

# HB Large Series



The HBH/V Large product line offers large capacities products in a small foot print. When space is a concern, whether is be for new construction or retrofit, the HB product line maximizes comfort needs with space constraints.

Available standard with high quality construction, reliable refrigerant circuit, standard safety controls, and many field acceptability/convertibility features.

## FEATURES

- Dual Copeland scroll compressors (All Models)
- Dual refrigeration circuits (All Models)
- Exceeds ASHRAE 90.1 efficiencies
- Galvanized steel construction with attractive matte black epoxy powder coat painted front access panel
- Extended range (20 to 120°F, -6.7 to 48.9°C) operation (may require optional extended range insulation)
- Optional Waterside Economizer (WSE)
- Optional advanced DXM2 controls for reduced start up commissioning and service time
- Optional Variable Frequency Drive fan motor controls for optimal fan motor energy efficiency



## WATER SOURCE HEAT PUMPS

*6 to 25 Tons*

*Energy Efficient Heating & Cooling  
for Commercial Applications*

## SPECIFICATIONS

### Application Flexibility

- Available with multiple return and supply air configurations with the ability to field convert supply air configurations with no additional parts
- Electrical box is on right side and can be field converted to left side of unit
- Electric power can enter from either side of front
- Water can be connected to either side

## UNIT SIZE

Vertical Model		W	D	H
072 - 120	in.	41.0	29.0	69.8
	cm	104.1	73.7	177.2
160 - 300	in.	82.0	29.0	69.8
	cm	208.2	73.7	177.2

Horizontal Model		W	D	H
072 - 120	in.	36.3	84.9	21.6
	cm	92.2	215.6	54.9

**Warranty**—5 years on compressor, 1 year on parts  
(Some limitations apply; see printed warranty for details.)

[www.marsdelivers.com](http://www.marsdelivers.com)

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## PHYSICAL DATA

Model HBV072-300	072	096	120	160	192	240	300
Compressor	Scroll						
Number of Circuits (Compressors)	2						
Factory Charge R410a - (oz) [kg] per circuit	60 [1.70]	76 [2.15]	80 [2.27]	112 [3.18]	136 [3.86]	196 [5.56]	224 [6.35]
Blower Motor							
Blower Motor Quantity	1						
Standard Motor (hp) [kw]	1 [.75]	1.5 [1.12]	3 [2.23]	3 [2.24]	3 [2.24]	5 [3.73]	7.5 [5.60]
No. of Blowers	1			2			3
Water Connection Size							
FPT (in) [mm]	1-1/4" [31.8]		1-1/2" [38.1]	2" [50.8]			2-1/2" [63.5]
Condensate Connection Size	3/4" [19.1]						
FPT (in) [mm]							
Miscellaneous Data							
Filter Standard - 1" [25.4mm] Throwaway (qty) (in) [cm]	(QTY.2 EA.) 20 x30 [50.80 x 76.2] & 10 x 20 [25.4 x 40.64]			(QTY.4) 20 x 25 [50.80 x 63.5] & (QTY.2) 20 x 30 [50.80 x 76.2]			
Weight - Operating (lbs) [kg]	586 [265.8]	644 [292.1]	698 [316.6]	1069 [484.9]	1164 [528.0]	1184 [537.1]	1297 [588.3]
Weight - Packaged (lbs) [kg]	626 [283.9]	684 [310.3]	738 [334.8]	1149 [521.2]	1244 [564.3]	1264 [573.3]	1377 [624.6]

\* Physical data table is for vertical configuration models. Please see product submittal for horizontal configuration physical data table.

## TESTED TO ASHRAE/AHRI/ISO 13256-1 ENGLISH (I-P) UNITS

Model	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
HBH/V072 - Part	35,000	14.7	46,000	5.4	40,000	22.5	37,000	4.6	37,500	18.5	31,500	4.1
HBH/V072 - Full	69,000	14.5	92,500	5.2	78,500	22.0	75,500	4.6	71,000	15.6	56,000	3.6
HBH/V096 - Part	47,500	14.5	59,500	5.1	52,300	20.7	48,500	4.3	52,000	18.2	42,000	3.8
HBH/V096 - Full	95,000	13.8	123,000	5.0	105,000	20.4	101,000	4.4	98,000	15.4	77,000	3.6
HBH/V120 - Part	60,000	13.8	78,500	4.7	67,500	19.7	64,500	4.0	63,000	16.6	53,800	3.5
HBH/V120 - Full	119,000	13.3	160,000	4.6	134,000	19.3	132,500	4.0	122,500	14.7	103,000	3.3
HBV160 - Part	78,500	14.4	98,500	4.9	86,500	19.7	84,000	4.4	83,200	17.3	70,300	3.9
HBV160 - Full	157,000	14.3	207,000	4.9	172,000	19.6	168,000	4.4	162,000	15.6	125,000	3.6
HBV192 - Part	95,800	14.5	118,500	5.1	106,500	19.7	96,500	4.5	102,700	17.3	83,000	3.9
HBV192 - Full	191,500	14.3	243,000	5.1	211,000	19.5	196,500	4.5	199,000	15.8	149,000	3.7
HBV240 - Part	117,000	14.1	157,000	5.1	132,900	19.6	128,000	4.4	127,500	17.3	111,000	3.8
HBV240 - Full	233,000	13.9	318,000	5.0	263,500	19.2	260,500	4.4	240,000	14.9	198,500	3.5
HBV300 - Part	153,000	14.2	192,300	4.9	171,000	19.2	156,500	4.3	164,000	16.9	137,400	3.8
HBV300 - Full	300,000	13.5	395,000	4.8	341,500	18.7	321,500	4.3	310,000	14.5	240,000	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.

Due to ongoing product improvements, specifications and dimensions are subject to change and correction without notice or incurring obligations. Determining the application and suitability for use of any product is the responsibility of the installer. Additionally, the installer is responsible for verifying dimensional data on the actual product before beginning any installation preparations. All products meet applicable regulations in effect on date of manufacture; however, certifications aren't necessarily granted for life of the product. It is the responsibility of the applicant to determine whether a specific model qualifies for third party incentive/rebate programs (Federal, state, utilities, etc.).

"This product complies with all California product labeling laws including, but not limited to, the Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65."