

Genesis (GS) Series

SINGLE-STAGE
HORIZONTAL, VERTICAL, AND DOWNFLOW SYSTEMS
SIZES 015 - 070 [4.4 - 21.1 kW]

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Genesis Packaged System Design Features

Design Features

- Efficient operation from 20°F to 110°F entering water temperatures. Flow rates may be as low as 1.5 gpm/ton.
- Top or bottom supply air discharge for upflow or counterflow applications when using the vertical cabinets; and side or end supply air discharge for horizontal cabinets.
- Left or right hand return air positions for all models. Vertical cabinets include a deluxe filter rack/duct collar.
- Standard three-speed, high static capable PSC fan motor.
- Optional variable speed ECM2 blower motors adjusts to multiple duct system applications and provides soft start for added comfort and quiet operation.
- Narrow cabinet design for easy movement through doorways.
- Internally trapped condensate piping for easy, compact installations on vertical cabinets.
- Internal electric heat unit (optional) designed for easy field installation.
- Electrical box located at corner for easy field wiring from two sides.
- Loop pump power block with circuit breaker.
- Coax freeze protection is field selectable for well or closed loop installations.
- Air coil freeze protection using high accuracy thermistors.

Operating Efficiencies

- Top of the industry ARI/ASHRAE/ISO 13256-1 ratings for heating COP's, cooling EER's.
- Optional hot water generator (HWG) with internal pump generates hot water at dramatic savings while improving system performance.
- High efficiency scroll or rotary compressors for quiet, reliable operation.
- Oversized coaxial tube water-to-refrigerant heat exchanger for high efficiency and extra heating capacity. Convoluted copper (optional cupro nickel available) water tube functions efficiently at low flow rates and provides resistance to freeze-damage.
- Oversized rifled copper tube/lanced aluminum fin air-to-refrigerant heat exchanger offers high efficiencies at low air velocity.
- Large, low RPM blower is both quiet and efficient and provides high static capability.

Service Advantages

- Three removable access panels for the compressor compartment and one or two for the air handler compartment offer quick access to all internal components even with ductwork in place.
- Bi-directional thermal expansion valve.
- Brass, swivel-water connections for easy connections of loop and hot water piping.
- Insulated divider and separate air handling/compressor access panels allow service testing without air bypass.
- Designed for in-place service in tight installations spaces.
- CXM control features LED status light with memory feature for easy diagnostics.
- Control box and fan motors have quick-attach wiring connections for fast removal.
- Internal drop-out blower assembly for easy servicing.

- High and low pressure service ports in refrigerant circuit.
- E-Coated refrigerant-to-air coil helps protect the coil from corrosion and extends life expectancy.

Factory Quality

- All units are built on our Integrated Process Control Assembly System (IPCS). The IPCS is a unique state of the art manufacturing system that is designed to assure quality of the highest standards of any manufacturer in the water-source industry.
Our IPCS system:
 - Verifies that the correct components are being assembled.
 - Automatically performs special leak tests on all joints.
 - Conducts pressure tests.
 - Performs highly detailed run test unparalleled in the HVAC industry.
 - System automatically won't allow a "failed" unit to be packaged for shipment.
 - Run-test creates computer database for future service analysis and diagnostics.
- Heavy-gauge steel cabinets are painted with durable epoxy for a long-lasting finish.
- All refrigerant brazing is performed in a nitrogen-rich environment.
- Units are deep evacuated to less than 50 microns prior to refrigerant charging.
- All joints are halogen leak-tested to ensure leak rate of less than 1/4 ounce per year.
- Coaxial heat exchanger, refrigerant suction lines, hot water generator coil, and all water pipes are fully insulated to reduce condensation in low temperature conditions.
- Isolation mounted compressors and low RPM blowers are used to reduce noise. Compressor compartment and interior cabinet is insulated with 1/2" coated glass fiber.
- Safety features include: high pressure and loss of charge to protect the compressor; condensate overflow protection; freeze protection sensors to safeguard the coaxial heat exchanger and air coil; hot water high-limit hot water generator pump shutdown; fault lockout enables emergency heat and prevents compressor operation until thermostat or circuit breaker has been reset.

Options & Accessories

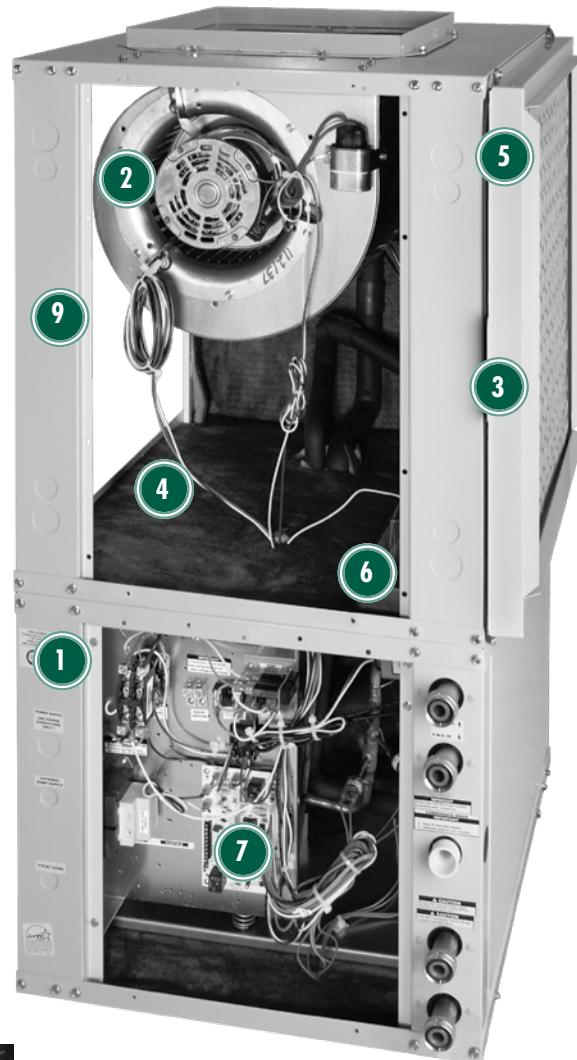
- Optional hot water generator with internally mounted pump and includes special water heater plumbing connections.
- Optional cupro nickel coaxial heat exchanger.
- Optional internal auxiliary electric heat .
- Electronic auto-changeover thermostats with 2-stage heat and 1-stage cool and indicator LED's.
- Closed loop flow controller and hose kits.

Genesis Packaged (GS) Series

The Genesis GS

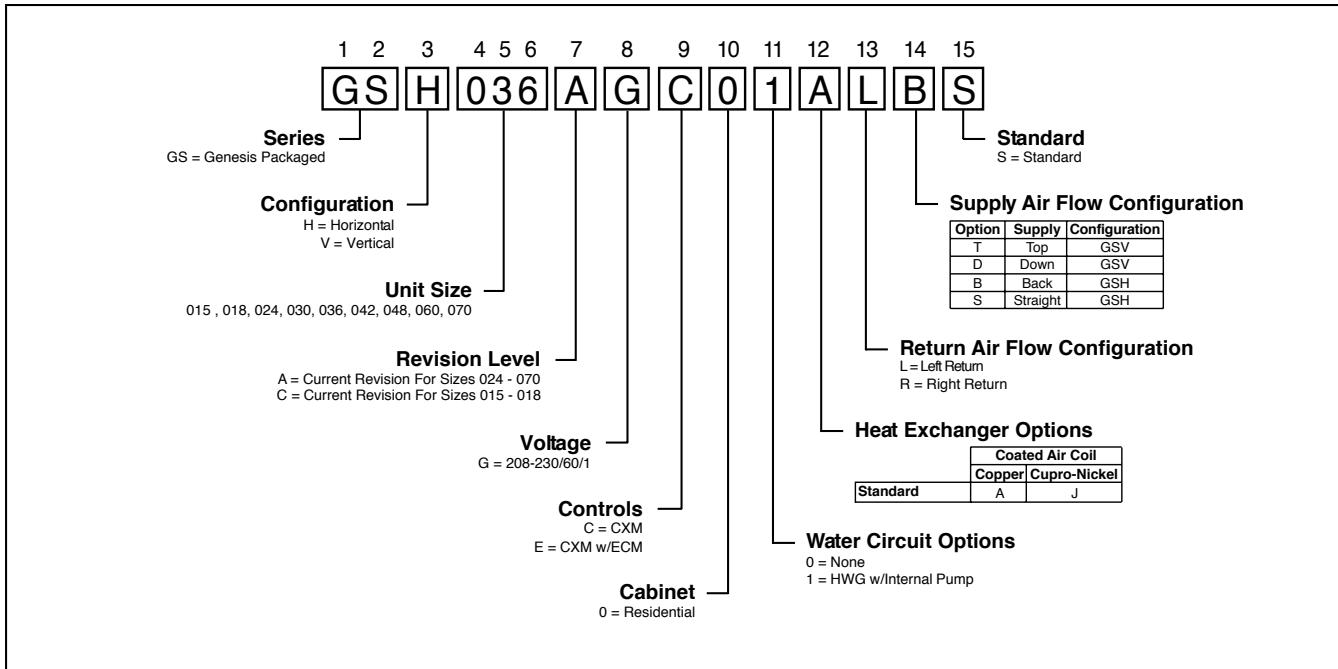
- 1** Copeland™ High Efficiency Scroll Compressor or High Efficiency Rotary Compressor (015 - 018)
- 2** Optional State-Of-The-Art GE Variable Speed Blower Motor
- 3** E-Coated Air Coil
- 4** Fully Insulated Blower Section, with Fully Insulated Compressor Section
- 5** Integrated Filter Rack with Return Air Duct Connection
- 6** Sloped Drain Pan with Condensate Overflow Sensor
- 7** Unit Performance Sentinel: Automatic Alert System Lets You Know If The System Is Not Running At Peak Performance*
- 8** Exclusive Double Spring And Grommet Compressor Isolation For Ultra Quiet Operation
- 9** Five Easy, Lift-out Service Access Panels

* When installed with a ClimateMaster Residential Thermostat



ClimateMaster Geothermal Heat Pump Systems

Unit Model Key



Rev.: 03 March, 2008D

About ARI/ISO/ASHRAE 13256-1

About ARI/ISO/ASHRAE 13256-1

ARI/ASHRAE/ISO 13256-1 (Air-Conditioning and Refrigeration Institute/American Society of Heating, Refrigerating and Air Conditioning Engineers/International Standards Organization) is a certification standard for water-source heat pumps used in the following applications:

- WLHP (Water Loop Heat Pump – Boiler/Tower)
- GWHP (Ground Water Heat Pump – Open Loop)
- GLHP (Ground Loop Heat Pump – Geothermal)

The directory at <http://www.arendirectory.org/ari/wbahp.php> is constantly being updated and immediately available on the Internet. All ratings are submitted by the manufacturer for certification, and must be approved by ARI. Therefore, there is a significant difference between ARI "certified" and ARI "rated." Thirty percent of a manufacturer's basic models must be tested each year. ARI selects models at random from stock for testing on the basis of its evaluation of a participant's certification data.

Units that fail one or more certified test (90% of declared performance or lower) may be declared defective. If the initial failure is a performance test, the manufacturer must obsolete all units within the same basic model group or elect to have a second sample tested. If the second unit fails a performance test, it must be obsoleted, together with all units within the same basic model group. ClimateMaster takes certification seriously. We were recently awarded a certificate for consecutive years of no ARI failures.

Temperatures used in ARI certification standards are S.I. (Système International – metric) based. For example, typical catalog data for cooling is shown at 80°F DB/67°F WB [26.7°C DB/19.4°C] entering air temperature, but the ARI standard for cooling is 80.6°F DB/66.2°F WB [27°C DB/19°C], since it is based upon whole numbers in degrees Celsius. Water and air temperatures for the standard are shown below.

Test Condition Comparison Table

	WLHP	GWHP	GLHP
Cooling Entering Air Temperature - DB/WB °F [°C] Entering Water Temperature - °F [°C] Fluid Flow Rate	80.6/66.2 [27/19] 86 [30] *	80.6/66.2 [27/19] 59 [15] *	80.6/66.2 [27/19] 77 [25] *
Heating Entering Air Temperature - DB/WB °F [°C] Entering Water Temperature - °F [°C] Fluid Flow Rate	68 [20] 68 [20] *	68 [20] 50 [10] *	68 [20] 32 [0] *

*Flow rate is specified by the manufacturer

Data certified by ARI include heating/cooling capacities, EER (Energy Efficiency Ratio – Btuh per Watt) and COP (Btuh per Btuh) at the various conditions shown above. Pump power correction is calculated to adjust efficiencies for pumping Watts. Within each model, only one water flow rate is specified for all three groups, and pumping Watts are calculated using the formula below. This additional power is added onto the existing power consumption.

- Pump power correction = $(\text{gpm} \times 0.0631) \times (\text{Press Drop} \times 2990)/300$

Fan power is corrected to zero external static pressure using the equation below. The nominal airflow is rated at a specific external static pressure. This effectively reduces the power consumption of the unit and increases cooling capacity but decreases heating capacity.

- Fan Power Correction = $(\text{cfm} \times 0.472) \times (\text{esp} \times 249)/300$

Capacities and efficiencies are calculated using the following equations:

- ISO Cooling Capacity = Cooling Capacity (Btuh) + [Fan Power Correction (Watts) $\times 3.412]$
- ISO EER Efficiency (Btuh/W) = $\text{ISO Cooling Capacity (Btuh)}/[\text{Power Input (Watts)} - \text{Fan Power Correction (Watts)} + \text{Pump Power Correction (Watts)}]$
- ISO Heating Capacity = Heating Capacity (Btuh) – [Fan Power Correction (Watts) $\times 3.412]$
- ISO COP Efficiency (Btuh/Btuh) = $\text{ISO Heating Capacity (Btuh)} \times 3.412/[\text{Power Input (Watts)} - \text{Fan Power Correction (Watts)} + \text{Pump Power Correction (Watts)}]$

ClimateMaster Geothermal Heat Pump Systems

ARI/ISO/ASHRAE/ANSI 13256-1 Performance

ASHRAE/ARI/ISO 13256-1. English (IP) 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		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
015	14,100	16.0	16,300	5.3	15,600	23.9	12,900	4.1	14,900	18.5	10,200	3.8
018	17,100	14.8	20,900	5.0	19,000	22.7	16,000	4.1	18,300	16.7	13,200	3.6
024	24,200	14.9	31,000	4.8	26,500	21.2	23,500	4.0	26,000	17.1	19,200	3.6
030	28,900	15.1	35,000	4.8	31,100	21.4	27,200	4.0	30,700	16.9	22,200	3.6
036	33,800	14.9	40,400	4.6	36,000	20.7	32,900	4.0	35,800	16.4	26,700	3.4
042	41,000	14.5	49,800	4.8	45,400	20.3	39,000	4.0	43,300	16.0	32,700	3.7
048	45,800	14.6	54,100	4.9	49,000	19.9	43,300	4.0	48,900	16.4	36,900	3.7
060	56,800	13.4	74,900	4.7	59,600	17.7	58,900	3.6	59,400	14.6	48,700	3.8
070	63,700	12.4	78,300	4.5	70,000	16.8	62,900	3.8	67,100	13.4	53,400	3.6

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 air flow is rated on high speed

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

ASHRAE/ARI/ISO 13256-1. Metric (SI) Units

Model	Water Loop Heat Pump				Ground Water Heat Pump				Ground Loop Heat Pump			
	Cooling 30°C		Heating 20°C		Cooling 15°C		Heating 10°C		Cooling 25°C		Heating 0°C	
	Capacity Watts	EER W/W	Capacity Watts	COP	Capacity Watts	EER W/W	Capacity Watts	COP	Capacity Watts	EER W/W	Capacity Watts	COP
015	4,131	4.7	4,776	5.3	4,571	7.0	3,780	4.1	4,366	5.4	3,282	3.8
018	5,010	4.3	6,124	5.0	5,567	6.7	4,688	4.1	5,362	4.9	3,868	3.6
024	7,091	4.4	8,819	4.8	7,764	6.2	6,886	4.0	7,618	5.0	5,626	3.6
030	8,468	4.4	10,255	4.8	9,112	6.3	7,790	4.0	8,995	5.0	6,505	3.6
036	9,903	4.4	11,837	4.6	10,548	6.1	9,640	4.0	10,468	4.8	7,823	3.4
042	12,013	4.2	14,591	4.8	13,302	5.9	11,423	4.0	12,687	4.7	9,581	3.7
048	13,419	4.3	15,851	4.9	14,357	5.8	12,687	4.0	14,328	4.8	10,812	3.7
060	16,642	3.9	21,946	4.7	17,463	5.2	17,258	3.6	17,409	4.3	14,269	3.8
070	18,664	3.6	22,942	4.5	20,510	4.9	18,430	3.8	19,660	3.9	15,646	3.6

Cooling capacities based upon 27°C DB, 19°C WB entering air temperature

Heating capacities based upon 20°C DB, 15°C WB entering air temperature

All air flow is rated on high speed

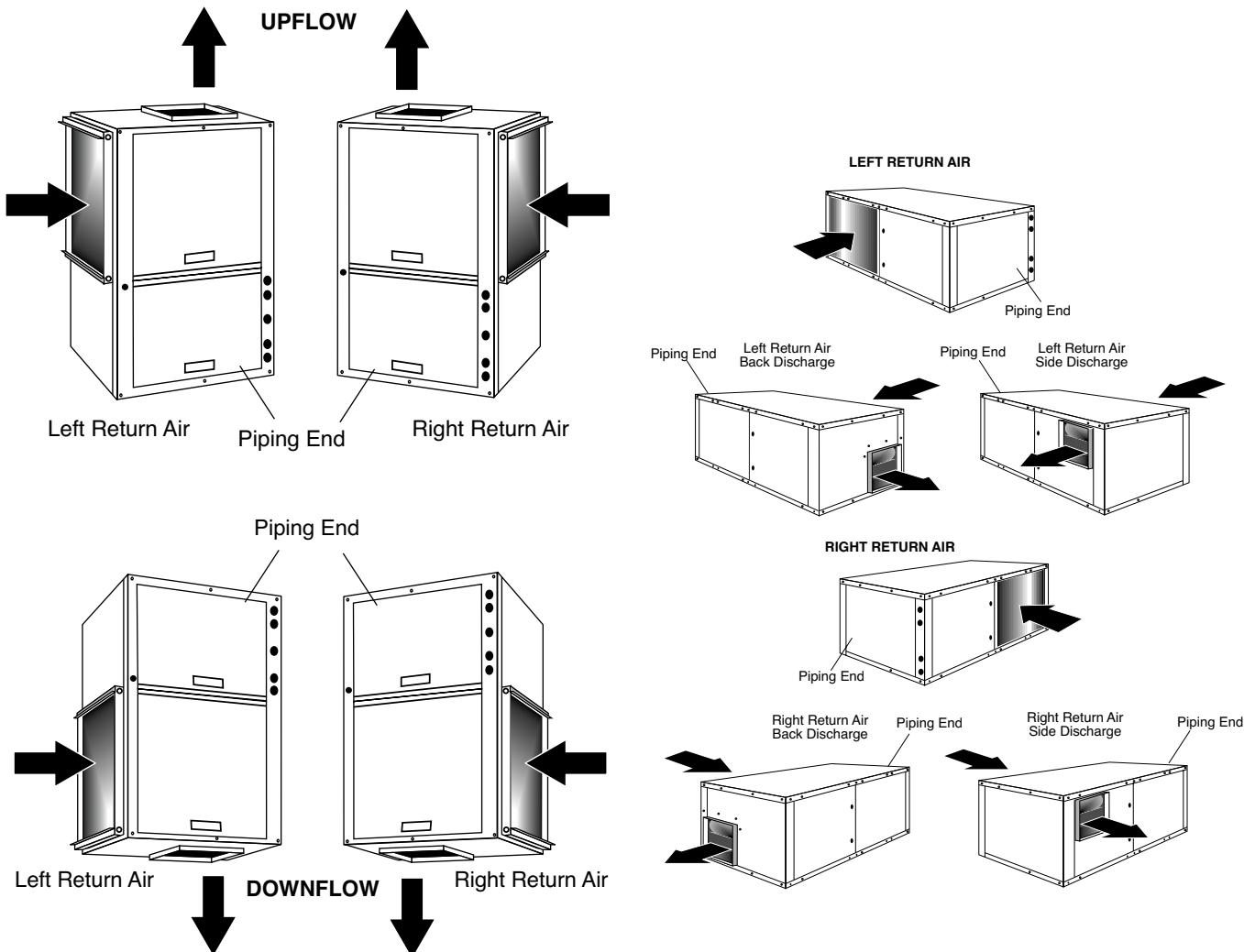
All ratings based upon operation at lower voltage of dual voltage rated models

Genesis Packaged (GS) Series

Reference Calculations & Legend

Heating	Cooling
$LWT = EWT - \frac{HE}{GPM \times 500}$	$LWT = EWT + \frac{HR}{GPM \times 500}$
$LAT = EAT + \frac{HC}{CFM \times 1.08}$	$LAT (DB) = EAT (DB) - \frac{SC}{CFM \times 1.08}$
	$LC = TC - SC$
	$S/T = \frac{SC}{TC}$

CFM	= airflow, cubic feet/minute	HE	= total heat of extraction, Mbtuh
EWT	= entering water temperature, °F	HWC	= Hot Water Generator (desuperheater) capacity, Mbtuh
GPM	= water flow in US gallons/minute	WPD	= Water coil pressure drop (psi & ft hd)
EAT	= entering air temperature, Fahrenheit (dry bulb/wet bulb)	EER	= Energy Efficiency Ratio = BTU output/Watt input
HC	= air heating capacity, Mbtuh	COP	= Coefficient of Performance = BTU output/BTU input
TC	= total cooling capacity, Mbtuh	LWT	= leaving water temperature, °F
SC	= sensible cooling capacity, Mbtuh	LAT	= leaving air temperature, °F
KW	= total power unit input, KiloWatts	LC	= latent cooling capacity, Mbtuh
HR	= total heat of rejection, Mbtuh	S/T	= sensible to total cooling ratio



Performance Data Correction Tables

Air Flow Correction Table

Airflow	Cooling				Heating			
	% of Rated	Total Capacity	Sensible Capacity	Power	Heat of Rejection	Heating Capacity	Power	Heat of Extraction
75%	0.914	0.834	0.987	0.929	0.968	1.091	0.936	
81%	0.936	0.876	0.990	0.946	0.976	1.068	0.952	
88%	0.957	0.917	0.994	0.964	0.984	1.045	0.968	
94%	0.979	0.959	0.997	0.982	0.992	1.023	0.984	
100%	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
106%	1.021	1.041	1.003	1.018	1.008	0.977	1.016	
113%	1.043	1.083	1.006	1.036	1.016	0.955	1.032	

Entering Air Correction Table

Heating				Cooling										
Entering Air DB°F	Heating Capacity	Power	Heat of Extraction	Entering Air WB°F	Total Capacity	Sensible Cooling Capacity Multiplier - Entering DB °F						Power	Heat of Rejection	
						70	75	80	80.6	85	90	95		
60	1.019	0.896	1.054	60	0.881	0.943	1.067	1.192	1.240	*	*	*	0.983	0.899
65	1.010	0.948	1.028	65	0.940	0.797	0.952	1.106	1.125	1.261	*	*	0.991	0.949
68	1.004	0.980	1.011	66.2	0.976	0.693	0.868	1.043	1.063	1.217	*	*	0.997	0.980
70	1.000	1.000	1.000	67	1.000	0.624	0.812	1.000	1.023	1.188	1.343	1.352	1.000	1.000
75	0.997	1.059	0.979	70	1.012	0.697	0.820	0.835	0.944	1.067	1.257		1.002	1.010
80	0.993	1.118	0.957	75	1.024	0.637	0.658	0.817	0.983	1.159			1.005	1.019

* = Sensible capacity equals total capacity

ARI/ISO/ASHRAE 13256-1 uses entering air conditions of Cooling - 80.6°F DB/66.2°F WB, 1 and Heating - 68°F DB/59°F WB entering air temperature

Genesis Packaged (GS) Series

Performance Data — Genesis GS Model 015 - PSC Blower

400 CFM Nominal (Rated) Airflow Cooling, 500 CFM Nominal (Rated) Airflow Heating

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F						Heating - EAT 70°F						
		PSI	FT	Airflow CFM	TC	SC	kW	HR	EER	HWC	HC	KW	HE	LAT	COP	HWC
20	3.8	1.3	3.1								9.1	0.85	6.2	91.1	3.14	1.3
	3.8	1.3	3.1	Operation not recommended							9.4	0.85	6.6	87.5	3.28	1.2
30	1.8	0.3	0.8	400	18.0	11.3	0.46	19.6	38.8	0.5	9.4	0.89	6.3	91.8	3.08	1.5
	1.8	0.3	0.8	500	18.6	12.4	0.48	20.2	39.0	0.5	9.4	0.89	6.4	87.5	3.10	1.3
	2.8	0.8	1.8	400	17.8	11.4	0.44	19.4	40.2	0.6	10.2	0.88	7.2	93.6	3.39	1.6
	2.8	0.8	1.8	500	18.6	12.5	0.47	20.1	39.8	0.5	10.4	0.88	7.4	89.2	3.48	1.3
	3.8	1.3	3.0	400	17.7	11.4	0.42	19.1	41.7	0.6	11.0	0.87	8.0	95.4	3.71	1.6
	3.8	1.3	3.0	500	18.5	12.7	0.45	20.0	40.7	0.5	11.3	0.86	8.4	91.0	3.87	1.4
40	1.8	0.3	0.8	400	17.3	11.1	0.55	19.2	31.3	1.0	11.1	0.90	8.0	95.6	3.59	1.8
	1.8	0.3	0.8	500	17.9	12.2	0.57	19.8	31.5	0.9	11.1	0.90	8.0	90.6	3.62	1.5
	2.8	0.7	1.7	400	17.2	11.2	0.53	19.0	32.6	0.9	11.8	0.90	8.7	97.2	3.82	1.8
	2.8	0.7	1.7	500	17.9	12.3	0.55	19.8	32.3	0.8	11.8	0.89	8.7	91.8	3.87	1.6
	3.8	1.3	2.9	400	17.1	11.2	0.50	18.8	34.1	0.8	12.4	0.90	9.4	98.8	4.06	1.9
	3.8	1.3	2.9	500	17.8	12.4	0.54	19.7	33.3	0.8	12.5	0.89	9.4	93.1	4.12	1.7
50	1.8	0.3	0.8	400	16.6	11.0	0.64	18.8	26.0	1.4	12.8	0.92	9.6	99.5	4.08	2.0
	1.8	0.3	0.8	500	17.2	12.0	0.66	19.4	26.1	1.3	12.8	0.91	9.7	93.7	4.12	1.8
	2.8	0.7	1.7	400	16.5	11.0	0.61	18.6	27.1	1.2	13.3	0.92	10.2	100.9	4.24	2.1
	2.8	0.7	1.7	500	17.2	12.1	0.64	19.4	26.9	1.2	13.2	0.91	10.1	94.4	4.24	1.8
	3.8	1.2	2.8	400	16.4	11.0	0.58	18.4	28.5	1.0	13.9	0.93	10.7	102.2	4.39	2.2
	3.8	1.2	2.8	500	17.2	12.2	0.62	19.3	27.8	1.1	13.6	0.91	10.4	95.1	4.36	1.9
60	1.8	0.3	0.7	400	15.6	10.5	0.73	18.1	21.5	1.7	14.3	0.94	11.1	103.1	4.46	2.3
	1.8	0.3	0.7	500	16.2	11.7	0.75	18.7	21.7	1.6	14.5	0.92	11.3	96.8	4.61	2.0
	2.8	0.7	1.6	400	15.5	10.5	0.70	17.9	22.1	1.5	14.8	0.95	11.6	104.4	4.58	2.4
	2.8	0.7	1.6	500	16.2	11.7	0.72	18.7	22.6	1.5	15.0	0.92	11.8	97.8	4.77	2.1
	3.8	1.2	2.7	400	15.4	10.5	0.67	17.7	22.9	1.3	15.4	0.96	12.1	105.6	4.70	2.4
	3.8	1.2	2.7	500	16.3	11.7	0.69	18.6	23.5	1.4	15.5	0.92	12.4	98.7	4.93	2.2
70	1.8	0.3	0.7	400	14.6	10.0	0.82	17.4	18.0	2.0	15.9	0.97	12.6	106.8	4.82	2.6
	1.8	0.3	0.7	500	15.2	11.4	0.84	18.0	18.2	2.0	16.1	0.93	13.0	99.9	5.09	2.2
	2.8	0.7	1.5	400	14.5	9.9	0.79	17.2	18.3	1.8	16.4	0.98	13.0	107.9	4.91	2.6
	2.8	0.7	1.5	500	15.3	11.3	0.80	18.0	19.1	1.8	16.8	0.93	13.6	101.1	5.28	2.3
	3.8	1.1	2.7	400	14.4	9.9	0.77	17.0	18.7	1.6	16.9	0.99	13.5	109.0	4.99	2.7
	3.8	1.1	2.7	500	15.4	11.2	0.77	18.0	20.1	1.7	17.5	0.94	14.3	102.3	5.47	2.4
80	1.8	0.3	0.7	400	14.1	9.8	0.91	17.2	15.6	2.2	17.5	0.98	14.2	110.6	5.27	2.9
	1.8	0.3	0.7	500	14.6	11.3	0.93	17.8	15.8	2.3	17.8	0.94	14.6	103.0	5.56	2.4
	2.8	0.6	1.5	400	14.0	9.8	0.88	17.0	15.9	2.1	18.0	1.00	14.6	111.7	5.27	3.0
	2.8	0.6	1.5	500	14.7	11.2	0.89	17.8	16.6	2.2	18.5	0.96	15.2	104.3	5.67	2.5
	3.8	1.1	2.6	400	13.8	9.8	0.85	16.8	16.2	1.9	18.5	1.03	15.0	112.9	5.27	3.1
	3.8	1.1	2.6	500	14.8	11.1	0.85	17.7	17.4	2.0	19.2	0.97	15.9	105.5	5.78	2.7
90	1.8	0.3	0.7	400	13.5	9.7	1.00	16.9	13.6	2.5	19.2	0.99	15.8	114.4	5.70	3.1
	1.8	0.3	0.7	500	14.1	11.1	1.02	17.5	13.8	2.6	19.5	0.95	16.3	106.1	6.02	2.7
	2.8	0.6	1.4	400	13.4	9.7	0.97	16.7	13.9	2.4	19.7	1.03	16.2	115.6	5.62	3.3
	2.8	0.6	1.4	500	14.2	11.0	0.98	17.5	14.5	2.5	20.2	0.98	16.9	107.4	6.04	2.8
	3.8	1.1	2.5	400	13.3	9.7	0.94	16.5	14.2	2.3	20.2	1.07	16.6	116.8	5.53	3.4
	3.8	1.1	2.5	500	14.2	11.0	0.94	17.4	15.2	2.3	20.9	1.01	17.5	108.8	6.07	2.9
100	1.8	0.3	0.6	400	12.6	9.4	1.12	16.5	11.3	2.9	Operation not recommended					
	1.8	0.3	0.6	500	13.1	10.8	1.15	17.0	11.5	3.0	Operation not recommended					
	2.8	0.6	1.4	400	12.5	9.4	1.09	16.2	11.5	2.7	Operation not recommended					
	2.8	0.6	1.4	500	13.2	10.7	1.10	17.0	12.0	2.8	Operation not recommended					
	3.8	1.0	2.4	400	12.4	9.4	1.06	16.0	11.8	2.5	Operation not recommended					
	3.8	1.0	2.4	500	13.3	10.6	1.05	16.9	12.7	2.6	Operation not recommended					
110	1.8	0.3	0.6	400	11.7	9.1	1.24	16.0	9.5	3.2	Operation not recommended					
	1.8	0.3	0.6	500	12.2	10.4	1.27	16.5	9.6	3.3	Operation not recommended					
	2.8	0.6	1.3	400	11.6	9.1	1.21	15.7	9.6	3.0	Operation not recommended					
	2.8	0.6	1.3	500	12.3	10.3	1.22	16.4	10.1	3.1	Operation not recommended					
	3.8	1.0	2.3	400	11.5	9.1	1.17	15.5	9.8	2.8	Operation not recommended					
	3.8	1.0	2.3	500	12.3	10.3	1.17	16.3	10.6	2.9	Operation not recommended					

Interpolation is permissible; extrapolation is not.

