

Engineering Specifications



ECONAR[®]

Ultra[®] Hydronic GW 37 Thru 360

GeoSource Hydronic Heat Pumps – R410A

Engineering Guide Specifications

General: The GeoSystem heat pump and the earth loop field shall be one system and include all interconnecting piping and controls to provide an efficient and harmoniously-balanced package.

Earth Loop: The earth loop field shall be constructed of high-density polyethylene or polybutylene piping. Its layout shall be of parallel circuits terminated at a reducing header of reverse return design. All underground joints shall be fusion-welded. The earth loop field shall be designed to provide a 25°F water/antifreeze mixture to the heat pumps during the month of January. The antifreeze shall be GTF heat transfer fluid mixed 50% by volume with water of 100-PPM grain hardness or less. The heat pumps shall work over extended-range earth-loop temperature variations (15°F to 100°F). The piping shall consist of sufficient pump capacity with suction and discharge pressure ports. Valves shall be incorporated for purging all debris and air from the total system. All backfilling and grouting shall be done in accordance with IGSHPA guidelines. All heat pumps shall be installed with P/T ports for pressure and temperature measurement.

Cabinet: The heat pump cabinet shall be constructed of heavy-gauge Galvaneal corrosion-resistant steel coated with a baked-on powder epoxy finish. It shall be oriented to allow complete component service access from the front.

Refrigerant Circuit: Compressors shall be hermetically-sealed high-efficiency compliant

scroll mounted on vibration isolators, and the refrigerant shall be environmentally friendly R410A. The water heat exchangers shall be either non-coaxial open-center canister-type with enhanced heat exchanger surface, or stainless steel brazed plate. An optional domestic water desuperheater coil of vented double-wall copper construction for potable water with over-temperature control shall be employed. The expansion device shall be a bi-flow thermostatic metering valve. The reversing valve shall be 24VAC control with fail-to-heating positioning. All heat pumps shall have a factory-installed filter/drier.

Controls: All units shall incorporate both low- and high-pressure switches and freeze protection with total refrigerant lockout with manual reset upon application. All units shall have random start and be anti-short cycle protected.

Testing: All heat pumps shall be factory run-tested with simulated design conditions to ensure component and system integrity. All units shall be tested by, and rated in accordance with, ISO Standard 13256 for performance and UL 1995 for safety.

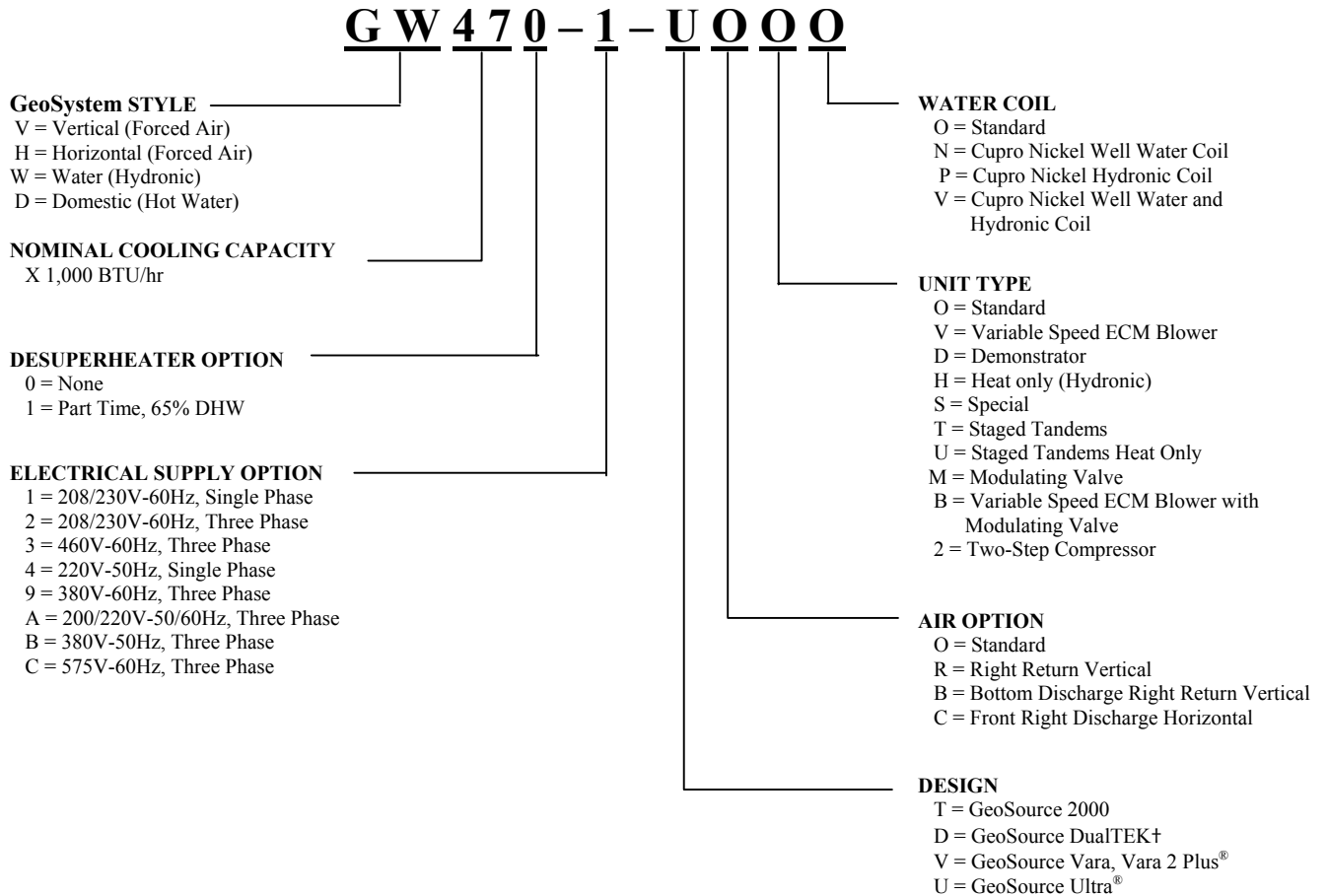
Legend for Tables

BTU/hr	Heating or cooling capacity	HE	Heat extracted
CAP	Capacity	HR	Heat rejected
COP	Coefficient of performance (BTU/hr out ÷ BTU/hr in)	HYD	Hydronic
CFM	Cubic feet per minute	KW	Kilowatt input
DB	Dry-bulb entering air temperature	LRA	Locked-rotor amperage
DHW	Domestic hot water	MBTU/hr	Btu/hr X 1000
DWR	Domestic hot water, extra capacity	RLA	Rated-load amperage
dP	Pressure drop across heat pump (in feet of water and psi)	SR	Sensible Ratio (sensible cooling capacity ÷ total cooling capacity)
EER	Energy efficiency ratio (BTU/hr CAP ÷ watts in)	SUP	Supplemental domestic water heating
EWT	Entering water temperature (in degrees Fahrenheit)	VA	Volt-amperes
FLA	Full-load amperage	WB	Wet-bulb entering air temperature
GND	Ground		
GPM	Gallons per minute of water flow		

