



COMMERCIAL
TRANQUILITY® (SB) COMPACT HIGH-CAPACITY SERIES

PRODUCT CATALOG

Part#: LC3008 | Revised: June 16, 2025

Models: SB 072-300

60Hz - R-454B

Models: SB 072-300

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Introduction

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), groundwater (geothermal) applications, as well as waterloop (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 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 an AWC Thermostat or Wireless 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

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 returnair 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, webenabled 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 – From the myUplink PRO website, mobile app, AWC Thermostat, or Wireless Service Tool, installers can configure the following: 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.

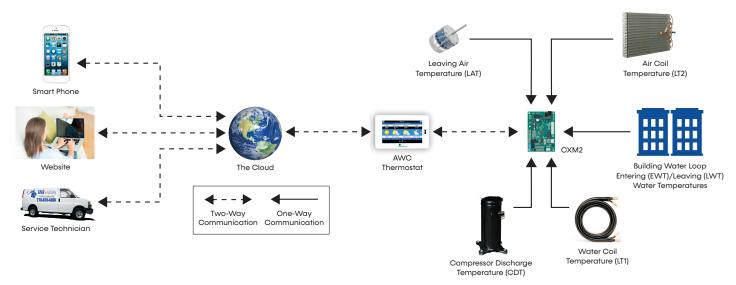
Precise Control – The new CXM2 enables intelligent, two-way communication between the CXM2 and smart components like the AWC Thermostat and Wireless Service Tool. CXM2 Communicating Controls uses information received from the temperature sensors to precisely control operation to deliver high efficiency,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

Diagnostics – iGate 2 takes diagnosing watersource 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, Wireless 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.

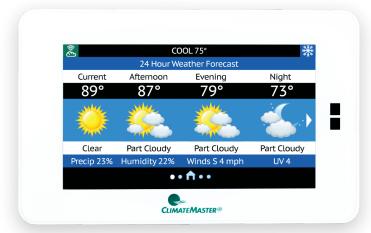
In iGate 2 Service Mode, the service personnel can access fault description, possible causes and most importantly, the conditions (temp, flow, i/o conditions, configuration) at the time of the fault. Manual Operation mode allows the service personnel to manually command operation for any of the thermostat outputs, blower speed, to help troubleshoot specific components. This operation can either be conducted at the unit with an AWC Thermostat and Wireless Service 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 Communicating (AWC) Thermostat

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 touchscreen 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.



myUplink: Web and Mobile Interface

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

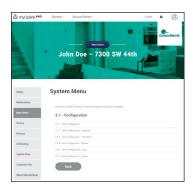
provide the most efficient link between their system and your services. The customizable monitoring from the myUplink PRO web portal or phone app account allows for continuous system monitoring, analysis, repair recognition, and early warnings for potential system faults that are sent to you and your customer.



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.



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

Selection Procedure

Reference Calculations

Heating	Cooling								
LWT = EWT - HE GPM x Constant	LWT = EWT + HR GPM x Constant LC = TC - SC								
LAT = EAT + HC	LAT (DB) = EAT (DB) - $\frac{SC}{CFM \times 1.08}$ 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 \times 0.472	Water Flow (L/s) = GPM x 0.0631	ESP (Pa) = ESP (in of wg) \times 249	PD (kPa) = PD (ft of hd) $\times 2.99$

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								
HGRH	Hot Gas Reheat								
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									

Selection Procedure

USE THE FOLLOWING SELECTION STEPS

- 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.
- 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.
- 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 Bt	uh
Sensible Cooling	73,300 Bt	uh
Entering Air Temp80°F Dry I	Bulb / 65°F Wet Bu	ılb

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
Airflow2,800 CFM

Selection Procedure

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				Airflow		Corrected
Corrected Total Cooling	=	93,200	X	0.977	x	0.976	=	88,871
Corrected Sensible Cooling	=	70,390	X	1.088	Х	0.933	=	71,453
Corrected Heat of Rejection	=	120,100	X	0.998	Χ	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)

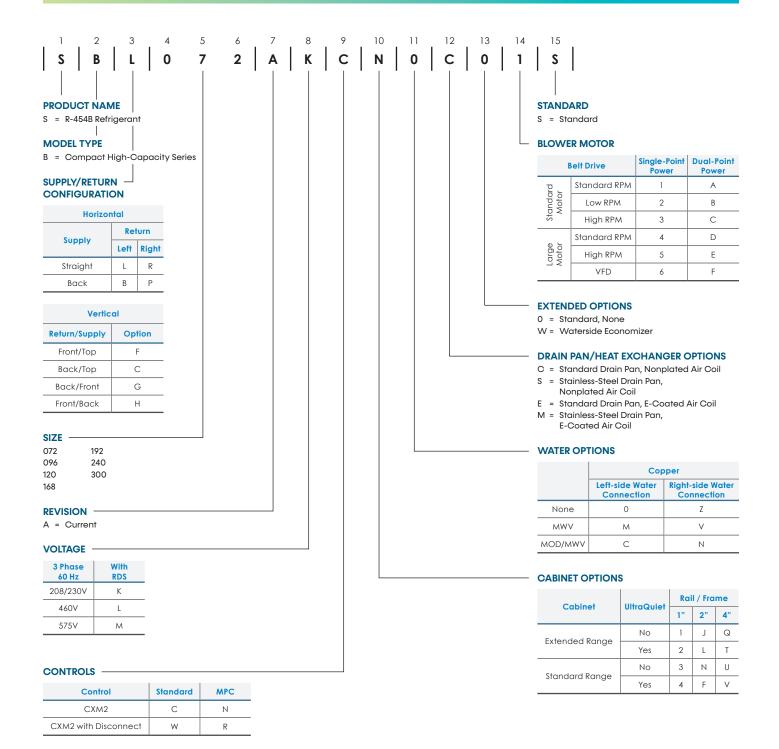
When we compare the Corrected Total Cooling and Corrected Sensible Cooling figures with our load requirements stated in Step 1, we discover that our selection is within \pm 10% of our sensible load requirement. Furthermore, we see that our Corrected Total Cooling figure is within 1,000 Btuh the actual 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	Х	0.986	×	0.976	=	87,626	
	Corrected = Sensible Cooling	71,453	Х	0.986	Х	0.933	=	70,452	

Model Nomenclature



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

	Full Load			Rated GPM	Sheave Setting (turns open)		Water I	оор		Ground	Water		Ground Loop				
Size		Motor Type	Rated CFM			Cooling 86°F		Heating 68°F		Cooling 59°F		Heating 50°F		Cooling 77°F		Heating 32°F	
		.,,,,	O.M.			Capacity Btuh	EER Btuh/W	Capacity Btuh	СОР	Capacity Btuh	EER Btuh/W	Capacity Btuh	СОР	Capacity Btuh	EER Btuh/W	Capacity Btuh	СОР
	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
72	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
	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
96	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
	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
120	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

		II Motor			Sheave Setting (turns	Water Loop					Ground	Water		Ground Loop			
Size	Part or Full Load		Rated CFM	Rated GPM		Cooling	86°F	Heating 68°F		Cooling 59°F		Heating 50°F		Cooling 77°F		Heating 32°F	
	Loud	туре	CIM	GIM	open)	Capacity Btuh	EER Btuh/W	Capacity Btuh	СОР	Capacity Btuh	EER Btuh/W	Capacity Btuh	СОР	Capacity Btuh	EER Btuh/W	Capacity Btuh	СОР
72	Р	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	Р	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	Р	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
	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
168	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
	Р	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
	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
192	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
	Р	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
	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
240	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
	Р	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
300	Р	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

- 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

	Full Load			Waterflow Rated L/s	Sheave Setting (turns open)		Water	Loop		Ground	Water		Ground Loop				
Size		Motor Type	Airflow Rated			Cooling 30 °C		Heating 20 °C		Cooling 15 °C		Heating 10 °C		Cooling 25 °C		Heating 0 °C	
		.,,,,	L/s			Capacity Watts	EER W/W	Capacity Watts	СОР	Capacity Watts	EER W/W	Capacity Watts	СОР	Capacity Watts	EER W/W	Capacity Watts	СОР
	F	Belt Drive	1,133	1.14	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
72	F	Belt Drive with VFD	1,133	1.14	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
	F	Belt Drive	1,510	1.51	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
96	F	Belt Drive with VFD	1,510	1.51	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
	F	Belt Drive	1,888	1.89	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
120	F	Belt Drive with VFD	1,888	1.89	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 27°C DB, 19°C WB entering air temperature. Heating capacities based upon 20°C DB, 15°C 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

					Sheave		Water	Loop			Ground	Water			Ground	Loop	
Size	Part or Full Load	Motor Type	Airflow Rated	Waterflow Rated	Setting (turns	Cooling	30 °C	Heating 2	20 °C	Cooling	15 °C	Heating 1	0°C	Cooling	25 °C	Heating	0 °C
	Lodd	туре	L/s	L/s	open)	Capacity Watts	EER W/W	Capacity Watts	СОР	Capacity Watts	EER W/W	Capacity Watts	СОР	Capacity Watts	EER W/W	Capacity Watts	СОР
72	Р	Belt Drive with VFD	566	1.14	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	Р	Belt Drive with VFD	755	1.51	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	Р	Belt Drive with VFD	944	1.89	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
	F	Belt Drive	2,643	2.65	3.0	49,238	4.22	56,272	4.70	54,513	6.15	44,490	4.10	50,410	4.75	35,463	3.50
168	F	Belt Drive with VFD	2,643	2.65	1.0	49,531	4.48	58,030	4.90	54,513	6.27	44,549	4.10	50,996	4.98	35,463	3.50
	Р	Belt Drive with VFD	1,321	1.32	1.0	24,033	4.54	27,257	4.80	27,257	6.89	21,981	4.20	26,084	6.15	19,930	3.90
	F	Belt Drive	3,020	3.03	3.0	54,807	4.37	64,478	5.10	58,910	6.30	53,048	4.50	56,858	4.84	40,739	3.70
192	F	Belt Drive with VFD	3,020	3.03	1.0	55,100	4.45	65,064	5.20	59,203	6.45	53,341	4.50	56,858	4.98	41,032	3.70
	Р	Belt Drive with VFD	1,510	1.51	1.0	27,257	4.69	32,239	5.20	29,308	7.03	26,084	4.50	29,015	6.15	22,274	4.00
	F	Belt Drive	3,776	3.79	2.5	67,995	4.07	86,166	4.90	75,029	5.86	69,168	4.30	67,995	4.19	52,462	3.50
240	F	Belt Drive with VFD	3,776	3.79	1.0	67,995	4.10	87,339	4.90	75,322	6.15	70,047	4.30	68,875	4.40	52,462	3.50
	Р	Belt Drive with VFD	1,888	1.89	1.0	33,705	4.54	41,618	5.10	37,515	6.45	33,411	4.40	35,756	6.01	28,429	4.00
300	F	Belt Drive with VFD	4,719	4.73	1.0	87,925	3.90	110,785	4.60	96,717	5.60	86,166	3.90	88,511	4.19	64,771	3.10
300	Р	Belt Drive with VFD	2,360	2.37	1.0	43,669	4.25	53,634	4.80	49,238	6.74	43,083	4.20	45,428	5.42	37,808	3.70

- Where dual voltages are available, ratings are based on the lower voltage setting. Cooling capacities based upon 27°C DB, 19°C WB entering air temperature. Heating capacities based upon 20°C DB, 15°C WB entering air temperature.

- Ground Loop Heat Pump ratings based on 15% antifreeze solution.

Performance Data: Selection Notes

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

SB096

	WATER	/BRINE			Heat	ing - EA1	70°F	
ewt °F	FLOW GPM	PD psi	PD ft.	нс	kW	HE	LAT	СОР
	12.0	1.7	4.0	96.7	7.17	72.2	95.9	4.0
50	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

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:

 $HE = TD \times GPM \times 500$, where HE = Heat of Extraction (Btuh);

TD = temperature difference (EWT - LWT) and GPM = U.S. Gallons per Minute.

 $TD = HE / (GPM \times 500)$

 $TD = 72,200 / (12 \times 500)$

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.

EWT FLOW GPN 20 18.00 9.00 30 13.50 18.00	M P3	SI F	, I			2 Db															
20 18.00 9.00 30 13.50	M P3	SI F	г т			3-Phas	e Std <i>I</i>	Motor		VFD			3-Phas	e Std /	Motor				VFD		
9.00	-			С	SC	Power kW	HR	EER	Power kW	HR	EER	нс	Power kW	HE	LAT	СОР	нс	Power kW	HE	LAT	СОР
30 13.50	0 1	.1 14	0			Operat	ion Not	Recomi	mended			48.9	4.8	32.6	86.8	3.0	48.6	4.71	32.6	86.7	3.0
	٠	.7 3.	7	9.0	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
18.00	50 3.	.3 7.	7 7	9.1	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
1	00 5.	.1 11	7 7	9.0	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
9.00	0 1.	.4 3.	2 7	8.2	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
40 13.50	50 2.	.8 6.	3 7	8.8	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	00 4.	.4 10	.1 7	9.0	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
9.00	0 1.	.2 2.	7 7	6.9	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
50 13.50	50 2.	.4 5.	5 7	7.9	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	00 3.	.9 9.) 7	8.3	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
9.00	0 1.	.0 2.	4 7	4.9	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
60 13.50	50 2.	.1 4.	7	6.3	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	00 3.	.6 8.	3 7	6.9	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
9.00	0 1.	.0 2.	3 7:	2.5	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
70 13.50	50 2.	.0 4.	7 7.	4.2	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	00 3.	.4 7.	3 7	4.9	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
9.00	0 1.	.0 2.	2 6	9.7	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
80 13.50	50 2.	.0 4.	5 7	1.6	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	00 3.	.3 7.	5 7	2.5	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
9.00	0 0.	.9 2.	2 6	6.5	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
90 13.50	50 2.	.0 4.	5 6	8.6	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	00 3.	.2 7.	5 6	9.6	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
9.00	0 0.	.9 2.	1 6	3.0	47.6	6.85	86.4	9.2	6.76	86.1	9.3										
100 13.50	50 1.	.9 4.	4 6	5.3	48.5	6.42	87.2	10.2	6.33	86.9	10.3										
18.00	00 3.	.2 7.	3 6	6.4	49.0	6.21	87.5	10.7	6.12	87.3	10.8										
9.00	0 0.	.9 2.	5 5	9.3	46.1	7.56	85.1	7.8	7.47	84.8	7.9										
110 13.50	50 1.	.8 4.	2 6	1.7	47.1	7.10	85.9	8.7	7.01	85.6	8.8				Operati	ion Not I	Recomn	nended			
18.00	00 3.	.1 7.	6	2.8	47.6	6.88	86.3	9.1	6.79	86.0	9.3										
9.00	0 0.	.7 1.	7 5	5.4	44.5	8.32	83.8	6.7	8.23	83.5	6.7										
120 13.50	50 1.	.6 3.	3 5	7.9	45.5	7.84	84.6	7.4	7.75	84.3	7.5										
18.00	00 2.	.9 6.	7 5	9.1	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.