All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.

ARI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.

Table does not reflect fan or pump power corrections for ARI/ISO conditions.

All performance is based upon the lower voltage of dual voltage rated units.

Operation below 40°F EWT is based upon a 15% antifreeze solution.

Operation below 60°F EWT requires optional insulated water/refrigerant circuit (standard on residential models).

See performance correction tables for operating conditions other than those listed above.

For operation in the shaded areas, please see the Performance Data Selection Notes.

Performance Data — Genesis GS Model 018 - PSC Blower

475 CFM Nominal (Rated) Airflow Cooling, 600 CFM Nominal (Rated) Airflow Heating

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F						Heating - EAT 70°F						
		PSI	FT	Airflow CFM	TC	SC	kW	HR	EER	HWC	HC	KW	HE	LAT	COP	HWC
20	4.5	1.8	4.2	Operation not recommended						11.6	1.13	7.8	92.6	3.01	1.5	
30	4.5	1.8	4.2							11.7	1.08	8.0	88.1	3.18	1.3	
	2.2	0.5	1.2	475	22.5	13.9	0.57	24.4	39.4	0.6	11.8	1.05	8.2	92.9	3.28	1.7
	2.2	0.5	1.2	600	23.6	16.0	0.59	25.6	40.0	0.5	12.1	1.04	8.5	88.6	3.41	1.5
	3.5	1.1	2.6	475	21.9	13.7	0.53	23.7	41.0	0.6	12.5	1.12	8.7	94.3	3.28	1.8
	3.5	1.1	2.6	600	23.0	15.6	0.55	24.9	41.5	0.5	12.7	1.08	9.0	89.6	3.43	1.5
	4.5	1.8	4.1	475	21.3	13.5	0.50	23.0	42.7	0.6	13.2	1.18	9.2	95.7	3.28	1.9
40	4.5	1.8	4.1	600	22.4	15.3	0.52	24.2	43.2	0.5	13.3	1.13	9.5	90.6	3.45	1.6
	2.2	0.5	1.1	475	21.5	13.5	0.71	23.9	30.3	1.1	13.9	1.13	10.0	97.0	3.61	2.0
	2.2	0.5	1.1	600	22.6	15.5	0.74	25.1	30.7	1.0	14.2	1.11	10.4	91.9	3.76	1.8
	3.5	1.1	2.5	475	21.0	13.3	0.67	23.3	31.5	1.0	14.6	1.17	10.6	98.4	3.64	2.1
	3.5	1.1	2.5	600	22.1	15.2	0.69	24.4	31.9	1.0	14.7	1.13	10.8	92.7	3.80	1.8
	4.5	1.7	3.9	475	20.5	13.1	0.62	22.6	32.8	0.9	15.3	1.22	11.1	99.8	3.68	2.2
50	4.5	1.7	3.9	600	21.6	14.9	0.65	23.8	33.2	0.9	15.2	1.16	11.2	93.4	3.84	1.9
	2.2	0.5	1.1	475	20.5	13.1	0.85	23.4	24.1	1.6	16.0	1.20	11.9	101.1	3.90	2.4
	2.2	0.5	1.1	600	21.5	15.1	0.88	24.5	24.5	1.5	16.3	1.18	12.3	95.2	4.06	2.0
	3.5	1.1	2.5	475	20.1	13.0	0.80	22.8	25.1	1.4	16.7	1.23	12.5	102.5	3.98	2.4
	3.5	1.1	2.5	600	21.1	14.8	0.83	23.9	25.4	1.4	16.7	1.18	12.6	95.7	4.14	2.1
	4.5	1.7	3.8	475	19.7	12.8	0.75	22.2	26.2	1.2	17.3	1.25	13.1	103.8	4.06	2.5
60	4.5	1.7	3.8	600	20.7	14.5	0.78	23.3	26.5	1.3	17.0	1.18	13.0	96.2	4.22	2.2
	2.2	0.5	1.0	475	19.5	12.7	0.98	22.8	19.9	2.0	18.2	1.28	13.8	105.4	4.18	2.7
	2.2	0.5	1.0	600	20.4	14.6	1.01	23.8	20.3	2.0	18.5	1.25	14.2	98.5	4.33	2.3
	3.5	1.0	2.4	475	19.4	12.7	0.92	22.5	21.0	1.8	18.8	1.28	14.4	106.6	4.30	2.8
	3.5	1.0	2.4	600	20.3	14.4	0.95	23.5	21.4	1.8	19.1	1.24	14.9	99.5	4.51	2.4
	4.5	1.6	3.7	475	19.2	12.6	0.87	22.2	22.2	1.6	19.4	1.29	15.0	107.8	4.41	2.8
70	4.5	1.6	3.7	600	20.2	14.1	0.89	23.2	22.6	1.7	19.7	1.23	15.5	100.4	4.69	2.5
	2.2	0.4	1.0	475	18.5	12.4	1.11	22.2	16.7	2.4	20.4	1.35	15.8	109.8	4.43	3.0
	2.2	0.4	1.0	600	19.2	14.2	1.13	23.0	17.0	2.4	20.6	1.33	16.1	101.9	4.56	2.6
	3.5	1.0	2.3	475	18.6	12.4	1.04	22.2	17.8	2.2	20.9	1.34	16.4	110.8	4.59	3.1
	3.5	1.0	2.3	600	19.4	14.0	1.07	23.1	18.2	2.2	21.5	1.30	17.1	103.2	4.84	2.7
	4.5	1.5	3.6	475	18.8	12.4	0.98	22.1	19.1	2.0	21.5	1.33	17.0	111.9	4.75	3.2
80	4.5	1.5	3.6	600	19.6	13.8	1.01	23.1	19.5	2.1	22.4	1.28	18.1	104.6	5.13	2.8
	2.2	0.4	1.0	475	17.5	12.0	1.26	21.8	14.0	2.7	22.5	1.42	17.7	113.9	4.63	3.3
	2.2	0.4	1.0	600	18.2	13.7	1.28	22.6	14.2	2.8	22.8	1.40	18.0	105.2	4.78	2.9
	3.5	1.0	2.2	475	17.7	12.0	1.19	21.7	14.9	2.5	22.8	1.39	18.1	114.5	4.80	3.5
	3.5	1.0	2.2	600	18.4	13.5	1.21	22.6	15.2	2.6	23.5	1.36	18.8	106.2	5.07	3.0
	4.5	1.5	3.5	475	17.8	12.0	1.12	21.6	16.0	2.4	23.1	1.36	18.5	115.1	4.98	3.6
90	4.5	1.5	3.5	600	18.6	13.3	1.14	22.5	16.3	2.4	24.2	1.32	19.7	107.3	5.38	3.1
	2.2	0.4	0.9	475	16.6	11.6	1.41	21.4	11.8	3.1	24.6	1.50	19.5	118.0	4.82	3.7
	2.2	0.4	0.9	600	17.2	13.3	1.44	22.1	12.0	3.2	24.9	1.47	19.9	108.5	4.97	3.1
	3.5	0.9	2.1	475	16.7	11.6	1.33	21.2	12.6	2.9	24.7	1.45	19.8	118.2	5.00	3.8
	3.5	0.9	2.1	600	17.4	13.1	1.36	22.1	12.8	3.0	25.4	1.41	20.6	109.2	5.28	3.3
	4.5	1.4	3.3	475	16.8	11.6	1.25	21.1	13.5	2.7	24.8	1.40	20.0	118.4	5.20	4.0
100	4.5	1.4	3.3	600	17.6	12.9	1.28	22.0	13.8	2.8	25.9	1.35	21.3	110.0	5.62	3.4
	2.2	0.4	0.9	475	15.5	11.1	1.54	20.8	10.1	3.5	Operation not recommended					
	2.2	0.4	0.9	600	16.1	12.8	1.58	21.5	10.2	3.6						
	3.5	0.9	2.1	475	15.7	11.1	1.46	20.6	10.7	3.3						
	3.5	0.9	2.1	600	16.3	12.6	1.49	21.4	10.9	3.4						
	4.5	1.4	3.2	475	15.8	11.1	1.37	20.5	11.5	3.1						
110	4.5	1.4	3.2	600	16.5	12.4	1.41	21.3	11.8	3.2						
	2.2	0.4	0.9	475	14.5	10.7	1.68	20.2	8.6	3.9						
	2.2	0.4	0.9	600	15.1	12.3	1.72	20.9	8.8	4.1						
	3.5	0.9	2.0	475	14.6	10.7	1.59	20.0	9.2	3.7						
	3.5	0.9	2.0	600	15.3	12.1	1.63	20.8	9.4	3.8						
	4.5	1.3	3.1	475	14.7	10.7	1.49	19.8	9.9	3.5						
	4.5	1.3	3.1	600	15.4	11.9	1.53	20.7	10.1	3.6						

Interpolation is permissible; extrapolation is not.

All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.

ARI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.

Table does not reflect fan or pump power corrections for ARI/ISO conditions.

All performance is based upon the lower voltage of dual voltage rated units.

Operation below 40°F EWT is based upon a 15% antifreeze solution.

Operation below 60°F EWT requires optional insulated water/refrigerant circuit (standard on residential models).

See performance correction tables for operating conditions other than those listed above.

For operation in the shaded areas, please see the Performance Data Selection Notes.

Genesis Packaged (GS) Series

Performance Data — Genesis GS Model 024 - PSC Blower

650 CFM Nominal (Rated) Airflow Cooling, 800 CFM Nominal (Rated) Airflow Heating

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F						Heating - EAT 70°F						
		PSI	FT	Airflow CFM	TC	SC	kW	HR	EER	HWC	HC	KW	HE	LAT	COP	HWC
20	6.0	1.7	3.9	Operation not recommended						16	1.62	10.5	92.8	2.89	2.1	
30	6.0	1.7	3.9	650	29.4	19.3	0.92	32.6	32.1	0.9	16.2	1.59	10.8	88.7	2.99	1.8
	3.0	0.4	0.9	800	31.0	21.2	0.94	34.2	33.0	0.8	18.9	1.69	13.2	97.0	3.29	2.4
	3.0	0.4	0.9	650	30.0	19.6	0.89	33.0	33.8	1.0	19.2	1.62	13.7	92.3	3.48	2.0
	4.5	0.9	2.1	800	31.0	21.2	0.91	34.1	34.3	0.8	19.1	1.69	13.4	97.2	3.32	2.5
	4.5	0.9	2.1	650	30.6	19.9	0.86	33.5	35.6	1.0	19.3	1.69	13.5	97.5	3.35	2.6
	6.0	1.6	3.8	800	31.1	21.2	0.87	34.1	35.6	0.8	19.5	1.65	13.9	92.6	3.47	2.2
40	3.0	0.4	0.9	650	28.7	18.7	1.10	32.4	26.2	1.6	21.5	1.75	15.6	100.7	3.60	2.8
	3.0	0.4	0.9	800	30.2	20.6	1.12	34.0	26.9	1.4	21.9	1.69	16.1	95.3	3.80	2.4
	4.5	0.9	2.1	650	29.2	19.0	1.06	32.8	27.6	1.5	21.9	1.77	15.9	101.2	3.63	2.9
	4.5	0.9	2.1	800	30.2	20.6	1.08	33.9	28.0	1.4	22.2	1.70	16.3	95.6	3.81	2.5
	6.0	1.6	3.7	650	29.7	19.3	1.02	33.1	29.1	1.3	22.3	1.78	16.2	101.8	3.67	3.0
	6.0	1.6	3.7	800	30.2	20.6	1.04	33.8	29.2	1.3	22.5	1.72	16.6	96.0	3.82	2.6
50	3.0	0.4	0.9	650	27.9	18.2	1.28	32.3	21.9	2.2	24.1	1.82	17.9	104.4	3.88	3.2
	3.0	0.4	0.9	800	29.4	20.0	1.31	33.8	22.5	2.1	24.5	1.75	18.5	98.3	4.10	2.8
	4.5	0.9	2.0	650	28.4	18.4	1.23	32.5	23.1	2.0	24.7	1.85	18.4	105.2	3.92	3.3
	4.5	0.9	2.0	800	29.3	20.0	1.25	33.6	23.4	2.0	24.9	1.77	18.9	98.9	4.13	2.9
	6.0	1.6	3.6	650	28.8	18.7	1.18	32.8	24.4	1.7	25.3	1.87	18.9	106.1	3.96	3.4
	6.0	1.6	3.6	800	29.3	20.0	1.20	33.4	24.4	1.8	25.4	1.79	19.3	99.4	4.16	3.0
60	3.0	0.4	0.9	650	27.0	18.0	1.42	31.9	19.0	2.7	26.6	1.90	20.1	107.9	4.09	3.6
	3.0	0.4	0.9	800	28.4	19.6	1.46	33.4	19.5	2.7	27.1	1.82	20.9	101.4	4.38	3.2
	4.5	0.8	1.9	650	27.2	18.1	1.36	31.9	20.0	2.4	27.5	1.93	20.9	109.1	4.16	3.8
	4.5	0.8	1.9	800	28.2	19.6	1.39	32.9	20.3	2.5	27.9	1.84	21.6	102.3	4.43	3.3
	6.0	1.5	3.5	650	27.4	18.3	1.30	31.9	21.2	2.2	28.4	1.96	21.7	110.4	4.23	3.9
	6.0	1.5	3.5	800	28.0	19.7	1.32	32.5	21.2	2.3	28.7	1.87	22.3	103.2	4.49	3.4
70	3.0	0.4	0.8	650	26.1	17.8	1.57	31.5	16.7	3.2	29.0	1.98	22.3	111.3	4.29	4.1
	3.0	0.4	0.8	800	27.5	19.3	1.61	33.0	17.1	3.2	29.7	1.88	23.3	104.4	4.63	3.5
	4.5	0.8	1.9	650	26.1	17.9	1.49	31.2	17.5	2.9	30.2	2.02	23.3	113.0	4.38	4.2
	4.5	0.8	1.9	800	27.0	19.3	1.53	32.3	17.7	3.0	30.8	1.92	24.3	105.7	4.72	3.7
	6.0	1.5	3.4	650	26.1	18.0	1.41	30.9	18.4	2.7	31.4	2.06	24.4	114.7	4.47	4.3
	6.0	1.5	3.4	800	26.6	19.4	1.44	31.5	18.4	2.8	32.0	1.95	25.3	107.0	4.80	3.8
80	3.0	0.3	0.8	650	25.4	17.1	1.77	31.5	14.4	3.6	31.6	2.05	24.6	115.0	4.51	4.5
	3.0	0.3	0.8	800	26.8	18.5	1.81	32.9	14.8	3.7	32.4	1.95	25.7	107.4	4.87	3.9
	4.5	0.8	1.8	650	25.4	17.2	1.68	31.1	15.1	3.4	32.9	2.09	25.8	116.9	4.60	4.7
	4.5	0.8	1.8	800	26.3	18.6	1.72	32.2	15.3	3.5	33.6	1.99	26.8	108.9	4.96	4.0
	6.0	1.4	3.2	650	25.4	17.2	1.59	30.8	16.0	3.1	34.3	2.14	27.0	118.8	4.69	4.8
	6.0	1.4	3.2	800	25.9	18.6	1.62	31.4	15.9	3.2	34.9	2.03	28.0	110.4	5.04	4.2
90	3.0	0.3	0.8	650	24.7	16.4	1.96	31.4	12.6	4.1	34.2	2.12	26.9	118.6	4.72	5.0
	3.0	0.3	0.8	800	26.0	17.7	2.01	32.9	12.9	4.3	35.0	2.01	28.1	110.5	5.10	4.2
	4.5	0.8	1.7	650	24.7	16.4	1.86	31.1	13.3	3.9	35.6	2.17	28.2	120.8	4.81	5.2
	4.5	0.8	1.7	800	25.6	17.8	1.91	32.1	13.4	4.0	36.4	2.06	29.4	112.1	5.18	4.4
	6.0	1.4	3.1	650	24.7	16.5	1.77	30.7	14.0	3.6	37.1	2.22	29.5	122.9	4.89	5.4
	6.0	1.4	3.1	800	25.2	17.9	1.80	31.3	14.0	3.7	37.8	2.11	30.6	113.8	5.25	4.6
100	3.0	0.3	0.7	650	23.4	15.9	2.20	30.9	10.6	4.6	Operation not recommended					
	3.0	0.3	0.7	800	24.6	17.2	2.26	32.3	10.9	4.8	Operation not recommended					
	4.5	0.7	1.7	650	23.3	16.0	2.09	30.5	11.2	4.4	Operation not recommended					
	4.5	0.7	1.7	800	24.2	17.3	2.14	31.5	11.3	4.5	Operation not recommended					
	6.0	1.3	3.0	650	23.3	16.0	1.98	30.1	11.8	4.1	Operation not recommended					
	6.0	1.3	3.0	800	23.8	17.3	2.02	30.7	11.8	4.2	Operation not recommended					
110	3.0	0.3	0.7	650	22.0	15.4	2.44	30.3	9.0	5.1	Operation not recommended					
	3.0	0.3	0.7	800	23.2	16.7	2.50	31.7	9.3	5.3	Operation not recommended					
	4.5	0.7	1.6	650	22.0	15.5	2.32	29.9	9.5	4.8	Operation not recommended					
	4.5	0.7	1.6	800	22.8	16.7	2.37	30.9	9.6	5.0	Operation not recommended					
	6.0	1.3	2.9	650	21.9	15.5	2.20	29.4	10.0	4.6	Operation not recommended					
	6.0	1.3	2.9	800	22.4	16.8	2.24	30.0	10.0	4.7	Operation not recommended					

Interpolation is permissible; extrapolation is not.

All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.

ARI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.

Table does not reflect fan or pump power corrections for ARI/ISO conditions.

All performance is based upon the lower voltage of dual voltage rated units.

Operation below 40°F EWT is based upon a 15% antifreeze solution.

Operation below 60°F EWT requires optional insulated water/refrigerant circuit (standard on residential models).

See performance correction tables for operating conditions other than those listed above.

For operation in the shaded areas, please see the Performance Data Selection Notes.

Performance Data — Genesis GS Model 024 - ECM Blower

650 CFM Nominal (Rated) Airflow Cooling, 800 CFM Nominal (Rated) Airflow Heating

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F						Heating - EAT 70°F						
		PSI	FT	Airflow CFM	TC	SC	kW	HR	EER	HWC	HC	KW	HE	LAT	COP	HWC
20	6.0	1.7	3.9	Operation not recommended						15.7	1.54	10.5	92.4	2.99	2.1	
30	6.0	1.7	3.9							16.0	1.52	10.8	88.5	3.07	1.8	
	3.0	0.4	0.9	650	29.7	19.6	0.83	32.6	35.8	0.9	18.7	1.60	13.2	96.6	3.42	2.4
	3.0	0.4	0.9	800	31.2	21.4	0.88	34.2	35.5	0.8	19.0	1.56	13.7	92.0	3.58	2.0
	4.5	0.9	2.1	650	30.3	19.9	0.80	33.0	37.8	1.0	18.8	1.60	13.4	96.8	3.44	2.5
	4.5	0.9	2.1	800	31.3	21.4	0.85	34.1	37.0	0.8	19.2	1.57	13.8	92.2	3.57	2.1
	6.0	1.6	3.8	650	30.9	20.2	0.77	33.5	40.0	1.0	19.0	1.60	13.5	97.1	3.47	2.6
40	6.0	1.6	3.8	800	31.3	21.4	0.81	34.1	38.6	0.8	19.3	1.59	13.9	92.4	3.56	2.2
	3.0	0.4	0.9	650	29.0	19.0	1.01	32.4	28.7	1.6	21.2	1.67	15.5	100.3	3.73	2.8
	3.0	0.4	0.9	800	30.4	20.8	1.06	34.0	28.6	1.4	21.6	1.62	16.1	95.1	3.91	2.4
	4.5	0.9	2.1	650	29.5	19.3	0.97	32.8	30.3	1.5	21.6	1.68	15.9	100.8	3.77	2.9
	4.5	0.9	2.1	800	30.4	20.8	1.02	33.9	29.8	1.4	21.9	1.64	16.3	95.4	3.92	2.5
	6.0	1.6	3.7	650	30.0	19.6	0.93	33.1	32.1	1.3	22.0	1.70	16.2	101.4	3.81	3.0
50	6.0	1.6	3.7	800	30.4	20.8	0.98	33.8	31.2	1.3	22.2	1.66	16.6	95.7	3.93	2.6
	3.0	0.4	0.9	650	28.2	18.4	1.19	32.3	23.7	2.2	23.8	1.74	17.9	103.9	4.02	3.2
	3.0	0.4	0.9	800	29.6	20.2	1.25	33.8	23.7	2.1	24.3	1.69	18.5	98.1	4.21	2.8
	4.5	0.9	2.0	650	28.6	18.7	1.14	32.5	25.1	2.0	24.4	1.76	18.4	104.8	4.07	3.3
	4.5	0.9	2.0	800	29.6	20.2	1.19	33.6	24.8	2.0	24.7	1.71	18.9	98.6	4.24	2.9
	6.0	1.6	3.6	650	29.1	19.0	1.09	32.8	26.6	1.7	25.0	1.79	18.9	105.7	4.11	3.4
60	6.0	1.6	3.6	800	29.5	20.2	1.14	33.4	25.9	1.8	25.2	1.73	19.3	99.1	4.27	3.0
	3.0	0.4	0.9	650	27.3	18.3	1.34	31.9	20.4	2.7	26.3	1.82	20.1	107.4	4.24	3.6
	3.0	0.4	0.9	800	28.6	19.8	1.40	33.4	20.5	2.7	26.9	1.75	20.9	101.1	4.49	3.2
	4.5	0.8	1.9	650	27.5	18.4	1.27	31.9	21.6	2.4	27.2	1.85	20.9	108.7	4.31	3.8
	4.5	0.8	1.9	800	28.4	19.8	1.33	32.9	21.4	2.5	27.7	1.78	21.6	102.0	4.55	3.3
	6.0	1.5	3.5	650	27.7	18.6	1.21	31.9	22.9	2.2	28.1	1.88	21.7	110.0	4.38	3.9
70	6.0	1.5	3.5	800	28.2	19.9	1.26	32.5	22.3	2.3	28.5	1.81	22.3	102.9	4.61	3.4
	3.0	0.4	0.8	650	26.4	18.1	1.48	31.5	17.8	3.2	28.7	1.90	22.3	110.9	4.44	4.1
	3.0	0.4	0.8	800	27.7	19.5	1.55	33.0	17.9	3.2	29.5	1.82	23.3	104.2	4.75	3.5
	4.5	0.8	1.9	650	26.4	18.2	1.41	31.2	18.8	2.9	29.9	1.93	23.3	112.6	4.53	4.2
	4.5	0.8	1.9	800	27.3	19.5	1.47	32.3	18.6	3.0	30.6	1.85	24.3	105.5	4.84	3.7
	6.0	1.5	3.4	650	26.4	18.2	1.33	30.9	19.9	2.7	31.1	1.97	24.4	114.3	4.63	4.3
80	6.0	1.5	3.4	800	26.8	19.6	1.38	31.5	19.4	2.8	31.7	1.89	25.3	106.7	4.92	3.8
	3.0	0.3	0.8	650	25.7	17.4	1.68	31.5	15.3	3.6	31.3	1.96	24.6	114.6	4.67	4.5
	3.0	0.3	0.8	800	27.0	18.7	1.75	32.9	15.4	3.7	32.1	1.88	25.7	107.2	5.00	3.9
	4.5	0.8	1.8	650	25.7	17.5	1.59	31.1	16.1	3.4	32.6	2.01	25.8	116.5	4.76	4.7
	4.5	0.8	1.8	800	26.5	18.8	1.66	32.2	16.0	3.5	33.4	1.93	26.8	108.7	5.08	4.0
	6.0	1.4	3.2	650	25.7	17.5	1.50	30.8	17.1	3.1	34.0	2.05	27.0	118.4	4.85	4.8
90	6.0	1.4	3.2	800	26.1	18.8	1.56	31.4	16.7	3.2	34.7	1.97	28.0	110.1	5.16	4.2
	3.0	0.3	0.8	650	25.0	16.7	1.88	31.4	13.3	4.1	33.9	2.03	26.9	118.2	4.88	5.0
	3.0	0.3	0.8	800	26.2	17.9	1.95	32.9	13.5	4.3	34.8	1.95	28.1	110.2	5.23	4.2
	4.5	0.8	1.7	650	25.0	16.7	1.78	31.1	14.1	3.9	35.3	2.08	28.2	120.3	4.97	5.2
	4.5	0.8	1.7	800	25.8	18.0	1.85	32.1	14.0	4.0	36.2	2.00	29.4	111.9	5.31	4.4
	6.0	1.4	3.1	650	25.0	16.8	1.68	30.7	14.9	3.6	36.8	2.14	29.5	122.5	5.05	5.4
100	6.0	1.4	3.1	800	25.4	18.1	1.74	31.3	14.6	3.7	37.6	2.05	30.6	113.5	5.38	4.6
	3.0	0.3	0.7	650	23.7	16.2	2.12	30.9	11.2	4.6	Operation not recommended					
	3.0	0.3	0.7	800	24.8	17.4	2.19	32.3	11.3	4.8						
	4.5	0.7	1.7	650	23.6	16.2	2.01	30.5	11.8	4.4						
	4.5	0.7	1.7	800	24.4	17.5	2.08	31.5	11.7	4.5						
	6.0	1.3	3.0	650	23.6	16.3	1.90	30.1	12.5	4.1						
110	6.0	1.3	3.0	800	24.0	17.5	1.96	30.7	12.2	4.2						
	3.0	0.3	0.7	650	22.3	15.7	2.35	30.3	9.5	5.1						
	3.0	0.3	0.7	800	23.4	16.9	2.44	31.7	9.6	5.3						
	4.5	0.7	1.6	650	22.3	15.8	2.23	29.9	10.0	4.8						
	4.5	0.7	1.6	800	23.0	16.9	2.31	30.9	9.9	5.0						
	6.0	1.3	2.9	650	22.2	15.8	2.11	29.4	10.5	4.6						
	6.0	1.3	2.9	800	22.6	17.0	2.18	30.0	10.4	4.7						

Interpolation is permissible; extrapolation is not.

All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.

ARI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.

Table does not reflect fan or pump power corrections for ARI/ISO conditions.

All performance is based upon the lower voltage of dual voltage rated units.

Operation below 40°F EWT is based upon a 15% antifreeze solution.

Operation below 60°F EWT requires optional insulated water/refrigerant circuit (standard on residential models).

See performance correction tables for operating conditions other than those listed above.

For operation in the shaded areas, please see the Performance Data Selection Notes.

