720	755	790	825	860	890	920	950	980	1010	1040	1065	1095	1120	1145	1175
3,300	BHP	0.98	1.04	1.11	1.18	1.25	1.31	1.37	1.43	1.49	1.55	1.62	1.68	1.75	1.81	1.88	1.95
	Sheave/Mtr	B	B	B	B	A	A	A	A	A	A	A	A	A	A	A	C
	RPM	740	770	805	840	875	905	935	965	995	1020	1050	1075	1105	1130	1155	1180
3,400	BHP	1.06	1.13	1.19	1.26	1.33	1.38	1.44	1.50	1.56	1.65	1.72	1.80	1.87	1.94	2.00	2.06
	Sheave/Mtr	B	B	B	B	A	A	A	A	A	A	A	A	A	A	C	C
	RPM	755	790	820	855	890	915	945	975	1005	1035	1060	1090	1115	1140	1165	1190
3,500	BHP	1.14	1.21	1.27	1.34	1.40	1.46	1.52	1.58	1.65	1.71	1.77	1.84	1.90	1.98	2.06	2.14
	Sheave/Mtr	B	B	B	A	A	A	A	A	A	A	A	A	A	A	C	C
	RPM	770	805	835	870	900	930	960	990	1020	1045	1070	1100	1125	1150	1175	1200
3,600	BHP	1.23	1.29	1.36	1.42	1.50	1.57	1.64	1.71	1.77	1.84	1.90	1.96	2.05	2.13	2.21	2.27
	Sheave/Mtr	B	B	B	A	A	A	A	A	A	A	A	A	A	C	C	C
	RPM	790	820	855	885	915	945	975	1005	1030	1060	1085	1110	1140	1165	1190	1210
3,700	BHP	1.32	1.38	1.44	1.51	1.58	1.65	1.73	1.81	1.88	1.96	2.03	2.10	2.18	2.26	2.34	2.42
	Sheave/Mtr	B	B	A	A	A	A	A	A	A	A	A	A	A	C	C	C
	RPM	810	840	870	900	930	960	990	1020	1045	1075	1100	1125	1150	1175	1200	1225
3,800	BHP	1.41	1.47	1.54	1.61	1.68	1.75	1.82	1.91	1.99	2.07	2.17	2.25	2.31	2.39	2.47	2.55
	Sheave/Mtr	B	B	A	A	A	A	A	A	A	A	A	A	A	C	C	C
	RPM	830	860	890	920	950	980	1005	1035	1060	1085	1115	1140	1160	1185	1210	1235
3,900	BHP	1.54	1.60	1.67	1.74	1.82	1.89	1.96	2.04	2.14	2.22	2.30	2.38	2.46	2.52	2.60	2.68
	Sheave/Mtr	B	A	A	A	A	A	A	A	A	A	A	A	C	C	C	C
	RPM	850	875	905	935	965	995	1020	1045	1075	1100	1125	1150	1175	1195	1220	1245
4,000	BHP	1.63	1.71	1.78	1.86	1.94	2.03	2.11	2.19	2.27	2.37	2.45	2.51	2.59	2.67	2.75	2.85
	Sheave/Mtr	A	A	A	A	A	A	A	A	A	A	A	A	C	C	C	C
	RPM	865	895	920	950	980	1010	1035	1060	1085	1115	1140	1160	1185	1210	1235	1260
4,100	BHP	1.73	1.81	1.90	1.97	2.05	2.12	2.20	2.27	2.34	2.42	2.52	2.62	2.70	2.80	2.90	
	Sheave/Mtr	A	A	A	A	A	A	A	A	A	A	A	C	C	C	C	
	RPM	885	915	945	970	1000	1025	1055	1080	1105	1130	1155	1180	1200	1225	1250	
4,200	BHP	1.87	1.94	2.02	2.08	2.16	2.24	2.32	2.40	2.48	2.58	2.68	2.76	2.86	2.96		
	Sheave/Mtr	A	A	A	A	A	A	A	A	A	A	C	C	C	C		
	RPM	905	935	965	990	1020	1045	1070	1095	1120	1145	1170	1190	1215	1240		

Notes:
- A, 1 = Standard RPM/Standard Blower Motor
- E, 5 = High RPM/Large Blower Motor
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

Table continued on next page.

Table continued from previous page

SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
4,300	BHP	2.00	2.07	2.16	2.23	2.31	2.41	2.49	2.57	2.66	2.74	2.84	2.94	3.02	3.15		
	Sheave/Mtr	A	A	A	A	A	A	A	A	A	C	C	C	E	E		
	RPM	930	955	985	1010	1035	1065	1090	1115	1140	1160	1185	1210	1230	1255		
4,400	BHP	2.14	2.22	2.32	2.40	2.48	2.56	2.65	2.74	2.82	2.92	3.00	3.10	3.18			
	Sheave/Mtr	A	A	A	A	A	A	A	A	A	C	E	E	E			
	RPM	950	975	1005	1030	1055	1080	1110	1135	1155	1180	1200	1225	1245			
4,500	BHP	2.30	2.38	2.46	2.54	2.62	2.72	2.80	2.88	3.00	3.08	3.16	3.26				
	Sheave/Mtr	A	A	A	A	A	A	A	A	D	E	E	E				
	RPM	970	995	1020	1045	1070	1100	1125	1145	1170	1195	1215	1240				
4,600	BHP	2.39	2.45	2.54	2.63	2.72	2.83	2.92	3.00	3.10	3.18	3.28	3.38				
	Sheave/Mtr	A	A	A	A	A	A	A	D	D	E	E	E				
	RPM	980	1000	1025	1050	1075	1105	1130	1150	1175	1195	1220	1245				
4,700	BHP	2.46	2.52	2.62	2.72	2.82	2.92	3.02	3.12	3.22	3.32	3.40	3.50				
	Sheave/Mtr	A	A	A	A	A	A	D	D	E	E	E	E				
	RPM	985	1005	1030	1055	1080	1105	1130	1155	1180	1205	1225	1250				
4,800	BHP	2.57	2.64	2.74	2.84	2.94	3.04	3.14	3.24	3.32	3.42	3.52	3.60				
	Sheave/Mtr	A	A	A	A	A	D	D	D	E	E	E	E				
	RPM	990	1010	1035	1060	1085	1110	1135	1160	1180	1205	1230	1250				
4,900	BHP	2.68	2.78	2.88	3.00	3.06	3.16	3.26	3.36	3.44	3.54	3.64	3.75				
	Sheave/Mtr	A	A	A	D	D	D	D	E	E	E	E	E				
	RPM	995	1020	1045	1070	1090	1115	1140	1165	1185	1210	1235	1255				
5,000	BHP	2.82	2.92	3.00	3.10	3.20	3.28	3.38	3.48	3.56	3.66	3.74					
	Sheave/Mtr	A	A	D	D	D	D	D	E	E	E	E					
	RPM	1005	1030	1050	1075	1100	1120	1145	1170	1190	1215	1235					

Notes:
- A, 1 = Standard RPM/Standard Blower Motor
- E, 5 = High RPM/Large Blower Motor
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
3,000	BHP	0.75	0.81	0.86	0.91	0.97	1.03	1.09	1.15	1.21	1.27	1.34	1.41	1.47	1.54	1.61	1.67
	Discrete Spd Setting	B	B	B	B	B	B	A	A	A	A	A	A	A	A	A	A
	RPM	680	720	755	790	825	860	895	925	955	985	1015	1045	1070	1100	1130	1155
3,100	BHP	0.82	0.88	0.94	0.99	1.04	1.10	1.17	1.26	1.33	1.40	1.46	1.53	1.59	1.66	1.72	1.80
	Discrete Spd Setting	B	B	B	B	B	A	A	A	A	A	A	A	A	A	A	C
	RPM	700	735	775	805	840	875	905	940	970	1000	1025	1055	1080	1110	1135	1165
3,200	BHP	0.90	0.96	1.03	1.10	1.17	1.23	1.29	1.35	1.41	1.47	1.55	1.61	1.68	1.74	1.81	1.89
	Discrete Spd Setting	B	B	B	B	B	A	A	A	A	A	A	A	A	A	A	C
	RPM	720	755	790	825	860	890	920	950	980	1010	1040	1065	1095	1120	1145	1175
3,300	BHP	0.98	1.04	1.11	1.18	1.25	1.31	1.37	1.43	1.49	1.55	1.62	1.68	1.75	1.81	1.88	1.95
	Discrete Spd Setting	B	B	B	B	A	A	A	A	A	A	A	A	A	A	A	C
	RPM	740	770	805	840	875	905	935	965	995	1020	1050	1075	1105	1130	1155	1180
3,400	BHP	1.06	1.13	1.19	1.26	1.33	1.38	1.44	1.50	1.56	1.65	1.72	1.80	1.87	1.94	2.00	2.06
	Discrete Spd Setting	B	B	B	B	A	A	A	A	A	A	A	A	A	A	C	C
	RPM	755	790	820	855	890	915	945	975	1005	1035	1060	1090	1115	1140	1165	1190
3,500	BHP	1.14	1.21	1.27	1.34	1.40	1.46	1.52	1.58	1.65	1.71	1.77	1.84	1.90	1.98	2.06	2.14
	Discrete Spd Setting	B	B	B	A	A	A	A	A	A	A	A	A	A	A	C	C
	RPM	770	805	835	870	900	930	960	990	1020	1045	1070	1100	1125	1150	1175	1200
3,600	BHP	1.23	1.29	1.36	1.42	1.50	1.57	1.64	1.71	1.77	1.84	1.90	1.96	2.05	2.13	2.21	2.27
	Discrete Spd Setting	B	B	B	A	A	A	A	A	A	A	A	A	A	C	C	C
	RPM	790	820	855	885	915	945	975	1005	1030	1060	1085	1110	1140	1165	1190	1210
3,700	BHP	1.32	1.38	1.44	1.51	1.58	1.65	1.73	1.81	1.88	1.96	2.03	2.10	2.18	2.26	2.34	2.42
	Discrete Spd Setting	B	B	A	A	A	A	A	A	A	A	A	A	A	C	C	C
	RPM	810	840	870	900	930	960	990	1020	1045	1075	1100	1125	1150	1175	1200	1225
3,800	BHP	1.41	1.47	1.54	1.61	1.68	1.75	1.82	1.91	1.99	2.07	2.17	2.25	2.31	2.39	2.47	2.55
	Discrete Spd Setting	B	B	A	A	A	A	A	A	A	A	A	A	A	C	C	C
	RPM	830	860	890	920	950	980	1005	1035	1060	1085	1115	1140	1160	1185	1210	1235
3,900	BHP	1.54	1.60	1.67	1.74	1.82	1.89	1.96	2.04	2.14	2.22	2.30	2.38	2.46	2.52	2.60	2.68
	Discrete Spd Setting	B	A	A	A	A	A	A	A	A	A	A	A	C	C	C	C
	RPM	850	875	905	935	965	995	1020	1045	1075	1100	1125	1150	1175	1195	1220	1245
4,000	BHP	1.63	1.71	1.78	1.86	1.94	2.03	2.11	2.19	2.27	2.37	2.45	2.51	2.59	2.67	2.75	2.85
	Discrete Spd Setting	A	A	A	A	A	A	A	A	A	A	A	A	C	C	C	C
	RPM	865	895	920	950	980	1010	1035	1060	1085	1115	1140	1160	1185	1210	1235	1260
4,100	BHP	1.73	1.81	1.90	1.97	2.05	2.12	2.20	2.27	2.34	2.42	2.52	2.62	2.70	2.80	2.90	
	Discrete Spd Setting	A	A	A	A	A	A	A	A	A	A	A	C	C	C	C	
	RPM	885	915	945	970	1000	1025	1055	1080	1105	1130	1155	1180	1200	1225	1250	
4,200	BHP	1.87	1.94	2.02	2.08	2.16	2.24	2.32	2.40	2.48	2.58	2.68	2.76	2.86	2.96		
	Discrete Spd Setting	A	A	A	A	A	A	A	A	A	A	C	C	C	C		
	RPM	905	935	965	990	1020	1045	1070	1095	1120	1145	1170	1190	1215	1240		
4,300	BHP	2.00	2.07	2.16	2.23	2.31	2.41	2.49	2.57	2.66	2.74	2.84	2.94	3.02	3.15		
	Discrete Spd Setting	A	A	A	A	A	A	A	A	A	C	C	C	E	E		
	RPM	930	955	985	1010	1035	1065	1090	1115	1140	1160	1185	1210	1230	1255		

Notes:
- Motor Sheave set to 1-turn open from factory.
- Factory torque setting is A. Torque setting is field-adjustable to any torque setting listed in drive table through the ACDU01 Service Tool.
- The unit can control the blower through LAT control. Enable this settings in the field with the ACDU01 Service Tool.
- You can purchase the Advanced control panel as an accessory.
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

Table continued on next page.

Table continued from previous page

SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
4,400	BHP	2.14	2.22	2.32	2.40	2.48	2.56	2.65	2.74	2.82	2.92	3.00	3.10	3.18			
	Discrete Spd Setting	A	A	A	A	A	A	A	A	A	C	C	C	C			
	RPM	950	975	1005	1030	1055	1080	1110	1135	1155	1180	1200	1225	1245			
4,500	BHP	2.30	2.38	2.46	2.54	2.62	2.72	2.80	2.88	3.00	3.08	3.16	3.26				
	Discrete Spd Setting	A	A	A	A	A	A	A	A	A	C	C	C				
	RPM	970	995	1020	1045	1070	1100	1125	1145	1170	1195	1215	1240				
4,600	BHP	2.39	2.45	2.54	2.63	2.72	2.83	2.92	3.00	3.10	3.18	3.28	3.38				
	Discrete Spd Setting	A	A	A	A	A	A	A	A	A	C	C	C				
	RPM	980	1000	1025	1050	1075	1105	1130	1150	1175	1195	1220	1245				
4,700	BHP	2.46	2.52	2.62	2.72	2.82	2.92	3.02	3.12	3.22	3.32	3.40	3.50				
	Discrete Spd Setting	A	A	A	A	A	A	A	A	C	C	C	C				
	RPM	985	1005	1030	1055	1080	1105	1130	1155	1180	1205	1225	1250				
4,800	BHP	2.57	2.64	2.74	2.84	2.94	3.04	3.14	3.24	3.32	3.42	3.52	3.60				
	Discrete Spd Setting	A	A	A	A	A	A	A	A	C	C	C	C				
	RPM	990	1010	1035	1060	1085	1110	1135	1160	1180	1205	1230	1250				
4,900	BHP	2.68	2.78	2.88	3.00	3.06	3.16	3.26	3.36	3.44	3.54	3.64	3.75				
	Discrete Spd Setting	A	A	A	A	A	A	A	C	C	C	C	C				
	RPM	995	1020	1045	1070	1090	1115	1140	1165	1185	1210	1235	1255				
5,000	BHP	2.82	2.92	3.00	3.10	3.20	3.28	3.38	3.48	3.56	3.66	3.74					
	Discrete Spd Setting	A	A	A	A	A	A	A	C	C	C	C					
	RPM	1005	1030	1050	1075	1100	1120	1145	1170	1190	1215	1235					

Notes:
- Motor Sheave set to 1-turn open from factory.
- Factory torque setting is A. Torque setting is field-adjustable to any torque setting listed in drive table through the ACDU01 Service Tool.
- The unit can control the blower through LAT control. Enable this settings in the field with the ACDU01 Service Tool.
- You can purchase the Advanced control panel as an accessory.
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
4,200	BHP			0.69	0.78	0.86	0.95	1.02	1.11	1.21	1.32	1.41	1.50	1.57	1.64	1.72	1.80
	Sheave/Mtr			B	B	B	B	A	A	A	A	A	A	A	C	C	C
	RPM			547	594	640	685	725	765	805	845	880	915	945	975	1005	1030
4,400	BHP			0.75	0.83	0.92	1.01	1.11	1.21	1.31	1.41	1.51	1.60	1.68	1.76	1.85	1.94
	Sheave/Mtr			B	B	B	B	A	A	A	A	A	A	A	C	C	C
	RPM			563	609	655	695	735	775	815	855	890	925	955	985	1015	1045
4,600	BHP		0.75	0.85	0.95	1.03	1.11	1.19	1.30	1.40	1.50	1.60	1.70	1.78	1.89	2.00	2.10
	Sheave/Mtr		B	B	B	B	B	A	A	A	A	A	A	C	C	C	C
	RPM		526	573	625	665	705	745	785	825	860	895	930	960	995	1025	1050
4,800	BHP		0.83	0.94	1.03	1.12	1.20	1.30	1.40	1.53	1.63	1.73	1.82	1.92	2.00	2.12	2.22
	Sheave/Mtr		B	B	B	B	A	A	A	A	A	A	A	C	C	C	C
	RPM		542	594	640	680	720	760	795	835	870	905	935	970	1000	1030	1055
5,000	BHP		0.93	1.02	1.11	1.20	1.31	1.41	1.52	1.64	1.76	1.85	1.95	2.03	2.12	2.24	2.36
	Sheave/Mtr		B	B	B	B	A	A	A	A	A	A	A	C	C	C	C
	RPM		563	609	650	690	735	770	805	840	880	910	945	975	1005	1035	1065
5,200	BHP	0.93	1.02	1.10	1.20	1.29	1.39	1.50	1.61	1.72	1.83	1.94	2.06	2.15	2.26	2.38	2.50
	Sheave/Mtr	B	B	B	B	B	A	A	A	A	A	A	A	C	C	C	C
	RPM	542	583	625	665	705	745	780	815	850	885	920	955	985	1015	1045	1075
5,400	BHP	1.03	1.10	1.19	1.29	1.39	1.50	1.59	1.70	1.80	1.92	2.03	2.16	2.26	2.38	2.50	2.62
	Sheave/Mtr	B	B	B	B	B	A	A	A	A	A	A	C	C	C	C	C
	RPM	563	599	640	680	720	760	790	825	860	895	925	960	990	1020	1050	1080
5,600	BHP	1.12	1.19	1.28	1.39	1.50	1.61	1.72	1.84	1.93	2.06	2.17	2.29	2.40	2.54	2.69	2.83
	Sheave/Mtr	B	B	B	B	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	583	620	655	695	735	770	805	840	870	905	935	970	1000	1030	1060	1090
5,800	BHP	1.17	1.28	1.39	1.49	1.60	1.70	1.81	1.90	2.02	2.14	2.28	2.40	2.52	2.67	2.81	2.96
	Sheave/Mtr	B	B	B	B	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	588	630	670	710	750	780	815	845	880	910	945	975	1005	1035	1065	1095
6,000	BHP	1.25	1.40	1.51	1.61	1.73	1.84	1.94	2.05	2.18	2.30	2.42	2.54	2.67	2.79	2.94	3.08
	Sheave/Mtr	B	B	B	A	A	A	A	A	A	A	A	C	C	C	C	E
	RPM	604	645	685	720	760	795	825	860	895	925	955	985	1015	1040	1070	1100
6,200	BHP	1.40	1.51	1.62	1.75	1.86	1.98	2.09	2.20	2.34	2.49	2.63	2.78	2.92	3.06	3.18	
	Sheave/Mtr	B	B	B	A	A	A	A	A	A	A	C	C	C	E	E	
	RPM	625	660	695	735	770	805	840	875	905	935	965	995	1025	1055	1080	
6,400	BHP	1.55	1.68	1.79	1.90	2.04	2.18	2.32	2.44	2.56	2.68	2.80	2.92	3.07	3.19	3.33	
	Sheave/Mtr	B	B	B	A	A	A	A	A	A	A	C	C	E	E	E	
	RPM	640	680	715	750	785	820	855	885	915	945	975	1005	1035	1060	1090	
6,600	BHP	1.73	1.84	1.94	2.06	2.20	2.34	2.46	2.58	2.70	2.82	2.94	3.07	3.19	3.34	3.46	
	Sheave/Mtr	B	B	A	A	A	A	A	A	A	A	C	E	E	E	E	
	RPM	665	700	730	765	800	835	865	895	925	955	985	1015	1040	1070	1095	
6,800	BHP	1.87	1.98	2.08	2.20	2.34	2.48	2.62	2.74	2.86	2.96	3.08	3.24	3.38	3.55		
	Sheave/Mtr	B	B	A	A	A	A	A	A	A	C	E	E	E	E		
	RPM	685	715	745	775	810	845	880	910	940	965	995	1025	1050	1080		
7,000	BHP	2.03	2.13	2.22	2.36	2.50	2.62	2.76	2.88	3.00	3.12	3.22	3.37	3.49	3.61		
	Sheave/Mtr	B	A	A	A	A	A	A	A	D	E	E	E	E	E		
	RPM	705	730	755	790	825	855	890	920	950	980	1005	1035	1060	1085		

