Submittal Data

Compact (HBH/V) Series

HBH-HBV 006-60

60Hz - HFC-410A

Comfort-Aire® Century®

Compact (HBH/V) Series Submittal Data

Models HBH/V 006 - 060
60Hz - HFC-410A

English Language/I-P Units

Delivering Confidence

Comfort-Aire Century

SUBMITTAL DATA - I-P UNITS

Unit Designation: _____

Job Name: _____

Architect: _____

Engineer: _____

Contractor: _____

PERFORMANCE DATA

Cooling Capacity: _____ Btuh

EER: _____

Heating Capacity: _____ Btuh

COP: _____

Ambient Air Temp: _____ °F

Entering Water Temp (Clg): _____ °F

Entering Air Temp (Clg): _____ °F

Entering Water Temp (Htg): _____ °F

Entering Air Temp (Htg): _____ °F

Airflow: _____ CFM

Fan Speed or Motor/RPM/Turns: _____

Operating Weight: _____ (lb)

ELECTRICAL DATA

Power Supply: _____ Volts

_____ Phase _____ Hz

Minimum Circuit Ampacity: _____

Maximum Overcurrent Protection: _____

Compact (HBH/V) Series Submittal Data

Models HBH/V 006 - 060
60Hz - HFC-410A

English Language/S-I Units

Delivering Confidence

Comfort-Aire Century

SUBMITTAL DATA - S-I UNITS

Unit Designation: _____

Job Name: _____

Architect: _____

Engineer: _____

Contractor: _____

PERFORMANCE DATA

Cooling Capacity: _____ kW

EER: _____

Heating Capacity: _____ kW

COP: _____

Ambient Air Temp: _____ °C

Entering Water Temp (Clg): _____ °C

Entering Air Temp (Clg): _____ °C

Entering Water Temp (Htg): _____ °C

Entering Air Temp (Htg): _____ °C

Airflow: _____ l/s

Fan Speed or Motor/RPM/Turns: _____

Operating Weight: _____ (kg)

ELECTRICAL DATA

Power Supply: _____ Volts

_____ Phase _____ Hz

Minimum Circuit Ampacity: _____

Maximum Overcurrent Protection: _____

Table of Contents

Unit Features

COMPACT (HB) SERIES

The award winning HB Series raises the bar for water-source heat pump efficiencies, features and application flexibility. Not only does the HB Series exceed ASHRAE 90.1 efficiencies, but it also uses EarthPure® HFC-410A zero ozone depletion refrigerant, making it an extremely environmentally-friendly option. The HB Series is eligible for additional LEED® (Leadership in Energy and Environmental Design) points because of the “green” technology design. With one of the smallest cabinets in the industry, the HB Series will easily fit into tight spaces. Designed to be backward compatible with thousands of older water-source heat pumps, the HB Series heat pump is packed full of the innovation you have come to expect from the experts at MARS.

Available in sizes from 1/2 ton (1.76 kW) through 5 tons (17.6 kW) with multiple cabinet options (vertical upflow and horizontal) the HB Series offers a wide range of units for most anaxy powder painted front access panel, galvanized steel with epoxy powder painted drain pan and sound absorbing air handler insulation are just some of the features of the HB Series.

MARS’s exclusive double isolation compressor mounting system makes the HB Series the quietest unit on the market. Compressors are mounted on specially engineered sound-tested EPDM grommets or spring vibration isolators to a heavy gauge mounting plate, which is further isolated from the cabinet base with rubber grommets for maximized vibration/sound attenuation. The easy access control box and large access panels make installing and maintaining the unit easier than other water-source heat pumps currently in production, proving that a small unit can be easy to service.

Options such as coated air coil, DDC controls, high efficiency pleated MERV 11 two-inch (51mm) air filter or one-inch (25mm) pleated MERV 8 air filters allow customized design solutions. Optional high static fan motor expands the operating range and helps overcome some of the challenges associated with ductwork for retrofit installations. A cupro-nickel water-coil and sound absorbing mute package are options that make a great unit even better.

The HB 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.

UNIT FEATURES

Sizes 006 (1/2 ton, 1.76 kW) through 060 (5 tons, 17.6 kW)
EarthPure® HFC-410A refrigerant
Exceeds ASHRAE 90.1 efficiencies
Galvanized steel construction with attractive matte black epoxy powder coat paint front access panel
Epoxy powder painted galvanized steel drain pan
Sound absorbing glass fiber insulation
Unique double isolation compressor mounting via vibration isolating rubber grommets for quiet operation
Insulated divider and separate compressor/air handler compartments
Copeland scroll compressors (rotary for size 018 and below)
TXV metering device
Microprocessor controls standard (optional DXM and/or DDC controls)
Field convertible discharge air arrangement for horizontal units
PSC three-speed fan motor
Internally trapped condensate drain line (vertical units only)
Unit Performance Sentinel performance monitoring system
Eight Safeties Standard
Extended range (20 to 120°F, -6.7 to 48.9°C) capable

AVAILABLE OPTIONS

- High static blowers
- LonWorks, BACnet, Modbus and Johnson N2 compatibility options for DDC controls
- Cupro-nickel water-coil
- Sound absorbing UltraQuiet package
- ECM Blowers

Selection Procedure

Reference Calculations

Heating

$$LWT = EWT - \frac{HE}{GPM \times 500}$$

$$LAT = EAT + \frac{HC}{CFM \times 1.08}$$

Cooling

$$LWT = EWT + \frac{HR}{GPM \times 500}$$

$$LAT\ (DB) = EAT\ (DB) - \frac{SC}{CFM \times 1.08}$$

$$LC = TC - SC$$

$$S/T = \frac{SC}{TC}$$

Legend and Glossary of Abbreviations

BTUH = BTU(British Thermal Unit) per hour
CFM = airflow, cubic feet/minute
COP = coefficient of performance = BTUH output/BTUH input
DB = dry bulb temperature (°F)
EAT = entering air temperature, Fahrenheit (dry bulb/wet bulb)
EER = energy efficiency ratio = BTUH output/Watt input
MPT = male pipe thread
ESP = external static pressure (inches w.g.)
EWT = entering water temperature
GPM = water flow in U.S. gallons/minute
HE = total heat of extraction, BTUH
HC = air heating capacity, BTUH
HR = total heat of rejection, BTUH
HWC = hot water generator (desuperheater) capacity, Mbtuh
FPT = female pipe thread
KW = total power unit input, kilowatts
LAT = leaving air temperature, °F
LC = latent cooling capacity, BTUH
LWT = leaving water temperature, °F
MBTUH = 1000 BTU per hour
S/T = sensible to total cooling ratio
SC = sensible cooling capacity, BTUH
TC = total cooling capacity, BTUH
WB = wet bulb temperature (°F)
WPD = waterside pressure drop (psi & ft. of hd.)

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

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

Selection Procedure

Step 1 Determine the actual heating and cooling loads at the desired dry bulb and wet bulb conditions.

Step 2 Obtain the following design parameters: Entering water temperature, water flow rate in GPM, air flow in CFM, water flow pressure drop and design wet and dry bulb temperatures. Air flow 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.

Step 3 Select a unit based on total and sensible cooling conditions. Select a unit which is closest to, but no larger than, the actual cooling load.

Step 4 Enter tables at the design water flow and water temperature. Read the total and sensible cooling capacities (Note: interpolation is permissible, extrapolation is not).

Step 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.

Step 6 Determine the correction factors associated with the variable factors of dry bulb, wet bulb and air flow.

Corrected Total Cooling = tabulated total cooling x wet bulb correction x air flow correction

Corrected Sensible Cooling = tabulated sensible cooling x dry bulb correction x air flow correction

Step 7 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.

Step 8 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.....23,700 BTUH
Sensible Cooling.....16,500 BTUH
Entering Air Temp.....80°F Dry Bulb / 65°F Wet Bulb

Step 2 Design Conditions:

Similarly, we have also obtained the following design parameters:

Entering Water Temp.....90°F
Water Flow (Based upon 10°F rise in temp.).....6.0 GPM
Air Flow.....800 CFM

Step 3, 4 & 5 HP Selection:

After making our preliminary selection (TC024), we enter the tables at design water flow and water temperature and read Total Cooling, Sens. Cooling and Heat of Rej. capacities:

Total Cooling.....23,400 BTUH
Sensible Cooling.....17,500 BTUH
Heat of Rejection.....30,200 BTUH

Step 6 & 7 Entering Air and Airflow Corrections:

Next, we determine our correction factors.

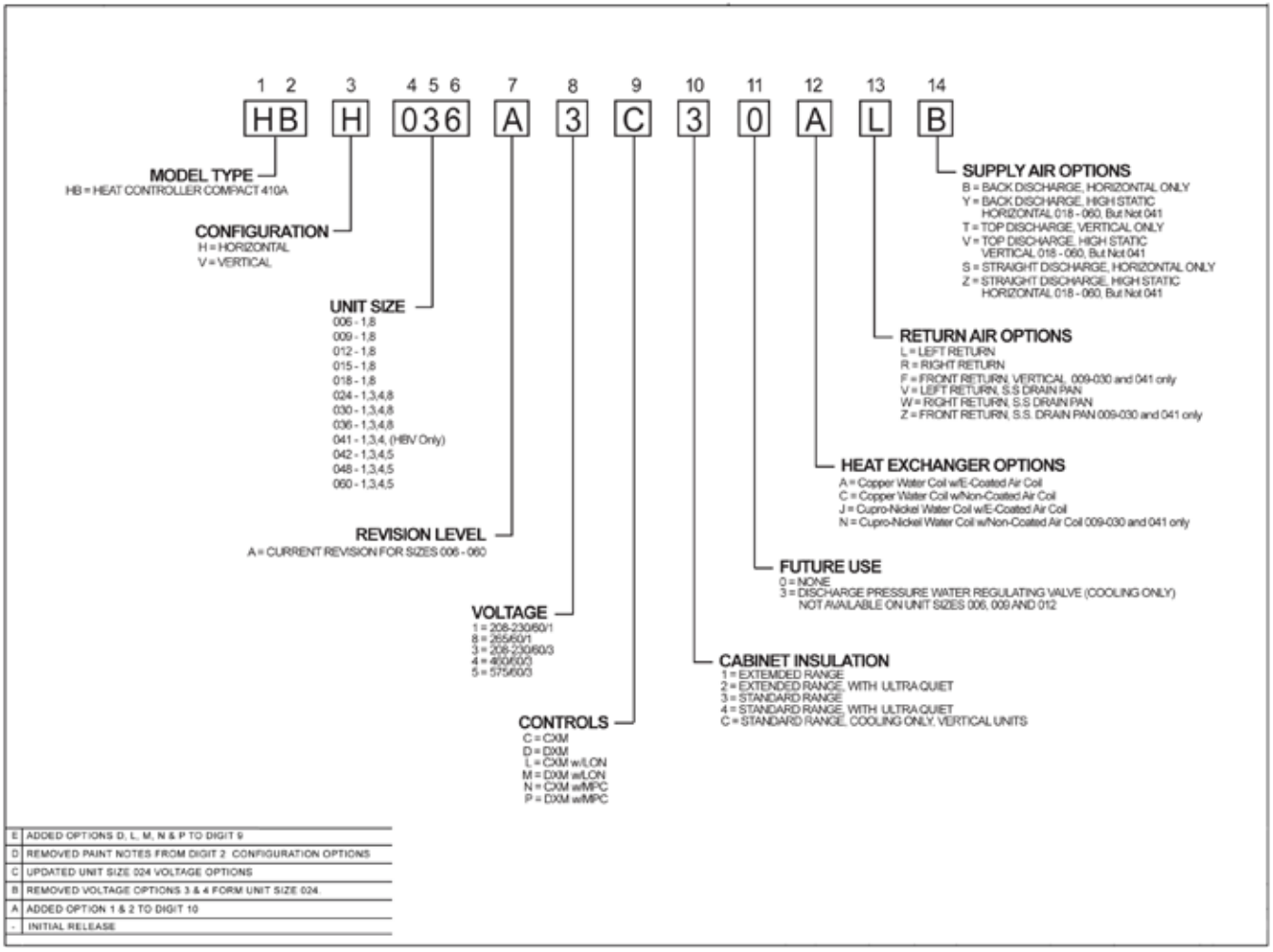
	Table	Ent Air	Air Flow	Corrected
Corrected Total Cooling =	23,400	x 0.9681	x 1.0050	= 22,767
Corrected Sens Cooling =	17,500	x 1.1213	x 0.9820	= 19,270
Corrected Heat of Rej. =	30,200	x 0.9747	x 1.0434	= 30,713

Step 8 Water Temperature Rise Calculation & Assessment:

Actual Temperature Rise.....10.2°F

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

HB Series Nomenclature



E	ADDED OPTIONS D, L, M, N & P TO DIGIT 9
D	REMOVED PAINT NOTES FROM DIGIT 2 CONFIGURATION OPTIONS
C	UPDATED UNIT SIZE 024 VOLTAGE OPTIONS
B	REMOVED VOLTAGE OPTIONS 3 & 4 FORM UNIT SIZE 024.
A	ADDED OPTION 1 & 2 TO DIGIT 10
-	INITIAL RELEASE

Performance Data – AHRI/ASHRAE/ISO 13256-1

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

Model	Fan Motor	Water Loop Heat Pump				Ground Water Heat Pump				Ground Loop Heat Pump			
		Cooling 86°F		Heating 68°F		Cooling 59°F		Heating 50°F		Cooling 77°F		Heating 32°F	
		Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP
HB-006	PSC	5,800	13.2	7,500	4.7	6,900	21.1	6,200	4.0	6,200	15.4	4,900	3.4
HB-009	PSC	8,800	13.4	11,600	4.2	10,100	21.0	9,800	3.9	9,300	15.7	7,900	3.4
HB-012	PSC	11,700	13.5	15,200	4.3	13,700	20.8	12,500	3.8	12,000	14.9	9,900	3.2
HB-015	PSC	14,500	15.4	17,300	5.0	16,800	24.5	14,400	4.4	15,000	17.2	11,100	3.6
	ECM	14,500	15.5	16,800	5.1	16,800	25.0	13,800	4.4	15,000	17.9	10,900	3.6
HB-018	PSC	17,300	14.3	21,500	5.0	20,600	24.2	17,200	4.4	18,400	16.3	13,900	3.4
	ECM	19,600	15.9	22,000	5.3	22,300	24.8	18,200	4.6	20,200	18.1	14,100	3.8
HB-024	PSC	23,700	13.4	28,500	4.7	26,700	20.9	24,000	4.1	24,900	15.4	18,500	3.3
	ECM	23,800	14.3	27,700	4.9	26,700	21.5	23,400	4.1	24,900	16.4	18,500	3.5
HB-030	PSC	28,100	13.4	35,100	4.6	31,700	20.1	29,600	4.1	28,900	15.1	23,400	3.4
	ECM	28,300	14.3	35,800	4.8	32,400	22.0	30,000	4.4	29,300	16.5	23,600	3.7
HB-036	PSC	34,500	13.5	45,200	4.4	38,700	20.7	37,500	4.0	35,300	14.9	29,600	3.3
	ECM	34,500	14.0	43,400	4.5	39,000	20.9	35,800	4.0	35,400	15.5	28,700	3.4
HBV-041	PSC	36,500	13.2	45,700	4.2	41,400	19.7	38,000	3.7	38,000	14.8	30,100	3.1
HB-042	PSC	40,100	13.2	52,700	4.3	45,900	19.6	44,000	3.8	40,500	14.4	34,300	3.2
	ECM	42,100	14.9	50,400	4.5	46,400	22.0	42,400	4.0	42,200	16.8	33,900	3.4
HB-048	PSC	47,700	13.3	55,900	4.7	54,300	20.5	46,500	4.1	49,000	14.7	36,400	3.4
	ECM	47,900	14.2	53,000	4.8	53,600	21.0	45,600	4.3	49,000	16.2	36,400	3.6
HB-060	PSC	59,400	13.4	72,000	4.3	66,600	19.9	60,000	3.9	60,100	14.8	47,500	3.3
	ECM	60,000	14.8	71,200	4.4	67,000	21.0	59,600	4.0	61,400	16.5	47,500	3.4

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
All ratings based upon operation at lower voltage of dual voltage rated models

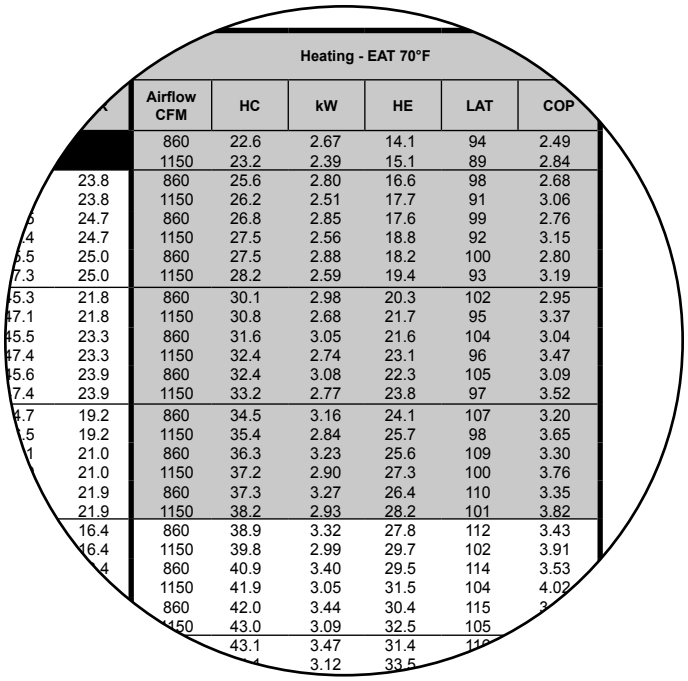
ASHRAE/AHRI/ISO 13256-1. Metric (S-I) Units