Genesis Packaged (GS) Series

Performance Data — Genesis GS Model 030 - PSC Blower

800 CFM Nominal (Rated) Airflow Cooling, 1000 CFM Nominal (Rated) Airflow Heating

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F						Heating - EAT 70°F						
		PSI	FT	Airflow CFM	TC	SC	kW	HR	EER	HWC	HC	KW	HE	LAT	COP	HWC
20	7.5 7.5	2.7 2.7	6.2 6.2	Operation not recommended						18.4 18.6	1.92 1.88	11.9 12.2	91.3 87.2	2.82 2.91	2.6 2.2	
30	3.7 3.7 5.5 5.5 7.5 7.5	0.6 0.6 1.4 1.4 2.6 2.6	1.4 1.4 3.2 3.2 6.0 6.0	800 1000 800 1000 800 1000	34.5 36.0 34.6 36.0 34.8 36.1	22.6 25.2 22.4 24.7 22.2 24.1	1.09 1.04 1.07 1.09 1.05 1.14	38.2 39.5 38.3 39.7 38.4 40.0	31.6 34.4 32.4 33.1 33.2 31.8	1.1 0.9 1.1 1.0 1.2 1.0	20.6 20.7 21.5 21.6 22.4 22.6	1.97 1.92 1.96 1.92 1.96 1.92	13.9 14.1 14.8 15.1 15.7 16.1	93.8 89.1 94.9 90.0 95.9 90.9	3.06 3.15 3.20 3.30 3.35 3.45	2.9 2.5 3.0 2.6 3.2 2.7
	3.7 3.7 5.5 5.5 7.5 7.5	0.6 0.6 1.3 1.3 2.5 2.5	1.4 1.4 3.1 3.1 5.8 5.8	800 1000 800 1000 800 1000	33.5 34.9 33.6 34.9 33.7 35.0	22.3 25.0 22.2 24.4 22.1 23.9	1.31 1.25 1.26 1.28 1.20 1.31	37.9 39.2 37.9 39.3 37.8 39.5	25.5 27.8 26.7 27.3 28.0 26.8	1.9 1.8 1.8 1.7 1.6 1.6	24.0 24.1 24.9 24.9 25.8 25.7	2.03 1.98 2.04 1.98 2.06 1.99	17.1 17.4 18.0 18.2 18.8 18.9	97.8 92.4 98.9 93.1 99.9 93.8	3.48 3.58 3.58 3.68 3.68 3.78	3.4 3.0 3.6 3.1 3.7 3.2
	3.7 3.7 5.5 5.5 7.5 7.5	0.6 0.6 1.3 1.3 2.4 2.4	1.3 1.3 3.0 3.0 5.6 5.6	800 1000 800 1000 800 1000	32.4 33.8 32.6 33.9 32.7 33.9	22.1 24.7 22.0 24.2 21.9 23.8	1.53 1.47 1.45 1.47 1.36 1.48	37.7 38.8 37.5 38.9 37.3 39.0	21.2 23.1 22.5 23.0 24.0 23.0	2.7 2.6 2.4 2.4 2.1 2.2	27.5 27.6 28.4 28.2 29.3 28.8	2.08 2.03 2.12 2.05 2.16 2.06	20.4 20.7 21.2 21.2 21.9 21.8	101.8 95.6 102.8 96.1 103.9 96.6	3.87 3.99 3.93 4.04 3.98 4.09	4.0 3.4 4.1 3.6 4.2 3.7
	3.7 3.7 5.5 5.5 7.5 7.5	0.6 0.6 1.3 1.3 2.4 2.4	1.3 1.3 3.0 3.0 5.6 5.6	800 1000 800 1000 800 1000	31.2 32.7 32.0 33.9 32.7 33.9	21.4 23.8 22.0 24.2 21.9 23.8	1.66 1.67 1.45 1.47 1.36 1.48	36.9 38.3 37.5 38.9 37.3 39.0	18.8 19.6 22.5 23.0 24.0 23.0	3.3 3.3 2.4 2.4 2.2 2.2	31.0 31.1 28.4 28.2 29.3 28.8	2.17 2.09 2.12 2.05 2.16 2.06	23.6 24.0 21.2 24.8 21.9 21.8	105.8 98.8 102.8 99.6 103.9 100.4	4.19 4.37 3.93 4.04 3.98 4.52	4.5 3.9 4.6 4.1 4.25 4.2
	3.7 3.7 5.5 5.5 7.5 7.5	0.6 0.6 1.3 1.3 2.4 2.4	1.3 1.3 3.0 3.0 5.4 5.4	800 1000 800 1000 800 1000	31.2 32.7 32.0 33.9 32.8 33.8	21.4 23.8 22.0 24.2 23.1 24.2	1.66 1.67 1.45 1.47 1.58 1.58	36.9 38.3 37.5 38.9 38.2 38.2	18.8 19.6 22.5 23.0 20.7 20.7	3.3 3.3 2.4 2.4 2.8 2.8	31.0 31.1 31.8 32.0 32.7 32.9	2.17 2.09 2.21 2.11 2.25 2.13	23.6 24.0 24.3 24.8 25.0 25.6	105.8 98.8 106.8 106.6 107.9 100.4	4.19 4.37 4.22 4.45 4.25 4.52	4.5 3.9 4.6 4.1 4.25 4.2
	3.7 3.7 5.5 5.5 7.5 7.5	0.5 0.5 1.2 1.2 2.3 2.3	1.3 1.3 2.8 2.8 5.3 5.3	800 1000 800 1000 800 1000	30.0 31.5 29.9 31.6 29.7 31.7	20.7 23.0 20.2 22.8 19.7 22.5	1.79 1.87 1.73 1.78 1.67 1.69	36.2 37.9 35.8 37.7 35.5 37.5	16.8 16.9 17.3 17.8 17.8 18.8	3.9 3.9 3.6 3.7 3.3 3.4	34.4 34.6 35.3 35.8 36.1 37.0	2.25 2.14 2.30 2.17 2.35 2.20	26.8 27.3 27.4 28.4 28.1 29.5	109.9 102.0 110.8 103.1 111.8 104.2	4.48 4.73 4.50 4.83 4.51 4.92	5.0 4.4 5.2 4.5 5.3 4.7
70	3.7 3.7 5.5 5.5 7.5 7.5	0.5 0.5 1.2 1.2 2.3 2.3	1.3 1.3 2.8 2.8 5.3 5.3	800 1000 800 1000 800 1000	29.0 31.5 29.9 31.6 29.7 31.7	20.7 23.0 20.2 22.8 19.7 22.5	2.00 1.87 1.73 1.78 1.67 1.69	35.9 37.9 35.8 37.7 35.5 37.5	14.5 14.7 17.3 17.8 17.8 18.8	4.5 4.6 3.6 3.7 3.9 3.4	37.9 38.0 39.1 39.3 40.2 40.2	2.31 2.20 2.24 2.44 2.28 2.28	30.0 30.5 31.5 31.0 32.4 32.4	113.9 105.2 106.2 115.5 107.2 107.2	4.81 5.08 5.12 4.73 5.17 5.17	5.6 4.4 5.2 4.5 5.3 4.7
	3.7 3.7 5.5 5.5 7.5 7.5	0.5 0.5 1.2 1.2 2.2 2.2	1.2 1.2 2.7 2.7 5.1 5.1	800 1000 800 1000 800 1000	29.0 30.5 28.9 30.6 28.7 30.6	20.7 23.0 20.2 22.7 19.7 22.5	2.00 2.08 1.93 1.98 1.87 1.89	35.9 37.6 35.5 37.3 35.1 37.1	14.5 14.7 15.0 15.4 15.4 16.3	4.5 4.6 4.2 4.3 3.9 4.0	37.9 38.0 38.6 39.1 39.3 40.2	2.31 2.20 2.37 2.24 2.44 2.28	30.0 30.5 30.5 31.5 31.0 	113.9 105.2 114.7 106.2 115.5 107.2	4.81 5.08 4.77 5.12 4.73 5.17	5.6 4.4 5.8 5.0 6.0 5.2
	3.7 3.7 5.5 5.5 7.5 7.5	0.5 0.5 1.2 1.2 2.2 2.2	1.2 1.2 2.7 2.7 5.1 5.1	800 1000 800 1000 800 1000	28.0 30.5 28.9 30.6 28.7 30.6	20.7 23.0 20.2 22.7 19.7 22.5	2.00 2.08 1.93 1.98 1.87 1.89	35.5 37.6 35.5 37.3 35.1 37.1	12.7 14.7 15.0 15.4 15.4 16.3	5.1 5.1 4.2 4.3 3.9 4.0	41.4 41.5 41.9 42.5 42.5 43.5	2.37 2.25 2.44 2.31 2.52 2.36	33.3 33.8 33.6 34.6 33.9 35.4	117.9 108.4 118.5 109.3 119.2 110.3	5.12 5.41 5.03 5.40 4.94 5.4	6.2 5.2 6.4 5.5 6.7 5.7
	3.7 3.7 5.5 5.5 7.5 7.5	0.5 0.5 1.1 1.1 2.1 2.1	1.2 1.2 2.6 2.6 4.9 4.9	800 1000 800 1000 800 1000	28.0 29.4 27.9 29.5 27.7 29.6	20.7 23.0 20.2 22.7 19.7 22.5	2.00 2.30 2.13 2.19 2.06 2.08	35.5 37.3 35.2 37.0 34.8 36.7	12.7 12.8 13.1 13.5 13.5 14.2	5.1 5.3 4.8 4.9 4.5 4.6	41.4 41.5 41.9 42.5 42.5 43.5	2.37 2.25 2.44 2.31 2.52 2.36	33.3 33.8 33.6 34.6 33.9 35.4	117.9 108.4 118.5 109.3 119.2 110.3	5.12 5.41 5.03 5.40 4.94 5.4	6.2 5.2 6.4 5.5 6.7 5.7
	3.7 3.7 5.5 5.5 7.5 7.5	0.5 0.5 1.1 1.1 2.0 2.0	1.1 1.1 2.5 2.5 4.7 4.7	800 1000 800 1000 800 1000	26.4 27.7 26.3 27.8 26.2 27.9	19.6 21.8 19.2 21.6 18.7 21.3	2.39 2.49 2.32 2.38 2.24 2.26	34.6 36.2 34.2 35.9 33.8 35.6	11.0 11.1 11.4 11.7 11.7 12.3	5.8 6.0 5.4 5.6 5.1 5.2	Operation not recommended					
	3.7 3.7 5.5 5.5 7.5 7.5	0.5 0.5 1.1 1.1 2.0 2.0	1.1 1.1 2.4 2.4 4.5 4.5	800 1000 800 1000 800 1000	24.8 26.0 24.7 26.1 24.6 26.2	18.6 20.6 18.1 20.4 17.7 20.2	2.58 2.69 2.50 2.57 2.42 2.44	33.6 35.2 33.2 34.9 32.8 34.5	9.6 9.7 9.9 10.2 10.2 10.7	6.4 6.7 6.0 6.2 5.7 5.8	Operation not recommended					

Interpolation is permissible; extrapolation is not.

All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.

ARI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.

Table does not reflect fan or pump power corrections for ARI/ISO conditions.

All performance is based upon the lower voltage of dual voltage rated units.

Operation below 40°F EWT is based upon a 15% antifreeze solution.

Operation below 60°F EWT requires optional insulated water/refrigerant circuit (standard on residential models).

See performance correction tables for operating conditions other than those listed above.

For operation in the shaded areas, please see the Performance Data Selection Notes.

Performance Data — Genesis GS Model 030 - ECM Blower

800 CFM Nominal (Rated) Airflow Cooling, 1000 CFM Nominal (Rated) Airflow Heating

Performance capacities shown in thousands of Btu/h

EWT °F	GPM	WPD		Cooling - EAT 80/67°F						Heating - EAT 70°F						
		PSI	FT	Airflow CFM	TC	SC	kW	HR	EER	HWC	HC	kW	HE	LAT	COP	HWC
20	7.5	2.7	6.2								18.3	1.88	11.9	91.2	2.86	2.6
	7.5	2.7	6.2								18.5	1.85	12.2	87.2	2.93	2.2
30	3.7	0.6	1.4	800	34.6	22.7	1.05	38.2	32.9	1.1	20.4	1.93	13.9	93.7	3.11	2.9
	3.7	0.6	1.4	1000	36.0	25.3	1.02	39.5	35.3	0.9	20.6	1.90	14.1	89.1	3.18	2.5
	5.5	1.4	3.2	800	34.8	22.5	1.03	38.3	33.8	1.1	21.4	1.92	14.8	94.7	3.25	3.0
	5.5	1.4	3.2	1000	36.1	24.8	1.07	39.7	33.9	1.0	21.6	1.90	15.1	90.0	3.33	2.6
	7.5	2.6	6.0	800	34.9	22.4	1.01	38.4	34.7	1.2	22.3	1.92	15.7	95.8	3.40	3.2
	7.5	2.6	6.0	1000	36.2	24.2	1.11	40.0	32.6	1.0	22.5	1.89	16.1	90.9	3.48	2.7
40	3.7	0.6	1.4	800	33.6	22.4	1.27	37.9	26.4	1.9	23.9	1.98	17.1	97.7	3.53	3.4
	3.7	0.6	1.4	1000	35.0	25.0	1.23	39.2	28.4	1.8	24.1	1.95	17.4	92.3	3.61	3.0
	5.5	1.3	3.1	800	33.7	22.3	1.22	37.9	27.7	1.8	24.8	2.00	18.0	98.7	3.63	3.6
	5.5	1.3	3.1	1000	35.0	24.5	1.26	39.3	27.9	1.7	24.8	1.96	18.2	93.0	3.72	3.1
	7.5	2.5	5.8	800	33.9	22.2	1.16	37.8	29.2	1.6	25.7	2.02	18.8	99.7	3.73	3.7
	7.5	2.5	5.8	1000	35.1	24.0	1.28	39.5	27.4	1.6	25.6	1.97	18.9	93.7	3.82	3.2
50	3.7	0.6	1.3	800	32.6	22.2	1.49	37.7	21.8	2.7	27.4	2.04	20.4	101.7	3.93	4.0
	3.7	0.6	1.3	1000	33.9	24.8	1.44	38.8	23.5	2.6	27.5	2.01	20.7	95.5	4.02	3.4
	5.5	1.3	3.0	800	32.7	22.1	1.41	37.5	23.3	2.4	28.2	2.08	21.2	102.7	3.98	4.1
	5.5	1.3	3.0	1000	33.9	24.3	1.45	38.9	23.5	2.4	28.1	2.02	21.2	96.0	4.08	3.6
	7.5	2.4	5.6	800	32.8	22.0	1.32	37.3	24.9	2.1	29.1	2.11	21.9	103.7	4.04	4.2
	7.5	2.4	5.6	1000	34.0	23.8	1.45	39.0	23.4	2.2	28.7	2.04	21.7	96.6	4.13	3.7
60	3.7	0.6	1.3	800	31.4	21.5	1.62	36.9	19.4	3.3	30.8	2.13	23.6	105.7	4.25	4.5
	3.7	0.6	1.3	1000	32.7	23.9	1.64	38.3	20.0	3.3	31.0	2.06	24.0	98.7	4.41	3.9
	5.5	1.3	2.9	800	31.4	21.2	1.55	36.7	20.3	3.0	31.7	2.17	24.3	106.7	4.28	4.6
	5.5	1.3	2.9	1000	32.8	23.6	1.60	38.3	20.5	3.0	31.9	2.08	24.8	99.5	4.49	4.1
	7.5	2.4	5.4	800	31.4	21.0	1.48	36.4	21.3	2.7	32.6	2.21	25.0	107.7	4.31	4.8
	7.5	2.4	5.4	1000	32.9	23.2	1.56	38.2	21.1	2.8	32.8	2.11	25.6	100.4	4.56	4.2
70	3.7	0.5	1.3	800	30.2	20.9	1.75	36.2	17.3	3.9	34.3	2.21	26.8	109.7	4.55	5.0
	3.7	0.5	1.3	1000	31.6	23.1	1.84	37.9	17.2	3.9	34.5	2.12	27.3	101.9	4.77	4.4
	5.5	1.2	2.8	800	30.0	20.4	1.69	35.8	17.8	3.6	35.1	2.26	27.4	110.7	4.56	5.2
	5.5	1.2	2.8	1000	31.7	22.8	1.75	37.7	18.1	3.7	35.7	2.15	28.4	103.0	4.87	4.5
	7.5	2.3	5.3	800	29.9	19.9	1.63	35.5	18.3	3.3	36.0	2.31	28.1	111.7	4.57	5.3
	7.5	2.3	5.3	1000	31.8	22.6	1.67	37.5	19.1	3.4	36.9	2.18	29.4	104.1	4.97	4.7
80	3.7	0.5	1.2	800	29.2	20.9	1.96	35.9	14.9	4.5	37.8	2.27	30.0	113.7	4.88	5.6
	3.7	0.5	1.2	1000	30.6	23.1	2.06	37.6	14.9	4.6	38.0	2.17	30.5	105.1	5.12	4.8
	5.5	1.2	2.7	800	29.0	20.4	1.89	35.5	15.4	4.2	38.5	2.33	30.5	114.5	4.84	5.8
	5.5	1.2	2.7	1000	30.6	22.8	1.96	37.3	15.6	4.3	39.0	2.21	31.5	106.2	5.17	5.0
	7.5	2.2	5.1	800	28.9	19.9	1.83	35.1	15.8	3.9	39.2	2.39	31.0	115.4	4.80	6.0
	7.5	2.2	5.1	1000	30.7	22.6	1.86	37.1	16.5	4.0	40.1	2.26	32.4	107.2	5.21	5.2
90	3.7	0.5	1.2	800	28.2	20.8	2.16	35.5	13.0	5.1	41.2	2.32	33.3	117.7	5.19	6.2
	3.7	0.5	1.2	1000	29.5	23.1	2.27	37.3	13.0	5.3	41.4	2.23	33.8	108.4	5.45	5.2
	5.5	1.1	2.6	800	28.0	20.3	2.09	35.2	13.4	4.8	41.8	2.40	33.6	118.4	5.10	6.4
	5.5	1.1	2.6	1000	29.6	22.8	2.16	37.0	13.7	4.9	42.4	2.28	34.6	109.3	5.45	5.5
	7.5	2.1	4.9	800	27.9	19.8	2.02	34.8	13.8	4.5	42.4	2.48	33.9	119.1	5.01	6.7
	7.5	2.1	4.9	1000	29.7	22.6	2.06	36.7	14.4	4.6	43.4	2.34	35.4	110.2	5.44	5.7
100	3.7	0.5	1.1	800	26.6	19.8	2.35	34.6	11.3	5.8						
	3.7	0.5	1.1	1000	27.8	21.9	2.47	36.2	11.3	6.0						
	5.5	1.1	2.5	800	26.4	19.3	2.27	34.2	11.6	5.4						
	5.5	1.1	2.5	1000	27.9	21.6	2.35	35.9	11.9	5.6						
	7.5	2.0	4.7	800	26.3	18.8	2.20	33.8	12.0	5.1						
	7.5	2.0	4.7	1000	28.0	21.4	2.24	35.6	12.5	5.2						
110	3.7	0.5	1.1	800	25.0	18.7	2.54	33.6	9.8	6.4						
	3.7	0.5	1.1	1000	26.1	20.7	2.67	35.2	9.8	6.7						
	5.5	1.1	2.4	800	24.8	18.3	2.46	33.2	10.1	6.0						
	5.5	1.1	2.4	1000	26.2	20.5	2.54	34.9	10.3	6.2						
	7.5	2.0	4.5	800	24.7	17.8	2.38	32.8	10.4	5.7						
	7.5	2.0	4.5	1000	26.3	20.2	2.42	34.5	10.9	5.8						

Operation not recommended

Interpolation is permissible; extrapolation is not.

All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.

ARI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.

Table does not reflect fan or pump power corrections for ARI/ISO conditions.

All performance is based upon the lower voltage of dual voltage rated units.

Operation below 40°F EWT is based upon a 15% antifreeze solution.

Operation below 60°F EWT requires optional insulated water/refrigerant circuit (standard on residential models).

See performance correction tables for operating conditions other than those listed above.

For operation in the shaded areas, please see the Performance Data Selection Notes.

Genesis Packaged (GS) Series

Performance Data — Genesis GS Model 036 - PSC Blower

975 CFM Nominal (Rated) Airflow Cooling, 1200 CFM Nominal (Rated) Airflow Heating

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F						Heating - EAT 70°F						
		PSI	FT	Airflow CFM	TC	SC	kW	HR	EER	HWC	HC	KW	HE	LAT	COP	HWC
20	9.0	4.9	11.2	Operation not recommended						23.1	2.15	15.7	91.9	3.14	3.2	
30	9.0	4.9	11.2							22.9	2.23	15.3	87.7	3.01	2.7	
	4.5	1.6	3.7	975	41.8	27.1	1.32	46.3	31.6	1.2	25.6	2.38	17.5	94.3	3.14	3.6
	4.5	1.6	3.7	1200	42.2	29.1	1.38	46.9	30.5	1.1	25.9	2.30	18.1	90.0	3.30	3.0
	7.0	3.2	7.3	975	41.7	27.3	1.27	46.1	32.9	1.3	26.2	2.31	18.3	94.9	3.32	3.7
	7.0	3.2	7.3	1200	42.0	29.4	1.33	46.5	31.7	1.1	26.3	2.31	18.4	90.3	3.33	3.2
	9.0	4.7	10.9	975	41.6	27.5	1.22	45.8	34.2	1.3	26.8	2.24	19.2	95.5	3.51	3.9
40	9.0	4.7	10.9	1200	41.9	29.8	1.27	46.2	32.9	1.2	26.6	2.32	18.7	90.5	3.36	3.3
	4.5	1.5	3.5	975	40.4	26.5	1.53	45.6	26.5	2.2	29.2	2.46	20.8	97.7	3.48	4.2
	4.5	1.5	3.5	1200	40.7	28.5	1.60	46.1	25.5	2.1	29.6	2.37	21.5	92.8	3.65	3.6
	7.0	3.1	7.1	975	40.4	26.7	1.47	45.4	27.5	2.1	29.8	2.42	21.6	98.3	3.61	4.4
	7.0	3.1	7.1	1200	40.6	28.8	1.54	45.9	26.4	2.0	29.9	2.39	21.8	93.1	3.67	3.7
	9.0	4.6	10.6	975	40.4	26.9	1.41	45.2	28.5	1.9	30.4	2.38	22.3	98.9	3.75	4.5
50	9.0	4.6	10.6	1200	40.6	29.0	1.48	45.6	27.5	1.9	30.3	2.41	22.1	93.4	3.69	3.9
	4.5	1.5	3.4	975	38.9	26.0	1.73	44.8	22.5	3.2	32.8	2.53	24.2	101.1	3.80	4.8
	4.5	1.5	3.4	1200	39.2	27.9	1.81	45.4	21.7	3.1	33.2	2.44	24.9	95.6	3.99	4.2
	7.0	3.0	6.9	975	39.0	26.1	1.67	44.7	23.4	2.8	33.4	2.53	24.8	101.7	3.88	5.0
	7.0	3.0	6.9	1200	39.3	28.1	1.75	45.2	22.5	2.8	33.6	2.47	25.2	95.9	3.99	4.3
	9.0	4.4	10.2	975	39.1	26.2	1.61	44.6	24.3	2.4	34.1	2.52	25.5	102.3	3.96	5.2
60	9.0	4.4	10.2	1200	39.3	28.3	1.68	45.0	23.4	2.6	34.0	2.49	25.5	96.2	4.00	4.5
	4.5	1.4	3.3	975	36.9	25.7	1.90	43.3	19.4	3.9	36.2	2.65	27.2	104.4	4.01	5.5
	4.5	1.4	3.3	1200	37.4	28.2	1.98	44.1	18.9	3.9	36.9	2.54	28.2	98.4	4.25	4.7
	7.0	2.9	6.7	975	37.3	25.9	1.84	43.6	20.3	3.6	36.9	2.65	27.9	105.1	4.08	5.6
	7.0	2.9	6.7	1200	37.8	28.2	1.91	44.3	19.8	3.6	37.5	2.57	28.7	98.9	4.28	4.9
	9.0	4.3	9.9	975	37.7	26.2	1.78	43.8	21.2	3.2	37.7	2.66	28.6	105.8	4.15	5.8
70	9.0	4.3	9.9	1200	38.2	28.3	1.85	44.5	20.7	3.3	38.2	2.59	29.3	99.4	4.32	5.1
	4.5	1.4	3.2	975	34.8	25.4	2.07	41.9	16.8	4.7	39.6	2.76	30.2	107.6	4.20	6.1
	4.5	1.4	3.2	1200	35.5	28.4	2.15	42.8	16.5	4.7	40.5	2.64	31.5	101.3	4.49	5.3
	7.0	2.8	6.5	975	35.6	25.8	2.01	42.4	17.7	4.3	40.5	2.78	31.0	108.4	4.26	6.3
	7.0	2.8	6.5	1200	36.3	28.3	2.08	43.4	17.5	4.4	41.4	2.67	32.3	101.9	4.55	5.5
	9.0	4.1	9.6	975	36.3	26.2	1.96	43.0	18.6	3.9	41.3	2.80	31.7	109.2	4.32	6.5
80	9.0	4.1	9.6	1200	37.1	28.2	2.01	44.0	18.5	4.1	42.3	2.69	33.1	102.6	4.61	5.7
	4.5	1.3	3.1	975	33.5	24.5	2.30	41.4	14.6	5.4	43.2	2.86	33.4	111.0	4.42	6.8
	4.5	1.3	3.1	1200	34.2	27.4	2.39	42.3	14.3	5.5	44.2	2.74	34.8	104.1	4.72	5.8
	7.0	2.7	6.2	975	34.3	24.9	2.23	41.9	15.4	5.0	44.0	2.88	34.2	111.8	4.47	7.0
	7.0	2.7	6.2	1200	35.0	27.3	2.31	42.9	15.2	5.1	45.0	2.76	35.6	104.7	4.78	6.1
	9.0	4.0	9.3	975	35.0	25.2	2.17	42.4	16.1	4.6	44.8	2.90	34.9	112.6	4.53	7.3
90	9.0	4.0	9.3	1200	35.8	27.2	2.23	43.4	16.0	4.8	45.9	2.79	36.4	105.4	4.83	6.3
	4.5	1.3	3.0	975	32.3	23.6	2.52	40.9	12.8	6.1	46.7	2.97	36.6	114.4	4.61	7.5
	4.5	1.3	3.0	1200	32.9	26.4	2.62	41.9	12.6	6.3	47.8	2.84	38.1	106.9	4.93	6.3
	7.0	2.6	6.0	975	33.0	24.0	2.45	41.4	13.4	5.7	47.5	2.98	37.4	115.1	4.67	7.8
	7.0	2.6	6.0	1200	33.7	26.3	2.54	42.3	13.3	5.9	48.7	2.86	38.9	107.5	4.98	6.6
	9.0	3.9	8.9	975	33.7	24.3	2.38	41.8	14.1	5.4	48.3	3.00	38.1	115.9	4.72	8.1
100	9.0	3.9	8.9	1200	34.4	26.2	2.45	42.8	14.0	5.5	49.5	2.88	39.7	108.2	5.04	6.9
	4.5	1.3	2.9	975	30.3	23.7	2.83	39.9	10.7	6.9	Operation not recommended					
	4.5	1.3	2.9	1200	30.9	26.5	2.94	40.9	10.5	7.2						
	7.0	2.5	5.8	975	30.9	24.1	2.75	40.3	11.2	6.5						
	7.0	2.5	5.8	1200	31.6	26.4	2.85	41.3	11.1	6.7						
	9.0	3.7	8.6	975	31.6	24.4	2.67	40.7	11.8	6.1						
110	9.0	3.7	8.6	1200	32.3	26.3	2.75	41.6	11.7	6.2						
	4.5	1.2	2.8	975	28.2	23.9	3.14	38.9	9.0	7.7						
	4.5	1.2	2.8	1200	28.8	26.7	3.26	39.9	8.8	8.0						
	7.0	2.4	5.6	975	28.9	24.2	3.05	39.3	9.5	7.2						
	7.0	2.4	5.6	1200	29.5	26.6	3.16	40.2	9.3	7.5						
	9.0	3.6	8.3	975	29.5	24.6	2.97	39.6	9.9	6.8						
	9.0	3.6	8.3	1200	30.1	26.5	3.05	40.5	9.9	7.0						

Interpolation is permissible; extrapolation is not.

All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.

ARI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.

Table does not reflect fan or pump power corrections for ARI/ISO conditions.

All performance is based upon the lower voltage of dual voltage rated units.

Operation below 40°F EWT is based upon a 15% antifreeze solution.

Operation below 60°F EWT requires optional insulated water/refrigerant circuit (standard on residential models).

See performance correction tables for operating conditions other than those listed above.

For operation in the shaded areas, please see the Performance Data Selection Notes.

