

HB Compact Series



The HB Compact Series raises the bar for water-source heat pump application flexibility. Not only does the HB Compact Series exceed ASHRAE 90.1 efficiencies, but with the new ECM fan motor option, it also delivers higher efficiencies up to 15.9 EER (Tower-Boiler) and 18 EER (Geothermal).

FEATURES

- EarthPure® (HFC-410A) refrigerant
- Exceeds ASHRAE 90.1 efficiencies
- Galvanized steel construction front access panel
- Corrosion resistant polymer drain pan
- Sound absorbing glass fiber insulation
- Unique double isolation compressor mounting for quiet operation
- Insulated divider and separate compressor/air handler compartments
- Copeland scroll compressors (size 024 and above)
- TXV metering device
- Microprocessor controls standard
- Field convertible discharge air arrangement for horizontal units

OPTIONS

- DXM2 Advanced Communicating controls
- Constant Volume Intelligent ECM Fan motors
- MPC or LON DDC building controls
- Water Side Economizer



WATER SOURCE HEAT PUMPS

.5 to 5 Tons

*Energy Efficient Heating & Cooling
for Commercial Applications*

UNIT SIZE

Horizontal Model		W	D	H
006 - 012	in. cm	19.1 48.5	34.1 86.6	11.1 28.2
015 - 018	in. cm	20.1 51.1	43.1 109.5	17.0 43.2
024 - 030	in. cm	20.1 51.1	43.1 109.5	18.3 46.5
036 - 042	in. cm	20.1 51.1	47.1 119.6	21.0 53.3
048 - 060	in. cm	24.1 61.2	54.1 137.4	21.0 53.3

Vertical Upflow Model		W	D	H
006 - 012	in. cm	19.1 48.5	19.1 48.5	22.0 55.9
015 - 030, 041	in. cm	21.5 54.6	21.5 54.6	40.0 101.6
036 - 042	in. cm	21.5 54.6	26.0 66.0	45.0 114.3
048 - 060	in. cm	24.0 61.0	32.5 82.6	46.0 116.8

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

www.marsdelivers.com

PHYSICAL DATA

HB Series	006	009	012	015	018	024	030	036	041	042	048	060	
Compressor (1 Each)	Rotary						Scroll						
Factory Charge HFC-410A (oz)	19	20	23	35	43	40	48	50	70	70	74	82	
ECM Fan Motor & Blower													
Blower Wheel Size (Dia x w)				9x7	9x7	9x7	9x7	9x8			9x8	10x10	12x10
PSC Fan Motor & Blower													
Fan Motor Type/Speeds	PSC/3	PSC/3	PSC-3	PSC/3	PSC/3	PSC/3	PSC/3	PSC/3	PSC/3	PSC/3	PSC/3	PSC/3	
Blower Wheel Size (Dia x w)	5x5	5x5	6x5	8x7	8x7	9x7	9x7	9x8	9x8	9x8	10x10	12x10	
Water Connection Size													
FPT	1/2"	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"	1"	1"	
Coax Volume (gallons)	0.123	0.143	0.167	0.286	0.450	0.286	0.323	0.323	0.890	0.890	0.738	0.939	
Vertical													
Air Coil Dimensions (H x W)	10x15	10x15	10x15	20x17.25	20x17.25	20x17.25	20x17.25	24x21.75	20x17.25	24x21.76	24x28.25	24x28.25	
Filter Standard - 1" Throwaway	10x18	10x18	10x18	20x20	20x20	20x20	20x20	24x24	20x20	24x24	1-14x24, 1-18x24	1-14x24, 1-18x24	
Weight - Operating (lbs.)	103	105	114	153	158	189	197	203	210	218	263	278	
Weight - Packaged (lbs.)	113	115	124	158	163	194	202	209	217	224	270	285	
Horizontal													
Air Coil Dimensions (H x W)	10x15	10x15	10x15	16x22	16x22	16x22	16x22	20x25			20x25	20x35	20x35
Filter Standard - 1" Throwaway	10x18	10x18	10x18	16x25	16x25	18x25	18x25	20x28 or 2-20x14			20x28 or 2-20x14	1-20x24, 1-20x14	1-20x24, 1-20x14
Weight - Operating (lbs.)	103	105	114	153	158	174	182	203			218	263	278
Weight - Packaged (lbs.)	113	115	124	158	163	179	187	209			224	270	285

Notes:

All units have TXV expansion device, and 1/2" & 3/4" electrical knockouts.
 FPT = Female Pipe Thread
 Condensate Drain Connection is rubber coupling that couples to 3/4" schedule 40/80 PVC.
 575 volt fan motors are two speed.

Unit Maximum Water Working Pressure	Max Pressure PSIG [kPa]
Base Unit	500 [3447]
WSE Option	300 [2068]

TESTED TO 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	7,000	21.1	6,300	4.0	6,200	15.4	4,900	3.1
HB-009	PSC	8,600	13.4	11,600	4.3	10,000	21.1	9,700	3.9	9,100	15.7	7,800	3.4
HB-012	PSC	11,100	12.5	14,700	4.3	13,500	19.2	12,100	3.7	12,000	14.3	10,000	3.2
HB-015	PSC	14,300	14.5	17,100	5.0	16,500	24.0	14,100	4.3	14,800	17.0	11,000	3.5
	ECM	14,300	15.5	17,100	5.3	16,500	25.0	14,100	4.5	14,800	18.0	11,000	3.6
HB-018	PSC	18,700	14.0	21,800	5.0	21,500	22.0	17,800	4.2	19,500	16.1	14,100	3.4
	ECM	18,700	15.0	21,800	5.2	21,500	23.6	17,800	4.5	19,500	17.1	14,100	3.7
HB-024	PSC	23,600	13.0	27,500	4.6	27,000	20.5	23,500	4.1	24,500	15.0	18,600	3.3
	ECM	23,600	13.5	27,500	4.8	27,000	21.5	23,500	4.3	24,500	16.0	18,600	3.5
HB-030	PSC	28,600	13.0	37,000	4.7	32,000	19.6	30,500	4.1	29,500	14.7	24,000	3.4
	ECM	28,600	13.6	37,000	4.9	32,000	21.6	30,500	4.3	29,500	16.0	24,000	3.6
HB-036	PSC	34,500	13.2	45,200	4.4	38,700	20.0	37,000	3.9	35,300	14.5	28,700	3.3
	ECM	34,500	14.0	45,200	4.5	38,700	21.0	37,000	4.0	35,300	15.5	28,700	3.4
HBV-041	PSC	36,500	13.2	45,700	4.3	41,400	19.7	38,000	3.7	38,000	14.8	30,000	3.2
HB-042	PSC	41,000	13.2	52,700	4.3	46,400	19.6	42,400	3.8	42,500	14.5	33,900	3.2
	ECM	41,000	14.9	52,700	4.5	46,400	21.0	42,400	4.0	42,500	16.0	33,900	3.4
HB-048	PSC	48,000	13.3	53,600	4.7	54,200	20.5	45,300	4.1	50,400	14.7	36,500	3.4
	ECM	48,000	14.0	53,600	4.8	54,200	21.0	45,300	4.3	50,400	16.2	36,500	3.6
HB-060	PSC	59,500	13.0	72,000	4.3	66,500	18.7	61,000	3.9	61,500	14.5	49,200	3.3
	ECM	59,500	14.6	72,000	4.4	66,500	20.5	61,000	4.0	61,500	16.5	49,200	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.).