Notes:
- A, 1 = Standard RPM/Standard Blower Motor
- E, 5 = High RPM/Large Blower Motor
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
4,200	BHP			0.69	0.78	0.86	0.95	1.02	1.11	1.21	1.32	1.41	1.50	1.57	1.64	1.72	1.80
	Discrete Spd Setting			B	B	B	B	A	A	A	A	A	A	A	C	C	C
	RPM			547	594	640	685	725	765	805	845	880	915	945	975	1005	1030
4,400	BHP			0.75	0.83	0.92	1.01	1.11	1.21	1.31	1.41	1.51	1.60	1.68	1.76	1.85	1.94
	Discrete Spd Setting			B	B	B	B	A	A	A	A	A	A	A	C	C	C
	RPM			563	609	655	695	735	775	815	855	890	925	955	985	1015	1045
4,600	BHP		0.75	0.85	0.95	1.03	1.11	1.19	1.30	1.40	1.50	1.60	1.70	1.78	1.89	2.00	2.10
	Discrete Spd Setting		B	B	B	B	B	A	A	A	A	A	A	C	C	C	C
	RPM		526	573	625	665	705	745	785	825	860	895	930	960	995	1025	1050
4,800	BHP		0.83	0.94	1.03	1.12	1.20	1.30	1.40	1.53	1.63	1.73	1.82	1.92	2.00	2.12	2.22
	Discrete Spd Setting		B	B	B	B	A	A	A	A	A	A	A	C	C	C	C
	RPM		542	594	640	680	720	760	795	835	870	905	935	970	1000	1030	1055
5,000	BHP		0.93	1.02	1.11	1.20	1.31	1.41	1.52	1.64	1.76	1.85	1.95	2.03	2.12	2.24	2.36
	Discrete Spd Setting		B	B	B	B	A	A	A	A	A	A	A	C	C	C	C
	RPM		563	609	650	690	735	770	805	840	880	910	945	975	1005	1035	1065
5,200	BHP	0.93	1.02	1.10	1.20	1.29	1.39	1.50	1.61	1.72	1.83	1.94	2.06	2.15	2.26	2.38	2.50
	Discrete Spd Setting	B	B	B	B	B	A	A	A	A	A	A	A	C	C	C	C
	RPM	542	583	625	665	705	745	780	815	850	885	920	955	985	1015	1045	1075
5,400	BHP	1.03	1.10	1.19	1.29	1.39	1.50	1.59	1.70	1.80	1.92	2.03	2.16	2.26	2.38	2.50	2.62
	Discrete Spd Setting	B	B	B	B	B	A	A	A	A	A	A	C	C	C	C	C
	RPM	563	599	640	680	720	760	790	825	860	895	925	960	990	1020	1050	1080
5,600	BHP	1.12	1.19	1.28	1.39	1.50	1.61	1.72	1.84	1.93	2.06	2.17	2.29	2.40	2.54	2.69	2.83
	Discrete Spd Setting	B	B	B	B	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	583	620	655	695	735	770	805	840	870	905	935	970	1000	1030	1060	1090
5,800	BHP	1.17	1.28	1.39	1.49	1.60	1.70	1.81	1.90	2.02	2.14	2.28	2.40	2.52	2.67	2.81	2.96
	Discrete Spd Setting	B	B	B	B	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	588	630	670	710	750	780	815	845	880	910	945	975	1005	1035	1065	1095
6,000	BHP	1.25	1.40	1.51	1.61	1.73	1.84	1.94	2.05	2.18	2.30	2.42	2.54	2.67	2.79	2.94	3.08
	Discrete Spd Setting	B	B	B	A	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	604	645	685	720	760	795	825	860	895	925	955	985	1015	1040	1070	1100
6,200	BHP	1.40	1.51	1.62	1.75	1.86	1.98	2.09	2.20	2.34	2.49	2.63	2.78	2.92	3.06	3.18	
	Discrete Spd Setting	B	B	B	A	A	A	A	A	A	A	C	C	C	C	C	
	RPM	625	660	695	735	770	805	840	875	905	935	965	995	1025	1055	1080	
6,400	BHP	1.55	1.68	1.79	1.90	2.04	2.18	2.32	2.44	2.56	2.68	2.80	2.92	3.07	3.19	3.33	
	Discrete Spd Setting	B	B	B	A	A	A	A	A	A	A	C	C	C	C	C	
	RPM	640	680	715	750	785	820	855	885	915	945	975	1005	1035	1060	1090	
6,600	BHP	1.73	1.84	1.94	2.06	2.20	2.34	2.46	2.58	2.70	2.82	2.94	3.07	3.19	3.34	3.46	
	Discrete Spd Setting	B	B	A	A	A	A	A	A	A	A	C	C	C	C	C	
	RPM	665	700	730	765	800	835	865	895	925	955	985	1015	1040	1070	1095	
6,800	BHP	1.87	1.98	2.08	2.20	2.34	2.48	2.62	2.74	2.86	2.96	3.08	3.24	3.38	3.55		
	Discrete Spd Setting	B	B	A	A	A	A	A	A	A	C	C	C	C	C		
	RPM	685	715	745	775	810	845	880	910	940	965	995	1025	1050	1080		
7,000	BHP	2.03	2.13	2.22	2.36	2.50	2.62	2.76	2.88	3.00	3.12	3.22	3.37	3.49	3.61		
	Discrete Spd Setting	B	A	A	A	A	A	A	A	A	C	C	C	C	C		
	RPM	705	730	755	790	825	855	890	920	950	980	1005	1035	1060	1085		

Notes:
- Motor Sheave set to 1-turn open from factory.
- Factory torque setting is A. Torque setting is field-adjustable to any torque setting listed in drive table through the ACDU01 Service Tool.
- The unit can control the blower through LAT control. Enable this settings in the field with the ACDU01 Service Tool.
- You can purchase the Advanced control panel as an accessory.
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
4,800	BHP		0.98	1.07	1.16	1.24	1.34	1.47	1.59	1.69	1.78	1.87	1.96	2.06	2.18	2.30	2.42
	Sheave/Mtr		B	B	B	B	A	A	A	A	A	A	A	C	C	C	C
	RPM		615	660	700	740	775	815	855	890	920	955	985	1015	1045	1075	1105
5,000	BHP	0.99	1.07	1.18	1.27	1.37	1.49	1.60	1.73	1.82	1.92	2.00	2.10	2.22	2.32	2.44	2.56
	Sheave/Mtr	B	B	B	B	A	A	A	A	A	A	A	A	C	C	C	C
	RPM	594	635	680	720	760	795	830	870	900	935	965	1000	1030	1055	1085	1115
5,200	BHP	1.09	1.18	1.28	1.36	1.48	1.59	1.70	1.82	1.93	2.02	2.14	2.24	2.36	2.48	2.60	2.72
	Sheave/Mtr	B	B	B	B	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	620	660	700	735	775	810	845	880	915	945	980	1010	1040	1070	1100	1130
5,400	BHP	1.19	1.29	1.39	1.48	1.59	1.70	1.80	1.92	2.03	2.16	2.26	2.38	2.50	2.62	2.74	2.87
	Sheave/Mtr	B	B	B	A	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	640	680	720	755	790	825	860	895	925	960	990	1020	1050	1080	1110	1140
5,600	BHP	1.30	1.40	1.51	1.62	1.74	1.85	1.95	2.08	2.18	2.31	2.42	2.57	2.71	2.86	2.98	3.12
	Sheave/Mtr	B	B	B	A	A	A	A	A	A	A	C	C	C	C	C	E
	RPM	660	700	740	775	810	845	875	910	940	975	1005	1035	1065	1095	1120	1150
5,800	BHP	1.41	1.52	1.63	1.73	1.84	1.95	2.06	2.18	2.32	2.44	2.57	2.72	2.86	3.00	3.15	3.27
	Sheave/Mtr	B	B	A	A	A	A	A	A	A	A	C	C	C	E	E	E
	RPM	680	720	760	790	825	860	890	920	955	985	1015	1045	1075	1105	1135	1160
6,000	BHP	1.56	1.67	1.78	1.89	2.00	2.12	2.24	2.36	2.48	2.60	2.74	2.89	3.01	3.15	3.30	3.42
	Sheave/Mtr	B	B	A	A	A	A	A	A	A	C	C	C	E	E	E	E
	RPM	700	740	775	810	845	880	910	940	970	1000	1030	1060	1085	1115	1145	1170
6,200	BHP	1.70	1.83	1.94	2.06	2.17	2.30	2.44	2.58	2.73	2.87	3.02	3.14	3.28	3.40	3.54	3.66
	Sheave/Mtr	B	A	A	A	A	A	A	A	A	C	E	E	E	E	E	E
	RPM	720	760	795	830	865	895	925	955	985	1015	1045	1070	1100	1125	1155	1180
6,400	BHP	1.88	2.02	2.16	2.28	2.42	2.54	2.66	2.78	2.90	3.04	3.16	3.31	3.43	3.58	3.72	3.86
	Sheave/Mtr	B	A	A	A	A	A	A	A	C	E	E	E	E	E	E	E
	RPM	745	780	815	845	880	910	940	970	1000	1030	1055	1085	1110	1140	1165	1190
6,600	BHP	2.06	2.18	2.32	2.46	2.58	2.70	2.82	2.94	3.07	3.19	3.34	3.46	3.60	3.74	3.88	4.02
	Sheave/Mtr	A	A	A	A	A	A	A	A	E	E	E	E	E	E	E	E
	RPM	765	795	830	865	895	925	955	985	1015	1040	1070	1095	1125	1150	1175	1200
6,800	BHP	2.22	2.36	2.50	2.62	2.74	2.86	3.00	3.10	3.27	3.41	3.58	3.72	3.85	3.97	4.11	4.23
	Sheave/Mtr	A	A	A	A	A	A	D	D	E	E	E	E	E	E	E	E
	RPM	780	815	850	880	910	940	970	1000	1030	1055	1085	1110	1135	1160	1190	1215
7,000	BHP	2.40	2.54	2.66	2.80	2.92	3.04	3.14	3.27	3.39	3.54	3.66	3.78	3.96	4.12	4.28	4.44
	Sheave/Mtr	A	A	A	A	A	D	D	E	E	E	E	E	E	E	E	E
	RPM	800	835	865	900	930	960	985	1015	1040	1070	1095	1120	1150	1175	1200	1225

Notes:
- A, 1 = Standard RPM/Standard Blower Motor
- E, 5 = High RPM/Large Blower Motor
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

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SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
7,200	BHP	2.58	2.70	2.85	2.99	3.14	3.28	3.42	3.54	3.66	3.81	3.93	4.06	4.22	4.38	4.54	4.70
	Sheave/Mtr	A	A	A	A	D	D	E	E	E	E	E	E	E	E	E	E
	RPM	820	850	885	915	945	975	1005	1030	1055	1085	1110	1135	1160	1185	1210	1235
7,400	BHP	2.76	2.88	3.02	3.16	3.31	3.45	3.61	3.75	3.92	4.06	4.20	4.36	4.52	4.68	4.81	4.97
	Sheave/Mtr	A	A	D	D	D	D	E	E	E	E	E	E	E	E	E	E
	RPM	840	870	900	930	960	990	1020	1045	1075	1100	1125	1150	1175	1200	1220	1245
7,600	BHP	2.94	3.07	3.22	3.36	3.50	3.63	3.82	3.98	4.14	4.34	4.50	4.66	4.78	4.94		
	Sheave/Mtr	A	D	D	D	D	E	E	E	E	E	E	E	E	E		
	RPM	860	890	920	950	980	1005	1035	1060	1085	1115	1140	1165	1185	1210		
7,800	BHP	3.22	3.34	3.49	3.63	3.78	3.96	4.12	4.28	4.44	4.63	4.76	4.92				
	Sheave/Mtr	D	D	D	D	D	E	E	E	E	E	E	E				
	RPM	880	905	935	965	995	1025	1050	1075	1100	1130	1150	1175				
8,000	BHP	3.41	3.58	3.75	3.92	4.06	4.26	4.42	4.58	4.74	4.90						
	Sheave/Mtr	D	D	D	D	E	E	E	E	E	E						
	RPM	895	925	955	985	1010	1040	1065	1090	1115	1140						

Notes:
- A, 1 = Standard RPM/Standard Blower Motor
- E, 5 = High RPM/Large Blower Motor
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
4,800	BHP		0.98	1.07	1.16	1.24	1.34	1.47	1.59	1.69	1.78	1.87	1.96	2.06	2.18	2.30	2.42
	Discrete Spd Setting		B	B	B	B	A	A	A	A	A	A	A	C	C	C	C
	RPM		615	660	700	740	775	815	855	890	920	955	985	1015	1045	1075	1105
5,000	BHP	0.99	1.07	1.18	1.27	1.37	1.49	1.60	1.73	1.82	1.92	2.00	2.10	2.22	2.32	2.44	2.56
	Discrete Spd Setting	B	B	B	B	A	A	A	A	A	A	A	A	C	C	C	C
	RPM	594	635	680	720	760	795	830	870	900	935	965	1000	1030	1055	1085	1115
5,200	BHP	1.09	1.18	1.28	1.36	1.48	1.59	1.70	1.82	1.93	2.02	2.14	2.24	2.36	2.48	2.60	2.72
	Sheave/Mtr	B	B	B	B	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	620	660	700	735	775	810	845	880	915	945	980	1010	1040	1070	1100	1130
5,400	BHP	1.19	1.29	1.39	1.48	1.59	1.70	1.80	1.92	2.03	2.16	2.26	2.38	2.50	2.62	2.74	2.87
	Discrete Spd Setting	B	B	B	A	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	640	680	720	755	790	825	860	895	925	960	990	1020	1050	1080	1110	1140
5,600	BHP	1.30	1.40	1.51	1.62	1.74	1.85	1.95	2.08	2.18	2.31	2.42	2.57	2.71	2.86	2.98	3.12
	Sheave/Mtr	B	B	B	A	A	A	A	A	A	A	C	C	C	C	C	C
	RPM	660	700	740	775	810	845	875	910	940	975	1005	1035	1065	1095	1120	1150
5,800	BHP	1.41	1.52	1.63	1.73	1.84	1.95	2.06	2.18	2.32	2.44	2.57	2.72	2.86	3.00	3.15	3.27
	Discrete Spd Setting	B	B	A	A	A	A	A	A	A	A	C	C	C	C	C	C
	RPM	680	720	760	790	825	860	890	920	955	985	1015	1045	1075	1105	1135	1160
6,000	BHP	1.56	1.67	1.78	1.89	2.00	2.12	2.24	2.36	2.48	2.60	2.74	2.89	3.01	3.15	3.30	3.42
	Discrete Spd Setting	B	B	A	A	A	A	A	A	A	C	C	C	C	C	C	C
	RPM	700	740	775	810	845	880	910	940	970	1000	1030	1060	1085	1115	1145	1170
6,200	BHP	1.70	1.83	1.94	2.06	2.17	2.30	2.44	2.58	2.73	2.87	3.02	3.14	3.28	3.40	3.54	3.66
	Discrete Spd Setting	B	A	A	A	A	A	A	A	A	C	C	C	C	C	C	C
	RPM	720	760	795	830	865	895	925	955	985	1015	1045	1070	1100	1125	1155	1180
6,400	BHP	1.88	2.02	2.16	2.28	2.42	2.54	2.66	2.78	2.90	3.04	3.16	3.31	3.43	3.58	3.72	3.86
	Discrete Spd Setting	B	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C
	RPM	745	780	815	845	880	910	940	970	1000	1030	1055	1085	1110	1140	1165	1190
6,600	BHP	2.06	2.18	2.32	2.46	2.58	2.70	2.82	2.94	3.07	3.19	3.34	3.46	3.60	3.74	3.88	4.02
	Discrete Spd Setting	A	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C
	RPM	765	795	830	865	895	925	955	985	1015	1040	1070	1095	1125	1150	1175	1200
6,800	BHP	2.22	2.36	2.50	2.62	2.74	2.86	3.00	3.10	3.27	3.41	3.58	3.72	3.85	3.97	4.11	4.23
	Discrete Spd Setting	A	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C
	RPM	780	815	850	880	910	940	970	1000	1030	1055	1085	1110	1135	1160	1190	1215

Notes:
- Motor Sheave set to 1-turn open from factory.
- Factory torque setting is A. Torque setting is field-adjustable to any torque setting listed in drive table through the ACDU01 Service Tool.
- The unit can control the blower through LAT control. Enable this settings in the field with the ACDU01 Service Tool.
- You can purchase the Advanced control panel as an accessory.
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

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SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
7,000	BHP	2.40	2.54	2.66	2.80	2.92	3.04	3.14	3.27	3.39	3.54	3.66	3.78	3.96	4.12	4.28	4.44
	Discrete Spd Setting	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C	C
	RPM	800	835	865	900	930	960	985	1015	1040	1070	1095	1120	1150	1175	1200	1225
7,200	BHP	2.58	2.70	2.85	2.99	3.14	3.28	3.42	3.54	3.66	3.81	3.93	4.06	4.22	4.38	4.54	4.70
	Discrete Spd Setting	A	A	A	A	A	A	C	C	C	C	C	C	C	C	C	C
	RPM	820	850	885	915	945	975	1005	1030	1055	1085	1110	1135	1160	1185	1210	1235
7,400	BHP	2.76	2.88	3.02	3.16	3.31	3.45	3.61	3.75	3.92	4.06	4.20	4.36	4.52	4.68	4.81	4.97
	Discrete Spd Setting	A	A	A	A	A	A	C	C	C	C	C	C	C	C	C	C
	RPM	840	870	900	930	960	990	1020	1045	1075	1100	1125	1150	1175	1200	1220	1245
7,600	BHP	2.94	3.07	3.22	3.36	3.50	3.63	3.82	3.98	4.14	4.34	4.50	4.66	4.78	4.94		
	Discrete Spd Setting	A	D	D	D	D	C	C	C	C	C	C	C	C	C		
	RPM	860	890	920	950	980	1005	1035	1060	1085	1115	1140	1165	1185	1210		
7,800	BHP	3.22	3.34	3.49	3.63	3.78	3.96	4.12	4.28	4.44	4.63	4.76	4.92				
	Discrete Spd Setting	A	A	A	A	A	C	C	C	C	C	C	C				
	RPM	880	905	935	965	995	1025	1050	1075	1100	1130	1150	1175				
8,000	BHP	3.41	3.58	3.75	3.92	4.06	4.26	4.42	4.58	4.74	4.90						
	Discrete Spd Setting	A	A	A	A	C	C	C	C	C	C						
	RPM	895	925	955	985	1010	1040	1065	1090	1115	1140						

Notes:
- Motor Sheave set to 1-turn open from factory.
- Factory torque setting is A. Torque setting is field-adjustable to any torque setting listed in drive table through the ACDU01 Service Tool.
- The unit can control the blower through LAT control. Enable this settings in the field with the ACDU01 Service Tool.
- You can purchase the Advanced control panel as an accessory.
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
6,000	BHP				1.78	1.89	2.00	2.12	2.24	2.36	2.48	2.60	2.74	2.89	3.01	3.15	3.30
	Sheave/Mtr				B	B	B	A	A	A	A	A	A	A	A	C	C
	RPM				775	810	845	880	910	940	970	1000	1030	1060	1085	1115	1145
6,200	BHP			1.82	1.93	2.04	2.15	2.30	2.44	2.58	2.73	2.87	2.99	3.14	3.26	3.40	3.52
	Sheave/Mtr			B	B	B	B	A	A	A	A	A	A	A	C	C	C
	RPM			755	790	825	860	895	925	955	985	1015	1040	1070	1095	1125	1150
6,400	BHP			2.00	2.14	2.26	2.40	2.52	2.64	2.76	2.88	3.02	3.14	3.28	3.40	3.56	3.70
	Sheave/Mtr			B	B	B	B	A	A	A	A	A	A	A	C	C	C
	RPM			775	810	840	875	905	935	965	995	1025	1050	1080	1105	1135	1160
6,600	BHP		2.02	2.16	2.30	2.42	2.56	2.68	2.80	2.92	3.05	3.17	3.29	3.43	3.55	3.71	3.85
	Sheave/Mtr		B	B	B	B	A	A	A	A	A	A	A	A	C	C	C
	RPM		755	790	825	855	890	920	950	980	1010	1035	1060	1090	1115	1145	1170
6,800	BHP		2.18	2.32	2.46	2.58	2.70	2.84	2.94	3.06	3.21	3.35	3.52	3.66	3.82	3.94	4.06
	Sheave/Mtr		B	B	B	B	A	A	A	A	A	A	A	C	C	C	C
	RPM		770	805	840	870	900	935	960	990	1020	1045	1075	1100	1130	1155	1180
7,000	BHP	2.22	2.34	2.48	2.62	2.74	2.86	2.98	3.10	3.22	3.34	3.49	3.61	3.73	3.90	4.06	4.22
	Sheave/Mtr	B	B	B	B	A	A	A	A	A	A	A	A	C	C	C	C
	RPM	755	785	820	855	885	915	945	975	1005	1030	1060	1085	1110	1140	1165	1190
7,200	BHP	2.38	2.52	2.64	2.78	2.92	3.06	3.21	3.35	3.47	3.62	3.74	3.88	4.00	4.16	4.32	4.48
	Sheave/Mtr	B	B	B	B	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	770	805	835	870	900	930	960	990	1015	1045	1070	1100	1125	1150	1175	1200
7,400	BHP	2.56	2.68	2.82	2.95	3.09	3.24	3.38	3.53	3.67	3.84	3.98	4.12	4.26	4.42	4.58	4.74
	Sheave/Mtr	B	B	B	A	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	790	820	855	885	915	945	975	1005	1030	1060	1085	1110	1135	1160	1185	1210
7,600	BHP	2.74	2.86	2.98	3.12	3.26	3.41	3.55	3.70	3.89	4.05	4.21	4.40	4.53	4.69	4.85	
	Sheave/Mtr	B	B	B	A	A	A	A	A	A	A	C	C	C	C	C	
	RPM	810	840	870	900	930	960	990	1015	1045	1070	1095	1125	1145	1170	1195	
7,800	BHP	2.98	3.13	3.25	3.39	3.54	3.68	3.83	3.99	4.15	4.34	4.50	4.66	4.82	4.95		
	Sheave/Mtr	B	B	A	A	A	A	A	A	A	C	C	C	C	C		
	RPM	830	860	885	915	945	975	1005	1030	1055	1085	1110	1135	1160	1180		
8,000	BHP	3.18	3.30	3.44	3.61	3.78	3.94	4.10	4.29	4.45	4.61	4.77	4.93				
	Sheave/Mtr	B	B	A	A	A	A	A	A	A	C	C	C				
	RPM	850	875	900	930	960	990	1015	1045	1070	1095	1120	1145				
8,200	BHP	3.35	3.48	3.65	3.79	3.96	4.13	4.27	4.44	4.58	4.72	4.88					
	Sheave/Mtr	B	A	A	A	A	A	A	A	A	C	C					
	RPM	865	890	920	945	975	1005	1030	1060	1085	1110	1135					

Notes:
- A, 1 = Standard RPM/Standard Blower Motor
- E, 5 = High RPM/Large Blower Motor
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

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SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
8,400	BHP	3.62	3.74	3.89	4.03	4.18	4.33	4.49	4.65	4.81	4.97						
	Sheave/Mtr	A	A	A	A	A	A	A	A	C	C						
	RPM	880	905	935	965	995	1020	1045	1070	1095	1120						
8,600	BHP	3.81	3.98	4.12	4.29	4.46	4.62	4.78	4.94								
	Sheave/Mtr	A	A	A	A	A	A	A	A								
	RPM	895	925	950	980	1010	1035	1060	1085								
8,800	BHP	4.06	4.22	4.41	4.57	4.73	4.92										
	Sheave/Mtr	A	A	A	A	A	A										
	RPM	915	940	970	995	1020	1050										
9,000	BHP	4.38	4.54	4.70	4.86												
	Sheave/Mtr	A	A	A	A												
	RPM	935	960	985	1010												
9,200	BHP	4.65	4.76	4.90													
	Sheave/Mtr	A	A	A													
	RPM	955	975	1000													
9,400	BHP	4.83	4.94														
	Sheave/Mtr	A	A														
	RPM	970	990														
9,600	BHP																
	Sheave/Mtr																
	RPM																

