



THE SMART SOLUTION FOR ENERGY EFFICIENCY

GENESIS COMPACT (GC) SERIES 0.5 TO 5 TON HORIZONTAL AND VERTICAL UNITS



ClimateMaster Water-Source Heat Pumps Genesis Compact (GC) Series Horizontal and Vertical Units

THE GENESIS COMPACT (GC) SERIES

Uniquely designed to be backwards compatible with hundreds of thousands of older water-source heat pumps, the Genesis Compact (GC) Series utilizes innovative ClimateMaster cabinet design solutions to meet ASHRAE 90.1 efficiencies, while maintaining one of the smallest cabinets in the industry. The Vertical GCV041 is designed to be a "drop-in" replacement unit for thousands of existing Condo / Apartment units.

The GC Series is designed specifically for boiler-tower applications where low first cost matters. Refrigerant circuits use trouble-free cap tube metering devices and reliable rotary, reciprocating or scroll compressors to create a full line of products to meet the varying needs of today's construction projects. Sizes from 1/2 ton (1.76 kW) through 5 tons (17.6 kW) and field convertible discharge options for horizontal units make the GC Series extremely flexible.

The GC Series features long-lasting galvanized steel for all models and epoxy powder coat paint for vertical units. ClimateMaster's exclusive double isolation compressor mounting system and standard cabinet insulation make the GC Series exceptionally quiet.

Some manufacturers' compact cabinet designs offer limited features. The GC series includes many standard features and a number of options. Factory installed hanger brackets (Horizontal units only), microprocessor controls and torsion flex motor mounting (006-042) are standard features. Options such as e-coated air coils, ClimaDry modulating reheat and DDC controls allow customized design solutions. Optional high static motors help overcome some of the challenges associated with ductwork for retrofit installations.

The GC 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)
- Meets ASHRAE 90.1 efficiencies
- Compact cabinet design: Great for retrofit or tight spaces
- Galvanized steel construction (powder coat paint on vertical units)
- Unique double isolation compressor mounting for quiet operation
- Reliable rotary, reciprocating and scroll compressors
- Trouble-free cap tube refrigerant metering device
- 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
- High static blowers available
- Low cost/high value product specifically designed for standard range (boiler/tower) applications
- Wide variety of options including ClimaDry modulating reheat and e-coated air coils
- Seven Safeties Standard