Performance Data — Genesis GS Model 036 - ECM Blower

975 CFM Nominal (Rated) Airflow Cooling, 1200 CFM Nominal (Rated) Airflow Heating

Performance capacities shown in thousands of Btu/h

EWT °F	GPM	WPD		Cooling - EAT 80/67°F						Heating - EAT 70°F						
		PSI	FT	Airflow CFM	TC	SC	kW	HR	EER	HWC	HC	KW	HE	LAT	COP	HWC
20	9.0	4.9	11.2	Operation not recommended						22.8	2.08	15.7	91.7	3.21	3.2	
30	9.0	4.9	11.2							22.9	2.23	15.3	87.7	3.01	2.7	
	4.5	1.6	3.7	975	42.1	27.3	1.25	46.3	33.6	1.2	25.4	2.32	17.4	94.1	3.21	3.6
	4.5	1.6	3.7	1200	42.2	29.1	1.38	46.9	30.5	1.1	25.9	2.30	18.1	90.0	3.30	3.0
	7.0	3.2	7.3	975	42.0	27.6	1.20	46.1	34.9	1.3	26.0	2.24	18.3	94.7	3.39	3.7
	7.0	3.2	7.3	1200	42.0	29.4	1.33	46.5	31.7	1.1	26.3	2.31	18.4	90.3	3.33	3.2
	9.0	4.7	10.9	975	41.9	27.8	1.15	45.8	36.4	1.3	26.6	2.17	19.2	95.2	3.59	3.9
40	9.0	4.7	10.9	1200	41.9	29.8	1.27	46.2	32.9	1.2	26.6	2.32	18.7	90.5	3.36	3.3
	4.5	1.5	3.5	975	40.6	26.8	1.46	45.6	27.9	2.2	29.0	2.39	20.8	97.5	3.55	4.2
	4.5	1.5	3.5	1200	40.7	28.5	1.60	46.1	25.5	2.1	29.6	2.37	21.5	92.8	3.65	3.6
	7.0	3.1	7.1	975	40.6	26.9	1.40	45.4	29.0	2.1	29.6	2.35	21.6	98.1	3.69	4.4
	7.0	3.1	7.1	1200	40.6	28.8	1.54	45.9	26.4	2.0	29.9	2.39	21.8	93.1	3.67	3.7
	9.0	4.6	10.6	975	40.6	27.1	1.35	45.2	30.2	1.9	30.2	2.31	22.3	98.7	3.83	4.5
50	9.0	4.6	10.6	1200	40.6	29.0	1.48	45.6	27.5	1.9	30.3	2.41	22.1	93.4	3.69	3.9
	4.5	1.5	3.4	975	39.1	26.2	1.66	44.8	23.6	3.2	32.6	2.46	24.2	100.9	3.88	4.8
	4.5	1.5	3.4	1200	39.2	27.9	1.81	45.4	21.7	3.1	33.2	2.44	24.9	95.6	3.99	4.2
	7.0	3.0	6.9	975	39.2	26.3	1.60	44.7	24.5	2.8	33.2	2.46	24.8	101.5	3.96	5.0
	7.0	3.0	6.9	1200	39.3	28.1	1.75	45.2	22.5	2.8	33.6	2.47	25.2	95.9	3.99	4.3
	9.0	4.4	10.2	975	39.3	26.4	1.54	44.6	25.5	2.4	33.8	2.45	25.4	102.1	4.04	5.2
60	9.0	4.4	10.2	1200	39.3	28.3	1.68	45.0	23.4	2.6	34.0	2.49	25.5	96.2	4.00	4.5
	4.5	1.4	3.3	975	37.1	25.9	1.83	43.3	20.3	3.9	36.0	2.58	27.2	104.2	4.09	5.5
	4.5	1.4	3.3	1200	37.4	28.2	1.98	44.1	18.9	3.9	36.9	2.54	28.2	98.4	4.25	4.7
	7.0	2.9	6.7	975	37.5	26.2	1.77	43.6	21.2	3.6	36.7	2.58	27.9	104.9	4.16	5.6
	7.0	2.9	6.7	1200	37.8	28.2	1.91	44.3	19.8	3.6	37.5	2.57	28.7	98.9	4.28	4.9
	9.0	4.3	9.9	975	38.0	26.4	1.71	43.8	22.2	3.2	37.4	2.59	28.6	105.6	4.23	5.8
70	9.0	4.3	9.9	1200	38.2	28.3	1.85	44.5	20.7	3.3	38.2	2.59	29.3	99.4	4.32	5.1
	4.5	1.4	3.2	975	35.0	25.7	2.00	41.9	17.5	4.7	39.4	2.69	30.2	107.4	4.29	6.1
	4.5	1.4	3.2	1200	35.5	28.4	2.15	42.8	16.5	4.7	40.5	2.64	31.5	101.3	4.49	5.3
	7.0	2.8	6.5	975	35.8	26.0	1.94	42.4	18.4	4.3	40.2	2.71	31.0	108.2	4.35	6.3
	7.0	2.8	6.5	1200	36.3	28.3	2.08	43.4	17.5	4.4	41.4	2.67	32.3	101.9	4.55	5.5
	9.0	4.1	9.6	975	36.6	26.4	1.89	43.0	19.4	3.9	41.1	2.73	31.7	109.0	4.41	6.5
80	9.0	4.1	9.6	1200	37.1	28.2	2.01	44.0	18.5	4.1	42.3	2.69	33.1	102.6	4.61	5.7
	4.5	1.3	3.1	975	33.8	24.8	2.23	41.4	15.2	5.4	42.9	2.80	33.4	110.8	4.50	6.8
	4.5	1.3	3.1	1200	34.2	27.4	2.39	42.3	14.3	5.5	44.2	2.74	34.8	104.1	4.72	5.8
	7.0	2.7	6.2	975	34.5	25.1	2.16	41.9	16.0	5.0	43.8	2.81	34.2	111.6	4.56	7.0
	7.0	2.7	6.2	1200	35.0	27.3	2.31	42.9	15.2	5.1	45.0	2.76	35.6	104.7	4.78	6.1
	9.0	4.0	9.3	975	35.3	25.5	2.10	42.4	16.8	4.6	44.6	2.83	34.9	112.3	4.62	7.3
90	9.0	4.0	9.3	1200	35.8	27.2	2.23	43.4	16.0	4.8	45.9	2.79	36.4	105.4	4.83	6.3
	4.5	1.3	3.0	975	32.5	23.9	2.45	40.9	13.2	6.1	46.5	2.90	36.6	114.2	4.70	7.5
	4.5	1.3	3.0	1200	32.9	26.4	2.62	41.9	12.6	6.3	47.8	2.84	38.1	106.9	4.93	6.3
	7.0	2.6	6.0	975	33.2	24.2	2.38	41.4	13.9	5.7	47.3	2.91	37.4	114.9	4.76	7.8
	7.0	2.6	6.0	1200	33.7	26.3	2.54	42.3	13.3	5.9	48.7	2.86	38.9	107.5	4.98	6.6
	9.0	3.9	8.9	975	33.9	24.5	2.31	41.8	14.7	5.4	48.1	2.93	38.1	115.7	4.81	8.1
100	9.0	3.9	8.9	1200	34.4	26.2	2.45	42.8	14.0	5.5	49.5	2.88	39.7	108.2	5.04	6.9
	4.5	1.3	2.9	975	30.5	24.0	2.76	39.9	11.0	6.9	Operation not recommended					
	4.5	1.3	2.9	1200	30.9	26.5	2.94	40.9	10.5	7.2						
	7.0	2.5	5.8	975	31.2	24.3	2.68	40.3	11.6	6.5						
	7.0	2.5	5.8	1200	31.6	26.4	2.85	41.3	11.1	6.7						
	9.0	3.7	8.6	975	31.8	24.7	2.61	40.7	12.2	6.1						
110	9.0	3.7	8.6	1200	32.3	26.3	2.75	41.6	11.7	6.2						
	4.5	1.2	2.8	975	28.5	24.1	3.07	39.0	9.3	7.7						
	4.5	1.2	2.8	1200	28.8	26.7	3.26	39.9	8.8	8.0						
	7.0	2.4	5.6	975	29.1	24.5	2.98	39.3	9.8	7.2						
	7.0	2.4	5.6	1200	29.5	26.6	3.16	40.2	9.3	7.5						
	9.0	3.6	8.3	975	29.7	24.8	2.90	39.6	10.3	6.8						
	9.0	3.6	8.3	1200	30.1	26.5	3.05	40.5	9.9	7.0						

Interpolation is permissible; extrapolation is not.

All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.

ARI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.

Table does not reflect fan or pump power corrections for ARI/ISO conditions.

All performance is based upon the lower voltage of dual voltage rated units.

Operation below 40°F EWT is based upon a 15% antifreeze solution.

Operation below 60°F EWT requires optional insulated water/refrigerant circuit (standard on residential models).

See performance correction tables for operating conditions other than those listed above.

For operation in the shaded areas, please see the Performance Data Selection Notes.

Genesis Packaged (GS) Series

Performance Data — Genesis GS Model 042 - PSC Blower

1150 CFM Nominal (Rated) Airflow Cooling, 1400 CFM Nominal (Rated) Airflow Heating

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F						Heating - EAT 70°F						
		PSI	FT	Airflow CFM	TC	SC	kW	HR	EER	HWC	HC	KW	HE	LAT	COP	HWC
20	10.5	6.2	14.3	Operation not recommended						26.5	2.62	17.5	91.3	2.96	3.6	
30	10.5	6.2	14.3							27.2	2.60	18.4	88.0	3.07	3.1	
	5.2	2.0	4.6	1150	50.5	33.1	1.67	56.2	30.3	1.6	31.3	2.71	22.0	95.2	3.38	4.1
	5.2	2.0	4.6	1400	52.4	36.4	1.73	58.3	30.3	1.3	31.3	2.65	22.3	90.7	3.46	3.5
	9.0	4.7	10.9	1150	49.9	32.6	1.62	55.4	30.9	1.6	31.4	2.71	22.2	95.3	3.40	4.3
	9.0	4.7	10.9	1400	52.5	36.6	1.68	58.2	31.3	1.4	31.9	2.67	22.8	91.1	3.51	3.6
	10.5	6.0	13.9	1150	49.3	32.2	1.57	54.6	31.4	1.7	31.6	2.71	22.4	95.4	3.42	4.4
40	10.5	6.0	13.9	1400	52.6	36.9	1.63	58.2	32.4	1.5	32.5	2.68	23.3	91.5	3.55	3.8
	5.2	1.9	4.5	1150	48.6	32.2	1.94	55.2	25.1	2.7	35.8	2.80	26.3	98.9	3.75	4.8
	5.2	1.9	4.5	1400	50.4	35.4	2.01	57.2	25.1	2.5	35.9	2.73	26.6	93.7	3.85	4.2
	9.0	4.6	10.6	1150	48.0	31.7	1.87	54.4	25.6	2.5	36.1	2.81	26.5	99.1	3.76	5.0
	9.0	4.6	10.6	1400	50.5	35.6	1.94	57.1	26.0	2.4	36.9	2.77	27.4	94.4	3.90	4.3
	10.5	5.8	13.5	1150	47.3	31.3	1.81	53.5	26.1	2.3	36.3	2.82	26.7	99.3	3.77	5.2
50	10.5	5.8	13.5	1400	50.5	35.9	1.88	57.0	26.9	2.3	37.8	2.80	28.3	95.0	3.96	4.5
	5.2	1.9	4.3	1150	46.7	31.3	2.21	54.2	21.1	3.8	40.4	2.88	30.6	102.5	4.11	5.6
	5.2	1.9	4.3	1400	48.4	34.3	2.29	56.2	21.1	3.6	40.4	2.82	30.8	96.7	4.21	4.8
	9.0	4.4	10.2	1150	46.0	30.8	2.13	53.3	21.6	3.4	40.7	2.91	30.8	102.8	4.10	5.8
	9.0	4.4	10.2	1400	48.4	34.6	2.21	56.0	21.9	3.4	41.8	2.87	32.0	97.7	4.27	5.0
	10.5	5.6	13.0	1150	45.4	30.4	2.05	52.4	22.1	2.9	41.1	2.94	31.1	103.1	4.10	6.0
60	10.5	5.6	13.0	1400	48.5	34.9	2.13	55.8	22.8	3.1	43.2	2.92	33.2	98.6	4.34	5.2
	5.2	1.8	4.2	1150	45.3	31.0	2.44	53.6	18.6	4.6	44.5	2.98	34.3	105.8	4.37	6.3
	5.2	1.8	4.2	1400	46.9	33.3	2.52	55.5	18.6	4.6	45.0	2.90	35.1	99.7	4.55	5.5
	9.0	4.3	9.9	1150	45.4	30.4	2.36	53.4	19.3	4.2	45.2	3.02	34.9	106.4	4.38	6.5
	9.0	4.3	9.9	1400	47.0	33.7	2.42	55.2	19.4	4.2	46.4	2.94	36.3	100.7	4.61	5.7
	10.5	5.5	12.6	1150	45.5	29.9	2.27	53.2	20.0	3.8	45.9	3.06	35.4	106.9	4.40	6.7
70	10.5	5.5	12.6	1400	47.0	34.1	2.31	54.9	20.3	3.9	47.8	2.99	37.6	101.6	4.68	5.9
	5.2	1.8	4.0	1150	43.9	30.8	2.67	53v	16.4	5.5	48.6	3.08	38.1	109.1	4.62	7.0
	5.2	1.8	4.0	1400	45.5	32.3	2.75	54.8	16.5	5.5	49.5	2.98	39.4	102.8	4.87	6.2
	9.0	4.1	9.6	1150	44.7	30.0	2.58	53.5	17.3	5.0	49.6	3.13	38.9	109.9	4.65	7.3
	9.0	4.1	9.6	1400	45.5	32.7	2.63	54.4	17.3	5.1	50.9	3.02	40.6	103.7	4.94	6.4
	10.5	5.3	12.2	1150	45.5	29.3	2.49	54.0	18.2	4.6	50.6	3.17	39.8	110.8	4.67	7.5
80	10.5	5.3	12.2	1400	45.5	33.2	2.50	54.0	18.2	4.8	52.3	3.07	41.9	104.6	5.00	6.6
	5.2	1.7	3.9	1150	41.7	29.8	2.97	51.8	14.0	6.3	53.0	3.16	42.2	112.7	4.91	7.9
	5.2	1.7	3.9	1400	43.2	31.2	3.06	53.6	14.1	6.4	54.1	3.06	43.6	105.8	5.17	6.7
	9.0	4.0	9.3	1150	42.5	29.1	2.87	52.3	14.8	5.8	54.3	3.23	43.2	113.7	4.92	8.1
	9.0	4.0	9.3	1400	43.2	31.7	2.92	53.2	14.8	6.0	55.7	3.13	45.1	106.9	5.22	7.0
	10.5	5.1	11.8	1150	43.2	28.4	2.77	52.7	15.6	5.4	55.5	3.30	44.2	114.7	4.93	8.4
90	10.5	5.1	11.8	1400	43.2	32.2	2.78	52.7	15.6	5.6	57.4	3.19	46.5	108.0	5.27	7.3
	5.2	1.6	3.8	1150	39.5	28.8	3.27	50.7	12.1	7.1	57.5	3.25	46.4	116.3	5.19	8.7
	5.2	1.6	3.8	1400	40.9	30.2	3.37	52.4	12.1	7.4	58.6	3.15	47.9	108.8	5.46	7.3
	9.0	3.9	8.9	1150	40.2	28.1	3.16	51.0	12.7	6.7	58.9	3.34	47.5	117.5	5.17	9.0
	9.0	3.9	8.9	1400	40.9	30.7	3.21	51.9	12.7	6.9	60.5	3.23	49.5	110.0	5.49	7.7
	10.5	4.9	11.4	1150	41.0	27.4	3.05	51.4	13.4	6.3	60.4	3.43	48.7	118.6	5.16	9.4
100	10.5	4.9	11.4	1400	40.9	31.1	3.06	51.4	13.4	6.4	62.5	3.31	51.2	111.3	5.53	8.0
	5.2	1.6	3.6	1150	37.5	28.2	3.65	50.0	10.3	8.0	Operation not recommended					
	5.2	1.6	3.6	1400	38.9	29.6	3.76	51.7	10.3	8.3						
	9.0	3.7	8.6	1150	38.2	27.6	3.53	50.3	10.8	7.5						
	9.0	3.7	8.6	1400	38.9	30.0	3.59	51.1	10.8	7.8						
	10.5	4.7	11.0	1150	38.9	26.9	3.41	50.6	11.4	7.1						
110	10.5	4.7	11.0	1400	38.9	30.5	3.42	50.6	11.4	7.2						
	5.2	1.5	3.5	1150	35.6	27.6	4.04	49.4	8.8	8.9						
	5.2	1.5	3.5	1400	36.8	29.0	4.16	51.0	8.8	9.2						
	9.0	3.6	8.3	1150	36.2	27.0	3.91	49.6	9.3	8.4						
	9.0	3.6	8.3	1400	36.8	29.4	3.97	50.4	9.3	8.6						
	10.5	4.6	10.5	1150	36.9	26.3	3.77	49.7	9.8	7.9						
	10.5	4.6	10.5	1400	36.9	29.9	3.78	49.8	9.8	8.1						

Interpolation is permissible; extrapolation is not.

All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.

ARI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.

Table does not reflect fan or pump power corrections for ARI/ISO conditions.

All performance is based upon the lower voltage of dual voltage rated units.

Operation below 40°F EWT is based upon a 15% antifreeze solution.

Operation below 60°F EWT requires optional insulated water/refrigerant circuit (standard on residential models).

See performance correction tables for operating conditions other than those listed above.

For operation in the shaded areas, please see the Performance Data Selection Notes.

Performance Data — Genesis GS Model 042 - ECM Blower

1150 CFM Nominal (Rated) Airflow Cooling, 1400 CFM Nominal (Rated) Airflow Heating

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F						Heating - EAT 70°F								
		PSI	FT	Airflow CFM	TC	SC	kW	HR	EER	HWC	HC	KW	HE	LAT	COP	HWC		
20	10.5	6.2	14.3	Operation not recommended						26.0	2.47	17.5	90.9	3.08	3.6			
30	10.5	6.2	14.3							26.8	2.48	18.4	87.8	3.17	3.1			
	5.2	2.0	4.6	1150	51.1	33.7	1.51	56.2	33.7	1.6	30.8	2.56	22.0	94.8	3.52	4.1		
	5.2	2.0	4.6	1400	52.8	36.8	1.61	58.3	32.7	1.3	30.9	2.54	22.3	90.5	3.58	3.5		
	9.0	4.7	10.9	1150	50.4	33.2	1.46	55.4	34.4	1.6	30.9	2.56	22.2	94.9	3.54	4.3		
	9.0	4.7	10.9	1400	52.9	37.0	1.56	58.2	33.9	1.4	31.5	2.55	22.8	90.9	3.62	3.6		
	10.5	6.0	13.9	1150	49.8	32.7	1.42	54.6	35.2	1.7	31.1	2.55	22.4	95.0	3.56	4.4		
40	10.5	6.0	13.9	1400	53.0	37.3	1.51	58.2	35.1	1.5	32.1	2.57	23.3	91.2	3.66	3.8		
	5.2	1.9	4.5	1150	49.1	32.7	1.78	55.2	27.5	2.7	35.3	2.64	26.3	98.4	3.91	4.8		
	5.2	1.9	4.5	1400	50.8	35.8	1.89	57.2	26.8	2.5	35.5	2.62	26.6	93.5	3.97	4.2		
	9.0	4.6	10.6	1150	48.5	32.3	1.72	54.4	28.2	2.5	35.6	2.66	26.5	98.6	3.92	5.0		
	9.0	4.6	10.6	1400	50.9	36.0	1.83	57.1	27.8	2.4	36.5	2.65	27.4	94.1	4.03	4.3		
	10.5	5.8	13.5	1150	47.9	31.8	1.66	53.5	28.9	2.3	35.8	2.67	26.7	98.8	3.93	5.2		
50	10.5	5.8	13.5	1400	50.9	36.3	1.76	57.0	28.9	2.3	37.4	2.68	28.3	94.8	4.09	4.5		
	5.2	1.9	4.3	1150	47.2	31.8	2.06	54.2	23.0	3.8	39.9	2.73	30.5	102.1	4.28	5.6		
	5.2	1.9	4.3	1400	48.8	34.7	2.18	56.2	22.4	3.6	40.0	2.70	30.8	96.5	4.34	4.8		
	9.0	4.4	10.2	1150	46.6	31.4	1.98	53.3	23.5	3.4	40.2	2.76	30.8	102.4	4.27	5.8		
	9.0	4.4	10.2	1400	48.8	35.0	2.09	56.0	23.3	3.4	41.4	2.75	32.0	97.4	4.41	5.0		
	10.5	5.6	13.0	1150	45.9	31.0	1.90	52.4	24.2	2.9	40.6	2.79	31.1	102.7	4.27	6.0		
60	10.5	5.6	13.0	1400	48.9	35.3	2.01	55.8	24.3	3.1	42.8	2.8	33.2	98.3	4.48	5.2		
	5.2	1.8	4.2	1150	45.8	31.5	2.29	53.6	20.0	4.6	43.9	2.83	34.3	105.4	4.56	6.3		
	5.2	1.8	4.2	1400	47.3	33.7	2.41	55.5	19.7	4.6	44.6	2.78	35.1	99.5	4.69	5.5		
	9.0	4.3	9.9	1150	45.9	31.0	2.20	53.4	20.8	4.2	44.6	2.87	34.9	105.9	4.57	6.5		
	9.0	4.3	9.9	1400	47.3	34.1	2.30	55.2	20.6	4.2	46.0	2.83	36.3	100.4	4.76	5.7		
	10.5	5.5	12.6	1150	46.0	30.4	2.12	53.2	21.7	3.8	45.3	2.90	35.4	106.5	4.57	6.7		
70	10.5	5.5	12.6	1400	47.4	34.5	2.20	54.9	21.6	3.9	47.4	2.88	37.6	101.3	4.83	5.9		
	5.2	1.8	4.0	1150	44.4	31.3	2.52	53.0	17.6	5.5	48.0	2.92	38.1	108.7	4.81	7.0		
	5.2	1.8	4.0	1400	45.8	32.7	2.64	54.8	17.4	5.5	49.1	2.87	39.4	102.5	5.02	6.2		
	9.0	4.1	9.6	1150	45.2	30.5	2.43	53.5	18.6	5.0	49.1	2.97	38.9	109.5	4.84	7.3		
	9.0	4.1	9.6	1400	45.9	33.1	2.51	54.4	18.3	5.1	50.5	2.91	40.6	103.4	5.09	6.4		
	10.5	5.3	12.2	1150	46.0	29.8	2.34	54.0	19.7	4.6	50.1	3.02	39.8	110.3	4.86	7.5		
80	10.5	5.3	12.2	1400	45.9	33.6	2.38	54.0	19.3	4.8	51.9	2.95	41.9	104.4	5.16	6.6		
	5.2	1.7	3.9	1150	42.2	30.3	2.82	51.8	15.0	6.3	52.5	3.01	42.2	112.3	5.11	7.9		
	5.2	1.7	3.9	1400	43.6	31.6	2.94	53.6	14.8	6.4	53.7	2.95	43.6	105.5	5.34	6.7		
	9.0	4.0	9.3	1150	43.0	29.6	2.72	52.3	15.8	5.8	53.7	3.08	43.2	113.3	5.11	8.1		
	9.0	4.0	9.3	1400	43.6	32.1	2.80	53.2	15.6	6.0	55.3	3.01	45.1	106.6	5.39	7.0		
	10.5	5.1	11.8	1150	43.8	28.9	2.62	52.7	16.7	5.4	55.0	3.15	44.2	114.3	5.12	8.4		
90	10.5	5.1	11.8	1400	43.6	32.6	2.66	52.7	16.4	5.6	57.0	3.07	46.5	107.7	5.44	7.3		
	5.2	1.6	3.8	1150	40.0	29.3	3.11	50.7	12.9	7.1	56.9	3.09	46.4	115.8	5.39	8.7		
	5.2	1.6	3.8	1400	41.3	30.6	3.25	52.4	12.7	7.4	58.2	3.03	47.9	108.5	5.63	7.3		
	9.0	3.9	8.9	1150	40.8	28.6	3.01	51.0	13.6	6.7	58.4	3.19	47.5	117.0	5.37	9.0		
	9.0	3.9	8.9	1400	41.3	31.1	3.09	51.9	13.3	6.9	60.1	3.11	49.5	109.8	5.66	7.7		
	10.5	4.9	11.4	1150	41.5	28.0	2.90	51.4	14.3	6.3	59.9	3.28	48.7	118.2	5.36	9.4		
100	10.5	4.9	11.4	1400	41.3	31.5	2.94	51.4	14.1	6.4	62.1	3.20	51.2	111.1	5.69	8.0		
	5.2	1.6	3.6	1150	38.1	28.7	3.50	50.0	10.9	8.0	Operation not recommended							
	5.2	1.6	3.6	1400	39.2	30.0	3.65	51.7	10.8	8.3								
	9.0	3.7	8.6	1150	38.8	28.1	3.38	50.3	11.5	7.5								
	9.0	3.7	8.6	1400	39.3	30.4	3.47	51.1	11.3	7.8								
	10.5	4.7	11.0	1150	39.4	27.4	3.26	50.6	12.1	7.1								
110	10.5	4.7	11.0	1400	39.3	30.9	3.30	50.6	11.9	7.2								
	5.2	1.5	3.5	1150	36.1	28.2	3.89	49.4	9.3	8.9								
	5.2	1.5	3.5	1400	37.2	29.4	4.05	51.0	9.2	9.2								
	9.0	3.6	8.3	1150	36.8	27.5	3.75	49.6	9.8	8.4								
	9.0	3.6	8.3	1400	37.2	29.8	3.85	50.4	9.7	8.6								
	10.5	4.6	10.5	1150	37.4	26.9	3.62	49.8	10.3	7.9								
						1400	37.3	30.3	3.66	49.8	10.2	8.1						

Interpolation is permissible; extrapolation is not.

All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.

ARI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.

Table does not reflect fan or pump power corrections for ARI/ISO conditions.

All performance is based upon the lower voltage of dual voltage rated units.

Operation below 40°F EWT is based upon a 15% antifreeze solution.

Operation below 60°F EWT requires optional insulated water/refrigerant circuit (standard on residential models).

See performance correction tables for operating conditions other than those listed above.

For operation in the shaded areas, please see the Performance Data Selection Notes.