All Pressure Drop Ratings are for Pure Water.
See last page for Correction Factors.

Performance values are +/- 10%, and are subject to change without notice.

Key to Model Numbers



Performance Ratings

Ground Water				HEATING		COOLING	
AHRI/ISO 13256-2				50°F Grd EWT		59°F Grd EWT	
MODELS	Hyd GPM	Ground GPM	104°F Hyd EWT		53.6°F Hyd EWT		
			BTU/hr	COP	BTU/hr	EER	
GW 370/371	9	9	33,300	3.5	35,900	21.5	
GW 470/471	12	12	43,500	3.5	46,900	20.4	
GW 570/571	15	15	58,900	3.5	61,800	20.4	
GW 770/771	18	18	73,800	3.5	74,300	21.3	
GW 870/871	20	20	82,800	3.5	83,800	19.2	
GW 1100/1101	1 st Stage	20	20	53,300	3.8	62,350	22.2
	2 nd Stage	20	20	105,300	3.2	108,700	18.0

Ground Loop				HEATING		COOLING	
AHRI/ISO 13256-2				2nd Stage: 32°F EWT 1st Stage: 41°F EWT		2nd Stage: 77°F EWT 1st Stage: 68°F EWT	
MODELS	Hyd GPM	Ground GPM	104°F Hyd EWT		53.6°F Hyd EWT		
			BTU/hr	COP	BTU/hr	EER	
GW 370/371	9	9	26,700	3.0	33,200	16.5	
GW 470/471	12	12	37,000	3.0	44,500	16.4	
GW 570/571	15	15	48,000	3.0	54,400	16.3	
GW 770/771	18	18	58,800	3.0	71,500	16.9	
GW 870/871	20	20	66,400	3.0	79,800	15.5	
GW 1100/1101	1 st Stage	20	30	53,300	3.4	60,400	18.5
	2 nd Stage	20	30	97,300	2.8	100,500	14.1

Ground Loop				HEATING		COOLING	
				2nd Stage: 32°F EWT 1st Stage: 41°F EWT		2nd Stage: 77°F EWT 1st Stage: 68°F EWT	
MODELS	Hyd GPM	Ground GPM	104°F Hyd EWT		53.6°F Hyd EWT		
			BTU/hr	COP	BTU/hr	EER	
GW 2400	1 st Stage	40	60	130,600	4.3	142,000	21.8
	2 nd Stage	40	60	222,400	3.3	240,700	15.2
GW 3600	1 st Stage	54	78	189,750	4.3	191,700	19.6
	2 nd Stage	54	78	318,000	3.3	316,500	14.6

* Tested using AHRI/ISO 13256-2



Configuration Options

Ultra Domestic Water Heater Model

Model Suffix	Description	37	57
GDxx0-x-U000	Standard, No Desuperheater	•	•
GDxx0-1-U000	Standard, 208/230-1, 60 Hz	•	•
GDxx0-4-U000	220/240-1, 50 Hz	*	*
GDxx0-x-U00N	Cupro-Nickel Well Water Coil	*	*

• Standard * Special Order

Ultra Hydronic Models

Model Suffix	Description	37	47	57	77	87	110	240	360
GWxx0-x-Uxxx	Standard, No Desuperheater	•	•	•	•	•	•	•	•
GWxx1-x-Uxxx	Desuperheater	*	*	*	*	*	*		
GWxxx-1-Uxxx	Standard, 208/230-1, 60 Hz	•	•	•	•	•	•		
GWxxx-2-Uxxx	208/230-3, 60Hz	*	*	*	*	*	*	•	•
GWxxx-3-Uxxx	460-3, 60Hz	*	*	*	*	*	*	*	*
GWxxx-4-Uxxx	220-1, 50Hz	*	*		*				
GWxxx-9-Uxxx	380-3, 60Hz					*	*	*	*
GWxxx-A-Uxxx	200/220-3, 50Hz	*	*			*	*	*	*
GWxxx-B-Uxxx	380-3, 50Hz			*	*	*	*	*	*
GWxxx-C-Uxxx	575-3, 60Hz							*	*
GWxxx-x-Ux0x	Standard Hydronic	•	•	•	•	•	•	•	•
GWxxx-x-UxHx	Heat Only Hydronic	*	*	*	*	*	*	*	*
GWxxx-x-UxTx	Staged Tandem Compressor						•	•	•
GWxxx-x-Uxx0	Standard Heat Exchangers	• ¹	• ¹	• ¹	• ¹	• ¹	• ¹	• ¹	• ¹
GWxxx-x-UxxN	Cupro-Nickel Well Water Coil	*	*	*	*	*	*		
GWxxx-x-UxxP	Cupro-Nickel Hydronic Coil	*	*	*	*	*	*		
GWxxx-x-UxxV	Cupro-Nickel Well Water and Hydronic Coil	*	*	*	*	*	*		