		WPD		(Coolin	g - EAT	80/67°	F		Heatin	g - EA	Г 70°F	
EWT	FLOW						VFD				VFD		
°F	GPM	PSI	FT	TC	SC	Power kW	HR	EER	нс	Power kW	HE	LAT	СОР
20	18.00	6.0	13.9	Op	eration	Not Reco	ommen	ded	23.1	2.19	15.6	85.8	3.1
	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
30	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
	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
40	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
	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
50	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
	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
60	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
	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
70	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
	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
80	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
	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
90	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
	9.00	0.9	2.1	32.6	25.3	3.08	43.1	10.6					
100	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					
	9.00	0.9	2.0	30.4	24.6	3.45	42.2	8.8					
110	13.50	1.8	4.2	31.1	24.9	3.33	42.5	9.4	Op	eration N	ot Reco	mmend	led
	18.00	3.1	7.2	31.5	25.0	3.27	42.7	9.6					
	9.00	0.8	1.8	27.8	23.6	3.85	40.9	7.2					
120	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.
- 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.

		WPD				Coo	ling -	EAT 80	/67°F						Не	ating -	EAT 7	0°F			
EWT	ELOW					3-Phas	e Std /	Motor		VFD			3-Phas	e Std /	Motor				VFD		
°F	GPM	PSI	FT	TC	SC	Power kW	HR	EER	Power kW	HR	EER	нс	Power kW	HE	LAT	СОР	нс	Power kW	HE	LAT	СОР
20	24.00	9.1	20.9			Operat	ion Not	Recom	mended			64.6	6.6	42.2	86.7	2.9	64.5	6.52	42.2	86.6	2.9
	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
30	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
	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
40	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
	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
50	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
	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
60	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
	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
70	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
	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
80	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
	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
90	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
	12.00	1.7	4.0	91.1	66.7	8.85	121.3	10.3	8.80	121.1	10.4										
100	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										
	12.00	1.7	3.9	86.7	64.4	9.78	120.0	8.9	9.73	119.9	8.9										
110	18.00	3.7	8.4	89.6	65.9	9.15	120.9	9.8	9.10	120.7	9.9				Operat	ion Not	Recomr	mended			
	24.00	5.6	13.0	91.2	66.7	8.84	121.3	10.3	8.79	121.2	10.4										
	12.00	1.6	3.7	82.4	62.2	10.80	119.2	7.6	10.75	119.0	7.7										
120	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.

		WPD			Coolin	ıg - EAT	80/67°	F		Heatin	g - EA	Г 70°F	
EWT	FLOW						VFD				VFD		
°F	GPM	PSI	FT	TC	SC	Power kW	HR	EER	нс	Power kW	HE	LAT	СОР
20	24.00	8.3	19.2	Op	eratior	Not Reco	ommen	ded	31.0	2.95	21.0	85.9	3.1
	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
30	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
	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
40	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
	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
50	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
	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
60	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
	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
70	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
	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
80	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
	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
90	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
	12.00	1.7	4.0	47.6	34.4	3.96	61.1	12.0					
100	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					
	12.00	1.7	3.9	45.0	33.2	4.46	60.2	10.1					
110	18.00	3.7	8.5	45.9	33.6	4.28	60.5	10.7	Op	eration N	ot Reco	mmenc	led
	24.00	5.7	13.1	46.3	33.8	4.20	60.7	11.0					
	12.00	1.6	3.7	42.3	32.2	5.01	59.4	8.4					
120	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.
- 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.

		WPD				Coo	ling - I	EAT 80	/67°F						Не	ating -	EAT 7	0°F			
EWT	FLOW					3-Phas	e Std /	Motor		VFD			3-Phas	e Std /	Motor				VFD		
°F	GPM	PSI	FT	TC	SC	Power kW	HR	EER	Power kW	HR	EER	нс	Power kW	HE	LAT	СОР	нс	Power kW	HE	LAT	СОР
20	30.00	9.7	22.4			Operat	ion Not	Recom	mended			86.5	8.9	56.0	88.0	2.8	86.4	8.91	56.0	87.9	2.8
	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
30	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
	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
40	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
	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
50	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
	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
60	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
	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
70	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
	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
80	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
	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
90	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
	15.00	2.3	5.4	112.3	80.4	11.93	153.0	9.4	11.90	152.9	9.4										
100	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										
	15.00	2.3	5.2	106.2	77.4	13.14	151.0	8.1	13.11	150.9	8.1										
110	22.50	4.5	10.4	110.4	79.4	12.30	152.4	9.0	12.28	152.3	9.0				Operat	ion Not	Recomr	nended			
	30.00	6.7	15.5	112.4	80.4	11.91	153.1	9.4	11.88	153.0	9.5										
	15.00	2.2	5.0	99.6	74.4	14.52	149.1	6.9	14.49	149.0	6.9										
120	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.
- 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.

		WPD			Coolin	g - EAT	80/67°	F		Heatin	g - EA	T 70°F	
EWT	FLOW						VFD				VFD		
°F	GPM	PSI	FT	TC	SC	Power kW	HR	EER	нс	Power kW	HE	LAT	СОР
20	30.00	9.8	22.6	Op	eratior	Not Reco	mmen	ded	39.7	3.84	26.6	86.4	3.0
	15.00	2.8	6.5	60.6	42.0	2.57	69.4	23.6	44.5	3.94	31.0	88.6	3.3
30	22.50	5.9	13.6	59.2	40.9	2.49	67.7	23.8	45.4	3.96	31.9	89.0	3.4
	30.00	9.0	20.8	58.5	40.4	2.45	66.9	23.9	45.9	3.97	32.3	89.2	3.4
	15.00	2.7	6.2	63.9	44.4	2.85	73.6	22.4	51.2	4.10	37.2	91.6	3.7
40	22.50	5.6	12.8	63.0	43.8	2.76	72.4	22.9	52.4	4.12	38.3	92.2	3.7
	30.00	8.4	19.4	62.5	43.4	2.71	71.8	23.0	53.1	4.14	38.9	92.5	3.8
	15.00	2.6	6.0	65.5	45.8	3.14	76.2	20.9	58.6	4.27	44.0	95.0	4.0
50	22.50	5.3	12.2	65.1	45.4	3.04	75.5	21.4	60.1	4.30	45.4	95.8	4.1
	30.00	8.0	18.4	64.9	45.2	2.99	75.1	21.7	60.9	4.32	46.1	96.1	4.1
	15.00	2.5	5.9	65.8	46.2	3.45	77.6	19.1	66.3	4.45	51.1	98.6	4.4
60	22.50	5.1	11.8	65.9	46.1	3.34	77.3	19.7	68.1	4.50	52.8	99.5	4.4
	30.00	7.7	17.7	65.8	46.1	3.29	77.0	20.0	69.1	4.52	53.6	99.9	4.5
	15.00	2.5	5.7	65.0	45.9	3.81	78.0	17.1	74.1	4.64	58.2	102.2	4.7
70	22.50	5.0	11.5	65.4	46.1	3.68	78.0	17.8	76.1	4.69	60.1	103.2	4.8
	30.00	7.4	17.2	65.6	46.1	3.62	77.9	18.1	77.2	4.72	61.1	103.7	4.8
	15.00	2.4	5.6	63.3	45.2	4.20	77.7	15.1	81.7	4.83	65.2	105.7	5.0
80	22.50	4.9	11.2	64.0	45.5	4.06	77.9	15.8	83.9	4.89	67.2	106.7	5.0
	30.00	7.3	16.8	64.3	45.6	3.99	77.9	16.1	85.0	4.92	68.2	107.3	5.1
	15.00	2.4	5.5	60.9	44.1	4.66	76.8	13.1	88.8	5.01	71.7	109.0	5.2
90	22.50	4.8	11.0	61.8	44.5	4.50	77.1	13.7	91.0	5.07	73.7	110.0	5.3
	30.00	7.1	16.5	62.2	44.7	4.42	77.3	14.1	92.0	5.10	74.7	110.5	5.3
	15.00	2.3	5.3	57.9	42.9	5.18	75.6	11.2					
100	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					
	15.00	2.2	5.1	54.5	41.5	5.78	74.3	9.4					
110	22.50	4.5	10.4	55.7	42.0	5.58	74.7	10.0	Op	eration N	ot Reco	mmenc	led
	30.00	6.8	15.7	56.2	42.2	5.47	74.9	10.3					
	15.00	2.0	4.7	50.9	40.2	6.47	73.0	7.9					
120	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.

		WPD				Coc	oling - I	EAT 80	/67°F						He	ating -	EAT 7	0°F			
EWT	FLOW					3-Phas	e Std /	Motor		VFD			3-Phas	e Std /	Motor				VFD		
°F	GPM	PSI	FT	TC	SC	Power kW	HR	EER	Power kW	HR	EER	нс	Power kW	HE	LAT	СОР	нс	Power kW	HE	LAT	СОР
20									Ор	eration	Not Rec	ommer	ded								
	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
30	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
	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
40	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
	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
50	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
	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
60	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
	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
70	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
	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
80	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
	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
90	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
	21.00	1.1	2.6	153.8	124.4	15.57	206.9	9.9	15.38	206.3	10.0										
100	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										
	21.00	1.1	2.5	146.3	120.3	17.17	204.9	8.5	16.98	204.2	8.6										
110	31.50	2.1	5.0	151.1	122.9	16.12	206.1	9.4	15.93	205.4	9.5				Operat	ion Not	Recomr	nended			
	42.00	3.6	8.2	153.7	124.3	15.60	206.9	9.9	15.41	206.2	10.0										
	21.00	1.1	2.4	139.9	116.4	18.85	204.2	7.4	18.66	203.6	7.5										
120	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.
- 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.

		WPD		(Coolin	g - EAT	80/67°	F		Heatin	g - EA	Г 70°F	
EWT	FLOW						VFD				VFD		
°F	GPM	PSI	FT	TC	SC	Power kW	HR	EER	нс	Power kW	HE	LAT	СОР
20					0	peration	Not Rec	ommer	ided				
	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
30	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
	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
40	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
	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
50	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
	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
60	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
	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
70	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
	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
80	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
	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
90	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
	10.50	0.9	2.1	75.7	62.0	7.18	100.3	10.5					
100	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					
	10.50	0.9	2.0	71.8	60.0	7.96	99.0	9.0					
110	15.75	1.6	3.7	74.2	61.2	7.46	99.7	9.9	Or	eration N	ot Reco	mmend	led
	21.00	2.7	6.3	75.6	61.9	7.22	100.2	10.5					
	10.50	0.8	1.9	68.5	58.4	8.77	98.4	7.8					
120	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.
- 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.

	LOW								/67°F							ating -		• •			
						3-Phas	e Std A	Notor		VFD			3-Phas	e Std /	∧otor				VFD		
	PM	PSI	FT	TC	\$C	Power kW	HR	EER	Power kW	HR	EER	нс	Power kW	HE	LAT	СОР	нс	Power kW	HE	LAT	СОР
20									Op	eration	Not Rec	ommen	ded								
24	4.00	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
30 36	6.00	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	8.00	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
24	4.00	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
40 36	6.00	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	8.00	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
24	4.00	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
50 36	6.00	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	8.00	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
24	4.00	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
60 36	6.00	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	8.00	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
24	4.00	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
70 36	6.00	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	8.00	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
24	4.00	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
80 36	6.00	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	8.00	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
24	4.00	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
90 36	6.00	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	8.00	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
24	4.00	1.9	4.3	167.5	139.9	16.69	224.4	10.0	16.69	224.4	10.0										
100 36	6.00	4.0	9.2	173.5	142.8	15.67	226.9	11.1	15.66	226.9	11.1										
48	8.00	6.1	14.0	176.5	144.3	15.16	228.2	11.6	15.16	228.2	11.6										
24	4.00	1.8	4.2	158.3	135.5	18.41	221.1	8.6	18.41	221.1	8.6										
110 36	6.00	3.9	9.0	163.9	138.2	17.33	223.1	9.5	17.33	223.0	9.5				Operati	on Not I	Recomn	nended			
48	8.00	5.9	13.7	166.9	139.6	16.80	224.2	9.9	16.80	224.2	9.9										
24	4.00	1.7	4.0	149.9	131.6	20.23	218.9	7.4	20.23	218.9	7.4										
120 36	6.00	3.7	8.6	154.9	133.9	19.11	220.1	8.1	19.10	220.1	8.1										
48	8.00	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.
- 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.

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- See Performance Data Selection Notes for operation in the shaded areas.

		WPD		(Coolin	g - EAT	80/6 7 °	F		Heatin	g - EA	Г 70°F	
EWT	FLOW						VFD				VFD		
°F	GPM	PSI	FT	TC	SC	Power kW	HR	EER	нс	Power kW	HE	LAT	СОР
20					0	peration	Not Rec	ommer	nded				
	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
30	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
	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
40	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
	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
50	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
	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
60	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
	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
70	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
	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
80	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
	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
90	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
	12.00	1.5	3.5	82.3	70.4	7.68	108.5	10.7					
100	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					
	12.00	1.5	3.4	78.2	68.4	8.55	107.4	9.1					
110	18.00	3.0	7.0	80.5	69.5	8.02	107.9	10.0	Ор	eration N	ot Reco	mmenc	led
	24.00	4.6	10.6	81.9	70.1	7.76	108.3	10.6					
	12.00	1.4	3.2	75.8	68.0	9.55	108.4	7.9					
120	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.
- 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.