Genesis Packaged (GS) Series

Performance Data — Genesis GS Model 048 - PSC Blower

1300 CFM Nominal (Rated) Airflow Cooling, 1600 CFM Nominal (Rated) Airflow Heating

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F						Heating - EAT 70°F						
		PSI	FT	Airflow CFM	TC	SC	kW	HR	EER	HWC	HC	KW	HE	LAT	COP	HWC
20	12.0	7.6	17.6								30.1	3.01	19.8	91.4	2.93	4.2
	12.0	7.6	17.6	Operation not recommended							31.4	2.95	21.3	88.2	3.12	3.6
30	6.0	2.5	5.8	1300	54.9	35.5	1.91	61.4	28.7	1.7	34.2	2.99	24.0	94.3	3.35	4.8
	6.0	2.5	5.8	1600	56.7	38.9	2.00	63.5	28.3	1.4	36.7	2.98	26.5	91.2	3.61	4.0
	9.0	4.7	10.9	1300	54.9	35.7	1.84	61.1	29.9	1.7	34.8	3.04	24.4	94.8	3.35	5.0
	9.0	4.7	10.9	1600	56.5	38.7	1.93	63.1	29.4	1.5	36.8	3.01	26.5	91.3	3.58	4.2
	12.0	7.4	17.1	1300	54.8	35.9	1.76	60.9	31.1	1.8	35.4	3.10	24.8	95.2	3.35	5.1
	12.0	7.4	17.1	1600	56.4	38.5	1.85	62.7	30.5	1.6	36.9	3.04	26.5	91.4	3.56	4.4
40	6.0	2.4	5.6	1300	53.4	34.9	2.19	60.9	24.4	3.0	37.9	3.07	27.4	97.0	3.61	5.6
	6.0	2.4	5.6	1600	55.1	38.2	2.30	63.0	24.0	2.8	40.7	3.07	30.2	93.6	3.89	4.8
	9.0	4.6	10.6	1300	53.3	35.1	2.11	60.5	25.3	2.8	39.1	3.13	28.4	97.8	3.66	5.8
	9.0	4.6	10.6	1600	54.9	38.0	2.21	62.4	24.9	2.6	41.3	3.09	30.7	93.9	3.92	5.0
	12.0	7.2	16.6	1300	53.2	35.2	2.03	60.1	26.3	2.6	40.3	3.19	29.4	98.7	3.71	6.0
	12.0	7.2	16.6	1600	54.7	37.8	2.12	61.9	25.8	2.5	41.9	3.11	31.3	94.2	3.95	5.2
50	6.0	2.3	5.4	1300	51.9	34.2	2.47	60.3	21.0	4.3	41.6	3.16	30.8	99.6	3.86	6.4
	6.0	2.3	5.4	1600	53.6	37.5	2.59	62.4	20.7	4.1	44.7	3.15	33.9	95.9	4.15	5.6
	9.0	4.4	10.2	1300	51.7	34.4	2.38	59.9	21.8	3.8	43.4	3.21	32.4	100.9	3.95	6.7
	9.0	4.4	10.2	1600	53.3	37.3	2.49	61.8	21.4	3.8	45.8	3.16	35.0	96.5	4.24	5.8
	12.0	7.0	16.1	1300	51.6	34.6	2.29	59.4	22.6	3.3	45.2	3.27	34.0	102.2	4.05	6.9
	12.0	7.0	16.1	1600	53.0	37.1	2.40	61.2	22.1	3.5	46.8	3.17	36.0	97.1	4.33	6.0
60	6.0	2.3	5.2	1300	50.1	33.6	2.71	59.4	18.5	5.3	46.9	3.26	35.8	103.4	4.21	7.3
	6.0	2.3	5.2	1600	52.7	37.2	2.83	62.4	18.6	5.2	48.7	3.24	37.6	98.2	4.40	6.3
	9.0	4.3	9.9	1300	50.1	33.6	2.62	59.1	19.2	4.8	48.5	3.31	37.2	104.5	4.29	7.5
	9.0	4.3	9.9	1600	52.4	37.0	2.73	61.7	19.2	4.8	50.3	3.25	39.2	99.1	4.53	6.6
	12.0	6.7	15.6	1300	50.1	33.6	2.52	58.8	19.9	4.3	50.1	3.36	38.6	105.7	4.37	7.7
	12.0	6.7	15.6	1600	52.0	36.9	2.62	60.9	19.8	4.5	52.0	3.27	40.8	100.1	4.66	6.8
70	6.0	2.2	5.1	1300	48.4	32.9	2.96	58.5	16.4	6.3	52.2	3.36	40.7	107.2	4.55	8.1
	6.0	2.2	5.1	1600	51.9	36.9	3.07	62.4	16.9	6.3	52.6	3.32	41.3	100.5	4.64	7.1
	9.0	4.1	9.6	1300	48.5	32.8	2.86	58.3	17.0	5.8	53.6	3.40	42.0	108.1	4.62	8.4
	9.0	4.1	9.6	1600	51.4	36.8	2.96	61.5	17.4	5.9	54.9	3.35	43.5	101.8	4.81	7.3
	12.0	6.5	15.1	1300	48.7	32.7	2.76	58.1	17.7	5.3	54.9	3.44	43.2	109.1	4.68	8.6
	12.0	6.5	15.1	1600	50.9	36.6	2.85	60.6	17.9	5.5	57.1	3.37	45.6	103.0	4.97	7.6
80	6.0	2.1	4.9	1300	46.6	32.1	3.26	57.7	14.3	7.2	56.1	3.45	44.3	110.0	4.77	9.0
	6.0	2.1	4.9	1600	50.0	36.0	3.39	61.5	14.7	7.4	56.6	3.41	45.0	102.8	4.87	7.8
	9.0	4.0	9.3	1300	46.7	32.0	3.15	57.5	14.8	6.7	57.2	3.48	45.4	110.8	4.82	9.4
	9.0	4.0	9.3	1600	49.5	35.8	3.26	60.6	15.2	6.9	58.6	3.43	47.0	103.9	5.01	8.1
	12.0	6.3	14.6	1300	46.9	31.9	3.04	57.2	15.4	6.3	58.4	3.52	46.4	111.6	4.86	9.7
	12.0	6.3	14.6	1600	49.0	35.7	3.14	59.7	15.6	6.4	60.7	3.44	48.9	105.1	5.16	8.4
90	6.0	2.0	4.7	1300	44.8	31.3	3.57	57.0	12.6	8.2	60.1	3.53	48.0	112.8	4.98	10.0
	6.0	2.0	4.7	1600	48.0	35.0	3.71	60.7	13.0	8.5	60.6	3.49	48.7	105.1	5.08	8.4
	9.0	3.9	8.9	1300	44.9	31.2	3.45	56.7	13.0	7.7	60.9	3.56	48.8	113.4	5.01	10.4
	9.0	3.9	8.9	1600	47.6	34.9	3.57	59.7	13.3	8.0	62.4	3.51	50.4	106.1	5.21	8.8
	12.0	6.1	14.0	1300	45.1	31.1	3.33	56.4	13.6	7.2	61.8	3.60	49.5	114.0	5.04	10.8
	12.0	6.1	14.0	1600	47.1	34.8	3.43	58.8	13.7	7.4	64.2	3.52	52.2	107.2	5.35	9.2
100	6.0	2.0	4.5	1300	43.1	30.9	3.99	56.7	10.8	9.3	Operation not recommended					
	6.0	2.0	4.5	1600	46.3	34.6	4.14	60.4	11.2	9.6	Operation not recommended					
	9.0	3.7	8.6	1300	43.3	30.8	3.85	56.4	11.2	8.7	Operation not recommended					
	9.0	3.7	8.6	1600	45.8	34.5	3.99	59.4	11.5	9.0	Operation not recommended					
	12.0	5.9	13.5	1300	43.4	30.7	3.72	56.1	11.7	8.2	Operation not recommended					
	12.0	5.9	13.5	1600	45.4	34.4	3.84	58.4	11.8	8.4	Operation not recommended					
110	6.0	1.9	4.4	1300	41.5	30.6	4.41	56.5	9.4	10.3	Operation not recommended					
	6.0	1.9	4.4	1600	44.5	34.2	4.58	60.1	9.7	10.7	Operation not recommended					
	9.0	3.6	8.3	1300	41.6	30.5	4.26	56.1	9.8	9.7	Operation not recommended					
	9.0	3.6	8.3	1600	44.1	34.1	4.41	59.1	10.0	10	Operation not recommended					
	12.0	5.6	13.0	1300	41.7	30.4	4.11	55.8	10.2	9.2	Operation not recommended					
	12.0	5.6	13.0	1600	43.6	34.0	4.24	58.1	10.3	9.4	Operation not recommended					

Interpolation is permissible; extrapolation is not.

All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.

ARI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.

Table does not reflect fan or pump power corrections for ARI/ISO conditions.

All performance is based upon the lower voltage of dual voltage rated units.

Operation below 40°F EWT is based upon a 15% antifreeze solution.

Operation below 60°F EWT requires optional insulated water/refrigerant circuit (standard on residential models).

See performance correction tables for operating conditions other than those listed above.

For operation in the shaded areas, please see the Performance Data Selection Notes.

Performance Data — Genesis GS Model 048 - ECM Blower

1300 CFM Nominal (Rated) Airflow Cooling, 1600 CFM Nominal (Rated) Airflow Heating

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F						Heating - EAT 70°F								
		PSI	FT	Airflow CFM	TC	SC	kW	HR	EER	HWC	HC	kW	HE	LAT	COP	HWC		
20	12.0	7.6	17.6	Operation not recommended						29.3	2.77	19.8	90.9	3.10	4.2			
30	12.0	7.6	17.6	Operation not recommended						30.7	2.74	21.3	87.7	3.28	3.6			
	6.0	2.5	5.8	1300	55.7	36.3	1.68	61.4	33.3	1.7	33.4	2.75	24.0	93.8	3.55	4.8		
	6.0	2.5	5.8	1600	57.4	39.7	1.79	63.5	32.1	1.4	36.0	2.77	26.5	90.8	3.81	4.0		
	9.0	4.7	10.9	1300	55.7	36.5	1.60	61.1	34.8	1.7	34.0	2.81	24.4	94.2	3.55	5.0		
	9.0	4.7	10.9	1600	57.3	39.5	1.71	63.1	33.4	1.5	36.1	2.80	26.5	90.9	3.78	4.2		
	12.0	7.4	17.1	1300	55.6	36.7	1.53	60.9	36.4	1.8	34.6	2.86	24.8	94.6	3.54	5.1		
40	12.0	7.4	17.1	1600	57.1	39.3	1.63	62.7	34.9	1.6	36.2	2.83	26.5	90.9	3.75	4.4		
	6.0	2.4	5.6	1300	54.2	35.7	1.95	60.9	27.7	3.0	37.1	2.84	27.4	96.4	3.83	5.6		
	6.0	2.4	5.6	1600	55.9	38.9	2.08	63.0	26.8	2.8	40.0	2.85	30.2	93.1	4.10	4.8		
	9.0	4.6	10.6	1300	54.1	35.9	1.87	60.5	28.9	2.8	38.3	2.89	28.4	97.3	3.88	5.8		
	9.0	4.6	10.6	1600	55.6	38.8	1.99	62.5	27.9	2.6	40.5	2.87	30.7	93.5	4.14	5.0		
	12.0	7.2	16.6	1300	54.0	36.0	1.79	60.1	30.2	2.6	39.5	2.95	29.4	98.1	3.92	6.0		
50	12.0	7.2	16.6	1600	55.4	38.6	1.91	61.9	29.1	2.5	41.1	2.89	31.3	93.8	4.17	5.2		
	6.0	2.3	5.4	1300	52.7	35.0	2.23	60.3	23.6	4.3	40.8	2.92	30.8	99.0	4.09	6.4		
	6.0	2.3	5.4	1600	54.3	38.2	2.37	62.4	22.9	4.1	43.9	2.94	33.9	95.4	4.38	5.6		
	9.0	4.4	10.2	1300	52.5	35.2	2.14	59.9	24.5	3.8	42.6	2.98	32.4	100.3	4.19	6.7		
	9.0	4.4	10.2	1600	54.0	38.0	2.28	61.8	23.7	3.8	45.0	2.95	35.0	96.1	4.47	5.8		
	12.0	7.0	16.1	1300	52.4	35.4	2.05	59.4	25.6	3.3	44.4	3.03	34.0	101.6	4.28	6.9		
60	12.0	7.0	16.1	1600	53.8	37.9	2.18	61.2	24.6	3.5	46.1	2.96	36.0	96.7	4.57	6.0		
	6.0	2.3	5.2	1300	50.9	34.4	2.48	59.4	20.6	5.3	46.1	3.02	35.7	102.8	4.47	7.3		
	6.0	2.3	5.2	1600	53.5	37.9	2.62	62.4	20.4	5.2	47.9	3.02	37.6	97.7	4.64	6.3		
	9.0	4.3	9.9	1300	50.9	34.4	2.38	59.1	21.4	4.8	47.7	3.07	37.2	103.9	4.55	7.5		
	9.0	4.3	9.9	1600	53.1	37.8	2.51	61.7	21.1	4.8	49.6	3.04	39.2	98.7	4.78	6.6		
	12.0	6.7	15.6	1300	51.0	34.4	2.29	58.8	22.3	4.3	49.3	3.12	38.6	105.1	4.63	7.7		
70	12.0	6.7	15.6	1600	52.7	37.6	2.41	60.9	21.9	4.5	51.2	3.06	40.8	99.6	4.91	6.8		
	6.0	2.2	5.1	1300	49.2	33.7	2.72	58.5	18.1	6.3	51.4	3.12	40.7	106.6	4.82	8.1		
	6.0	2.2	5.1	1600	52.7	37.6	2.86	62.4	18.4	6.3	51.9	3.11	41.3	100.0	4.89	7.1		
	9.0	4.1	9.6	1300	49.4	33.6	2.62	58.3	18.8	5.8	52.7	3.16	42.0	107.6	4.89	8.4		
	9.0	4.1	9.6	1600	52.1	37.5	2.75	61.5	19.0	5.9	54.1	3.13	43.4	101.3	5.07	7.3		
	12.0	6.5	15.1	1300	49.5	33.5	2.52	58.1	19.6	5.3	54.1	3.20	43.2	108.6	4.95	8.6		
80	12.0	6.5	15.1	1600	51.6	37.4	2.63	60.6	19.6	5.5	56.4	3.15	45.6	102.6	5.24	7.6		
	6.0	2.1	4.9	1300	47.4	32.9	3.03	57.7	15.7	7.2	55.3	3.21	44.3	109.4	5.05	9.0		
	6.0	2.1	4.9	1600	50.7	36.7	3.18	61.6	16.0	7.4	55.9	3.20	45.0	102.3	5.12	7.8		
	9.0	4.0	9.3	1300	47.5	32.8	2.92	57.5	16.3	6.7	56.4	3.25	45.4	110.2	5.09	9.4		
	9.0	4.0	9.3	1600	50.2	36.6	3.05	60.6	16.5	6.9	57.9	3.21	46.9	103.5	5.28	8.1		
	12.0	6.3	14.6	1300	47.7	32.7	2.81	57.3	17.0	6.3	57.6	3.28	46.4	111.0	5.14	9.7		
90	12.0	6.3	14.6	1600	49.7	36.5	2.92	59.7	17.0	6.4	59.9	3.23	48.9	104.7	5.44	8.4		
	6.0	2.0	4.7	1300	45.6	32.1	3.33	57.0	13.7	8.2	59.2	3.30	48.0	112.2	5.27	10.0		
	6.0	2.0	4.7	1600	48.8	35.8	3.49	60.7	14.0	8.5	59.9	3.28	48.7	104.7	5.35	8.4		
	9.0	3.9	8.9	1300	45.7	32.0	3.21	56.7	14.2	7.7	60.1	3.33	48.8	112.8	5.29	10.4		
	9.0	3.9	8.9	1600	48.3	35.7	3.35	59.7	14.4	8.0	61.7	3.29	50.4	105.7	5.49	8.8		
	12.0	6.1	14.0	1300	45.9	31.9	3.09	56.4	14.8	7.2	61.0	3.36	49.5	113.5	5.32	10.8		
100	12.0	6.1	14.0	1600	47.8	35.6	3.22	58.8	14.9	7.4	63.5	3.31	52.2	106.7	5.63	9.2		
	6.0	2.0	4.5	1300	43.9	31.7	3.75	56.7	11.7	9.3	Operation not recommended							
	6.0	2.0	4.5	1600	47.0	35.4	3.93	60.4	12.0	9.6	Operation not recommended							
	9.0	3.7	8.6	1300	44.1	31.6	3.62	56.4	12.2	8.7	Operation not recommended							
	9.0	3.7	8.6	1600	46.5	35.3	3.78	59.4	12.3	9.0	Operation not recommended							
	12.0	5.9	13.5	1300	44.2	31.5	3.48	56.1	12.7	8.2	Operation not recommended							
110	12.0	5.9	13.5	1600	46.1	35.2	3.62	58.4	12.7	8.4	Operation not recommended							
	6.0	1.9	4.4	1300	42.3	31.4	4.17	56.5	10.1	10.3	Operation not recommended							
	6.0	1.9	4.4	1600	45.2	35.0	4.37	60.1	10.4	10.7	Operation not recommended							
	9.0	3.6	8.3	1300	42.4	31.3	4.02	56.1	10.5	9.7	Operation not recommended							
	9.0	3.6	8.3	1600	44.8	34.9	4.20	59.1	10.7	10.0	Operation not recommended							
	12.0	5.6	13.0	1300	42.5	31.2	3.87	55.8	11.0	9.2	Operation not recommended							
						1600	44.3	34.8	4.03	58.1	11.0	9.4	Operation not recommended					

Interpolation is permissible; extrapolation is not.

All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.

ARI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.

Table does not reflect fan or pump power corrections for ARI/ISO conditions.

All performance is based upon the lower voltage of dual voltage rated units.

Operation below 40°F EWT is based upon a 15% antifreeze solution.

Operation below 60°F EWT requires optional insulated water/refrigerant circuit (standard on residential models).

See performance correction tables for operating conditions other than those listed above.

For operation in the shaded areas, please see the Performance Data Selection Notes.

Genesis Packaged (GS) Series

Performance Data — Genesis GS Model 060 - PSC Blower

1650 CFM Nominal (Rated) Airflow Cooling, 2000 CFM Nominal (Rated) Airflow Heating

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F						Heating - EAT 70°F						
		PSI	FT	Airflow CFM	TC	SC	kW	HR	EER	HWC	HC	KW	HE	LAT	COP	HWC
20	15.0	5.1	11.8								41.1	4.04	27.3	93.0	2.98	5.3
	15.0	5.1	11.8								41.5	3.99	27.9	89.2	3.05	4.5
Operation not recommended																
30	7.5	1.6	3.6	1650	67.5	44.2	2.64	76.5	25.5	2.2	43.1	4.09	29.2	94.2	3.09	6.0
	7.5	1.6	3.6	2000	69.1	47.2	2.73	78.5	25.3	1.8	43.8	4.05	30.0	90.3	3.17	5.0
	11.3	3.1	7.1	1650	67.6	43.9	2.58	76.4	26.2	2.3	45.5	4.13	31.4	95.5	3.23	6.2
	11.3	3.1	7.1	2000	68.8	46.7	2.68	77.9	25.7	1.9	46.1	4.09	32.2	91.4	3.30	5.3
	15.0	4.9	11.4	1650	67.6	43.6	2.52	76.2	26.9	2.3	47.9	4.18	33.6	96.9	3.36	6.4
40	15.	4.9	11.4	2000	68.4	46.1	2.63	77.4	26.0	2.0	48.5	4.13	34.4	92.4	3.44	5.5
	7.5	1.5	3.5	1650	65.3	43.5	3.05	75.7	21.4	3.8	50.4	4.29	35.8	98.3	3.45	7.0
	7.5	1.5	3.5	2000	66.8	46.5	3.15	77.6	21.2	3.5	51.3	4.25	36.8	93.7	3.54	6.0
	11.3	3.0	6.9	1650	65.4	43.3	2.96	75.5	22.1	3.5	53.0	4.35	38.2	99.8	3.57	7.3
	11.3	3.0	6.9	2000	66.5	46.0	3.07	77.0	21.7	3.4	53.3	4.28	38.7	94.7	3.65	6.2
50	15.0	4.8	11.1	1650	65.5	43.0	2.86	75.2	22.9	3.2	55.7	4.42	40.6	101.3	3.69	7.5
	15.0	4.8	11.1	2000	66.3	45.5	2.99	76.5	22.1	3.2	55.3	4.32	40.6	95.6	3.75	6.5
	7.5	1.5	3.4	1650	63.1	42.9	3.46	74.9	18.2	5.4	57.7	4.48	42.4	102.4	3.77	8.0
	7.5	1.5	3.4	2000	64.6	45.8	3.58	76.8	18.1	5.2	58.7	4.44	43.5	97.2	3.87	7.0
	11.3	2.9	6.7	1650	63.2	42.6	3.34	74.6	18.9	4.8	60.6	4.57	45.0	104.0	3.88	8.3
60	11.3	2.9	6.7	2000	64.3	45.3	3.47	76.1	18.6	4.8	60.4	4.48	45.2	98.0	3.96	7.2
	15.0	4.6	10.7	1650	63.3	42.4	3.21	74.2	19.7	4.1	63.5	4.66	47.6	105.6	3.99	8.6
	15.0	4.6	10.7	2000	64.1	44.8	3.36	75.5	19.1	4.4	62.2	4.51	46.8	98.8	4.04	7.5
	7.5	1.4	3.3	1650	61.6	41.9	3.78	74.6	16.3	6.6	64.9	4.68	48.9	106.4	4.06	9.1
	7.5	1.4	3.3	2000	63.1	45.4	3.90	76.4	16.2	6.5	66.1	4.64	50.3	100.6	4.17	7.9
70	11.3	2.8	6.5	1650	61.9	41.7	3.61	74.2	17.1	6.0	68.1	4.79	51.7	108.2	4.16	9.4
	11.3	2.8	6.5	2000	63.2	45.0	3.74	75.9	16.9	6.1	68.5	4.67	52.6	101.7	4.30	8.2
	15.0	4.5	10.4	1650	62.1	41.4	3.45	73.9	18.0	5.4	71.3	4.90	54.5	110.0	4.26	9.7
	15.0	4.5	10.4	2000	63.2	44.6	3.58	75.4	17.7	5.6	71.0	4.71	54.9	102.9	4.42	8.5
	7.5	1.4	3.2	1650	60.2	41.0	4.11	74.2	14.7	7.8	72.2	4.88	55.5	110.5	4.33	10.1
80	7.5	1.4	3.2	2000	61.7	45.0	4.23	76.1	14.6	7.9	73.5	4.83	57.0	104.0	4.45	8.9
	11.3	2.7	6.3	1650	60.6	40.7	3.89	73.9	15.6	7.2	75.6	5.01	58.5	112.4	4.42	10.4
	11.3	2.7	6.3	2000	62.0	44.7	4.02	75.7	15.4	7.3	76.6	4.87	60.0	105.5	4.61	9.2
	15.0	4.3	10.0	1650	61.0	40.4	3.68	73.5	16.6	6.6	79.0	5.15	61.5	114.4	4.50	10.8
	15.0	4.3	10.0	2000	62.4	44.3	3.80	75.4	16.4	6.8	79.7	4.90	63.0	106.9	4.77	9.5
80	7.5	1.3	3.1	1650	57.6	40.2	4.56	73.2	12.6	9.0	79.4	5.08	62.1	114.6	4.58	11.3
	7.5	1.3	3.1	2000	59.0	44.2	4.70	75.0	12.5	9.2	80.9	5.03	63.7	107.5	4.71	9.7
	11.3	2.6	6.1	1650	58.0	40.0	4.32	72.7	13.4	8.4	82.7	5.20	64.9	116.4	4.66	11.7
	11.3	2.6	6.1	2000	59.3	43.8	4.46	74.5	13.3	8.6	83.8	5.05	66.6	108.8	4.86	10.1
	15.0	4.2	9.7	1650	58.3	39.7	4.09	72.3	14.3	7.8	86.0	5.33	67.8	118.2	4.73	12.1
90	15.0	4.2	9.7	2000	59.7	43.5	4.22	74.1	14.1	8.0	86.7	5.07	69.4	110.1	5.01	10.5
	7.5	1.3	3.0	1650	55.0	39.5	5.02	72.1	11.0	10.2	86.7	5.28	68.7	118.7	4.81	12.5
	7.5	1.3	3.0	2000	56.3	43.4	5.17	73.9	10.9	10.6	88.3	5.23	70.5	110.9	4.95	10.5
	11.3	2.5	5.9	1650	55.3	39.2	4.76	71.5	11.6	9.6	89.8	5.39	71.4	120.4	4.88	13.0
	11.3	2.5	5.9	2000	56.6	43.0	4.90	73.3	11.5	9.9	91.0	5.24	73.1	112.1	5.09	11.0
100	15.0	4.1	9.4	1650	55.6	39.0	4.49	71.0	12.4	9.0	92.9	5.51	74.1	122.1	4.94	13.5
	15.0	4.1	9.4	2000	56.9	42.7	4.64	72.8	12.3	9.2	93.7	5.25	75.8	113.4	5.23	11.5
	7.5	1.2	2.9	1650	53.3	39.1	5.56	72.3	9.6	11.5	Operation not recommended					
	7.5	1.2	2.9	2000	54.6	42.9	5.72	74.1	9.5	11.9	Operation not recommended					
	11.3	2.4	5.6	1650	53.7	38.8	5.27	71.6	10.2	10.8	Operation not recommended					
110	11.3	2.4	5.6	2000	54.9	42.6	5.43	73.5	10.1	11.2	Operation not recommended					
	15.0	3.9	9.0	1650	54.0	38.5	4.98	71.0	10.8	10.2	Operation not recommended					
	15.0	3.9	9.0	2000	55.3	42.2	5.14	72.8	10.7	10.4	Operation not recommended					
	7.5	1.2	2.8	1650	51.7	38.6	6.10	72.5	8.5	12.8	Operation not recommended					
	7.5	1.2	2.8	2000	52.9	42.5	6.28	74.4	8.4	13.3	Operation not recommended					
110	11.3	2.4	5.4	1650	52.0	38.4	5.78	71.8	9.0	12.1	Operation not recommended					
	11.3	2.4	5.4	2000	53.3	42.1	5.96	73.6	8.9	12.5	Operation not recommended					
	15.0	3.8	8.7	1650	52.4	38.1	5.46	71.0	9.6	11.4	Operation not recommended					
	15.0	3.8	8.7	2000	53.6	41.8	5.64	72.8	9.5	11.6	Operation not recommended					

Interpolation is permissible; extrapolation is not.

All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.

ARI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.

Table does not reflect fan or pump power corrections for ARI/ISO conditions.

All performance is based upon the lower voltage of dual voltage rated units.

Operation below 40°F EWT is based upon a 15% antifreeze solution.

Operation below 60°F EWT requires optional insulated water/refrigerant circuit (standard on residential models).

See performance correction tables for operating conditions other than those listed above.

For operation in the shaded areas, please see the Performance Data Selection Notes.

Performance Data — Genesis GS Model 060 - ECM Blower

1650 CFM Nominal (Rated) Airflow Cooling, 2000 CFM Nominal (Rated) Airflow Heating

Performance capacities shown in thousands of Btuh

EWT °F	GPM	WPD		Cooling - EAT 80/67°F						Heating - EAT 70°F						
		PSI	FT	Airflow CFM	TC	SC	kW	HR	EER	HWC	HC	kW	HE	LAT	COP	HWC
20	15.0	5.1	11.8	Operation not recommended						40.1	3.75	27.3	92.5	3.13	5.3	
30	15.0	5.1	11.8							41.1	3.86	27.9	89.0	3.12	4.5	
	7.5	1.6	3.6	1650	68.5	45.1	2.36	76.5	29.0	2.2	42.1	3.80	29.2	93.6	3.25	6.0
	7.5	1.6	3.6	2000	69.6	47.7	2.60	78.5	26.7	1.8	43.4	3.92	30.0	90.1	3.24	5.0
	11.3	3.1	7.1	1650	68.5	44.9	2.29	76.4	29.9	2.3	44.5	3.85	31.4	95.0	3.39	6.2
	11.3	3.1	7.1	2000	69.2	47.1	2.55	77.9	27.2	1.9	45.7	3.96	32.2	91.2	3.38	5.3
	15.0	4.9	11.4	1650	68.6	44.6	2.23	76.2	30.8	2.3	46.9	3.90	33.6	96.3	3.53	6.4
40	15.0	4.9	11.4	2000	68.9	46.6	2.50	77.4	27.6	2.0	48.0	4.00	34.4	92.2	3.52	5.5
	7.5	1.5	3.5	1650	66.3	44.5	2.77	75.7	24.0	3.8	49.4	4.00	35.8	97.7	3.62	7.0
	7.5	1.5	3.5	2000	67.3	47.0	3.02	77.6	22.3	3.5	50.8	4.12	36.8	93.5	3.62	6.0
	11.3	3.0	6.9	1650	66.3	44.2	2.67	75.5	24.8	3.5	52.1	4.07	38.2	99.2	3.75	7.3
	11.3	3.0	6.9	2000	67.0	46.5	2.94	77.0	22.8	3.4	52.8	4.15	38.7	94.5	3.73	6.2
	15.0	4.8	11.1	1650	66.4	44.0	2.58	75.2	25.8	3.2	54.7	4.14	40.6	100.7	3.88	7.5
50	15.0	4.8	11.1	2000	66.7	45.9	2.86	76.5	23.3	3.2	54.9	4.19	40.6	95.4	3.84	6.5
	7.5	1.5	3.4	1650	64.0	43.9	3.17	74.9	20.2	5.4	56.7	4.20	42.4	101.8	3.96	8.0
	7.5	1.5	3.4	2000	65.0	46.3	3.44	76.8	18.9	5.2	58.2	4.31	43.5	97.0	3.96	7.0
	11.3	2.9	6.7	1650	64.1	43.6	3.05	74.6	21.0	4.8	59.6	4.29	45.0	103.4	4.07	8.3
	11.3	2.9	6.7	2000	64.8	45.8	3.33	76.1	19.4	4.8	60.0	4.35	45.2	97.8	4.05	7.2
	15.0	4.6	10.7	1650	64.3	43.4	2.93	74.3	22.0	4.1	62.5	4.38	47.6	105.1	4.18	8.6
60	15.0	4.6	10.7	2000	64.5	45.3	3.23	75.5	20.0	4.4	61.8	4.38	46.8	98.6	4.13	7.5
	7.5	1.4	3.3	1650	62.6	42.9	3.50	74.6	17.9	6.6	63.9	4.40	48.9	105.9	4.26	9.1
	7.5	1.4	3.3	2000	63.6	45.9	3.77	76.4	16.8	6.5	65.6	4.51	50.2	100.4	4.27	7.9
	11.3	2.8	6.5	1650	62.9	42.6	3.33	74.2	18.9	6.0	67.1	4.51	51.7	107.7	4.36	9.4
	11.3	2.8	6.5	2000	63.6	45.4	3.61	75.9	17.6	6.1	68.1	4.54	52.6	101.5	4.39	8.2
	15.0	4.5	10.4	1650	63.1	42.4	3.16	73.9	20.0	5.4	70.3	4.62	54.5	109.4	4.46	9.7
70	15.0	4.5	10.4	2000	63.7	45.0	3.45	75.4	18.5	5.6	70.5	4.58	54.9	102.6	4.52	8.5
	7.5	1.4	3.2	1650	61.2	41.9	3.82	74.3	16.0	7.8	71.2	4.60	55.5	109.9	4.54	10.1
	7.5	1.4	3.2	2000	62.1	45.5	4.10	76.1	15.1	7.9	73.0	4.70	57.0	103.8	4.55	8.9
	11.3	2.7	6.3	1650	61.6	41.7	3.61	73.9	17.1	7.2	74.6	4.73	58.5	111.9	4.62	10.4
	11.3	2.7	6.3	2000	62.5	45.1	3.89	75.7	16.1	7.3	76.2	4.74	60.0	105.3	4.71	9.2
	15.0	4.3	10.0	1650	62.0	41.4	3.39	73.5	18.3	6.6	78.1	4.86	61.5	113.8	4.71	10.8
80	15.0	4.3	10.0	2000	62.8	44.7	3.67	75.4	17.1	6.8	79.3	4.77	63.0	106.7	4.87	9.5
	7.5	1.3	3.1	1650	58.6	41.2	4.28	73.2	13.7	9.0	78.5	4.79	62.1	114.0	4.79	11.3
	7.5	1.3	3.1	2000	59.4	44.6	4.57	75.0	13.0	9.2	80.5	4.90	63.7	107.2	4.81	9.7
	11.3	2.6	6.1	1650	58.9	40.9	4.04	72.7	14.6	8.4	81.7	4.92	64.9	115.9	4.87	11.7
	11.3	2.6	6.1	2000	59.8	44.3	4.33	74.5	13.8	8.6	83.4	4.92	66.6	108.6	4.96	10.1
	15.0	4.2	9.7	1650	59.3	40.7	3.80	72.3	15.6	7.8	85.0	5.04	67.8	117.7	4.94	12.1
90	15.0	4.2	9.7	2000	60.1	43.9	4.09	74.1	14.7	8.0	86.2	4.94	69.4	109.9	5.11	10.5
	7.5	1.3	3.0	1650	55.9	40.4	4.73	72.1	11.8	10.2	85.7	4.99	68.7	118.1	5.03	12.5
	7.5	1.3	3.0	2000	56.7	43.8	5.04	73.9	11.3	10.6	87.9	5.10	70.5	110.7	5.05	10.5
	11.3	2.5	5.9	1650	56.3	40.2	4.47	71.5	12.6	9.6	88.8	5.11	71.4	119.8	5.10	13.0
	11.3	2.5	5.9	2000	57.0	43.5	4.77	73.3	12.0	9.9	90.5	5.11	73.1	111.9	5.20	11.0
	15.0	4.1	9.4	1650	56.6	39.9	4.21	71.0	13.5	9.0	91.9	5.22	74.1	121.6	5.16	13.5
100	15.0	4.1	9.4	2000	57.4	43.1	4.51	72.8	12.7	9.2	93.2	5.12	75.8	113.2	5.34	11.5
	7.5	1.2	2.9	1650	54.3	40.0	5.27	72.3	10.3	11.5						
	7.5	1.2	2.9	2000	55.1	43.4	5.59	74.1	9.8	11.9						
	11.3	2.4	5.6	1650	54.6	39.8	4.98	71.6	11.0	10.8						
	11.3	2.4	5.6	2000	55.4	43.0	5.30	73.5	10.4	11.2						
	15.0	3.9	9.0	1650	55.0	39.5	4.69	71.0	11.7	10.2						
110	15.0	3.9	9.0	2000	55.7	42.7	5.01	72.8	11.1	10.4						
	7.5	1.2	2.8	1650	52.7	39.6	5.81	72.5	9.1	12.8						
	7.5	1.2	2.8	2000	53.4	42.9	6.15	74.4	8.7	13.3						
	11.3	2.4	5.4	1650	53.0	39.4	5.49	71.8	9.6	12.1						
	11.3	2.4	5.4	2000	53.7	42.6	5.83	73.6	9.2	12.5						
	15.0	3.8	8.7	1650	53.3	39.1	5.18	71.0	10.3	11.4						
	15.0	3.8	8.7	2000	54.0	42.2	5.51	72.8	9.8	11.6						

Operation not recommended

Interpolation is permissible; extrapolation is not.