¹Brazed Plate Ground Loop Heat Exchanger

• Standard * Special Order

GW 370 and GW 371 Heating Performance Data

GROUND				Hyd LWT °F	HYDRONIC FLOW - 7 GPM 2.0 PSIG dP, 4.6 FT dP					HYDRONIC FLOW - 9 GPM 3.2 PSIG dP, 7.4 FT dP					REFRIGERANT PRESSURE		
EWTF	GPM	dP psig	dP ft		TEMP RISE	CAP kBTUh	PWR kW	COP	HE kBTUh	TEMP RISE	CAP kBTUh	PWR kW	COP	HE kBTUh	Suction Pressure	Head Pressure	
25	9	3.2	7.4	115	6.8	23.9	2.8	2.5	14.2	5.3	24.0	2.8	2.5	14.5	55 - 75	390 - 420	
				100	7.0	24.4	2.4	2.9	16.1	5.4	24.5	2.4	3.0	16.4		330 - 355	
				85	7.1	24.9	2.0	3.6	18.0	5.6	25.0	2.0	3.7	18.2		268 - 295	
				70	7.3	25.5	1.6	4.6	19.9	5.7	25.6	1.6	4.7	20.1		210 - 235	
30	9	3.2	7.4	115	7.3	25.7	2.9	2.6	15.9	5.7	25.8	2.8	2.7	16.3	65 - 85	390 - 425	
				100	7.5	26.3	2.4	3.1	17.9	5.9	26.4	2.4	3.2	18.2		335 - 360	
				85	7.7	26.8	2.0	3.8	19.8	6.0	26.9	2.0	4.0	20.1		270 - 305	
				70	7.8	27.4	1.6	4.9	21.8	6.1	27.5	1.6	5.0	22.0		210 - 235	
35	9	3.2	7.4	115	7.9	27.5	2.9	2.8	17.7	6.1	27.6	2.8	2.9	18.0	70 - 90	390 - 430	
				100	8.0	28.1	2.5	3.4	19.7	6.3	28.2	2.4	3.4	20.0		335 - 365	
				85	8.2	28.7	2.0	4.1	21.7	6.4	28.8	2.0	4.2	22.0		270 - 310	
				70	8.4	29.3	1.6	5.2	23.7	6.5	29.4	1.6	5.4	24.0		210 - 240	
40	7	2	4.6	115	8.2	28.6	2.8	2.9	18.9	6.4	28.7	2.8	3.0	19.3	70 - 95	390 - 430	
				100	8.3	29.2	2.4	3.5	20.9	6.5	29.3	2.4	3.6	21.3		330 - 370	
				85	8.5	29.9	2.0	4.3	22.9	6.7	30.0	2.0	4.5	23.3		270 - 310	
				70	8.7	30.5	1.6	5.5	25.0	6.8	30.6	1.6	5.7	25.3		200 - 250	
	9	3.2	7.4	7.4	115	8.4	29.3	2.9	3.0	19.5	6.5	29.4	2.8	3.1	19.8	75 - 100	395 - 430
					100	8.5	29.9	2.5	3.6	21.5	6.7	30.0	2.4	3.7	21.8		335 - 370
					85	8.7	30.6	2.0	4.4	23.6	6.8	30.7	2.0	4.5	23.9		275 - 310
					70	8.9	31.2	1.6	5.6	25.7	7.0	31.4	1.6	5.8	25.9		205 - 250
45	6	1.6	3.7	115	8.4	29.4	2.8	3.1	19.8	6.6	29.5	2.7	3.2	20.2	65 - 95	390 - 430	
				100	8.6	30.1	2.4	3.6	21.8	6.7	30.2	2.3	3.8	22.2		330 - 370	
				85	8.8	30.7	2.0	4.5	23.9	6.9	30.8	1.9	4.6	24.2		270 - 310	
				70	9.0	31.4	1.6	5.8	25.9	7.0	31.5	1.6	5.9	26.2		200 - 250	
	7	2	4.6	4.6	115	8.7	30.3	2.9	3.1	20.6	6.8	30.8	2.8	3.2	21.3	70 - 100	395 - 430
					100	8.9	31.0	2.4	3.7	22.7	7.0	31.4	2.4	3.9	23.3		335 - 370
					85	9.1	31.7	2.0	4.6	24.8	7.1	32.1	2.0	4.8	25.4		275 - 310
					70	9.2	32.4	1.6	5.9	26.9	7.3	32.8	1.6	6.1	27.5		205 - 250
	9	3.2	7.4	7.4	115	8.9	31.1	2.9	3.2	21.2	6.9	31.2	2.8	3.2	21.6	75 - 100	400 - 430
					100	9.1	31.8	2.5	3.8	23.3	7.1	31.9	2.4	3.9	23.7		340 - 370
					85	9.3	32.5	2.1	4.6	25.5	7.2	32.6	2.0	4.8	25.8		280 - 310
					70	9.5	33.1	1.6	6.0	27.6	7.4	33.3	1.6	6.1	27.8		210 - 250
50	6	1.6	3.7	115	8.9	31.1	2.8	3.2	21.4	6.9	31.2	2.8	3.3	21.8	75 - 100	395 - 430	
				100	9.1	31.8	2.4	3.9	23.5	7.1	31.9	2.4	4.0	23.9		335 - 370	
				85	9.3	32.5	2.0	4.7	25.6	7.3	32.6	2.0	4.9	26.0		270 - 310	
				70	9.5	33.2	1.6	6.1	27.8	7.4	33.3	1.6	6.3	28.0		200 - 250	
	7	2	4.6	4.6	115	9.2	32.1	2.9	3.3	22.3	7.2	32.5	2.8	3.4	23.0	80 - 105	400 - 430