Model	Fan Motor	Water Loop Heat Pump				Ground Water Heat Pump				Ground Loop Heat Pump			
		Cooling 86°F		Heating 68°F		Cooling 59°F		Heating 50°F		Full Cooling 77°F		Full Heating 32°F	
		Capacity Btuh	EER W/W	Capacity Btuh	COP	Capacity Btuh	EER W/W	Capacity Btuh	COP	Capacity Btuh	EER W/W	Capacity Btuh	COP
HB-006	PSC	1.70	3.9	2.20	4.7	2.02	6.2	1.82	4.0	1.82	4.5	1.44	3.4
HB-009	PSC	2.58	3.9	3.40	4.2	2.96	6.2	2.87	3.9	2.72	4.6	2.31	3.4
HB-012	PSC	3.43	4.0	4.45	4.3	4.01	6.1	3.66	3.8	3.52	4.4	2.90	3.2
HB-015	PSC	4.25	4.5	5.07	5.0	4.92	7.2	4.22	4.4	4.39	5.0	3.25	3.6
	ECM	4.25	4.5	4.92	5.1	4.92	7.3	4.04	4.4	4.39	5.2	3.19	3.6
HB-018	PSC	5.07	4.2	6.30	5.0	6.04	7.1	5.04	4.4	5.39	4.8	4.07	3.4
	ECM	5.74	4.7	6.45	5.3	6.54	7.3	5.33	4.6	5.92	5.3	4.13	3.8
HB-024	PSC	6.94	3.9	8.35	4.7	7.82	6.1	7.03	4.1	7.30	4.5	5.42	3.3
	ECM	6.97	4.2	8.12	4.9	7.82	6.3	6.87	4.1	7.30	4.8	5.42	3.5
HB-030	PSC	8.23	3.9	10.28	4.6	9.29	5.9	8.67	4.1	8.47	4.4	6.86	3.4
	ECM	8.29	4.2	10.49	4.8	9.49	6.4	8.79	4.4	8.58	4.8	6.91	3.7
HB-036	PSC	10.11	4.0	13.24	4.4	11.34	6.1	10.99	4.0	10.34	4.4	8.67	3.3
	ECM	10.11	4.1	12.72	4.5	11.43	6.1	10.49	4.0	10.37	4.5	8.41	3.4
HBV041	PSC	10.69	3.9	13.39	4.2	12.13	5.8	11.13	3.7	11.13	4.3	8.82	3.1
HB-042	PSC	11.75	3.9	15.44	4.3	13.45	5.7	12.89	3.8	11.87	4.2	10.05	3.2
	ECM	12.34	4.4	14.77	4.5	13.60	6.4	12.42	4.0	12.36	4.9	9.93	3.4
HB-048	PSC	13.98	3.9	16.38	4.7	15.91	6.0	13.62	4.1	14.36	4.3	10.67	3.4
	ECM	14.03	4.2	15.53	4.8	15.70	6.2	13.36	4.3	14.36	4.7	10.67	3.6
HB-060	PSC	17.40	3.9	21.10	4.3	19.51	5.8	17.58	3.9	17.61	4.3	14.80	3.3
	ECM	17.58	4.3	20.86	4.4	19.63	6.2	17.46	4.0	17.99	4.8	13.92	3.4

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
All ratings based upon operation at lower voltage of dual voltage rated models

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 40°F [4.4°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 40ºF or below and the JW3 jumper should be clipped. This is due to the potential of the refrigerant temperature being as low as 32°F [0°C] with 40°F [4.4°C] LWT, which may lead to a nuisance cutout due to the activation of the Low Temperature Protection. JW3 should never be clipped for standard range equipment or systems without antifreeze.



Heating - EAT 70°F						
[illegible]	Airflow CFM	HC	kW	HE	LAT	COP
[illegible]	860	22.6	2.67	14.1	94	2.49
[illegible]	1150	23.2	2.39	15.1	89	2.84
23.8	860	25.6	2.80	16.6	98	2.68
23.8	1150	26.2	2.51	17.7	91	3.06
24.7	860	26.8	2.85	17.6	99	2.76
24.7	1150	27.5	2.56	18.8	92	3.15
25.0	860	27.5	2.88	18.2	100	2.80
25.0	1150	28.2	2.59	19.4	93	3.19
21.8	860	30.1	2.98	20.3	102	2.95
21.8	1150	30.8	2.68	21.7	95	3.37
23.3	860	31.6	3.05	21.6	104	3.04
23.3	1150	32.4	2.74	23.1	96	3.47
23.9	860	32.4	3.08	22.3	105	3.09
23.9	1150	33.2	2.77	23.8	97	3.52
19.2	860	34.5	3.16	24.1	107	3.20
19.2	1150	35.4	2.84	25.7	98	3.65
21.0	860	36.3	3.23	25.6	109	3.30
21.0	1150	37.2	2.90	27.3	100	3.76
21.9	860	37.3	3.27	26.4	110	3.35
21.9	1150	38.2	2.93	28.2	101	3.82
16.4	860	38.9	3.32	27.8	112	3.43
16.4	1150	39.8	2.99	29.7	102	3.91
[illegible]	860	40.9	3.40	29.5	114	3.53
[illegible]	1150	41.9	3.05	31.5	104	4.02
[illegible]	860	42.0	3.44	30.4	115	[illegible]
[illegible]	1150	43.0	3.09	32.5	105	[illegible]
[illegible]	[illegible]	43.1	3.47	31.4	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	3.12	33.5	[illegible]	[illegible]

Example:

At 50°F EWT (Entering Water Temperature) and 2.25 gpm/ton, a 3 ton unit has a HE of 27,300 Btuh. To calculate LWT, rearrange the formula for HE as follows:

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

TD = HE / (GPM x 500)

TD = 27,300 / (6.75 x 500)

TD = 8°F

LWT = EWT - TD

LWT = 50 - 8 = 42°F

In this example, as long as the EWT does not fall below 50°F, the system will operate as designed. For EWTs below 50°F, higher flow rates will be required (open loop systems, for example, require at least 2 gpm/ton when EWT is below 50°F).

Performance Data – HBH/V 006 (PSC Blower)

220 CFM Nominal (Rated) Airflow

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F							Heating - EAT 70°F					
		PSI	FT	Airflow CFM	TC	SC	Sens/Tot Ratio	kW	HR	EER	Airflow CFM	HC	kW	HE	LAT	COP
20	1.5	1.7	4.0	Operation not recommended							170	4.3	0.49	2.7	93.3	2.6
	1.5	1.7	4.0								225	4.4	0.44	2.9	88.0	2.9
30	0.8	0.5	1.2	170	7.4	4.2	0.57	0.28	8.4	26.4	170	4.6	0.50	3.0	95.2	2.7
	0.8	0.5	1.2	225	7.7	4.8	0.62	0.29	8.7	26.4	225	4.7	0.45	3.2	89.5	3.1
	1.1	0.8	1.8	170	7.4	4.1	0.55	0.26	8.3	28.5	170	4.8	0.51	3.2	96.2	2.8
	1.1	0.8	1.8	225	7.7	4.6	0.60	0.27	8.6	28.5	225	4.9	0.46	3.4	90.3	3.2
	1.5	1.3	2.9	170	7.3	4.0	0.54	0.25	8.2	29.2	170	4.9	0.51	3.2	96.8	2.8
	1.5	1.3	2.9	225	7.6	4.5	0.59	0.26	8.5	29.2	225	5.0	0.46	3.5	90.7	3.2
40	0.8	0.4	0.9	170	7.3	4.3	0.59	0.31	8.3	23.2	170	5.3	0.52	3.6	98.8	3.0
	0.8	0.4	0.9	225	7.6	4.8	0.64	0.33	8.7	23.2	225	5.4	0.47	3.8	92.3	3.4
	1.1	0.6	1.4	170	7.4	4.2	0.57	0.29	8.4	25.8	170	5.5	0.53	3.8	100.2	3.1
	1.1	0.6	1.4	225	7.7	4.8	0.62	0.30	8.7	25.8	225	5.7	0.47	4.1	93.3	3.5
	1.5	1.0	2.4	170	7.4	4.2	0.56	0.28	8.4	26.9	170	5.7	0.53	3.9	100.9	3.1
	1.5	1.0	2.4	225	7.7	4.7	0.61	0.29	8.7	26.9	225	5.8	0.48	4.2	93.9	3.6
50	0.8	0.3	0.8	170	6.9	4.2	0.61	0.35	8.1	19.9	170	6.0	0.54	4.2	102.7	3.3
	0.8	0.3	0.8	225	7.2	4.8	0.66	0.36	8.5	19.9	225	6.1	0.48	4.5	95.3	3.7
	1.1	0.5	1.2	170	7.2	4.3	0.59	0.32	8.3	22.5	170	6.3	0.55	4.5	104.4	3.4
	1.1	0.5	1.2	225	7.5	4.8	0.64	0.33	8.6	22.5	225	6.5	0.49	4.8	96.6	3.9
	1.5	0.9	2.0	170	7.3	4.3	0.58	0.31	8.3	23.8	170	6.5	0.55	4.6	105.4	3.4
	1.5	0.9	2.0	225	7.6	4.8	0.63	0.32	8.7	23.8	225	6.7	0.50	5.0	97.4	3.9
60	0.8	0.3	0.6	170	6.5	4.1	0.63	0.39	7.9	16.8	170	6.7	0.56	4.9	106.7	3.5
	0.8	0.3	0.6	225	6.8	4.7	0.69	0.40	8.2	16.8	225	6.9	0.50	5.2	98.4	4.0
	1.1	0.5	1.0	170	6.9	4.2	0.61	0.36	8.1	19.1	170	7.1	0.57	5.2	108.6	3.7
	1.1	0.5	1.0	225	7.1	4.8	0.67	0.37	8.4	19.1	225	7.3	0.51	5.5	99.9	4.2
	1.5	0.8	1.8	170	7.0	4.2	0.61	0.34	8.2	20.4	170	7.3	0.57	5.3	109.7	3.7
	1.5	0.8	1.8	225	7.3	4.8	0.66	0.36	8.5	20.4	225	7.5	0.51	5.7	100.7	4.3
70	0.8	0.2	0.5	170	6.0	4.0	0.66	0.43	7.5	14.0	170	7.4	0.58	5.5	110.5	3.8
	0.8	0.2	0.5	225	6.3	4.5	0.72	0.45	7.8	14.0	225	7.6	0.52	5.9	101.4	4.3
	1.1	0.4	0.9	170	6.4	4.1	0.64	0.40	7.8	16.0	170	7.8	0.58	5.8	112.4	3.9
	1.1	0.4	0.9	225	6.7	4.6	0.70	0.42	8.1	16.0	225	8.0	0.53	6.2	102.8	4.5
	1.5	0.7	1.6	170	6.6	4.1	0.63	0.38	7.9	17.1	170	8.0	0.59	5.9	113.4	4.0
	1.5	0.7	1.6	225	6.8	4.7	0.69	0.40	8.2	17.1	225	8.2	0.53	6.4	103.6	4.5
80	0.8	0.2	0.5	170	5.6	3.8	0.68	0.47	7.2	12.0	170	7.9	0.59	5.9	113.2	4.0
	0.8	0.2	0.5	225	5.8	4.3	0.74	0.49	7.5	12.0	225	8.1	0.53	6.3	103.5	4.5
	1.1	0.4	0.8	170	5.9	3.9	0.67	0.45	7.4	13.2	170	8.3	0.60	6.3	115.4	4.1
	1.1	0.4	0.8	225	6.1	4.4	0.73	0.46	7.7	13.2	225	8.5	0.54	6.7	105.1	4.6
	1.5	0.6	1.5	170	6.2	4.0	0.65	0.42	7.6	14.7	170	8.4	0.60	6.3	115.7	4.1
	1.5	0.6	1.5	225	6.4	4.6	0.71	0.44	7.9	14.7	225	8.6	0.54	6.7	105.3	4.6
85	0.8	0.2	0.5	170	5.3	3.7	0.70	0.50	7.0	10.7	170	8.2	0.60	6.2	114.7	4.0
	0.8	0.2	0.5	225	5.5	4.2	0.76	0.52	7.3	10.7	225	8.4	0.50	6.6	104.6	4.6
	1.1	0.3	0.8	170	5.6	3.8	0.68	0.47	7.2	11.9	170	8.5	0.60	6.4	116.2	4.1
	1.1	0.3	0.8	225	5.8	4.3	0.74	0.49	7.5	11.9	225	8.7	0.50	6.8	105.8	4.7
	1.5	0.6	1.4	170	5.8	3.9	0.67	0.45	7.4	13.1	170	8.5	0.60	6.4	116.4	4.1
	1.5	0.6	1.4	225	6.1	4.4	0.73	0.47	7.7	13.1	225	8.7	0.50	6.8	105.9	4.7
90	0.8	0.2	0.4	170	5.0	3.6	0.72	0.53	6.7	9.4	170	8.5	0.61	6.4	116.3	4.1
	0.8	0.2	0.4	225	5.2	4.1	0.79	0.55	7.0	9.4	225	8.7	0.55	6.8	105.8	4.7
	1.1	0.3	0.7	170	5.3	3.7	0.70	0.49	7.0	10.7	170	8.6	0.62	6.5	117.0	4.1
	1.1	0.3	0.7	225	5.5	4.2	0.76	0.52	7.3	10.7	225	8.8	0.55	7.0	106.4	4.7
	1.5	0.6	1.3	170	5.5	3.8	0.69	0.48	7.1	11.5	170	8.7	0.62	6.5	117.1	4.1
	1.5	0.6	1.3	225	5.7	4.3	0.75	0.50	7.4	11.5	225	8.9	0.56	7.0	106.5	4.7
100	0.8	0.2	0.4	170	4.4	3.4	0.76	0.58	6.4	7.6	Operation not recommended					
	0.8	0.2	0.4	225	4.6	3.8	0.83	0.60	6.6	7.6						
	1.1	0.3	0.7	170	4.7	3.5	0.74	0.55	6.6	8.7						
	1.1	0.3	0.7	225	4.9	4.0	0.80	0.57	6.9	8.7						
	1.5	0.5	1.2	170	4.9	3.6	0.73	0.53	6.7	9.3						
	1.5	0.5	1.2	225	5.1	4.0	0.79	0.55	7.0	9.3						
110	0.8	0.2	0.3	170	3.9	3.1	0.81	0.63	6.0	6.2						
	0.8	0.2	0.3	225	4.1	3.6	0.87	0.66	6.3	6.2						
	1.1	0.3	0.6	170	4.2	3.3	0.78	0.60	6.2	7.0						
	1.1	0.3	0.6	225	4.4	3.7	0.85	0.62	6.5	7.0						
	1.5	0.5	1.2	170	4.3	3.3	0.77	0.58	6.3	7.4						
	1.5	0.5	1.2	225	4.5	3.8	0.83	0.61	6.6	7.4						
120	0.8	0.1	0.3	170	3.5	3.0	0.85	0.68	5.8	5.0						
	0.8	0.1	0.3	225	3.6	3.3	0.93	0.71	6.0	5.0						
	1.1	0.3	0.6	170	3.7	3.0	0.83	0.65	5.9	5.6						
	1.1	0.3	0.6	225	3.8	3.4	0.90	0.68	6.2	5.6						
	1.5	0.5	1.1	170	3.8	3.1	0.81	0.64	6.0	6.0						
	1.5	0.5	1.1	225	4.0	3.5	0.88	0.67	6.2	6.0						

Interpolation is permissible; extrapolation is not.
All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.
AHRI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
All performance is based upon the lower voltage of dual voltage rated 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 upon 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.

Performance Data – HBH/V 009 (PSC Blower)