Notes:
- A, 1 = Standard RPM/Standard Blower Motor
- E, 5 = High RPM/Large Blower Motor
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
6,000	BHP				1.78	1.89	2.00	2.12	2.24	2.36	2.48	2.60	2.74	2.89	3.01	3.15	3.30
	Discrete Spd Setting				B	B	B	A	A	A	A	A	A	A	A	C	C
	RPM				775	810	845	880	910	940	970	1000	1030	1060	1085	1115	1145
6,200	BHP			1.82	1.93	2.04	2.15	2.30	2.44	2.58	2.73	2.87	2.99	3.14	3.26	3.40	3.52
	Discrete Spd Setting			B	B	B	B	A	A	A	A	A	A	A	C	C	C
	RPM			755	790	825	860	895	925	955	985	1015	1040	1070	1095	1125	1150
6,400	BHP			2.00	2.14	2.26	2.40	2.52	2.64	2.76	2.88	3.02	3.14	3.28	3.40	3.56	3.70
	Discrete Spd Setting			B	B	B	B	A	A	A	A	A	A	A	C	C	C
	RPM			775	810	840	875	905	935	965	995	1025	1050	1080	1105	1135	1160
6,600	BHP		2.02	2.16	2.30	2.42	2.56	2.68	2.80	2.92	3.05	3.17	3.29	3.43	3.55	3.71	3.85
	Discrete Spd Setting		B	B	B	B	A	A	A	A	A	A	A	A	C	C	C
	RPM		755	790	825	855	890	920	950	980	1010	1035	1060	1090	1115	1145	1170
6,800	BHP		2.18	2.32	2.46	2.58	2.70	2.84	2.94	3.06	3.21	3.35	3.52	3.66	3.82	3.94	4.06
	Discrete Spd Setting		B	B	B	B	A	A	A	A	A	A	A	C	C	C	C
	RPM		770	805	840	870	900	935	960	990	1020	1045	1075	1100	1130	1155	1180
7,000	BHP	2.22	2.34	2.48	2.62	2.74	2.86	2.98	3.10	3.22	3.34	3.49	3.61	3.73	3.90	4.06	4.22
	Discrete Spd Setting	B	B	B	B	A	A	A	A	A	A	A	A	C	C	C	C
	RPM	755	785	820	855	885	915	945	975	1005	1030	1060	1085	1110	1140	1165	1190
7,200	BHP	2.38	2.52	2.64	2.78	2.92	3.06	3.21	3.35	3.47	3.62	3.74	3.88	4.00	4.16	4.32	4.48
	Discrete Spd Setting	B	B	B	B	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	770	805	835	870	900	930	960	990	1015	1045	1070	1100	1125	1150	1175	1200
7,400	BHP	2.56	2.68	2.82	2.95	3.09	3.24	3.38	3.53	3.67	3.84	3.98	4.12	4.26	4.42	4.58	4.74
	Discrete Spd Setting	B	B	B	A	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	790	820	855	885	915	945	975	1005	1030	1060	1085	1110	1135	1160	1185	1210
7,600	BHP	2.74	2.86	2.98	3.12	3.26	3.41	3.55	3.70	3.89	4.05	4.21	4.40	4.53	4.69	4.85	5.01
	Discrete Spd Setting	B	B	B	A	A	A	A	A	A	A	C	C	C	C	C	C
	RPM	810	840	870	900	930	960	990	1015	1045	1070	1095	1125	1145	1170	1195	1220
7,800	BHP	2.98	3.13	3.25	3.39	3.54	3.68	3.83	3.99	4.15	4.34	4.50	4.66	4.82	4.95	5.11	5.27
	Discrete Spd Setting	B	B	A	A	A	A	A	A	A	C	C	C	C	C	C	C
	RPM	830	860	885	915	945	975	1005	1030	1055	1085	1110	1135	1160	1180	1205	1230
8,000	BHP	3.18	3.30	3.44	3.61	3.78	3.94	4.10	4.29	4.45	4.61	4.77	4.93	5.09	5.25	5.38	5.54
	Discrete Spd Setting	B	B	A	A	A	A	A	A	A	C	C	C	C	C	C	C
	RPM	850	875	900	930	960	990	1015	1045	1070	1095	1120	1145	1170	1195	1215	1240

Notes:
- Motor Sheave set to 1-turn open from factory.
- Factory torque setting is A. Torque setting is field-adjustable to any torque setting listed in drive table through the ACDU01 Service Tool.
- The unit can control the blower through LAT control. Enable this settings in the field with the ACDU01 Service Tool.
- You can purchase the Advanced control panel as an accessory.
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

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Table continued from previous page

SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
8,200	BHP	3.35	3.48	3.65	3.79	3.96	4.13	4.27	4.44	4.58	4.72	4.88	5.08	5.24	5.44	5.64	
	Discrete Spd Setting	B	A	A	A	A	A	A	A	A	C	C	C	C	C	C	
	RPM	865	890	920	945	975	1005	1030	1060	1085	1110	1135	1160	1180	1205	1230	
8,400	BHP	3.62	3.74	3.89	4.03	4.18	4.33	4.49	4.65	4.81	4.97	5.16	5.36	5.56	5.72	5.92	
	Discrete Spd Setting	A	A	A	A	A	A	A	A	C	C	C	C	C	C	C	
	RPM	880	905	935	965	995	1020	1045	1070	1095	1120	1145	1170	1195	1215	1240	
8,600	BHP	3.81	3.98	4.12	4.29	4.46	4.62	4.78	4.94	5.10	5.28	5.48	5.64	5.84	6.04	6.20	
	Discrete Spd Setting	A	A	A	A	A	A	A	A	C	C	C	C	C	C	C	
	RPM	895	925	950	980	1010	1035	1060	1085	1110	1135	1160	1180	1205	1230	1250	
8,800	BHP	4.06	4.22	4.41	4.57	4.73	4.92	5.08	5.24	5.40	5.60	5.76	5.96	6.16	6.32		
	Discrete Spd Setting	A	A	A	A	A	A	A	C	C	C	C	C	C	C		
	RPM	915	940	970	995	1020	1050	1075	1100	1125	1150	1170	1195	1220	1240		
9,000	BHP	4.38	4.54	4.70	4.86	5.02	5.18	5.34	5.50	5.68	5.88	6.08	6.24				
	Sheave/Mtr	A	A	A	A	A	A	A	C	C	C	C	C				
	RPM	935	960	985	1010	1035	1060	1085	1110	1135	1160	1185	1205				
	Turns Open	4.5	4	3.5	3	2	1.5	1	3.5	3	2.5	2	1.5				
9,200	BHP	4.65	4.76	4.90	5.08	5.26	5.44	5.62	5.80	6.00	6.16						
	Discrete Spd Setting	A	A	A	A	A	A	C	C	C	C						
	RPM	955	975	1000	1025	1050	1075	1100	1125	1150	1170						
9,400	BHP	4.83	4.94	5.12	5.32	5.52	5.72	5.92	6.12	6.32	6.48						
	Discrete Spd Setting	A	A	A	A	A	A	C	C	C	C						
	RPM	970	990	1015	1040	1065	1090	1115	1140	1165	1185						
9,600	BHP	5.10	5.24	5.44	5.64	5.84	6.04	6.24	6.40								
	Discrete Spd Setting	A	A	A	A	A	C	C	C								
	RPM	985	1005	1030	1055	1080	1105	1130	1150								

Notes:
- Motor Sheave set to 1-turn open from factory.
- Factory torque setting is A. Torque setting is field-adjustable to any torque setting listed in drive table through the ACDU01 Service Tool.
- The unit can control the blower through LAT control. Enable this settings in the field with the ACDU01 Service Tool.
- You can purchase the Advanced control panel as an accessory.
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

SCFM	ESP (in.w.c.)	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
7,500	BHP	2.69	2.84	2.96	3.11	3.27	3.45	3.60	3.78	3.96	4.08	4.23	4.38	4.53	4.69	4.86	5.03
	Discrete Spd Setting	B	B	B	B	A	A	A	A	A	A	A	A	A	C	C	C
	RPM	890	925	955	990	1020	1050	1075	1105	1135	1155	1180	1205	1230	1255	1275	1295
7,800	BHP	2.87	3.04	3.18	3.36	3.54	3.72	3.87	4.05	4.20	4.35	4.50	4.65	4.80	4.97	5.14	5.30
	Discrete Spd Setting	B	B	B	A	A	A	A	A	A	A	A	A	C	C	C	C
	RPM	910	945	975	1010	1040	1070	1095	1125	1150	1175	1200	1225	1250	1270	1290	1310
8,100	BHP	3.10	3.26	3.42	3.60	3.78	3.96	4.14	4.34	4.52	4.70	4.88	5.06	5.21	5.35	5.53	5.68
	Discrete Spd Setting	B	B	B	A	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	935	965	995	1025	1055	1085	1115	1145	1170	1195	1220	1245	1265	1285	1310	1330
8,400	BHP	3.36	3.52	3.74	3.92	4.14	4.36	4.57	4.75	4.93	5.11	5.29	5.47	5.62	5.80	5.94	6.12
	Discrete Spd Setting	B	B	A	A	A	A	A	A	A	A	A	C	C	C	C	C
	RPM	955	985	1020	1045	1075	1105	1135	1160	1185	1210	1235	1260	1280	1305	1325	1350
8,700	BHP	3.60	3.79	4.00	4.22	4.43	4.65	4.83	5.01	5.19	5.37	5.55	5.76	5.97	6.14	6.35	6.56
	Discrete Spd Setting	B	A	A	A	A	A	A	A	A	A	C	C	C	C	C	C
	RPM	975	1005	1035	1065	1095	1125	1150	1175	1200	1225	1250	1275	1300	1320	1345	1370
9,000	BHP	3.90	4.12	4.30	4.51	4.73	4.91	5.09	5.30	5.48	5.66	5.89	6.08	6.32	6.56	6.76	
	Discrete Spd Setting	A	A	A	A	A	A	A	A	A	C	C	C	C	C	C	
	RPM	1000	1030	1055	1085	1115	1140	1165	1195	1220	1245	1270	1290	1315	1340	1360	
9,300	BHP	4.34	4.56	4.74	4.96	5.14	5.35	5.53	5.71	5.89	6.08	6.29	6.50	6.67	6.88	7.05	
	Discrete Spd Setting	A	A	A	A	A	A	A	A	A	C	C	C	C	C	C	
	RPM	1020	1050	1075	1105	1130	1160	1185	1210	1235	1260	1285	1310	1330	1355	1375	
9,600	BHP	4.64	4.85	5.03	5.25	5.46	5.67	5.88	6.13	6.34	6.52	6.66	6.84	7.02	7.16		
	Discrete Spd Setting	A	A	A	A	A	A	A	A	C	C	C	C	C	C		
	RPM	1040	1070	1095	1125	1150	1175	1200	1230	1255	1280	1300	1325	1350	1370		
9,900	BHP	4.93	5.15	5.33	5.53	5.78	5.99	6.20	6.41	6.62	6.83	7.04	7.21	7.42			
	Discrete Spd Setting	A	A	A	A	A	A	A	C	C	C	C	C	C			
	RPM	1060	1090	1115	1140	1170	1195	1220	1245	1270	1295	1320	1340	1365			
10,200	BHP	5.36	5.57	5.77	5.95	6.17	6.35	6.53	6.74	6.94	7.18						
	Discrete Spd Setting	A	A	A	A	A	A	C	C	C	C						
	RPM	1085	1110	1135	1160	1190	1215	1240	1265	1285	1310						
10,500	BHP	5.52	5.75	5.99	6.23	6.47	6.71	6.95	7.19								
	Discrete Spd Setting	A	A	A	A	A	A	C	C								
	RPM	1100	1130	1155	1180	1205	1230	1255	1280								
10,800	BHP	6.00	6.24	6.48	6.72	6.96	7.20	7.39	7.63								
	Discrete Spd Setting	A	A	A	A	A	C	C	C								
	RPM	1125	1150	1175	1200	1225	1250	1270	1295								

Notes:

- Motor Sheave set to 1-turn open from factory.
- Factory torque setting is A. Torque setting is field-adjustable to any torque setting listed in drive table through the ACDU01 Service Tool.
- The unit can control the blower through LAT control. Enable this settings in the field with the ACDU01 Service Tool.
- You can purchase the Advanced control panel as an accessory.
- The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

SB Physical Data

Configuration	Horizontal			Vertical						
Unit Size	072	096	120	072	096	120	168	192	240	300
Compressor Type	Scroll			Scroll						
Number of Circuits (Compressors)	2			2						
Refrigerant Leak Detection System	R	R	R	R	R	R	R	R	R	R
Number of Sensors	2	2	2	2	2	2	2	2	2	2
Factory Charge R-454B (oz) [kg] per Circuit	54 [1.5]	62 [1.8]	66 [1.9]	54 [1.5]	62 [1.8]	66 [1.9]	94 [2.7]	103 [2.9]	134 [3.8]	184 [5.2]
Blower Motor										
Standard Motor (hp) [kW]	1 [0.75]	2 [1.49]	3 [2.23]	1 [0.75]	2 [1.49]	3 [2.23]			5 [3.73]	7.5 [5.60]
*Large Motor (hp) [kW]	2 [1.49]	3 [2.23]	5 [3.73]	2 [1.49]	3 [2.23]	5 [3.73]			7.5 [5.60]	10 [7.46]
Water Connections										
FPT (in) [mm]	1-1/4" [31.8]		1-1/2" [38.1]	1-1/4" [31.8]		1-1/2" [38.1]	2" [50.8]			2-1/2" [63.5]
Coax Data										
Number of Coaxes per Circuit	1			1			2		3	
Volume per Coax (gallon) [liter]	1.62 [6.13]	2.40 [9.08]	2.40 [9.08]	1.62 [6.13]	2.40 [9.08]	2.40 [9.08]	3.62 [13.70]	4.83 [18.28]	4.90 [18.55]	7.39 [27.98]
Condensate Connection Size										
FPT (in) [mm]	3/4" [19.1]			1" [25.4]						
Miscellaneous Data										
Filter Standard - 1" [2.54cm] Throwaway (qty) (in) [cm]	(QTY.3) 16 x 20 [40.6 x 50.8]			(QTY.4) 20 x 20 [50.8 x 50.8]			(QTY.4) 20 x 25 [50.80 x 63.5]			
	(QTY.1) 20 x 20 [50.8 x 50.8]						(QTY.2) 20 x 30 [50.80 x 76.2]			
Weight - Operating (lbs) [kg]	586 [265.8]	644 [292.1]	698 [316.6]	586 [265.8]	644 [292.1]	698 [316.6]	1069 [484.9]	1164 [528.0]	1184 [537.1]	1297 [588.3]
Weight - Packaged (lbs) [kg]	626 [283.9]	684 [310.3]	738 [334.8]	626 [283.9]	684 [310.3]	738 [334.8]	1149 [521.2]	1244 [564.3]	1264 [573.3]	1377 [624.6]

O = Optional, R = Required

SB with WSE Physical Data

Unit Size	072	096	120	168	192	240	300
Vertical							
Weight - Operating (lbs.) [kg]	762 [345.5]	837 [379.7]	907 [411.6]	1529 [693.4]	1665 [755]	1693 [768]	1855 [841.3]
Weight - Packaged (lbs.) [kg]	814 [369.1]	889 [403.3]	962 [436.4]	1643 [745.3]	1779 [806.9]	1808 [819.9]	1974 [895.4]
Air Coil Volume (gal) [L]	4.3	4.8		9.7		19	
Horizontal							
Weight - Operating (lbs.) [kg]	838 [380.1]	921 [417.7]	998 [452.7]				
Weight - Packaged (lbs.) [kg]	900 [408.2]	978 [443.7]	1008 [457.2]				
Air Coil Volume (gal) [L]	4	4.4					

Unit Maximum Water Working Pressure

Configuration	Max Pressure PSIG [kPa]
Base Unit	300 [2,068]
MWV	200 [1,379]
MOD Valve	200 [1,379]

Use the lowest maximum pressure rating when multiple options are combined.

Waterside Economizer (WSE) Data

Unit with WSE Cooling Performance – 45°F EWT, 400 CFM/Ton

Model	Cabinet Config	Water Side			Airside (Dry)		Capacity	
		Flow GPM	PD psi	PD ft	CFM	DP psi	TC	SC
SB072	H	18	3.8	8.7	2,400	<0.10	29,804	17,778
SB096	H	24	6.8	15.6	3,200	<0.10	39,061	22,964
SB120	H	30	6.2	14.3	4,000	<0.10	43,659	24,291
SB072	V	20	2.7	6.3	2,400	<0.10	27,548	16,904
SB096	V	24	4.8	11.0	3,200	<0.10	35,545	21,568
SB120	V	30	3.0	7.0	4,000	<0.10	41,300	24,495
SB168	V	42	4.8	11.0	5,600	<0.10	76,156	45,598
SB192	V	48	5.9	13.5	6,400	<0.10	83,715	49,510
SB240	V	60	15.0	34.6	8,000	0.10	165,124	99,273
SB300	V	75	22.1	51.1	10,000	0.13	189,286	112,711

EAT 80/67; EWT 45; Nominal Airflow at 1.00" ESP; Nominal Waterflow

Airside PD

Model	Cabinet Config	Coil	AirSide PD Adder (in. wg) at CFM/TON				
			300	350	400	450	500
SB072	H	Dry	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
		Wet	< 0.1	< 0.1	< 0.1	< 0.1	0.10
SB096	H	Dry	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
		Wet	< 0.1	< 0.1	< 0.1	< 0.1	0.10
SB120	H	Dry	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
		Wet	< 0.1	< 0.1	< 0.1	< 0.1	0.10
SB072	V	Dry	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
		Wet	< 0.1	< 0.1	< 0.1	< 0.1	0.10
SB096	V	Dry	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
		Wet	< 0.1	< 0.1	< 0.1	< 0.1	0.10
SB120	V	Dry	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
		Wet	< 0.1	< 0.1	< 0.1	< 0.1	0.10
SB168	V	Dry	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
		Wet	< 0.1	< 0.1	< 0.1	< 0.1	0.10
SB192	V	Dry	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
		Wet	< 0.1	< 0.1	< 0.1	< 0.1	0.10
SB240	V	Dry	< 0.1	< 0.1	< 0.1	< 0.1	0.12
		Wet	< 0.1	0.11	0.14	0.17	0.20
SB300	V	Dry	< 0.1	< 0.1	< 0.1		
		Wet	< 0.1	0.11	0.14		

WSE Valve Flow Coefficient

Model	Cabinet Config	CV	
		Econ - On	Econ - Off
SB072	H	34	27
SB096	H	61	49
SB120	H	61	49
SB072	V	34	27
SB096	V	61	49
SB120	V	61	49
SB168	V	109	87
SB192	V	109	87
SB240	V	109	87
SB300	V	109	87

WSE Entering Air Correction tables include the following notes:

*Sensible Capacity = Total Capacity

- Corrections are based on nominal gpm and cfm.
- Tot Clg Cap @ EAT 80db/67wb
- EWT @ 45°F

SB072 Horizontal — Nominal Airflow (cfm) 2,400 — Nominal Waterflow (gpm) 18

Ent Air WB (°F)	Total Clg Cap	Sensible Cooling Capacity Multipliers - Entering DB °F								
		65	70	75	80	80.6	85	90	95	100
50.0	0.899	*	*	*	*	*	*	*	*	*
55.0	0.902	*	*	*	*	*	*	*	*	*
60.0	0.905	0.448	0.661	*	*	*	*	*	*	*
65.0	0.872		0.590	0.810	1.031	1.056	1.706	*	*	*
66.2	0.881		0.546	0.900	1.127	1.169	2.171	*	*	*
67.0	1.000		0.562	0.779	1.000	1.106	1.225	1.958	*	*
70.0	1.210			0.737	0.956	1.052	1.178	1.404	1.896	*
75.0	1.579				0.866	0.905	1.086	1.313	1.541	1.778

SB072 Vertical — Nominal Airflow (cfm) 2,400 — Nominal Waterflow (gpm) 18

Ent Air WB (°F)	Total Clg Cap	Sens Clg Cap Multipliers - Entering DB °F								
		65	70	75	80	80.6	85	90	95	100
50.0	0.922	*	*	*	*	*	*	*	*	*
55.0	0.925	*	*	*	*	*	*	*	*	*
60.0	0.929	0.431	0.667	*	*	*	*	*	*	*
65.0	0.870		0.574	0.803	1.038	1.063	1.700	*	*	*
66.2	0.885		0.538	0.894	1.131	1.174	2.164	*	*	*
67.0	1.000		0.533	0.769	1.000	1.100	1.290	1.951	*	*
70.0	1.196			0.704	0.934	1.020	1.169	1.410	2.109	*
75.0	1.566				0.825	0.854	1.058	1.297	1.536	1.785

SB096 Horizontal — Nominal Airflow (cfm) 3,200 — Nominal Waterflow (gpm) 24

Ent Air WB (°F)	Total Clg Cap	Sens Clg Cap Multipliers - Entering DB °F								
		65	70	75	80	80.6	85	90	95	100
50.0	0.882	*	*	*	*	*	*	*	*	*
55.0	0.886	*	*	*	*	*	*	*	*	*
60.0	0.889	0.442	0.660	*	*	*	*	*	*	*
65.0	0.868		0.591	0.808	1.027	1.051	1.652	*	*	*
66.2	0.874		0.548	0.896	1.122	1.164	2.127	*	*	*
67.0	1.000		0.560	0.782	1.000	1.107	1.220	1.913	*	*
70.0	1.195			0.729	0.948	1.043	1.173	1.399	1.856	*
75.0	1.571				0.866	0.905	1.086	1.318	1.544	1.773