		WPD				Coc	oling - I	EAT 80	/67°F						Не	ating -	EAT 7	0°F			
EWT	FLOW					3-Phas	e Std /	Motor		VFD			3-Phas	e Std /	Motor				VFD		
°F	GPM	PSI	FT	TC	SC	Power kW	HR	EER	Power kW	HR	EER	нс	Power kW	HE	LAT	СОР	нс	Power kW	HE	LAT	СОР
20									Ор	eration	Not Rec	ommen	ided								
	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
30	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
	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
40	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
	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
50	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
	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
60	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
	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
70	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
	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
80	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
	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
90	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
	30.00	1.4	3.2	205.3	168.8	22.31	281.5	9.2	22.12	280.8	9.3										
100	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										
	30.00	1.3	2.9	191.4	162.1	24.63	275.4	7.8	24.45	274.8	7.8										
110	45.00	3.1	7.1	200.1	166.3	23.16	279.1	8.6	22.98	278.5	8.7				Operat	ion Not	Recomr	nended			
	60.00	4.8	11.2	204.5	168.3	22.45	281.1	9.1	22.27	280.4	9.2										
	30.00	1.1	2.5	176.8	154.7	27.23	269.7	6.5	27.05	269.0	6.5										
120	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.
- 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.

		WPD			Coolin	g - EAT	80/67°	F		Heatin	g - EA1	Г 70°F			
EWT	FLOW						VFD				VFD				
°F	GPM	PSI	FT	TC	SC	Power kW	HR	EER	нс	Power kW	HE	LAT	СОР		
20					0	peration	Not Rec	ommen	ded						
	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		
30	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		
	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		
40	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		
	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		
50	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		
	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		
60	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		
	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		
70	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		
	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		
80	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		
	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		
90	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		
	15.00	1.1	2.6	102.7	86.6	9.95	136.6	10.3							
100	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							
	15.00	1.1	2.5	96.8	83.8	11.04	134.5	8.8							
110	22.50	2.4	5.4	100.3	85.4	10.37	135.7	9.7	Operation Not Recommended						
	30.00	3.6	8.3	102.1	86.3	10.04	136.4	10.2	2						
	15.00	1.1	2.5	91.6	81.6	12.26	133.5	7.5							
120	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	6						

Notes:

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- 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.

		WPD			Coolin	g - EAT	80/67°	F		Heatin	g - EA	Г 70°F			
EWT	FLOW						VFD				VFD				
°F	GPM	PSI	FT	TC	SC	Power kW	HR	EER	нс	Power kW	HE	LAT	СОР		
20					0	peration	Not Rec	ommer	ided						
	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		
30	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		
	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		
40	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		
	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		
50	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		
	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		
60	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		
	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		
70	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		
	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		
80	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		
	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		
90	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		
	37.50	1.7	3.8	258.4	212.9	30.2	361.3	8.5							
100	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							
	37.50	1.6	3.7	242.8	205.7	33.1	355.7	8.2							
110	56.25	3.6	8.4	252.7	210.2	31.2	359.2	8.8	Operation Not Recommended						
	75.00	5.7	13.1	257.8	212.7	30.3	361.1	9.6							
	37.50	1.5	3.5	228.5	198.5	36.1	351.8	6.3							
120	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	3						

Notes:

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- 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.

		WPD		(Coolin	g - EAT	80/67°	F		Heatin	g - EA	Г 70°F			
EWT	FLOW						VFD				VFD				
°F	GPM	PSI	FT	TC	SC	Power kW	HR	EER	нс	Power kW	HE	LAT	СОР		
20					0	peration	Not Rec	ommer	ided						
	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		
30	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		
	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		
40	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		
	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		
50	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		
	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		
60	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		
	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		
70	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		
	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		
80	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		
	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		
90	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		
	18.75	1.4	3.2	133.1	107.3	13.48	179.1	9.9							
100	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	5						
	18.75	1.3	3.0	124.9	104.1	14.92	175.8	8.4							
110	28.13	2.9	6.7	130.2	106.2	14.00	177.9	9.3	Op	eration N	ot Reco	mmend	led		
	37.50	4.5	10.4	132.8	107.2	13.54	179.0	9.8							
	18.75	1.2	2.9	115.9	100.8	16.47	172.1	7.0							
120	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	3						

Notes:

- Interpolation is permissible, extrapolation is not.
- 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	Heat 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	Total		Sensib	le Cooli	ing Cap	acity Mu	ltiplier -	Entering	DB °F		Power	Heat of
Air WB°F	Capacity	60	65	70	75	80	80.6	85	90	95	Power	Rejection
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				Cooling		Heatir	ng	was
(°F)	Antifreeze Type	Antifreeze %	Total Cap	Sensible Cap	Watts	Total Cap	Watts	WPD
	Water	0%	1.000	1.000	1.000	1.000	1.000	1.000
Ī		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
	Ethanol	25%	0.986	0.986	1.009	0.972	0.991	1.207
	EINGHOI	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
		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
	Ethylona Chroal	25%	0.988	0.988	1.008	0.976	0.993	1.146
	Ethylene Glycol	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	Watts Total Cap Watts 1.000 1.000 1.000 1.002 0.996 0.999 1.003 0.991 0.997 1.005 0.987 0.996 1.006 0.982 0.994 1.009 0.972 0.991 1.012 0.962 0.988 1.015 0.953 0.985 1.018 0.943 0.982 1.023 0.931 0.978 1.027 0.918 0.974 1.002 0.996 0.999 1.003 0.991 0.997 1.004 0.987 0.996 1.005 0.982 0.995 1.008 0.976 0.993 1.010 0.969 0.990 1.012 0.963 0.988	1.278		
90		50%	0.972	0.972	1.018	0.943	0.982	1.314
		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
	Methanol	25%	0.982	0.982	1.012	0.964	0.989	1.189
	Memanor	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
		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
	Propylene Glycol	25%	0.978	0.978	1.014	0.956	0.986	1.227
	1 TOPYTETTE GIYCUI	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				Cooling		Heatir	ng	
(°F)	Antifreeze Type	Antifreeze %	Total Cap	Sensible Cap	Watts	Total Cap	Watts	WPD
	Water	0%	1.000	1.000	1.000	1.000	1.000	1.000
		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
	Ethanol	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
		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
	Ethylene Glycol	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
30		50%	0.966	0.966	1.023	0.930	0.978	1.419
		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
	Methanol	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
		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
	Bronylone Chical	25%	0.974	0.974	1.017	0.947	0.983	1.359
	Propylene Glycol	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
	ВНР			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
1,800	Sheave/Mtr			В	В	В	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM			599	645	690	735	775	815	850	885	910	940	965	995	1015	1040
	ВНР			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
1,900	Sheave/Mtr			В	В	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С
	RPM			604	655	695	740	780	820	855	890	920	950	980	1005	1030	1055
	ВНР		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
2,000	Sheave/Mtr		В	В	В	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С
	RPM		568	615	660	705	750	785	825	860	895	930	960	990	1015	1040	1065
	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
2,100	Sheave/Mtr	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С
	RPM	531	583	630	670	715	755	795	835	875	905	940	970	1000	1025	1055	1080
	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
2,200	Sheave/Mtr	В	В	В	Α	Α	Α	Α	Α	Α	С	С	С	С	С	Е	Е
	RPM	552	599	645	685	730	770	810	850	885	915	950	980	1010	1040	1065	1090
	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
2,300	Sheave/Mtr	В	В	В	Α	Α	Α	Α	Α	Α	С	С	С	Е	Е	Е	Е
	RPM	573	620	660	705	745	785	820	860	895	925	960	990	1020	1050	1075	1105
	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
2,400	Sheave/Mtr	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	Е	Е	Е	Е	Е
	RPM	604	645	690	730	765	805	845	880	910	945	975	1010	1035	1065	1095	1125
	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
2,500	Sheave/Mtr	В	В	Α	Α	Α	Α	Α	Α	С	Е	Е	Е	Е	Е	Е	Е
	RPM	620	660	700	740	780	815	850	885	920	950	985	1015	1045	1075	1100	1130
	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
2,600	Sheave/Mtr	В	Α	Α	Α	Α	Α	Α	Α	С	Е	Е	Е	Е	Е	Е	Е
	RPM	635	675	715	750	790	825	860	895	925	960	990	1020	1050	1080	1110	1135
	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
2,700	Sheave/Mtr	В	Α	Α	Α	Α	Α	Α	Α	Е	Е	Е	Е	Е	Е	Е	Е
	RPM	655	695	730	770	805	840	875	905	940	970	1000	1030	1060	1090	1120	1145
	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
2,800	Sheave/Mtr	В	Α	Α	Α	Α	Α	Α	D	Е	Е	Е	Е	Е	Е	Е	Е
	RPM	670	710	750	785	815	850	885	915	950	980	1010	1040	1070	1100	1130	1155
	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
2,900	Sheave/Mtr	Α	Α	Α	Α	Α	Α	D	Е	Е	Е	Е	Е	Е	Е	Е	Е
	RPM	685	725	765	795	830	860	895	925	955	985	1020	1045	1075	1105	1135	1160
	ВНР	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	
3,000	Sheave/Mtr	Α	Α	Α	Α	Α	D	D	Е	Е	Е	Е	Е	Е	Е	Е	
	RPM	710	745	780	815	850	885	915	945	975	1005	1035	1065	1090	1120	1150	

- 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
	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
1,800	Discrete Spd Setting			В	В	В	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM			599	645	690	735	775	815	850	885	910	940	965	995	1015	1040
	ВНР			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
1,900	Discrete Spd Setting			В	В	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С
	RPM			604	655	695	740	780	820	855	890	920	950	980	1005	1030	1055
	ВНР		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
2,000	Discrete Spd Setting		В	В	В	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С
	RPM		568	615	660	705	750	785	825	860	895	930	960	990	1015	1040	1065
	ВНР	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
2,100	Discrete Spd Setting	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С
	RPM	531	583	630	670	715	755	795	835	875	905	940	970	1000	1025	1055	1080
	ВНР	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
2,200	Discrete Spd Setting	В	В	В	Α	Α	Α	Α	Α	Α	С	С	С	С	С	Е	Е
	RPM	552	599	645	685	730	770	810	850	885	915	950	980	1010	1040	1065	1090
	ВНР	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
2,300	Discrete Spd Setting	В	В	В	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С
	RPM	573	620	660	705	745	785	820	860	895	925	960	990	1020	1050	1075	1105
	ВНР	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
2,400	Discrete Spd Setting	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С
	RPM	604	645	690	730	765	805	845	880	910	945	975	1010	1035	1065	1095	1125
	ВНР	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
2,500	Discrete Spd Setting	В	В	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С	С
	RPM	620	660	700	740	780	815	850	885	920	950	985	1015	1045	1075	1100	1130
	ВНР	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
2,600	Discrete Spd Setting	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С	С
	RPM	635	675	715	750	790	825	860	895	925	960	990	1020	1050	1080	1110	1135
	ВНР	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
2,700	Discrete Spd Setting	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С	С
	RPM	655	695	730	770	805	840	875	905	940	970	1000	1030	1060	1090	1120	1145
	ВНР	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
2,800	Discrete Spd Setting	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С	С
	RPM	670	710	750	785	815	850	885	915	950	980	1010	1040	1070	1100	1130	1155
	ВНР	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	
2,900	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С	С	
	RPM	685	725	765	795	830	860	895	925	955	985	1020	1045	1075	1105	1135	
	ВНР	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		
3,000	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С		
	RPM	710	745	780	815	850	885	915	945	975	1005	1035	1065	1090	1120		

- 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 Wireless Service Tool.
 The unit can control the blower through LAT control. Enable this setting in the field with the Wireless Service Tool.
 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	ВНР	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	В	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С
	RPM	578	625	665	705	745	785	820	860	895	925	960	990	1020	1050	1080	1110
	ВНР	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
2,500	Sheave/Mtr	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM	599	645	685	725	765	800	835	875	905	940	970	1005	1035	1060	1090	1120
	ВНР	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
2,600	Sheave/Mtr	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM	625	665	705	740	780	815	850	885	920	950	985	1015	1045	1075	1100	1130
	ВНР	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
2,700	Sheave/Mtr	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM	645	685	725	760	795	830	865	900	930	960	995	1025	1055	1085	1115	1140
	ВНР	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
2,800	Sheave/Mtr	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM	665	705	745	780	810	845	880	910	945	975	1005	1035	1065	1095	1125	1150
2,900	ВНР	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	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM	685	720	760	795	825	860	890	920	955	985	1015	1045	1075	1105	1135	1160
	ВНР	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
3,000	Sheave/Mtr	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	700	740	775	810	845	880	910	940	970	1000	1030	1055	1085	1115	1140	1170
	ВНР	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
3,100	Sheave/Mtr	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	720	755	790	825	860	890	925	955	985	1015	1040	1070	1095	1125	1150	1175
	ВНР	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
3,200	Sheave/Mtr	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С
	RPM	740	775	810	845	875	905	935	965	995	1025	1050	1080	1105	1135	1160	1185
	ВНР	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
3,300	Sheave/Mtr	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	Е
	RPM	755	790	820	855	890	915	945	975	1005	1035	1060	1090	1115	1140	1170	1195
	ВНР	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
3,400	Sheave/Mtr	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	Е	Е
	RPM	765	800	835	870	900	930	960	990	1015	1045	1070	1100	1125	1150	1175	1200

- 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.