325 CFM Nominal (Rated) Airflow

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F							Heating - EAT 70°F					
		PSI	FT	Airflow CFM	TC	SC	Sens/Tot Ratio	kW	HR	EER	Airflow CFM	HC	kW	HE	LAT	COP
20	2.3	4.5	10.5	Operation not recommended							250	6.5	0.73	4.2	94.2	2.6
	2.3	4.5	10.5								330	6.7	0.66	4.4	88.8	3.0
30	1.1	1.3	3.0	250	10.2	6.0	0.59	0.39	11.6	26.6	250	7.1	0.74	4.7	96.3	2.8
	1.1	1.3	3.0	330	10.7	6.8	0.64	0.40	12.0	26.6	330	7.3	0.67	5.0	90.4	3.2
	1.7	1.9	4.4	250	10.5	6.0	0.57	0.36	11.7	29.5	250	7.4	0.75	4.9	97.4	2.9
	1.7	1.9	4.4	330	10.9	6.8	0.62	0.37	12.2	29.5	330	7.6	0.67	5.3	91.2	3.3
	2.3	3.5	8.1	250	10.6	6.0	0.56	0.34	11.8	31.1	250	7.5	0.75	5.1	97.9	2.9
	2.3	3.5	8.1	330	11.0	6.8	0.61	0.36	12.3	31.1	330	7.7	0.68	5.4	91.7	3.4
40	1.1	0.9	2.0	250	9.9	6.0	0.61	0.43	11.3	22.8	250	8.0	0.76	5.5	99.8	3.1
	1.1	0.9	2.0	330	10.3	6.8	0.66	0.45	11.8	22.8	330	8.2	0.69	5.9	93.1	3.5
	1.7	1.5	3.5	250	10.1	6.0	0.59	0.40	11.5	25.4	250	8.4	0.77	5.8	101.1	3.2
	1.7	1.5	3.5	330	10.5	6.8	0.64	0.41	12.0	25.4	330	8.6	0.69	6.2	94.1	3.6
	2.3	3.0	6.8	250	10.3	6.0	0.59	0.38	11.6	26.8	250	8.6	0.78	6.0	101.8	3.2
	2.3	3.0	6.8	330	10.7	6.8	0.64	0.40	12.0	26.9	330	8.8	0.70	6.4	94.7	3.7
50	1.1	0.6	1.5	250	9.4	6.0	0.63	0.48	11.1	19.5	250	9.0	0.79	6.4	103.3	3.4
	1.1	0.6	1.5	330	9.8	6.7	0.69	0.50	11.6	19.5	330	9.2	0.71	6.8	95.8	3.8
	1.7	1.3	2.9	250	9.7	6.0	0.62	0.45	11.3	21.7	250	9.4	0.80	6.7	104.8	3.5
	1.7	1.3	2.9	330	10.1	6.8	0.67	0.47	11.7	21.7	330	9.6	0.72	7.2	97.0	3.9
	2.3	2.6	6.0	250	9.9	6.0	0.61	0.43	11.3	23.0	250	9.6	0.80	6.9	105.6	3.5
	2.3	2.6	6.0	330	10.3	6.8	0.66	0.45	11.8	23.0	330	9.8	0.72	7.4	97.6	4.0
60	1.1	0.5	1.2	250	9.0	5.9	0.65	0.54	10.8	16.5	250	9.9	0.81	7.2	106.8	3.6
	1.1	0.5	1.2	330	9.4	6.7	0.71	0.57	11.3	16.5	330	10.2	0.73	7.7	98.5	4.1
	1.7	1.1	2.5	250	9.3	5.9	0.64	0.50	11.0	18.5	250	10.4	0.82	7.6	108.4	3.7
	1.7	1.1	2.5	330	9.7	6.7	0.69	0.52	11.5	18.5	330	10.6	0.74	8.1	99.8	4.2
	2.3	2.3	5.4	250	9.5	6.0	0.63	0.48	11.1	19.6	250	10.6	0.83	7.8	109.3	3.7
	2.3	2.3	5.4	330	9.8	6.7	0.69	0.50	11.6	19.6	330	10.9	0.75	8.3	100.5	4.3
70	1.1	0.4	0.9	250	8.5	5.8	0.68	0.61	10.6	14.0	250	10.8	0.84	8.0	110.1	3.8
	1.1	0.4	0.9	330	8.8	6.5	0.74	0.63	11.0	14.0	330	11.1	0.75	8.5	101.1	4.3
	1.7	1.0	2.3	250	8.8	5.8	0.66	0.56	10.7	15.6	250	11.3	0.85	8.4	111.9	3.9
	1.7	1.0	2.3	330	9.2	6.6	0.72	0.59	11.2	15.6	330	11.6	0.77	9.0	102.5	4.4
	2.3	2.1	4.9	250	9.1	5.9	0.65	0.53	10.9	17.1	250	11.4	0.85	8.5	112.1	3.9
	2.3	2.1	4.9	330	9.5	6.7	0.71	0.55	11.3	17.1	330	11.6	0.77	9.0	102.7	4.4
80	1.1	0.3	0.8	250	8.0	5.6	0.70	0.67	10.3	11.8	250	11.7	0.87	8.7	113.3	4.0
	1.1	0.3	0.8	330	8.3	6.3	0.77	0.70	10.7	11.8	330	12.0	0.78	9.3	103.6	4.5
	1.7	0.9	2.1	250	8.3	5.7	0.69	0.63	10.5	13.2	250	12.2	0.88	9.1	115.1	4.0
	1.7	0.9	2.1	330	8.6	6.5	0.75	0.66	10.9	13.2	330	12.5	0.79	9.8	105.0	4.6
	2.3	2.0	4.6	250	8.6	5.8	0.67	0.59	10.6	14.4	250	12.2	0.88	9.2	115.4	4.1
	2.3	2.0	4.6	330	8.9	6.5	0.73	0.62	11.1	14.4	330	12.5	0.79	9.8	105.2	4.6
85	1.1	0.3	0.7	250	7.7	5.5	0.71	0.70	10.1	11.0	250	12.0	0.88	9.0	114.5	4.0
	1.1	0.3	0.7	330	8.0	6.2	0.78	0.73	10.5	11.0	330	12.3	0.80	9.6	104.6	4.6
	1.7	0.9	2.0	250	8.0	5.6	0.70	0.67	10.3	12.1	250	12.6	0.90	9.5	116.5	4.1
	1.7	0.9	2.0	330	8.4	6.4	0.76	0.69	10.7	12.1	330	12.9	0.80	10.1	106.1	4.7
	2.3	1.9	4.4	250	8.3	5.7	0.69	0.63	10.5	13.3	250	12.6	0.90	9.5	116.8	4.1
	2.3	1.9	4.4	330	8.7	6.5	0.75	0.65	10.9	13.3	330	12.9	0.80	10.2	106.3	4.7
90	1.1	0.3	0.6	250	7.5	5.4	0.72	0.73	10.0	10.2	250	12.3	0.89	9.3	115.7	4.1
	1.1	0.3	0.6	330	7.8	6.2	0.79	0.76	10.4	10.2	330	12.6	0.80	9.9	105.5	4.6
	1.7	0.8	1.9	250	7.7	5.5	0.71	0.70	10.1	11.1	250	12.9	0.91	9.8	117.9	4.2
	1.7	0.8	1.9	330	8.1	6.3	0.78	0.73	10.6	11.1	330	13.3	0.82	10.5	107.2	4.8
	2.3	1.8	4.3	250	8.0	5.6	0.70	0.66	10.3	12.1	250	13.0	0.91	9.9	118.2	4.2
	2.3	1.8	4.3	330	8.4	6.4	0.76	0.69	10.7	12.1	330	13.3	0.82	10.5	107.4	4.8
100	1.1	0.2	0.6	250	6.8	5.1	0.76	0.82	9.6	8.2	Operation not recommended					
	1.1	0.2	0.6	330	7.0	5.8	0.82	0.86	10.0	8.2						
	1.7	0.8	1.7	250	7.1	5.3	0.74	0.78	9.8	9.2						
	1.7	0.8	1.7	330	7.4	6.0	0.81	0.81	10.2	9.2						
	2.3	1.7	4.0	250	7.3	5.4	0.73	0.75	9.9	9.7						
	2.3	1.7	4.0	330	7.6	6.1	0.80	0.78	10.3	9.7						
110	1.1	0.2	0.5	250	6.1	4.8	0.79	0.90	9.2	6.8						
	1.1	0.2	0.5	330	6.3	5.4	0.85	0.94	9.5	6.8						
	1.7	0.7	1.6	250	6.5	5.0	0.77	0.86	9.4	7.6						
	1.7	0.7	1.6	330	6.8	5.6	0.84	0.89	9.8	7.6						
	2.3	1.6	3.8	250	6.7	5.1	0.76	0.83	9.5	8.0						
	2.3	1.6	3.8	330	7.0	5.8	0.83	0.87	9.9	8.0						
120	1.1	0.2	0.4	250	5.4	4.4	0.82	0.98	8.7	5.5						
	1.1	0.2	0.4	330	5.6	5.0	0.89	1.02	9.1	5.5						
	1.7	0.7	1.6	250	5.8	4.6	0.80	0.94	9.0	6.2						
	1.7	0.7	1.6	330	6.0	5.2	0.87	0.98	9.4	6.2						
	2.3	1.6	3.6	250	6.0	4.7	0.79	0.91	9.1	6.5						
	2.3	1.6	3.6	330	6.2	5.4	0.86	0.95	9.5	6.5						

Interpolation is permissible; extrapolation is not.
All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.
AHRI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
All performance is based upon the lower voltage of dual voltage rated 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 upon 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.

Performance Data – HBH/V 012 (PSC Blower)

400 CFM Nominal (Rated) Airflow

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F							Heating - EAT 70°F					
		PSI	FT	Airflow CFM	TC	SC	Sens/Tot Ratio	kW	HR	EER	Airflow CFM	HC	kW	HE	LAT	COP
20	3.0	8.5	19.6	Operation not recommended							300	8.5	0.98	5.3	96.2	2.5
	3.0	8.5	19.6								400	8.7	0.88	5.7	90.2	2.9
30	1.5	1.9	4.3	300	14.2	8.2	0.58	0.55	16.1	25.8	300	9.3	1.00	6.0	98.6	2.7
	1.5	1.9	4.3	400	14.8	9.3	0.63	0.57	16.8	25.8	400	9.5	0.90	6.4	91.9	3.1
	2.3	3.6	8.4	300	14.3	8.2	0.58	0.51	16.1	27.9	300	9.6	1.01	6.3	99.7	2.8
	2.3	3.6	8.4	400	14.9	9.3	0.63	0.53	16.7	27.9	400	9.9	0.91	6.8	92.8	3.2
	3.0	6.7	15.5	300	14.3	8.2	0.58	0.50	16.0	28.8	300	9.8	1.02	6.5	100.4	2.8
	3.0	6.7	15.5	400	14.9	9.3	0.63	0.52	16.6	28.8	400	10.1	0.92	7.0	93.3	3.2
40	1.5	1.4	3.2	300	14.0	8.1	0.58	0.61	16.0	22.9	300	10.6	1.04	7.1	102.6	3.0
	1.5	1.4	3.2	400	14.5	9.2	0.63	0.63	16.7	22.9	400	10.8	0.93	7.6	95.0	3.4
	2.3	3.0	6.9	300	14.2	8.2	0.58	0.57	16.1	25.1	300	11.0	1.05	7.6	104.1	3.1
	2.3	3.0	6.9	400	14.8	9.3	0.63	0.59	16.8	25.1	400	11.3	0.94	8.1	96.2	3.5
	3.0	5.7	13.1	300	14.3	8.2	0.58	0.54	16.1	26.2	300	11.3	1.06	7.8	104.9	3.1
	3.0	5.7	13.1	400	14.8	9.3	0.63	0.57	16.8	26.2	400	11.6	0.95	8.3	96.8	3.6
50	1.5	1.1	2.5	300	13.5	7.9	0.58	0.67	15.8	20.1	300	11.9	1.08	8.3	106.8	3.2
	1.5	1.1	2.5	400	14.1	8.9	0.63	0.70	16.5	20.1	400	12.2	0.97	8.9	98.2	3.7
	2.3	2.6	6.0	300	13.9	8.0	0.58	0.62	16.0	22.2	300	12.5	1.09	8.9	108.6	3.4
	2.3	2.6	6.0	400	14.4	9.1	0.63	0.65	16.7	22.2	400	12.8	0.98	9.5	99.6	3.8
	3.0	5.0	11.5	300	14.0	8.1	0.58	0.60	16.1	23.3	300	12.8	1.10	9.1	109.6	3.4
	3.0	5.0	11.5	400	14.6	9.2	0.63	0.63	16.7	23.3	400	13.1	0.99	9.8	100.4	3.9
60	1.5	0.9	2.1	300	12.9	7.6	0.59	0.74	15.5	17.4	300	13.3	1.11	9.6	111.1	3.5
	1.5	0.9	2.1	400	13.5	8.6	0.64	0.77	16.1	17.4	400	13.6	1.00	10.2	101.5	4.0
	2.3	2.3	5.3	300	13.4	7.8	0.58	0.69	15.7	19.3	300	14.0	1.13	10.2	113.1	3.6
	2.3	2.3	5.3	400	13.9	8.8	0.63	0.72	16.4	19.3	400	14.3	1.02	10.8	103.1	4.1
	3.0	4.5	10.3	300	13.6	7.9	0.58	0.67	15.8	20.4	300	14.3	1.14	10.5	114.2	3.7
	3.0	4.5	10.3	400	14.1	8.9	0.63	0.69	16.5	20.4	400	14.7	1.03	11.2	104.0	4.2
70	1.5	0.8	1.8	300	12.2	7.3	0.60	0.82	15.0	14.9	300	14.7	1.15	10.8	115.3	3.7
	1.5	0.8	1.8	400	12.7	8.3	0.65	0.85	15.6	14.9	400	15.0	1.04	11.5	104.8	4.2
	2.3	2.1	4.8	300	12.5	7.4	0.59	0.77	15.2	16.3	300	15.4	1.18	11.4	117.6	3.8
	2.3	2.1	4.8	400	13.1	8.4	0.64	0.80	15.8	16.3	400	15.8	1.06	12.2	106.5	4.4
	3.0	4.1	9.5	300	12.7	7.5	0.59	0.75	15.3	17.0	300	15.8	1.19	11.7	118.8	3.9
	3.0	4.1	9.5	400	13.3	8.5	0.64	0.78	15.9	17.0	400	16.2	1.07	12.5	107.5	4.4
80	1.5	0.7	1.5	300	11.4	7.0	0.61	0.90	14.5	12.7	300	16.0	1.20	11.9	119.4	3.9
	1.5	0.7	1.5	400	11.9	7.9	0.67	0.94	15.1	12.7	400	16.4	1.08	12.7	108.0	4.5
	2.3	1.9	4.4	300	11.8	7.1	0.60	0.85	14.7	13.9	300	16.8	1.22	12.6	121.7	4.0
	2.3	1.9	4.4	400	12.3	8.0	0.65	0.88	15.3	13.9	400	17.2	1.10	13.4	109.8	4.6
	3.0	3.8	8.8	300	12.0	7.2	0.60	0.83	14.8	14.5	300	17.2	1.24	12.9	123.0	4.1
	3.0	3.8	8.8	400	12.5	8.1	0.65	0.86	15.4	14.5	400	17.6	1.11	13.8	110.7	4.6
85	1.5	0.6	1.5	300	10.9	6.8	0.62	0.9	14.2	11.7	300	16.6	1.22	12.5	121.3	4.0
	1.5	0.6	1.5	400	11.4	7.7	0.68	0.98	14.7	11.7	400	17.0	1.1	13.3	109.4	4.6
	2.3	1.8	4.2	300	11.4	6.9	0.61	0.89	14.4	12.8	300	17.4	1.3	13.1	123.6	4.1
	2.3	1.8	4.2	400	11.9	7.9	0.66	0.93	15.0	12.8	400	17.8	1.1	14.0	111.2	4.6
	3.0	3.7	8.5	300	11.6	7.0	0.60	0.87	14.5	13.4	300	17.7	1.3	13.4	124.8	4.1
	3.0	3.7	8.5	400	12.1	7.9	0.66	0.90	15.1	13.4	400	18.2	1.1	14.3	112.1	4.7
90	1.5	0.6	1.4	300	10.5	6.7	0.63	0.99	13.9	10.7	300	17.3	1.24	13.0	123.3	4.1
	1.5	0.6	1.4	400	10.9	7.5	0.69	1.03	14.4	10.7	400	17.7	1.12	13.9	110.9	4.6
	2.3	1.8	4.1	300	11.0	6.8	0.62	0.93	14.1	11.7	300	18.0	1.28	13.6	125.5	4.1
	2.3	1.8	4.1	400	11.4	7.7	0.67	0.97	14.7	11.7	400	18.4	1.15	14.5	112.6	4.7
	3.0	3.6	8.2	300	11.2	6.8	0.61	0.91	14.3	12.3	300	18.3	1.29	13.9	126.6	4.2
	3.0	3.6	8.2	400	11.6	7.7	0.67	0.95	14.8	12.3	400	18.8	1.16	14.8	113.5	4.7
100	1.5	0.5	1.2	300	9.5	6.4	0.67	1.07	13.2	8.9	Operation not recommended					
	1.5	0.5	1.2	400	9.9	7.2	0.72	1.12	13.8	8.9						
	2.3	1.7	3.8	300	10.1	6.5	0.65	1.02	13.5	9.8						
	2.3	1.7	3.8	400	10.5	7.3	0.70	1.06	14.1	9.8						
	3.0	3.3	7.7	300	10.4	6.6	0.64	1.00	13.8	10.4						
	3.0	3.3	7.7	400	10.8	7.5	0.69	1.04	14.3	10.4						
110	1.5	0.5	1.1	300	8.5	6.0	0.71	1.17	12.5	7.3						
	1.5	0.5	1.1	400	8.9	6.8	0.77	1.22	13.1	7.3						
	2.3	1.6	3.6	300	9.1	6.2	0.68	1.12	12.9	8.1						
	2.3	1.6	3.6	400	9.4	7.0	0.74	1.16	13.4	8.1						
	3.0	3.2	7.3	300	9.4	6.3	0.67	1.09	13.1	8.6						
	3.0	3.2	7.3	400	9.8	7.1	0.73	1.14	13.7	8.6						
120	1.5	0.4	1.0	300	7.5	5.7	0.76	1.27	11.8	5.9						
	1.5	0.4	1.0	400	7.8	6.4	0.82	1.32	12.3	5.9						
	2.3	1.5	3.4	300	8.0	5.8	0.73	1.22	12.2	6.6						
	2.3	1.5	3.4	400	8.3	6.6	0.79	1.27	12.7	6.6						
	3.0	3.0	7.0	300	8.3	5.9	0.71	1.19	12.4	7.0						
	3.0	3.0	7.0	400	8.7	6.7	0.77	1.24	12.9	7.0						

Interpolation is permissible; extrapolation is not.
All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.
AHRI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
All performance is based upon the lower voltage of dual voltage rated 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 upon 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.

Performance Data – HBH/V 015 (PSC Blower)