SB096 Vertical — Nominal Airflow (cfm) 3,200 — Nominal Waterflow (gpm) 24

Ent Air WB (°F)	Total Clg Cap	Sens Clg Cap Multipliers - Entering DB °F								
		65	70	75	80	80.6	85	90	95	100
50.0	0.916	*	*	*	*	*	*	*	*	*
55.0	0.919	*	*	*	*	*	*	*	*	*
60.0	0.922	0.433	0.662	*	*	*	*	*	*	*
65.0	0.871		0.568	0.801	1.039	1.064	1.708	*	*	*
66.2	0.884		0.532	0.892	1.133	1.175	2.175	*	*	*
67.0	1.000		0.536	0.766	1.000	1.099	1.272	1.963	*	*
70.0	1.204			0.702	0.939	1.022	1.181	1.421	2.080	*
75.0	1.579				0.831	0.857	1.064	1.311	1.551	1.796

SB120 Horizontal — Nominal Airflow (cfm) 4,000 — Nominal Waterflow (gpm) 30

Ent Air WB (°F)	Total Clg Cap	Sens Clg Cap Multipliers - Entering DB °F								
		65	70	75	80	80.6	85	90	95	100
50.0	0.867	*	*	*	*	*	*	*	*	*
55.0	0.870	*	*	*	*	*	*	*	*	*
60.0	0.874	0.368	0.615	*	*	*	*	*	*	*
65.0	0.858		0.537	0.782	1.030	1.057	1.708	*	*	*
66.2	0.863		0.490	0.881	1.136	1.182	2.211	*	*	*
67.0	1.000		0.502	0.753	1.000	1.090	1.249	2.000	*	*
70.0	1.209			0.694	0.941	1.018	1.196	1.450	1.952	*
75.0	1.611				0.849	0.874	1.097	1.360	1.614	1.873

SB120 Vertical — Nominal Airflow (cfm) 4,000 — Nominal Waterflow (gpm) 30

Ent Air WB (°F)	Total Clg Cap	Sens Clg Cap Multipliers - Entering DB °F								
		65	70	75	80	80.6	85	90	95	100
50.0	0.907	*	*	*	*	*	*	*	*	*
55.0	0.910	*	*	*	*	*	*	*	*	*
60.0	0.914	0.403	0.644	*	*	*	*	*	*	*
65.0	0.867		0.546	0.790	1.041	1.067	1.737	*	*	*
66.2	0.879		0.508	0.884	1.138	1.182	2.211	*	*	*
67.0	1.000		0.512	0.754	1.000	1.092	1.279	2.004	*	*
70.0	1.211			0.687	0.936	1.011	1.191	1.443	2.117	*
75.0	1.597				0.823	0.843	1.068	1.328	1.580	1.837

SB0168 Vertical — Nominal Airflow (cfm) 5,600 — Nominal Waterflow (gpm) 42

Ent Air WB (°F)	Total Clg Cap	Sens Clg Cap Multipliers - Entering DB °F								
		65	70	75	80	80.6	85	90	95	100
50.0	0.884	*	*	*	*	*	*	*	*	*
55.0	0.887	*	*	*	*	*	*	*	*	*
60.0	0.890	0.482	0.680	*	*	*	*	*	*	*
65.0	0.884		0.620	0.820	1.030	1.051	1.559	*	*	*
66.2	0.887		0.577	0.905	1.120	1.157	2.037	*	*	*
67.0	1.000		0.599	0.798	1.000	1.117	1.212	1.797	*	*
70.0	1.195			0.756	0.960	1.067	1.168	1.375	1.739	*
75.0	1.554				0.889	0.937	1.095	1.303	1.511	1.723

SB192 Vertical — Nominal Airflow (cfm) 6,400 — Nominal Waterflow (gpm) 48

Ent Air WB (°F)	Total Clg Cap	Sens Clg Cap Multipliers - Entering DB °F								
		65	70	75	80	80.6	85	90	95	100
50.0	0.879	*	*	*	*	*	*	*	*	*
55.0	0.882	*	*	*	*	*	*	*	*	*
60.0	0.885	0.467	0.671	*	*	*	*	*	*	*
65.0	0.882		0.610	0.815	1.031	1.052	1.567	*	*	*
66.2	0.884		0.566	0.902	1.122	1.160	2.051	*	*	*
67.0	1.000		0.588	0.792	1.000	1.114	1.218	1.811	*	*
70.0	1.197			0.749	0.958	1.062	1.173	1.386	1.753	*
75.0	1.563				0.886	0.932	1.098	1.312	1.526	1.743

SB240 Vertical — Nominal Airflow (cfm) 8,000 — Nominal Waterflow (gpm) 60

Ent Air WB (°F)	Total Clg Cap	Sens Clg Cap Multipliers - Entering DB °F								
		65	70	75	80	80.6	85	90	95	100
50.0	0.858	*	*	*	*	*	*	*	*	*
55.0	0.862	*	*	*	*	*	*	*	*	*
60.0	0.866	0.481	0.680	*	*	*	*	*	*	*
65.0	0.876		0.621	0.824	1.026	1.051	1.556	*	*	*
66.2	0.876		0.584	0.899	1.107	1.146	2.010	*	*	*
67.0	1.000		0.592	0.797	1.000	1.117	1.204	1.786	*	*
70.0	1.191			0.754	0.956	1.063	1.159	1.367	1.730	*
75.0	1.549				0.882	0.930	1.085	1.290	1.494	1.701

SB300 Vertical — Nominal Airflow (cfm) 10,000 — Nominal Waterflow (gpm) 75

Ent Air WB (°F)	Total Clg Cap	Sens Clg Cap Multipliers - Entering DB °F								
		65	70	75	80	80.6	85	90	95	100
50.0	0.886	*	*	*	*	*	*	*	*	*
55.0	0.890	*	*	*	*	*	*	*	*	*
60.0	0.894	0.477	0.676	*	*	*	*	*	*	*
65.0	0.874		0.623	0.822	1.023	1.047	1.579	*	*	*
66.2	0.880		0.576	0.908	1.119	1.158	2.063	*	*	*
67.0	1.000		0.596	0.800	1.000	1.118	1.202	1.815	*	*
70.0	1.196			0.755	0.961	1.067	1.162	1.368	1.720	*
75.0	1.552				0.888	0.936	1.089	1.293	1.497	1.704

WSE Cooling Correction tables include the following note:

- Corrections based on 80/67; EWT 45; Nominal Airflow @ 1.00" ESP; Nominal Water flow

SB072 Horizontal

Airflow	Cooling Corrections	
% Normal Capacity	Sensible Capacity	Sens/Total Ratio
75.00	0.906	0.61
81.25	0.939	0.61
87.50	0.968	0.60
93.75	0.988	0.60
100.00	1.000	0.60
106.25	1.010	0.59
112.50	1.012	0.58
118.75	1.008	0.58
125.00	0.994	0.57

SB072 Vertical

Airflow	Cooling Corrections	
% Normal Capacity	Sensible Capacity	Sens/Total Ratio
75.00	0.905	0.62
81.25	0.935	0.62
87.50	0.955	0.62
93.75	0.980	0.62
100.00	1.000	0.61
106.25	1.007	0.61
112.50	1.011	0.61
118.75	1.014	0.60
125.00	1.012	0.59

SB096 Horizontal

Airflow	Cooling Corrections	
% Normal Capacity	Sensible Capacity	Sens/Total Ratio
75.00	0.886	0.60
81.25	0.924	0.60
87.50	0.956	0.60
93.75	0.978	0.59
100.00	1.000	0.59
106.25	1.009	0.58
112.50	1.018	0.58
118.75	1.025	0.57
125.00	1.027	0.56

SB096 Vertical

Airflow	Cooling Corrections	
% Normal Capacity	Sensible Capacity	Sens/Total Ratio
75.00	0.911	0.62
81.25	0.947	0.61
87.50	0.968	0.61
93.75	0.982	0.61
100.00	1.000	0.61
106.25	1.013	0.60
112.50	1.013	0.59
118.75	1.007	0.59
125.00	1.002	0.58

SB120 Horizontal

Airflow	Cooling Corrections	
% Normal Capacity	Sensible Capacity	Sens/Total Ratio
75.00	0.923	0.59
81.25	0.955	0.58
87.50	0.978	0.58
93.75	0.990	0.57
100.00	1.000	0.56
106.25	0.994	0.54
112.50	0.985	0.53
118.75	0.973	0.51
125.00	0.953	0.49

SB120 Vertical

Airflow	Cooling Corrections	
% Normal Capacity	Sensible Capacity	Sens/Total Ratio
75.00	0.931	0.61
81.25	0.963	0.61
87.50	0.979	0.60
93.75	0.988	0.60
100.00	1.000	0.59
106.25	1.006	0.58
112.50	1.000	0.57
118.75	0.983	0.56
125.00	0.968	0.55

SB168 Vertical

Airflow	Cooling Corrections	
% Normal Capacity	Sensible Capacity	Sens/Total Ratio
75.00	0.862	0.61
81.25	0.906	0.60
87.50	0.945	0.60
93.75	0.970	0.60
100.00	1.000	0.60
106.25	1.027	0.60
112.50	1.043	0.59
118.75	1.062	0.59
125.00	1.074	0.58

SB192 Vertical

Airflow	Cooling Corrections	
% Normal Capacity	Sensible Capacity	Sens/Total Ratio
75.00	0.872	0.60
81.25	0.914	0.60
87.50	0.951	0.60
93.75	0.972	0.60
100.00	1.000	0.59
106.25	1.024	0.59
112.50	1.036	0.58
118.75	1.049	0.58
125.00	1.057	0.57

SB240 Vertical

Airflow	Cooling Corrections	
% Normal Capacity	Sensible Capacity	Sens/Total Ratio
75.00	0.922	0.61
81.25	0.948	0.61
87.50	0.970	0.61
93.75	0.989	0.60
100.00	1.000	0.60
106.25	1.008	0.60
112.50	1.012	0.59
118.75	1.011	0.58
125.00	1.007	0.58

SB300 Vertical

Airflow	Cooling Corrections	
% Normal Capacity	Sensible Capacity	Sens/Total Ratio
75.00	0.924	0.61
81.25	0.949	0.61
87.50	0.970	0.60
93.75	0.987	0.60
100.00	1.000	0.60

WSE Airflow Ratings tables include the following note:

- EAT 80/67; EWT 45; Nom Airflow @ 1.00" ESP; Nominal Water flow

SB072 Horizontal WSE 2,400 CFM Nominal Airflow

EWT °F	Waterside				Capacity	
	Flow GPM	LWT F°	WPD psi	WPD ft hd	TC	SC
45	18.0	48.8	3.8	8.7	29,804	17,778
	13.5	49.7	2.2	5.1	27,480	16,848
	9.0	51.2	1.0	2.4	23,905	15,462
50	18.0	53.0	3.8	8.7	23,034	15,122
	13.5	53.7	2.2	5.1	21,160	14,420
	9.0	55.0	1.0	2.4	18,342	13,740
55	18.0	57.5	3.8	8.7	18,409	16,619
	13.5	58.2	2.2	5.1	17,514	16,551
	9.0	59.4	1.0	2.4	15,881	14,978
60	18.0	62.0	3.8	8.7	14,082	13,245
	13.5	62.6	2.2	5.1	13,320	12,511
	9.0	63.6	1.0	2.4	12,023	11,262

SB072 Vertical WSE 2,400 CFM Nominal Airflow

EWT °F	Waterside				Capacity	
	Flow GPM	LWT F°	WPD psi	WPD ft hd	TC	SC
45	18.0	45.8	2.7	6.3	27,548	16,904
	13.5	45.7	1.5	3.6	24,818	15,840
	9.0	45.6	0.7	1.6	20,864	14,348
50	18.0	50.6	2.7	6.3	21,059	14,417
	13.5	50.6	1.5	3.6	18,896	13,623
	9.0	50.5	0.7	1.6	17,729	15,909
55	18.0	55.5	2.7	6.3	17,524	16,560
	13.5	55.5	1.5	3.6	16,409	15,486
	9.0	55.5	0.7	1.6	14,578	13,722
60	18.0	60.4	2.7	6.3	13,340	12,531
	13.5	60.4	1.5	3.6	12,458	11,681
	9.0	60.4	0.7	1.6	11,002	10,279

SB096 Horizontal WSE 3,200 CFM Nominal Airflow

EWT °F	Waterside				Capacity	
	Flow GPM	LWT F°	WPD psi	WPD ft hd	TC	SC
45	24.0	48.7	6.8	15.6	39,061	22,964
	18.0	49.6	3.9	9.1	36,298	21,841
	12.0	51.1	1.8	4.3	31,373	19,918
50	24.0	52.9	6.8	15.6	29,817	19,317
	18.0	53.7	3.9	9.1	27,810	18,570
	12.0	54.8	1.8	4.3	23,565	16,984
55	24.0	57.4	6.8	15.6	23,226	20,253
	18.0	58.1	3.9	9.1	22,639	21,201
	12.0	59.3	1.8	4.3	20,435	19,251
60	24.0	62.0	6.8	15.6	17,991	16,899
	18.0	62.5	3.9	9.1	17,018	15,960
	12.0	63.5	1.8	4.3	15,005	14,007

SB096 Vertical WSE 3,200 CFM Nominal Airflow

EWT °F	Waterside				Capacity	
	Flow GPM	LWT F°	WPD psi	WPD ft hd	TC	SC
45	24.0	48.4	4.8	11.0	35,545	21,568
	18.0	49.2	2.7	6.3	32,522	20,374
	12.0	50.4	1.2	2.8	27,179	18,352
50	24.0	52.7	4.8	11.0	27,278	18,386
	18.0	53.3	2.7	6.3	24,401	17,335
	12.0	54.7	1.2	2.8	22,516	19,694
55	24.0	57.3	4.8	11.0	22,333	21,079
	18.0	57.9	2.7	6.3	20,942	19,739
	12.0	59.0	1.2	2.8	18,632	17,513
60	24.0	61.9	4.8	11.0	16,959	15,905
	18.0	62.4	2.7	6.3	15,822	14,809
	12.0	63.2	1.2	2.8	13,592	12,646

Waterside Economizer (WSE) Data Airflow Ratings

Models:
SB
072-300

SB120 Horizontal WSE 4,000 CFM Nominal Airflow

EWT °F	Waterside				Capacity	
	Flow GPM	LWT F°	WPD psi	WPD ft hd	TC	SC
45	30.0	48.6	6.2	14.3	43,659	24,291
	22.5	49.5	3.6	8.4	40,385	22,968
	15.0	50.9	1.7	3.9	34,534	20,675
50	30.0	52.8	6.2	14.3	32,557	19,909
	22.5	53.6	3.6	8.4	30,180	19,015
	15.0	54.7	1.7	3.9	25,209	17,186
55	30.0	57.3	6.2	14.3	24,557	20,818
	22.5	58.0	3.6	8.4	23,763	22,035
	15.0	59.1	1.7	3.9	21,198	19,770
60	30.0	61.9	6.2	14.3	18,147	16,832
	22.5	62.4	3.6	8.4	17,052	15,777
	15.0	63.3	1.7	3.9	15,172	13,967

SB120 Vertical WSE 4,000 CFM Nominal Airflow

EWT °F	Waterside				Capacity	
	Flow GPM	LWT F°	WPD psi	WPD ft hd	TC	SC
45	30.0	48.3	3.0	7.0	41,300	24,495
	22.5	49.1	1.7	4.0	37,714	23,077
	15.0	50.2	0.8	1.8	31,379	20,676
50	30.0	52.6	3.0	7.0	31,336	20,620
	22.5	53.2	1.7	4.0	27,886	19,342
	15.0	54.5	0.8	1.8	25,461	21,740
55	30.0	57.2	3.0	7.0	25,187	23,678
	22.5	57.8	1.7	4.0	23,536	22,088
	15.0	58.8	0.8	1.8	20,844	19,496
60	30.0	61.8	3.0	7.0	18,719	17,449
	22.5	62.3	1.7	4.0	17,434	16,212
	15.0	63.1	0.8	1.8	15,289	14,146

SB168 Vertical WSE 5,600 CFM Nominal Airflow

EWT °F	Waterside				Capacity	
	Flow GPM	LWT F°	WPD psi	WPD ft hd	TC	SC
45	42.0	49.0	4.8	11.0	76,156	45,598
	31.5	50.0	2.8	6.5	70,874	43,453
	21.0	51.6	1.3	3.1	62,602	40,179
50	42.0	53.2	4.8	11.0	59,555	38,958
	31.5	53.9	2.8	6.5	54,953	37,209
	21.0	55.3	1.3	3.1	48,162	34,699
55	42.0	57.5	4.8	11.0	45,757	38,463
	31.5	58.4	2.8	6.5	46,368	42,567
	21.0	59.6	1.3	3.1	41,469	39,275
60	42.0	62.1	4.8	11.0	36,407	34,399
	31.5	62.7	2.8	6.5	34,760	32,812
	21.0	63.7	1.3	3.1	32,009	30,166

SB192 Vertical WSE 6,400 CFM Nominal Airflow

EWT °F	Waterside				Capacity	
	Flow GPM	LWT F°	WPD psi	WPD ft hd	TC	SC
45	48.0	48.9	5.9	13.5	83,715	49,510
	36.0	49.9	3.5	8.1	77,852	47,129
	24.0	51.5	1.7	3.9	68,677	43,501
50	48.0	53.1	5.9	13.5	65,234	42,158
	36.0	53.9	3.5	8.1	60,117	40,210
	24.0	55.2	1.7	3.9	52,582	37,428
55	48.0	57.5	5.9	13.5	49,679	41,469
	36.0	58.3	3.5	8.1	50,341	46,088
	24.0	59.5	1.7	3.9	44,942	42,483
60	48.0	62.0	5.9	13.5	39,250	37,001
	36.0	62.6	3.5	8.1	37,445	35,262
	24.0	63.6	1.7	3.9	34,280	32,213

SB240 Vertical WSE 8,000 CFM Nominal Airflow

EWT °F	Waterside				Capacity	
	Flow GPM	LWT F°	WPD psi	WPD ft hd	TC	SC
45	60.0	51.0	15.0	34.6	165,124	99,273
	45.0	52.5	9.0	20.9	151,928	93,931
	30.0	54.9	4.5	10.3	132,467	86,302
50	60.0	54.8	15.0	34.6	128,187	84,527
	45.0	55.9	9.0	20.9	116,892	80,250
	30.0	57.8	4.5	10.3	100,663	75,438
55	60.0	58.9	15.0	34.6	100,606	86,703
	45.0	60.1	9.0	20.9	99,532	88,502
	30.0	62.0	4.5	10.3	87,994	81,279
60	60.0	63.1	15.0	34.6	76,126	72,152
	45.0	63.9	9.0	20.9	72,497	68,656
	30.0	65.5	4.5	10.3	66,067	62,462

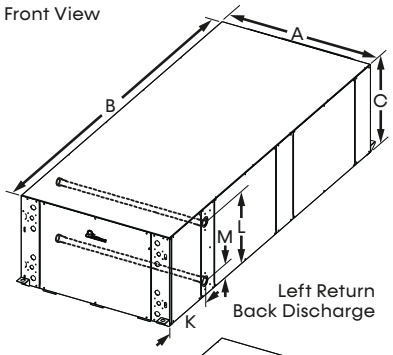
SB300 Vertical WSE 10,000 CFM Nominal Airflow

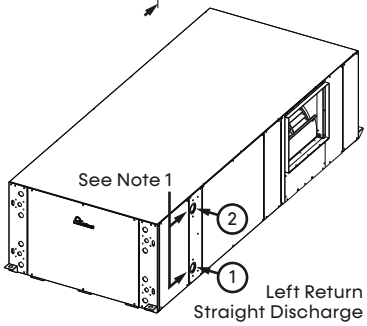
EWT °F	Waterside				Capacity	
	Flow GPM	LWT F°	WPD psi	WPD ft hd	TC	SC
45	75.0	50.6	18.3	42.2	189,286	112,711
	56.3	51.9	10.6	24.5	175,596	107,150
	37.5	54.3	4.8	11.1	154,285	98,745
50	75.0	54.4	18.3	42.2	147,281	96,007
	56.3	55.5	10.6	24.5	134,899	91,299
	37.5	57.2	4.8	11.1	116,174	84,855
55	75.0	58.6	18.3	42.2	115,518	98,176
	56.3	59.9	10.6	24.5	118,368	105,192
	37.5	61.6	4.8	11.1	104,828	96,837
60	75.0	62.9	18.3	42.2	90,334	85,588
	56.3	63.7	10.6	24.5	86,190	81,597
	37.5	65.2	4.8	11.1	78,786	74,464

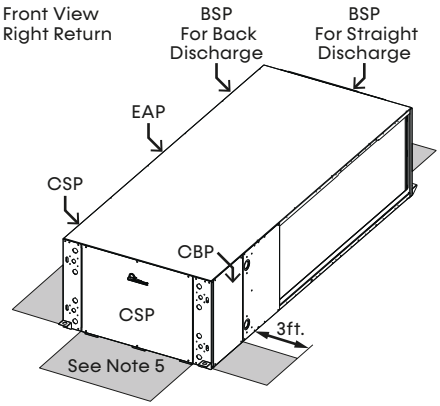
SB 072-120 Horizontal Dimensional Data

Models:
SB
072-300

Unit Size		Overall Cabinet			Discharge Connections Duct Flange				Water Connections			Electrical Knockouts								Return Air Connections Using Return Air Opening					
		A	B	C	D	E	F	G	K	L	M	O		P				Q		S		T	U	V	
		Width	Depth	Height	Flange Offset	Supply Depth	Supply Width	Supply Height		Water Outlet	Water Inlet	1	2	1	2	3	4	1	2	Return Depth		Return Height	Unit Top Height	072	096-120
												1-1/8" (2.9 cm)	7/8" (2.2 cm)	1-1/8" (2.9 cm)				7/8" (2.2 cm)		072	096-120				
072-120	inch	36.3	84.9	21.6	13.9	17.1	13.5	7.4	15.0	18.0	3.5	3.0	2.7	19.4	14.3	7.3	2.1	16.8	4.8	55.0	65.0	18.0	1.0	28.9	18.9
	cm	92.2	215.6	54.9	35.2	43.4	34.3	19.8	38.1	45.7	8.9	7.6	6.8	49.2	36.3	18.6	5.4	42.7	12.2	139.7	165.1	45.7	2.5	73.4	48.0





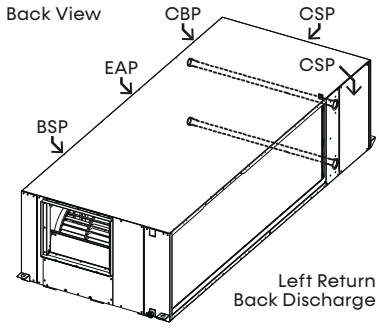


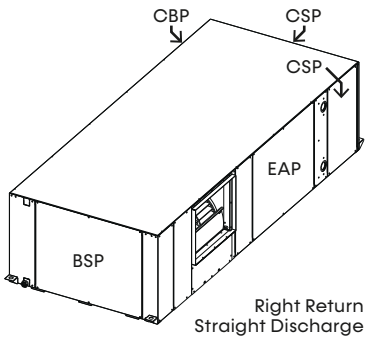
Legend:

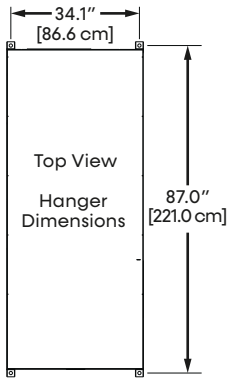
BSP = Blower Service Panel
CSP = Compressor Service Panel
CBP = Control Box Panel
EAP = Expansion Valve Access Panel

Notes:
All dimensions in table are inches (cm).