Blower Performance SB*096

Models: SB 072-300

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
3,500	ВНР	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	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	Е	Е	Е
	RPM	780	815	845	880	910	940	970	1000	1025	1055	1080	1105	1130	1160	1185	1210
	ВНР	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
3,600	Sheave/Mtr	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	Е	Е	Е	Е
	RPM	795	825	860	890	920	950	980	1010	1035	1065	1090	1115	1145	1165	1190	1215
3,700	ВНР	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	Α	Α	Α	Α	Α	Α	Α	Α	С	С	Е	Е	Е	Е	Е	Е
	RPM	820	850	880	910	940	970	1000	1025	1055	1080	1110	1135	1160	1180	1205	1230
	ВНР	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
3,800	Sheave/Mtr	Α	Α	Α	Α	Α	Α	Α	Α	E	E	E ₁	E	E	E	E	E
	RPM	840	870	900	930	960	990	1020	1045	1070	1100	1125	1150	1170	1195	1220	1245
	ВНР	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	
3,900	Sheave/Mtr	Α	Α	Α	Α	Α	Α	D	D	Е	Е	Е	Е	Е	Е	Е	
	RPM	865	890	920	950	980	1010	1035	1060	1090	1115	1140	1160	1185	1210	1235	
4,000	ВНР	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	Α	Α	Α	Α	D	D	D	Е	Е	Е	Е	Е	Е	Е	Е	
	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	В	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С
	RPM	578	625	665	705	745	785	820	860	895	925	960	990	1020	1050	1080	1110
	ВНР	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
2,500	Discrete Spd Setting	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM	599	645	685	725	765	800	835	875	905	940	970	1005	1035	1060	1090	1120
	ВНР	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
2,600	Discrete Spd Setting	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM	625	665	705	740	780	815	850	885	920	950	985	1015	1045	1075	1100	1130
	ВНР	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
2,700	Discrete Spd Setting	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM	645	685	725	760	795	830	865	900	930	960	995	1025	1055	1085	1115	1140
2,800	ВНР	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	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM	665	705	745	780	810	845	880	910	945	975	1005	1035	1065	1095	1125	1150
2,900	ВНР	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	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM	685	720	760	795	825	860	890	920	955	985	1015	1045	1075	1105	1135	1160
	ВНР	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
3,000	Discrete Spd Setting	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	700	740	775	810	845	880	910	940	970	1000	1030	1055	1085	1115	1140	1170
	ВНР	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
3,100	Discrete Spd Setting	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	720	755	790	825	860	890	925	955	985	1015	1040	1070	1095	1125	1150	1175
	ВНР	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
3,200	Discrete Spd Setting	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С
	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	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С
	RPM	755	790	820	855	890	915	945	975	1005	1035	1060	1090	1115	1140	1170	1195
	ВНР	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
3,400	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С
	RPM	765	800	835	870	900	930	960	990	1015	1045	1070	1100	1125	1150	1175	1200

- 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 Wireless Service Tool. The unit can control the blower through LAT control. Enable this setting in the field with the Wireless Service Tool. The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

Table continued on next page.

Blower Performance SB*096 with VFD

Models: SB 072-300

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
	ВНР	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
3,500	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С
	RPM	780	815	845	880	910	940	970	1000	1025	1055	1080	1105	1130	1160	1185	1210
	ВНР	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
3,600	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С
	RPM	795	825	860	890	920	950	980	1010	1035	1065	1090	1115	1145	1165	1190	1215
	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
3,700	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С	С
	RPM	820	850	880	910	940	970	1000	1025	1055	1080	1110	1135	1160	1180	1205	1230
	ВНР	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
3,800	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С	С
	RPM	840	870	900	930	960	990	1020	1045	1070	1100	1125	1150	1170	1195	1220	1245
	ВНР	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	
3,900	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С	
	RPM	865	890	920	950	980	1010	1035	1060	1090	1115	1140	1160	1185	1210	1235	
	ВНР	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	
4,000	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С	С	
	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 Wireless Service Tool. The unit can control the blower through LAT control. Enable this setting in the field with the Wireless Service Tool. 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
	ВНР	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
3,000	Sheave/Mtr	В	В	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	А	A
	RPM	680	720	755	790	825	860	895	925	955	985	1015	1045	1070	1100	1130	1155
	ВНР	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
3,100	Sheave/Mtr	В	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С
	RPM	700	735	775	805	840	875	905	940	970	1000	1025	1055	1080	1110	1135	1165
	ВНР	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
3,200	Sheave/Mtr	В	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С
	RPM	720	755	790	825	860	890	920	950	980	1010	1040	1065	1095	1120	1145	1175
	ВНР	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
3,300	Sheave/Mtr	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С
	RPM	740	770	805	840	875	905	935	965	995	1020	1050	1075	1105	1130	1155	1180
	ВНР	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
3,400	Sheave/Mtr	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С
	RPM	755	790	820	855	890	915	945	975	1005	1035	1060	1090	1115	1140	1165	1190
	ВНР	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
3,500	Sheave/Mtr	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С
	RPM	770	805	835	870	900	930	960	990	1020	1045	1070	1100	1125	1150	1175	1200
	ВНР	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
3,600	Sheave/Mtr	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM	790	820	855	885	915	945	975	1005	1030	1060	1085	1110	1140	1165	1190	1210
	ВНР	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
3,700	Sheave/Mtr	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM	810	840	870	900	930	960	990	1020	1045	1075	1100	1125	1150	1175	1200	1225
	ВНР	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
3,800	Sheave/Mtr	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM	830	860	890	920	950	980	1005	1035	1060	1085	1115	1140	1160	1185	1210	1235
	ВНР	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
3,900	Sheave/Mtr	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM	850	875	905	935	965	995	1020	1045	1075	1100	1125	1150	1175	1195	1220	1245
	ВНР	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
4,000	Sheave/Mtr	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM	865	895	920	950	980	1010	1035	1060	1085	1115	1140	1160	1185	1210	1235	1260
	ВНР	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	
4,100	Sheave/Mtr	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	
	RPM	885	915	945	970	1000	1025	1055	1080	1105	1130	1155	1180	1200	1225	1250	
	ВНР	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		
4,200	Sheave/Mtr	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С		
	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).

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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
	ВНР	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		
4,300	Sheave/Mtr	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	Е	Е		
	RPM	930	955	985	1010	1035	1065	1090	1115	1140	1160	1185	1210	1230	1255		
	ВНР	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			
4,400	Sheave/Mtr	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	Е	Е	Е			
	RPM	950	975	1005	1030	1055	1080	1110	1135	1155	1180	1200	1225	1245			
	ВНР	2.30	2.38	2.46	2.54	2.62	2.72	2.80	2.88	3.00	3.08	3.16	3.26				
4,500	Sheave/Mtr	Α	Α	Α	Α	Α	Α	Α	Α	D	Е	Е	Е				
	RPM	970	995	1020	1045	1070	1100	1125	1145	1170	1195	1215	1240				
	ВНР	2.39	2.45	2.54	2.63	2.72	2.83	2.92	3.00	3.10	3.18	3.28	3.38				
4,600	Sheave/Mtr	Α	Α	Α	Α	Α	Α	Α	D	D	Е	Е	Е				
	RPM	980	1000	1025	1050	1075	1105	1130	1150	1175	1195	1220	1245				
	ВНР	2.46	2.52	2.62	2.72	2.82	2.92	3.02	3.12	3.22	3.32	3.40	3.50				
4,700	Sheave/Mtr	Α	Α	Α	Α	Α	Α	D	D	Е	Е	Е	Е				
	RPM	985	1005	1030	1055	1080	1105	1130	1155	1180	1205	1225	1250				
	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				
4,800	Sheave/Mtr	Α	Α	Α	Α	Α	D	D	D	Е	Е	Е	Е				
	RPM	990	1010	1035	1060	1085	1110	1135	1160	1180	1205	1230	1250				
	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				
4,900	Sheave/Mtr	Α	Α	Α	D	D	D	D	Е	Е	Е	Е	Е				
	RPM	995	1020	1045	1070	1090	1115	1140	1165	1185	1210	1235	1255				
	ВНР	2.82	2.92	3.00	3.10	3.20	3.28	3.38	3.48	3.56	3.66	3.74					
5,000	Sheave/Mtr	Α	Α	D	D	D	D	D	Е	Е	Е	Е					
	RPM	1005	1030	1050	1075	1100	1120	1145	1170	1190	1215	1235					

- 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
	ВНР	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
3,000	Discrete Spd Setting	В	В	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α
	RPM	680	720	755	790	825	860	895	925	955	985	1015	1045	1070	1100	1130	1155
	ВНР	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
3,100	Discrete Spd Setting	В	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С
	RPM	700	735	775	805	840	875	905	940	970	1000	1025	1055	1080	1110	1135	1165
	ВНР	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
3,200	Discrete Spd Setting	В	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С
	RPM	720	755	790	825	860	890	920	950	980	1010	1040	1065	1095	1120	1145	1175
	ВНР	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
3,300	Discrete Spd Setting	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С
	RPM	740	770	805	840	875	905	935	965	995	1020	1050	1075	1105	1130	1155	1180
	ВНР	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
3,400	Discrete Spd Setting	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С
	RPM	755	790	820	855	890	915	945	975	1005	1035	1060	1090	1115	1140	1165	1190
	ВНР	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
3,500	Discrete Spd Setting	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С
	RPM	770	805	835	870	900	930	960	990	1020	1045	1070	1100	1125	1150	1175	1200
	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
3,600	Discrete Spd Setting	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM	790	820	855	885	915	945	975	1005	1030	1060	1085	1110	1140	1165	1190	1210
	ВНР	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
3,700	Discrete Spd Setting	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM	810	840	870	900	930	960	990	1020	1045	1075	1100	1125	1150	1175	1200	1225
	ВНР	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
3,800	Discrete Spd Setting	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM	830	860	890	920	950	980	1005	1035	1060	1085	1115	1140	1160	1185	1210	1235
	ВНР	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
3,900	Discrete Spd Setting	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM	850	875	905	935	965	995	1020	1045	1075	1100	1125	1150	1175	1195	1220	1245
	ВНР	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
4,000	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM	865	895	920	950	980	1010	1035	1060	1085	1115	1140	1160	1185	1210	1235	1260
	ВНР	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	
4,100	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	
	RPM	885	915	945	970	1000	1025	1055	1080	1105	1130	1155	1180	1200	1225	1250	
	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		
4,200	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С		
	RPM	905	935	965	990	1020	1045	1070	1095	1120	1145	1170	1190	1215	1240		
	ВНР	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		
4,300	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	Е	Е		
	RPM	930	955	985	1010	1035	1065	1090	1115	1140	1160	1185	1210	1230	1255		

Notes:

- ores:

 Motor Sheave set to 1-turn open from factory.

 Factory forque setting is A. Torque setting is field-adjustable to any torque setting listed in drive table through the Wireless Service Tool.

 The unit can control the blower through LAT control. Enable this setting in the field with the Wireless Service Tool.

 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
	ВНР	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			
4,400	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С			
	RPM	950	975	1005	1030	1055	1080	1110	1135	1155	1180	1200	1225	1245			
	ВНР	2.30	2.38	2.46	2.54	2.62	2.72	2.80	2.88	3.00	3.08	3.16	3.26				
4,500	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С				
	RPM	970	995	1020	1045	1070	1100	1125	1145	1170	1195	1215	1240				
	ВНР	2.39	2.45	2.54	2.63	2.72	2.83	2.92	3.00	3.10	3.18	3.28	3.38				
4,600	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С				
	RPM	980	1000	1025	1050	1075	1105	1130	1150	1175	1195	1220	1245				
	ВНР	2.46	2.52	2.62	2.72	2.82	2.92	3.02	3.12	3.22	3.32	3.40	3.50				
4,700	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С				
	RPM	985	1005	1030	1055	1080	1105	1130	1155	1180	1205	1225	1250				
	ВНР	2.57	2.64	2.74	2.84	2.94	3.04	3.14	3.24	3.32	3.42	3.52	3.60				
4,800	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С				
	RPM	990	1010	1035	1060	1085	1110	1135	1160	1180	1205	1230	1250				
	ВНР	2.68	2.78	2.88	3.00	3.06	3.16	3.26	3.36	3.44	3.54	3.64	3.75				
4,900	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С				
	RPM	995	1020	1045	1070	1090	1115	1140	1165	1185	1210	1235	1255				
	ВНР	2.82	2.92	3.00	3.10	3.20	3.28	3.38	3.48	3.56	3.66	3.74					
5,000	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	С	С	С	С					
	RPM	1005	1030	1050	1075	1100	1120	1145	1170	1190	1215	1235					

- 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 Wireless Service Tool.

 The unit can control the blower through LAT control. Enable this setting in the field with the Wireless Service Tool.

 The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

Blower Performance SB*168

Models: SB 072-300

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
301M	BHP	0.00	0.10	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
4,200	Sheave/Mtr			В	В	В	В	A	A	Α	A	Α	Α	Α	C	C	C
1,200	RPM			547	594	640	685	725	765	805	845	880	915	945	975	1005	1030
	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
4,400	Sheave/Mtr			В	В	В	В	Α	A	Α	Α	A	A	A	С	С	С
·	RPM			563	609	655	695	735	775	815	855	890	925	955	985	1015	1045
	ВНР		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
4,600	Sheave/Mtr		В	В	В	В	В	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM		526	573	625	665	705	745	785	825	860	895	930	960	995	1025	1050
	ВНР		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
4,800	Sheave/Mtr		В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM		542	594	640	680	720	760	795	835	870	905	935	970	1000	1030	1055
	ВНР		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
5,000	Sheave/Mtr		В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM		563	609	650	690	735	770	805	840	880	910	945	975	1005	1035	1065
	ВНР	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
5,200	Sheave/Mtr	В	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM	542	583	625	665	705	745	780	815	850	885	920	955	985	1015	1045	1075
	ВНР	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
5,400	Sheave/Mtr	В	В	В	В	В	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	563	599	640	680	720	760	790	825	860	895	925	960	990	1020	1050	1080
	ВНР	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
5,600	Sheave/Mtr	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	583	620	655	695	735	770	805	840	870	905	935	970	1000	1030	1060	1090
	ВНР	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
5,800	Sheave/Mtr	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	588	630	670	710	750	780	815	845	880	910	945	975	1005	1035	1065	1095
	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
6,000	Sheave/Mtr	В	В	В	Α	Α	Α	A	A	A	A	A	С	С	С	С	Е
	RPM	604	645	685	720	760	795	825	860	895	925	955	985	1015	1040	1070	1100
4 000	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	
6,200	Sheave/Mtr	В	В	B (05	A 70.5	A 770	A	Α	A 075	905	A	C	C 995	C	E 1055	E 1000	
	RPM BHP	1.55	660	695	735	770	805	2.32	875		935	965		1025	1055	1080	
6,400		B	1.68 B	B	1.90	2.04	2.18 A		2.44	2.56 A	2.68 A	2.80 C	2.92 C	3.07 E	3.19 E	3.33 E	
6,400	Sheave/Mtr RPM	640	680	715	750	785	820	855	885	915	945	975	1005	1035	1060	1090	
	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	
6,600	Sheave/Mtr	В	В	A	A A	A A	A A	A A	A A	A A	A	C	E	E	E	E	
0,000	RPM	665	700	730	765	800	835	865	895	925	955	985	1015	1040	1070	1095	
	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	1070	
6,800	Sheave/Mtr	В	В	A	A A	Α	Α	A	Α	A	C	E	E	E	E		
2,300	RPM	685	715	745	775	810	845	880	910	940	965	995	1025	1050	1080		
	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		
7,000	Sheave/Mtr	В	A	A	A	A	A	A	A	D	Е	Е	E	E	Е		
	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
- E, 5 = High RPM/Large Blower Motor
 The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