525 CFM Nominal (Rated) Airflow

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F							Heating - EAT 70°F					
		PSI	FT	Airflow CFM	TC	SC	Sens/Tot Ratio	kW	HR	EER	Airflow CFM	HC	kW	HE	LAT	COP
20	3.8	4.1	9.5	Operation not recommended							395	9.5	1.07	6.1	92	2.62
	3.8	4.1	9.5								525	9.8	0.96	6.5	87	2.98
30	1.9	1.0	2.3	395	17.3	10.8	0.62	0.61	19.4	28.4	395	10.6	1.09	7.1	95	2.84
	1.9	1.0	2.3	525	18.1	12.2	0.67	0.64	20.2	28.4	525	10.9	0.98	7.5	89	3.24
	2.8	1.8	4.3	395	17.5	10.8	0.62	0.56	19.4	31.1	395	11.1	1.11	7.5	96	2.94
	2.8	1.8	4.3	525	18.2	12.2	0.67	0.59	20.2	31.1	525	11.4	0.99	8.0	90	3.35
	3.8	3.3	7.7	395	17.5	10.8	0.62	0.54	19.4	32.2	395	11.3	1.11	7.7	97	2.99
	3.8	3.3	7.7	525	18.3	12.2	0.67	0.57	20.2	32.2	525	11.6	1.00	8.2	90	3.41
40	1.9	0.8	1.8	395	17.0	10.6	0.63	0.68	19.3	24.8	395	12.3	1.13	8.5	99	3.18
	1.9	0.8	1.8	525	17.7	12.0	0.68	0.71	20.1	24.8	525	12.6	1.02	9.1	92	3.62
	2.8	1.6	3.6	395	17.2	10.7	0.62	0.63	19.4	27.3	395	12.8	1.14	9.0	100	3.29
	2.8	1.6	3.6	525	18.0	12.1	0.68	0.66	20.2	27.3	525	13.1	1.03	9.7	93	3.75
	3.8	2.9	6.6	395	17.4	10.8	0.62	0.60	19.4	28.8	395	13.1	1.15	9.3	101	3.35
	3.8	2.9	6.6	525	18.1	12.2	0.67	0.63	20.2	28.8	525	13.5	1.03	10.0	94	3.82
50	1.9	0.6	1.5	395	16.4	10.4	0.63	0.76	19.0	21.6	395	13.9	1.16	10.0	103	3.50
	1.9	0.6	1.5	525	17.1	11.8	0.69	0.79	19.8	21.6	525	14.2	1.05	10.7	95	3.99
	2.8	1.4	3.1	395	16.8	10.6	0.63	0.71	19.2	23.8	395	14.6	1.18	10.6	104	3.63
	2.8	1.4	3.1	525	17.5	12.0	0.68	0.74	20.0	23.8	525	14.9	1.06	11.3	96	4.13
	3.8	2.5	5.8	395	17.0	10.6	0.63	0.68	19.3	25.0	395	14.9	1.18	10.9	105	3.69
	3.8	2.5	5.8	525	17.7	12.0	0.68	0.71	20.1	25.0	525	15.3	1.06	11.7	97	4.21
60	1.9	0.6	1.3	395	15.7	10.2	0.65	0.84	18.6	18.7	395	15.5	1.20	11.5	106	3.81
	1.9	0.6	1.3	525	16.4	11.5	0.70	0.88	19.4	18.7	525	15.9	1.07	12.2	98	4.34
	2.8	1.2	2.8	395	16.2	10.4	0.64	0.79	18.9	20.5	395	16.3	1.21	12.1	108	3.94
	2.8	1.2	2.8	525	16.9	11.7	0.69	0.82	19.7	20.5	525	16.7	1.09	13.0	99	4.50
	3.8	2.3	5.3	395	16.4	10.4	0.63	0.76	19.0	21.6	395	16.7	1.22	12.5	109	4.02
	3.8	2.3	5.3	525	17.1	11.8	0.69	0.79	19.8	21.6	525	17.1	1.09	13.3	100	4.58
70	1.9	0.5	1.1	395	15.2	10.1	0.66	0.93	18.3	16.2	395	17.1	1.22	12.9	110	4.10
	1.9	0.5	1.1	525	15.8	11.4	0.72	0.97	19.1	16.3	525	17.5	1.10	13.8	101	4.68
	2.8	1.1	2.5	395	15.5	10.1	0.65	0.88	18.5	17.6	395	18.0	1.24	13.7	112	4.25
	2.8	1.1	2.5	525	16.1	11.4	0.71	0.91	19.2	17.6	525	18.4	1.11	14.6	102	4.85
	3.8	2.1	4.9	395	15.8	10.2	0.65	0.85	18.6	18.6	395	18.4	1.25	14.1	113	4.33
	3.8	2.1	4.9	525	16.4	11.5	0.70	0.88	19.4	18.6	525	18.8	1.12	15.0	103	4.94
80	1.9	0.4	1.0	395	14.3	9.8	0.68	1.03	17.8	13.9	395	18.7	1.25	14.3	114	4.38
	1.9	0.4	1.0	525	14.9	11.1	0.74	1.07	18.5	13.9	525	19.2	1.12	15.3	104	5.00
	2.8	1.0	2.4	395	14.7	9.8	0.67	0.97	18.0	15.1	395	19.6	1.27	15.1	116	4.54
	2.8	1.0	2.4	525	15.3	11.1	0.73	1.01	18.7	15.1	525	20.1	1.14	16.2	105	5.18
	3.8	2.0	4.6	395	14.9	9.9	0.66	0.94	18.2	15.9	395	20.1	1.27	15.6	117	4.62
	3.8	2.0	4.6	525	15.6	11.2	0.72	0.98	18.9	15.9	525	20.6	1.14	16.6	106	5.27
85	1.9	0.4	0.9	395	13.8	9.6	0.70	1.1	17.5	12.8	395	19.5	1.26	15.0	116	4.52
	1.9	0.4	0.9	525	14.4	10.9	0.76	1.13	18.2	12.8	525	19.9	1.13	16.0	105	5.15
	2.8	1.0	2.3	395	14.2	9.7	0.68	1.02	17.7	13.9	395	20.4	1.28	15.9	118	4.68
	2.8	1.0	2.3	525	14.8	11.0	0.74	1.07	18.4	13.9	525	20.9	1.15	16.9	107	5.34
	3.8	1.9	4.4	395	14.5	9.8	0.67	0.99	17.9	14.7	395	20.9	1.29	16.3	119	4.77
	3.8	1.9	4.4	525	15.1	11.1	0.73	1.03	18.6	14.7	525	21.4	1.15	17.4	108	5.43
90	1.9	0.4	0.9	395	13.3	9.5	0.71	1.14	17.2	11.7	395	20.2	1.28	15.7	117	4.65
	1.9	0.4	0.9	525	13.9	10.7	0.77	1.19	18.0	11.7	525	20.7	1.15	16.8	107	5.30
	2.8	1.0	2.2	395	13.7	9.5	0.69	1.08	17.4	12.8	395	21.2	1.29	16.6	120	4.82
	2.8	1.0	2.2	525	14.3	10.8	0.75	1.12	18.1	12.8	525	21.7	1.16	17.7	108	5.49
	3.8	1.9	4.3	395	14.1	9.6	0.69	1.04	17.6	13.5	395	21.7	1.30	17.1	121	4.90
	3.8	1.9	4.3	525	14.6	10.9	0.74	1.08	18.3	13.5	525	22.2	1.17	18.2	109	5.59
100	1.9	0.4	0.8	395	12.4	9.2	0.74	1.25	16.6	9.9	Operation not recommended					
	1.9	0.4	0.8	525	12.9	10.4	0.80	1.31	17.3	9.9						
	2.8	0.9	2.1	395	12.8	9.2	0.72	1.19	16.8	10.8						
	2.8	0.9	2.1	525	13.3	10.4	0.78	1.23	17.5	10.8						
	3.8	1.8	4.1	395	13.1	9.3	0.71	1.15	17.0	11.4						
	3.8	1.8	4.1	525	13.6	10.5	0.77	1.20	17.7	11.4						
110	1.9	0.3	0.7	395	11.3	8.8	0.78	1.37	16.0	8.3						
	1.9	0.3	0.7	525	11.8	10.0	0.84	1.43	16.7	8.3						
	2.8	0.8	1.9	395	11.8	8.9	0.75	1.30	16.2	9.0						
	2.8	0.8	1.9	525	12.2	10.0	0.82	1.36	16.9	9.0						
	3.8	1.7	3.9	395	12.1	9.0	0.74	1.27	16.4	9.5						
	3.8	1.7	3.9	525	12.6	10.2	0.81	1.32	17.1	9.5						
120	1.9	0.3	0.7	395	10.3	8.5	0.82	1.50	15.5	6.9						
	1.9	0.3	0.7	525	10.8	9.6	0.89	1.56	16.1	6.9						
	2.8	0.8	1.8	395	10.7	8.5	0.79	1.43	15.6	7.5						
	2.8	0.8	1.8	525	11.2	9.6	0.86	1.48	16.2	7.5						
	3.8	1.6	3.7	395	11.0	8.6	0.78	1.39	15.8	7.9						
	3.8	1.6	3.7	525	11.5	9.8	0.85	1.45	16.4	7.9						

Interpolation is permissible; extrapolation is not.
All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.
AHRI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
All performance is based upon the lower voltage of dual voltage rated 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 upon 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.

Performance Data – HBH/V 015 (ECM Blower)

500 CFM Nominal (Rated) Airflow

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F							Heating - EAT 70°F					
		PSI	FT	Airflow CFM	TC	SC	Sens/Tot Ratio	kW	HR	EER	Airflow CFM	HC	kW	HE	LAT	COP
20	3.8	4.1	9.5	Operation not recommended							395	9.6	1.01	6.1	92.0	2.8
	3.8	4.1	9.5								525	9.6	0.90	6.5	87.0	3.1
30	1.9	1.0	2.3	395	17.3	10.8	0.62	0.55	19.2	31.3	395	10.6	1.03	7.1	95.0	3.0
	1.9	1.0	2.3	525	18.1	12.2	0.67	0.58	20.1	31.0	525	10.7	0.92	7.5	89.0	3.4
	2.8	1.8	4.3	395	17.5	10.8	0.62	0.50	19.2	34.8	395	11.1	1.05	7.5	96.0	3.1
	2.8	1.8	4.3	525	18.2	12.2	0.67	0.53	20.0	34.1	525	11.2	0.93	8.0	90.0	3.5
	3.8	3.3	7.7	395	17.5	10.8	0.62	0.48	19.1	36.2	395	11.3	1.05	7.7	97.0	3.1
	3.8	3.3	7.7	525	18.3	12.2	0.67	0.51	20.1	35.6	525	11.4	0.94	8.2	90.0	3.5
40	1.9	0.8	1.8	395	17.0	10.6	0.62	0.62	19.1	27.3	395	12.2	1.07	8.5	99.0	3.3
	1.9	0.8	1.8	525	17.7	12.0	0.68	0.65	19.9	27.1	525	12.4	0.96	9.1	92.0	3.8
	2.8	1.6	3.6	395	17.2	10.7	0.62	0.57	19.2	30.0	395	12.7	1.08	9.0	100.0	3.4
	2.8	1.6	3.6	525	18.0	12.1	0.67	0.60	20.1	29.8	525	13.0	0.97	9.7	93.0	3.9
	3.8	2.9	6.6	395	17.4	10.8	0.62	0.54	19.3	32.0	395	13.0	1.09	9.3	101.0	3.5
	3.8	2.9	6.6	525	18.1	12.2	0.67	0.57	20.1	31.6	525	13.3	0.97	10.0	94.0	4.0
50	1.9	0.6	1.5	395	16.4	10.4	0.63	0.70	18.8	23.3	395	13.8	1.10	10.0	103.0	3.7
	1.9	0.6	1.5	525	17.1	11.8	0.69	0.73	19.6	23.3	525	14.1	0.99	10.7	95.0	4.2
	2.8	1.4	3.1	395	16.8	10.6	0.63	0.65	19.0	25.7	395	14.4	1.12	10.6	104.0	3.8
	2.8	1.4	3.1	525	17.5	12.0	0.69	0.68	19.8	25.6	525	14.7	1.00	11.3	96.0	4.3
	3.8	2.5	5.8	395	17.0	10.6	0.62	0.62	19.1	27.3	395	14.7	1.12	10.9	105.0	3.8
	3.8	2.5	5.8	525	17.7	12.0	0.68	0.65	19.9	27.1	525	15.1	1.00	11.7	97.0	4.4
60	1.9	0.6	1.3	395	15.7	10.2	0.65	0.78	18.4	20.0	395	15.4	1.14	11.5	106.0	3.9
	1.9	0.6	1.3	525	16.4	11.5	0.70	0.82	19.2	19.9	525	15.7	1.01	12.2	98.0	4.5
	2.8	1.2	2.8	395	16.2	10.4	0.64	0.73	18.7	22.1	395	16.0	1.15	12.1	108.0	4.1
	2.8	1.2	2.8	525	16.9	11.7	0.69	0.76	19.5	22.1	525	16.5	1.03	13.0	99.0	4.7
	3.8	2.3	5.3	395	16.4	10.4	0.63	0.70	18.8	23.3	395	16.5	1.16	12.5	109.0	4.1
	3.8	2.3	5.3	525	17.1	11.8	0.69	0.73	19.6	23.3	525	16.8	1.03	13.3	100.0	4.8
70	1.9	0.5	1.1	395	15.2	10.1	0.66	0.87	18.2	17.4	395	16.9	1.16	12.9	110.0	4.2
	1.9	0.5	1.1	525	15.8	11.4	0.72	0.91	18.9	17.3	525	17.4	1.04	13.8	101.0	4.9
	2.8	1.1	2.5	395	15.5	10.1	0.65	0.82	18.3	18.8	395	17.7	1.18	13.7	112.0	4.4
	2.8	1.1	2.5	525	16.1	11.4	0.71	0.85	19.0	18.9	525	18.2	1.05	14.6	102.0	5.1
	3.8	2.1	4.9	395	15.8	10.2	0.65	0.79	18.5	19.9	395	18.2	1.19	14.1	113.0	4.5
	3.8	2.1	4.9	525	16.4	11.5	0.70	0.82	19.2	19.9	525	18.6	1.06	15.0	103.0	5.1
80	1.9	0.4	1.0	395	14.3	9.8	0.69	0.97	17.6	14.7	395	18.4	1.19	14.3	114.0	4.5
	1.9	0.4	1.0	525	14.9	11.1	0.74	1.01	18.4	14.7	525	18.9	1.06	15.3	104.0	5.2
	2.8	1.0	2.4	395	14.7	9.8	0.67	0.91	17.8	16.1	395	19.2	1.21	15.1	116.0	4.6
	2.8	1.0	2.4	525	15.3	11.1	0.73	0.95	18.6	16.0	525	19.9	1.08	16.2	105.0	5.4
	3.8	2.0	4.6	395	14.9	9.9	0.66	0.88	17.9	16.9	395	19.7	1.21	15.6	117.0	4.8
	3.8	2.0	4.6	525	15.6	11.2	0.72	0.92	18.8	16.9	525	20.3	1.08	16.6	106.0	5.5
85	1.9	0.4	0.9	395	13.8	9.6	0.70	1.04	17.4	13.2	395	19.1	1.20	15.0	116.0	4.7
	1.9	0.4	0.9	525	14.4	10.9	0.76	1.07	18.1	13.4	525	19.7	1.07	16.0	105.0	5.4
	2.8	1.0	2.3	395	14.2	9.7	0.68	0.96	17.5	14.7	395	20.1	1.22	15.9	118.0	4.8
	2.8	1.0	2.3	525	14.8	11.0	0.74	1.01	18.3	14.6	525	20.6	1.09	16.9	107.0	5.5
	3.8	1.9	4.4	395	14.5	9.8	0.68	0.93	17.7	15.5	395	20.5	1.23	16.3	119.0	4.9
	3.8	1.9	4.4	525	15.1	11.1	0.74	0.97	18.4	15.5	525	21.1	1.09	17.4	108.0	5.7
90	1.9	0.4	0.9	395	13.3	9.5	0.71	1.08	17.0	12.3	395	19.9	1.22	15.7	117.0	4.8
	1.9	0.4	0.9	525	13.9	10.7	0.77	1.13	17.8	12.3	525	20.5	1.09	16.8	107.0	5.5
	2.8	1.0	2.2	395	13.7	9.5	0.69	1.02	17.2	13.4	395	20.8	1.23	16.6	120.0	4.9
	2.8	1.0	2.2	525	14.3	10.8	0.76	1.06	17.9	13.4	525	21.5	1.10	17.7	108.0	5.7
	3.8	1.9	4.3	395	14.1	9.6	0.68	0.98	17.5	14.3	395	21.3	1.24	17.1	121.0	5.0
	3.8	1.9	4.3	525	14.6	10.9	0.75	1.02	18.1	14.3	525	22.0	1.11	18.2	109.0	5.8
100	1.9	0.4	0.8	395	12.4	9.2	0.74	1.19	16.5	10.4	Operation not recommended					
	1.9	0.4	0.8	525	12.9	10.4	0.81	1.25	17.2	10.3						
	2.8	0.9	2.1	395	12.8	9.2	0.72	1.13	16.7	11.3						
	2.8	0.9	2.1	525	13.3	10.4	0.78	1.17	17.3	11.3						
	3.8	1.8	4.1	395	13.1	9.3	0.71	1.09	16.8	12.0						
	3.8	1.8	4.1	525	13.6	10.5	0.77	1.14	17.5	11.9						
110	1.9	0.3	0.7	395	11.3	8.8	0.78	1.31	15.8	8.6						
	1.9	0.3	0.7	525	11.8	10.0	0.85	1.37	16.5	8.6						
	2.8	0.8	1.9	395	11.8	8.9	0.75	1.24	16.0	9.5						
	2.8	0.8	1.9	525	12.2	10.0	0.82	1.30	16.6	9.4						
	3.8	1.7	3.9	395	12.1	9.0	0.74	1.21	16.2	10.0						
	3.8	1.7	3.9	525	12.6	10.2	0.81	1.26	16.9	10.0						
120	1.9	0.3	0.7	395	10.3	8.5	0.83	1.44	15.2	7.1						
	1.9	0.3	0.7	525	10.8	9.6	0.89	1.50	15.9	7.2						
	2.8	0.8	1.8	395	10.7	8.5	0.79	1.37	15.4	7.8						
	2.8	0.8	1.8	525	11.2	9.6	0.86	1.42	16.1	7.9						
	3.8	1.6	3.7	395	11.0	8.6	0.78	1.33	15.5	8.2						
	3.8	1.6	3.7	525	11.5	9.8	0.85	1.39	16.3	8.3						

Interpolation is permissible; extrapolation is not.
All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.
AHRI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
All performance is based upon the lower voltage of dual voltage rated 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 upon 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.

