



THE SMART SOLUTION FOR ENERGY EFFICIENCY

GENESIS STANDARD (GR) SERIES 0.5 TO 5 TON HORIZONTAL AND VERTICAL UNITS



ClimateMaster Water-Source Heat Pumps Genesis Standard (GR) Series 0.5 to 5 Ton Horizontal and Vertical Units

THE GENESIS STANDARD (GR) SERIES

The GR series offers high efficiency, quiet operation with advanced features and application flexibility at competitive prices. GR series exceeds ASHRAE 90.1 efficiencies, yet maintains small cabinet dimensions.

Available in sizes 1/2 ton (1.76 kW) through 5 tons (17.6 kW) with multiple vertical and horizontal cabinet options the GR series offers a wide range of units for most any installation. The GR has an extended range refrigerant circuit, capable of ground loop (geothermal) applications as well as water loop (boiler-tower) applications. Standard features are many. Microprocessor controls, galvanized steel cabinet, epoxy powder coat paint (vertical units) and TXV refrigerant metering device are just some of the features of the flexible GR series.

ClimateMaster's exclusive double isolation compressor mounting system makes the GR series the quietest unit on the market. Compressors are mounted on vibration isolation springs to a heavy gauge mounting plate, which is then isolated from the cabinet base with rubber grommets for maximized vibration/sound attenuation. Options such as e-coated air coil, DDC controls, internal pump and factory-installed water solenoid valves allow customized design solutions.

The GR Series water-source heat pumps are designed to meet the challenges of today's HVAC demands with a low cost/high value solution.

UNIT FEATURES

- Sizes 006 (1/2 ton, 1.76 kW) through 060 (5 tons, 17.6 kW)
- Rotary, reciprocating and scroll compressors
- Exceeds ASHRAE 90.1 efficiencies
- Galvanized steel construction with epoxy powder coat paint (vertical units)
- Unique double isolation compressor mounting with vibration isolation springs for quiet operation
- Insulated divider and separate compressor/air handler compartments
- TXV metering device
- Extended range (20 to 120°F, -6.7 to 48.9°C) operation
- Microprocessor controls standard (optional DXM and/or DDC controls)
- LonWorks, BACnet, Modbus and Johnson N2 compatibility options for DDC controls
- Field convertible discharge air arrangement for horizontal units
- Factory-mounted hanger brackets for horizontal units
- Internally trapped condensate drain line (vertical units only)
- Flush securely-mounted corner post water connections (no backup wrench required)
- Unit Performance Sentinel performance monitoring system
- Eight Safeties Standard
- Wide variety of options including e-coated air coils and internal pumps

The Smart Choice for Energy Efficiency



Advanced digital controls with Remote Service Sentinel
Optional Enhanced controls (DXM) & DDC Controllers

Easy to remove torsion-flex motor mounts for quiet operation and blower inlet ring for quick service (Optional High-Static blowers)



Easy Service Access from multiple sides



Insulated Drain Pan with condensate overflow protection (Optional Stainless Steel Drain Pan)



Factory installed hanger brackets

Double spring and grommet compressor isolation



PERFORMANCE AND SPECIFICATIONS

AHRI/ISO/ASHRAE 13256-1 Data (English (IP) Units & Metric (SI) Units)