Blower Performance SB168 with VFD

Models: SB 072-300

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
	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
4,200	Discrete Spd Setting			В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM			547	594	640	685	725	765	805	845	880	915	945	975	1005	1030
	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
4,400	Discrete Spd Setting			В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM			563	609	655	695	735	775	815	855	890	925	955	985	1015	1045
	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
4,600	Discrete Spd Setting		В	В	В	В	В	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM		526	573	625	665	705	745	785	825	860	895	930	960	995	1025	1050
	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
4,800	Discrete Spd Setting		В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM		542	594	640	680	720	760	795	835	870	905	935	970	1000	1030	1055
	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
5,000	Discrete Spd Setting		В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM		563	609	650	690	735	770	805	840	880	910	945	975	1005	1035	1065
	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
5,200	Discrete Spd Setting	В	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM	542	583	625	665	705	745	780	815	850	885	920	955	985	1015	1045	1075
	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
5,400	Discrete Spd Setting	В	В	В	В	В	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	563	599	640	680	720	760	790	825	860	895	925	960	990	1020	1050	1080
	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
5,600	Discrete Spd Setting	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	583	620	655	695	735	770	805	840	870	905	935	970	1000	1030	1060	1090
	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
5,800	Discrete Spd Setting	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	588	630	670	710	750	780	815	845	880	910	945	975	1005	1035	1065	1095
	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
6,000	Discrete Spd Setting	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	604	645	685	720	760	795	825	860	895	925	955	985	1015	1040	1070	1100
	ВНР	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	
6,200	Discrete Spd Setting	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	
	RPM	625	660	695	735	770	805	840	875	905	935	965	995	1025	1055	1080	
	ВНР	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	
6,400	Discrete Spd Setting	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	
	RPM	640	680	715	750	785	820	855	885	915	945	975	1005	1035	1060	1090	
	ВНР	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	
6,600	Discrete Spd Setting	В	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	
	RPM	665	700	730	765	800	835	865	895	925	955	985	1015	1040	1070	1095	
	ВНР	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		
6,800	Discrete Spd Setting	В	В	A	Α	Α	A	Α	Α	A	С	С	С	С	С		
	RPM	685	715	745	775	810	845	880	910	940	965	995	1025	1050	1080		
	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		
7,000	Discrete Spd Setting	В	A 700	A	A 700	A	A	A	A	A	С	C	C	C	C		
	RPM	705	730	755	790	825	855	890	920	950	980	1005	1035	1060	1085		

- Motor Sheave set to 1-turn open from factory.
 Factory torque setting is A. Torr.
- Factory torque setting is A. Torque setting is field-adjustable to any torque setting listed in drive table through the Wireless Service Tool.
- The unit can control the blower through LAT control. Enable this setting in the field with the Wireless Service Tool. 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
	ВНР		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
4,800	Sheave/Mtr		В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM		615	660	700	740	775	815	855	890	920	955	985	1015	1045	1075	1105
	ВНР	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
5,000	Sheave/Mtr	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM	594	635	680	720	760	795	830	870	900	935	965	1000	1030	1055	1085	1115
	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
5,200	Sheave/Mtr	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	620	660	700	735	775	810	845	880	915	945	980	1010	1040	1070	1100	1130
	ВНР	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
5,400	Sheave/Mtr	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	640	680	720	755	790	825	860	895	925	960	990	1020	1050	1080	1110	1140
	ВНР	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
5,600	Sheave/Mtr	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	Е
	RPM	660	700	740	775	810	845	875	910	940	975	1005	1035	1065	1095	1120	1150
	ВНР	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
5,800	Sheave/Mtr	В	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	Е	Е	Е
	RPM	680	720	760	790	825	860	890	920	955	985	1015	1045	1075	1105	1135	1160
	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
6,000	Sheave/Mtr	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	E	Е	E	Е
	RPM	700	740	775	810	845	880	910	940	970	1000	1030	1060	1085	1115	1145	1170
	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
6,200	Sheave/Mtr	В	Α	Α	Α	Α	Α	Α	Α	Α	С	E	E	Е	Е	Е	E
	RPM	720	760	795	830	865	895	925	955	985	1015	1045	1070	1100	1125	1155	1180
	ВНР	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
6,400	Sheave/Mtr	В	Α	Α	Α	Α	Α	Α	Α	С	E	E	E	E	Е	E	E
	RPM	745	780	815	845	880	910	940	970	1000	1030	1055	1085	1110	1140	1165	1190
	ВНР	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
6,600	Sheave/Mtr	Α	Α	Α	Α	Α	Α	Α	Α	E	E	E	E	E	Е	E	E
	RPM	765	795	830	865	895	925	955	985	1015	1040	1070	1095	1125	1150	1175	1200
	ВНР	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
6,800	Sheave/Mtr	Α	Α	Α	Α	Α	Α	D	D	Е	Е	E	Е	Е	Е	Е	Е
	RPM	780	815	850	880	910	940	970	1000	1030	1055	1085	1110	1135	1160	1190	1215
	ВНР	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
7,000	Sheave/Mtr	Α	Α	Α	Α	Α	D	D	Е	Е	Е	E	E	Е	Е	Е	Е
	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
	ВНР	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
7,200	Sheave/Mtr	Α	Α	Α	Α	D	D	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е
	RPM	820	850	885	915	945	975	1005	1030	1055	1085	1110	1135	1160	1185	1210	1235
	ВНР	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
7,400	Sheave/Mtr	Α	Α	D	D	D	D	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е
	RPM	840	870	900	930	960	990	1020	1045	1075	1100	1125	1150	1175	1200	1220	1245
	ВНР	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		
7,600	Sheave/Mtr	Α	D	D	D	D	Е	Е	Е	Е	Е	Е	Е	Е	Е		
	RPM	860	890	920	950	980	1005	1035	1060	1085	1115	1140	1165	1185	1210		
	ВНР	3.22	3.34	3.49	3.63	3.78	3.96	4.12	4.28	4.44	4.63	4.76	4.92				
7,800	Sheave/Mtr	D	D	D	D	D	Е	Е	Е	Е	Е	Е	Е				
	RPM	880	905	935	965	995	1025	1050	1075	1100	1130	1150	1175				
	ВНР	3.41	3.58	3.75	3.92	4.06	4.26	4.42	4.58	4.74	4.90						
8,000	Sheave/Mtr	D	D	D	D	Е	Е	Е	Е	Е	Е						
	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
	ВНР		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
4,800	Discrete Spd Setting		В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM		615	660	700	740	775	815	855	890	920	955	985	1015	1045	1075	1105
	ВНР	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
5,000	Discrete Spd Setting	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM	594	635	680	720	760	795	830	870	900	935	965	1000	1030	1055	1085	1115
	ВНР	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
5,200	Sheave/Mtr	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	620	660	700	735	775	810	845	880	915	945	980	1010	1040	1070	1100	1130
	ВНР	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
5,400	Discrete Spd Setting	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	640	680	720	755	790	825	860	895	925	960	990	1020	1050	1080	1110	1140
	ВНР	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
5,600	Sheave/Mtr	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С
	RPM	660	700	740	775	810	845	875	910	940	975	1005	1035	1065	1095	1120	1150
	ВНР	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
5,800	Discrete Spd Setting	В	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С
	RPM	680	720	760	790	825	860	890	920	955	985	1015	1045	1075	1105	1135	1160
	ВНР	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
6,000	Discrete Spd Setting	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С
	RPM	700	740	775	810	845	880	910	940	970	1000	1030	1060	1085	1115	1145	1170
	ВНР	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
6,200	Discrete Spd Setting	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С
	RPM	720	760	795	830	865	895	925	955	985	1015	1045	1070	1100	1125	1155	1180
	ВНР	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
6,400	Discrete Spd Setting	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С	С
	RPM	745	780	815	845	880	910	940	970	1000	1030	1055	1085	1110	1140	1165	1190
	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
6,600	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С	С
	RPM	765	795	830	865	895	925	955	985	1015	1040	1070	1095	1125	1150	1175	1200
	ВНР	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
6,800	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С	С
	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 Wireless Service Tool. The unit can control the blower through LAT control. Enable this setting in the field with the Wireless Service Tool. 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
	ВНР	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
7,000	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С	С	С
	RPM	800	835	865	900	930	960	985	1015	1040	1070	1095	1120	1150	1175	1200	1225
	ВНР	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
7,200	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С	С	С	С
	RPM	820	850	885	915	945	975	1005	1030	1055	1085	1110	1135	1160	1185	1210	1235
	ВНР	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
7,400	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С	С	С	С
	RPM	840	870	900	930	960	990	1020	1045	1075	1100	1125	1150	1175	1200	1220	1245
	ВНР	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		
7,600	Discrete Spd Setting	Α	D	D	D	D	С	С	С	С	С	С	С	С	С		
	RPM	860	890	920	950	980	1005	1035	1060	1085	1115	1140	1165	1185	1210		
	ВНР	3.22	3.34	3.49	3.63	3.78	3.96	4.12	4.28	4.44	4.63	4.76	4.92				
7,800	Discrete Spd Setting	Α	Α	Α	Α	Α	С	С	С	С	С	С	С				
	RPM	880	905	935	965	995	1025	1050	1075	1100	1130	1150	1175				
	ВНР	3.41	3.58	3.75	3.92	4.06	4.26	4.42	4.58	4.74	4.90						
8,000	Discrete Spd Setting	Α	Α	Α	Α	С	С	С	С	С	С						
	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 Wireless Service Tool. The unit can control the blower through LAT control. Enable this setting in the field with the Wireless Service Tool. 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
	ВНР				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
6,000	Sheave/Mtr				В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С
	RPM				775	810	845	880	910	940	970	1000	1030	1060	1085	1115	1145
	ВНР			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
6,200	Sheave/Mtr			В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM			755	790	825	860	895	925	955	985	1015	1040	1070	1095	1125	1150
	ВНР			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
6,400	Sheave/Mtr			В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM			775	810	840	875	905	935	965	995	1025	1050	1080	1105	1135	1160
	ВНР		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
6,600	Sheave/Mtr		В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM		755	790	825	855	890	920	950	980	1010	1035	1060	1090	1115	1145	1170
	ВНР		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
6,800	Sheave/Mtr		В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM		770	805	840	870	900	935	960	990	1020	1045	1075	1100	1130	1155	1180
	ВНР	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
7,000	Sheave/Mtr	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM	755	785	820	855	885	915	945	975	1005	1030	1060	1085	1110	1140	1165	1190
	ВНР	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
7,200	Sheave/Mtr	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	770	805	835	870	900	930	960	990	1015	1045	1070	1100	1125	1150	1175	1200
	ВНР	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
7,400	Sheave/Mtr	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	790	820	855	885	915	945	975	1005	1030	1060	1085	1110	1135	1160	1185	1210
	ВНР	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	
7,600	Sheave/Mtr	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	
	RPM	810	840	870	900	930	960	990	1015	1045	1070	1095	1125	1145	1170	1195	
	ВНР	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		
7,800	Sheave/Mtr	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С		
	RPM	830	860	885	915	945	975	1005	1030	1055	1085	1110	1135	1160	1180		
	ВНР	3.18	3.30	3.44	3.61	3.78	3.94	4.10	4.29	4.45	4.61	4.77	4.93				
8,000	Sheave/Mtr	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С				
	RPM	850	875	900	930	960	990	1015	1045	1070	1095	1120	1145				
	ВНР	3.35	3.48	3.65	3.79	3.96	4.13	4.27	4.44	4.58	4.72	4.88					
8,200	Sheave/Mtr	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С					
	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
	ВНР	3.62	3.74	3.89	4.03	4.18	4.33	4.49	4.65	4.81	4.97						
8,400	Sheave/Mtr	Α	Α	Α	Α	Α	Α	Α	Α	С	С						
	RPM	880	905	935	965	995	1020	1045	1070	1095	1120						
	ВНР	3.81	3.98	4.12	4.29	4.46	4.62	4.78	4.94								
8,600	Sheave/Mtr	Α	Α	Α	Α	Α	Α	Α	Α								
	RPM	895	925	950	980	1010	1035	1060	1085								
	ВНР	4.06	4.22	4.41	4.57	4.73	4.92										
8,800	Sheave/Mtr	Α	Α	Α	Α	Α	Α										
	RPM	915	940	970	995	1020	1050										
	BHP	4.38	4.54	4.70	4.86												
9,000	Sheave/Mtr	Α	Α	Α	Α												
	RPM	935	960	985	1010												
	ВНР	4.65	4.76	4.90													
9,200	Sheave/Mtr	Α	Α	Α													
	RPM	955	975	1000													
	ВНР	4.83	4.94														
9,400	Sheave/Mtr	Α	Α														
	RPM	970	990														
	ВНР																
9,600	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
	ВНР				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
6,000	Discrete Spd Setting				В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С
	RPM				775	810	845	880	910	940	970	1000	1030	1060	1085	1115	1145
	ВНР			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
6,200	Discrete Spd Setting			В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM			755	790	825	860	895	925	955	985	1015	1040	1070	1095	1125	1150
	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
6,400	Discrete Spd Setting			В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM			775	810	840	875	905	935	965	995	1025	1050	1080	1105	1135	1160
	ВНР		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
6,600	Discrete Spd Setting		В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM		755	790	825	855	890	920	950	980	1010	1035	1060	1090	1115	1145	1170
	ВНР		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
6,800	Discrete Spd Setting		В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM		770	805	840	870	900	935	960	990	1020	1045	1075	1100	1130	1155	1180
	ВНР	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
7,000	Discrete Spd Setting	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM	755	785	820	855	885	915	945	975	1005	1030	1060	1085	1110	1140	1165	1190
	ВНР	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
7,200	Discrete Spd Setting	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	770	805	835	870	900	930	960	990	1015	1045	1070	1100	1125	1150	1175	1200
	ВНР	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
7,400	Discrete Spd Setting	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	790	820	855	885	915	945	975	1005	1030	1060	1085	1110	1135	1160	1185	1210
	ВНР	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
7,600	Discrete Spd Setting	В	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С
	RPM	810	840	870	900	930	960	990	1015	1045	1070	1095	1125	1145	1170	1195	1220
	ВНР	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
7,800	Discrete Spd Setting	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С
	RPM	830	860	885	915	945	975	1005	1030	1055	1085	1110	1135	1160	1180	1205	1230
	ВНР	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
8,000	Discrete Spd Setting	В	В	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С
	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 Wireless Service Tool.
 The unit can control the blower through LAT control. Enable this setting in the field with the Wireless Service Tool.
 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
	ВНР	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	
8,200	Discrete Spd Setting	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	
	RPM	865	890	920	945	975	1005	1030	1060	1085	1110	1135	1160	1180	1205	1230	
	ВНР	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	
8,400	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С	
	RPM	880	905	935	965	995	1020	1045	1070	1095	1120	1145	1170	1195	1215	1240	
	ВНР	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	
8,600	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С	
	RPM	895	925	950	980	1010	1035	1060	1085	1110	1135	1160	1180	1205	1230	1250	
	ВНР	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		
8,800	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	С		
	RPM	915	940	970	995	1020	1050	1075	1100	1125	1150	1170	1195	1220	1240		
	ВНР	4.38	4.54	4.70	4.86	5.02	5.18	5.34	5.50	5.68	5.88	6.08	6.24				
9,000	Sheave/Mtr	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С				
9,000	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				
	ВНР	4.65	4.76	4.90	5.08	5.26	5.44	5.62	5.80	6.00	6.16						
9,200	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	С	С	С	С						
	RPM	955	975	1000	1025	1050	1075	1100	1125	1150	1170						
	ВНР	4.83	4.94	5.12	5.32	5.52	5.72	5.92	6.12	6.32	6.48						
9,400	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	С	С	С	С						
	RPM	970	990	1015	1040	1065	1090	1115	1140	1165	1185						
	ВНР	5.10	5.24	5.44	5.64	5.84	6.04	6.24	6.40								
9,600	Discrete Spd Setting	Α	Α	Α	Α	Α	С	С	С								
	RPM	985	1005	1030	1055	1080	1105	1130	1150								

- 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 Wireless Service Tool.