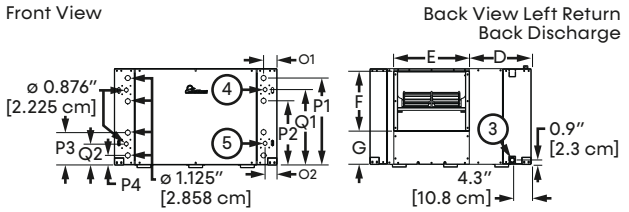
1. Water inlet and water outlet connections are configurable on either side (left or right) of the unit. Qty (2x) MPT Plugs are shipped loose in a plastic bag tied to the water leg in front of the unit. Installer must plug water inlet/outlet side not being connected to.
2. Condensate drain is ¾-inch FPT and is located on cabinet end opposite the compressor.
3. Electrical access is configurable on either side (left or right) of the front.
4. If the control box is configured on one side, it can be field converted to the opposite side. Conversion should only be attempted by a qualified service technician.
5. Units require 3 feet (90.1 cm) of clearance for water connections, CSP, CBP, EAP, and BSP service access. Service access is required at all removable panels locations and installer should take care to comply with all building codes and allow adequate clearance for future field service.
6. Overall cabinet width dimensions do not include filter rail and duct flange.
7. Units are shipped with air-filter rails that are not suitable for supporting return air ductwork. An air-filter frame with duct-mounting collar is available to order as an accessory.

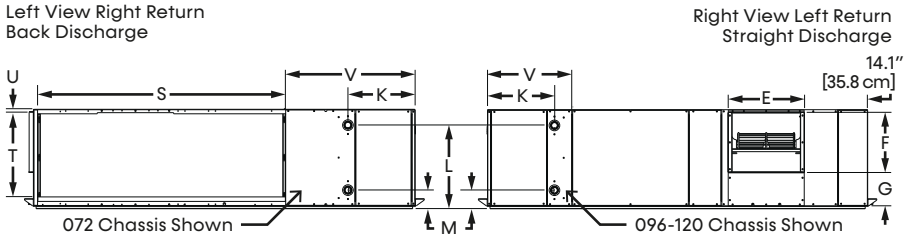






Notes	SB072-096	SB120
① Water Inlet[1]	1-1/4" FPT	1-1/2" FPT
② Water Outlet[1]	1-1/4" FPT	1-1/2" FPT
③ Condensate Drain[2]	1" FPT	
④ High Voltage Access[3]	1-3/8" (3.49 cm)	
⑤ Low Voltage Access[3]	7/8" (2.2 cm)	

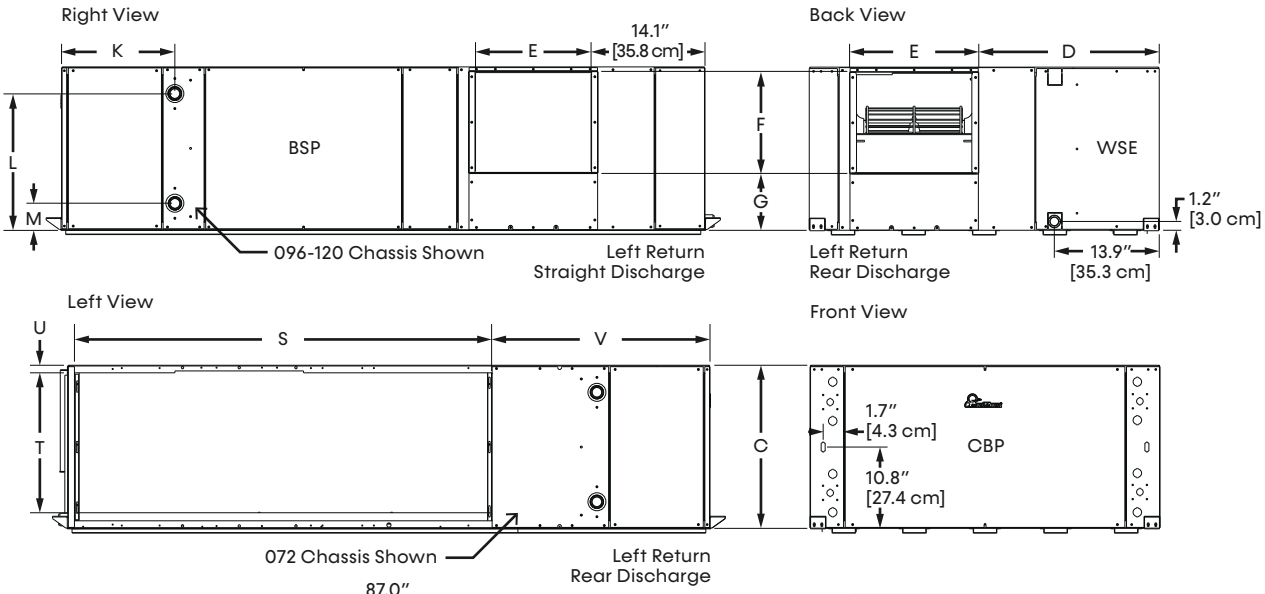


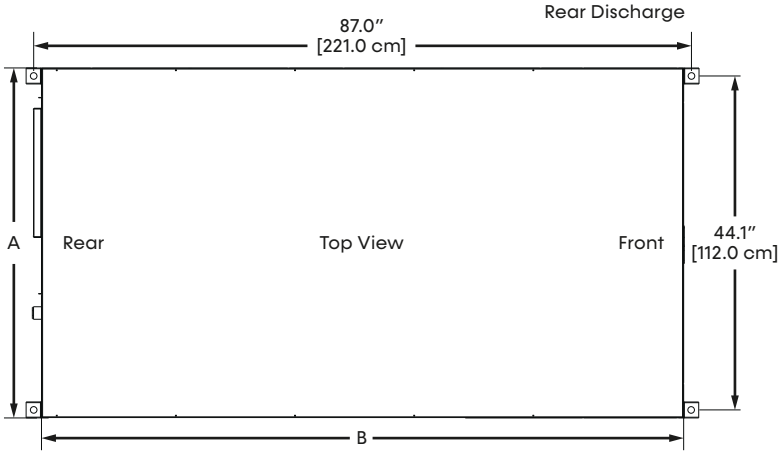


SB 072-120 Horizontal with WSE Dimensional Data

Models:
SB
072-300

Unit Size		Overall Cabinet			Discharge Connections Duct Flange				Water Connections			Electrical Knockouts								Return Air Connections Using Return Air Opening					
		A	B	C	D	E	F	G	K	L	M	O		P				Q		S		T	U	V	
		Width	Depth	Height	Flange Offset	Supply Width	Supply Height	Supply Height		1 Water Outlet	2 Water Inlet	1 1-1/8" (2.9 cm)	2 7/8" (2.2 cm)	1 1-1/8" (2.9 cm)	2 1-1/8" (2.9 cm)	3 1-1/8" (2.9 cm)	4 1-1/8" (2.9 cm)	1 7/8" (2.2 cm)	2 7/8" (2.2 cm)	Return Depth 072	Return Depth 096-120	Return Height	Unit Top Height	072	096-120
072-120	inch	46.3	84.9	21.6	23.9	17.1	13.5	7.4	15.0	18.0	3.5	3.0	2.7	19.4	14.3	7.2	2.1	16.8	4.7	55.1	61.0	18.5	1.0	28.9	22.8
	cm	117.6	215.6	54.8	60.6	43.4	34.3	18.8	38.1	45.7	8.9	7.6	6.8	49.2	36.3	18.3	5.4	42.7	11.9	140.0	154.9	47.0	2.5	73.4	57.9





Legend:

BSP = Blower Service Panel
CSP = Compressor Service Panel
CBP = Control Box Panel
EAP = Expansion Valve Access Panel
WSE = Waterside Economizer

Notes:

All dimensions in table are inches (cm). See standard configuration for electrical knockout dimensions.

1. Water inlet and water outlet connections are configurable on either side (left or right) of the unit. Qty (2x) MPT Plugs are shipped loose in a plastic bag tied to the water leg in front of the unit. Installer must plug water inlet/outlet side not being connected to.
2. Condensate drain is ¾-inch FPT and is located on cabinet end opposite the compressor.
3. Electrical access is configurable on either side (left or right) of the front.
4. If the control box is configured on one side, it can be field converted to the opposite side. Conversion should only be attempted by a qualified service technician.
5. Units require 3 feet (90.1 cm) of clearance for water connections, CSP, CBP, EAP, and BSP service access. Service access is required at all removable panels locations and installer should take care to comply with all building codes and allow adequate clearance for future field service.
6. Overall cabinet width dimensions do not include filter rail and duct flange.
7. Units are shipped with air-filter rails that are not suitable for supporting return air ductwork. An air-filter frame with duct-mounting collar is available to order as an accessory.

SB 072-120 Vertical Dimensional Data

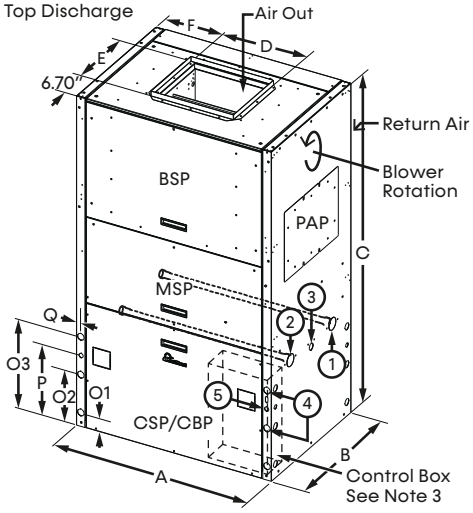
Models:
SB
072-300

Unit Size		Overall Cabinet			Discharge Connections Duct Flange			Water Connections				Electrical Knockouts					Return Air Connections Using Return Air Opening			
		A	B	C	D	E	F	K	L	M	N	O			P	Q	S	T	U	V
								1	2	3		1	2	3						
		Width	Depth	Height	Supply Width	Supply Height	Side Offset	Water In	Water Out	Condensate	Connection Height	1-3/8" (3.5cm)			7/8" (2.2 cm)		Return Width	Return Height		
072	inch	41.0	29.0	69.8	17.5	14.8	11.9	22.0	7.2	14.6	22.3	3.0	11.0	19.0	15.0	0.9	36.3	29.4	28.6	4.5
	cm	104.1	73.3	177.3	44.5	37.6	30.2	55.9	18.3	37.1	56.6	7.6	27.9	48.3	38.1	2.3	92.2	74.7	72.6	11.4
096-120	inch	41.0	29.0	69.8	17.5	14.8	11.9	22.0	7.2	14.6	22.3	3.0	11.0	19.0	15.0	0.9	36.0	35.1	28.6	2.6
	cm	104.1	73.3	177.3	44.5	37.6	30.2	55.9	18.3	37.1	56.6	7.6	27.9	48.3	38.1	2.3	91.4	89.2	72.6	6.6

Notes:
All dimensions in table are inches (cm)

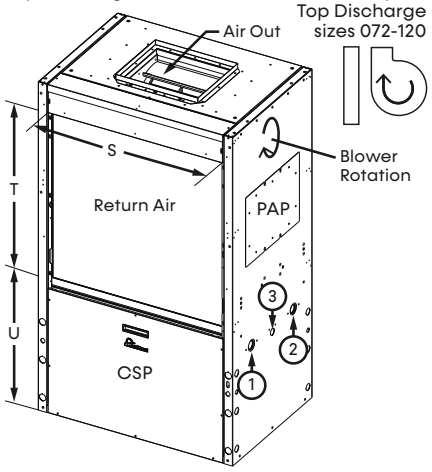
1. Water inlet and water outlet connections are factory shipped on the left side. Union allows field conversion to right side.
2. Condensate drain is available on either side (left or right) of unit. Drain hose and drain connection will be tied inside the unit. Installer will untie the drain hose, form trap, and connect to the condensate drain hole of installer's choice.
3. Electrical access is available on either side (left or right) of unit and is also available in the front on the left or right side of the unit.
4. Overall cabinet dimensions do not include duct flange or filter rails.
5. Units require 3 feet (90.1 cm) of clearance for water connections, CSP, CBP, MSP, and BSP service access. Service access is required at all removable panels locations and installer should take care to comply with all building codes and allow adequate clearance for future field service.
6. Filter removal is from right or left side of filter frame, allow 3 feet (61 cm) of access for servicing.

Front View
Top Discharge

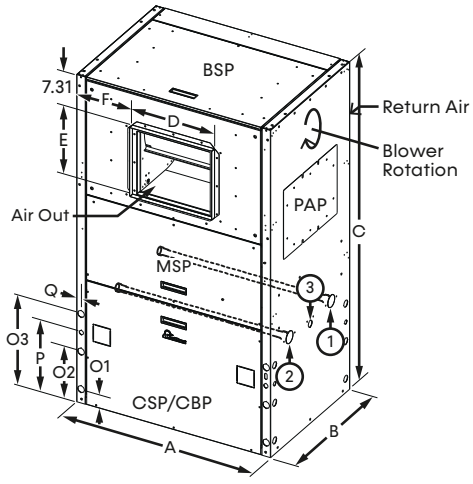


Rear View
Top Discharge

Blower to Air Coil relationship for Top Discharge sizes 072-120

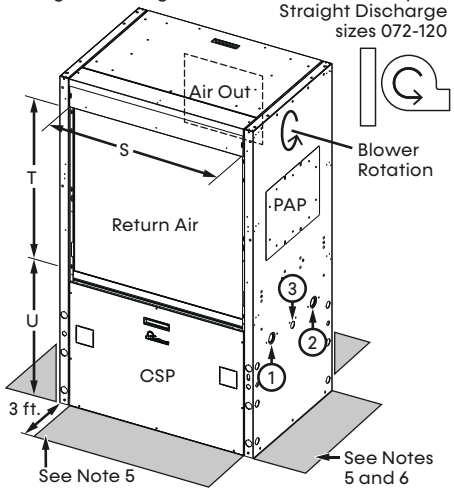


Front View
Straight Discharge

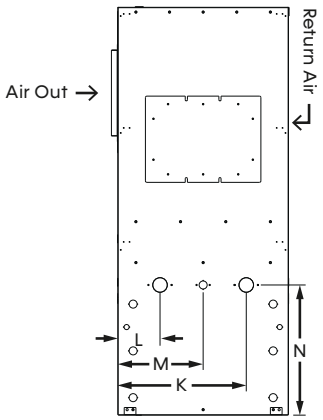


Rear View
Straight Discharge

Blower to Air Coil relationship for Straight Discharge sizes 072-120



Right Side View
Straight Discharge



Notes	SB072-096	SB120
① Water Inlet[1]	1-1/4" FPT	1-1/2" FPT
② Water Outlet[1]	1-1/4" FPT	1-1/2" FPT
③ Condensate Drain[2]	1" FPT	
④ High Voltage Access[3]	1-3/8" (3.49 cm)	
⑤ Low Voltage Access[3]	7/8" (2.2 cm)	

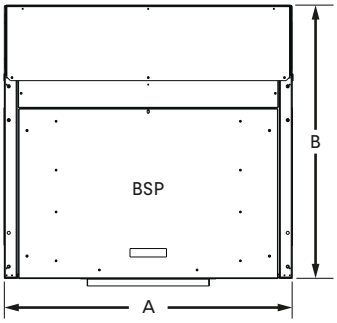
Legend
BSP = Blower Service Panel
CBP = Control Box Panel
CSP = Compressor Service Panel
MSP = Motor Service Panel
PAP = Pulley Access Panel

SB 072-120 Vertical with WSE Dimensional Data

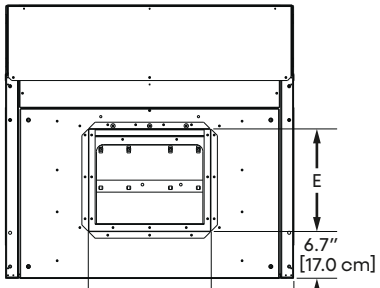
Models:
SB
072-300

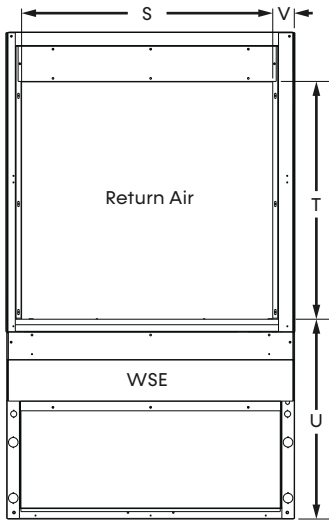
Unit Size		Overall Cabinet			Discharge Connections Duct Flange			Water Connections				Electrical Knockouts					Return Air Connections Using Return Air Opening			
		A	B	C	D	E	F	K	L	M	N	O			P	Q	S	T	U	V
								1	2	3		1	2	3						
		Width	Depth	Height	Supply Width	Supply Height	Side Offset	Water In	Water Out	Condensate	Connection Height						Return Width	Return Height		Return Side Offset
072	inch	41.3	39.2	69.8	17.5	14.7	11.9	22.0	7.2	14.6	22.3	3.0	11.0	19.0	15.1	0.9	34.0	31.6	28.6	3.6
	cm	104.9	99.6	177.3	44.5	37.3	30.2	55.9	18.3	37.1	56.6	7.6	27.9	48.3	38.4	2.3	86.4	80.3	72.7	9.1
096-120	inch	41.3	39.2	69.8	17.5	14.7	11.9	22.3	6.9	14.6	22.3	3.0	11.0	19.0	15.1	0.9	36.0	34.1	28.6	3.0
	cm	104.9	99.6	177.3	44.5	37.3	30.2	56.6	17.5	37.1	56.6	7.6	27.9	48.3	38.4	2.3	91.4	86.6	72.7	7.5

Top View
Rear Return Front Discharge

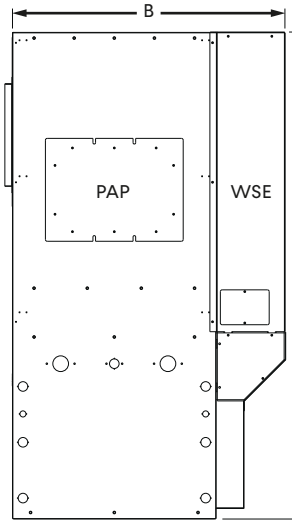


Top View
Rear Return Top Discharge

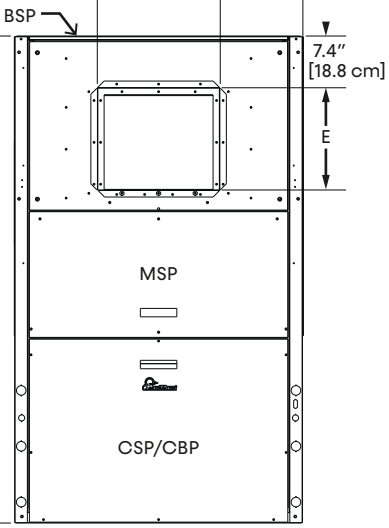




Back View
Rear Return Front Discharge



Right Side View



Front View
Rear Return Front Discharge

Notes:

All dimensions in table are inches (cm). See standard configuration for water connecntion and electrical knockout dimensions.

1. While clear access to all removable panels may not be required, installer should take care to comply with all building codes and allow adequate clearance for future field service.
2. Units require 3 feet (91 cm) of clearance for water connections, WSE coil air bleed, CBP, CSP, BSP, PAP, and MSP.
3. Condensate drain is internally trapped, externally vented.
4. For top discharge units, BSP is on front. For front discharge units, BSP is on top. Allow 3 feet above unit for service.