Performance Data – HBH/V 018 (PSC Blower)

600 CFM Nominal (Rated) Airflow

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F							Heating - EAT 70°F					
		PSI	FT	Airflow CFM	TC	SC	Sens/Tot Ratio	kW	HR	EER	Airflow CFM	HC	kW	HE	LAT	COP
20	4.5	7.2	16.7	Operation not recommended							450	11.2	1.25	7.2	93	2.61
	4.5	7.2	16.7								600	11.4	1.13	7.6	88	2.98
30	2.3	2.1	4.9	450	22.1	14.2	0.64	0.72	24.5	30.7	450	12.4	1.29	8.2	96	2.83
	2.3	2.1	4.9	600	23.0	16.1	0.70	0.75	25.5	30.8	600	12.7	1.16	8.8	90	3.22
	3.4	3.4	7.9	450	22.9	14.4	0.63	0.64	25.1	35.8	450	12.9	1.30	8.7	97	2.92
	3.4	3.4	7.9	600	23.9	16.3	0.68	0.67	26.1	35.8	600	13.3	1.17	9.3	90	3.33
	4.5	5.9	13.7	450	23.3	14.4	0.62	0.60	25.3	39.0	450	13.2	1.31	9.0	97	2.97
	4.5	5.9	13.7	600	24.3	16.3	0.67	0.62	26.4	39.0	600	13.5	1.17	9.6	91	3.38
40	2.3	1.7	3.9	450	21.1	13.9	0.66	0.82	23.9	25.6	450	14.3	1.33	9.9	99	3.15
	2.3	1.7	3.9	600	22.0	15.7	0.72	0.86	24.9	25.6	600	14.7	1.20	10.6	93	3.59
	3.4	2.9	6.7	450	21.9	14.2	0.65	0.75	24.4	29.3	450	15.0	1.35	10.5	101	3.26
	3.4	2.9	6.7	600	22.8	16.0	0.70	0.78	25.4	29.3	600	15.3	1.21	11.2	94	3.72
	4.5	5.1	11.8	450	22.5	14.5	0.64	0.71	24.9	31.9	450	15.3	1.35	10.8	102	3.32
	4.5	5.1	11.8	600	23.5	16.4	0.70	0.74	25.9	31.9	600	15.7	1.22	11.6	94	3.78
50	2.3	1.4	3.3	450	20.4	13.7	0.67	0.93	23.5	21.9	450	16.3	1.37	11.7	103	3.47
	2.3	1.4	3.3	600	21.2	15.5	0.73	0.97	24.5	22.0	600	16.6	1.23	12.5	96	3.96
	3.4	2.6	5.9	450	20.8	13.8	0.66	0.85	23.7	24.4	450	17.0	1.39	12.4	105	3.60
	3.4	2.6	5.9	600	21.7	15.6	0.72	0.89	24.7	24.4	600	17.4	1.25	13.2	97	4.10
	4.5	4.6	10.6	450	21.2	13.9	0.66	0.81	23.9	26.1	450	17.4	1.39	12.7	106	3.67
	4.5	4.6	10.6	600	22.1	15.8	0.72	0.85	24.9	26.1	600	17.9	1.25	13.6	98	4.18
60	2.3	1.3	2.9	450	19.3	13.2	0.68	1.04	22.8	18.6	450	18.2	1.41	13.4	107	3.79
	2.3	1.3	2.9	600	20.1	14.9	0.74	1.08	23.8	18.6	600	18.6	1.26	14.3	99	4.32
	3.4	2.3	5.3	450	19.8	13.4	0.68	0.96	23.0	20.6	450	19.1	1.42	14.2	109	3.93
	3.4	2.3	5.3	600	20.6	15.1	0.73	1.00	24.0	20.6	600	19.6	1.28	15.2	100	4.49
	4.5	4.2	9.6	450	20.1	13.5	0.67	0.92	23.3	21.9	450	19.6	1.43	14.7	110	4.01
	4.5	4.2	9.6	600	21.0	15.3	0.73	0.96	24.2	21.9	600	20.1	1.29	15.7	101	4.58
70	2.3	1.1	2.6	450	18.2	12.7	0.69	1.15	22.1	15.8	450	20.2	1.44	15.2	112	4.11
	2.3	1.1	2.6	600	19.0	14.3	0.76	1.20	23.1	15.8	600	20.7	1.29	16.2	102	4.68
	3.4	2.1	4.9	450	18.7	12.8	0.69	1.07	22.3	17.4	450	21.2	1.46	16.1	114	4.27
	3.4	2.1	4.9	600	19.4	14.5	0.75	1.12	23.2	17.4	600	21.7	1.31	17.2	103	4.86
	4.5	3.9	8.9	450	19.1	13.0	0.68	1.03	22.6	18.4	450	21.7	1.46	16.6	115	4.35
	4.5	3.9	8.9	600	19.8	14.7	0.74	1.08	23.5	18.4	600	22.3	1.32	17.8	104	4.96
80	2.3	1.0	2.3	450	17.0	12.1	0.71	1.28	21.4	13.3	450	22.1	1.47	17.0	116	4.41
	2.3	1.0	2.3	600	17.7	13.7	0.77	1.33	22.3	13.3	600	22.7	1.32	18.2	105	5.03
	3.4	2.0	4.5	450	17.5	12.3	0.70	1.20	21.6	14.7	450	23.3	1.49	18.0	118	4.59
	3.4	2.0	4.5	600	18.3	13.9	0.76	1.25	22.5	14.7	600	23.9	1.34	19.3	107	5.23
	4.5	3.6	8.3	450	17.9	12.5	0.69	1.15	21.9	15.5	450	23.9	1.50	18.6	119	4.68
	4.5	3.6	8.3	600	18.7	14.1	0.76	1.20	22.8	15.5	600	24.5	1.35	19.9	108	5.34
85	2.3	1.0	2.2	450	16.4	11.8	0.72	1.35	21.0	12.2	450	23.1	1.49	17.9	118	4.56
	2.3	1.0	2.2	600	17.1	13.3	0.78	1.40	21.9	12.2	600	23.7	1.33	19.1	107	5.20
	3.4	1.9	4.4	450	16.9	12.0	0.71	1.26	21.2	13.5	450	24.3	1.50	19.0	120	4.74
	3.4	1.9	4.4	600	17.6	13.5	0.77	1.31	22.1	13.5	600	24.9	1.35	20.3	108	5.41
	4.5	3.5	8.1	450	17.3	12.2	0.70	1.22	21.5	14.3	450	25.0	1.51	19.6	121	4.84
	4.5	3.5	8.1	600	18.0	13.8	0.76	1.27	22.4	14.3	600	25.6	1.36	20.9	110	5.51
90	2.3	0.9	2.1	450	15.8	11.5	0.73	1.42	20.6	11.1	450	24.1	1.50	18.8	120	4.71
	2.3	0.9	2.1	600	16.4	13.0	0.79	1.48	21.5	11.1	600	24.7	1.35	20.1	108	5.37
	3.4	1.8	4.2	450	16.3	11.7	0.71	1.33	20.8	12.3	450	25.4	1.52	20.0	122	4.89
	3.4	1.8	4.2	600	17.0	13.2	0.78	1.38	21.7	12.3	600	26.0	1.37	21.3	110	5.58
	4.5	3.4	7.9	450	16.7	11.9	0.71	1.28	21.1	13.0	450	26.1	1.53	20.6	124	4.99
	4.5	3.4	7.9	600	17.4	13.4	0.77	1.34	22.0	13.0	600	26.7	1.38	22.0	111	5.69
100	2.3	0.9	2.0	450	14.4	10.8	0.75	1.57	19.8	9.2	Operation not recommended					
	2.3	0.9	2.0	600	15.0	12.2	0.82	1.63	20.6	9.2						
	3.4	1.7	4.0	450	15.0	11.0	0.74	1.48	20.0	10.1						
	3.4	1.7	4.0	600	15.6	12.5	0.80	1.54	20.8	10.1						
	4.5	3.2	7.4	450	15.4	11.2	0.73	1.43	20.3	10.8						
	4.5	3.2	7.4	600	16.0	12.7	0.79	1.49	21.1	10.8						
110	2.3	0.8	1.8	450	12.9	10.1	0.78	1.74	18.8	7.4						
	2.3	0.8	1.8	600	13.4	11.4	0.85	1.81	19.6	7.4						
	3.4	1.6	3.8	450	13.5	10.3	0.76	1.64	19.1	8.2						
	3.4	1.6	3.8	600	14.0	11.6	0.83	1.71	19.9	8.2						
	4.5	3.1	7.1	450	13.9	10.5	0.75	1.59	19.4	8.8						
	4.5	3.1	7.1	600	14.5	11.9	0.82	1.65	20.2	8.8						
120	2.3	0.7	1.7	450	11.2	9.2	0.82	1.92	17.8	5.8						
	2.3	0.7	1.7	600	11.6	10.4	0.89	2.00	18.5	5.8						
	3.4	1.6	3.6	450	11.8	9.5	0.80	1.82	18.1	6.5						
	3.4	1.6	3.6	600	12.3	10.7	0.87	1.89	18.8	6.5						
	4.5	2.9	6.8	450	12.3	9.7	0.79	1.77	18.4	7.0						
	4.5	2.9	6.8	600	12.8	11.0	0.86	1.84	19.1	7.0						

Interpolation is permissible; extrapolation is not.
All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.
AHRI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
All performance is based upon the lower voltage of dual voltage rated 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 upon 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.

Performance Data – HBH/V 018 (ECM Blower)

600 CFM Nominal (Rated) Airflow

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F							Heating - EAT 70°F					
		PSI	FT	Airflow CFM	TC	SC	Sens/Tot Ratio	kW	HR	EER	Airflow CFM	HC	kW	HE	LAT	COP
20	4.5	7.2	16.7	Operation not recommended							450	11.3	1.20	7.2	92.0	2.8
	4.5	7.2	16.7								600	11.2	1.10	7.6	87.0	3.1
30	2.3	2.1	4.9	450	22.1	14.2	0.64	0.66	24.3	33.5	450	12.4	1.20	8.2	95.0	3.0
	2.3	2.1	4.9	600	23.0	16.1	0.70	0.69	25.4	33.4	600	12.5	1.10	8.8	89.0	3.3
	3.4	3.4	7.9	450	22.9	14.4	0.63	0.58	24.9	39.6	450	12.9	1.20	8.7	96.0	3.1
	3.4	3.4	7.9	600	23.9	16.3	0.68	0.61	26.0	39.2	600	13.1	1.10	9.3	90.0	3.5
	4.5	5.9	13.7	450	23.3	14.4	0.62	0.54	25.1	43.2	450	13.3	1.20	9.0	97.0	3.1
	4.5	5.9	13.7	600	24.3	16.3	0.67	0.56	26.2	43.5	600	13.4	1.10	9.6	90.0	3.5
40	2.3	1.7	3.9	450	21.1	13.9	0.66	0.76	23.7	27.8	450	14.2	1.30	9.9	99.0	3.3
	2.3	1.7	3.9	600	22.0	15.7	0.71	0.80	24.7	27.5	600	14.5	1.10	10.6	92.0	3.7
	3.4	2.9	6.7	450	21.9	14.2	0.65	0.69	24.3	31.8	450	14.9	1.30	10.5	100.0	3.4
	3.4	2.9	6.7	600	22.8	16.0	0.70	0.72	25.3	31.7	600	15.1	1.10	11.2	93.0	3.9
	4.5	5.1	11.8	450	22.5	14.5	0.64	0.65	24.7	34.7	450	15.2	1.30	10.8	101.0	3.5
	4.5	5.1	11.8	600	23.5	16.4	0.70	0.68	25.8	34.6	600	15.6	1.20	11.6	94.0	3.9
50	2.3	1.4	3.3	450	20.4	13.7	0.67	0.87	23.4	23.5	450	16.2	1.30	11.7	103.0	3.6
	2.3	1.4	3.3	600	21.2	15.5	0.73	0.91	24.3	23.3	600	16.5	1.20	12.5	95.0	4.1
	3.4	2.6	5.9	450	20.8	13.8	0.66	0.79	23.5	26.4	450	16.9	1.30	12.4	104.0	3.7
	3.4	2.6	5.9	600	21.7	15.6	0.72	0.83	24.5	26.2	600	17.3	1.20	13.2	96.0	4.3
	4.5	4.6	10.6	450	21.2	13.9	0.66	0.75	23.8	28.3	450	17.2	1.30	12.7	105.0	3.8
	4.5	4.6	10.6	600	22.1	15.8	0.71	0.79	24.8	28.0	600	17.7	1.20	13.6	97.0	4.4
60	2.3	1.3	2.9	450	19.3	13.2	0.68	0.98	22.6	19.7	450	18.0	1.30	13.4	106.0	3.9
	2.3	1.3	2.9	600	20.1	14.9	0.74	1.02	23.6	19.7	600	18.4	1.20	14.3	98.0	4.5
	3.4	2.3	5.3	450	19.8	13.4	0.68	0.90	22.9	22.0	450	18.8	1.40	14.2	108.0	4.1
	3.4	2.3	5.3	600	20.6	15.1	0.73	0.94	23.8	21.9	600	19.4	1.20	15.2	99.0	4.7
	4.5	4.2	9.6	450	20.1	13.5	0.67	0.86	23.0	23.4	450	19.4	1.40	14.7	109.0	4.1
	4.5	4.2	9.6	600	21.0	15.3	0.73	0.90	24.1	23.4	600	19.9	1.20	15.7	100.0	4.7
70	2.3	1.1	2.6	450	18.2	12.7	0.70	1.09	21.9	16.7	450	19.9	1.40	15.2	110.0	4.2
	2.3	1.1	2.6	600	19.0	14.3	0.75	1.14	22.9	16.7	600	20.4	1.20	16.2	101.0	4.9
	3.4	2.1	4.9	450	18.7	12.8	0.68	1.01	22.1	18.5	450	20.9	1.40	16.1	112.0	4.4
	3.4	2.1	4.9	600	19.4	14.5	0.75	1.06	23.0	18.3	600	21.5	1.20	17.2	102.0	5.0
	4.5	3.9	8.9	450	19.1	13.0	0.68	0.97	22.4	19.7	450	21.4	1.40	16.6	113.0	4.5
	4.5	3.9	8.9	600	19.8	14.7	0.74	1.02	23.3	19.4	600	22.1	1.30	17.8	103.0	5.1
80	2.3	1.0	2.3	450	17.0	12.1	0.71	1.22	21.2	13.9	450	21.8	1.40	17.0	114.0	4.5
	2.3	1.0	2.3	600	17.7	13.7	0.77	1.27	22.0	13.9	600	22.5	1.30	18.2	104.0	5.2
	3.4	2.0	4.5	450	17.5	12.3	0.70	1.14	21.4	15.4	450	22.9	1.40	18.0	116.0	4.7
	3.4	2.0	4.5	600	18.3	13.9	0.76	1.19	22.4	15.4	600	23.7	1.30	19.3	105.0	5.4
	4.5	3.6	8.3	450	17.9	12.5	0.70	1.09	21.6	16.4	450	23.5	1.40	18.6	117.0	4.8
	4.5	3.6	8.3	600	18.7	14.1	0.75	1.14	22.6	16.4	600	24.3	1.30	19.9	106.0	5.5
85	2.3	1.0	2.2	450	16.4	11.8	0.72	1.29	20.8	12.7	450	22.8	1.40	17.9	116.0	4.7
	2.3	1.0	2.2	600	17.1	13.3	0.78	1.34	21.7	12.8	600	23.4	1.30	19.1	105.0	5.4
	3.4	1.9	4.4	450	16.9	12.0	0.71	1.20	21.0	14.1	450	23.9	1.40	19.0	118.0	4.9
	3.4	1.9	4.4	600	17.6	13.5	0.77	1.25	21.9	14.1	600	24.7	1.30	20.3	107.0	5.6
	4.5	3.5	8.1	450	17.3	12.2	0.71	1.16	21.3	14.9	450	24.5	1.40	19.6	119.0	5.0
	4.5	3.5	8.1	600	18.0	13.8	0.77	1.21	22.1	14.9	600	25.3	1.30	20.9	108.0	5.7
90	2.3	0.9	2.1	450	15.8	11.5	0.73	1.36	20.4	11.6	450	23.7	1.40	18.8	117.0	4.8
	2.3	0.9	2.1	600	16.4	13.0	0.79	1.42	21.2	11.6	600	24.5	1.30	20.1	107.0	5.6
	3.4	1.8	4.2	450	16.3	11.7	0.72	1.27	20.6	12.8	450	25.0	1.50	20.0	120.0	5.0
	3.4	1.8	4.2	600	17.0	13.2	0.78	1.32	21.5	12.9	600	25.8	1.30	21.3	108.0	5.8
	4.5	3.4	7.9	450	16.7	11.9	0.71	1.22	20.9	13.7	450	25.6	1.50	20.6	121.0	5.1
	4.5	3.4	7.9	600	17.4	13.4	0.77	1.28	21.8	13.6	600	26.5	1.30	22.0	109.0	5.9
100	2.3	0.9	2.0	450	14.4	10.8	0.75	1.51	19.5	9.5	Operation not recommended					
	2.3	0.9	2.0	600	15.0	12.2	0.81	1.57	20.4	9.6						
	3.4	1.7	4.0	450	15.0	11.0	0.73	1.42	19.8	10.6						
	3.4	1.7	4.0	600	15.6	12.5	0.80	1.48	20.6	10.5						
	4.5	3.2	7.4	450	15.4	11.2	0.73	1.37	20.1	11.2						
	4.5	3.2	7.4	600	16.0	12.7	0.79	1.43	20.9	11.2						
110	2.3	0.8	1.8	450	12.9	10.1	0.78	1.68	18.6	7.7						
	2.3	0.8	1.8	600	13.4	11.4	0.85	1.75	19.4	7.7						
	3.4	1.6	3.8	450	13.5	10.3	0.76	1.58	18.9	8.5						
	3.4	1.6	3.8	600	14.0	11.6	0.83	1.65	19.6	8.5						
	4.5	3.1	7.1	450	13.9	10.5	0.76	1.53	19.1	9.1						
	4.5	3.1	7.1	600	14.5	11.9	0.82	1.59	19.9	9.1						
120	2.3	0.7	1.7	450	11.2	9.2	0.82	1.86	17.5	6.0						
	2.3	0.7	1.7	600	11.6	10.4	0.90	1.94	18.2	6.0						
	3.4	1.6	3.6	450	11.8	9.5	0.81	1.76	17.8	6.7						
	3.4	1.6	3.6	600	12.3	10.7	0.87	1.83	18.5	6.7						
	4.5	2.9	6.8	450	12.3	9.7	0.79	1.71	18.1	7.2						
	4.5	2.9	6.8	600	12.8	11.0	0.86	1.78	18.9	7.2						

Interpolation is permissible; extrapolation is not.
All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.
AHRI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
All performance is based upon the lower voltage of dual voltage rated 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 upon 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.