					100	9.4	32.8	2.5	3.9	24.4	7.4	33.3	2.4	4.1	25.1		340 - 370
					85	9.6	33.5	2.0	4.8	26.6	7.6	34.0	2.0	5.0	27.2		275 - 310
					70	9.8	34.2	1.6	6.2	28.7	7.7	34.7	1.6	6.5	29.4		205 - 250
	9	3.2	7.4	7.4	115	9.4	32.9	2.9	3.3	23.0	7.3	33.0	2.8	3.4	23.3	85 - 105	405 - 430
					100	9.6	33.6	2.5	4.0	25.1	7.5	33.7	2.4	4.1	25.5		345 - 370
					85	9.8	34.3	2.1	4.9	27.3	7.7	34.5	2.0	5.0	27.6		280 - 310
					70	10.0	35.1	1.6	6.3	29.5	7.8	35.2	1.6	6.5	29.8		210 - 250
55	6	1.6	3.7	115	9.4	32.8	2.8	3.4	23.1	7.3	32.9	2.8	3.5	23.5	85 - 115	400 - 435	
				100	9.6	33.5	2.4	4.0	25.3	7.5	33.7	2.4	4.2	25.6		340 - 375	
				85	9.8	34.3	2.0	5.0	27.4	7.6	34.4	2.0	5.2	27.8		270 - 315	
				70	10.0	35.0	1.6	6.4	29.6	7.8	35.2	1.5	6.7	29.9		200 - 255	
	7	2	4.6	4.6	115	9.7	33.8	2.9	3.4	24.0	7.6	34.3	2.8	3.6	24.7	90 - 120	405 - 435
					100	9.9	34.6	2.5	4.1	26.2	7.8	35.1	2.4	4.3	26.9		345 - 375
					85	10.1	35.4	2.0	5.1	28.4	8.0	35.9	2.0	5.3	29.1		275 - 315
					70	10.3	36.1	1.6	6.6	30.6	8.1	36.6	1.6	6.8	31.3		205 - 255
	9	3.2	7.4	7.4	115	OPERATION NOT RECOMMENDED					7.7	34.8	2.8	3.6	25.1	95 - 125	410 - 435
					100	OPERATION NOT RECOMMENDED					7.9	35.6	2.4	4.3	27.3		345 - 375
					85	OPERATION NOT RECOMMENDED					8.1	36.4	2.0	5.3	29.5		280 - 315
					70	OPERATION NOT RECOMMENDED					8.3	37.1	1.6	6.8	31.7		210 - 255
60	6	1.6	3.7	115	9.9	34.5	2.9	3.5	24.8	7.7	34.6	2.8	3.7	25.2	95 - 130	405 - 435	
				100	10.1	35.3	2.4	4.2	27.0	7.9	35.4	2.4	4.4	27.3		345 - 375	
				85	10.3	36.0	2.0	5.3	29.2	8.0	36.2	2.0	5.4	29.5		280 - 315	
				70	10.5	36.8	1.6	6.8	31.4	8.2	37.0	1.5	7.0	31.7		210 - 255	
	7	2	4.6	4.6	115	OPERATION NOT RECOMMENDED					8.0	36.1	2.8	3.8	26.5	110 - 135	410 - 435
					100	OPERATION NOT RECOMMENDED					8.2	36.9	2.4	4.5	28.7		350 - 375
					85	OPERATION NOT RECOMMENDED					8.4	37.7	2.0	5.6	31.0		285 - 315
					70	OPERATION NOT RECOMMENDED					8.6	38.5	1.6	7.2	33.2		215 - 255
	9	3.2	7.4	7.4	115	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED					120 - 150	417 - 445
					100	OPERATION NOT RECOMMENDED					8.5	38.0	2.8	4.0	28.5		353 - 381
					85	OPERATION NOT RECOMMENDED					8.6	38.9	2.4	4.8	30.8		286 - 323
					70	OPERATION NOT RECOMMENDED					8.8	39.8	2.0	5.9	33.1		220 - 270
70	6	1.6	3.7	115	OPERATION NOT RECOMMENDED					9.0	40.6	1.5	7.7	35.4	120 - 150	417 - 445	
				100	OPERATION NOT RECOMMENDED					8.6	38.9	2.4	4.8	30.8		353 - 381	
				85	OPERATION NOT RECOMMENDED					8.8	39.8	2.0	5.9	33.1		286 - 323	
				70	OPERATION NOT RECOMMENDED					9.0	40.6	1.5	7.7	35.4		220 - 270	
9	3.2	7.4	7.4	115	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED					120 - 150	417 - 445	
				100	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED						353 - 381	
9	3.2	7.4	7.4	85	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED					120 - 150	286 - 323	
				70	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED						220 - 270	

