

TWO-STAGE GEOTHERMAL HEAT PUMPS

'HE' Series

Self-contained HE Series units combine a small footprint with two stage operation and integrated digital communication controls at a competitive price. Exceeding industry standards for energy efficiency including Energy Star® Tier 3 requirements, the units are eligible for Federal tax credits.

A digital electronic controller links the thermostat, fan motor and compressor staging to provide set-up and diagnostic data, saving time during installation and service calls. Also saving installation time is a four wire connection between the controller and the communicating thermostat. If the communicating thermostat is not used, the installer can choose an optional separate diagnostic tool to access the data, and a port for the tool is built into the unit.

The two stage compressor runs at 67% capacity most of the time to maintain a consistent temperature/humidity level. When there's demand, the unit instantly shifts to 100% capacity. The ECM blower motor automatically adapts to system requirements for increased efficiency while operating.

The HE Series is designed for open loop, closed loop and boiler/cooling tower applications, and the compact size makes it ideal for tight spaces. Available in vertical and horizontal models, the HE Series delivers installation flexibility that contractors and homeowners alike will appreciate.



HE Series 2 to 5 Tons
With Electronic Digital Controller
Available in vertical and horizontal configurations



Outstanding Limited Warranty—
10 years on compressor and parts
(Some limitations apply; see printed warranty for details.)



Features

- **Extended Range Refrigerant Circuit**—HE unit is capable of geothermal ground loop and ground water applications, as well as boiler/cooling tower water loop installations
- **Scroll Compressor**—Dependable two stage design is efficient, reliable, quiet
- **Large Filter**—Captures pollutants for enhanced indoor air quality, can be quickly changed as needed
- **System Performance Monitoring**—Signals when the system is not running at peak performance so maintenance can be scheduled
- **Quiet Operation**—Double isolation compressor mounting system and air handler compartment insulation make this HE one of the quietest units on the market
- **Easy Service Access**—All components can be accessed through the conveniently located control box and large access panels for fast installation, easy maintenance
- **Hot Water Generator**—Supplements domestic hot water for increased energy savings



Designed for reliable, quiet operation and long life



Dependable

- State-of-the-art, solid state microprocessor controls feature easy to understand diagnostics
- Scroll compressor is rated for heat pump use and designed for quiet operation and efficiency
- Performance monitoring system signals a potential problem, much like a car's "check engine" light, so service can be scheduled before a lockout can occur
- Insulated, stainless steel drain pan has condensate overflow protection
- Limited number of moving parts means less wear and long life expectancy
- Tin-plated air coil resists corrosion, prolonging equipment life in most environments and improving efficiency

Quiet Operation

- Double spring and grommet isolation mounting system for the compressor reduces vibration and related sound
- Flexible torsion motor mounting further reduces vibration
- Compressor compartment is insulated; it's also separated from the air handler by an insulated divider
- Discharge muffler reduces inherent compressor pulse noise

Installation Flexibility

- Condensate line is internally trapped
- Swivel connectors make water hook-up quick and easy
- Compact models are ideal for tight spaces or retrofit applications

Easy Servicing

- Components can be accessed from multiple sides to simplify service and maintenance
- Removable blower inlet ring allows easy access to the fan and motor for maintenance
- Safety features protect the unit: High pressure and loss of refrigerant charge to protect compressor; condensate overflow; freeze protection for coaxial heat exchanger and air coil; hot water generator limiter; fault lock-out enables emergency heat and prevents compressor operation

All models 208/230V-1-60

Model	Capacity Modulation	Ground Water				Ground Loop				Shipping Weight (lbs)
		Cooling Water 59° F		Heating Water 50° F		Cooling Full Load 77° F Part Load 68° F		Heating Full Load 32° F Part Load 41° F		
		BTUH	EER	BTUH	COP	BTUH	EER	BTUH	COP	
HEV/HEH 024	Full	26,500	21.7	23,000	4.1	24,600	16.0	17,800	3.6	213
	Part	20,300	27.2	16,700	4.4	19,400	22.2	14,700	4.0	
HEV/HEH 030	Full	32,300	20.7	30,000	4.2	29,900	15.7	23,800	3.6	213
	Part	24,900	24.8	22,000	4.3	24,200	20.9	19,400	3.9	
HEV/HEH 036	Full	38,200	22.3	35,100	4.3	35,200	16.7	27,300	3.6	239
	Part	29,000	29.4	24,900	4.6	27,300	23.4	21,500	4.0	
HEV/HEH 042	Full	46,300	21.3	42,300	4.1	43,100	16.1	33,300	3.4	250
	Part	35,200	26.4	30,500	4.3	34,000	22.0	26,900	3.8	
HEV/HEH 048	Full	51,800	20.9	45,000	4.4	48,100	15.5	35,600	3.7	306
	Part	39,200	26.8	32,600	4.6	37,600	21.2	29,200	4.1	
HEV/HEH 060	Full	68,000	22.7	55,400	4.3	63,200	17.3	43,700	3.6	321
	Part	50,400	28.9	39,800	4.5	48,600	23.7	34,800	4.0	

Cooling capacities based on 80.6° F DB, 66.2° F WB entering air temp. Heating capacities based on 68° F DB, 59° F WB entering air temp. All ratings based on 208V operation.

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.).



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