

# HZ Series



The HZ Premier Efficiency Series delivers the ultimate in efficiency, comfort, reliability and serviceability – intelligently driven by the DXM2, the industry’s first two-way communicating control, two-stage compressor, variable speed fan and industry-first factory pump internal variable water flow components. The HZ Series also delivers reliable operation, lower operating cost and compact installation.



## FEATURES

- Advanced Controls - DXM2 Board communicating control provides advanced unit functionality and comprehensive configuration, monitoring and diagnostic capabilities through digital communication links with the variable-speed fan motor, variable-speed source pump (or modulating valve) and communicating thermostat or configuration/diagnostic tool
- Optional Internal Variable Water Flow - Industry-first, built-in factory pump replaces a traditionally inefficient, external component of the geothermal system (water circulation) with an ultra-high efficient, variable speed, internal water flow system consisting of an internal variable speed circulator or an internal modulating motorized water valve
- HFC-410A refrigerant
- Copeland UltraTech™ two-stage scroll compressors
- ECM variable speed communicating fan motor with soft start
- Exceeds ASHRAE 90.1 efficiencies
- Part load operation significantly lowers annual operating costs
- Galvanized steel construction with an Artic White polyester powder coat paint and silver accents
- Stainless steel drain pan
- Unique double isolation compressor mounting for quiet operation
- TXV metering device
- Extended range (20 to 120°F, -6.7 to 48.9°C) operation
- Eight Safeties Standard
- Tin-plated micro-channel EVAP coil

## WATER SOURCE HEAT PUMPS

*2 to 6 Tons  
Energy Efficient Heating & Cooling  
for Residential Applications*

## UNIT SIZE

Vertical Upflow Model		A Width	B Length	C Height
024	in	22.4	62.2	19.3
	cm	56.8	158.0	48.9
036	in	25.4	71.2	21.3
	cm	64.5	180.8	54.0
048	in	25.4	76.2	21.3
	cm	64.5	193.5	54.0
060 & 070	in	25.4	81.2	21.3
	cm	64.5	206.2	54.0

Vertical Upflow Model		A Width	B Depth	C Height
024	in	22.4	25.6	48.5
	cm	56.8	65.1	123.2
036	in	25.4	30.6	50.5
	cm	64.5	77.8	128.3
048	in	25.4	30.6	54.5
	cm	64.5	77.8	138.4
060 & 070	in	25.4	30.6	58.5
	cm	64.5	77.8	148.6

## PACKAGE UNIT AUXILIARY/EMERGENCY HEATERS

Part Number	kW @ 240 Single Phase	Number of Circuits	Used with HZV/D/H		
			24	36	48-70
HGM05AAG	4.8	1	X		
HGM08ABG	7.6	1	X		
HGM10ABG	9.6	1	X		
HGM12ABG	11.4	2	X		
HGL10ABG	9.6	1		X	X
HGL15ABG	14.4	2		X	X
HGL20ABG	19.2	2			X
16B0002N02	Single Circuit Adapter Kit for 2 circuit heaters				

**Warranty**—12 years on compressor, 12 years on parts  
(Some limitations apply; see printed warranty for details.)

[www.century-hvac.com](http://www.century-hvac.com)