Performance Data – HBH/V 024 (PSC Blower)

800 CFM Nominal (Rated) Airflow

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F							Heating - EAT 70°F					
		PSI	FT	Airflow CFM	TC	SC	Sens/Tot Ratio	kW	HR	EER	Airflow CFM	HC	kW	HE	LAT	COP
20	6.0	8.5	19.6	Operation not recommended							640	15.5	1.91	9.5	92	2.39
	6.0	8.5	19.6								850	15.9	1.71	10.1	87	2.72
30	3.0	2.2	5.2	640	27.7	17.4	0.63	1.12	31.5	24.8	640	17.2	1.93	11.0	95	2.61
	3.0	2.2	5.2	850	28.9	19.7	0.68	1.16	32.8	24.8	850	17.6	1.74	11.8	89	2.98
	4.5	4.0	9.3	640	28.2	17.5	0.62	1.05	31.8	26.9	640	18.0	1.95	11.7	96	2.70
	4.5	4.0	9.3	850	29.4	19.8	0.67	1.09	33.1	26.9	850	18.4	1.75	12.5	90	3.08
	6.0	7.2	16.7	640	28.5	17.5	0.62	1.02	31.9	28.0	640	18.4	1.95	12.1	97	2.76
	6.0	7.2	16.7	850	29.6	19.8	0.67	1.06	33.2	28.0	850	18.8	1.76	12.9	91	3.14
40	3.0	1.9	4.4	640	26.9	17.1	0.64	1.23	31.1	21.9	640	19.9	1.98	13.4	99	2.94
	3.0	1.9	4.4	850	28.0	19.4	0.69	1.28	32.4	21.9	850	20.4	1.78	14.4	92	3.36
	4.5	3.6	8.2	640	27.5	17.3	0.63	1.15	31.4	24.0	640	20.8	2.00	14.3	100	3.06
	4.5	3.6	8.2	850	28.7	19.6	0.68	1.19	32.7	24.0	850	21.3	1.79	15.3	93	3.49
	6.0	6.4	14.9	640	27.8	17.4	0.63	1.11	31.5	25.1	640	21.3	2.01	14.7	101	3.12
	6.0	6.4	14.9	850	28.9	19.7	0.68	1.16	32.8	25.1	850	21.9	1.80	15.7	94	3.55
50	3.0	1.7	3.9	640	26.2	16.9	0.65	1.36	30.8	19.3	640	22.6	2.03	15.9	103	3.27
	3.0	1.7	3.9	850	27.3	19.1	0.70	1.42	32.1	19.3	850	23.2	1.82	17.0	95	3.72
	4.5	3.2	7.4	640	26.7	17.0	0.64	1.26	31.0	21.1	640	23.7	2.05	16.9	104	3.39
	4.5	3.2	7.4	850	27.8	19.3	0.69	1.32	32.2	21.1	850	24.3	1.84	18.0	96	3.87
	6.0	5.9	13.6	640	27.0	17.1	0.64	1.22	31.1	22.1	640	24.3	2.06	17.4	105	3.46
	6.0	5.9	13.6	850	28.1	19.4	0.69	1.27	32.4	22.1	850	24.9	1.85	18.6	97	3.94
60	3.0	1.5	3.5	640	25.3	16.6	0.66	1.52	30.4	16.7	640	25.3	2.08	18.3	107	3.57
	3.0	1.5	3.5	850	26.3	18.8	0.71	1.58	31.7	16.7	850	25.9	1.87	19.6	98	4.07
	4.5	3.0	6.9	640	25.7	16.7	0.65	1.40	30.5	18.3	640	26.6	2.10	19.4	108	3.70
	4.5	3.0	6.9	850	26.8	18.9	0.70	1.46	31.7	18.3	850	27.2	1.89	20.7	100	4.22
	6.0	5.5	12.6	640	26.1	16.8	0.64	1.35	30.6	19.3	640	27.2	2.12	20.0	109	3.77
	6.0	5.5	12.6	850	27.1	19.0	0.70	1.41	31.9	19.3	850	27.9	1.90	21.4	100	4.30
70	3.0	1.4	3.2	640	24.1	16.2	0.67	1.70	29.9	14.2	640	27.9	2.13	20.7	110	3.84
	3.0	1.4	3.2	850	25.1	18.3	0.73	1.77	31.1	14.2	850	28.6	1.91	22.1	101	4.38
	4.5	2.8	6.4	640	24.6	16.3	0.66	1.57	30.0	15.7	640	29.2	2.16	21.8	112	3.97
	4.5	2.8	6.4	850	25.6	18.4	0.72	1.63	31.2	15.7	850	29.9	1.94	23.3	103	4.53
	6.0	5.2	11.9	640	25.0	16.4	0.66	1.51	30.1	16.6	640	29.9	2.17	22.5	113	4.04
	6.0	5.2	11.9	850	26.0	18.6	0.71	1.57	31.4	16.6	850	30.6	1.95	24.0	103	4.60
80	3.0	1.3	3.0	640	22.9	15.7	0.69	1.91	29.4	12.0	640	30.4	2.18	22.9	114	4.08
	3.0	1.3	3.0	850	23.8	17.8	0.75	1.99	30.6	12.0	850	31.1	1.96	24.4	104	4.65
	4.5	2.6	6.1	640	23.4	15.8	0.67	1.76	29.4	13.3	640	31.7	2.21	24.0	116	4.20
	4.5	2.6	6.1	850	24.4	17.9	0.73	1.84	30.7	13.3	850	32.5	1.99	25.7	105	4.79
	6.0	4.9	11.3	640	23.8	16.0	0.67	1.70	29.6	14.1	640	32.4	2.23	24.6	117	4.26
	6.0	4.9	11.3	850	24.8	18.1	0.73	1.77	30.8	14.1	850	33.1	2.00	26.3	106	4.85
85	3.0	1.3	2.9	640	22.2	15.5	0.70	2.03	29.2	11.0	640	31.5	2.21	23.8	116	4.18
	3.0	1.3	2.9	850	23.1	17.5	0.76	2.12	30.4	11.0	850	32.3	1.98	25.5	105	4.77
	4.5	2.6	5.9	640	22.8	15.6	0.68	1.88	29.2	12.2	640	32.7	2.24	25.0	117	4.29
	4.5	2.6	5.9	850	23.7	17.6	0.74	1.95	30.4	12.2	850	33.5	2.01	26.7	107	4.89
	6.0	4.8	11.0	640	23.2	15.7	0.68	1.80	29.3	12.9	640	33.4	2.25	25.5	118	4.34
	6.0	4.8	11.0	850	24.1	17.8	0.74	1.88	30.5	12.9	850	34.2	2.02	27.2	107	4.95
90	3.0	1.2	2.8	640	21.6	15.3	0.71	2.16	28.9	10.0	640	32.6	2.23	24.8	117	4.28
	3.0	1.2	2.8	850	22.4	17.3	0.77	2.25	30.1	10.0	850	33.4	2.01	26.5	106	4.88
	4.5	2.5	5.8	640	22.2	15.4	0.69	1.99	29.0	11.1	640	33.8	2.26	25.9	119	4.38
	4.5	2.5	5.8	850	23.1	17.4	0.75	2.07	30.1	11.1	850	34.6	2.03	27.6	108	4.99
	6.0	4.7	10.7	640	22.5	15.4	0.69	1.91	29.0	11.8	640	34.4	2.28	26.4	120	4.42
	6.0	4.7	10.7	850	23.4	17.5	0.75	1.99	30.2	11.8	850	35.2	2.05	28.2	108	5.04
100	3.0	1.2	2.7	640	20.2	14.8	0.74	2.44	28.5	8.3	Operation not recommended					
	3.0	1.2	2.7	850	21.0	16.8	0.80	2.54	29.7	8.3						
	4.5	2.4	5.5	640	20.8	14.9	0.72	2.25	28.5	9.2						
	4.5	2.4	5.5	850	21.6	16.9	0.78	2.34	29.7	9.2						
	6.0	4.5	10.3	640	21.1	15.0	0.71	2.16	28.5	9.8						
	6.0	4.5	10.3	850	22.0	17.0	0.77	2.25	29.7	9.8						
110	3.0	1.1	2.5	640	18.8	14.4	0.77	2.77	28.3	6.8						
	3.0	1.1	2.5	850	19.5	16.3	0.84	2.88	29.4	6.8						
	4.5	2.3	5.3	640	19.3	14.4	0.75	2.55	28.1	7.6						
	4.5	2.3	5.3	850	20.1	16.3	0.81	2.66	29.2	7.6						
	6.0	4.3	9.9	640	19.7	14.5	0.74	2.45	28.1	8.0						
	6.0	4.3	9.9	850	20.5	16.4	0.80	2.55	29.3	8.0						
120	3.0	1.0	2.4	640	17.1	13.9	0.81	3.13	27.9	5.5						
	3.0	1.0	2.4	850	17.8	15.7	0.88	3.26	29.0	5.5						
	4.5	2.2	5.1	640	17.8	14.0	0.78	2.89	27.8	6.2						
	4.5	2.2	5.1	850	18.6	15.8	0.85	3.01	28.9	6.2						
	6.0	4.2	9.6	640	18.3	14.1	0.77	2.78	27.9	6.6						
	6.0	4.2	9.6	850	19.1	16.0	0.84	2.89	29.0	6.6						

Interpolation is permissible; extrapolation is not.
All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.
AHRI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
All performance is based upon the lower voltage of dual voltage rated 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 upon 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.

Performance Data – HBH/V 024 (ECM Blower)

800 CFM Nominal (Rated) Airflow

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F							Heating - EAT 70°F					
		PSI	FT	Airflow CFM	TC	SC	Sens/Tot Ratio	kW	HR	EER	Airflow CFM	HC	kW	HE	LAT	COP
20	6.0	8.5	19.6	Operation not recommended							640	15.9	1.87	9.5	92.0	2.5
	6.0	8.5	19.6								850	15.8	1.67	10.1	87.0	2.8
30	3.0	2.2	5.2	640	27.7	17.4	0.63	1.08	31.4	25.6	640	17.5	1.89	11.0	95.0	2.7
	3.0	2.2	5.2	850	28.9	19.7	0.68	1.12	32.7	25.8	850	17.6	1.70	11.8	89.0	3.0
	4.5	4.0	9.3	640	28.2	17.5	0.62	1.01	31.7	27.9	640	18.2	1.91	11.7	96.0	2.8
	4.5	4.0	9.3	850	29.4	19.8	0.67	1.05	33.0	28.0	850	18.3	1.71	12.5	90.0	3.1
	6.0	7.2	16.7	640	28.5	17.5	0.61	0.98	31.8	29.0	640	18.6	1.91	12.1	97.0	2.9
	6.0	7.2	16.7	850	29.6	19.8	0.67	1.02	33.1	29.0	850	18.8	1.72	12.9	90.0	3.2
40	3.0	1.9	4.4	640	26.9	17.1	0.64	1.19	31.0	22.6	640	20.0	1.94	13.4	99.0	3.0
	3.0	1.9	4.4	850	28.0	19.4	0.69	1.24	32.2	22.6	850	20.3	1.74	14.4	92.0	3.4
	4.5	3.6	8.2	640	27.5	17.3	0.63	1.11	31.3	24.7	640	21.0	1.96	14.3	100.0	3.1
	4.5	3.6	8.2	850	28.7	19.6	0.68	1.15	32.6	24.9	850	21.3	1.75	15.3	93.0	3.6
	6.0	6.4	14.9	640	27.8	17.4	0.63	1.07	31.5	25.9	640	21.4	1.97	14.7	101.0	3.2
	6.0	6.4	14.9	850	28.9	19.7	0.68	1.12	32.7	25.8	850	21.7	1.76	15.7	94.0	3.6
50	3.0	1.7	3.9	640	26.2	16.9	0.65	1.32	30.7	19.8	640	22.7	1.99	15.9	103.0	3.3
	3.0	1.7	3.9	850	27.3	19.1	0.70	1.38	32.0	19.8	850	23.1	1.78	17.0	95.0	3.8
	4.5	3.2	7.4	640	26.7	17.0	0.64	1.22	30.9	21.9	640	23.8	2.01	16.9	104.0	3.5
	4.5	3.2	7.4	850	27.8	19.3	0.69	1.28	32.2	21.7	850	24.1	1.80	18.0	96.0	3.9
	6.0	5.9	13.6	640	27.0	17.1	0.63	1.18	31.0	22.9	640	24.3	2.02	17.4	105.0	3.5
	6.0	5.9	13.6	850	28.1	19.4	0.69	1.23	32.3	22.8	850	24.8	1.81	18.6	97.0	4.0
60	3.0	1.5	3.5	640	25.3	16.6	0.66	1.48	30.4	17.1	640	25.3	2.04	18.3	106.0	3.6
	3.0	1.5	3.5	850	26.3	18.8	0.71	1.54	31.6	17.1	850	25.8	1.83	19.6	98.0	4.1
	4.5	3.0	6.9	640	25.7	16.7	0.65	1.36	30.3	18.9	640	26.4	2.06	19.4	108.0	3.8
	4.5	3.0	6.9	850	26.8	18.9	0.71	1.42	31.6	18.9	850	27.0	1.85	20.7	99.0	4.3
	6.0	5.5	12.6	640	26.1	16.8	0.64	1.31	30.6	19.9	640	27.1	2.08	20.0	109.0	3.8
	6.0	5.5	12.6	850	27.1	19.0	0.70	1.37	31.8	19.8	850	27.8	1.86	21.4	100.0	4.4
70	3.0	1.4	3.2	640	24.1	16.2	0.67	1.66	29.8	14.5	640	27.8	2.09	20.7	110.0	3.9
	3.0	1.4	3.2	850	25.1	18.3	0.73	1.73	31.0	14.5	850	28.5	1.87	22.1	101.0	4.5
	4.5	2.8	6.4	640	24.6	16.3	0.66	1.53	29.8	16.1	640	29.0	2.12	21.8	112.0	4.0
	4.5	2.8	6.4	850	25.6	18.4	0.72	1.59	31.0	16.1	850	29.8	1.90	23.3	102.0	4.6
	6.0	5.2	11.9	640	25.0	16.4	0.66	1.47	30.0	17.0	640	29.8	2.13	22.5	113.0	4.1
	6.0	5.2	11.9	850	26.0	18.6	0.72	1.53	31.2	17.0	850	30.5	1.91	24.0	103.0	4.7
80	3.0	1.3	3.0	640	22.9	15.7	0.69	1.87	29.3	12.2	640	30.2	2.14	22.9	114.0	4.1
	3.0	1.3	3.0	850	23.8	17.8	0.75	1.95	30.5	12.2	850	31.0	1.92	24.4	104.0	4.7
	4.5	2.6	6.1	640	23.4	15.8	0.68	1.72	29.3	13.6	640	31.4	2.17	24.0	116.0	4.2
	4.5	2.6	6.1	850	24.4	17.9	0.73	1.80	30.5	13.5	850	32.4	1.95	25.7	105.0	4.9
	6.0	4.9	11.3	640	23.8	16.0	0.67	1.66	29.5	14.3	640	32.1	2.19	24.6	117.0	4.3
	6.0	4.9	11.3	850	24.8	18.1	0.73	1.73	30.7	14.3	850	33.0	1.96	26.3	106.0	4.9
85	3.0	1.3	2.9	640	22.2	15.5	0.70	1.99	29.0	11.1	640	31.2	2.17	23.8	116.0	4.2
	3.0	1.3	2.9	850	23.1	17.5	0.76	2.08	30.2	11.1	850	32.1	1.94	25.5	105.0	4.8
	4.5	2.6	5.9	640	22.8	15.6	0.68	1.84	29.1	12.4	640	32.5	2.20	25.0	118.0	4.3
	4.5	2.6	5.9	850	23.7	17.6	0.74	1.91	30.2	12.4	850	33.4	1.97	26.7	107.0	5.0
	6.0	4.8	11.0	640	23.2	15.7	0.68	1.76	29.2	13.2	640	33.0	2.21	25.5	119.0	4.4
	6.0	4.8	11.0	850	24.1	17.8	0.74	1.84	30.4	13.1	850	34.0	1.98	27.2	108.0	5.0
90	3.0	1.2	2.8	640	21.6	15.3	0.71	2.12	28.8	10.2	640	32.3	2.19	24.8	117.0	4.3
	3.0	1.2	2.8	850	22.4	17.3	0.77	2.21	29.9	10.1	850	33.2	1.97	26.5	107.0	4.9
	4.5	2.5	5.8	640	22.2	15.4	0.69	1.95	28.9	11.4	640	33.5	2.22	25.9	120.0	4.4
	4.5	2.5	5.8	850	23.1	17.4	0.75	2.03	30.0	11.4	850	34.4	1.99	27.6	108.0	5.1
	6.0	4.7	10.7	640	22.5	15.4	0.68	1.87	28.9	12.0	640	34.0	2.24	26.4	121.0	4.5
	6.0	4.7	10.7	850	23.4	17.5	0.75	1.95	30.1	12.0	850	35.1	2.01	28.2	109.0	5.1
100	3.0	1.2	2.7	640	20.2	14.8	0.73	2.40	28.4	8.4	Operation not recommended					
	3.0	1.2	2.7	850	21.0	16.8	0.80	2.50	29.5	8.4						
	4.5	2.4	5.5	640	20.8	14.9	0.72	2.21	28.3	9.4						
	4.5	2.4	5.5	850	21.6	16.9	0.78	2.30	29.5	9.4						
	6.0	4.5	10.3	640	21.1	15.0	0.71	2.12	28.3	9.9						
	6.0	4.5	10.3	850	22.0	17.0	0.77	2.21	29.5	9.9						
110	3.0	1.1	2.5	640	18.8	14.4	0.77	2.73	28.1	6.9						
	3.0	1.1	2.5	850	19.5	16.3	0.84	2.84	29.2	6.9						
	4.5	2.3	5.3	640	19.3	14.4	0.75	2.51	27.9	7.7						
	4.5	2.3	5.3	850	20.1	16.3	0.81	2.62	29.0	7.7						
	6.0	4.3	9.9	640	19.7	14.5	0.74	2.41	27.9	8.2						
	6.0	4.3	9.9	850	20.5	16.4	0.80	2.51	29.1	8.2						
120	3.0	1.0	2.4	640	17.1	13.9	0.81	3.09	27.6	5.5						
	3.0	1.0	2.4	850	17.8	15.7	0.88	3.22	28.8	5.5						
	4.5	2.2	5.1	640	17.8	14.0	0.79	2.85	27.5	6.2						
	4.5	2.2	5.1	850	18.6	15.8	0.85	2.97	28.7	6.3						
	6.0	4.2	9.6	640	18.3	14.1	0.77	2.74	27.7	6.7						
	6.0	4.2	9.6	850	19.1	16.0	0.84	2.85	28.8	6.7						

Interpolation is permissible; extrapolation is not.
All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.
AHRI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
All performance is based upon the lower voltage of dual voltage rated 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 upon 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.