 The unit can control the blower through LAT control. Enable this setting in the field with the Wireless Service Tool.

 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
	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
7,500	Discrete Spd Setting	В	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С
	RPM	890	925	955	990	1020	1050	1075	1105	1135	1155	1180	1205	1230	1255	1275	1295
	ВНР	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
7,800	Discrete Spd Setting	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С
	RPM	910	945	975	1010	1040	1070	1095	1125	1150	1175	1200	1225	1250	1270	1290	1310
	ВНР	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
8,100	Discrete Spd Setting	В	В	В	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	935	965	995	1025	1055	1085	1115	1145	1170	1195	1220	1245	1265	1285	1310	1330
	ВНР	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
8,400	Discrete Spd Setting	В	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С
	RPM	955	985	1020	1045	1075	1105	1135	1160	1185	1210	1235	1260	1280	1305	1325	1350
	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
8,700	Discrete Spd Setting	В	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С
	RPM	975	1005	1035	1065	1095	1125	1150	1175	1200	1225	1250	1275	1300	1320	1345	1370
	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	
9,000	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	
	RPM	1000	1030	1055	1085	1115	1140	1165	1195	1220	1245	1270	1290	1315	1340	1360	
	ВНР	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	
9,300	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С	
	RPM	1020	1050	1075	1105	1130	1160	1185	1210	1235	1260	1285	1310	1330	1355	1375	
	ВНР	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		
9,600	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С		
	RPM	1040	1070	1095	1125	1150	1175	1200	1230	1255	1280	1300	1325	1350	1370		
	ВНР	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			
9,900	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	Α	С	С	С	С	С	С			
	RPM	1060	1090	1115	1140	1170	1195	1220	1245	1270	1295	1320	1340	1365			
	ВНР	5.36	5.57	5.77	5.95	6.17	6.35	6.53	6.74	6.94	7.18						
10,200	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	С	С	С	С						
	RPM	1085	1110	1135	1160	1190	1215	1240	1265	1285	1310						
	ВНР	5.52	5.75	5.99	6.23	6.47	6.71	6.95	7.19								
10,500	Discrete Spd Setting	Α	Α	Α	Α	Α	Α	С	С								
	RPM	1100	1130	1155	1180	1205	1230	1255	1280								
·	ВНР	6.00	6.24	6.48	6.72	6.96	7.20	7.39	7.63								
10,800	Discrete Spd Setting	Α	Α	Α	Α	Α	С	С	С								
	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 Wireless Service Tool.
 The unit can control the blower through LAT control. Enable this setting in the field with the Wireless Service Tool.
 The maximum allowable altitude of installation for this product is 6,561 ft (2,000 m).

Electrical Data: Standard

	Volters		Min/Max	Player	Co	mpres	sor	Fan	Rated	Min	SCCR	SCCR	Max Fuse
Model	Voltage Code	Voltage	Voltage	Blower Option	Qty	RLA	LRA	Motor FLA	Current	Circuit	kA RMS Symetrical	Volts	HACR Amps
				1,2,3	2	12.2	97.5	3.0	27.4	Amps 30.5	5	Maximum 600	40
	K	208/230-3-60	187/253	4,5	2	12.2	97.5	5.8	30.2	33.3	5	600	45
		200/200 0 00	107/200	6	2	12.2	97.5	5.2	29.6	32.6	5	600	40
				1,2,3	2	5.8	44.3	1.4	13.0	14.5	5	600	20
SB072	L	460-3-60	414/506	4,5	2	5.8	44.3	2.9	14.5	16.0	5	600	20
		400 0 00	414,000	6	2	5.8	44.3	6.9	18.5	20.2	5	600	25
				1,2,3	2	4.5	27.1	1.2	10.2	11.3	5	600	15
	M	575-3-60	518/633	4,5	2	4.5	27.1	2.2	11.2	12.3	5	600	15
				1,2,3	2	12.8	120.4	5.8	31.4	34.6	5	600	45
	K	208/230-3-60	187/253	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
				1,2,3	2	6.0	49.4	2.9	14.9	16.4	5	600	20
SB096	L	460-3-60	414/506	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
				1,2,3	2	5.8	41.0	2.2	13.8	15.3	5	600	20
	M	575-3-60	518/633	4,5	2	5.8	41.0	3.2	14.8	16.3	5	600	20
				1,2,3	2	18.6	155.0	8.2	45.4	50.1	5	600	60
	K	208/230-3-60	187/253	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
00100				1,2,3	2	8.3	58.1	4.1	20.7	22.8	5	600	30
SB120	L	460-3-60	414/506	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
		E7E 2 /0	E10//22	1,2,3	2	7.7	47.8	3.2	18.6	20.5	5	600	25
	M	575-3-60	518/633	4,5	2	7.7	47.8	5.2	20.6	22.5	5	600	30
				1,2,3	2	24.4	200.0	8.2	57.0	63.1	5	600	80
	K	208/230-3-60	187/253	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
SB168				1,2,3	2	11.9	103.0	4.1	27.9	30.9	5	600	40
35100	L	460-3-60	414/506	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
	7**	070 0 00	010,000	4,5	2	9.4	78.0	5.2	24.0	26.4	5	600	35
				1,2,3	2	27.7	178.5	8.2	63.6	70.5	5	600	90
	K	208/230-3-60	187/253	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
SB192				1,2,3	2	11.5	103.0	4.1	27.1	30.0	5	600	40
	L	460-3-60	414/506	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
	М	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
	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
SB240	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

								Compres	sor Powe	er Supply				Fai	n Power Supp	oly	
Model	Voltage Code	Voltage	Min/Max Voltage		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
				A,B,C	2	12.2	97.5	24.4	27.5	5	600	35	3.0	3.8	5	600	15
	K	208/230-3-60	187/253	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
SB072				A,B,C	2	5.8	44.3	11.6	13.1	5	600	15	1.4	1.8	5	600	15
SB(L	460-3-60	414/506	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
	///	373-3-60	310/033	D,E	2	4.5	27.1	9.0	10.1	5	600	15	2.2	2.8	5	600	15
				A,B,C	2	12.8	120.4	25.6	28.8	5	600	40	5.8	7.3	5	600	15
	K	208/230-3-60	187/253	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
SB096				A,B,C	2	6.0	49.4	12.0	13.5	5	600	15	2.9	3.6	5	600	15
SB(L	460-3-60	414/506	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
	///	373-3-60	310/033	D,E	2	5.8	41	11.6	13.1	5	600	15	3.2	4.0	5	600	15
				A,B,C	2	18.6	155	37.2	41.9	5	600	60	8.2	10.3	5	600	15
	K	208/230-3-60	187/253	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
SB120				A,B,C	2	8.3	58.1	16.6	18.7	5	600	25	4.1	5.1	5	600	15
SB	L	460-3-60	414/506	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
	М	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
	171	3/3-3-60	310/033	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

								Compres	sor Powe	er Supply				Fai	n Power Supp	oly	
Model	Voltage Code	Voltage	Min/Max Voltage		Qty	RLA	LRA	Rated Current Amps	Min Circuit Amps	SCCR kA RMS Symmetrical	SCCR Volts Max	Max Fuse HACR Amps	Fan Motor FLA		SCCR kA RMS Symmetrical	SCCR Volts Max	Max Fuse HACR Amps
				A,B,C	2	24.4	200	48.8	54.9	5	600	70	8.2	10.3	5	600	15
	K	208/230-3-60	187/253	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
SB168				A,B,C	2	11.9	103	23.8	26.8	5	600	35	4.1	5.1	5	600	15
SB	L	460-3-60	414/506	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
	М	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
	17/1	3/3-3-60	310/633	D,E	2	9.4	78	18.8	21.2	5	600	30	5.2	6.5	5	600	15
				A,B,C	2	27.7	178.5	55.4	62.3	5	600	90	8.2	10.3	5	600	15
	K	208/230-3-60	187/253	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
SB192				A,B,C	2	11.5	103	23.0	25.9	5	600	35	4.1	5.1	5	600	15
SB1	L	460-3-60	414/506	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
	М	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
	17/1	3/3-3-60	310/633	D,E	2	9.0	78	18.0	20.3	5	600	25	5.2	6.5	5	600	15
	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
0	K	208/230-3-60	18//253	F	2	28.5	255	57.0	64.1	5	600	90	28.0	35.0	5	600	60
SB240		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
S	L	460-3-60	414/506	F	2	13.5	123	27.0	30.4	5	600	40	18.8	23.5	5	600	40
	М	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
SB3	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

Physical Data

SB Physical Data

		Stand	dard Rang	je Cabinet						
Configuration		Horizonta	I				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]	
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]		/4" .8]	1-1/2" [38.1]		/4'' .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.3)	16 x 20 [40	.6 x 50.8]	(OTV 4) C	20 x 20 [50	0 v EO 01	(QT	Y.4) 20 x 2	5 [50.80 x 6	3.5]
(qty) (in) [cm]	(QTY.1) 2	20 x 20 [50	.8 x 50.8]	(Q11.4) 2	20 X 20 [30	.8 X 3U.8]	(QT	Y.2) 20 x 30	0 [50.80 x 7	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]
Corner Weights - Standard Configuration										
Compressor Section - Left Front (lb) [kg]	101 [46]	120 [52]	137 [62]							
Control Box - Right Front (lb) [kg]	235 [107]	254 [115]	271 [123]							
Air Coil Side - Back (lb) [kg]	70 [32]	80 [36]	90 [41]							
Blower Side - Back (lb) [kg]	180 [82]	190 [86]	200 [91]							
	Extended	Range C	abinet wit	h Watersic	le Econon	nizer				
Dimensions										
Weight - Operating (lbs.) [kg]	838 [380.1]	921 [417.7]	998 [452.7]	762 [345.5]	837 [379.7]	907 [411.6]	1,529 [693.4]	1665 [755.0]	1693 [768.0]	1855 [841.3]
Weight - Packaged (lbs.) [kg]	900 [408.2]	978 [443.7]	1008 [457.2]	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]	4.0 [15.1]	4.4 [16.7]	4.3 [16.3]	4.8 [18.2]	9.7 [36.7]	19.0	[71.9]
Corner Weights										
Compressor Section - Left Front (lb) [kg]	154 [70]	169 [77]	183 [83]							
Control Box - Right Front (lb) [kg]	331 [150]	364 [165]	394 [179]							
Air Coil Side - Back (lb) [kg]	104 [47]	115 [52]	124 [56]							
Blower Side - Back (lb) [kg]	249 [113]	273 [124]	296 [134]							

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.

O = Optional, R = Required * VFD Option comes with Large motor option

Motorized Water Valve and Modulating Valve Adders

			1	MWV				МО	D Valve		
Size	Flow	Cv	Close Off	MOPD	Pres		Cv	Close Off	MOPD	Pres	
			Pressure		PSI	FT		Pressure		PSI	FT
	9.00				0.06	0.1				0.81	1.9
072	13.50	37	200	50	0.13	0.3	10	200	50	1.82	4.2
	18.00				0.24	0.5				3.24	7.5
	12.00				0.11	0.2				1.44	3.3
096	18.00	37	200	50	0.24	0.5	10	200	50	3.24	7.5
	24.00				0.42	1.0				5.76	13.3
	15.00				0.16	0.4				0.62	1.4
120	22.50	37	200	150	0.37	0.9	19	200	50	1.40	3.2
	30.00				0.66	1.5				2.49	5.8
	21.00				0.32	0.7				0.52	1.2
168	31.50	37	200	150	0.72	1.7	29	200	50	1.18	2.7
	42.00				1.29	3.0				2.10	4.8
	24.00				0.42	1.0				0.68	1.6
192	36.00	37	200	150	0.95	2.2	29	200	50	1.54	3.6
	48.00				1.68	3.9				2.74	6.3
	30.00				0.66	1.5				1.07	2.5
240	45.00	37	200	150	1.48	3.4	29	200	50	2.41	5.6
	60.00				2.63	6.1				4.28	9.9
	37.50				0.43	1.0				1.67	3.9
300	56.25	57	200	150	0.97	2.2	29	200	50	3.76	8.7
	75.00				1.73	4.0				6.69	15.4

PSI values are calculated based on manufacturer-recommended 70°F entering water temperature.