Model	Voltage & Refrigerant	Water Loop Heat Pump				Ground Water Heat Pump				Ground Loop Heat Pump			
		Cooling 86°F [30°C]		Heating 68°F [20°C]		Cooling 59°F [15°C]		Heating 50°F [10°C]		Cooling 77°F [25°]		Heating 32°F [0°C]	
		Capacity	EER	Capacity	COP	Capacity	EER	Capacity	COP	Capacity	EER	Capacity	COP
		Btuh [kW]	Btuh/W [W/W]	Btuh [kW]		Btuh [kW]	Btuh/W [W/W]	Btuh [kW]		Btuh [kW]	Btuh/W [W/W]	Btuh [kW]	
60Hz - R22	kW	W/W	kW		kW	W/W	kW		kW	W/W	kW		
50Hz - R407c	kW	W/W	kW		kW	W/W	kW		kW	W/W	kW		
GRH/V006	60Hz - R22	5,400 [1.58]	12.8 [3.8]	7,400 [2.17]	4.2	5,900 [1.73]	17.6 [5.2]	5,500 [1.61]	3.8	5,600 [1.64]	14.3 [4.2]	4,400 [1.29]	3.4
	50Hz - R407c	1.50	3.3	1.80	3.9	1.80	5.3	1.50	3.4	1.60	3.9	1.20	3.0
GRH/V009	60Hz - R22	8,100 [2.37]	12.8 [3.8]	10,300 [3.02]	4.3	8,800 [2.58]	17.6 [5.2]	7,700 [2.26]	3.8	8,300 [2.43]	14.2 [4.2]	6,200 [1.82]	3.4
	50Hz - R407c	2.10	4.0	2.40	4.2	2.50	6.3	2.00	3.8	2.20	4.7	1.60	3.33
GRH/V012	60Hz - R22	11,800 [3.46]	12.7 [3.7]	14,600 [4.28]	4.2	12,500 [3.66]	17.6 [5.2]	11,000 [3.22]	3.6	12,100 [3.55]	14.2 [4.2]	8,700 [2.55]	3.4
	50Hz - R407c	2.50	3.1	3.40	3.7	3.10	4.8	2.80	3.4	2.70	3.6	2.20	3.0
GRH/V015	60Hz - R22	14,100 [4.13]	13.3 [3.9]	16,800 [4.98]	4.6	15,200 [4.54]	17.6 [5.2]	13,500 [3.96]	4.1	14,500 [4.25]	14.8 [4.3]	10,700 [3.14]	3.5
	50Hz - R407c	3.90	4.6	3.80	4.7	4.50	6.8	3.10	4.2	4.10	5.3	2.60	3.7
GRH/V019	60Hz - R22	18,900 [5.54]	12.5 [3.7]	22,500 [6.59]	4.2	20,100 [5.89]	17.6 [5.2]	16,700 [4.89]	3.6	19,100 [5.60]	13.4 [3.9]	11,800 [3.46]	3.2
	50Hz - R407c	4.90	3.3	6.10	4.0	5.90	4.8	4.80	3.6	5.30	3.8	3.60	3.1
GRH/V024	60Hz - R22	23,000 [6.74]	12.3 [3.6]	27,600 [8.09]	4.2	26,100 [7.65]	18.2 [5.3]	21,300 [6.24]	3.7	23,000 [6.74]	13.3 [3.9]	16,700 [4.89]	3.3
	50Hz - R407c	5.70	3.4	7.00	4.0	6.80	5.0	5.70	3.7	6.10	3.9	4.40	3.3
GRH/V030	60Hz - R22	28,500 [8.35]	13.2 [3.9]	33,300 [9.76]	4.4	31,100 [9.11]	18.3 [5.4]	27,000 [7.91]	3.9	28,700 [8.41]	14.4 [4.2]	20,100 [5.89]	3.4
	50Hz - R407c	6.40	3.3	7.90	4.2	7.40	4.9	6.40	3.7	6.80	3.8	5.10	3.2
GRH/V036	60Hz - R22	34,000 [9.97]	13.0 [3.8]	41,700 [12.22]	4.2	37,500 [10.99]	18.2 [5.3]	33,400 [9.79]	3.9	35,200 [10.32]	14.7 [4.3]	25,500 [7.47]	3.4
	50Hz - R407c	8.00	3.3	10.60	4.0	9.30	4.6	8.70	3.7	8.50	3.7	6.80	3.3
GRH/V042	60Hz - R22	40,000 [11.72]	13.0 [3.8]	46,700 [13.69]	4.3	46,500 [13.63]	18.6 [5.4]	38,300 [11.23]	3.9	42,000 [12.31]	15.0 [4.4]	29,400 [8.62]	3.4
	50Hz - R407c	9.90	3.7	11.30	4.4	12.20	5.8	9.50	4.0	10.80	4.4	7.50	3.6
GRH/V048	60Hz - R22	47,000 [13.78]	12.8 [3.8]	58,000 [17.00]	4.2	54,000 [15.83]	18.1 [5.3]	46,000 [13.48]	3.8	48,500 [14.22]	14.3 [4.2]	35,300 [10.35]	3.3
	50Hz - R407c	11.40	3.6	14.30	4.1	13.10	5.2	11.40	3.7	12.00	4.1	8.40	3.4
GRH/V060	60Hz - R22	59,000 [17.23]	12.8 [3.8]	68,000 [19.93]	4.2	64,500 [18.90]	16.8 [4.9]	56,000 [16.41]	3.8	60,600 [17.76]	14.1 [4.1]	44,000 [12.90]	3.2
	50Hz - R407c	13.70	3.4	16.80	4.3	15.90	5.2	13.80	3.8	14.50	4.0	11.20	3.3

Cooling capacities based upon 80.6°F [27°C] DB, 66.2°F [19°C] WB entering air temperature.

Heating capacities based upon 68°F [20°C] DB, 59°F [15°C] WB entering air temperature.

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

Dimensional Data

Vertical Upflow Model	Overall Cabinet	Overall Cabinet			Horizontal Model	Overall Cabinet			
		W	D	H		W	D	H	
009 - 012	in. cm.	22.4 56.8	21.6 54.9	22.6 57.4	006 - 012	in. cm.	22.4 56.8	43.1 109.5	11.3 28.7
015 - 024	in. cm.	22.4 56.8	21.6 54.9	34.6 87.9	015 - 024	in. cm.	22.4 56.8	43.1 109.5	17.3 43.9
030 - 036	in. cm.	22.4 56.8	25.6 65.1	40.6 103.1	030 - 036	in. cm.	22.4 56.8	53.2 135.1	19.3 49.0
042 - 048	in. cm.	22.4 56.8	25.6 65.1	48.6 123.4	042 - 048	in. cm.	22.4 56.8	62.2 158.0	19.3 49.0
060	in. cm.	25.4 64.5	30.6 77.8	50.6 128.5	060	in. cm.	25.4 64.5	71.2 180.8	21.3 54.1

Voltage Options

Model	Volts	Hz	Phase	Model	Volts	Hz	Phase
006 - 019	208/230	60	1	042 - 060	208/230	60	1
	265	60	1		208/230	60	3
	220/240	50	1		460	60	3
			575		60	3	
			380/420		50	3	
024 - 036 <small>* Excludes size 024</small>	208/230	60	1				
	265	60	1				
	208/230	60	3				
	460	60	3				
	220/240	50	1				
	380/420	50	3*				



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