All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.

ARI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.

Table does not reflect fan or pump power corrections for ARI/ISO conditions.

All performance is based upon the lower voltage of dual voltage rated units.

Operation below 40°F EWT is based upon a 15% antifreeze solution.

Operation below 60°F EWT requires optional insulated water/refrigerant circuit (standard on residential models).

See performance correction tables for operating conditions other than those listed above.

For operation in the shaded areas, please see the Performance Data Selection Notes.

Genesis Packaged (GS) Series

Performance Data — Genesis GS Model 070 - PSC Blower

1950 CFM Nominal (Rated) Airflow Cooling, 2400 CFM Nominal (Rated) Airflow Heating

Performance capacities shown in thousands of Btu/h

EWT °F	GPM	WPD		Cooling - EAT 80/67°F						Heating - EAT 70°F						
		PSI	FT	Airflow CFM	TC	SC	kW	HR	EER	HWC	HC	kW	HE	LAT	COP	HWC
20	18.0	6.9	15.9								44.4	4.57	28.8	91.1	2.85	6.3
	18.0	6.9	15.9								45.7	4.51	30.3	87.6	2.97	5.4
30	9.0	2.1	4.9	1950	76.8	51.1	3.11	87.4	24.7	2.7	48.5	4.53	33.0	93.0	3.13	7.2
	9.0	2.1	4.9	2400	78.9	55.5	3.30	90.1	23.9	2.2	48.3	4.47	33.1	88.6	3.17	6.1
	13.5	4.2	9.6	1950	76.0	50.6	3.01	86.3	25.3	2.8	50.2	4.58	34.5	93.8	3.21	7.4
	13.5	4.2	9.6	2400	77.7	54.8	3.17	88.5	24.5	2.3	50.8	4.52	35.4	89.6	3.29	6.3
	18.0	6.7	15.4	1950	75.3	50.2	2.90	85.2	25.9	2.9	51.8	4.63	36.0	94.6	3.28	7.7
	18.0	6.7	15.4	2400	76.6	54.1	3.04	86.9	25.2	2.4	53.3	4.58	37.7	90.6	3.41	6.6
40	9.0	2.1	4.8	1950	74.1	49.8	3.55	86.2	20.9	4.6	56.2	4.71	40.1	96.7	3.50	8.4
	9.0	2.1	4.8	2400	76.1	54.2	3.76	89.0	20.2	4.2	56.0	4.64	40.2	91.6	3.54	7.2
	13.5	4.0	9.3	1950	73.5	49.5	3.43	85.2	21.4	4.3	57.7	4.76	41.4	97.4	3.55	8.7
	13.5	4.0	9.3	2400	75.2	53.5	3.61	87.5	20.8	4.1	58.1	4.67	42.2	92.4	3.64	7.5
	18.0	6.5	15.0	1950	72.9	49.1	3.31	84.2	22.0	3.9	59.2	4.82	42.7	98.1	3.60	9.0
	18.0	6.5	15.0	2400	74.2	52.9	3.46	86.0	21.4	3.9	60.3	4.71	44.2	93.3	3.75	7.8
50	9.0	2.0	4.6	1950	71.5	48.6	3.98	85.1	17.9	6.6	63.9	4.88	47.2	100.3	3.84	9.7
	9.0	2.0	4.6	2400	73.4	52.9	4.23	87.8	17.4	6.2	63.6	4.81	47.3	94.6	3.88	8.3
	13.5	3.9	9.0	1950	71.0	48.3	3.85	84.2	18.4	5.8	65.2	4.94	48.4	101.0	3.87	10.0
	13.5	3.9	9.0	2400	72.6	52.3	4.06	86.4	17.9	5.8	65.4	4.83	49.0	95.2	3.97	8.7
	18.0	6.3	14.5	1950	70.6	48.0	3.72	83.3	19.0	5.0	66.5	5.00	49.5	101.6	3.90	10.3
	18.0	6.3	14.5	2400	71.8	51.7	3.89	85.1	18.5	5.3	67.2	4.85	50.7	95.9	4.06	9.0
60	9.0	1.9	4.5	1950	69.1	47.6	4.36	83.9	15.8	8.0	71.3	5.10	53.9	103.8	4.10	10.9
	9.0	1.9	4.5	2400	71.3	52.1	4.62	87.1	15.4	7.8	71.3	4.98	54.3	97.5	4.20	9.5
	13.5	3.8	8.7	1950	69.3	47.8	4.22	83.7	16.4	7.2	72.6	5.14	55.1	104.5	4.14	11.3
	13.5	3.8	8.7	2400	71.3	51.9	4.43	86.4	16.1	7.3	73.2	5.02	56.0	98.2	4.27	9.8
	18.0	6.1	14.0	1950	69.5	48.0	4.08	83.4	17.0	6.4	73.9	5.18	56.2	105.1	4.18	11.6
	18.0	6.1	14.0	2400	71.2	51.6	4.25	85.7	16.8	6.7	75.0	5.07	57.7	98.9	4.34	10.2
70	9.0	1.9	4.3	1950	66.7	46.7	4.73	82.8	14.1	9.4	78.6	5.31	60.5	107.3	4.34	12.2
	9.0	1.9	4.3	2400	69.3	51.3	5.02	86.4	13.8	9.4	79.0	5.15	61.4	100.5	4.50	10.6
	13.5	3.7	8.4	1950	67.5	47.3	4.59	83.2	14.7	8.6	80.0	5.34	61.7	108.0	4.39	12.5
	13.5	3.7	8.4	2400	70.0	51.4	4.81	86.4	14.5	8.8	80.9	5.22	63.1	101.2	4.54	11.0
	18.0	5.9	13.6	1950	68.4	47.9	4.45	83.6	15.4	7.9	81.3	5.36	63.0	108.6	4.44	12.9
	18.0	5.9	13.6	2400	70.7	51.6	4.61	86.4	15.3	8.2	82.8	5.29	64.8	102.0	4.59	11.4
80	9.0	1.8	4.2	1950	63.7	45.2	5.20	81.5	12.3	10.8	86.3	5.49	67.5	111.0	4.60	13.6
	9.0	1.8	4.2	2400	66.2	49.6	5.51	85.0	12.0	11.0	86.6	5.32	68.5	103.4	4.78	11.6
	13.5	3.5	8.2	1950	64.6	45.8	5.04	81.8	12.8	10.0	86.7	5.51	67.9	111.2	4.61	14.0
	13.5	3.5	8.2	2400	66.9	49.8	5.28	84.9	12.7	10.3	87.7	5.38	69.4	103.8	4.78	12.1
	18.0	5.7	13.1	1950	65.4	46.4	4.89	82.1	13.4	9.3	87.1	5.53	68.3	111.4	4.62	14.5
	18.0	5.7	13.1	2400	67.6	50.0	5.06	84.8	13.4	9.6	88.8	5.45	70.2	104.3	4.78	12.6
90	9.0	1.7	4.0	1950	60.8	43.7	5.66	80.1	10.7	12.2	93.9	5.67	74.6	114.6	4.86	15.0
	9.0	1.7	4.0	2400	63.2	48.0	6.00	83.6	10.5	12.6	94.3	5.49	75.6	106.4	5.04	12.7
	13.5	3.4	7.9	1950	61.6	44.3	5.50	80.3	11.2	11.5	93.4	5.68	74.1	114.4	4.82	15.5
	13.5	3.4	7.9	2400	63.8	48.2	5.76	83.4	11.1	11.8	94.5	5.55	75.6	106.5	4.99	13.2
	18.0	5.5	12.7	1950	62.4	44.9	5.33	80.5	11.7	10.8	93.0	5.69	73.6	114.1	4.79	16.1
	18.0	5.5	12.7	2400	64.4	48.3	5.51	83.2	11.7	11.0	94.8	5.61	75.6	106.6	4.95	13.8
100	9.0	1.7	3.9	1950	58.1	43.1	6.30	79.6	9.2	13.7						
	9.0	1.7	3.9	2400	60.4	47.4	6.68	83.2	9.1	14.3						
	13.5	3.3	7.6	1950	58.9	43.7	6.11	79.8	9.6	13.0						
	13.5	3.3	7.6	2400	61.0	47.6	6.40	82.9	9.5	13.4						
	18.0	5.3	12.2	1950	59.7	44.3	5.93	79.9	10.1	12.2						
	18.0	5.3	12.2	2400	61.6	47.7	6.13	82.6	10.1	12.4						
110	9.0	1.6	3.7	1950	55.5	42.6	6.93	79.2	8.0	15.3						
	9.0	1.6	3.7	2400	57.7	46.8	7.35	82.8	7.9	15.9						
	13.5	3.2	7.3	1950	56.2	43.2	6.73	79.2	8.4	14.4						
	13.5	3.2	7.3	2400	58.3	46.9	7.05	82.3	8.3	14.9						
	18.0	5.1	11.7	1950	57.0	43.8	6.52	79.2	8.7	13.6						
	18.0	5.1	11.7	2400	58.9	47.1	6.75	81.9	8.7	13.9						

Operation not recommended

Interpolation is permissible; extrapolation is not.

All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.

ARI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.

Table does not reflect fan or pump power corrections for ARI/ISO conditions.

All performance is based upon the lower voltage of dual voltage rated units.

Operation below 40°F EWT is based upon a 15% antifreeze solution.

Operation below 60°F EWT requires optional insulated water/refrigerant circuit (standard on residential models).

See performance correction tables for operating conditions other than those listed above.

For operation in the shaded areas, please see the Performance Data Selection Notes.

Performance Data — Genesis GS Model 070 - ECM Blower

1950 CFM Nominal (Rated) Airflow Cooling, 2300 CFM Nominal (Rated) Airflow Heating

Performance capacities shown in thousands of Btu/h

EWT °F	GPM	WPD		Cooling - EAT 80/67°F						Heating - EAT 70°F						
		PSI	FT	Airflow CFM	TC	SC	kW	HR	EER	HWC	HC	kW	HE	LAT	COP	HWC
20	18.0	6.9	15.9		Operation not recommended						43.3	4.23	28.8	90.5	3	6.3
	18.0	6.9	15.9								45.0	4.30	30.3	88.1	3.07	5.4
30	9.0	2.1	4.9	1950	77.9	52.2	2.77	87.4	28.1	2.7	47.4	4.19	33.0	92.5	3.31	7.2
	9.0	2.1	4.9	2300	79.6	56.3	3.09	90.1	25.8	2.2	47.6	4.25	33.1	89.2	3.28	6.1
30	13.5	4.2	9.6	1950	77.2	51.8	2.67	86.3	28.9	2.8	49.0	4.24	34.5	93.3	3.38	7.4
	13.5	4.2	9.6	2300	78.5	55.5	2.96	88.5	26.5	2.3	50.1	4.31	35.4	90.2	3.41	6.3
30	18.0	6.7	15.4	1950	76.4	51.4	2.56	85.2	29.8	2.9	50.6	4.29	36.0	94.0	3.46	7.7
	18.0	6.7	15.4	2300	77.3	54.8	2.82	86.9	27.4	2.4	52.6	4.36	37.7	91.2	3.53	6.6
40	9.0	2.1	4.8	1950	75.3	51.0	3.21	86.2	23.5	4.6	55.0	4.37	40.1	96.1	3.69	8.4
	9.0	2.1	4.8	2300	76.9	54.9	3.55	89.0	21.7	4.2	55.2	4.42	40.2	92.2	3.66	7.2
40	13.5	4.0	9.3	1950	74.7	50.6	3.09	85.2	24.2	4.3	56.5	4.42	41.4	96.8	3.75	8.7
	13.5	4.0	9.3	2300	75.9	54.3	3.40	87.5	22.3	4.1	57.4	4.46	42.2	93.1	3.77	7.5
40	18.0	6.5	15.0	1950	74.1	50.3	2.97	84.2	24.9	3.9	58.0	4.48	42.7	97.5	3.80	9.0
	18.0	6.5	15.0	2300	74.9	53.6	3.25	86.0	23.1	3.9	59.5	4.50	44.2	94.0	3.88	7.8
50	9.0	2.0	4.6	1950	72.6	49.8	3.64	85.1	19.9	6.6	62.7	4.54	47.2	99.8	4.05	9.7
	9.0	2.0	4.6	2300	74.1	53.6	4.01	87.8	18.5	6.2	62.9	4.59	47.2	95.3	4.02	8.3
50	13.5	3.9	9.0	1950	72.2	49.5	3.51	84.2	20.6	5.8	64.1	4.60	48.4	100.4	4.08	10.0
	13.5	3.9	9.0	2300	73.3	53.0	3.84	86.4	19.1	5.8	64.7	4.61	49.0	96.0	4.11	8.7
50	18.0	6.3	14.5	1950	71.7	49.2	3.38	83.3	21.2	5.0	65.4	4.66	49.5	101.0	4.11	10.3
	18.0	6.3	14.5	2300	72.5	52.4	3.68	85.1	19.7	5.3	66.5	4.64	50.7	96.8	4.20	9.0
60	9.0	1.9	4.5	1950	70.2	48.8	4.02	83.9	17.5	8.0	70.1	4.76	53.9	103.3	4.32	10.9
	9.0	1.9	4.5	2300	72.1	52.8	4.41	87.1	16.4	7.8	70.6	4.76	54.3	98.4	4.34	9.5
60	13.5	3.8	8.7	1950	70.4	49.0	3.88	83.7	18.2	7.2	71.4	4.80	55.1	103.9	4.36	11.3
	13.5	3.8	8.7	2300	72.0	52.6	4.22	86.4	17.1	7.3	72.4	4.81	56.0	99.2	4.42	9.8
60	18.0	6.1	14.0	1950	70.7	49.1	3.74	83.4	18.9	6.4	72.7	4.84	56.2	104.5	4.40	11.6
	18.0	6.1	14.0	2300	72.0	52.4	4.03	85.7	17.8	6.7	74.3	4.85	57.7	99.9	4.48	10.2
70	9.0	1.9	4.3	1950	67.8	47.8	4.39	82.8	15.4	9.4	77.5	4.97	60.5	106.8	4.56	12.2
	9.0	1.9	4.3	2300	70.0	52.0	4.80	86.4	14.6	9.4	78.2	4.93	61.4	101.5	4.65	10.6
70	13.5	3.7	8.4	1950	68.7	48.5	4.25	83.2	16.2	8.6	78.8	5.00	61.7	107.4	4.62	12.5
	13.5	3.7	8.4	2300	70.7	52.2	4.60	86.4	15.4	8.8	80.2	5.00	63.1	102.3	4.70	11.0
70	18.0	5.9	13.6	1950	69.6	49.1	4.11	83.6	16.9	7.9	80.1	5.02	63.0	108.0	4.68	12.9
	18.0	5.9	13.6	2300	71.4	52.3	4.39	86.4	16.3	8.2	82.1	5.07	64.8	103.0	4.74	11.4
80	9.0	1.8	4.2	1950	64.9	46.3	4.86	81.5	13.4	10.8	85.1	5.15	67.5	110.4	4.84	13.6
	9.0	1.8	4.2	2300	67.0	50.4	5.29	85.0	12.6	11.0	85.9	5.10	68.5	104.6	4.94	11.6
80	13.5	3.5	8.2	1950	65.7	47.0	4.70	81.8	14.0	10.0	85.5	5.17	67.9	110.6	4.85	14.0
	13.5	3.5	8.2	2300	67.6	50.5	5.07	84.9	13.3	10.3	87.0	5.17	69.3	105.0	4.93	12.1
80	18.0	5.7	13.1	1950	66.5	47.6	4.55	82.1	14.6	9.3	86.0	5.19	68.3	110.8	4.86	14.5
	18.0	5.7	13.1	2300	68.3	50.7	4.85	84.8	14.1	9.6	88.1	5.23	70.2	105.4	4.93	12.6
90	9.0	1.7	4.0	1950	61.9	44.9	5.32	80.1	11.6	12.2	92.7	5.33	74.6	114.0	5.10	15.0
	9.0	1.7	4.0	2300	63.9	48.7	5.79	83.6	11.0	12.6	93.6	5.27	75.6	107.7	5.20	12.7
90	13.5	3.4	7.9	1950	62.7	45.5	5.16	80.3	12.2	11.5	92.3	5.34	74.1	113.8	5.07	15.5
	13.5	3.4	7.9	2300	64.5	48.9	5.54	83.4	11.6	11.8	93.8	5.33	75.6	107.8	5.15	13.2
90	18.0	5.5	12.7	1950	63.5	46.1	4.99	80.5	12.7	10.8	91.8	5.35	73.6	113.6	5.03	16.1
	18.0	5.5	12.7	2300	65.2	49.1	5.30	83.3	12.3	11.0	94.0	5.40	75.6	107.8	5.11	13.8
100	9.0	1.7	3.9	1950	59.3	44.3	5.96	79.6	10.0	13.7						
	9.0	1.7	3.9	2300	61.2	48.1	6.46	83.2	9.5	14.3						
100	13.5	3.3	7.6	1950	60.1	44.9	5.77	79.8	10.4	13.0						
	13.5	3.3	7.6	2300	61.8	48.3	6.19	82.9	10.0	13.4						
100	18.0	5.3	12.2	1950	60.8	45.5	5.59	79.9	10.9	12.2						
	18.0	5.3	12.2	2300	62.4	48.4	5.92	82.6	10.5	12.4						
110	9.0	1.6	3.7	1950	56.7	43.7	6.59	79.2	8.6	15.3						
	9.0	1.6	3.7	2300	58.4	47.5	7.14	82.8	8.2	15.9						
110	13.5	3.2	7.3	1950	57.4	44.3	6.39	79.2	9.0	14.4						
	13.5	3.2	7.3	2300	59.0	47.7	6.84	82.3	8.6	14.9						
110	18.0	5.1	11.7	1950	58.1	44.9	6.18	79.2	9.4	13.6						
	18.0	5.1	11.7	2300	59.6	47.8	6.54	81.9	9.1	13.9						

Operation not recommended

Interpolation is permissible; extrapolation is not.

All entering air conditions are 80°F DB and 67°F WB in cooling, and 70°F DB in heating.

ARI/ISO certified conditions are 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.

Table does not reflect fan or pump power corrections for ARI/ISO conditions.

All performance is based upon the lower voltage of dual voltage rated units.

Operation below 40°F EWT is based upon a 15% antifreeze solution.

Operation below 60°F EWT requires optional insulated water/refrigerant circuit (standard on residential models).

See performance correction tables for operating conditions other than those listed above.

For operation in the shaded areas, please see the Performance Data Selection Notes.

Genesis Packaged (GS) Series

Performance Data Selection Notes

For operation in the shaded area when water is used in lieu of an anti-freeze solution, the LWT (Leaving Water Temperature) must be calculated. Flow must be maintained to a level such that the LWT is maintained above 40°F [4.4°C] when the JW3 jumper is not clipped (see example below). This is due to the potential of the refrigerant temperature being as low as 32°F [0°C] with 40°F [4.4°C] LWT, which may lead to a nuisance cutout due to the activation of the Low Temperature Protection. JW3 should never be clipped for standard range equipment or systems without antifreeze.

Example:

At 50°F EWT (Entering Water Temperature) and 1.5 gpm/ton, a 3 ton unit has a HE of 22,500 Btuh. To calculate LWT, rearrange the formula for HE as follows:

HE = TD x GPM x 500, where HE = Heat of Extraction (Btuh);
TD = temperature difference (EWT - LWT) and GPM = U.S. Gallons per Minute.

$$TD = HE/(GPM \times 500)$$

$$TD = 22,500/(4.5 \times 500)$$

$$TD = 10^{\circ}\text{F}$$

$$LWT = EWT - TD$$

$$LWT = 50 - 10 = 40^{\circ}\text{F}$$

In this example, as long as the EWT does not fall below 50°F, the system will operate as designed. For EWTs below 50°F, higher flow rates will be required (open loop systems, for example, require at least 2 gpm/ton when EWT is below 50°F).

		Performance capacities shown in thousands						
		Heating - EAT 70°F						
ZR	HWC	HC	kW	HE	LAT	COP	HV	
28.1	2.7	43.3 45.0	4.23 4.30	28.8 30.3	90.5 88.1	3 3.07	6.3 5.4	
25.8	2.2	47.4	4.19	33.0	92.5	3.31	7.2	
28.9	2.8	47.6	4.25	33.1	89.2	3.28	6.1	
26.5	2.3	49.0	4.24	34.5	93.3	3.38	7.4	
29.8	2.9	50.1	4.31	35.4	90.2	3.41	6.3	
27.4	2.4	50.6	4.29	36.0	94.0	3.46	7.7	
23.5	4.6	52.6	4.36	37.7	91.2	3.53	6.6	
21.7	4.2	55.0	4.37	40.1	96.1	3.69	8.4	
24.2	4.3	55.2	4.42	40.2	92.2	3.66	7.2	
22.3	4.1	56.5	4.42	41.4	96.8	3.75	8.7	
24.9	3.9	57.4	4.46	42.2	93.1	3.77	7.5	
23.1	3.9	58.0	4.48	42.7	97.5	3.80	9.0	
19.9	6.6	59.5	4.50	44.2	94.0	3.88	7.8	
8.5	6.2	62.7	4.54	47.2	99.8	4.05	9.7	
6	5.8	62.9	4.59	47.2	95.3	4.02	8.9	
	5.8	64.1	4.60	48.4	100.4	4.08	10.0	
	5.0	64.7	4.61	49.0	96.0	4.11		
	5.3	65.4	4.66	49.5	101.0	4.11		
	6.3	66.5	4.64	50.7	96.8	4.20		
	70.1	4.76	53.9	103.3				
	70.6	4.76	54.3	98.4				
	70.8	4.80	55.1					

ClimateMaster Geothermal Heat Pump Systems

Physical Data

Model	015	018	024	030	036	042	048	060	070
Compressor (1 Each)	Rotary		Copeland Scroll						
Factory Charge R22, oz [kg]	44 [1.25]	44 [1.25]	48 [1.36]	48 [1.36]	60 [1.70]	74 [2.0]	74 [2.10]	102 [2.89]	104 [2.95]
PSC Fan Motor & Blower Wheel									
Fan Motor Type & Speeds	PSC/3								
Fan Motor, hp [W]	1/6 [124]	1/6 [124]	1/5 [150]	1/3 [250]	1/2 [373]	1/2 [373]	3/4 [560]	1/6 [124]	1 [746]
Blower Wheel Size (Dia x W), in [mm]	9 x 7 [229 x 178]	9 x 7 [229 x 178]	9 x 7 [229 x 178]	9 x 7 [229 x 178]	9 x 7 [229 x 178]	10 x 10 [254 x 254]	10 x 10 [254 x 254]	11 x 10 [279 x 254]	11 x 10 [279 x 254]
ECM Fan Motor & Blower Wheel									
Fan Motor Type & Speeds	ECM Variable Speed								
Fan Motor, hp [W]	1/2 [373]	1/2 [373]	1/2 [373]	1/2 [373]	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]	9 x 7 [229 x 178]	9 x 7 [229 x 178]	9 x 7 [229 x 178]	9 x 7 [229 x 178]	11 x 10 [279 x 254]			
Water Connection Size									
Swivel - Residential Class	1"	1"	1"	1"	1"	1"	1"	1"	1"
HWG Water Connection Size									
Swivel - Residential Class	1"	1"	1"	1"	1"	1"	1"	1"	1"
Vertical Upflow/Downflow									
Air Coil Dimensions (H x W), in [mm]	20 x 20 [508 x 508]	20 x 20 [508 x 508]	24 x 20 [588 x 542]	24 x 20 [588 x 542]	28 x 20 [712 x 508]	28 x 25 [712 x 635]	28 x 25 [712 x 635]	32 x 25 [802 x 635]	36 x 25 [914 x 635]
Standard Filter - 1" [25.4mm] Throwaway, in [mm]	20 x 24 [508 x 588]	20 x 24 [508 x 588]	24 x 24 [610 x 610]	24 x 24 [610 x 610]	2 - 14 x 24 [343 x 610]	2 - 14 x 30 [343 x 762]	2 - 14 x 30 [343 x 762]	2 - 10 x 30 [254 x 762]	3 - 12 X 30 [305 X 762]
Weight - Operating, lbs [kg]	174 [79]	184 [83]	250 [113]	252 [114]	266 [121]	323 [147]	327 [148]	416 [186]	443 [201]
Weight - Packaged, lbs [kg]	184 [83]	194 [88]	260 [118]	262 [119]	276 [125]	333 [151]	337 [153]	426 [193]	453 [205]
Horizontal									
Air Coil Dimensions (H x W), in [mm]	18 X 22 [457 x 539]	18 X 22 [457 x 539]	18 x 27 [457 x 686]	18 x 27 [457 x 686]	18 x 31 [457 x 782]	20 x 35 [508 x 858]	20 x 35 [508 x 858]	20 x 40 [508 x 1016]	20 x 45 [508 x 1143]
Standard Filter - 2" [51mm] Throwaway, in [mm]	18 x 24 [457 x 588]	18 x 24 [457 x 588]	2 - 18 x 18 [457 x 457]	2 - 18 x 18 [457 x 457]	2 - 18 x 18 [457 x 457]	2 - 12 x 20 [305 x 508]	2 - 12 x 20 [305 x 508]	1 - 18 x 20 [457 x 508]	2 - 24 x 20 [610 x 508]
Weight - Operating, lbs [kg]	179 [79]	189 [83]	250 [113]	252 [114]	266 [121]	323 [147]	327 [148]	416 [186]	443 [201]
Weight - Packaged, lbs [kg]	189 [83]	199 [88]	260 [118]	262 [119]	276 [125]	333 [151]	337 [153]	426 [193]	453 [206]

All units have spring compressor mountings, TXV expansion devices, and 1/2" [12.7mm] & 3/4" [19.1mm] electrical knockouts.

Genesis Packaged (GS) Series

Dimensions — Vertical Upflow Genesis (GS) Series

Vertical Upflow Model		Overall Cabinet		
		A Width	B Depth	C Height
015 - 018	in cm	22.4 56.8	25.6 65.1	40.4 102.6
024 - 030	in cm	22.4 56.8	25.6 65.1	44.4 112.8
036	in cm	22.4 56.8	25.6 65.1	48.4 122.9
042 - 048	in cm	25.4 64.5	30.6 77.8	50.4 128.0
060	in cm	25.4 64.5	30.6 77.8	54.4 138.2
070	in cm	25.4 64.5	30.6 77.8	58.4 148.3

Vertical Upflow Model		Water Connections						
		1	2	3	4	5	H Condensate	Loop Water IPT
D In	E Out	F HWG IN	G HWG Out					
018	in cm	2.4 6.1	5.4 13.7	13.9 35.2	16.9 42.9	9.8 24.9	1" Swivel	1" Swivel
024 - 030	in cm	2.4 6.1	5.4 13.7	13.9 35.2	16.9 42.9	9.8 24.9	1" Swivel	1" Swivel
036	in cm	2.4 6.1	5.4 13.7	13.9 35.2	16.9 42.9	9.8 24.9	1" Swivel	1" Swivel
042 - 048	in cm	2.4 6.1	5.4 13.7	15.9 40.4	18.9 47.9	10.8 27.4	1" Swivel	1" Swivel
060	in cm	2.4 6.1	5.4 13.7	15.9 40.4	18.9 47.9	10.8 27.4	1" Swivel	1" Swivel
070	in cm	2.4 6.1	5.4 13.7	15.9 40.4	18.9 47.9	10.8 27.4	1" Swivel	1" Swivel

Vertical Upflow Model		Electrical Knockouts		
		J 1/2"	K 1/2"	L 3/4"
		Low Voltage	External Pump	Power Supply
018	in cm	6.0 15.2	9.5 24.1	12.0 30.5
024 - 030	in cm	6.0 15.2	9.5 24.1	12.0 30.5
036	in cm	6.0 15.2	9.5 24.1	12.0 30.5
042 - 048	in cm	8.0 20.3	11.5 29.2	14.0 35.6
060	in cm	8.0 20.3	11.5 29.2	14.0 35.6
070	in cm	8.0 20.3	11.5 29.2	14.0 35.6

Condensate is 3/4" PVC female glue socket and is switchable from front to side.