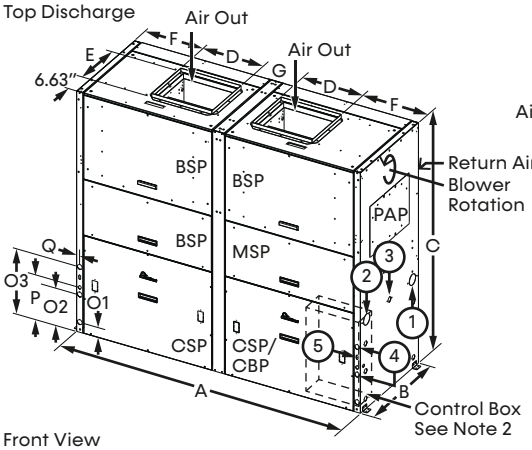
BSP = Blower Service Panel
CSP = Compressor Service Panel
CBP = Control Box Panel
MSP = Motor Service Panel
PAP = Pulley Access Panel
WSE = Waterside Economizer

SB 168-240 Vertical Dimensional Data

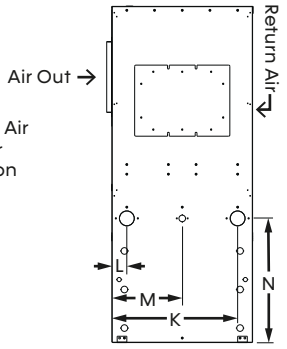
Models:
SB
072-300

Unit Size		Overall Cabinet			Discharge Connections Duct Flange				Water Connections				Electrical Knockouts					Return Air Connections Using Return Air Opening			
		A	B	C	D	E	F	G	K	L	M	N	O			P	Q	S	T	U	V
									1	2	3		1	2	3						
		Width	Depth	Height	Supply Width	Supply Height	Side Offset	Center Offset	Water In	Water Out	Condensate	Connection Height	1-3/8" (3.5cm)			7/8" (2.2 cm)		Return Width	Return Height		
168-240	inch	82.3	29.2	69.8	17.5	14.7	17.9	11.5	26.2	3.1	14.6	25.8	3.0	11.0	19.0	13.0	0.9	77.2	35.0	31.0	2.6
	cm	209.0	74.2	177.3	44.5	37.3	45.5	29.2	66.5	7.9	37.1	65.5	7.6	27.9	48.3	33.0	2.3	196.1	88.9	78.7	6.6

Front View
Top Discharge

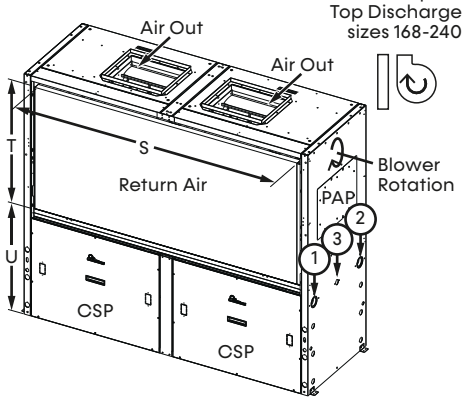


Front Return Rear Discharge (FR/RD)

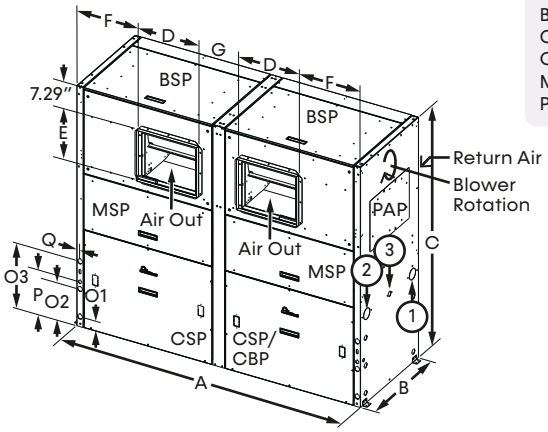


Rear View
Top Discharge

Blower to Air Coil relationship for Top Discharge sizes 168-240



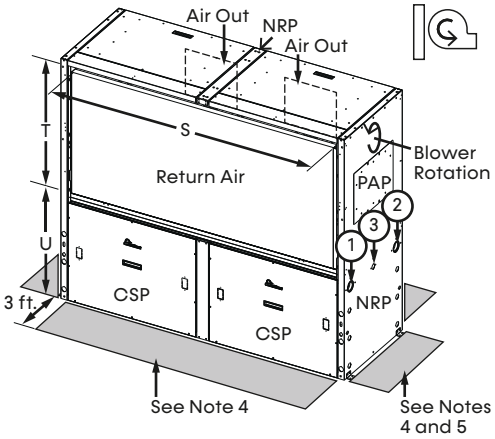
Front View
Straight Discharge



Legend
BSP = Blower Service Panel
CBP = Control Box Panel
CSP = Compressor Service Panel
MSP = Motor Service Panel
PAP = Pulley Access Panel

Rear View
Straight Discharge

Blower to Air Coil relationship for Straight Discharge sizes 168-240



Notes
All dimensions in table are inches (cm)

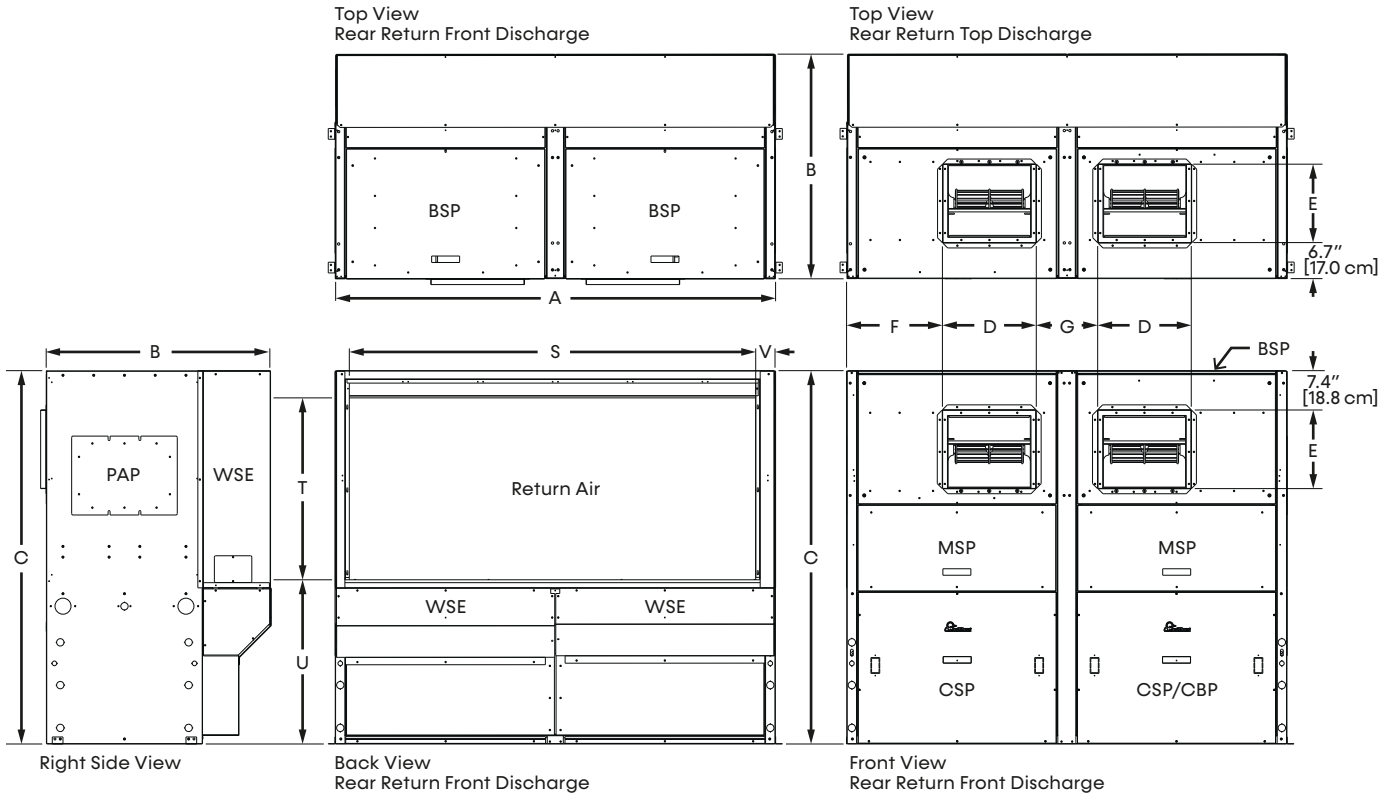
1. Condensate drain is available on either side (left or right) of unit. Drain hose and drain connection will be tied inside the unit. Installer will untie the drain hose, form trap, and connect to the condensate drain hole of installer's choice.
2. Electrical access is available on either side (left or right) of unit and is also available in the front on the left or right side of the unit.
3. Overall cabinet height and depth dimensions do not include duct flange or filter rails.
4. Units require 3 feet (91 cm) of clearance for water connections, CBP, CSP, MSP, and BSP service access. Service access is required at all removable panels locations and installer should take care to comply with all building codes and allow adequate clearance for future field service.
5. Filter removal is from right or left side of filter frame, allow 3 feet (91 cm) of access for servicing.

Legend	SB168-240
① Water Inlet	2" FPT
② Water Outlet	2" FPT
③ Condensate Drain[1]	1" FPT
④ High Voltage Access[2]	1-3/8" (3.49 cm)
⑤ Low Voltage Access[2]	7/8" (2.2 cm)

SB 168-240 Vertical with WSE Dimensional Data

Models:
SB
072-300

Unit Size		Overall Cabinet			Discharge Connections Duct Flange				Water Connections				Electrical Knockouts					Return Air Connections Using Return Air Opening			
		A	B	C	D	E	F	G	K	L	M	N	O			P	Q	S	T	U	V
									1	2	3		1	2	3						
		Width	Depth	Height	Supply Width	Supply Height	Side Offset	Center Offset	Water In	Water Out	Condensate	Connection Height						Return Width	Return Height		Return Side Offset
168-240	inch	82.3	42.0	69.8	17.5	14.7	17.9	11.5	26.1	3.1	14.6	25.8	3.0	11.0	19.0	15.1	0.9	76.0	34.0	30.7	3.6
	cm	209.0	106.7	177.3	44.5	37.3	45.5	29.3	66.3	7.9	37.1	65.5	7.6	27.9	48.3	38.4	2.3	193.0	86.4	78.0	9.1



Notes:

All dimensions in table are inches (cm). See standard configuration for water connecntion and electrical knockout dimensions.

1. While clear access to all removable panels may not be required, installer should take care to comply with all building codes and allow adequate clearance for future field service.
2. Units require 3 feet (91 cm) of clearance for water connections, WSE coil air bleed, CBP, CSP, BSP, PAP, and MSP.
3. Condensate drain is internally trapped, externally vented.
4. For top discharge units, BSP is on front. For front discharge units, BSP is on top. Allow 3 feet above unit for service.

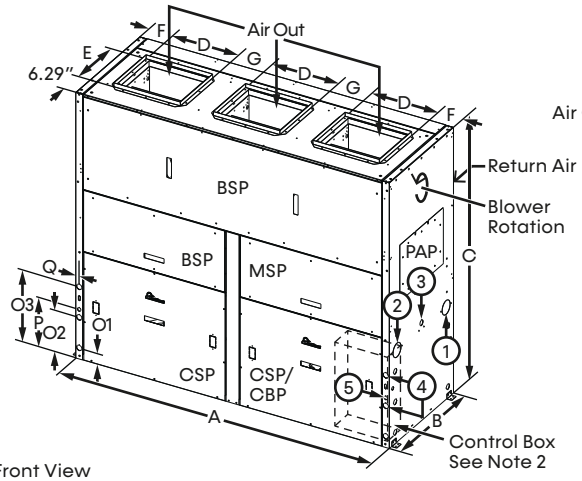
BSP = Blower Service Panel
CSP = Compressor Service Panel
CBP = Control Box Panel
MSP = Motor Service Panel
PAP = Pulley Access Panel
WSE = Waterside Economizer

SB 300 Vertical Dimensional Data

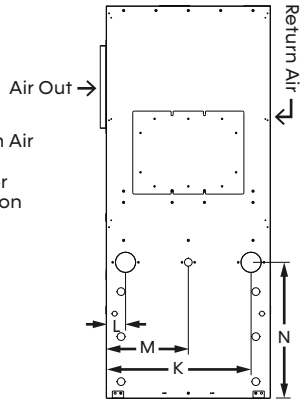
Models:
SB
072-300

Unit Size		Overall Cabinet			Discharge Connections Duct Flange				Water Connections				Electrical Knockouts					Return Air Connections Using Return Air Opening			
		A	B	C	D	E	F	G	K	L	M	N	O			P	Q	S	T	U	V
									1	2	3		1	2	3						
		Width	Depth	Height	Supply Width	Supply Height	Side Offset	Center Offset	Water In	Water Out	Condensate	Connection Height	1-3/8" (3.5cm)			7/8" (2.2 cm)		Return Width	Return Height		
300	inch	82.3	29.2	69.8	17.5	14.7	6.3	8.6	25.8	3.4	14.6	24.2	3.0	11.0	19.0	13.0	0.9	77.2	35.0	31.0	2.6
	cm	209.0	74.2	177.3	44.5	37.3	16.0	21.8	65.5	8.6	37.1	61.5	7.6	27.7	48.3	33.0	2.3	196.1	88.9	78.7	6.6

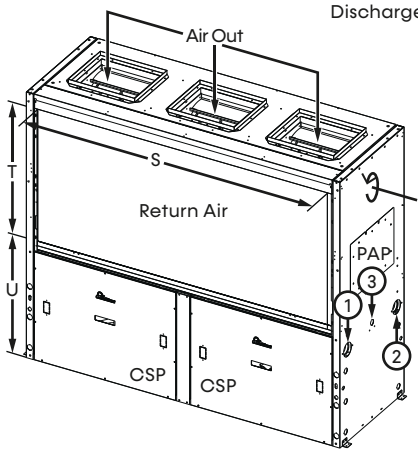
Front View
Top Discharge



Right Side View
Straight Discharge

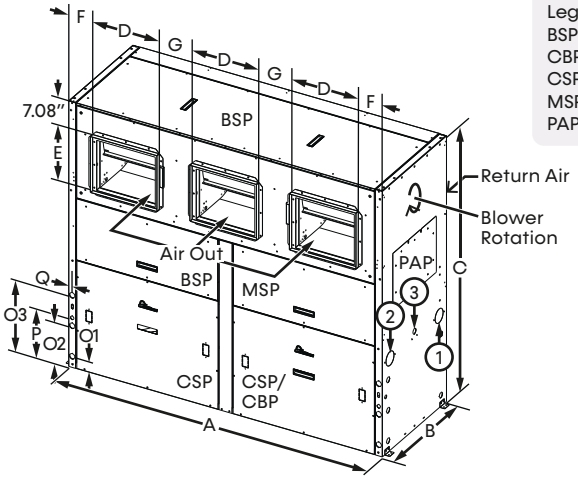


Rear Return
Top Discharge



Blower to Air Coil relationship for Top Discharge size 300

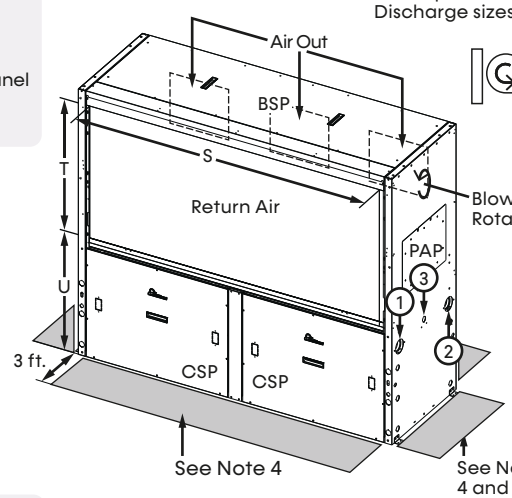
Front View
Straight Discharge



Legend

BSP	=	Blower Service Panel
CBP	=	Control Box Panel
CSP	=	Compressor Service Panel
MSP	=	Motor Service Panel
PAP	=	Pulley Access Panel

Rear View
Straight Discharge



Blower to Air Coil relationship for Straight Discharge sizes 300

Notes:
All dimensions in table are inches (cm)

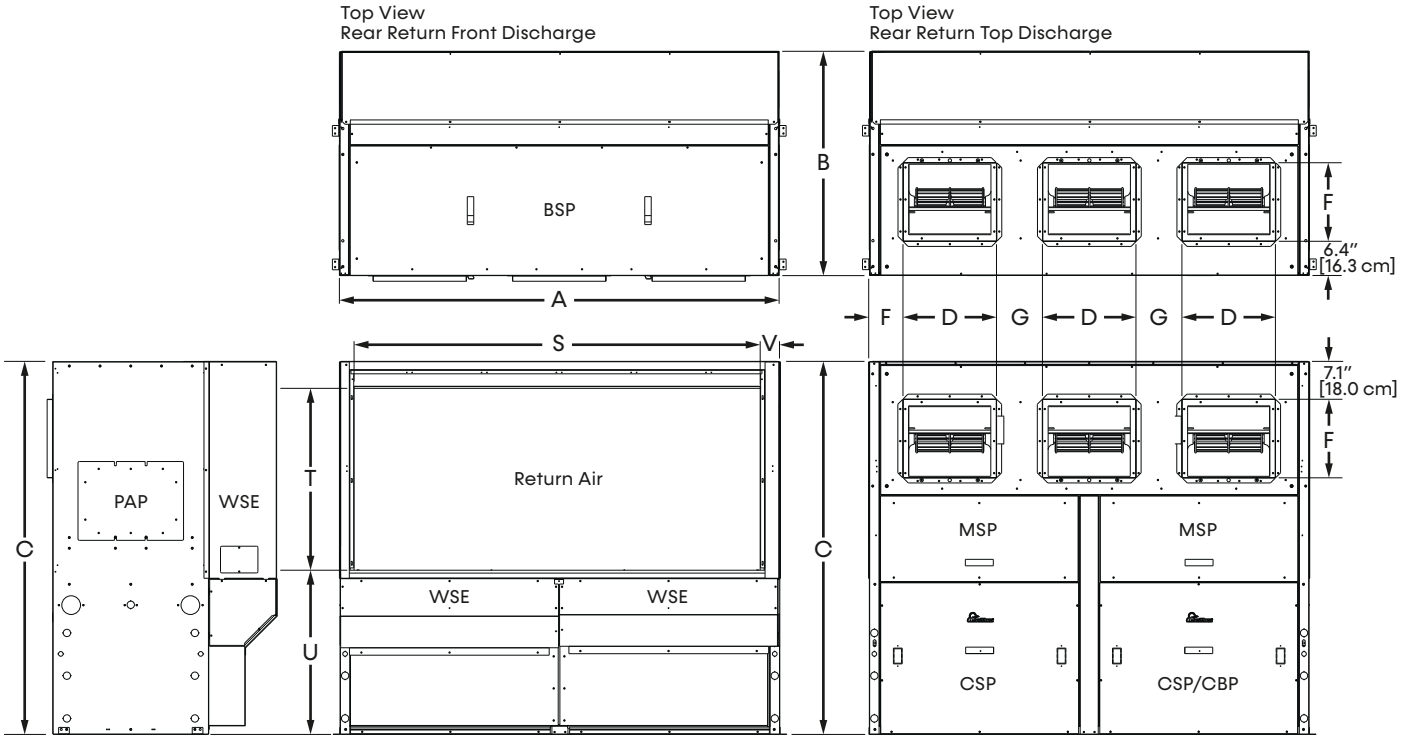
1. Condensate drain is available on either side (left or right) of unit. Drain hose and drain connection will be tied inside the unit. Installer will untie the drain hose, form trap, and connect to the condensate drain hole of installer's choice.
2. Electrical access is available on either side (left or right) of unit and is also available in the front on the left or right side of the unit.
3. Overall cabinet height and depth dimension does not include duct flange for or filter rails.
4. Units require 3 feet (91 cm) of clearance, CBP, CSP, MSP and BSP service access. While access to all removable panels may not be required, installer should take care to comply with all building codes and allow adequate clearance for future field service.
5. Filter removal is from right or left side of filter frame, allow 3 feet (91 cm) of access for servicing.

Legend	SB300
① Water Inlet	2-1/2" FPT
② Water Outlet	2-1/2" FPT
③ Condensate Drain[1]	1" FPT
④ High Voltage Access[2]	1-3/8" (3.49 cm)
⑤ Low Voltage Access[2]	7/8" (2.2 cm)

SB 300 Vertical with WSE Dimensional Data

Models:
SB
072-300

Unit Size		Overall Cabinet			Discharge Connections Duct Flange				Water Connections				Electrical Knockouts					Return Air Connections Using Return Air Opening			
		A	B	C	D	E	F	G	K	L	M	N	O			P	Q	S	T	U	V
									1	2	3		1	2	3						
		Width	Depth	Height	Supply Width	Supply Height	Side Offset	Center Offset	Water In	Water Out	Condensate	Connection Height						Return Width	Return Height		Return Side Offset
300	inch	82.3	42.0	69.8	17.5	14.7	6.4	8.6	25.8	3.4	14.6	24.2	3.0	11.0	19.0	15.1	0.9	76.0	34.0	30.7	3.6
	cm	209.0	106.7	177.3	44.5	37.3	16.3	21.8	65.5	8.6	37.1	61.5	7.6	27.9	48.3	38.4	2.3	193.0	86.4	78.0	9.1



Notes:
All dimensions in table are inches (cm). See standard configuration for water connecntion and electrical knockout dimensions.

1. While clear access to all removable panels may not be required, installer should take care to comply with all building codes and allow adequate clearance for future field service.
2. Units require 3 feet (91 cm) of clearance for water connections, WSE coil air bleed, CBP, CSP, BSP, PAP, and MSP.
3. Condensate drain is internally trapped, externally vented.
4. For top discharge units, BSP is on front. For front discharge units, BSP is on the top. Allow 3 feet above unit for service.

BSP = Blower Service Panel
CSP = Compressor Service Panel
CBP = Control Box Panel
MSP = Motor Service Panel
PAP = Pulley Access Panel
WSE = Waterside Economizer

MINIMUM INSTALLATION AREA

Minimum area where a blower-equipped unit must be installed, and mechanical/natural ventilation is not required

Model	Charge (oz)	Configuration	Minimum Installation Area ft² (m²) [A_{min}]			
			Floor	Window	Wall	Ceiling
SB072	54	Vertical	186	70	46	40
		Horizontal	186	70	46	40
SB096	62	Vertical	213	80	53	46
		Horizontal	213	80	53	46
SB120	66	Vertical	227	85	57	49
		Horizontal	213	80	53	46
SB168	94	Vertical	323	121	81	69
SB192	103	Vertical	354	133	89	76
SB240	134	Vertical	461	173	115	99
SB300	184	Vertical	633	237	158	136

A_{min}	=	Minimum area where unit is installed where unit has incorporated airflow
h_{inst} (floor)	=	0.0 ft (0.0 m)
h_{inst} (window)	=	3.3 ft (1.0 m)
h_{inst} (wall)	=	5.9 ft (1.8 m)
h_{inst} (ceiling)	=	7.2 ft (2.2 m)

Minimum area and CFM requirements for the conditioned space

Model	Charge (oz)	Minimum CFM [Q_{min}]	
		TA_{min} (ft²)	Q_{min} (ft³/min)
SB072	54	2.77	91
SB096	62	3.18	105
SB120	66	3.38	112
SB168	94	4.82	159
SB192	103	5.28	174
SB240	134	6.87	227
SB300	184	9.43	311

TA_{min}	=	Minimum conditioned area for venting leaked refrigerant
Q_{min}	=	Minimum ventilation flow rate for conditioned space if space is less than TA_{min}

Minimum area of opening for natural ventilation

Model	Charge (oz)	A_{nv} (in²)
SB072	54	98.70
SB096	62	105.76
SB120	66	109.12
SB168	94	130.22
SB192	103	136.31
SB240	134	155.48
SB300	184	182.19

A_{nv}	=	Minimum natural ventilation area opening

When the openings for connected rooms or natural ventilation are required, the following conditions shall be applied:

- The area of any openings above 11.8 inches (300 mm) from the floor shall not be considered in determining compliance with Anv_{min}.
- At least 50% of the required opening area Anv_{min} shall be below 7.8 inches (200 mm) from the floor.
- The bottom of the lowest openings shall not be higher than the point of release when the unit is installed and not more than 3.9 inches (100 mm) from the floor.
- Openings are permanent openings which cannot be closed.
- For openings extending to the floor, the height shall not be less than 0.78 inch (20 mm) above the surface of the floor covering.
- A second higher opening shall be provided. The total size of the second opening shall not be less than 50% of minimum opening area for Anv_{min} and shall be at least 3.3 ft (1.5 m) above the floor.