Waterside Economizer (WSE) Data

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

	Cabinet	١	Water Side	•	Airside	e (Dry)	Cap	acity
Model	Config	Flow GPM	PD psi	PD ft	CFM	DP psi	TC	sc
SB072	Н	18	3.8	8.7	2,400	<0.10	29,804	17,778
SB096	Н	24	6.8	15.6	3,200	<0.10	39,061	22,964
SB120	Н	30	6.2	14.3	4,000	<0.10	43,659	24,291
SB072	٧	20	2.7	6.3	2,400	<0.10	27,548	16,904
SB096	٧	24	4.8	11.0	3,200	<0.10	35,545	21,568
SB120	٧	30	3.0	7.0	4,000	<0.10	41,300	24,495
SB168	٧	42	4.8	11.0	5,600	<0.10	76,156	45,598
SB192	٧	48	5.9	13.5	6,400	<0.10	83,715	49,510
SB240	٧	60	15.0	34.6	8,000	0.10	165,124	99,273
SB300	٧	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

Madal	Cabinet	Coil	AirSi	de PD Ad	der (in. w	g) at CFM	/TON
Model	Config	Coll	300	350	400	450	500
60070		Dry	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
SB072	Н	Wet	< 0.1	< 0.1	< 0.1	< 0.1	0.10
1,0043		Dry	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
SB096	Н	Wet	< 0.1	< 0.1	< 0.1	< 0.1	0.10
CD100		Dry	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
SB120	Н	Wet	< 0.1	< 0.1	< 0.1	< 0.1	0.10
CD070	.,	Dry	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
SB072	V	Wet	< 0.1	< 0.1	< 0.1	< 0.1	0.10
SB096	V	Dry	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
38096	V	Wet	< 0.1	< 0.1	< 0.1	< 0.1	0.10
SB120	V	Dry	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
30120	V	Wet	< 0.1	< 0.1	< 0.1	< 0.1	0.10
SB168	V	Dry	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
20100	V	Wet	< 0.1	< 0.1	< 0.1	< 0.1	0.10
CD100	\/	Dry	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
SB192	V	Wet	< 0.1	< 0.1	< 0.1	< 0.1	0.10
SB240	V	Dry	< 0.1	< 0.1	< 0.1	< 0.1	0.12
3B24U	V	Wet	< 0.1	0.11	0.14	0.17	0.20
CB200	\	Dry	< 0.1	< 0.1	< 0.1		
SB300	V	Wet	< 0.1	0.11	0.14		

WSE Valve Flow Coefficient

AAI - I	Cabinet	С	:V
Model	Config	Econ - On	Econ - Off
SB072	Н	34	27
SB096	Н	61	49
SB120	Н	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	Total Clg		Sensible Cooling Capacity Multipliers - Entering DB °F							
(°F)	Cap	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	Total Clg		Sens Clg Cap Multipliers - Entering DB °F							
(°F)	Cap	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	Total Clg	Sens Clg Cap Multipliers - Entering DB °F								
(°F)	Cap	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

Waterside Economizer (WSE) Data Entering Air Corrections

Models: SB 072-300

	tical 	NOIT	iii lui Al						rflow (g	PIII) Z
Ent Air WB	Total Clg			Sens C	lg Cap N	\ultipliers	- Enterin	g DB °F		
(°F)	Сар	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
B120 Hori	zontal	Non	ninal Ai	rflow (ofm) 4,	000 N	Iomina	l Wate	rflow (g	pm) 3
Ent Air WB	Total Clg			Sens C	lg Cap N	\ultipliers	- Enterin	g DB °F		
(°F)	Сар	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
B120 Vert	ical	Non	ninal Ai	rflow (d	ofm) 4,	000 N	Iomina	l Wateı	rflow (g	pm) 3
Ent Air WB	Total Clg			Sens C	lg Cap N	Nultipliers	- Enterin	g DB °F		
(°F)	Cap	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
B0168 Ver	tical	Non	ninal Ai	rflow (ofm) 5,	600 N	Iomina	l Wateı	rflow (g	pm) 4
Ent Air WB	Total Clg			Sens C	lg Cap N	\ultipliers	- Enterin	g DB °F		
(°F)	Cap	65	70	75	80	80.6	85	90	95	100
			*	*		*	*	*		
50.0	0.884	*	*	^	*	T	T	^	*	*
50.0	0.884	*	*	*	*	*	*	*	*	*

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Waterside Economizer (WSE) Data Entering Air Corrections

Models: SB 072-300

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

Ent Air WB	Total Clg		Sens Clg Cap Multipliers - Entering DB °F							
(°F)	Cap	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	Total Clg		Sens Clg Cap Multipliers - Entering DB °F							
(°F)	Cap	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	Total Clg		Sens Clg Cap Multipliers - Entering DB °F							
(°F)	Cap	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				

SB096 Horizontal

Airflow	Cooling C	orrections
% 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

SB120 Horizontal

Airflow	Cooling C	orrections
% 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

SB072 Vertical

Airflow	Cooling C	orrections
% 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 Vertical

Airflow	Cooling C	orrections
% 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 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			

Waterside Economizer (WSE) Data Cooling Corrections

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			

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			

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			

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			

Waterside Economizer (WSE) Data Airflow Ratings

Models: SB 072-300

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		Wate	Capacity			
°F	Flow GPM	LWT F°	WPD psi	WPD ft hd	TC	sc
	18.0	48.8	3.8	8.7	29,804	17,778
45	13.5	49.7	2.2	5.1	27,480	16,848
	9.0	51.2	1.0	2.4	23,905	15,462
	18.0	53.0	3.8	8.7	23,034	15,122
50	13.5	53.7	2.2	5.1	21,160	14,420
	9.0	55.0	1.0	2.4	18,342	13,740
	18.0	57.5	3.8	8.7	18,409	16,619
55	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

		Wate	Capacity			
EWT °F	Flow GPM	LWT F°	WPD psi	WPD ft hd	TC	SC
	18.0	45.8	2.7	6.3	27,548	16,904
45	13.5	45.7	1.5	3.6	24,818	15,840
	9.0	45.6	0.7	1.6	20,864	14,348
	18.0	50.6	2.7	6.3	21,059	14,417
50	13.5	50.6	1.5	3.6	18,896	13,623
	9.0	50.5	0.7	1.6	17,729	15,909
	18.0	55.5	2.7	6.3	17,524	16,560
55	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

		Wate	Capacity			
EWT °F	Flow GPM	LWT F°	WPD psi	WPD ft hd	TC	sc
	24.0	48.7	6.8	15.6	39,061	22,964
45	18.0	49.6	3.9	9.1	36,298	21,841
	12.0	51.1	1.8	4.3	31,373	19,918
	24.0	52.9	6.8	15.6	29,817	19,317
50	18.0	53.7	3.9	9.1	27,810	18,570
	12.0	54.8	1.8	4.3	23,565	16,984
	24.0	57.4	6.8	15.6	23,226	20,253
55	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

		Wate	Capacity			
EWT °F	Flow GPM	LWT F°	WPD psi	WPD ft hd	TC	sc
	24.0	48.4	4.8	11.0	35,545	21,568
45	18.0	49.2	2.7	6.3	32,522	20,374
	12.0	50.4	1.2	2.8	27,179	18,352
	24.0	52.7	4.8	11.0	27,278	18,386
50	18.0	53.3	2.7	6.3	24,401	17,335
	12.0	54.7	1.2	2.8	22,516	19,694
	24.0	57.3	4.8	11.0	22,333	21,079
55	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

		Wate	Capacity			
EWT °F	Flow GPM	LWT F°	WPD psi	WPD ft hd	TC	sc
	30.0	48.6	6.2	14.3	43,659	24,291
45	22.5	49.5	3.6	8.4	40,385	22,968
	15.0	50.9	1.7	3.9	34,534	20,675
	30.0	52.8	6.2	14.3	32,557	19,909
50	22.5	53.6	3.6	8.4	30,180	19,015
	15.0	54.7	1.7	3.9	25,209	17,186
	30.0	57.3	6.2	14.3	24,557	20,818
55	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

		Wate	Capacity			
EWT °F	Flow GPM	LWT F°	WPD psi	WPD ft hd	TC	SC
	30.0	48.3	3.0	7.0	41,300	24,495
45	22.5	49.1	1.7	4.0	37,714	23,077
	15.0	50.2	0.8	1.8	31,379	20,676
	30.0	52.6	3.0	7.0	31,336	20,620
50	22.5	53.2	1.7	4.0	27,886	19,342
	15.0	54.5	0.8	1.8	25,461	21,740
	30.0	57.2	3.0	7.0	25,187	23,678
55	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

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

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

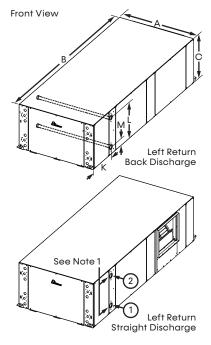
		147 1				11
EVALE OF			rside		Сар	асіту
EWT °F	Flow GPM	LWT F°	WPD psi	WPD ff hd	TC	SC
	60.0	51.0	15.0	34.6	165,124	99,273
45	45.0	52.5	9.0	20.9	151,928	93,931
	30.0	54.9	4.5	10.3	132,467	86,302
	60.0	54.8	15.0	34.6	128,187	84,527
50	45.0	55.9	9.0	20.9	116,892	80,250
	30.0	57.8	4.5	10.3	100,663	75,438
	60.0	58.9	15.0	34.6	100,606	86,703
55	45.0	60.1	9.0	20.9	99,532	88,502
	30.0	62.0	4.5	10.3	87,994	81,279
	60.0	63.1	15.0	34.6	76,126	72,152
60	45.0	63.9	9.0	20.9	72,497	68,656
	30.0	65.5	4.5	10.3	66,067	62,462

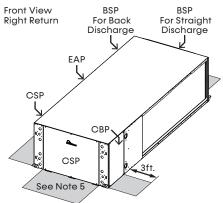
SB300 Vertical WSE 10,000 CFM Nominal Airflow

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

)vera				Connection (Connection)			Wate nnect	-			Elect	rical I	Knocl	couts				eturn A				3
	ze	Α	В	С	D	Е	F	G	K	L	M	(F	•			2		5	T	U	\	/
	nit Sizo		_	_	0 -							1	2	1	2	3	4	1	2	Return	Depth		۵.		0
	ร	Width	Depth	Height	Flange Offset	Suppl) Depth	Suppl) Width	Supply Heigh		Water Outlet	Water Inlet	1-1/8" (2.9 cm)	7/8" (2.2 cm)		1-1, (2.9			7/ (2.2	8" cm)	072	096-120	Return Heigh	Unit Tol Heigh	072	096-120
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
072-	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

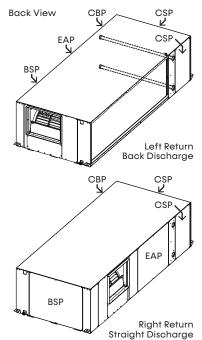
CBP = Control Box Panel

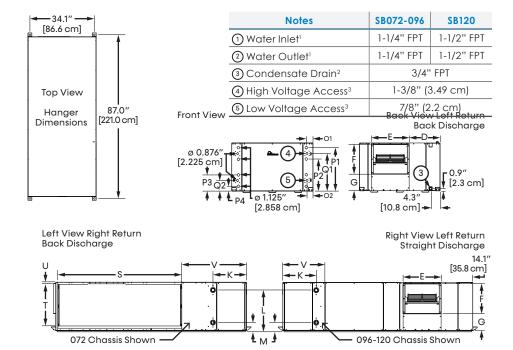
EAP = Expansion Valve Access Panel

Notes:

All dimensions in table are inches (cm).

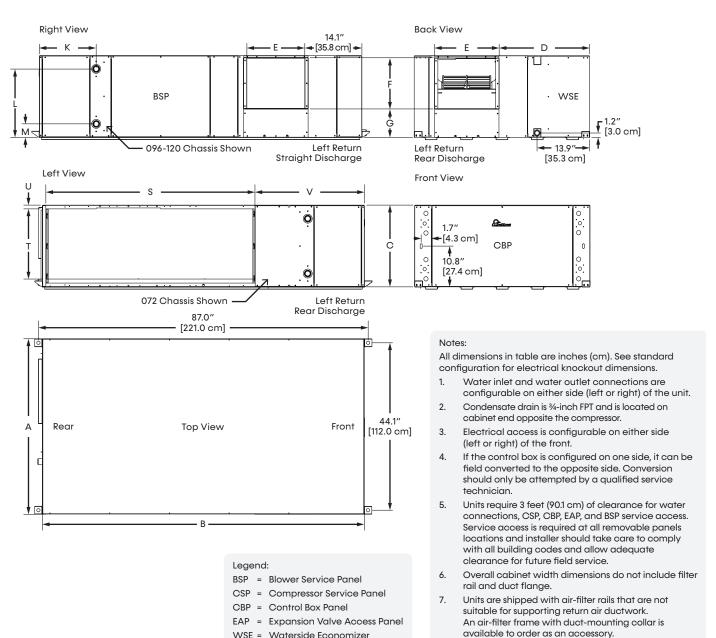
- Water inlet and water outlet connections are field configurable on either side (left or right) of the unit.
- Condensate drain is ¾-inch FPT and is located on cabinet end opposite the compressor.
- Electrical access is configurable on either side (left or right) of the front.
- If the control box is 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.
- 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 Horizontal with WSE Dimensional Data

			Overal abine				Conne lange			Wate nect				Elect	rical I	Knoc	kouts				eturn A ing Ret				
	ize	Α	В	С	D	E	F	G	K	L	M)		ı				2		S	T	U	١ ١	/
	S			_	4.					1	2	1	2	1	2	3	4	1	2	Return	Depth		0		
	Uni	Width	Depth	Height	Flange Offset	Supply Width	Supply Height	Supply Height		Water Outlet	Water	1-1/8" (2.9 cm)	7/8" (2.2 cm)		1-1 (2.9	/8" cm)		7/	8" cm)	072	096-120	Return Height	Unit Tol Heigh	072	096-120
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
072-	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



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WSE = Waterside Economizer

SB 072-120 Vertical Dimensional Data

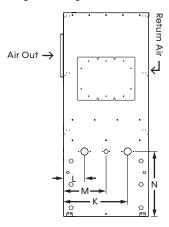
		Over	all Ca	binet		ge Conr uct Flang		Wa	ler Co	nnec	tions	Ele	ectric	al Kn	ockou	ıts			onnec Air Op	
		Α	В	С	D	Е	F	K	L	M	N		0		P	Q	S	T	U	٧
								1	2	3	_	1	2	3						
Unit Size	Width	Depth	Height	Supply Width	Supply Height	Side Offset	Water In	Water Out	Condensate	Connectior Height		1-3/8' 3.5cm		7/8" (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
0/2	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
070-120	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

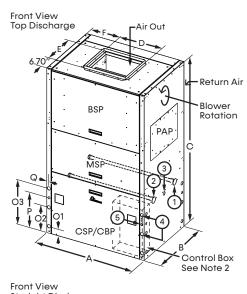
Notes

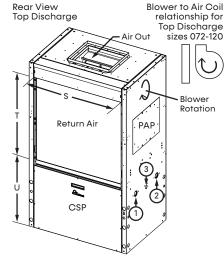
- All dimensions in table are inches (cm)

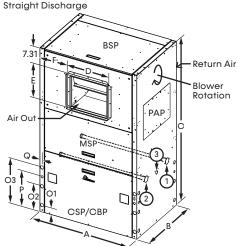
 1. Condensate drain is available on either side (left or right) of unit. Drain hose and drain connection will be tied inside the unit. Installer will untie the drain hose, form trap, and connect to the condensate drain hole of installer's choice.
- Electrical access is available on either side (left or right) of unit and is also available in the front on the left or right side of the unit.
- Overall cabinet dimensions do not include duct flange or filter rails.
- 4. 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.
- Filter removal is from right or left side of filter frame, allow 3 feet (61 cm) of access for servicing.