Note: dP pressure drops apply to standard coils, and cupro-nickel ground water coils have higher pressure drops.

GW 370 and GW 371 Cooling Performance Data

GROUND				Hyd LWT °F	HYDRONIC FLOW - 7 GPM 2.0 PSIG dP, 4.6 FT dP					HYDRONIC FLOW - 9 GPM 3.2 PSIG dP, 7.4 FT dP					REFRIGERANT PRESSURE					
EWT °F	GPM	dP psig	dP ft		TEMP DROP	CAP kBTUh	PWR kW	EER	HR kBTUh	TEMP DROP	CAP kBTUh	PWR kW	EER	HR kBTUh	Suction Pressure	Head Pressure				
50	6	1.6	3.7	35	9.2	32.4	1.4	22.8	37.2	7.5	33.7	1.4	23.5	38.6	80 - 100	220 - 260				
				40	9.7	33.8	1.5	23.0	38.8	7.8	35.2	1.5	23.7	40.3	85 - 105					
				45	10.1	35.3	1.5	23.1	40.5	8.2	36.7	1.5	23.8	42.0	90 - 110					
				50	10.5	36.7	1.6	23.2	42.1	8.5	38.2	1.6	23.9	43.7	95 - 115					
	7	2	4.6	35	9.4	32.8	1.4	23.9	37.5	7.6	34.1	1.4	24.6	38.9	80 - 100	210 - 250				
				40	9.8	34.3	1.4	24.0	39.1	7.9	35.7	1.4	24.8	40.6	85 - 105					
				45	10.2	35.7	1.5	24.2	40.8	8.3	37.2	1.5	24.9	42.3	90 - 110					
				50	10.6	37.2	1.5	24.3	42.4	8.6	38.7	1.5	25.0	44.0	95 - 115					
	9	3.2	7.4	35	9.5	33.2	1.3	24.8	37.8	7.7	34.5	1.3	25.7	39.1	85 - 100	200 - 240				
				40	9.9	34.7	1.4	25.0	39.5	8.0	36.1	1.4	25.9	40.8	90 - 105					
				45	10.3	36.2	1.4	25.1	41.1	8.4	37.6	1.4	26.0	42.6	95 - 110					
				50	10.8	37.7	1.5	25.2	42.8	8.7	39.2	1.5	26.1	44.3	100 - 115					
60	6	1.6	3.7	35	8.6	30.2	1.7	17.9	36.0	7.0	31.5	1.7	18.5	37.3	80 - 100	255 - 295				
				40	9.1	31.9	1.7	18.5	37.8	7.4	33.2	1.7	19.1	39.2	90 - 110					
				45	9.6	33.6	1.8	19.1	39.6	7.8	35.0	1.8	19.7	41.0	90 - 115					
				50	10.1	35.2	1.8	19.7	41.4	8.2	36.7	1.8	20.3	42.9	95 - 120					
	7	2	4.6	35	8.8	30.7	1.6	18.7	36.2	7.1	31.9	1.7	19.3	37.5	80 - 110	245 - 285				
				40	9.2	32.3	1.7	19.4	38.0	7.5	33.7	1.7	20.0	39.4	90 - 110					
				45	9.7	34.0	1.7	20.0	39.8	7.9	35.4	1.7	20.6	41.3	90 - 115					
				50	10.2	35.7	1.7	20.6	41.6	8.3	37.2	1.8	21.2	43.2	95 - 125					
	9	3.2	7.4	35	8.9	31.1	1.6	19.5	36.5	7.2	32.3	1.6	20.2	37.7	85 - 100	235 - 275				
				40	9.4	32.8	1.6	20.1	38.3	7.6	34.0	1.6	20.8	39.6	95 - 110					
				45	9.9	34.5	1.7	20.8	40.1	8.0	35.8	1.7	21.5	41.5	95 - 115					
				50	10.3	36.2	1.7	21.4	42.0	8.4	37.6	1.7	22.1	43.4	100 - 125					
65	6	1.6	3.7	35	8.3	29.2	1.8	16.0	35.4	6.8	30.4	1.8	16.5	36.7	85 - 105	275 - 315				
				40	8.8	31.0	1.8	16.8	37.3	7.2	32.2	1.9	17.3	38.6	90 - 110					
				45	9.4	32.7	1.9	17.5	39.1	7.6	34.1	1.9	18.0	40.5	95 - 120					
				50	9.9	34.5	1.9	18.2	41.0	8.0	35.9	1.9	18.8	42.5	95 - 120					
	7	2	4.6	35	8.5	29.6	1.8	16.7	35.6	6.8	30.8	1.8	17.3	36.9	85 - 105	265 - 305				
				40	9.0	31.4	1.8	17.5	37.5	7.3	32.7	1.8	18.1	38.8	90 - 110					
				45	9.5	33.2	1.8	18.3	39.4	7.7	34.5	1.8	18.9	40.8	95 - 120					
				50	10.0	35.0	1.8	19.0	41.2	8.1	36.4	1.9	19.6	42.7	100 - 120					
	9	3.2	7.4	35	8.6	30.0	1.7	17.4	35.9	6.9	31.1	1.7	18.0	37.0	90 - 105	255 - 295				
				40	9.1	31.8	1.7	18.2	37.8	7.3	33.0	1.8	18.9	39.0	95 - 110					
				45	9.6	33.6	1.8	19.0	39.7	7.8	34.9	1.8	19.7	41.0	100 - 120					
				50	10.1	35.4	1.8	19.8	41.5	8.2	36.8	1.8	20.5	43.0	100 - 120					
70	6	1.6	3.7	OPERATION NOT RECOMMENDED																
				7	2	4.6	35	3.6	28.5	1.9	15.0	35.0	6.6	29.7	1.9	15.5	36.2	85 - 105	280 - 325	
							40	3.8	30.4	1.9	15.9	36.9	7.0	31.7	1.9	16.4	38.3	90 - 110		
							45	4.0	32.3	1.9	16.8	38.9	7.5	33.7	1.9	17.3	40.3	95 - 120		
	50	4.3	34.2				1.9	17.7	40.8	7.9	35.6	2.0	18.2	42.3	100 - 125					
	9	3.2	7.4	35	3.6	28.9	1.9	15.6	35.2	6.7	30.0	1.9	16.2	36.4	90 - 105	270 - 315				
				40	3.9	30.8	1.9	16.5	37.2	7.1	32.0	1.9	17.1	38.5	95 - 110					
				45	4.1	32.8	1.9	17.5	39.2	7.6	34.0	1.9	18.1	40.6	100 - 120					
				50	4.3	34.7	1.9	18.4	41.1	8.0	36.0	1.9	19.0	42.8	100 - 125					
	80	6	1.6	3.7	OPERATION NOT RECOMMENDED															
					7	2	4.6	35	3.3	26.4	2.2	12.2	33.7	6.1	27.5	2.2	12.6	34.9	85 - 105	315 - 365
								40	3.6	28.5	2.2	13.2	35.9	6.6	29.7	2.2	13.6	37.1	90 - 110	
45								3.8	30.6	2.1	14.3	38.0	7.1	31.9	2.2	14.7	39.3	95 - 115		
50		4.1	32.8	2.1				15.3	40.1	7.6	34.1	2.2	15.8	41.5	100 - 120					
9		3.2	7.4	35	3.3	26.7	2.1	12.7	33.9	6.2	27.8	2.1	13.1	35.0	90 - 105	305 - 355				
				40	3.6	28.9	2.1	13.7	36.0	6.7	30.0	2.1	14.2	37.2	95 - 110					
				45	3.9	31.0	2.1	14.8	38.2	7.2	32.2	2.1	15.3	39.4	100 - 120					
				50	4.1	33.2	2.1	15.9	40.3	7.7	34.5	2.1	16.5	41.6	105 - 125					
90		6	1.6	3.7	OPERATION NOT RECOMMENDED															
					7	2	4.6	OPERATION NOT RECOMMENDED												
		9	3.2	7.4				35	7.0	24.6	2.4	10.4	32.6	5.7	25.5	2.4	10.7	33.6	90 - 105	340 - 390
	40				7.7	26.9	2.3	11.5	34.9	6.2	28.0	2.3	11.9	36.0	95 - 110					
	45				8.4	29.3	2.3	12.7	37.2	6.8	30.5	2.3	13.1	38.4	105 - 115					
45	9.1	31.7	2.3	13.9	39.5	7.3	32.9	2.3	14.4	40.8	110 - 130									
50	9.1	31.7	2.3	13.9	39.5	7.3	32.9	2.3	14.4	40.8	110 - 130									
100	6	1.6	3.7	OPERATION NOT RECOMMENDED																
				7	2	4.6	OPERATION NOT RECOMMENDED													
	9	3.2	7.4				35	6.4	22.4	2.6	8.5	31.3	5.2	23.3	2.6	8.8	32.2	95 - 110	370 - 430	
				40	7.1	25.0	2.6	9.7	33.8	5.8	26.0	2.6	10.0	34.8	100 - 115					
				45	7.9	27.6	2.5	10.9	36.2	6.4	28.7	2.5	11.3	37.3	105 - 125					
45	8.6	30.2	2.5	12.2	38.7	7.0	31.4	2.5	12.6	39.9	110 - 130									
50	8.6	30.2	2.5	12.2	38.7	7.0	31.4	2.5	12.6	39.9	110 - 130									

Note: dP pressure drops apply to standard coils, and cupro-nickel ground water coils have higher pressure drops.