Electrical Data: Standard

Model	Voltage Code	Voltage	Min/Max Voltage	Blower Option	Compressor			Fan Motor FLA	Rated Current Amps	Min Circuit Amps	SCCR kA RMS Symetrical	SCCR Volts Maximum	Max Fuse HACR Amps
					Qty	RLA	LRA						
SB072	K	208/230-3-60	187/253	1,2,3	2	12.2	97.5	3.0	27.4	30.5	5	600	40
				4,5	2	12.2	97.5	5.8	30.2	33.3	5	600	45
				6	2	12.2	97.5	5.2	29.6	32.6	5	600	40
	L	460-3-60	414/506	1,2,3	2	5.8	44.3	1.4	13.0	14.5	5	600	20
				4,5	2	5.8	44.3	2.9	14.5	16.0	5	600	20
				6	2	5.8	44.3	6.9	18.5	20.2	5	600	25
	M	575-3-60	518/633	1,2,3	2	4.5	27.1	1.2	10.2	11.3	5	600	15
				4,5	2	4.5	27.1	2.2	11.2	12.3	5	600	15
SB096	K	208/230-3-60	187/253	1,2,3	2	12.8	120.4	5.8	31.4	34.6	5	600	45
				4,5	2	12.8	120.4	8.2	33.8	37.0	5	600	45
				6	2	12.8	120.4	9.3	34.9	38.1	5	600	50
	L	460-3-60	414/506	1,2,3	2	6.0	49.4	2.9	14.9	16.4	5	600	20
				4,5	2	6.0	49.4	4.1	16.1	17.6	5	600	20
				6	2	6.0	49.4	9.6	21.6	24.0	5	600	30
	M	575-3-60	518/633	1,2,3	2	5.8	41.0	2.2	13.8	15.3	5	600	20
				4,5	2	5.8	41.0	3.2	14.8	16.3	5	600	20
SB120	K	208/230-3-60	187/253	1,2,3	2	18.6	155.0	8.2	45.4	50.1	5	600	60
				4,5	2	18.6	155.0	14.0	51.2	55.9	5	600	70
				6	2	18.6	155.0	11.0	48.2	52.8	5	600	70
	L	460-3-60	414/506	1,2,3	2	8.3	58.1	4.1	20.7	22.8	5	600	30
				4,5	2	8.3	58.1	6.5	23.1	25.2	5	600	30
				6	2	8.3	58.1	13.6	30.2	33.6	5	600	45
	M	575-3-60	518/633	1,2,3	2	7.7	47.8	3.2	18.6	20.5	5	600	25
				4,5	2	7.7	47.8	5.2	20.6	22.5	5	600	30
SB168	K	208/230-3-60	187/253	1,2,3	2	24.4	200.0	8.2	57.0	63.1	5	600	80
				4,5	2	24.4	200.0	14.0	62.8	68.9	5	600	90
				6	2	24.4	200.0	8.9	57.7	63.8	5	600	80
	L	460-3-60	414/506	1,2,3	2	11.9	103.0	4.1	27.9	30.9	5	600	40
				4,5	2	11.9	103.0	6.5	30.3	33.3	5	600	45
				6	2	11.9	103.0	13.6	37.4	40.8	5	600	50
	M	575-3-60	518/633	1,2,3	2	9.4	78.0	3.2	22.0	24.4	5	600	30
				4,5	2	9.4	78.0	5.2	24.0	26.4	5	600	35
SB192	K	208/230-3-60	187/253	1,2,3	2	27.7	178.5	8.2	63.6	70.5	5	600	90
				4,5	2	27.7	178.5	14.0	69.4	76.3	5	600	100
				6	2	27.7	178.5	14.6	70.0	76.9	5	600	100
	L	460-3-60	414/506	1,2,3	2	11.5	103.0	4.1	27.1	30.0	5	600	40
				4,5	2	11.5	103.0	6.5	29.5	32.4	5	600	40
				6	2	11.5	103.0	13.6	36.6	40.0	5	600	50
	M	575-3-60	518/633	1,2,3	2	9.0	78.0	3.2	21.2	23.5	5	600	30
				4,5	2	9.0	78.0	5.2	23.2	25.5	5	600	30
SB240	K	208/230-3-60	187/253	1,2,3	2	28.5	255.0	14.0	71.0	78.1	5	600	100
				6	2	28.5	255.0	28.0	85.0	92.1	5	600	110
	L	460-3-60	414/506	1,2,3	2	13.5	123.0	6.5	33.5	36.9	5	600	50
				6	2	13.5	123.0	18.8	45.8	50.5	5	600	60
	M	575-3-60	518/633	1,2,3	2	10.7	93.7	5.2	26.6	29.3	5	600	35
SB300	K	208/230-3-60	187/253	6	2	40.8	270.0	22.3	103.9	114.1	5	600	150
	L	460-3-60	414/506	6	2	19.4	147.0	22.1	60.9	66.4	5	600	80

Electrical Data: Dual Point Power

Model	Voltage Code	Voltage	Min/Max Voltage	Blower Option	Compressor Power Supply								Fan Power Supply				
					Qty	RLA	LRA	Rated Current Amps	Min Circuit Amps	SCCR kA RMS Symmetrical	SCCR Volts Max	Max Fuse HACR Amps	Fan Motor FLA	Min Circuit Amps	SCCR kA RMS Symmetrical	SCCR Volts Max	Max Fuse HACR Amps
SB072	K	208/230-3-60	187/253	A,B,C	2	12.2	97.5	24.4	27.5	5	600	35	3.0	3.8	5	600	15
				D,E	2	12.2	97.5	24.4	27.5	5	600	35	5.8	7.3	5	600	15
				F	2	12.2	97.5	24.4	27.5	5	600	35	5.2	6.4	5	600	15
	L	460-3-60	414/506	A,B,C	2	5.8	44.3	11.6	13.1	5	600	15	1.4	1.8	5	600	15
				D,E	2	5.8	44.3	11.6	13.1	5	600	15	2.9	3.6	5	600	15
				F	2	5.8	44.3	11.6	13.1	5	600	15	6.9	8.6	5	600	15
	M	575-3-60	518/633	A,B,C	2	4.5	27.1	9.0	10.1	5	600	15	1.2	1.5	5	600	15
				D,E	2	4.5	27.1	9.0	10.1	5	600	15	2.2	2.8	5	600	15
SB096	K	208/230-3-60	187/253	A,B,C	2	12.8	120.4	25.6	28.8	5	600	40	5.8	7.3	5	600	15
				D,E	2	12.8	120.4	25.6	28.8	5	600	40	8.2	10.3	5	600	15
				F	2	12.8	120.4	25.6	28.8	5	600	40	9.3	11.6	5	600	20
	L	460-3-60	414/506	A,B,C	2	6.0	49.4	12.0	13.5	5	600	15	2.9	3.6	5	600	15
				D,E	2	6.0	49.4	12.0	13.5	5	600	15	4.1	5.1	5	600	15
				F	2	6.0	49.4	12.0	13.5	5	600	15	9.6	12.0	5	600	20
	M	575-3-60	518/633	A,B,C	2	5.8	41	11.6	13.1	5	600	15	2.2	2.8	5	600	15
				D,E	2	5.8	41	11.6	13.1	5	600	15	3.2	4.0	5	600	15
SB120	K	208/230-3-60	187/253	A,B,C	2	18.6	155	37.2	41.9	5	600	60	8.2	10.3	5	600	15
				D,E	2	18.6	155	37.2	41.9	5	600	60	14.0	17.5	5	600	30
				F	2	18.6	155	37.2	41.9	5	600	60	11.0	13.7	5	600	20
	L	460-3-60	414/506	A,B,C	2	8.3	58.1	16.6	18.7	5	600	25	4.1	5.1	5	600	15
				D,E	2	8.3	58.1	16.6	18.7	5	600	25	6.5	8.1	5	600	15
				F	2	8.3	58.1	16.6	18.7	5	600	25	13.6	17.0	5	600	30
	M	575-3-60	518/633	A,B,C	2	7.7	47.8	15.4	17.3	5	600	25	3.2	4.0	5	600	15
				D,E	2	7.7	47.8	15.4	17.3	5	600	25	5.2	6.5	5	600	15

Table continued on next page.

Electrical Data: Dual Point Power

Table continued from previous page

Model	Voltage Code	Voltage	Min/Max Voltage	Blower Option	Compressor Power Supply								Fan Power Supply				
					Qty	RLA	LRA	Rated Current Amps	Min Circuit Amps	SCCR kA RMS Symmetrical	SCCR Volts Max	Max Fuse HACR Amps	Fan Motor FLA	Min Circuit Amps	SCCR kA RMS Symmetrical	SCCR Volts Max	Max Fuse HACR Amps
SB168	K	208/230-3-60	187/253	A,B,C	2	24.4	200	48.8	54.9	5	600	70	8.2	10.3	5	600	15
				D,E	2	24.4	200	48.8	54.9	5	600	70	14.0	17.5	5	600	30
				F	2	24.4	200	48.8	54.9	5	600	70	8.9	11.1	5	600	15
	L	460-3-60	414/506	A,B,C	2	11.9	103	23.8	26.8	5	600	35	4.1	5.1	5	600	15
				D,E	2	11.9	103	23.8	26.8	5	600	35	6.5	8.1	5	600	15
				F	2	11.9	103	23.8	26.8	5	600	35	13.6	17.0	5	600	30
	M	575-3-60	518/633	A,B,C	2	9.4	78	18.8	21.2	5	600	30	3.2	4.0	5	600	15
				D,E	2	9.4	78	18.8	21.2	5	600	30	5.2	6.5	5	600	15
SB192	K	208/230-3-60	187/253	A,B,C	2	27.7	178.5	55.4	62.3	5	600	90	8.2	10.3	5	600	15
				D,E	2	27.7	178.5	55.4	62.3	5	600	90	14.0	17.5	5	600	30
				F	2	27.7	178.5	55.4	62.3	5	600	90	14.6	18.3	5	600	30
	L	460-3-60	414/506	A,B,C	2	11.5	103	23.0	25.9	5	600	35	4.1	5.1	5	600	15
				D,E	2	11.5	103	23.0	25.9	5	600	35	6.5	8.1	5	600	15
				F	2	11.5	103	23.0	25.9	5	600	35	13.6	17.0	5	600	30
	M	575-3-60	518/633	A,B,C	2	9.0	78	18.0	20.3	5	600	25	3.2	4.0	5	600	15
				D,E	2	9.0	78	18.0	20.3	5	600	25	5.2	6.5	5	600	15
SB240	K	208/230-3-60	187/253	A,B,C	2	28.5	255	57.0	64.1	5	600	90	14.0	17.5	5	600	30
				F	2	28.5	255	57.0	64.1	5	600	90	28.0	35.0	5	600	60
	L	460-3-60	414/506	A,B,C	2	13.5	123	27.0	30.4	5	600	40	6.5	8.1	5	600	15
				F	2	13.5	123	27.0	30.4	5	600	40	18.8	23.5	5	600	40
	M	575-3-60	518/633	A,B,C	2	10.7	93.7	21.4	24.1	5	600	30	5.2	6.5	5	600	15
SB300	K	208/230-3-60	187/253	F	2	40.8	270	81.6	91.8	5	600	125	22.3	27.9	5	600	50
	L	460-3-60	414/506	F	2	19.4	147	38.8	43.7	5	600	60	22.1	27.6	5	600	45

Blower Motor Variable Frequency Drive (VFD) Controls (Optional)

Models:
SB
072-300

VFD BLOWER

Variable Frequency Drives are controllers that vary electrical frequency and voltage to the fan motor. Electrical frequency is directly related to a fan motor's speed (RPM's). The faster the frequency, the faster the motor will go and vice versa. VFD's allow the fan motor to ramp speed (CFM) up or down to match the load of the space they are satisfying. This allows the Tranquility SB to deliver variable capacity, optimizing system efficiency and saving owners money.

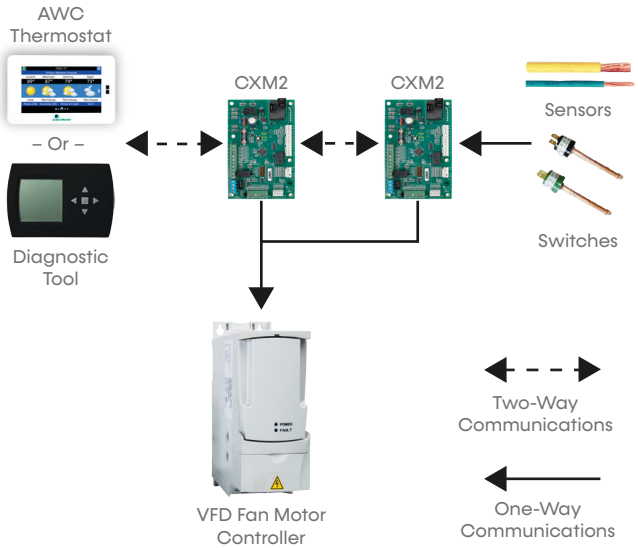
VFD controllers come factory installed and tested to provide supply fan motor speed modulation. VFDs on the supply fan, are quieter, more efficient, and are eligible for utility rebates. These products are commonly used in single-zone, variable-air-volume (VAV) applications. When applied to single-zone VAV applications the system modulates the indoor fan and stages compressors as space temperature changes, for increased part-load efficiency and more precise temperature control with fan speed varying down to 37.5% of maximum air flow.
The VFD controls are paired with our intelligent CXM2 Communicating Controls to provide superior service and functionality.

VFD BLOWER SEQUENCE OF OPERATION

The VFD blower option comes factory programmed with the standard CXM2 controls. The CXM2 controls the VFD blower controller using a 0–10VDC control signal, and comes factory programmed for Leaving Air Temperature (LAT) control mode. The actual operating range for the VFD when the blower should be active will be 3.7–10 VDC associated to the operating speeds of 37–100%. When the VFD is off, the output should be set to 0 VDC. For each unit size, there will be a maximum and minimum operating speed that the VFD can be operated at for any mode, defined in VFD operational Table 1.

The VFD blower may be operated in LAT or discrete-speed control modes.

NOTE: VFD output is 50% of last value during heating or cooling blower off delay times.



LAT CONTROL VFD OPERATION

The CXM2 will come factory configured for LAT control operation. The VFD speed will be controlled by the CXM2 to maintain the factory default LAT set point, 55° F for cooling and 105° F for heating. LAT can be adjusted in the field. See VFD Operational Table 1 for full details.

When a compressor demand is recognized, the VFD output will be set to the most recent operating speed of the VFD in the current operating mode (heating or cooling). If there is no value stored from a previous heating or cooling cycle, the VFD speed will initially set to 75% or 8.0 VDC. After the VFD speed is initially set, the VFD control signal will not be adjusted until after 90 seconds of compressor operation, and then will be periodically checked and adjusted every 10 seconds if needed to maintain the LAT.

If the control switches from the heating mode to cooling, or cooling to heating without de-activating the compressor, the VFD control voltage will immediately switch to the last stored control voltage for the new operating mode, and then will not be adjusted for the first 90 seconds of operation in the new operating mode. The VFD control voltage is increased or decreased incrementally based on the magnitude of the differential between the current LAT and the target LAT defined in VFD Operational Table 2.

DISCRETE SPEED VFD OPERATION

When the CXM2 is configured for discrete-speed VFD operation, the VFD speed will be set to the selected operating speed (A, B or C) for full-load heating or cooling. Full-load operation is defined as second stage enabled in either heating or cooling.

When the CXM2 is configured for discrete-speed VFD operation, the VFD operating speed may be increased or decreased by 10%. The speed offset option defaults to normal (no offset). To increase the VFD operating speed by 10%, set the speed offset option to Increase. To decrease the VFD operating speed by 10%, set the speed offset option to decrease.

When operating in first-stage heating or cooling, the VFD speed will be set to the percentage of the selected full load operating speed (A, B or C, plus or minus adjustment) listed for each unit size as defined in VFD Operational Table 2.

Table 1: VFD Control Valves

Model	Minimum VFD Speed	Maximum VFD Speed	VFD Fixed Speed A	VFD Fixed Speed B	VFD Fixed Speed C	Part Load Multiplier	Default Fan Speed
SB072	3.7	10.0	7.4	6.2	9.0	71%	5.2
SB096	3.8	10.0	7.0	6.0	9.0	75%	5.0
SB120	4.2	10.0	8.0	7.0	9.0	70%	6.0
SB144	4.0	8.8	6.4	7.2	8.0	72%	6.4
SB160	4.1	10.0	7.9	6.4	9.0	76%	5.4
SB192	4.4	10.0	8.0	7.0	9.0	73%	6.0
SB240	4.2	10.0	8.0	7.0	9.0	70%	6.0
SB300	5.0	10.0	8.0	8.0	9.5	71%	7.0

Table 2: Operating Temperatures

Model	Minimum Heat LAT	Maximum Heat LAT	Default Heat LAT	Minimum Cool LAT	Maximum Cool LAT	Default Cool LAT
SB072	85°	125°	105°	45°	65°	55°
SB096	85°	125°	105°	45°	65°	55°
SB120	85°	125°	105°	45°	65°	55°
SB144	85°	125°	105°	45°	65°	55°
SB160	85°	125°	105°	45°	65°	55°
SB192	85°	125°	105°	45°	65°	55°
SB240	85°	125°	105°	45°	65°	55°
SB300	85°	125°	105°	45°	65°	55°

LAT differential |Actual – Target|	VFD adjust (VDC)
$\Delta T \leq 1.0°F$	0.0
$1.0 < \Delta T \leq 2.0°F$	0.1
$2.0 < \Delta T \leq 3.0°F$	0.2
$3.0 < \Delta T \leq 5.0°F$	0.3
$\Delta T > 5.0°F$	0.4

GENERAL

Furnish and install ClimateMaster Tranquility (SB) Compact High-Capacity Series as indicated on the plans. Equipment shall be completely assembled, piped and internally wired. Capacities and characteristics as listed in the schedule and the specifications that follow.

Units shall be supplied completely factory built, capable of operating over an entering water temperature range from 20° to 120°F (-6.7° to 43.3°C) as standard. Equivalent units from other manufacturers may be proposed provided approval to bid is given 10 days prior to bid closing. All equipment listed in this section must be rated and certified in accordance with Air-Conditioning, Heating and Refrigeration Institute / International Standards Organization (AHRI / ISO 13256-1). All equipment must be tested, investigated, and determined to comply with the requirements of the standards for Heating and Cooling Equipment UL 60335-2-40 4th Edition, UL 60335-1 6th Edition for the United States and Can/CSA C22.2 No. 60335-2-40:22, CAN/CSA C22.2 No 60335-1:16 for Canada, by Intertek Testing Laboratories (ETL). The units shall have AHRI / ISO and ETL-US-C labels

All units shall pass a factory acceptance test. The quality control system shall automatically perform factory acceptance test via computer. A detailed report card from the factory acceptance test shall be shipped with each unit. **NOTE: If a unit fails the factory acceptance test, it shall not be allowed to ship. The unit serial number shall be recorded by factory acceptance test and furnished on report card for ease of unit warranty status.**

BASIC CONSTRUCTION

Horizontal units shall have one of the following air flow arrangements: Left Return/Back Discharge, Left Return/Straight Discharge, Right Return/Back Discharge, Right Return/Straight Discharge as shown on the plans. Unit sizes 072 to 120 can be field converted without requiring new panels or belts. **Unit sizes 072-120 that cannot be field converted shall not be acceptable.**

Vertical units shall have one of the following air flow arrangements: rear return/top discharge, front return/top discharge, rear return/front discharge, front return/rear discharge as shown on plans. Unit sizes 072-120 can be field converted without requiring new panels or belts. **Unit sizes 072-120 that cannot be field converted shall not be acceptable.**

If units with these arrangements are not used, the contractor is responsible for any extra costs incurred by other trades. All units must have a minimum of two access panels for serviceability of compressor compartment. **Units having only one access panel to compressor/heat exchangers/expansion device/ refrigerant piping shall not be acceptable.**

Compressor section interior surfaces shall be lined with ½-inch (12.7 mm) thick, 1½ lb/ft³ (24 kg/m³) acoustic type glass fiber insulation. Air handling section interior surfaces shall be lined with ½-inch (12.7 mm) thick, 1¾ lb/ft³ (28 kg/m³) foil-backed fiber insulation for ease of cleaning. Insulation placement shall be designed in a manner that will eliminate any exposed edges to prevent the introduction of glass fibers into the air stream. **Units without foil-faced insulation in the air handling section will not be accepted.**

Units shall be fabricated from heavy-gauge galvanized steel with powder-coat finish on front access panels.