Unit shipped with deluxe duct collar/filter rack extending from unit 3" [7.6cm] and is suitable for duct connection.

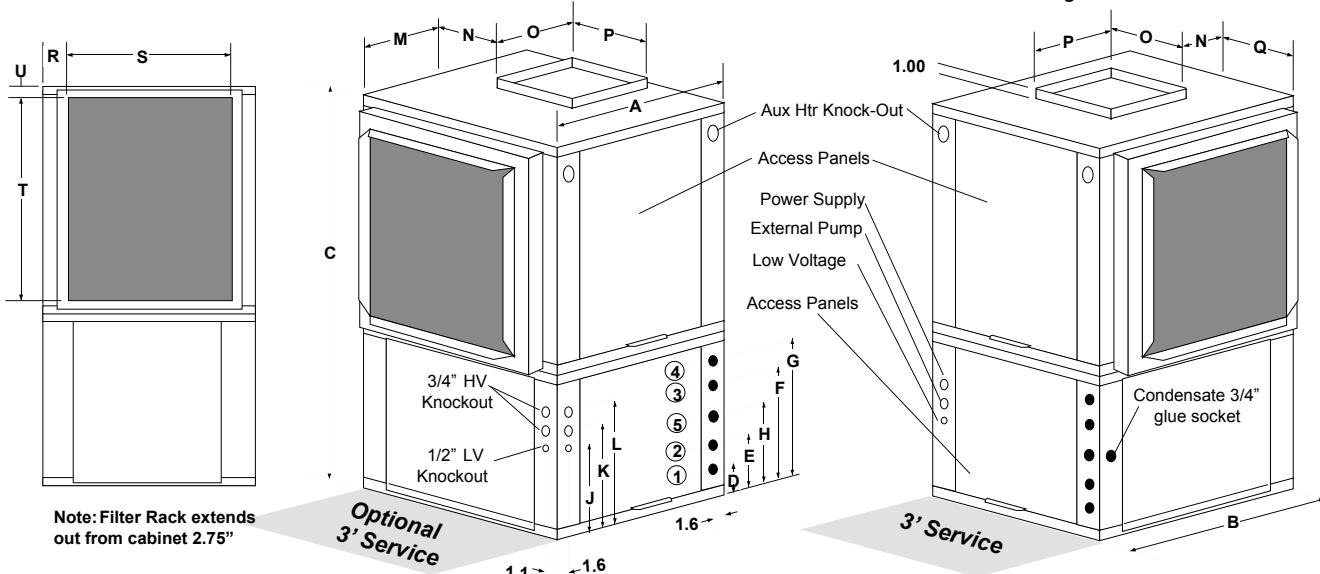
Discharge flange is field installed.

ClimateMaster Geothermal Heat Pump Systems

Dimensions — Vertical Upflow Genesis (GS) Series

Vertical Upflow Model		Discharge Connection Duct Flange Installed (+/- 0.10 in, +/- 2.5mm)					Return Connection Standard Deluxe Filter Rack (+/- 0.10 in, +/- 2.5mm)			
		M Left Return	N	O Supply Width	P Supply Depth	Q Right Return	R	S Return Depth	T Return Height	U
018	in cm	7.2 18.3	5.8 14.7	14.0 35.6	14.0 35.6	4.3 10.9	1.8 4.6	22.3 56.6	18.2 46.2	1.6 4.1
024 - 030	in cm	7.2 18.3	5.8 14.7	14.0 35.6	14.0 35.6	4.3 10.9	1.8 4.6	22.3 56.6	22.2 56.4	1.6 4.1
036	in cm	7.2 18.3	5.8 14.7	14.0 35.6	14.0 35.6	4.3 10.9	1.8 4.6	22.3 56.6	26.2 66.5	1.6 4.1
042 - 048	in cm	6.2 15.7	6.3 16.0	18.0 45.7	18.0 45.7	5.1 13.0	1.5 3.8	27.8 70.6	26.2 66.5	1.5 3.8
060	in cm	6.2 15.7	6.3 16.0	18.0 45.7	18.0 45.7	5.1 13.0	1.5 3.8	27.8 70.6	30.2 76.7	1.5 3.8
070	in cm	6.2 15.7	6.3 16.0	18.0 45.7	18.0 45.7	5.1 13.0	1.5 3.8	27.8 70.6	34.2 86.9	1.5 3.8

Filter Rack Dimensions



Genesis Packaged (GS) Series

Dimensions — Vertical Downflow Genesis (GS) Series

Vertical Downflow Model		Overall Cabinet		
		A Width	B Depth	C Height
015 - 018	in cm	22.4 56.8	25.6 65.1	44.4 112.8
024 - 030	in cm	22.4 56.8	25.6 65.1	48.4 122.9
036	in cm	22.4 56.8	25.6 65.1	52.4 133.1
042 - 048	in cm	25.4 64.5	30.6 77.8	54.4 138.2
060	in cm	25.4 64.5	30.6 77.8	58.4 148.2
070	in cm	25.4 64.5	30.6 77.8	62.4 158.5

Vertical Downflow Model		Water Connections						
		1	2	3	4	5		
D In	E Out	F HWG IN	G HWG Out	H Condensate	Loop Water IPT	HWG IPT		
018	in cm	17.0 42.9	14.0 35.3	5.4 13.7	2.4 6.1	3.6 8.9	1"	1" Swivel
024 - 030	in cm	17.0 42.9	14.0 35.3	5.4 13.7	2.4 6.1	3.6 8.9	1"	1" Swivel
036	in cm	17.0 42.9	14.0 35.3	5.4 13.7	2.4 6.1	3.6 8.9	1"	1" Swivel
042 - 048	in cm	19.0 48.0	16.0 40.4	5.4 13.7	2.4 6.1	3.6 8.9	1"	1" Swivel
060	in cm	19.0 48.0	16.0 40.4	5.4 13.7	2.4 6.1	3.6 8.9	1"	1" Swivel
070	in cm	19.0 48.0	16.0 40.4	5.4 13.7	2.4 6.1	3.6 8.9	1"	1" Swivel

Vertical Downflow Model		Electrical Knockouts		
		J 1/2"	K 1/2"	L 3/4"
Low Voltage	External Pump	Power Supply		
018	in cm	13.7 33.0	9.7 24.1	7.2 17.8
024 - 030	in cm	13.7 33.0	9.7 24.1	7.2 17.8
036	in cm	13.7 33.0	9.7 24.1	7.2 17.8
042 - 048	in cm	13.7 33.0	9.7 24.1	7.2 17.8
060	in cm	13.7 33.0	9.7 24.1	7.2 17.8
070	in cm	13.7 33.0	9.7 24.1	7.2 17.8

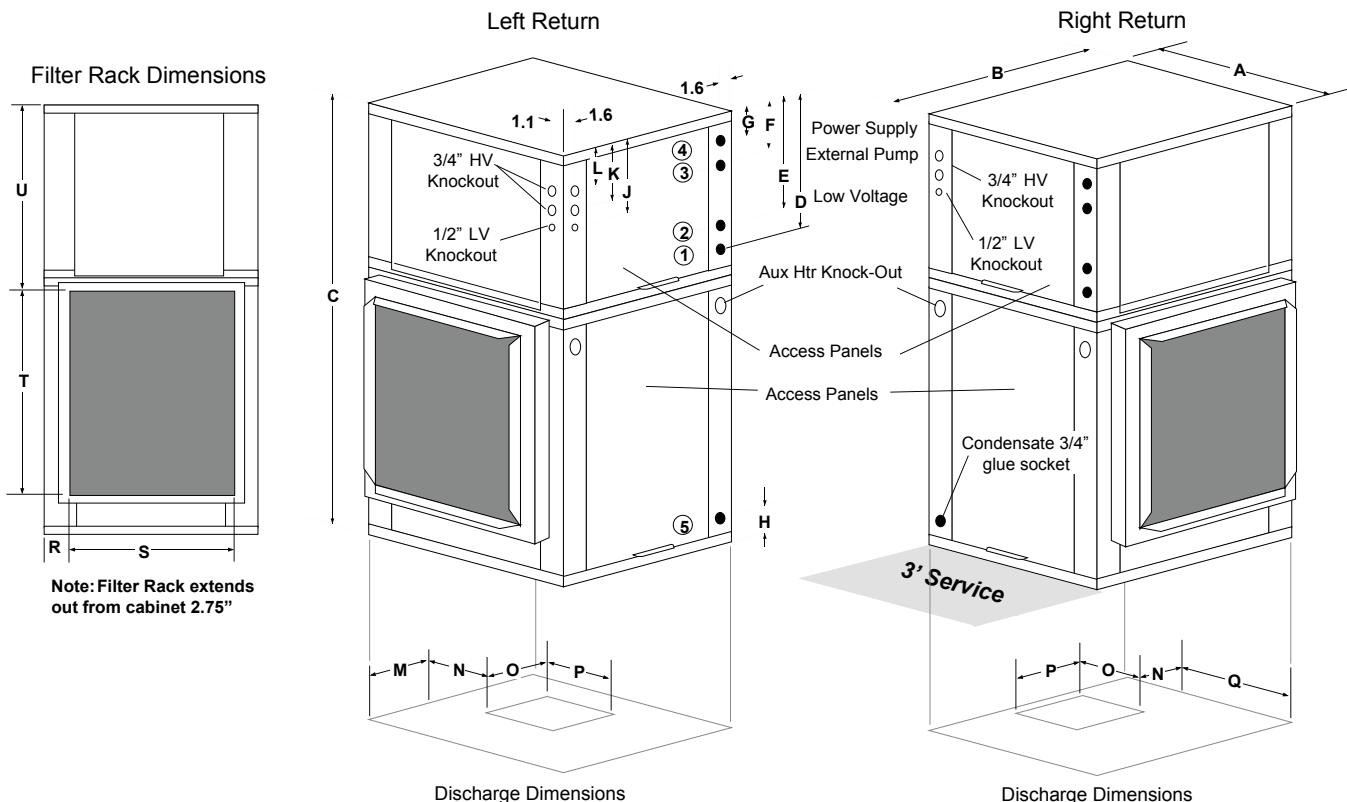
Condensate is 3/4" PVC female glue socket and is switchable from front to side.

Unit shipped with deluxe duct collar/filter rack extending from unit 3" [7.6cm] and is suitable for duct connection.
Downflow unit does not have discharge flange, and is rated for zero clearance installation.

ClimateMaster Geothermal Heat Pump Systems

Dimensions — Vertical Downflow Genesis (GS) Series

Vertical Downflow Model		Discharge Connection Duct Flange Installed (+/- 0.10 in, +/- 2.5mm)					Return Connection Standard Deluxe Filter Rack (+/- 0.10 in, +/- 2.5mm)			
		M Left Return	N	O Supply Width	P Supply Depth	Q Right Return	R	S Return Depth	T Return Height	U
018	in cm	6.1 15.4	8.2 20.8	10.4 26.4	9.4 23.5	10.9 27.9	1.8 4.6	22.3 56.6	18.2 46.2	21.1 53.6
024 - 030	in cm	6.1 15.4	8.2 20.8	10.4 26.4	9.4 23.5	10.9 27.9	1.8 4.6	22.3 56.6	22.2 56.4	21.1 53.6
036	in cm	6.1 15.4	8.2 20.8	10.4 26.4	9.4 23.5	10.9 27.9	1.8 4.6	22.3 56.6	26.2 66.5	21.1 53.6
042 - 048	in cm	7.4 18.3	8.6 22.1	13.6 34.4	13.3 33.7	10.5 27.5	1.5 3.8	27.8 70.6	26.2 66.5	23.1 58.4
060	in cm	7.4 18.3	8.6 22.1	13.6 34.4	13.3 33.7	10.5 27.5	1.5 3.8	27.8 70.6	30.2 76.7	23.1 58.4
070	in cm	7.4 18.3	8.6 22.1	13.6 34.4	13.3 33.7	10.5 27.5	1.5 3.8	27.8 70.6	34.2 86.9	23.1 58.4



Genesis Packaged (GS) Series

Dimensions — Horizontal Genesis (GS) Series

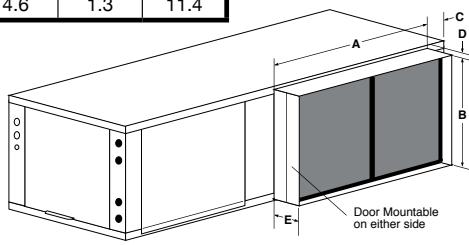
Horizontal Model		Overall Cabinet		
		A Width	B Depth	C Height
015 - 018	in cm	22.4 56.8	53.0 134.6	19.3 49.0
024 - 030	in cm	22.4 56.8	63.0 160.0	19.3 49.0
036	in cm	22.4 56.8	63.0 160.0	19.3 49.0
042 - 048	in cm	25.4 64.5	72.0 182.9	21.3 54.1
060	in cm	25.4 64.5	77.0 195.6	21.3 54.1
070	in cm	25.4 64.5	82.0 208.3	21.3 54.1

Horizontal Model		Water Connections						
		1 D In	2 E Out	3 F HWG IN	4 G HWG Out	5 H Condensate	Loop Water IPT	HWG IPT
018	in cm	2.4 6.1	5.4 13.7	13.9 35.3	16.9 42.9	0.5 1.3	1" Swivel	1" Swivel
024 - 030	in cm	2.4 6.1	5.4 13.7	13.9 35.3	16.9 42.9	0.5 1.3	1" Swivel	1" Swivel
036	in cm	2.4 6.1	5.4 13.7	13.9 35.3	16.9 42.9	0.5 1.3	1" Swivel	1" Swivel
042 - 048	in cm	2.4 6.1	5.4 13.7	15.9 40.4	18.9 48.0	0.5 1.3	1" Swivel	1" Swivel
060	in cm	2.4 6.1	5.4 13.7	15.9 40.4	18.9 48.0	0.5 1.3	1" Swivel	1" Swivel
070	in cm	2.4 6.1	5.4 13.7	15.9 40.4	18.9 48.0	0.5 1.3	1" Swivel	1" Swivel

Horizontal Model		Electrical Knockouts		
		J 1/2"	K 1/2"	L 3/4"
		Low Voltage	External Pump	Power Supply
018	in cm	6.0 15.2	9.5 22.9	12.0 30.5
024 - 030	in cm	6.0 15.2	9.5 22.9	12.0 30.5
036	in cm	6.0 15.2	9.5 22.9	12.0 30.5
042 - 048	in cm	8.0 20.3	11.5 29.2	14.0 35.6
060	in cm	8.0 20.3	11.5 29.2	14.0 35.6
070	in cm	8.0 20.3	11.5 29.2	14.0 35.6

Horizontal Filter Frame

Horizontal Model	A Width	B Height	C	D	E
015 - 018	in cm	24.2 61.5	18.2 46.2	1.2 3.0	0.5 1.3 4.5 11.4
024 - 036	in cm	36.2 91.9	18.2 46.2	1.2 3.0	0.5 1.3 4.5 11.4
042 - 048	in cm	37.2 94.2	20.2 51.3	1.8 4.6	0.5 1.3 4.5 11.4
060	in cm	42.2 107.2	20.2 51.3	1.8 4.6	0.5 1.3 4.5 11.4
070	in cm	47.2 119.9	20.2 51.3	1.8 4.6	0.5 1.3 4.5 11.4



Condensate is 3/4" IPT.

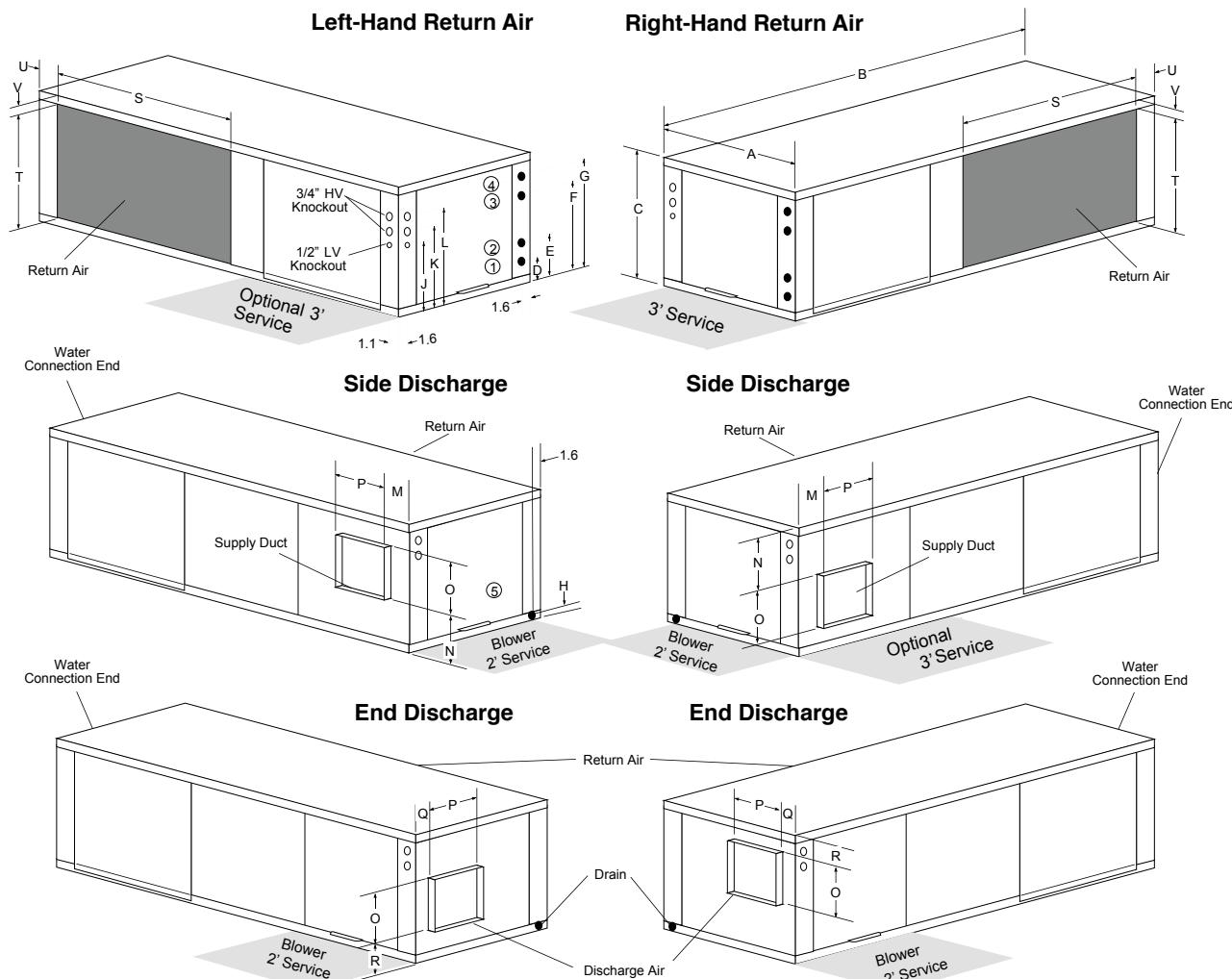
Unit shipped with filter bracket only. Bracket should be removed if connecting to ductwork.

Discharge flange and hanger brackets are factory installed.

ClimateMaster Geothermal Heat Pump Systems

Dimensions — Horizontal Genesis (GS) Series

Horizontal Model		Discharge Connection Duct Flange Installed (+/- 0.10 in, +/- 2.5mm)						Return Connection Standard Deluxe Filter Rack (+/- 0.10 in, +/- 2.5mm)			
		M Left Return	N	O Supply Width	P Supply Depth	Q Right Return	R	S Return Depth	T Return Height	U	V
018	in cm	4.3 10.9	1.8 4.6	10.4 26.4	9.3 23.6	4.3 10.9	1.8 4.6	22.1 56.1	17.0 43.2	2.5 6.4	1.0 2.5
024 - 030	in cm	4.3 10.9	1.8 4.6	10.4 26.4	9.3 23.6	4.3 10.9	1.8 4.6	28.1 71.4	17.0 43.2	6.5 16.5	1.0 2.5
036	in cm	4.3 10.9	1.8 4.6	10.4 26.4	9.3 23.6	4.3 10.9	1.8 4.6	31.1 79.0	17.0 43.2	3.5 8.9	1.0 2.5
042 - 048	in cm	5.0 12.7	1.9 4.8	13.6 34.5	13.3 33.8	5.0 12.7	1.9 4.8	36.1 91.7	19.0 48.3	2.5 6.4	1.0 2.5
060	in cm	5.0 12.7	1.9 4.8	13.6 34.5	13.3 33.8	5.0 12.7	1.9 4.8	41.1 104.4	19.0 48.3	2.5 6.4	1.0 2.5
070	in cm	5.0 12.7	1.9 4.8	13.6 34.5	13.3 33.8	5.0 12.7	1.9 4.8	46.1 117.1	19.0 48.3	2.5 6.4	1.0 2.5



Genesis Packaged (GS) Series

Electrical Data

Model	Compressor			HWG Pump FLA	Ext Loop Pump FLA	Fan Motor FLA	Total Unit FLA	Min Circuit Amps	Max Fuse/ HACR (2)	Supply Wire (2)	
	RLA	LRA	Qty							Min AWG 60°C (1, 4)	Max Length Ft (m) (3)
PSC Electrical Data											
015	4.9	26.3	1	0.4	4.0	1.0	10.3	11.5	15	12	56 (17.2)
018	7.1	38.0	1	0.4	4.0	1.0	12.5	14.3	20	12	77 (23.6)
024	10.3	56.0	1	0.4	4.0	1.1	15.8	18.4	25	10	100 (30.7)
030	12.2	67.0	1	0.4	4.0	1.3	17.9	21.0	30	10	88 (26.9)
036	13.5	73.0	1	0.4	4.0	1.8	19.7	23.1	35	10	80 (24.5)
042	16.5	95.0	1	0.4	4.0	1.9	22.8	26.9	40	10	69 (21.0)
048	18.3	109.0	1	0.4	4.0	3.0	25.7	30.3	45	8	97 (29.7)
060	25.0	148.0	1	0.4	4.0	3.4	32.8	39.1	60	8	75 (23.0)
070	28.8	148.0	1	0.4	4.0	4.9	38.1	45.3	70	6	103 (31.5)
ECM Electrical Data											
015	4.9	26.3	1	0.4	4.0	5.0	14.3	17.0	20	12	68 (20.8)
018	7.1	38.0	1	0.4	4.0	5.0	16.5	19.0	25	12	97 (29.8)
024	10.3	56.0	1	0.4	4.0	5.0	19.7	22.3	30	10	83 (25.4)
030	12.2	67.0	1	0.4	4.0	5.0	21.6	24.7	35	10	75 (22.9)
036	13.5	73.0	1	0.4	4.0	5.0	22.9	26.3	35	10	70 (21.5)
042	16.5	95.0	1	0.4	4.0	5.0	25.9	30.0	45	10	61 (18.8)
048	18.3	109.0	1	0.4	4.0	7.4	30.1	34.7	50	8	85 (26.0)
060	25.0	148.0	1	0.4	4.0	7.4	36.8	43.1	60	6	108 (33.1)
070	28.8	148.0	1	0.4	4.0	7.4	40.6	47.8	70	6	98 (29.9)

Rated Voltage of 208/230/60/1
HACR circuit breaker in USA only

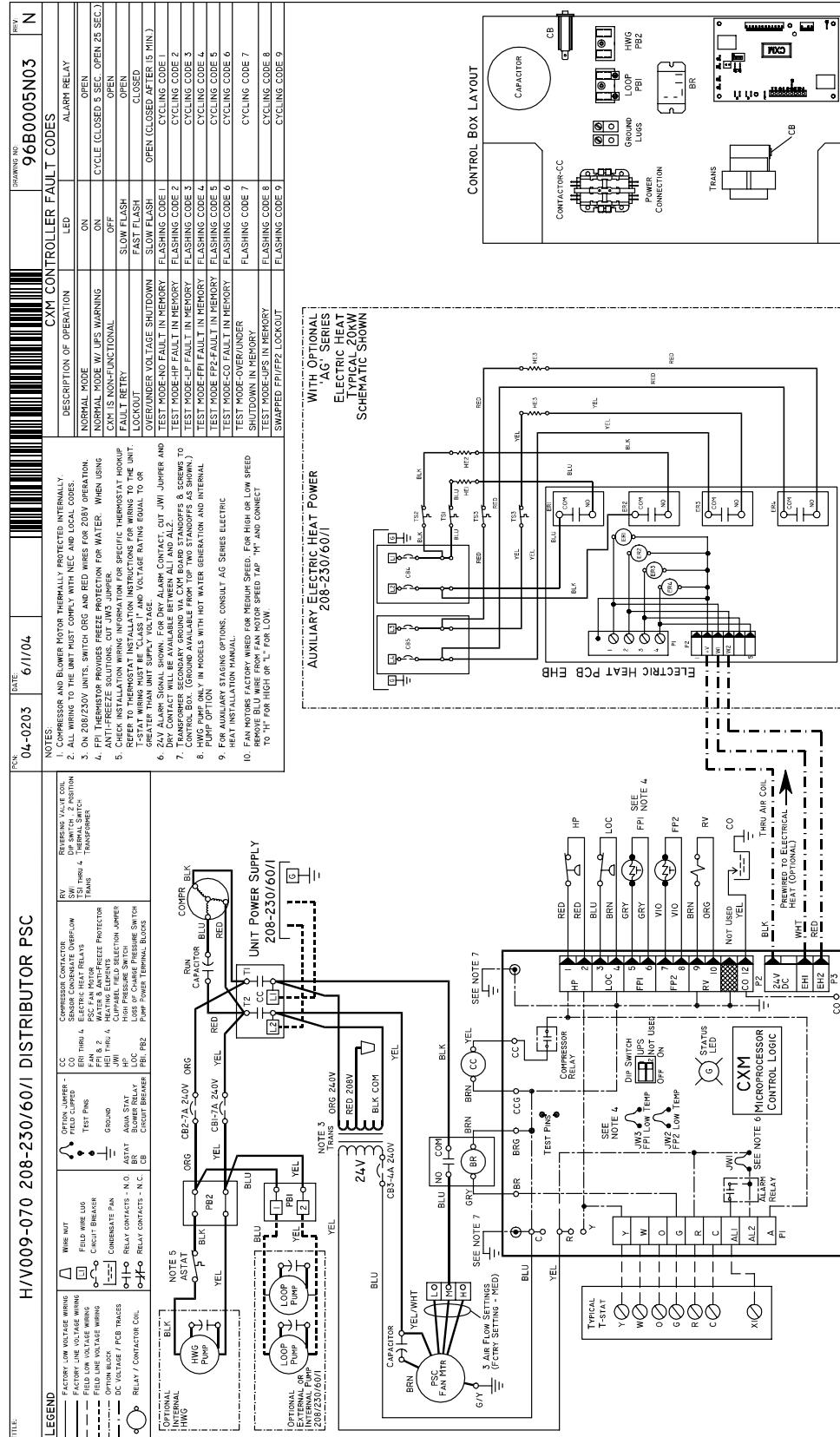
Min/Max Voltage of 197/254
All fuses Class RK-5

Notes:

- (1) If wire is applied at ambient greater than 86°F (30°C), consult table 310-16 of the National Electrical Code (NEC). The ampacity of non-metallic sheathed cable (NM), otherwise known as Romex cable, shall be that of 60°C (140°F) conditions per the NEC Article 336-26. If other wiring is used, consult applicable tables of the NEC.
- (2) Current carrying capacity (amperes) of the wire used must not be less than the fuse/breaker size used.
- (3) Wire length based on one way measurement with 2% voltage drop.
- (4) Wire size based on 60°C copper conductor and Minimum Circuit Ampacity.