GW 470 and GW 471 Heating Performance Data

GROUND				Hyd LWT °F	HYDRONIC FLOW - 10 GPM 3.8 PSIG dP, 8.8 FT dP					HYDRONIC FLOW - 12 GPM 4.8 PSIG dP, 11.1 FT dP					REFRIGERANT PRESSURE	
EWT °F	GPM	dP psig	dP ft		TEMP RISE	CAP kBTU/h	PWR kW	COP	HE kBTU/h	TEMP RISE	CAP kBTU/h	PWR kW	COP	HE kBTU/h	Suction Pressure	Head Pressure
25	12	5.3	12.2	115	6.8	34.0	4.0	2.5	20.3	5.7	34.1	3.9	2.5	20.7	55 - 75	390 - 420
				100	7.0	35.0	3.4	3.0	23.2	5.9	35.1	3.4	3.1	23.7		330 - 355
				85	7.2	36.0	2.9	3.7	26.2	6.0	36.2	2.8	3.8	26.6		268 - 295
				70	7.4	37.0	2.3	4.7	29.2	6.2	37.2	2.2	4.9	29.5		210 - 235
30	12	5.3	12.2	115	7.2	35.9	4.0	2.6	22.2	6.0	36.1	3.9	2.7	22.7	65 - 85	390 - 425
				100	7.4	37.0	3.4	3.1	25.2	6.2	37.1	3.4	3.2	25.6		335 - 360
				85	7.6	38.0	2.9	3.9	28.2	6.4	38.1	2.8	4.0	28.6		270 - 305
				70	7.8	39.0	2.3	5.0	31.2	6.5	39.2	2.2	5.1	31.5		210 - 235
35	12	5.3	12.2	115	7.6	37.8	4.0	2.8	24.2	6.3	38.0	3.9	2.8	24.7	70 - 90	390 - 430
				100	7.8	38.9	3.4	3.3	27.2	6.5	39.1	3.4	3.4	27.6		335 - 365
				85	8.0	40.0	2.9	4.1	30.2	6.7	40.1	2.8	4.2	30.6		270 - 310
				70	8.2	41.0	2.3	5.2	33.2	6.9	41.2	2.2	5.4	33.5		210 - 240
40	10	3.8	8.8	115	7.8	38.8	4.0	2.9	25.3	6.5	39.0	3.8	3.0	25.9	70 - 95	390 - 430
				100	8.0	39.9	3.4	3.4	28.3	6.7	40.1	3.3	3.6	28.8		330 - 370
				85	8.2	41.0	2.8	4.2	31.3	6.9	41.1	2.8	4.4	31.7		270 - 310
				70	8.4	42.0	2.3	5.4	34.3	7.0	42.2	2.2	5.6	34.6		200 - 250
	12	5.3	12.2	115	8.0	39.8	4.0	2.9	26.1	6.7	39.9	3.9	3.0	26.6	75 - 100	395 - 430
				100	8.2	40.9	3.4	3.5	29.2	6.8	41.0	3.3	3.6	29.6		335 - 370
				85	8.4	42.0	2.9	4.3	32.2	7.0	42.1	2.8	4.4	32.6		275 - 310
				70	8.6	43.0	2.3	5.5	35.2	7.2	43.2	2.3	5.6	35.5		205 - 250
45	8	2.6	6.0	115	7.9	39.5	3.9	3.0	26.2	6.6	39.6	3.8	3.1	26.7	65 - 95	390 - 430
				100	8.1	40.5	3.3	3.5	29.1	6.8	40.7	3.3	3.7	29.6		330 - 370
				85	8.3	41.6	2.8	4.3	32.0	7.0	41.8	2.7	4.5	32.5		270 - 310
				70	8.5	42.6	2.3	5.5	34.9	7.1	42.8	2.2	5.7	35.3		200 - 250
	10	3.8	8.8	115	8.1	40.7	3.9	3.0	27.3	6.9	41.3	3.8	3.2	28.2	70 - 100	395 - 430
				100	8.4	41.8	3.4	3.6	30.2	7.1	42.4	3.3	3.8	31.1		335 - 370
				85	8.6	42.9	2.8	4.4	33.2	7.2	43.5	2.8	4.6	34.1		275 - 310
				70	8.8	44.0	2.3	5.6	36.2	7.4	44.6	2.2	5.9	37.0		205 - 250
	12	5.3	12.2	115	8.3	41.7	4.0	3.1	28.1	7.0	41.9	3.9	3.2	28.6	75 - 100	400 - 430
				100	8.6	42.8	3.4	3.7	31.1	7.2	43.0	3.3	3.8	31.6		340 - 370
				85	8.8	43.9	2.9	4.5	34.2	7.4	44.1	2.8	4.6	34.6		280 - 310
				70	9.0	45.0	2.3	5.7	37.2	7.5	45.2	2.3	5.9	37.5		210 - 250
50	8	2.6	6.0	115	8.3	41.3	3.9	3.1	28.0	6.9	41.5	3.8	3.2	28.6	75 - 100	395 - 430
				100	8.5	42.4	3.3	3.7	31.0	7.1	42.6	3.3	3.8	31.5		335 - 370
				85	8.7	43.5	2.8	4.5	33.9	7.3	43.6	2.7	4.7	34.3		270 - 310