Standard insulation must meet NFPA Fire Hazard Classification requirements 25/50 per ASTM E84, UL 723, CAN/ULC S102-M88 and NFPA 90A requirements; air erosion and mold growth limits of UL-181; stringent fungal resistance test per ASTM-C1071 and ASTM G21; and shall meet zero level bacteria growth per ASTM G22. **Unit insulation must meet these stringent requirements or unit(s) will not be accepted.**

Horizontal units to have discharge air-duct collar, 1-inch (25.4 mm) or 2-inch (50.8 mm) filter rails with filters factory installed, and factory-installed hanger brackets. Vertical units have discharge air duct collar shipped loose, and 1-inch (25.4 mm), 2-inch (50.8 mm), or 4-inch (101.6 mm) full filter frame with filters factory installed. **If units with these factory installed provisions are not used, the contractor is responsible for any extra costs to field install these provisions, and/or the extra costs for their subcontractor to install these provisions.**

All units must have an insulated panel separating the fan compartment from the compressor compartment. Units with the compressor in the air stream are not acceptable.

Horizontal units shall have factory installed filter rails with filter removal from either side. Vertical units shall have factory installed full filter frame with filter removal from bottom. **The contractor shall purchase one spare set of filters and replace factory shipped filters on completion of startup.** Filters shall be standard sizes. **If units utilize non-standard filter sizes then the contractor shall provide 12 spare filter sets for each unit.**

Cabinets shall have separate knockouts on front and sides for entrance of line voltage and low-voltage control wiring. All factory-installed wiring passing through factory knockouts and openings shall be protected from sheet metal edges at openings by plastic ferrules. Supply and return water connections shall be copper FPT fittings, connections on both sides (installer to choose side and plug opposite) and shall be securely mounted flush to the cabinet side allowing for connection of a flexible hose without the use of a back-up wrench. **Water connections that protrude through the cabinet or require the use of a backup wrench shall not be allowed.** Water connections on only one side will not be accepted. All water connections and electrical knockouts must not interfere with the serviceability of unit. **Contractors shall be responsible for any extra costs involved in the installation of units that do not have this feature.** Contractors must ensure that units can be easily removed for servicing and coordinate locations of electrical conduit and lights with the electrical contractor.

Option: Dual-point power.

Option: UltraQuiet package shall consist of high technology sound attenuating material that is strategically applied to the compressor and air handling compartment casings and fan scroll in addition to the standard ClimaQuiet system design, to further dampen and attenuate sound transmissions. Compressor is mounted on specially engineered sound-tested isolators.

FAN AND MOTOR ASSEMBLY

All units shall have a belt-driven single centrifugal fan. Fan motor shall be premium duty, VFD compatible, permanently lubricated with thermal overload protection. Units supplied without permanently lubricated motors must provide external oilers for easy service. The fan and motor assembly must be capable of overcoming the external static pressures as shown on the schedule. Airflow/Static pressure rating of the unit shall be based on a wet coil and a clean filter in place. **Ratings based on a dry coil and/or no filter, or on an ESP less than 0.25 inches (6.35 mm w.g.) shall NOT be acceptable.**

Option: Various blower drive packages for selectable static pressure/airflow.

Option: Variable Frequency Drives (VFD). VFD controls shall be factory mounted, installed and programmed. VFD controls have the capability to reduce airflow down to 37.5%. Products not containing factory mounted VFD controls shall not be acceptable.

REFRIGERANT CIRCUIT

All units shall contain an R-454B sealed refrigerant circuit including a high-efficiency scroll compressor designed for heat-pump operation, a thermostatic expansion valve for refrigerant metering, an enhanced corrugated-aluminum lanced fin and rifled copper tube refrigerant-to-air heat exchanger, reversing valve, coaxial (tube-in-tube) refrigerant-to-water heat exchanger, and safety controls including a high-pressure switch, low-pressure switch (loss-of-charge), water coil low-temperature sensor, and air coil low-temperature sensor. Access fittings shall be factory installed on high and low-pressure refrigerant lines to facilitate field service. Activation of any safety device shall prevent compressor operation via a microprocessor lockout circuit. The lockout circuit shall be reset at the thermostat or at the contractor supplied disconnect switch. **Units that cannot be reset at the thermostat shall not be acceptable.**

The scroll compressors shall have a dual-level vibration isolation system. The compressor(s) will be mounted on specially engineered sound-tested EPDM vibration-isolation grommets to a large heavy gauge compressor mounting plate, which is then isolated from the cabinet base with EPDM grommets to minimize vibration and maximize vibration attenuation. Compressor shall have thermal-overload protection. Compressors shall be located in an insulated compartment isolated from air stream to minimize sound transmission.

Refrigerant-to-air heat exchangers shall utilize enhanced corrugated lanced aluminum fins and rifled copper tube construction rated to withstand 625 PSIG (4,309 kPa) refrigerant working pressure. Refrigerant-to-water heat exchangers shall be of copper inner water tube and steel refrigerant outer tube design, rated to withstand 625 PSIG (4,309 kPa) working refrigerant pressure and 300 PSIG (2,068 kPa) working water pressure. The refrigerant-to-water heat exchanger shall be "electro-coated" with a low-cure cathodic epoxy material a minimum of 0.4 mils thick (0.4 – 1.5 mils range) on all surfaces. The black-colored coating shall provide a minimum of 1,000 hours of salt-spray protection per ASTM B117-97 on all external steel and copper tubing. The material shall be formulated without the inclusion of any heavy metals and shall exhibit a pencil hardness of 2H (ASTM D3363-92A), crosshatch adhesion of 4B-5B (ASTM D3359-95), and impact resistance of 160 in-lbs (184 kg-cm) direct (ASTM D2794-93).

The unit water circuit is protected by two high-pressure switches set at 300 PSI (2,068 kPa). Switches will reset automatically when pressure is reduced. Units that do not have auto-reset water high-pressure switches are not acceptable.

Refrigerant metering shall be accomplished by thermostatic expansion valve only. Expansion valves shall be dual port balanced type with external equalizer for optimum refrigerant metering. Units shall be designed and tested for operating ranges of entering water temperatures from 20° to 120°F (-6.7° to 48.9°C). A reversing valve shall be a four-way solenoid-activated refrigerant valve, which shall default to heating mode should the solenoid fail to function. If the reversing-valve solenoid defaults to cooling mode, an additional low-temperature thermostat must be provided to prevent over-cooling an already cold room.

Individual refrigeration circuits charged with 62 ounces or greater of R-454B shall be supplied with a Refrigerant Detection System (RDS) with sensors to be strategically placed within the cabinet. In the event of a refrigerant leak, the RDS disables compressor operation, and the unit blower runs to disperse any concentration of leaked refrigerant in compliance with UL 60335-2-40 safety standards for flammable refrigerants. **Individual refrigeration circuits charged with 62 ounces or greater of R-454B that do not have an RDS shall not be acceptable.**

Option: The unit shall be supplied with extended range insulation option, which adds closed cell insulation to internal water lines, and provides insulation on suction side refrigeration tubing including refrigerant-to-water heat exchanger.

Option: The refrigerant-to-air heat exchanger shall be coated.

Option: The unit shall be supplied with a WSE. The WSE will consist of hydronic coil, three-way valve, and aquastat. The aquastat will be adjustable type and factory set at 45°F (7.2°C). Units with WSE will require heat pump thermostat with two-stage cooling.

Option: The Refrigerant Detection System (RDS) package shall consist of the RDS module and sensors to be strategically placed within the cabinet. In the event of a refrigerant leak, the RDS disables compressor operation, and the unit blower runs to disperse any concentration of leaked refrigerant in compliance with UL 60335-2-40 safety standards for flammable refrigerants.

DRAIN PAN

The drain pan shall be constructed of galvanized steel and have a powder coat paint application to further inhibit corrosion. This corrosion protection system shall meet the stringent 1,000-hour salt spray test per ASTM B117. If plastic type material is used, it must be HDPE (High-Density Polyethylene) to avoid thermal-cycling shock-stress failure over the lifetime of the unit. Drain pans shall be fully insulated.

Drain pan outlet shall be located to ensure positive unobstructed drainage of condensate. Drain outlet for horizontal units shall be connected from pan directly to 3/4-inch FPT fitting. For vertical units drain pan hose assembly can be connected to either side, drain outlet to be 1-inch FPT fitting. The unit as standard will be supplied with solid-state electronic condensate overflow protection. **Mechanical float switches will NOT be accepted.**

Option: The unit shall be supplied with stainless-steel drain pan.

ELECTRICAL

A control box shall be located within the unit compressor compartment and shall contain a 75 VA transformer with load side circuit breaker protection, 24V activated, two- or three-pole compressor contactor, terminal block for thermostat wiring, and solid-state controller for complete unit operation. Reversing valve and fan motor wiring shall be routed through this electronic controller. Units shall be name-plated for use with time delay fuses or HACR circuit breakers. Unit controls shall be 24-volt and provide heating or cooling as required by the remote thermostat/sensor. Two-compressor units shall have a solid-state time delay relay and random start to prevent both compressors from starting simultaneously.

ENHANCED SOLID-STATE CONTROL SYSTEM (CXM2)

Units shall have a solid-state control system. **Units utilizing electro-mechanical control shall not be acceptable.** The control system microprocessor board shall be specifically designed to protect against building electrical system noise contamination, EMI, and RFI interference. The control system shall interface with a heat pump type thermostat. The control system shall have the following features:

a. Anti-short cycle time delay on compressor operation.
b. Random start on power up mode.
c. Low-voltage protection.
d. High-voltage protection.
e. Unit shutdown on high- or low-refrigerant pressures.
f. Unit shutdown on low water temperature.
g. Condensate overflow electronic protection.
h. Option to reset unit at thermostat or disconnect.
i. Automatic intelligent reset. Unit shall automatically reset the unit 5 minutes after trip if the fault has cleared. If a fault occurs 3 times sequentially without thermostat meeting temperature, then lockout requiring manual reset will occur.
j. Ability to defeat time delays for servicing.
k. The low-pressure switch shall not be monitored for the first 120 seconds after a compressor start command to prevent nuisance safety trips.
l. 24V output to cycle a motorized water valve or other device with compressor contactor.
m. Unit Performance Sentinel (UPS). The UPS warns when the heat pump is running inefficiently.
n. Water coil low-temperature sensing (selectable for water or anti-freeze).
o. Air coil low-temperature sensing.
p. Minimized reversing-valve operation (Unit control logic shall only switch the reversing valve when cooling is demanded for the first time. The reversing valve shall be held in this position until the first call for heating, ensuring quiet operation and increased valve life).
q. Emergency shutdown contacts.
r. Entering- and leaving-water temperature sensing.
s. Leaving air temperature sensing.
t. Compressor discharge temperature sensing.

NOTE: Units not providing the eight safety protections of anti-short cycle, low-voltage, high-voltage, high-refrigerant pressure, low-pressure (loss of charge), air coil low temperature cut-out, water coil low temperature cut-out, and condensate overflow protections will not be accepted.

When CXM2 is connected to AWC99U01 thermostat or handheld service tool, the installer/service technician can; check DIP switch S2 settings; run operation modes manually; check all physical inputs from thermostat and refrigerant pressure switches status, (Y1, Y2, W, O, G, H, ESD, NSB, OR, HP switch, and LOC switch); current or at time of fault the following temperatures - water coil (LT1), air coil (LT2), compressor discharge, leaving air, leaving water, entering water and control voltage; record last five faults, list possible reasons, and clear faults. When the AWC99U01 communicating thermostat is used this same functionality can be viewed and adjusted remotely in the web portal or mobile app. Systems not providing remote access, diagnosis, and adjustment functionality will not be accepted.

DIGITAL NIGHT SETBACK WITH PUMP RESTART (CXM2 WITH ATP32U03C/04C, AWC99U01):

The unit will be provided with a Digital Night Setback feature using an accessory relay on the CXM2 controller with an ATP32U03C/04C or AWC99U01 thermostat and an external, field-provided time clock. The external time clock will initiate and terminate the night setback period. The thermostat will have a night setback override feature with a programmable override time period. An additional accessory relay on the unit CXM2 controller will energize the building loop pump control for the duration of the override period. **NOTE: This feature requires additional low voltage wiring. Consult Application Drawings for details.**

REMOTE SERVICE SENTINEL (CXM2)

The solid-state control system shall communicate with applicable thermostats to display (at the thermostat) the unit status, fault status, and specific fault condition, as well as retrieve previously stored fault that caused unit shutdown. The Remote Service Sentinel allows building maintenance personnel or service personnel to diagnose units from the wall thermostat. The control board shall provide a signal to the thermostat, indicating a lockout. A detailed message shall be provided at the communicating thermostat or service tool and specific fault status such as over/under voltage fault, high-pressure fault, low-pressure fault, low-water-temperature fault, condensate-overflow fault, etc. **Units that do not provide this remote service sentinel shall not be acceptable.**

Option: MPC (Multiple Protocol Control) Interface System

Units shall have all the CXM2 features listed above and the control board will be supplied with a Multiple Protocol interface board. Available protocols are BACnet MS/TP, Modbus, or Johnson Controls N2. The choice of protocol shall be field-selectable/changeable via the use of a simple selector switch. Protocol selection shall not require any additional programming or special external hardware or software tools. This enables all units to be daisy-chain connected by a two-wire twisted-pair shielded cable. The following points must be available at a central or remote computer location:

a. Space temperature
b. Leaving-water temperature
c. Discharge-air temperature
d. Command-of-space temperature setpoint
e. Cooling status
f. Heating status
g. Low-temperature sensor alarm
h. Low-pressure sensor alarm
i. High-pressure switch alarm
j. Condensate-overflow alarm
k. High-/low-voltage alarm
l. Fan “ON/AUTO” position of space thermostat as specified above
m. Unoccupied/occupied command
n. Cooling command
o. Heating command
p. Fan “ON/AUTO” command
q. Fault-reset command
r. Itemized fault code revealing reason for specific shutdown fault (any one of seven)

This option also provides the upgraded 75VA control transformer with load side short circuit and overload protection via a built-in circuit breaker.

WARRANTY

ClimateMaster shall warranty equipment for a period of 12 months from startup or 18 months from shipping (whichever occurs first).

Option: Extended 4-year compressor warranty covers compressor for a total of 5 years.

Option: Extended 4-year refrigeration circuit warranty covers coils, reversing valve, expansion valve and compressor for a total of 5 years.

Option: Extended 4-year control board warranty covers the CXM2 control board for a total of 5 years.

FIELD-INSTALLED OPTIONS

Hose Kits:

All units 120,000 Btuh (35 kW) and below shall be connected with hoses. The hoses shall be 2-feet (61-cm) long, braided stainless steel; fire-rated hoses complete with adapters. **Only fire rated hoses will be accepted.**

Valves:

The following valves are available and will be shipped loose:

a. Ball valve; bronze material, standard port full flow design, FPT connections.

b. Ball valve with memory stop and PT port.

c. "Y" strainer with blowdown valve; bronze material, FPT connections.

d. Motorized water valve; slow acting, 24V, FPT connections.

Hose Kit Assemblies:

The following assemblies ship with the valves already assembled to the hose described:

a. Supply and return hoses having ball valve with PT port.

b. Supply hose having ball valve with PT port; return hose having automatic flow regulator valve with PT ports, and ball valve.

c. Supply hose having "Y" strainer with blowdown valve, and ball valve with PT port; return hose having automatic flow regulator with PT ports, and ball valve.

d. Supply hose having "Y" strainer with blowdown valve, and ball valve with PT port; return hose having ball valve with PT port.

THERMOSTATS

The thermostat shall be a ClimateMaster mechanical or electronic type thermostat as selected below with the described features:

a. Thermostat (Communicating) (AWC99U01)

An electronic communicating web-enabled touchscreen thermostat shall be provided. The thermostat shall offer three stages of heating and two stages of cooling with precise temperature control and have a four-wire connection to the unit. The thermostat shall be capable of manual or automatic change-over operation and shall operate in standard or programmable mode. An integrated humidity control feature shall be included to control a humidifier and/or a dehumidifier. The thermostat shall include a utility demand reduction feature to be initiated by an independent time program or an external input. The thermostat shall provide access to via the web portal or mobile application to include temperature adjustment, schedule adjustment including occupied/unoccupied, entering-water temperature, leaving-water temperature, water-coil temperature, air-coil temperature, leaving-air temperature, and compressor-discharge temperature. A graphical system layout to be provided with real-time operating mode information of the temperature sensors for easy

diagnostics. The thermostat shall display system faults with probable cause and troubleshooting guidance. The system shall provide in clear language the last five faults, time of faults, operating temps at time of fault, and possible reasons for the fault. The thermostat shall provide access for immediate manual control of all outputs via the web portal/mobile application for rapid troubleshooting.

b. Multi-stage Digital Automatic Changeover (ATA22U01)

The thermostat shall be multi-stage (2H/2C), manual or automatic changeover with HEAT-OFF-COOL-AUTO-EM HEAT system settings and fan ON-AUTO settings. The thermostat shall have an LCD display with temperature, setpoint(s), mode, and status indication. The temperature indication shall be selectable for °F or °C. The thermostat shall provide permanent memory of setpoint(s) without batteries. A fault LED shall be provided to indicate specific fault condition(s). The thermostat shall provide temperature display offset for custom applications. The thermostat shall allow unit to provide better dehumidification with the standard CXM2 controller by automatically using lower fan speed on stage-1 cooling (higher latent cooling) as main cooling mode, and automatically shifting to high-speed fan on stage-2 cooling.

c. Multi-stage Manual Changeover Programmable 5-/2-Day (ATP21U01)

The thermostat shall be 5-day/2-day programmable (with up to four setpoints per day), multi-stage (2H/1C), manual changeover with HEAT-OFF-COOL-EM HEAT system settings and fan ON-AUTO settings. The thermostat shall have an LCD display with temperature, setpoint(s), mode, and status indication. The temperature indication shall be selectable for °F or °C. The thermostat shall provide permanent memory of setpoint(s) without batteries. The thermostat shall provide convenient override feature to temporarily change setpoint.

d. Multi-stage Automatic or Manual Changeover Programmable 7-Day (ATP32U03C)

The thermostat shall be 7-day programmable (with up to four setpoints per day), multi-stage (3H/2C), automatic or manual changeover with HEAT-OFF-COOL-AUTO-EM HEAT system settings and fan ON-AUTO settings. The thermostat shall have a blue backlit dot matrix LCD display with temperature, setpoints, mode, and status indication. The temperature indication shall be selectable for °F or °C. Time display shall be selectable for 12- or 24-hour clock. Fault identification shall be provided to simplify troubleshooting by providing specific unit fault at the thermostat with red backlit LCD during unit lockout. The thermostat shall provide permanent memory of setpoints without batteries. The thermostat shall provide heating-setpoint range limit, cooling-setpoint range limit, temperature display offset, keypad lockout, dead-band range setting, and inter-stage differential settings. The thermostat shall provide progressive recovery to anticipate the time required to bring space temperature to the next programmed event. The thermostat shall provide an installer setup for configuring options and for setup of servicing contractor name and contact information. The thermostat shall allow the use of an accessory remote and/or outdoor-temperature sensor (AST008). Thermostat navigation shall be accomplished via five buttons (up/down/right/left/select) with menu-driven selections for ease of use and programming.

e. Multi-stage Automatic or Manual Changeover Programmable 7-Day with Humidity Control (ATP32U04C)

The thermostat shall be 7-day programmable (with up to four setpoints per day), multi-stage (3H/2C), automatic or manual changeover with HEAT-OFF-COOL-AUTO-EM HEAT system settings and fan ON-AUTO settings. Separate dehumidification and humidification setpoints shall be configurable for discreet outputs to a dehumidification option and/or an external humidifier. Installer configuration mode shall allow the thermostat to operate with EC fan dehumidification mode via settings changes. The thermostat shall have a blue backlit dot matrix LCD display with temperature, relative humidity, setpoints, mode, and status indication. The temperature indication shall be selectable for °F or °C. Time display shall be selectable for 12- or 24-hour clock. Fault identification shall be provided to simplify troubleshooting by providing specific unit fault at the thermostat with red backlit LCD during unit lockout. The thermostat shall provide permanent memory of setpoints without batteries. Thermostat shall provide heating setpoint range limit, cooling setpoint range limit, temperature display offset, keypad lockout, dead-band range setting, and inter-stage differential settings. The thermostat shall provide progressive recovery to anticipate time required to bring space temperature to the next programmed event. The thermostat shall provide an installer setup for configuring options and for setup of servicing contractor name and contact information. The thermostat shall allow the use of an accessory remote and/or outdoor temperature sensor (AST008). Thermostat navigation shall be accomplished via five buttons (up/down/right/left/select) with menu-driven selections for ease of use and programming.

DDC SENSORS

ClimateMaster wall-mounted DDC sensor to monitor room temperature and interfaces with optional interface system described above. Several types as described below:

a. Sensor only with no display (MPC).

b. Sensor with setpoint adjustment and override (MPC only).

c. Sensor with setpoint adjustment and override, LCD display, status/fault indication (MPC).

NOTICE! This product specification document is furnished as a means to copy and paste ClimateMaster product information into project specification. It is not intended to be a complete list of product requirements. This document is an excerpt from the product submittal and must not be used without consulting the complete product submittal. For complete product installation and application requirements, please consult the complete product submittal. ClimateMaster is not responsible for misuse of this document or a failure to adequately review specific requirements in the product catalog.

Date	Section	Description
12/19/24	Physical Data	Added blower horsepower data.
	Dimensional Data	Corrected flange and water connection measurements. Standardized electrical knockout data.
	WSE Diagrams, Data, and Dimensions	Updated and rearranged preliminary WSE data, copy, and drawings with official content.
	Minimum Installation Area	Updated data. Removed unnecessary tables.
	Blower Motor VFD	Corrected Table reference
	All	Updated naming conventions for CXM2, DXM2.5, and AWC Thermostat
10/22/24	Features, Options, and Accessories	Updated language for items. Clarified some factory-configured options from field-convertible configurations.
	Model Nomenclature	Updated Voltage, Blower Motor, and Water Options offerings
	Performance Data: AHRI/ASHRAE/ISO 13256-1	Rearranged presentation and updated data.
	Performance Data	Consolidated redundant data. Updated data.
	Blower Performance Data	Removed unavailable configurations. Updated data. Added note concerning maximum allowable altitude of installation
	Horizontal and Vertical Installation	Added note concerning minimum clearances.
	Physical Data	Updated refrigerant charge and volume per Coax for some configurations. Updated maximum water working pressure.
	Dimensional Data	Updated standard configuration dimensional data and reference graphics
	Electrical Data	Updated Electrical Data
	Engineering Specifications	Updated maximum water working pressure.
03/06/24	All	Created

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