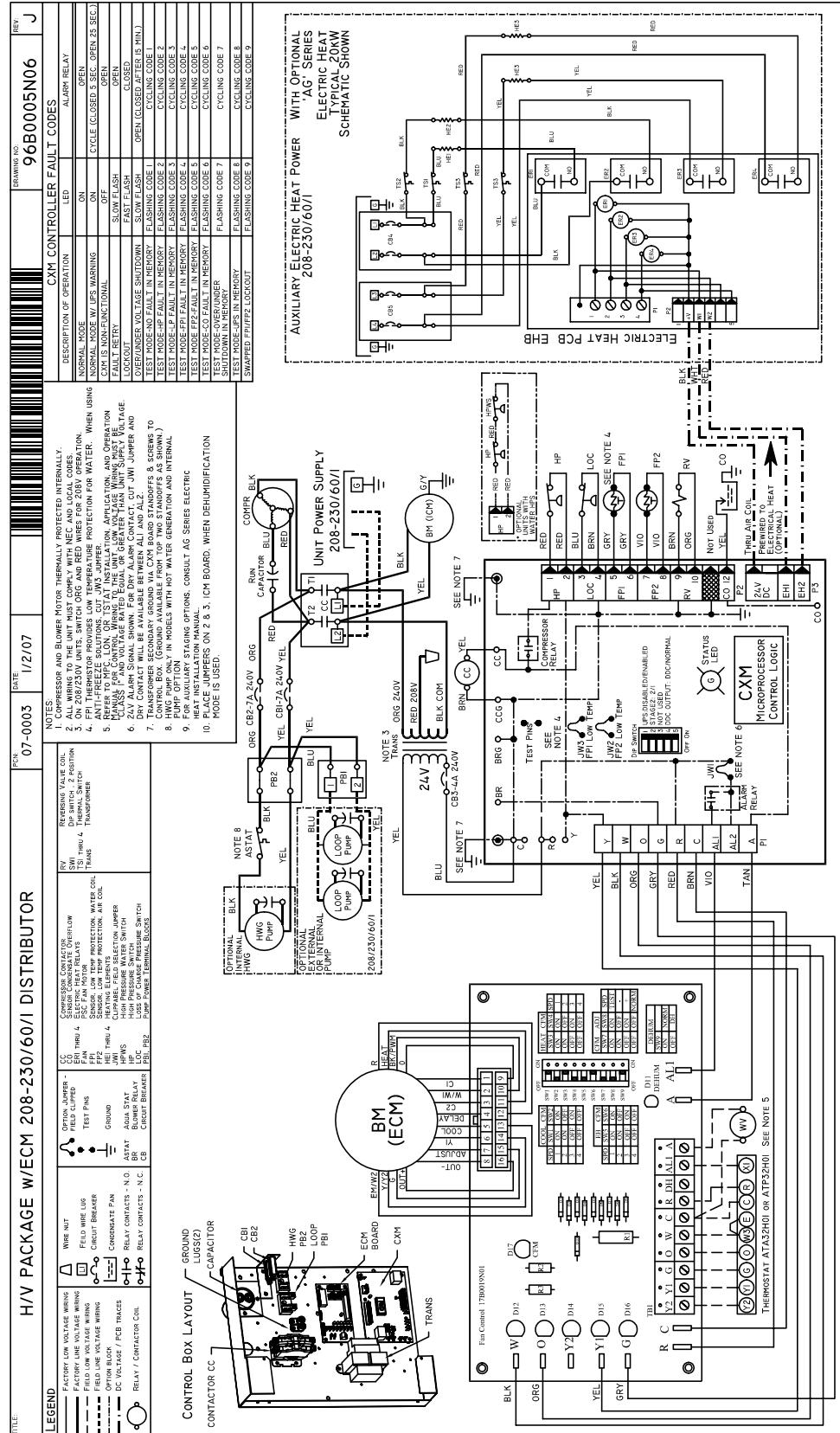
ClimateMaster Geothermal Heat Pump Systems

Genesis GS Electrical Wiring Diagram (PSC Blower) - 96B0005N03



Genesis Packaged (GS) Series

Genesis GS Electrical Wiring Diagram (ECM Blower) - 96B0005N06



ClimateMaster: Smart. Responsible. Comfortable.

Genesis GS ECM Control Features

The ECM fan is controlled by an interface board that converts thermostat inputs and field selectable CFM settings to signals used by the ECM motor controller. Units manufactured before July 2005 have version I (P/N 69243707). Units manufactured after July 2005 have version II (P/N 17B0019N01). Fan speeds are selected with jumpers for version I or via a nine position DIP switch for version II. To take full advantage of the ECM motor features, a multi-stage thermostat should be used (2-stage heat/2-stage cool or 3-stage heat/2-stage cool).

Note: Power must be off to the unit for at least three seconds before the ECM motor will recognize a speed change. The motor will recognize a change in the CFM Adjust or dehumidification mode settings while the unit is powered.

There are four different airflow settings from lowest airflow rate (speed tap 1) to the highest airflow rate (speed tap 4). The charts below indicate settings for both versions of the ECM interface board, followed by detailed information for each setting.

Cooling Settings: The cooling setting determines the cooling (normal) CFM for all units with ECM motor. Cooling (normal) setting is used when the unit is not in dehumidification mode. This setting also determines the heating CFM for Genesis (GS) units. Tap 1 is the lowest CFM setting, while tap 4 is the highest CFM setting. To avoid air coil freeze-up, tap 1 may not be used if the dehumidification mode is selected. Consult submittal data or specifications catalog for the specific unit series and model to correlate speed tap setting to airflow in CFM.

Heating Settings: The heating setting determines the heating CFM for Tranquility 27™ (TT) and Tranquility 20™ (TS) units. This setting is not used for Genesis (GS) units. Tap 1 is the lowest CFM setting, while tap 4 is the highest CFM setting. Consult submittal data or specifications catalog for the specific unit series and model to correlate speed tap setting to airflow in CFM.

Auxiliary/Emergency Heat Settings: The auxiliary/emergency heat setting determines the CFM when the unit is in auxiliary heat or emergency heat mode. This setting is used for residential units with internal electric heat. When auxiliary electric heat is energized (i.e. compressor and electric heat), the greater of the auxiliary/emergency or heating setting will be used. A "G" (fan) signal must be present from the thermostat for electric heat to operate. Consult the submittal data or specifications catalog for the specific unit series and model to correlate speed tap setting to airflow in CFM.

CFM Adjust Settings: The CFM adjust setting allows four selections. The NORM setting is the factory default position. The + or - settings adjust the airflow by +/- 15%.

The +/- settings are used to "fine tune" airflow adjustments. The TEST setting runs the ECM motor at 70% torque, which causes the motor to operate like a standard PSC motor, and disables the CFM counter.

Dehumidification Mode Settings: The dehumidification mode setting provides field selection of humidity control. When operating in the normal mode, the cooling airflow settings are determined by the cooling tap setting above. When dehumidification is enabled there is a reduction in airflow in cooling to increase the moisture removal of the heat pump. Consult submittal data or specifications catalog for the specific unit series and model to correlate speed tap to airflow in CFM. The dehumidification mode can be enabled in two ways.

1. **Constant Dehumidification Mode:** When the dehumidification mode is selected (via DIP switch or jumper setting), the ECM motor will operate with a multiplier applied to the cooling CFM settings (approx. 20-25% lower airflow). Any time the unit is running in the cooling mode, it will operate at the lower airflow to improve latent capacity. The "DEHUM" LED will be illuminated at all times. Heating airflow is not affected. NOTE: Do not select dehumidification mode if cooling setting is tap 1.
2. **Automatic (Humidistat-controlled) Dehumidification Mode:** When the dehumidification mode is selected (via DIP switch or jumper setting) AND a humidistat is connected to terminal DH (version II) or HUM (version I), the cooling airflow will only be reduced when the humidistat senses that additional dehumidification is required. The DH (or HUM) terminal is reverse logic. Therefore, a humidistat (not dehumidistat) is required. The "DEHUM" LED will be illuminated only when the humidistat is calling for dehumidification mode. Heating airflow is not affected. NOTE: Do not select dehumidification mode if cooling setting is tap 1.

Genesis Packaged (GS) Series

Genesis GS ECM Control Features

ECM Board Tap Settings

Cooling settings: TT, TS, GS units*

Tap Setting	Version I		Version II	
	69243707		17B0019N01	
	HP CFM Jumper	DIP Switch	SW1	SW2
1	1	ON	ON	
2	2	ON	OFF	
3	3	OFF	ON	
4	4	OFF	OFF	

*GS units use the same settings for both cooling (normal) CFM and heating CFM.

Heating settings: TT, TS units*

Tap Setting	Version I		Version II	
	69243707		17B0019N01	
	DELAY Jumper	DIP Switch	SW3	SW4
1	1	ON	ON	
2	2	ON	OFF	
3	3	OFF	ON	
4	4	OFF	OFF	

*This table not used for GS units.

Aux/Emerg Heat settings: TT, TS, GS units*

Tap Setting	Version I		Version II	
	69243707		17B0019N01	
	AUX CFM Jumper	DIP Switch	SW5	SW6
1	1	ON	ON	
2	2	ON	OFF	
3	3	OFF	ON	
4	4	OFF	OFF	

*Residential units

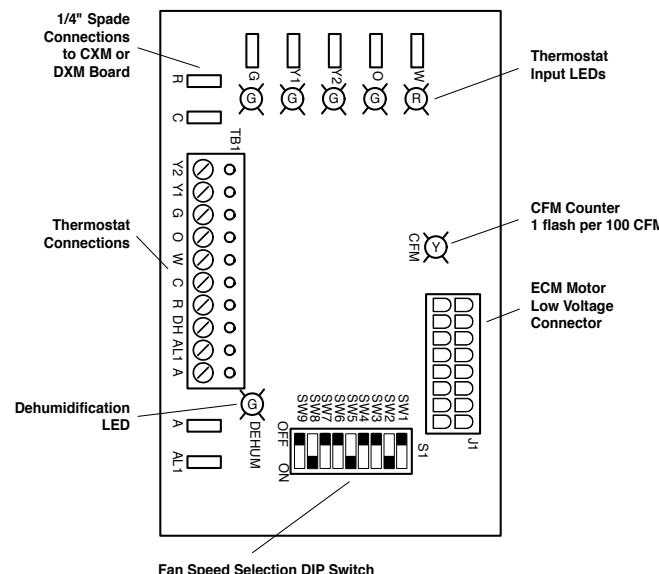
CFM Adjust settings: TT, TS, GS units

Tap Setting	Version I		Version II	
	69243707		17B0019N01	
	CFM Adj Jumper	DIP Switch	SW7	SW8
TEST	1	ON	ON	
-	2	ON	OFF	
+	3	OFF	ON	
NORM	4	OFF	OFF	

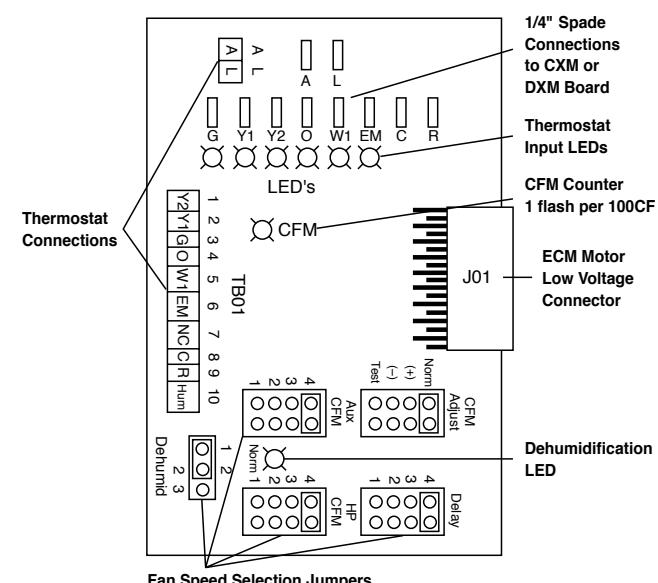
Dehum Mode settings: TT, TS, GS units

Tap Setting	Version I		Version II	
	69243707		17B0019N01	
	Dehumid Jumper	DIP Switch	SW9	
NORM	pins 1,2	ON		
Dehumid	pins 2,3	OFF		

ECM Version II Interface Layout



ECM Version I Interface Layout



ClimateMaster Geothermal Heat Pump Systems

ECM Blower Performance Data

Model	Max ESP (in. wg)	Fan Motor (hp)	Tap Set- ting	Normal Mode						Dehumid Mode			Residential Units Only			
				Normal Mode			Dehumid Mode			AUX CFM	Aux/ Emerg Mode					
				Stg 1	Stg 2	Fan	Stg 1	Stg 2	Fan							
015	0.50	1/2	4	440	540	270	340	420	270	4	540					
			3	410	500	250	320	390	250	3	500					
			2	380	460	230	300	360	230	2	460					
			1	350	430	210				1	430					
018	0.50	1/2	4	530	650	320	410	510	320	4	650					
			3	490	600	300	380	470	300	3	600					
			2	460	560	280	360	440	280	2	560					
			1	420	510	260				1	510					
024	0.50	1/2	4	710	860	430	550	670	430	4	860					
			3	660	800	400	510	620	400	3	800					
			2	610	740	370	480	580	370	2	740					
			1	560	680	340				1	680					
030	0.50	1/2	4	880	1080	540	690	840	540	4	1080					
			3	820	1000	500	640	780	500	3	1000					
			2	760	930	460	590	730	460	2	930					
			1	700	850	430				1	850					
036	0.50	1/2	4	1060	1290	650	830	1010	650	4	1290					
			3	980	1200	600	760	940	600	3	1200					
			2	910	1110	560	710	870	560	2	1110					
			1	840	1020	600				1	1020					
042	0.50	1/2	4	1230	1510	750	960	1180	750	4	1510					
			3	1150	1400	700	900	1090	700	3	1400					
			2	1060	1300	650	830	1010	650	2	1300					
			1	980	1190	600				1	1190					
048	0.75	1	4	1410	1720	860	1100	1340	860	4	1720					
			3	1310	1600	800	1020	1250	800	3	1600					
			2	1210	1480	740	940	1150	740	2	1480					
			1	1120	1360	680				1	1360					
060	0.75	1	4	1760	2150	1080	1370	1680	1080	4	2150					
			3	1640	2000	1000	1280	1560	1000	3	2000					
			2	1520	1850	930	1190	1440	930	2	1850					
			1	1390	1700	850				1	1700					
070	0.75	1	4	2120	2580	1290	1650	2010	1290	4	2580					
			3	1970	2400	1200	1540	1870	1200	3	2400					
			2	1820	2220	1110	1420	1730	1110	2	2220					
			1	1670	2040	1020				1	2040					

See ECM control section for details on setting taps.

Bold numbers indicate factory settings.

During Auxiliary operation the CFM will run at the higher of the Heating (Delay jumper) or AUX settings.

Airflow is controlled within 5% up to the Max ESP shown with wet coil.

Do not select Dehumidification mode if HP CFM is on setting 1.

All units ARI/ISO/ASHRAE 13256-1 rated HP CFM Setting 3.

Genesis Packaged (GS) Series

PSC Blower Performance Data

Model	Fan Speed	Rated Airflow	MIN CFM	Airflow (cfm) at External Static Pressure (in. wg)															
				0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.60	0.70	0.80	0.90	1.00
015	HI	500	375	880	860	840	830	820	800	780	750	730	690	660	610				
	MED	500	375	770	760	750	740	720	710	690	670	640	620	600	520				
	LOW	500	375	660	660	660	650	640	630	620	600	580	550	520	460				
018	HI	600	450	880	860	840	830	820	800	780	750	730	690	660	610				
	MED	600	450	770	760	750	740	720	710	690	670	640	620	600	520				
	LOW	600	450	660	660	660	650	640	630	620	600	580	550	520	460				
024	HI	800	600	1130	1110	1090	1060	1040	1010	980	950	920	880	840	720				
	MED	800	600	950	940	930	920	910	880	860	820	790	760	730					
	LOW	800	600	880	870	860	840	830	810	800	770	730	700	660					
030	HI	1000	750	1260	1230	1200	1180	1160	1120	1090	1050	1000	970	930	850	650			
	MED	1000	750	1180	1150	1120	1090	1070	1030	1000	970	950	910	870					
	LOW	1000	750	1040	1020	1000	980	960	930	910	870	840	820	790					
036	HI	1150	863	1400	1360	1320	1280	1250	1220	1200	1150	1110	1070	1020	940	850	690		
	MED	1150	850	1260	1240	1220	1190	1170	1130	1100	1070	1040	990	950					
	LOW	1150	863	1170	1150	1130	1100	1080	1050	1020	990	960	930	900					
042	HI	1400	1050				1670	1630	1600	1570	1540	1510	1440	1380	1290	1130	0		
	MED	1400	1050	1610	1580	1550	1510	1480	1450	1420	1390	1360	1320	1270					
	LOW	1400	1050	1270	1260	1250	1240	1220	1210	1190	1160	1120	1080	1030					
048	HI	1600	1200				2010	2000	1940	1880	1830	1780	1690	1610	1540	1310	1190		
	MED	1600	1200	1950	1910	1870	1820	1780	1740	1700	1670	1630	1570	1520	1410	1310	1170		
	LOW	1600	1200	1470	1460	1450	1440	1430	1410	1380	1360	1330	1280	1220	1110	1040			
060	HI	2000	1500				2270	2230	2200	2170	2140	2110	2040	1970	1870	1720	1640		
	MED	2000	1500	2260	2240	2220	2190	2170	2140	2110	2100	2080	2050	2020	1960	1870	1760	1660	1550
	LOW	2000	1500	2050	2030	2010	1990	1970	1950	1930	1910	1880	1850	1830	1780	1700	1650	1570	1430
070	HI	2300	1725				2460	2430	2390	2340	2310	2280	2230	2180	1990	1860	1740		
	MED	2300	1725	2530	2500	2470	2450	2420	2400	2370	2340	2310	2280	2260	2200	2100	1890	1740	1640
	LOW	2300	1725	2270	2260	2250	2240	2230	2210	2180	2160	2140	2120	2100	2040	1900	1790	1690	1570

Black areas denote ESP where operation is not recommended

Units factory shipped on medium speed (Size 015 on low), other speeds require field selection

All airflow is rated at lowest Voltage if unit is dual Voltage rated, e.g. 208V for 208-230V units

All units ARI/ISO/ASHRAE 13256-1 rated on high fan speed (Size 015 rated on medium speed)

Auxiliary Electric Heat

Auxiliary Heat Ratings

Auxiliary Electric Heat Model	GS Models										kW Rating		Btuh Rating		Minimum CFM Required
	015	018	024	030	036	042	048	060	070	230V	208V	230V	208V		
AGM5A										4.8	3.6	16300	12300	500	
AGM8A										7.6	5.7	25900	19400	650	
AGM10A										9.6	7.2	32700	24600	650	
AGM12A										11.4	8.6	38900	29200	750	
AGL10A										9.6	7.2	32700	24600	1300	
AGL15A										14.4	10.8	49100	36900	1350	
AGL20A										19.2	14.4	65500	49200	1350	

Grey area denotes compatibility

Note: Horizontal units rated for zero clearance unit and 1" clearance for the first three feet of duct, vertical units rated for zero clearance for both unit and duct.

Auxiliary Heat Electrical Data

Auxiliary Electric Heat Model	Supply Circuit	Heater Amps		Minimum Circuit Amps		Maximum Fuse		Supply Wire	
		230V	208V	230V	208V	230V	208V	Min AWG	Max Ft
AGM5A	Single	20.0	17.3	25.0	21.6	25	25	10	70
AGM8A	Single	31.7	27.5	39.6	34.4	40	35	8	70
AGM10A	Single	40.0	34.7	50.0	43.4	50	45	6	90
AGM12A	Single	47.5	41.2	59.4	51.5	60	60	6	70
	Dual - L1/L2 Dual - L3/L4	31.7 15.8	27.5 13.7	39.6 19.8	34.4 17.1	40 20	35 20	8 12	70 50
AGL10A	Single	40.0	34.7	50.0	43.4	50	45	6	80
AGL15A	Single	60.0	52.0	75.0	65.0	80	70	6	50
	Dual - L1/L2 Dual - L3/L4	40.0 20.0	34.7 17.3	50.0 25.0	43.4 21.6	50 25	45 25	6 10	80 70
AGL20A	Single	80.0	69.3	100.0	86.6	100	90	2	100
	Dual - L1/L2 Dual - L3/L4	40.0 40.0	34.7 34.7	50.0 50.0	43.4 43.4	50 50	45 45	6 6	80 80

All heaters rated single phase 208-230V 60Hz

Wire size based on 60°C (90°C) copper conductor

All models 12kW or larger feature internal circuit breakers

Wire length based on one way measurement with 2% voltage drop

Part numbers with "H" included are for horizontal units only

All Fuses UL Class K general purpose

Genesis Packaged (GS) Series

Engineering Guide Specifications

General

The water source heating/cooling units shall be either reverse cycle suspended type with horizontal air inlet and discharge or floor mounted type with horizontal air inlet and vertical upflow/downflow air discharge. Units shall be ARI/ISO/ASHRAE 13256-1 (ground-source closed loop) performance certified and listed by a nationally recognized safety-testing laboratory or agency. Each unit shall be pallet mounted and shipped in clear shrink wrap for visual shipping damage inspection.

Units shall be warranted by the manufacturer against defects in materials and workmanship for a period ten years on the compressor and refrigerant circuit parts and five years on all remaining parts, with a service labor allowance for the first five years on the compressor and refrigerant circuit parts and two years on all remaining parts. An optional extended labor warranty is available which extends the service labor allowance to ten years for the compressor and refrigeration circuit parts and five years on all remaining parts.

The water source units shall be designed to operate with entering fluid temperature between 20°F and 110°F.

Casing and Cabinet

The cabinet shall be fabricated from heavy gauge galvanized steel. The interior shall be insulated with 1/2" thick, multi-density, coated glass fiber with edges sealed or tucked under flanges to prevent the introduction of glass fibers into the air stream. One or two blower compartment access panels shall be provided and shall be removable with supply and return ductwork in place. The internal component layout shall provide for major service with the unit in-place for restricted access installations. A duct collar shall be provided on the supply air opening. Standard or semi-standard size 1" filters shall be provided with each unit. Vertical and horizontal units shall have a return air filter frame. The units shall have an insulated divider panel between the air handling section and the compressor section to minimize the transmission of compressor noise and to permit operational service testing without air bypass. The compressor shall have a dual level vibration isolation system. The compressor will be mounted on computer selected vibration isolation springs to a large, heavy gauge compressor mounting tray, which is then isolated from the cabinet base with rubber grommets for maximized vibration attenuation. Vertical units shall be supplied with left or right air inlet and top or bottom vertical air discharge. Horizontal units shall be supplied with left or right air inlet and field switchable side or end air discharge. The hanger kit (field-installed horizontal units only) shall consist of galvanized steel brackets, bolts, lock washers, and isolators and shall be designed to fasten to the unit bottom panel for suspension from 3/8" threaded rods.

Refrigerant Circuit

All units shall contain a sealed refrigerant circuit including a hermetic motor-compressor, bi-directional thermostatic expansion valve, finned tube E-Coated air-to-refrigerant heat exchanger, reversing valve, coaxial tube water-to-refrigerant heat exchanger, optional hot water generator coil, and service ports.

Compressors shall be high efficiency rotary or scroll-type designed

for heat pump duty and mounted on vibration isolators. Compressor motors shall be single or three phase with internal or integral overload protection. The finned tube coil shall be sized for low face velocity and constructed of lanced aluminum fins bonded to rifled copper tubes in a staggered pattern 3 or 4 rows deep. The entire coil shall be E-Coated for added protection against corrosion.

The coaxial water-to-refrigerant heat exchanger shall be designed for close approach temperatures and shall be constructed of a convoluted copper (optional cupro nickel) inner tube and a steel outer tube, and capable of 450 psi water and 450 psi refrigerant working pressures. The thermal expansion valve shall provide proper superheat over the entire liquid temperature range with minimal "hunting". The valve shall operate bi-directionally without the use of check valves.

The optional hot water generator shall include an internally mounted wet-rotor circulating pump with integral thermal limiting circuit.

The water-to-refrigerant heat exchanger, optional hot water generator coil and refrigerant suction lines shall be insulated to prevent condensation at low liquid temperatures.

Fan Motor & Assembly

The fan shall be a direct drive centrifugal type with a dynamically balanced wheel. The wheel and housing shall be designed for quiet, low outlet velocity operation. The fan housing shall be of galvanized steel construction and shall be removable from the unit without disconnecting the supply air ductwork for servicing of the fan motor. The fan motor shall be of 3-speed permanently split capacitor (PSC) type. The fan motor shall be high efficiency and provide high static capability, and shall include three on-motor selectable air flow options. An optional variable speed electronically communicated (ECM) fan motor is available with permanently lubricated ball bearing construction, and it has no less than four operational speeds online. The fan motor shall be isolated from the housing by rubber grommets. The motor shall be permanently lubricated and have thermal overload protection.

Electrical

CXM Control - A microprocessor-based compressor controller (CXM) shall be provided to monitor and control unit operation. The control shall provide compressor and electric heater sequencing, high and low pressure monitoring, field selectable water and air coil freeze protection sensing, condensate overflow sensing, over/under voltage monitoring, and unit performance sentinel (UPS). The control shall also provide for water valve connection, a test mode, short cycle protection, random start-up, as well as fault LED, fault memory, and intelligent fault retry.

The control shall employ quick attach harness assemblies for low voltage connections to the control board to aid in troubleshooting or replacement. An integral terminal block with screw terminals shall be provided on the control for all field low voltage connections. A circuit breaker protected 75VA transformer (50VA for commercial units) shall be employed. Line voltage box lugs shall be provided for unit wiring. Units shall have knockouts for entrance of low and line voltage wiring. The fan motor and control box shall be harness plug-connected for easy removal.

Accessories & Warranty

Piping

Supply and return water connections (and optional HWG connections) shall be of gasketed brass swivel union type and provide a working pressure rating to 450 psi. (Copper threaded fittings are mechanically fastened to the cabinet, eliminated the need to use a back-up wrench when making field piping connections for commercial units only.) The threaded copper adaptors shall be low-temperature soldered to prevent misshaping or weakening of the fitting, eliminating potential start-up piping leaks.

All water piping shall be insulated to prevent condensation at low liquid temperatures.

The condensate connection on horizontal units shall be 3/4" PVC socket. Vertical units utilize a 3/4" PVC socket and are internally trapped and can be field routed to the front or side of the cabinet.

Accessories

Variable Speed ECM Fan Motor

An optional soft-starting, high efficiency, variable speed fan motor shall be provided with multiple fan speeds and dehumidification mode to improve comfort and efficiency.

Hot Water Generator

An optional heat reclaiming desuperheater coil of vented double-wall copper construction suitable for potable water shall be provided. The coil and hot water circulating pump shall be factory mounted inside the unit. A high limit temperature switch shall be provided to disable the pump when these conditions occur.

Cupro-Nickel Heat Exchanger

An optional corrosion resistant CuNi coaxial heat exchanger shall be factory installed in lieu of standard copper construction.

Thermostat (field installed)

A multistage auto-changeover electronic digital thermostat shall be provided. The thermostat shall offer 3 heating and 2 cooling stages with precise temperature control. An OFF-HEAT-AUTO-COOL-EMERG system switch, OFF-AUTO fan switch, and indicating LED's shall be provided. The thermostat shall read out in °F or °C. An optional remote indoor sensor and outdoor sensor shall be available on some models.

Flow Controller (field installed)

A self-contained module shall provide all fluid pumping, fill and connection requirements for ground-source closed-loop systems up to 20 GPM. The Flow Controller shall provide 1" pump isolation valves and 3-way service valves. Pump heads shall be removable from the volute for easy replacement. The Flow Controller shall be enclosed in a polystyrene case and fully insulated with urethane foam to prevent condensation.

Auxiliary Heater (field installed)

An internal, field-installed electric heater shall provide supplemental and/or emergency heating capability when used with the three stage heating thermostat. (Heater is externally mounted on horizontal units).

Hose Connection Kit (field installed)

An accessory hose kit shall provide 150psi 1" rubber hose with brass fittings equipped with service pressure/temperature ports for connection between the unit and Flow Controller.

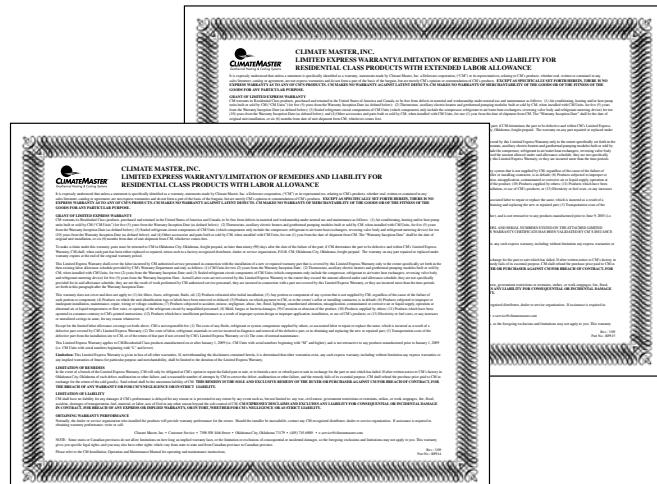
Warranty Information

ClimateMaster residential class heat pumps are backed by a ten-year limited warranty on major refrigerant circuit components and a five-year limited warranty on all remaining covered components. ClimateMaster Flow Controllers, Thermostats & Electric Heaters carry a five-year limited warranty when installed with ClimateMaster units.

ClimateMaster backs up its commitment to quality by including a service labor allowance for the first five years on the compressor and refrigerant circuit parts and two years on all unit parts, thermostats, auxiliary electric heaters and geothermal pumping modules.

An optional extended service labor warranty is available for an additional cost which further extends the service labor allowance to ten years for refrigeration circuit parts and five years on all unit parts, thermostats, auxiliary electric heaters and geothermal pumping modules.

See ClimateMaster's 2009 Limited Express Residential Warranty Certificates RP814 & RP815 for eligibility, specific coverage and limitations.



Revision History

Date	Page #	Description
05 June, 08	All	Reformatted Document Size
15 Mar, 08	43	Minor verbiage changes
03 Mar, 08	42	Updated Specifications
03 Mar, 08	32	Updated Horizontal Dimensional Data
01 Mar, 07	34	Added New Notes to Electrical Data
01 Oct, 06	All	First Published