The Smart Choice for Energy Efficiency



Double grommet compressor isolation

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



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



Factory installed hanger brackets

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



PERFORMANCE AND SPECIFICATIONS

ARI/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°C]		Heating 32°F [0°C]																																																																																		
		Capacity	EER	Capacity	COP	Capacity	EER	Capacity	COP	Capacity	EER	Capacity	COP																																																																																	
		60Hz - R22	Btuh [kW]	Btuh/W [W/W]		Btuh [kW]	60Hz - R22	Btuh [kW]		Btuh/W [W/W]	Btuh [kW]	60Hz - R22		Btuh [kW]	Btuh/W [W/W]	Btuh [kW]																																																																														
50Hz - R22	kW	W/W	kW	50Hz - R22		kW	W/W	kW		50Hz - R22	kW	W/W		kW																																																																																
GCH006	60Hz - R22	6,400 [1.88]	12.5 [3.7]	8,300 [2.43]	4.2	Please see the GR, GS, TT, or TS Series for Ground Water Loop Applications.	Please see the GR, GS, TT, or TS Series for Ground Loop Applications.	4.2	60Hz - R22	8,300 [2.43]	12.7 [3.7]	10,800 [3.17]	4.3																																																																																	
	50Hz - R22	1.64	3.9	2.10										4.4																																																																																
GCH/V009	60Hz - R22	8,300 [2.43]	12.7 [3.7]	10,800 [3.17]										4.3	Please see the GR, GS, TT, or TS Series for Ground Water Loop Applications.	Please see the GR, GS, TT, or TS Series for Ground Loop Applications.	4.3	60Hz - R22	11,500 [3.37]	12.7 [3.7]	14,300 [4.19]	4.2																																																																								
	50Hz - R22	2.13	4.0	2.74																			4.5																																																																							
GCH/V012	60Hz - R22	11,500 [3.37]	12.7 [3.7]	14,300 [4.19]																			4.2	Please see the GR, GS, TT, or TS Series for Ground Water Loop Applications.	Please see the GR, GS, TT, or TS Series for Ground Loop Applications.	4.2	60Hz - R22	18,200 [5.33]	12.3 [3.6]	22,000 [6.45]	4.2																																																															
	50Hz - R22	2.94	4.0	3.63																												4.4																																																														
GCH/V018	60Hz - R22	18,200 [5.33]	12.3 [3.6]	22,000 [6.45]																												4.2	Please see the GR, GS, TT, or TS Series for Ground Water Loop Applications.	Please see the GR, GS, TT, or TS Series for Ground Loop Applications.	4.2	60Hz - R22	23,800 [6.98]	13.0 [3.8]	27,800 [8.15]	4.6																																																						
	50Hz - R22	4.67	3.6	5.53																																					4.2																																																					
GCH/V024	60Hz - R22	23,800 [6.98]	13.0 [3.8]	27,800 [8.15]																																					4.6	Please see the GR, GS, TT, or TS Series for Ground Water Loop Applications.	Please see the GR, GS, TT, or TS Series for Ground Loop Applications.	4.6	60Hz - R22	28,000 [8.21]	12.2 [3.6]	33,500 [9.82]	4.4																																													
	50Hz - R22	6.12	3.9	7.38																																														5.0																																												
GCH/V030	60Hz - R22	28,000 [8.21]	12.2 [3.6]	33,500 [9.82]																																														4.4	Please see the GR, GS, TT, or TS Series for Ground Water Loop Applications.	Please see the GR, GS, TT, or TS Series for Ground Loop Applications.	4.4	60Hz - R22	35,000 [10.26]	12.0 [3.5]	45,500 [13.34]	4.2																																				
	50Hz - R22	6.92	3.7	8.48																																																							4.7																																			
GCH/V036	60Hz - R22	35,000 [10.26]	12.0 [3.5]	45,500 [13.34]																																																							4.2	Please see the GR, GS, TT, or TS Series for Ground Water Loop Applications.	Please see the GR, GS, TT, or TS Series for Ground Loop Applications.	4.2	60Hz - R22	37,700 [11.05]	12.0 [3.5]	47,500 [13.92]	4.2																											
	50Hz - R22	8.84	3.5	11.46																																																																4.5																										
GCV041	60Hz - R22	37,700 [11.05]	12.0 [3.5]	47,500 [13.92]																																																																4.2	Please see the GR, GS, TT, or TS Series for Ground Water Loop Applications.	Please see the GR, GS, TT, or TS Series for Ground Loop Applications.	4.2	60Hz - R22	41,000 [12.02]	12.0 [3.5]	52,600 [15.42]	4.2																		
	50Hz - R22	9.71	3.7	11.99																																																																									4.4																	
GCH/V042	60Hz - R22	41,000 [12.02]	12.0 [3.5]	52,600 [15.42]																																																																									4.2	Please see the GR, GS, TT, or TS Series for Ground Water Loop Applications.	Please see the GR, GS, TT, or TS Series for Ground Loop Applications.	4.2	60Hz - R22	47,100 [13.80]	12.2 [3.6]	58,200 [17.06]	4.4									
	50Hz - R22	10.51	3.8	13.19																																																																																		4.5								
GCH/V048	60Hz - R22	47,100 [13.80]	12.2 [3.6]	58,200 [17.06]																																																																																		4.4	Please see the GR, GS, TT, or TS Series for Ground Water Loop Applications.	Please see the GR, GS, TT, or TS Series for Ground Loop Applications.	4.4	60Hz - R22	58,000 [17.00]	12.0 [3.5]	76,800 [22.51]	4.2
	50Hz - R22	12.11	3.8	14.69																																																																																										
GCH/V060	60Hz - R22	58,000 [17.00]	12.0 [3.5]	76,800 [22.51]	4.2	Please see the GR, GS, TT, or TS Series for Ground Water Loop Applications.	Please see the GR, GS, TT, or TS Series for Ground Loop Applications.	4.2	60Hz - R22	14.79	3.9	18.71	4.5																																																																																	
	50Hz - R22	14.79	3.9	18.71																																																																																										

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		
		W	D	H
009 - 012	in.	19.1	19.1	22.0
	cm.	48.5	48.5	55.9
018 - 030	in.	21.5	21.5	39.0
	cm.	54.6	54.6	99.1
036 - 042	in.	21.5	26.0	44.0
	cm.	54.6	66.0	111.8
041	in.	21.5	21.5	39.0
	cm.	54.6	54.6	99.1
048 - 060	in.	24.0	32.5	46.0
	cm.	61.0	82.6	116.8

Horizontal Model		Overall Cabinet		
		W	D	H
006 - 012	in.	19.1	34.1	11.0
	cm.	48.5	86.6	27.9
018 - 030	in.	20.1	43.1	17.1
	cm.	51.1	109.5	43.4
036 - 042	in.	20.1	47.1	21.1
	cm.	51.1	119.8	53.6
048 - 060	in.	24.1	54.1	21.1
	cm.	61.2	137.4	53.6

Voltage Options

Model	Volts	Hz	Phase	Model	Volts	Hz	Phase
006 - 018	208/230	60	1	041 - 060	208/230	60	1
	265	60	1				
	220/240	50	1				
024 - 036	208/230	60	1				
	265	60	1				
	208/230	60	3				
041 - 060	460	60	3				
	575	60	3				
	380/420	50	3				
024 - 036	220/240	50	1				
	380/420	50	3				
	50	3	3				



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