				70	8.9	44.5	2.3	5.8	36.8	7.5	44.7	2.2	6.0	37.2		200 - 250
	10	3.8	8.8	115	8.5	42.6	3.9	3.2	29.2	7.2	43.2	3.8	3.3	30.1	80 - 105	400 - 430
				100	8.7	43.7	3.4	3.8	32.2	7.4	44.3	3.3	3.9	33.1		340 - 370
				85	9.0	44.8	2.8	4.6	35.2	7.6	45.5	2.8	4.8	36.0		275 - 310
				70	9.2	46.0	2.3	5.9	38.1	7.8	46.6	2.2	6.1	39.0		205 - 250
	12	5.3	12.2	115	8.7	43.6	4.0	3.2	30.1	7.3	43.8	3.9	3.3	30.5	85 - 105	405 - 430
				100	9.0	44.8	3.4	3.8	33.1	7.5	44.9	3.3	3.9	33.5		345 - 370
				85	9.2	45.9	2.9	4.7	36.1	7.7	46.1	2.8	4.8	36.5		280 - 310
				70	9.4	47.1	2.3	6.0	39.2	7.9	47.2	2.3	6.1	39.5		210 - 250
55	8	2.6	6.0	115	8.6	43.1	3.9	3.3	29.9	7.2	43.3	3.8	3.4	30.4	85 - 115	400 - 435
				100	8.8	44.2	3.3	3.9	32.8	7.4	44.4	3.2	4.0	33.3		340 - 375
				85	9.1	45.3	2.8	4.7	35.8	7.6	45.5	2.7	4.9	36.2		270 - 315
				70	9.3	46.4	2.3	6.0	38.7	7.8	46.6	2.2	6.2	39.1		200 - 255
	10	3.8	8.8	115	8.9	44.5	3.9	3.3	31.1	7.5	45.1	3.8	3.5	32.1	90 - 120	405 - 435
				100	9.1	45.6	3.4	4.0	34.1	7.7	46.3	3.3	4.1	35.0		345 - 375
				85	9.4	46.8	2.8	4.8	37.1	7.9	47.4	2.8	5.0	38.0		275 - 315
				70	9.6	47.9	2.3	6.1	40.1	8.1	48.6	2.2	6.4	41.0		205 - 255
	12	5.3	12.2	115	OPERATION NOT RECOMMENDED					7.6	45.7	3.9	3.5	32.5	95 - 125	410 - 435
				100	OPERATION NOT RECOMMENDED					7.8	46.9	3.3	4.1	35.5		345 - 375
				85	OPERATION NOT RECOMMENDED					8.0	48.1	2.8	5.0	38.5		280 - 315
				70	OPERATION NOT RECOMMENDED					8.2	49.3	2.3	6.4	41.6		210 - 255
60	8	2.6	6.0	115	9.0	44.9	3.9	3.4	31.7	7.5	45.1	3.8	3.5	32.3	95 - 130	405 - 435
				100	9.2	46.1	3.3	4.0	34.7	7.7	46.3	3.2	4.2	35.2		345 - 375
				85	9.4	47.2	2.8	4.9	37.6	7.9	47.4	2.7	5.1	38.1		280 - 315
				70	9.7	48.3	2.3	6.3	40.6	8.1	48.5	2.2	6.5	41.0		210 - 255
	10	3.8	8.8	115	OPERATION NOT RECOMMENDED					7.8	47.0	3.8	3.6	34.0	110 - 135	410 - 435
				100	OPERATION NOT RECOMMENDED					8.0	48.2	3.3	4.3	37.0		350 - 375
				85	OPERATION NOT RECOMMENDED					8.2	49.4	2.8	5.2	40.0		285 - 315
				70	OPERATION NOT RECOMMENDED					8.4	50.6	2.2	6.6	43.0		215 - 255
	12	5.3	12.2	115	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED					120 - 150	417 - 445
				100	OPERATION NOT RECOMMENDED					8.1	48.8	3.8	3.8	36.0		353 - 381
				85	OPERATION NOT RECOMMENDED					8.3	50.0	3.2	4.5	38.9		286 - 323
				70	OPERATION NOT RECOMMENDED					8.5	51.2	2.7	5.5	41.9		220 - 270
70	8	2.6	6.0	115	OPERATION NOT RECOMMENDED					8.7	52.3	2.2	7.0	44.8	120 - 150	417 - 445
				100	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED						353 - 381
				85	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED						286 - 323
				70	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED						220 - 270