Performance Data – HBH/V 030 (PSC Blower)

1,000 CFM Nominal (Rated) Airflow

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F							Heating - EAT 70°F					
		PSI	FT	Airflow CFM	TC	SC	Sens/Tot Ratio	kW	HR	EER	Airflow CFM	HC	kW	HE	LAT	COP
20	7.5	5.0	11.6	Operation not recommended							750	20.0	2.31	12.6	95	2.53
	7.5	5.0	11.6								1000	20.4	2.08	13.4	89	2.89
30	3.8	1.3	2.9	750	33.3	20.3	0.61	1.38	38.0	24.0	750	21.6	2.37	14.0	97	2.67
	3.8	1.3	2.9	1000	34.7	22.9	0.66	1.44	39.5	24.0	1000	22.1	2.13	14.9	90	3.04
	5.6	2.3	5.4	750	33.5	20.2	0.60	1.31	37.9	25.7	750	22.5	2.40	14.7	98	2.75
	5.6	2.3	5.4	1000	34.9	22.8	0.65	1.36	39.5	25.7	1000	23.0	2.15	15.7	91	3.13
	7.5	4.2	9.7	750	33.6	20.0	0.60	1.27	37.9	26.5	750	22.9	2.41	15.1	98	2.79
	7.5	4.2	9.7	1000	35.0	22.7	0.65	1.32	39.4	26.5	1000	23.5	2.16	16.2	92	3.18
40	3.8	1.0	2.4	750	32.6	20.2	0.62	1.51	37.7	21.6	750	24.7	2.45	16.7	100	2.95
	3.8	1.0	2.4	1000	34.0	22.8	0.67	1.57	39.3	21.6	1000	25.3	2.20	17.8	93	3.36
	5.6	2.0	4.7	750	33.1	20.3	0.61	1.42	37.9	23.3	750	25.7	2.48	17.6	102	3.04
	5.6	2.0	4.7	1000	34.5	22.9	0.67	1.48	39.5	23.3	1000	26.4	2.23	18.8	94	3.47
	7.5	3.7	8.6	750	33.7	20.5	0.61	1.38	38.3	24.4	750	26.3	2.49	18.1	102	3.10
	7.5	3.7	8.6	1000	35.1	23.2	0.66	1.44	39.9	24.4	1000	26.9	2.24	19.4	95	3.53
50	3.8	0.9	2.1	750	31.6	19.9	0.63	1.65	37.2	19.2	750	27.8	2.52	19.5	104	3.24
	3.8	0.9	2.1	1000	32.9	22.5	0.68	1.72	38.8	19.2	1000	28.5	2.26	20.8	96	3.69
	5.6	1.8	4.2	750	32.3	20.1	0.62	1.55	37.6	20.9	750	29.1	2.55	20.6	106	3.35
	5.6	1.8	4.2	1000	33.7	22.8	0.68	1.61	39.1	20.9	1000	29.8	2.29	22.0	98	3.82
	7.5	3.4	7.8	750	32.6	20.2	0.62	1.50	37.7	21.7	750	29.8	2.56	21.3	107	3.41
	7.5	3.4	7.8	1000	34.0	22.9	0.67	1.57	39.3	21.7	1000	30.5	2.30	22.7	98	3.89
60	3.8	0.8	1.8	750	30.4	19.4	0.64	1.81	36.6	16.8	750	31.0	2.58	22.4	108	3.52
	3.8	0.8	1.8	1000	31.7	21.9	0.69	1.89	38.1	16.8	1000	31.8	2.32	23.9	99	4.02
	5.6	1.7	3.8	750	31.1	19.6	0.63	1.70	36.9	18.3	750	32.5	2.61	23.7	110	3.65
	5.6	1.7	3.8	1000	32.4	22.2	0.69	1.77	38.4	18.3	1000	33.3	2.34	25.3	101	4.16
	7.5	3.1	7.2	750	31.4	19.7	0.63	1.65	37.0	19.0	750	33.3	2.63	24.4	111	3.71
	7.5	3.1	7.2	1000	32.7	22.3	0.68	1.71	38.5	19.1	1000	34.1	2.36	26.0	102	4.24
70	3.8	0.7	1.6	750	29.0	18.8	0.65	2.00	35.8	14.5	750	34.2	2.64	25.2	112	3.79
	3.8	0.7	1.6	1000	30.2	21.2	0.70	2.08	37.3	14.5	1000	35.1	2.37	26.9	102	4.33
	5.6	1.5	3.6	750	30.0	19.2	0.64	1.87	36.3	16.0	750	35.8	2.68	26.7	114	3.92
	5.6	1.5	3.6	1000	31.2	21.7	0.70	1.95	37.8	16.0	1000	36.7	2.40	28.5	104	4.47
	7.5	2.9	6.7	750	30.4	19.4	0.64	1.81	36.6	16.8	750	36.7	2.70	27.4	115	3.99
	7.5	2.9	6.7	1000	31.7	21.9	0.69	1.89	38.1	16.8	1000	37.6	2.42	29.3	105	4.55
80	3.8	0.7	1.5	750	27.7	18.3	0.66	2.21	35.3	12.5	750	37.3	2.71	28.0	116	4.04
	3.8	0.7	1.5	1000	28.8	20.7	0.72	2.30	36.7	12.5	1000	38.2	2.43	29.9	105	4.60
	5.6	1.4	3.3	750	28.5	18.5	0.65	2.07	35.5	13.7	750	39.0	2.75	29.5	118	4.15
	5.6	1.4	3.3	1000	29.6	21.0	0.71	2.16	37.0	13.7	1000	40.0	2.47	31.5	107	4.74
	7.5	2.7	6.3	750	29.0	18.7	0.65	2.00	35.8	14.5	750	40.2	2.78	30.6	120	4.24
	7.5	2.7	6.3	1000	30.2	21.2	0.70	2.08	37.3	14.5	1000	41.2	2.50	32.6	108	4.84
85	3.8	0.6	1.4	750	26.7	17.8	0.67	2.34	34.7	11.5	750	38.8	2.75	29.3	118	4.14
	3.8	0.6	1.4	1000	27.8	20.1	0.72	2.43	36.1	11.5	1000	39.8	2.5	31.3	107	4.72
	5.6	1.4	3.2	750	27.6	18.2	0.66	2.18	35.1	12.7	750	40.5	2.8	30.8	120	4.24
	5.6	1.4	3.2	1000	28.8	20.6	0.71	2.27	36.5	12.7	1000	41.5	2.5	32.9	108	4.84
	7.5	2.7	6.2	750	28.2	18.4	0.65	2.11	35.4	13.4	750	41.6	2.8	31.7	121	4.30
	7.5	2.7	6.2	1000	29.3	20.8	0.71	2.20	36.8	13.4	1000	42.6	2.5	33.9	109	4.91
90	3.8	0.6	1.4	750	25.7	17.3	0.67	2.46	34.1	10.5	750	40.3	2.79	30.6	120	4.23
	3.8	0.6	1.4	1000	26.8	19.6	0.73	2.56	35.5	10.5	1000	41.3	2.51	32.7	108	4.83
	5.6	1.4	3.1	750	26.8	17.8	0.66	2.30	34.7	11.7	750	42.0	2.85	32.1	122	4.33
	5.6	1.4	3.1	1000	27.9	20.1	0.72	2.39	36.1	11.7	1000	43.0	2.56	34.3	110	4.93
	7.5	2.6	6.0	750	27.3	18.0	0.66	2.22	34.9	12.3	750	42.9	2.88	32.9	123	4.36
	7.5	2.6	6.0	1000	28.5	20.4	0.72	2.31	36.4	12.3	1000	44.0	2.59	35.1	111	4.98
100	3.8	0.6	1.3	750	24.0	16.6	0.69	2.74	33.3	8.7	Operation not recommended					
	3.8	0.6	1.3	1000	24.9	18.8	0.75	2.85	34.7	8.7						
	5.6	1.3	3.0	750	25.1	17.0	0.68	2.56	33.8	9.8						
	5.6	1.3	3.0	1000	26.1	19.3	0.74	2.67	35.2	9.8						
	7.5	2.5	5.7	750	25.6	17.3	0.67	2.48	34.1	10.3						
	7.5	2.5	5.7	1000	26.7	19.6	0.73	2.58	35.5	10.3						
110	3.8	0.5	1.2	750	22.5	16.1	0.72	3.07	33.0	7.4						
	3.8	0.5	1.2	1000	23.5	18.2	0.78	3.19	34.4	7.4						
	5.6	1.2	2.8	750	23.2	16.3	0.70	2.86	33.1	8.1						
	5.6	1.2	2.8	1000	24.2	18.4	0.76	2.98	34.4	8.1						
	7.5	2.4	5.5	750	23.8	16.5	0.69	2.77	33.3	8.6						
	7.5	2.4	5.5	1000	24.8	18.7	0.75	2.88	34.6	8.6						
120	3.8	0.5	1.1	750	20.4	15.2	0.74	3.44	32.2	5.9						
	3.8	0.5	1.1	1000	21.2	17.2	0.81	3.58	33.5	5.9						
	5.6	1.2	2.7	750	21.4	15.6	0.73	3.21	32.4	6.7						
	5.6	1.2	2.7	1000	22.3	17.6	0.79	3.34	33.8	6.7						
	7.5	2.3	5.3	750	22.0	15.8	0.72	3.10	32.6	7.1						
	7.5	2.3	5.3	1000	22.9	17.8	0.78	3.23	33.9	7.1						

Interpolation is permissible; extrapolation is not.
All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.
AHRI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
All performance is based upon the lower voltage of dual voltage rated 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 upon 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.

Performance Data – HBH/V 030 (ECM Blower)

875 CFM Nominal (Rated) Airflow

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F							Heating - EAT 70°F					
		PSI	FT	Airflow CFM	TC	SC	Sens/Tot Ratio	kW	HR	EER	Airflow CFM	HC	kW	HE	LAT	COP
20	7.5	5.0	11.6	Operation not recommended							750	20.3	2.25	12.6	92.0	2.6
	7.5	5.0	11.6								1000	20.3	2.02	13.4	87.0	2.9
30	3.8	1.3	2.9	750	33.3	20.3	0.61	1.32	37.8	25.2	750	21.9	2.31	14.0	95.0	2.8
	3.8	1.3	2.9	1000	34.7	22.9	0.66	1.38	39.4	25.1	1000	22.0	2.07	14.9	89.0	3.1
	5.6	2.3	5.4	750	33.5	20.2	0.60	1.25	37.8	26.8	750	22.7	2.34	14.7	96.0	2.8
	5.6	2.3	5.4	1000	34.9	22.8	0.65	1.30	39.3	26.8	1000	22.8	2.09	15.7	90.0	3.2
	7.5	4.2	9.7	750	33.6	20.0	0.60	1.21	37.7	27.7	750	23.1	2.35	15.1	97.0	2.9
	7.5	4.2	9.7	1000	35.0	22.7	0.65	1.26	39.3	27.7	1000	23.4	2.10	16.2	90.0	3.3
40	3.8	1.0	2.4	750	32.6	20.2	0.62	1.45	37.6	22.5	750	24.9	2.39	16.7	99.0	3.0
	3.8	1.0	2.4	1000	34.0	22.8	0.67	1.51	39.2	22.5	1000	25.1	2.14	17.8	92.0	3.4
	5.6	2.0	4.7	750	33.1	20.3	0.61	1.36	37.7	24.3	750	25.9	2.42	17.6	100.0	3.1
	5.6	2.0	4.7	1000	34.5	22.9	0.66	1.42	39.4	24.3	1000	26.2	2.17	18.8	93.0	3.5
	7.5	3.7	8.6	750	33.7	20.5	0.61	1.32	38.2	25.5	750	26.4	2.43	18.1	101.0	3.2
	7.5	3.7	8.6	1000	35.1	23.2	0.66	1.38	39.8	25.4	1000	26.8	2.18	19.4	94.0	3.6
50	3.8	0.9	2.1	750	31.6	19.9	0.63	1.59	37.0	19.9	750	27.9	2.46	19.5	103.0	3.3
	3.8	0.9	2.1	1000	32.9	22.5	0.68	1.66	38.6	19.8	1000	28.3	2.20	20.8	95.0	3.8
	5.6	1.8	4.2	750	32.3	20.1	0.62	1.49	37.4	21.7	750	29.1	2.49	20.6	104.0	3.4
	5.6	1.8	4.2	1000	33.7	22.8	0.68	1.55	39.0	21.7	1000	29.6	2.23	22.0	96.0	3.9
	7.5	3.4	7.8	750	32.6	20.2	0.62	1.44	37.5	22.6	750	29.8	2.50	21.3	105.0	3.5
	7.5	3.4	7.8	1000	34.0	22.9	0.67	1.51	39.2	22.5	1000	30.3	2.24	22.7	97.0	4.0
60	3.8	0.8	1.8	750	30.4	19.4	0.64	1.75	36.4	17.4	750	31.0	2.52	22.4	106.0	3.6
	3.8	0.8	1.8	1000	31.7	21.9	0.69	1.83	37.9	17.3	1000	31.6	2.26	23.9	98.0	4.1
	5.6	1.7	3.8	750	31.1	19.6	0.63	1.64	36.7	18.9	750	32.4	2.55	23.7	108.0	3.7
	5.6	1.7	3.8	1000	32.4	22.2	0.69	1.71	38.2	18.9	1000	33.1	2.28	25.3	99.0	4.2
	7.5	3.1	7.2	750	31.4	19.7	0.63	1.59	36.8	19.7	750	33.2	2.57	24.4	109.0	3.8
	7.5	3.1	7.2	1000	32.7	22.3	0.68	1.65	38.3	19.8	1000	33.9	2.30	26.0	100.0	4.3
70	3.8	0.7	1.6	750	29.0	18.8	0.65	1.94	35.6	14.9	750	34.0	2.58	25.2	110.0	3.9
	3.8	0.7	1.6	1000	30.2	21.2	0.70	2.02	37.1	14.9	1000	34.8	2.31	26.9	101.0	4.4
	5.6	1.5	3.6	750	30.0	19.2	0.64	1.81	36.2	16.6	750	35.6	2.62	26.7	112.0	4.0
	5.6	1.5	3.6	1000	31.2	21.7	0.70	1.89	37.7	16.5	1000	36.5	2.34	28.5	102.0	4.6
	7.5	2.9	6.7	750	30.4	19.4	0.64	1.75	36.4	17.4	750	36.4	2.64	27.4	113.0	4.0
	7.5	2.9	6.7	1000	31.7	21.9	0.69	1.83	37.9	17.3	1000	37.4	2.36	29.3	103.0	4.6
80	3.8	0.7	1.5	750	27.7	18.3	0.66	2.15	35.0	12.9	750	37.0	2.65	28.0	114.0	4.1
	3.8	0.7	1.5	1000	28.8	20.7	0.72	2.24	36.4	12.8	1000	38.0	2.37	29.9	104.0	4.7
	5.6	1.4	3.3	750	28.5	18.5	0.65	2.01	35.4	14.2	750	38.7	2.69	29.5	116.0	4.2
	5.6	1.4	3.3	1000	29.6	21.0	0.71	2.10	36.8	14.1	1000	39.7	2.41	31.5	105.0	4.8
	7.5	2.7	6.3	750	29.0	18.7	0.64	1.94	35.6	14.9	750	39.9	2.72	30.6	117.0	4.3
	7.5	2.7	6.3	1000	30.2	21.2	0.70	2.02	37.1	14.9	1000	40.9	2.44	32.6	106.0	4.9
85	3.8	0.6	1.4	750	26.7	17.8	0.67	2.28	34.5	11.7	750	38.5	2.69	29.3	116.0	4.2
	3.8	0.6	1.4	1000	27.8	20.1	0.72	2.37	35.9	11.7	1000	39.6	2.44	31.3	105.0	4.8
	5.6	1.4	3.2	750	27.6	18.2	0.66	2.12	34.8	13.0	750	40.2	2.74	30.8	118.0	4.3
	5.6	1.4	3.2	1000	28.8	20.6	0.72	2.21	36.3	13.0	1000	41.2	2.44	32.9	107.0	4.9
	7.5	2.7	6.2	750	28.2	18.4	0.65	2.05	35.2	13.7	750	41.1	2.74	31.7	119.0	4.4
	7.5	2.7	6.2	1000	29.3	20.8	0.71	2.14	36.6	13.7	1000	42.2	2.44	33.9	108.0	5.1
90	3.8	0.6	1.4	750	25.7	17.3	0.67	2.40	33.9	10.7	750	39.9	2.73	30.6	117.0	4.3
	3.8	0.6	1.4	1000	26.8	19.6	0.73	2.50	35.3	10.7	1000	41.1	2.45	32.7	107.0	4.9
	5.6	1.4	3.1	750	26.8	17.8	0.66	2.24	34.4	12.0	750	41.6	2.79	32.1	120.0	4.4
	5.6	1.4	3.1	1000	27.9	20.1	0.72	2.33	35.9	12.0	1000	42.8	2.50	34.3	108.0	5.0
	7.5	2.6	6.0	750	27.3	18.0	0.66	2.16	34.7	12.6	750	42.5	2.82	32.9	121.0	4.4
	7.5	2.6	6.0	1000	28.5	20.4	0.72	2.25	36.2	12.7	1000	43.7	2.53	35.1	109.0	5.1
100	3.8	0.6	1.3	750	24.0	16.6	0.69	2.68	33.1	8.9	Operation not recommended					
	3.8	0.6	1.3	1000	24.9	18.8	0.76	2.79	34.4	8.9						
	5.6	1.3	3.0	750	25.1	17.0	0.68	2.50	33.6	10.0						
	5.6	1.3	3.0	1000	26.1	19.3	0.74	2.61	35.0	10.0						
	7.5	2.5	5.7	750	25.6	17.3	0.68	2.42	33.9	10.6						
	7.5	2.5	5.7	1000	26.7	19.6	0.73	2.52	35.3	10.6						
110	3.8	0.5	1.2	750	22.5	16.1	0.72	3.01	32.8	7.5						
	3.8	0.5	1.2	1000	23.5	18.2	0.77	3.13	34.2	7.5						
	5.6	1.2	2.8	750	23.2	16.3	0.70	2.80	32.8	8.3						
	5.6	1.2	2.8	1000	24.2	18.4	0.76	2.92	34.2	8.3						
	7.5	2.4	5.5	750	23.8	16.5	0.69	2.71	33.1	8.8						
	7.5	2.4	5.5	1000	24.8	18.7	0.75	2.82	34.4	8.8						
120	3.8	0.5	1.1	750	20.4	15.2	0.75	3.38	31.9	6.0						
	3.8	0.5	1.1	1000	21.2	17.2	0.81	3.52	33.2	6.0						
	5.6	1.2	2.7	750	21.4	15.6	0.73	3.15	32.2	6.8						
	5.6	1.2	2.7	1000	22.3	17.6	0.79	3.28	33.5	6.8						
	7.5	2.3	5.3	750	22.0	15.8	0.72	3.04	32.4	7.2						
	7.5	2.3	5.3	1000	22.9	17.8	0.78	3.17	33.7	7.2						

Interpolation is permissible; extrapolation is not.
All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.
AHRI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
All performance is based upon the lower voltage of dual voltage rated 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 upon 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.