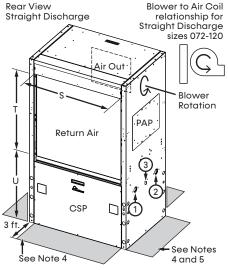
Right Side View Straight Discharge











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	3.49 cm)
(5) Low Voltage Access ³	7/8" (2	.2 cm)

Legend

BSP = Blower Service Panel

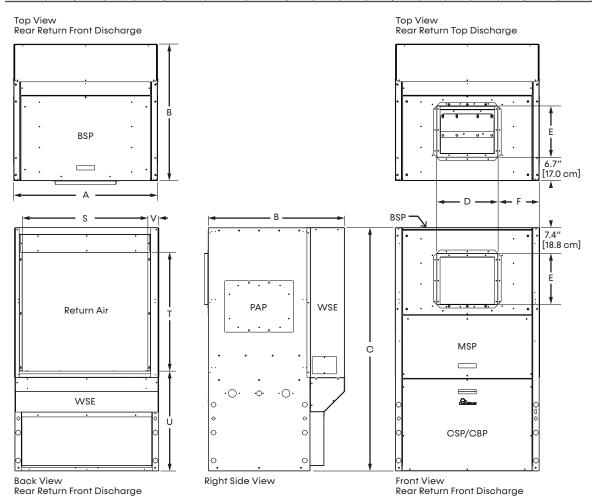
CBP = Control Box Panel

CSP = Compressor Service Panel

MSP = Motor Service Panel PAP = Pulley Access Panel

SB 072-120 Vertical with WSE Dimensional Data

		Over	all Ca	binet		ge Conn uct Flang		Wate	er Co	nnec	lions	Ele	ectric	al Kn	ockou	uts			Connec Air Op	
		Α	В	С	D	Е	F	K	L	M	N		0		P	Q	S	T	U	٧
								1	2	3	_	1	2	3						
Unit Size	Width	Depth	Height	Supply Width	Supply Height	Side Offset	Water In	Water Out	Condensate	Connection Height						Return	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
0/2	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
070-120	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



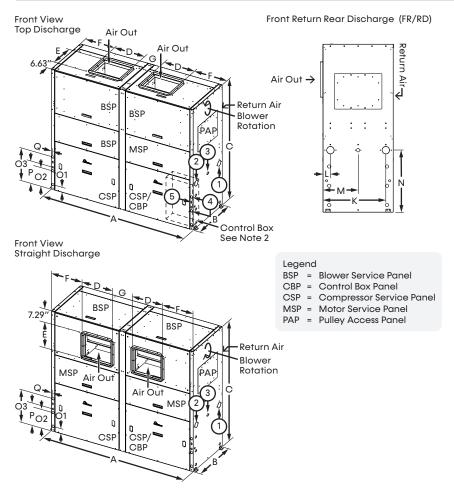
Notes

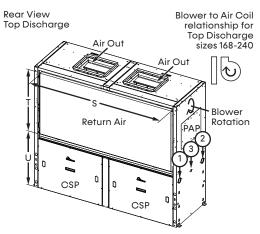
All dimensions in table are inches (cm). See standard configuration for water connecntion and electrical knockout dimensions.

- 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.
- 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.
- 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

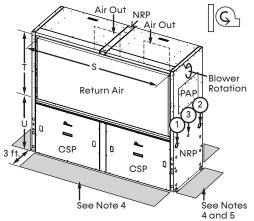
SB 168-240 Vertical Dimensional Data

		Over	all Ca	binet		arge C Duct F			Wate	er Co	nnec	ions	Ele	ectric	al Kn	ockou	ıts			onnec Air Op	
		Α	В	С	D	E	F	G	K	L	M	N		0		P	Q	S	T	U	V
	Unit Size								1	2	3	_	1	2	3						
Unit S		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
100-240	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





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



Notes

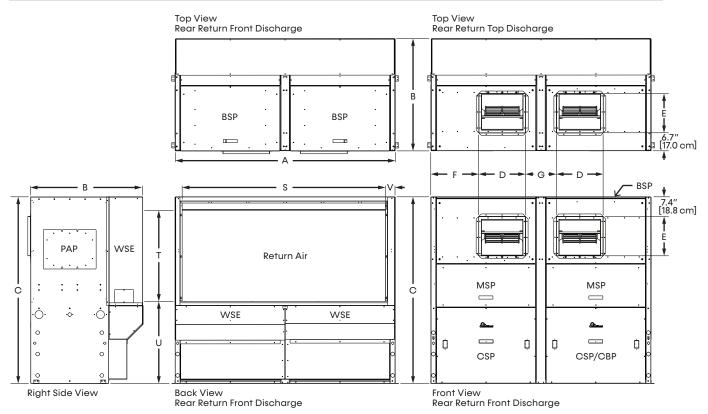
All dimensions in table are inches (cm)

- 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

		Over	all Ca	binet			Conne lange		Wate	er Co	nnec	lions	Ele	ectric	al Kn	ockou	uts			Connec Air Op	
		Α	В	С	D	E	F	G	K	L	M	N		0		P	Q	S	T	U	V
	Unit Size								1	2	3	_	1	2	3						
Unit S		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
100-240	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.

- 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.
- 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.
- 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

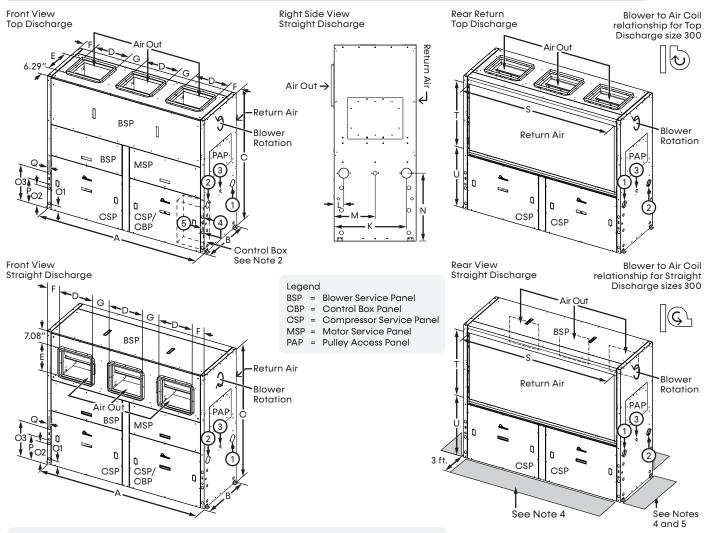
MSP = Motor Service Panel

PAP = Pulley Access Panel

WSE = Waterside Economizer

SB 300 Vertical Dimensional Data

			Overall Cabinet			Discharge Connections Duct Flange				Water Connections				Electrical Knockouts				Return Air Connections Using Return Air Opening			
Unit Size		Α	В	С	D	E	F	G	K	L	M	N		0		P	Q	S	T	U	٧
				Height	Supply Width	Supply Height	Side Offset	Center Offset	1	2	3	Condensate © Connection Height	1	2	3			Return Width	Return Height		
		Width	Depth						Water In	Water Out	Condensate			1-3/8" 3.5cm		7/8" (2.2 cm)					
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



Notes:

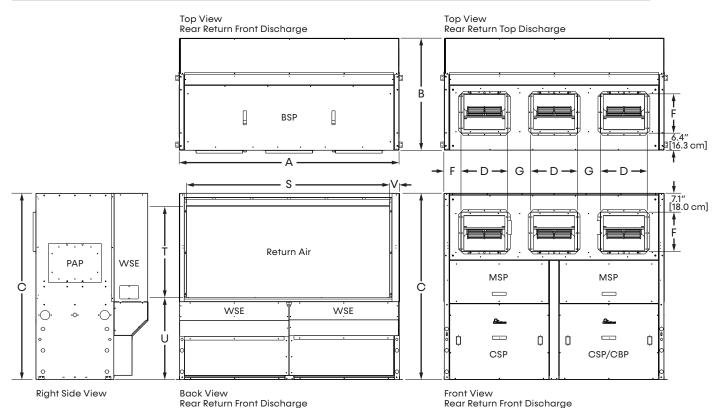
All dimensions in table are inches (cm)

- 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

		Overall Cabinet			Discharge Connections Duct Flange			Water Connections			Electrical Knockouts			Return Air Connections Using Return Air Opening							
		Α	В	С	D	E	F	G	K	L	M	N		0		P	Q	S	T	U	V
									1	2	3	_	1	2	3						
Unit	Size	Width	Depth	Height	Supply Width	Supply Height	Side Offset	Center Offset	WaterIn	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
300	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.

- 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.
- 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.
- 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 INSTALLATION AREA

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

Model	Charge	Configuration	Minimum Installation Area ft² (m²) [A _{min}]					
	(oz)		Floor	Window	Wall	Ceiling		
SB072	54	Vertical	186	70	46	40		
30072	34	Horizontal	186	70	46	40		
SB096	62	Vertical	213	80	53	46		
30076	02	Horizontal	213	80	53	46		
SB120	66	Vertical	227	85	57	49		
38120	66	Horizontal	213	80	53	46		
SB168	94	Vertical	323	121	81	69		
SB192	103	Vertical	354	133	89	76		
SB240	10 134 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
	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	Minimum CFM [Q _{min}]						
Model	(oz)	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.

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 3.7–10.0VDC associated to the operating speeds of 37–100%. When the VFD is off, the output should be set to 0VDC. 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 discretespeed control modes.

NOTE: At the end of a heating or cooling demand cycle, the VFD is set to 50% of the final demand value during the blower-off delay time.



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 demand 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
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°
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)
ΔT ≤ 1.0°F	0.0
1.0 < ∆T ≤ 2.0°F	0.1
2.0 < ∆T ≤ 3.0°F	0.2
3.0 < ∆T ≤ 5.0°F	0.3
ΔT > 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), 2-inch (50.8 mm), or 4-inch (101.6 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 either side. 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 either the left or right side 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.

tested isolators.

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 system design, to further dampen and attenuate sound transmissions. Compressor is mounted on specially engineered sound-

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:

selectable static pressure/airtiow.

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-towater heat exchanger, and safety controls including a high-pressure switch, low-pressure switch (loss-ofcharge), 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-towater 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 highpressure switches set at 300 PSI (2,068 kPa). Switches will reset automatically when pressure is reduced. Units that do not have auto-reset water highpressure 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.

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).

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 stainlesssteel drain pan.

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Option:

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. 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.
- 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 Wireless 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**

REMOTE SERVICE SENTINEL (CXM2)

wiring. Consult Application Drawings for details.

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 Wireless Service Tool and specific fault status such as over/under voltage fault, high-pressure fault, low-pressure fault, low-watertemperature 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
- 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
- a. 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:

- Supply and return hoses having ball valve with PT port.
- 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:

Note: All units will require heat pump thermostat with two-stage cooling.

a. iGate 2 Communicating (AWC) Thermostat (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, watercoil temperature, air-coil temperature, leavingair 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 Programmable5-/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.

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).

A 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.

Revision History

Date	Section	Description			
06/16/25	Blower Motor Variable Frequency Drive (VFD) Controls	Updated graphic from ACDU01/Handheld Service tool to Wireless Service Tool			
	All	Updated compatibility from ACDU01/Handheld Service tool to Wireless Service Tool			
	All	Reorganized the document's sections			
	Model Nomenclature	Corrected cabinet rail options to include 4" filters			
	ModerNomenciatore	Updated Blower motor table to reflect VFD as a large motor configuration			
	Performance Data: AHRI/ASHRAE/ISO 13256-1	Updated labels and S-I measurements			
	Performance Data	Updated size 120 Part Load heating data			
	T enormance baid	Updated size 300 Full Load title to represent use of VFD			
	Blower Performance	Removed note concerning Advanced Control Panel			
05/08/25	Motorized Water Valve and Modulating Valve Adders	Added section			
03/06/23		Added corner weights for horizontal units			
	Physical Data	Corrected and clarified motor compatibility			
		Added waterside economizer and accompanying data			
	Horizontal Dimensional Data	Corrected Condensate drain size			
	Horizoniai Birrierisionai Baia	Removed extraneous information in water connections notes			
	SB 072-120 Vertical Dimensional Data	Removed extraneous note and renumbered			
	Blower Motor Variable Frequency Drive (VFD) Controls	Clarified Sequence of Operation regarding output values			
		Corrected filter frame offerings			
	Engineering Specifications	Clarified redundant offerings, options, and specifications: Thermostat requirements, RDS, time-delay relay			
	Physical Data	Added blower horsepower data.			
	Disconsional Data	Corrected flange and water connection measurements			
	Dimensional Data	Standardized electrical knockout data			
12/19/24	WSE Diagrams, Data, and Dimensions	Updated and rearranged preliminary WSE data, copy, and drawings with official content			
	Minimum Installation Area	Updated data			
	William Historian Trica	Removed unnecessary tables			
	Blower Motor VFD	Corrected Table reference			
	All	Updated naming conventions for CXM2, DXM2.5, and AWC Thermostat			







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