## PHYSICAL DATA

Model	024	036	048	060	070
Compressor (1 Each)	Two-Stage Scroll				
Factory Charge (HFC-410A) (oz) [kg]	44 [1.25]	52 [1.47]	69 [1.96]	142 [4.03]	140 [3.97]
<b>ECM Fan Motor &amp; Blower</b>					
Fan Motor (hp) [W]	1/2 [373]	1/2 [373]	1 [746]	1 [746]	1 [746]
Blower Wheel Size (dia x w) - (in) [mm]	9 x 7 [229 x 178]	11 x 10 [279 x 254]	11 x 10 [279 x 254]	11 x 10 [279 x 254]	11 x 10 [279 x 254]
<b>Water Connection Size</b>					
FPT (in)	1	1	1	1	1
<b>HWG Connection Size</b>					
FPT (in)	1/2	1/2	1/2	1/2	1/2
<b>Coax Volume</b>					
Volume (US Gallons) [liters]	0.76 [2.88]	0.92 [3.48]	1.24 [4.69]	1.56 [5.91]	1.56 [5.91]
<b>Vertical Upflow/Downflow</b>					
Air Coil Dimensions (h x w) - (in) [mm]	28 x 20 [711 x 508]	28 x 25 [711 x 635]	32 x 25 [813 x 635]	36 x 25 [914 x 635]	36 x 25 [914 x 635]
Standard Filter - 1" [25.4mm] Throwaway, qty (in) [mm]	28 x 24 [711 x 610]	28 x 29.5 [712 x 749]	32 x 29.5 [813 x 749]	36 x 29.5 [914 x 749]	36 x 29.5 [914 x 749]
Weight - Operating, (lbs) [kg]	298 [135]	359 [163]	448 [203]	475 [215]	475 [215]
Weight - Packaged, (lbs) [kg]	308 [140]	369 [167]	458 [208]	485 [220]	485 [220]
Weight-ClimaDry II (lbs) [kg]	38 [17]	41 [19]	44 [20]	49 [22]	49 [22]
<b>Horizontal</b>					
Air Coil Dimensions (h x w) - (in) [mm]	18 x 31 [457 x 787]	20 x 35 [508 x 889]	20 x 40 [508 x 1016]	20 x 45 [508 x 1143]	20 x 45 [508 x 1143]
Standard Filter - 1" [25.4mm] Throwaway, qty (in) [mm]	2 - 18 x 18 [457 x 457]	1 - 12 x 20 [305 x 508] 1 - 20 x 25 [508 x 635]	1 - 18 x 20 [457 x 508] 1 - 20 x 24 [508 x 610]	2 - 20 x 24 [508 x 610]	2 - 20 x 24 [508 x 610]
Weight - Operating, (lbs) [kg]	298 [135]	359 [163]	448 [203]	475 [215]	475 [215]
Weight - Packaged, (lbs) [kg]	308 [140]	369 [167]	458 [208]	485 [220]	485 [220]
Weight-ClimaDry II (lbs) [kg]	38 [17]	41 [19]	44 [20]	49 [22]	49 [22]

Notes:  
All units have TXV expansion device and 1/2" & 3/4" electrical knockouts.

## 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		Full Cool 77°F Part Cool 68°F		Full Heat 32°F Part Heat 41°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
HZ024 Part	19,200	19.8	23,600	7.0	22,000	34.1	19,000	5.4	20,800	28.0	16,800	5.0
HZ024 Full	25,000	17.4	31,400	6.0	28,500	26.4	25,800	5.1	26,000	19.9	20,200	4.1
HZ036 Part	27,400	20.1	32,600	6.5	30,700	34.4	27,300	5.5	29,700	29.6	23,800	4.8
HZ036 Full	37,700	17.9	45,700	5.8	42,100	26.1	37,900	5.2	39,000	20.3	29,700	4.4
HZ048 Part	36,300	18.8	42,200	6.1	41,800	32.9	34,800	5.0	39,100	27.4	29,800	4.4
HZ048 Full	48,600	16.8	56,700	5.1	55,000	25.3	46,800	4.6	49,600	19.3	36,400	4.0
HZ060 Part	46,300	18.7	54,700	6.0	53,100	32.4	44,000	5.0	51,200	26.7	38,100	4.4
HZ060 Full	61,500	16.2	77,400	5.4	71,500	24.4	63,200	4.8	66,200	18.8	48,700	3.9
HZ070 Part	53,000	16.8	64,600	5.2	60,800	28.6	53,200	4.5	58,100	23.2	46,000	3.9
HZ070 Full	68,300	15.1	85,300	4.8	77,700	22.5	71,400	4.4	71,700	16.9	55,800	3.7

Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature  
Heating capacities based upon 68°F DB, 59°F WB entering air temperature  
Ground Loop Heat Pump ratings based on 15% antifreeze solution  
All ratings based upon operation at lower voltage of dual voltage rated models

"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."

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.).