Performance Data – HBH/V 036 (PSC Blower)

1,200 CFM Nominal (Rated) Airflow

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F							Heating - EAT 70°F					
		PSI	FT	Airflow CFM	TC	SC	Sens/Tot Ratio	kW	HR	EER	Airflow CFM	HC	kW	HE	LAT	COP
20	9.0	6.4	14.8	Operation not recommended							860	22.6	2.67	14.1	94	2.49
	9.0	6.4	14.8								1150	23.2	2.39	15.1	89	2.84
30	4.5	1.8	4.3	860	39.9	24.2	0.61	1.67	45.6	23.8	860	25.6	2.80	16.6	98	2.68
	4.5	1.8	4.3	1150	41.5	27.4	0.66	1.74	47.4	23.8	1150	26.2	2.51	17.7	91	3.06
	6.8	3.1	7.1	860	40.1	24.3	0.61	1.62	45.5	24.7	860	26.8	2.85	17.6	99	2.76
	6.8	3.1	7.1	1150	41.7	27.5	0.66	1.69	47.4	24.7	1150	27.5	2.56	18.8	92	3.15
	9.0	5.4	12.5	860	40.0	24.3	0.61	1.60	45.5	25.0	860	27.5	2.88	18.2	100	2.80
	9.0	5.4	12.5	1150	41.7	27.5	0.66	1.67	47.3	25.0	1150	28.2	2.59	19.4	93	3.19
40	4.5	1.6	3.6	860	39.2	24.0	0.61	1.80	45.3	21.8	860	30.1	2.98	20.3	102	2.95
	4.5	1.6	3.6	1150	40.8	27.2	0.67	1.87	47.1	21.8	1150	30.8	2.68	21.7	95	3.37
	6.8	2.7	6.2	860	39.7	24.2	0.61	1.71	45.5	23.3	860	31.6	3.05	21.6	104	3.04
	6.8	2.7	6.2	1150	41.4	27.4	0.66	1.78	47.4	23.3	1150	32.4	2.74	23.1	96	3.47
	9.0	4.8	11.1	860	39.9	24.3	0.61	1.67	45.6	23.9	860	32.4	3.08	22.3	105	3.09
	9.0	4.8	11.1	1150	41.6	27.4	0.66	1.74	47.4	23.9	1150	33.2	2.77	23.8	97	3.52
50	4.5	1.4	3.2	860	38.0	23.6	0.62	1.98	44.7	19.2	860	34.5	3.16	24.1	107	3.20
	4.5	1.4	3.2	1150	39.5	26.7	0.68	2.06	46.5	19.2	1150	35.4	2.84	25.7	98	3.65
	6.8	2.4	5.6	860	38.8	23.9	0.62	1.85	45.1	21.0	860	36.3	3.23	25.6	109	3.30
	6.8	2.4	5.6	1150	40.4	27.0	0.67	1.92	47.0	21.0	1150	37.2	2.90	27.3	100	3.76
	9.0	4.4	10.1	860	39.2	24.0	0.61	1.79	45.3	21.9	860	37.3	3.27	26.4	110	3.35
	9.0	4.4	10.1	1150	40.8	27.2	0.67	1.87	47.2	21.9	1150	38.2	2.93	28.2	101	3.82
60	4.5	1.3	2.9	860	36.1	22.9	0.63	2.20	43.6	16.4	860	38.9	3.32	27.8	112	3.43
	4.5	1.3	2.9	1150	37.6	25.9	0.69	2.29	45.4	16.4	1150	39.8	2.99	29.7	102	3.91
	6.8	2.3	5.2	860	37.5	23.5	0.63	2.04	44.4	18.4	860	40.9	3.40	29.5	114	3.53
	6.8	2.3	5.2	1150	39.1	26.5	0.68	2.13	46.3	18.4	1150	41.9	3.05	31.5	104	4.02
	9.0	4.0	9.3	860	38.0	23.6	0.62	1.97	44.7	19.3	860	42.0	3.44	30.4	115	3.58
	9.0	4.0	9.3	1150	39.6	26.7	0.68	2.05	46.5	19.3	1150	43.0	3.09	32.5	105	4.08
70	4.5	1.2	2.7	860	34.6	22.5	0.65	2.46	42.9	14.0	860	43.1	3.47	31.4	116	3.64
	4.5	1.2	2.7	1150	36.0	25.5	0.71	2.56	44.7	14.0	1150	44.1	3.12	33.5	106	4.15
	6.8	2.1	4.9	860	35.8	22.9	0.64	2.28	43.6	15.7	860	45.2	3.55	33.2	119	3.74
	6.8	2.1	4.9	1150	37.3	25.9	0.70	2.38	45.4	15.7	1150	46.3	3.19	35.4	107	4.26
	9.0	3.8	8.7	860	36.4	23.1	0.63	2.20	43.9	16.6	860	46.4	3.59	34.2	120	3.79
	9.0	3.8	8.7	1150	37.9	26.1	0.69	2.29	45.7	16.6	1150	47.5	3.22	36.5	108	4.32
80	4.5	1.1	2.5	860	32.5	21.8	0.67	2.76	41.9	11.8	860	47.0	3.61	34.8	121	3.82
	4.5	1.1	2.5	1150	33.8	24.7	0.73	2.88	43.7	11.8	1150	48.2	3.24	37.1	109	4.36
	6.8	2.0	4.6	860	33.9	22.3	0.66	2.56	42.6	13.2	860	49.2	3.68	36.6	123	3.92
	6.8	2.0	4.6	1150	35.3	25.2	0.72	2.67	44.4	13.2	1150	50.4	3.30	39.1	111	4.47
	9.0	3.6	8.3	860	34.5	22.5	0.65	2.47	42.9	14.0	860	50.3	3.71	37.6	124	3.97
	9.0	3.6	8.3	1150	35.9	25.5	0.71	2.57	44.7	14.0	1150	51.5	3.34	40.1	111	4.53
85	4.5	1.0	2.4	860	31.5	21.5	0.68	2.9	41.5	10.8	860	48.8	3.67	36.3	123	3.90
	4.5	1.0	2.4	1150	32.8	24.4	0.74	3.05	43.3	10.8	1150	50.0	3.29	38.8	110	4.45
	6.8	1.9	4.4	860	32.8	21.9	0.67	2.72	42.1	12.1	860	50.9	3.73	38.1	125	4.00
	6.8	1.9	4.4	1150	34.1	24.8	0.73	2.84	43.8	12.1	1150	52.2	3.35	40.7	112	4.56
	9.0	3.5	8.1	860	33.4	22.1	0.66	2.62	42.3	12.8	860	52.0	3.76	39.0	126	4.05
	9.0	3.5	8.1	1150	34.7	25.0	0.72	2.73	44.1	12.8	1150	53.2	3.38	41.7	113	4.62
90	4.5	1.0	2.3	860	30.5	21.2	0.70	3.10	41.1	9.8	860	50.6	3.72	37.9	125	3.99
	4.5	1.0	2.3	1150	31.8	24.0	0.76	3.23	42.8	9.8	1150	51.9	3.34	40.4	112	4.54
	6.8	1.9	4.3	860	31.7	21.6	0.68	2.88	41.6	11.0	860	52.7	3.79	39.6	127	4.08
	6.8	1.9	4.3	1150	33.0	24.4	0.74	3.00	43.3	11.0	1150	54.0	3.40	42.3	113	4.65
	9.0	3.4	7.9	860	32.2	21.7	0.67	2.78	41.7	11.6	860	53.7	3.82	40.5	128	4.12
	9.0	3.4	7.9	1150	33.5	24.5	0.73	2.89	43.4	11.6	1150	55.0	3.43	43.2	114	4.70
100	4.5	0.9	2.2	860	28.3	20.5	0.72	3.47	40.2	8.1	Operation not recommended					
	4.5	0.9	2.2	1150	29.5	23.1	0.79	3.62	41.9	8.2						
	6.8	1.8	4.1	860	29.5	20.8	0.71	3.24	40.6	9.1						
	6.8	1.8	4.1	1150	30.7	23.5	0.77	3.37	42.2	9.1						
	9.0	3.3	7.5	860	30.1	21.0	0.70	3.13	40.8	9.6						
	9.0	3.3	7.5	1150	31.3	23.7	0.76	3.25	42.5	9.6						
110	4.5	0.9	2.1	860	26.2	19.8	0.75	3.88	39.5	6.8						
	4.5	0.9	2.1	1150	27.3	22.4	0.82	4.04	41.1	6.8						
	6.8	1.7	4.0	860	27.2	20.0	0.73	3.63	39.7	7.5						
	6.8	1.7	4.0	1150	28.4	22.6	0.80	3.78	41.3	7.5						
	9.0	3.1	7.2	860	27.6	20.0	0.72	3.51	39.6	7.9						
	9.0	3.1	7.2	1150	28.8	22.7	0.79	3.65	41.3	7.9						
120	4.5	0.9	2.0	860	24.1	19.0	0.79	4.31	38.9	5.6						
	4.5	0.9	2.0	1150	25.1	21.4	0.86	4.49	40.4	5.6						
	6.8	1.6	3.8	860	25.1	19.2	0.77	4.05	39.0	6.2						
	6.8	1.6	3.8	1150	26.1	21.8	0.83	4.21	40.6	6.2						
	9.0	3.0	7.0	860	25.4	19.2	0.76	3.92	38.9	6.5						
	9.0	3.0	7.0	1150	26.5	21.8	0.82	4.08	40.5	6.5						

Interpolation is permissible; extrapolation is not.
All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.
AHRI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
All performance is based upon the lower voltage of dual voltage rated 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 upon 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.

Performance Data – HBH/V 036 (ECM Blower)

1125 CFM Nominal (Rated) Airflow

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F							Heating - EAT 70°F					
		PSI	FT	Airflow CFM	TC	SC	Sens/Tot Ratio	kW	HR	EER	Airflow CFM	HC	kW	HE	LAT	COP
20	9.0	6.4	14.8	Operation not recommended							860	23.1	2.63	14.1	92.0	2.6
	9.0	6.4	14.8								1150	23.1	2.35	15.1	87.0	2.9
30	4.5	1.8	4.3	860	39.9	24.2	0.61	1.63	45.5	24.4	860	26.0	2.76	16.6	95.0	2.8
	4.5	1.8	4.3	1150	41.5	27.4	0.66	1.70	47.3	24.4	1150	26.1	2.47	17.7	89.0	3.1
	6.8	3.1	7.1	860	40.1	24.3	0.61	1.58	45.5	25.3	860	27.2	2.81	17.6	96.0	2.8
	6.8	3.1	7.1	1150	41.7	27.5	0.66	1.65	47.3	25.2	1150	27.4	2.52	18.8	90.0	3.2
	9.0	5.4	12.5	860	40.0	24.3	0.61	1.56	45.3	25.6	860	27.9	2.84	18.2	97.0	2.9
	9.0	5.4	12.5	1150	41.7	27.5	0.66	1.63	47.3	25.5	1150	28.1	2.55	19.4	90.0	3.2
40	4.5	1.6	3.6	860	39.2	24.0	0.61	1.76	45.2	22.2	860	30.3	2.94	20.3	99.0	3.0
	4.5	1.6	3.6	1150	40.8	27.2	0.67	1.83	47.1	22.3	1150	30.7	2.64	21.7	92.0	3.4
	6.8	2.7	6.2	860	39.7	24.2	0.61	1.67	45.4	23.7	860	31.9	3.01	21.6	100.0	3.1
	6.8	2.7	6.2	1150	41.4	27.4	0.66	1.74	47.3	23.8	1150	32.3	2.70	23.1	93.0	3.5
	9.0	4.8	11.1	860	39.9	24.3	0.61	1.63	45.5	24.4	860	32.7	3.04	22.3	101.0	3.1
	9.0	4.8	11.1	1150	41.6	27.4	0.66	1.70	47.4	24.4	1150	33.1	2.73	23.8	94.0	3.6
50	4.5	1.4	3.2	860	38.0	23.6	0.62	1.94	44.6	19.6	860	34.8	3.12	24.1	103.0	3.3
	4.5	1.4	3.2	1150	39.5	26.7	0.68	2.02	46.4	19.5	1150	35.3	2.80	25.7	95.0	3.7
	6.8	2.4	5.6	860	38.8	23.9	0.62	1.81	45.0	21.4	860	36.5	3.19	25.6	104.0	3.4
	6.8	2.4	5.6	1150	40.4	27.0	0.67	1.88	46.8	21.5	1150	37.1	2.86	27.3	96.0	3.8
	9.0	4.4	10.1	860	39.2	24.0	0.61	1.75	45.2	22.4	860	37.4	3.23	26.4	105.0	3.4
	9.0	4.4	10.1	1150	40.8	27.2	0.67	1.83	47.1	22.3	1150	38.1	2.89	28.2	97.0	3.9
60	4.5	1.3	2.9	860	36.1	22.9	0.63	2.16	43.5	16.7	860	39.0	3.28	27.8	106.0	3.5
	4.5	1.3	2.9	1150	37.6	25.9	0.69	2.25	45.3	16.7	1150	39.8	2.95	29.7	98.0	3.9
	6.8	2.3	5.2	860	37.5	23.5	0.63	2.00	44.3	18.7	860	41.0	3.36	29.5	108.0	3.6
	6.8	2.3	5.2	1150	39.1	26.5	0.68	2.09	46.2	18.7	1150	41.8	3.01	31.5	99.0	4.1
	9.0	4.0	9.3	860	38.0	23.6	0.62	1.93	44.6	19.7	860	42.0	3.40	30.4	109.0	3.6
	9.0	4.0	9.3	1150	39.6	26.7	0.67	2.01	46.5	19.7	1150	42.9	3.05	32.5	100.0	4.1
70	4.5	1.2	2.7	860	34.6	22.5	0.65	2.42	42.9	14.3	860	43.1	3.43	31.4	110.0	3.7
	4.5	1.2	2.7	1150	36.0	25.5	0.71	2.52	44.6	14.3	1150	44.0	3.08	33.5	101.0	4.2
	6.8	2.1	4.9	860	35.8	22.9	0.64	2.24	43.5	16.0	860	45.2	3.51	33.2	112.0	3.8
	6.8	2.1	4.9	1150	37.3	25.9	0.69	2.34	45.3	15.9	1150	46.2	3.15	35.4	102.0	4.3
	9.0	3.8	8.7	860	36.4	23.1	0.63	2.16	43.8	16.8	860	46.3	3.55	34.2	113.0	3.8
	9.0	3.8	8.7	1150	37.9	26.1	0.69	2.25	45.6	16.8	1150	47.4	3.18	36.5	103.0	4.4
80	4.5	1.1	2.5	860	32.5	21.8	0.67	2.72	41.8	11.9	860	47.0	3.57	34.8	114.0	3.9
	4.5	1.1	2.5	1150	33.8	24.7	0.73	2.84	43.5	11.9	1150	48.0	3.20	37.1	104.0	4.4
	6.8	2.0	4.6	860	33.9	22.3	0.66	2.52	42.5	13.4	860	49.0	3.64	36.6	116.0	3.9
	6.8	2.0	4.6	1150	35.3	25.2	0.71	2.63	44.3	13.4	1150	50.2	3.26	39.1	105.0	4.5
	9.0	3.6	8.3	860	34.5	22.5	0.65	2.43	42.8	14.2	860	50.1	3.67	37.6	117.0	4.0
	9.0	3.6	8.3	1150	35.9	25.5	0.71	2.53	44.5	14.2	1150	51.4	3.30	40.1	106.0	4.6
85	4.5	1.0	2.4	860	31.5	21.5	0.68	2.86	41.3	11.0	860	48.7	3.63	36.3	116.0	3.9
	4.5	1.0	2.4	1150	32.8	24.4	0.74	3.01	43.1	10.9	1150	49.9	3.25	38.8	105.0	4.5
	6.8	1.9	4.4	860	32.8	21.9	0.67	2.68	42.0	12.2	860	50.7	3.69	38.1	118.0	4.0
	6.8	1.9	4.4	1150	34.1	24.8	0.73	2.80	43.7	12.2	1150	52.0	3.31	40.7	107.0	4.6
	9.0	3.5	8.1	860	33.4	22.1	0.66	2.58	42.2	12.9	860	51.7	3.72	39.0	119.0	4.1
	9.0	3.5	8.1	1150	34.7	25.0	0.72	2.69	43.9	12.9	1150	53.1	3.34	41.7	108.0	4.7
90	4.5	1.0	2.3	860	30.5	21.2	0.70	3.06	40.9	10.0	860	50.5	3.68	37.9	117.0	4.0
	4.5	1.0	2.3	1150	31.8	24.0	0.75	3.19	42.7	10.0	1150	51.7	3.30	40.4	107.0	4.6
	6.8	1.9	4.3	860	31.7	21.6	0.68	2.84	41.4	11.2	860	52.4	3.75	39.6	120.0	4.1
	6.8	1.9	4.3	1150	33.0	24.4	0.74	2.96	43.1	11.1	1150	53.8	3.36	42.3	108.0	4.7
	9.0	3.4	7.9	860	32.2	21.7	0.67	2.74	41.6	11.7	860	53.4	3.78	40.5	121.0	4.1
	9.0	3.4	7.9	1150	33.5	24.5	0.73	2.85	43.2	11.7	1150	54.8	3.39	43.2	109.0	4.7
100	4.5	0.9	2.2	860	28.3	20.5	0.72	3.43	40.0	8.2	Operation not recommended					
	4.5	0.9	2.2	1150	29.5	23.1	0.78	3.58	41.7	8.2						
	6.8	1.8	4.1	860	29.5	20.8	0.71	3.20	40.4	9.2						
	6.8	1.8	4.1	1150	30.7	23.5	0.77	3.33	42.1	9.2						
	9.0	3.3	7.5	860	30.1	21.0	0.70	3.09	40.7	9.7						
	9.0	3.3	7.5	1150	31.3	23.7	0.76	3.21	42.3	9.7						
110	4.5	0.9	2.1	860	26.2	19.8	0.76	3.84	39.3	6.8						
	4.5	0.9	2.1	1150	27.3	22.4	0.82	4.00	41.0	6.8						
	6.8	1.7	4.0	860	27.2	20.0	0.74	3.59	39.5	7.6						
	6.8	1.7	4.0	1150	28.4	22.6	0.80	3.74	41.2	7.6						
	9.0	3.1	7.2	860	27.6	20.0	0.72	3.47	39.4	7.9						
	9.0	3.1	7.2	1150	28.8	22.7	0.79	3.61	41.1	8.0						
120	4.5	0.9	2.0	860	24.1	19.0	0.79	4.27	38.7	5.6						
	4.5	0.9	2.0	1150	25.1	21.4	0.85	4.45	40.3	5.6						
	6.8	1.6	3.8	860	25.1	19.2	0.76	4.01	38.8	6.3						
	6.8	1.6	3.8	1150	26.1	21.8	0.84	4.17	40.3	6.3						
	9.0	3.0	7.0	860	25.4	19.2	0.76	3.88	38.6	6.5						
	9.0	3.0	7.0	1150	26.5	21.8	0.82	4.04	40.3	6.6						

Interpolation is permissible; extrapolation is not.
All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.
AHRI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
Table does not reflect fan or pump power corrections for AHRI/ISO conditions.
All performance is based upon the lower voltage of dual voltage rated 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 upon 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.