Note: dP pressure drops apply to standard coils, and cupro-nickel ground water coils have higher pressure drops.

GW 470 and GW 471 Cooling Performance Data

GROUND				Hyd LWT °F	HYDRONIC FLOW - 10 GPM 3.8 PSIG dP, 8.8 FT dP					HYDRONIC FLOW - 12 GPM 4.8 PSIG dP, 11.1 FT dP					REFRIGERANT PRESSURE					
EWT °F	GPM	dP psig	dP ft		TEMP DROP	CAP kBTU/h	PWR kW	EER	HR kBTU/h	TEMP DROP	CAP kBTU/h	PWR kW	EER	HR kBTU/h	Suction Pressure	Head Pressure				
50	8	2.6	6.0	35	7.6	37.9	2.1	18.0	45.1	6.6	39.4	2.1	18.5	46.7	80 - 100	220 - 260				
				40	8.3	41.4	2.1	19.5	48.6	7.2	43.1	2.1	20.1	50.4	85 - 105					
				45	9.0	44.9	2.1	21.0	52.2	7.8	46.8	2.2	21.6	54.2	90 - 110					
				50	9.7	48.5	2.2	22.5	55.8	8.4	50.5	2.2	23.2	57.9	95 - 115					
	10	3.8	8.8	35	7.7	38.4	2.0	18.8	45.3	6.7	40.0	2.1	19.4	47.0	80 - 100	210 - 250				
				40	8.4	42.0	2.1	20.4	49.0	7.3	43.7	2.1	21.0	50.8	85 - 105					
				45	9.1	45.5	2.1	22.0	52.6	7.9	47.4	2.1	22.6	54.6	90 - 110					
				50	9.8	49.1	2.1	23.5	56.2	8.5	51.1	2.1	24.2	58.3	95 - 115					
	12	5.3	12.2	35	7.8	38.9	2.0	19.6	45.7	6.7	40.4	2.0	20.3	47.2	85 - 100	200 - 240				
				40	8.5	42.5	2.0	21.2	49.4	7.4	44.2	2.0	22.0	51.0	90 - 105					
				45	9.2	46.1	2.0	22.8	53.0	8.0	47.9	2.0	23.6	54.9	95 - 110					
				50	10.0	49.8	2.0	24.4	56.7	8.6	51.7	2.0	25.3	58.7	100 - 115					
60	8	2.6	6.0	35	7.4	37.2	2.4	15.6	45.4	6.5	38.7	2.4	16.0	47.0	80 - 100	255 - 295				
				40	8.1	40.5	2.4	16.8	48.8	7.0	42.2	2.4	17.3	50.5	90 - 110					
				45	8.8	43.8	2.4	18.0	52.1	7.6	45.6	2.5	18.6	54.0	90 - 115					
				50	9.4	47.1	2.5	19.2	55.5	8.2	49.1	2.5	19.8	57.5	95 - 120					
	10	3.8	8.8	35	7.5	37.7	2.3	16.3	45.6	6.5	39.3	2.3	16.8	47.2	80 - 110	245 - 285				
				40	8.2	41.1	2.3	17.6	49.0	7.1	42.7	2.4	18.1	50.8	90 - 110					
				45	8.9	44.4	2.4	18.8	52.5	7.7	46.2	2.4	19.4	54.4	90 - 115					
				50	9.6	47.8	2.4	20.1	55.9	8.3	49.7	2.4	20.7	57.9	95 - 125					
	12	5.3	12.2	35	7.6	38.2	2.3	16.9	45.9	6.6	39.7	2.3	17.5	47.4	85 - 100	235 - 275				
				40	8.3	41.6	2.3	18.3	49.4	7.2	43.2	2.3	18.9	51.0	95 - 110					
				45	9.0	45.0	2.3	19.6	52.9	7.8	46.8	2.3	20.3	54.6	95 - 115					
				50	9.7	48.4	2.3	20.9	56.3	8.4	50.3	2.3	21.6	58.2	100 - 125					
65	8	2.6	6.0	35	7.4	36.9	2.5	14.5	45.5	6.4	38.4	2.6	15.0	47.1	85 - 105	275 - 315				
				40	8.0	40.1	2.6	15.7	48.8	7.0	41.7	2.6	16.1	50.5	90 - 110					
				45	8.7	43.3	2.6	16.8	52.1	7.5	45.1	2.6	17.3	54.0	95 - 120					
				50	9.3	46.5	2.6	17.9	55.4	8.1	48.4	2.6	18.4	57.4	95 - 120					
	10	3.8	8.8	35	7.5	37.4	2.5	15.2	45.7	6.5	38.9	2.5	15.7	47.4	85 - 105	265 - 305				
				40	8.1	40.6	2.5	16.4	49.1	7.0	42.3	2.5	16.9	50.8	90 - 110					
				45	8.8	43.9	2.5	17.5	52.4	7.6	45.7	2.5	18.1	54.3	95 - 120					
				50	9.4	47.1	2.5	18.7	55.7	8.2	49.0	2.5	19.2	57.7	100 - 120					
	12	5.3	12.2	35	7.6	37.9	2.4	15.8	46.0	6.6	39.3	2.4	16.4	47.5	90 - 105	255 - 295				
				40	8.2	41.1	2.4	17.0	49.4	7.1	42.8	2.4	17.6	51.0	95 - 110					
				45	8.9	44.4	2.4	18.2	52.8	7.7	46.2	2.4	18.9	54.5	100 - 120					
				50	9.5	47.7	2.5	19.4	56.1	8.3	49.6	2.5	20.1	58.0	100 - 120					
70	8	2.6	6.0	OPERATION NOT RECOMMENDED																
				10	3.8	8.8	35	4.6	37.0	2.6	14.3	45.9	6.4	38.5	2.6	14.7	47.5	85 - 105	280 - 325	
							40	5.0	40.2	2.6	15.3	49.1	7.0	41.8	2.6	15.8	50.8	90 - 110		
							45	5.4	43.3	2.6	16.4	52.3	7.5	45.1	2.7	16.9	54.2	95 - 120		
	50	5.8	46.4				2.7	17.4	55.5	8.1	48.3	2.7	17.9	57.5	100 - 125					
	12	5.3	12.2	35	4.7	37.5	2.5	14.8	46.1	6.5	39.0	2.5	15.3	47.6	90 - 105	270 - 315				
				40	5.1	40.7	2.6	15.9	49.4	7.0	42.3	2.6	16.5	51.0	95 - 110					
				45	5.5	43.9	2.6	17.0	52.7	7.6	45.6	2.6	17.6	54.4	100 - 120					
				50	5.9	47.1	2.6	18.1	55.9	8.1	48.9	2.6	18.7	57.8	100 - 125					
	80	8	2.6	6.0	OPERATION NOT RECOMMENDED															
					10	3.8	8.8	35	4.5	36.3	2.9	12.6	46.1	6.3	37.8	2.9	13.0	47.7	85 - 105	315 - 365
								40	4.9	39.3	2.9	13.5	49.2	6.8	40.9	2.9	13.9	50.9	90 - 110	
45								5.3	42.2	2.9	14.4	52.2	7.3	43.9	3.0	14.8	54.0	95 - 115		
50		5.6	45.1	3.0				15.3	55.2	7.8	47.0	3.0	15.7	57.1	100 - 120					
12		5.3	12.2	35	4.6	36.8	2.8	13.1	46.4	6.4	38.3	2.8	13.6	47.9	90 - 105	305 - 355				
				40	5.0	39.8	2.8	14.1	49.4	6.9	41.3	2.8	14.6	51.0	95 - 110					
				45	5.3	42.7	2.9	15.0	52.5	7.4	44.4	2.9	15.5	54.2	100 - 120					
				50	5.7	45.7	2.9	15.9	55.5	7.9	47.5	2.9	16.4	57.4	105 - 125					
90		8	2.6	6.0	OPERATION NOT RECOMMENDED															
					10	3.8	8.8	OPERATION NOT RECOMMENDED												
		12	5.3	12.2				35	7.2	36.1	3.1	11.8	46.6	6.3	37.5	3.1	12.2	48.1	90 - 105	340 - 390
	40				7.8	38.9	3.1	12.5	49.5	6.7	40.4	3.1	13.0	51.0	95 - 110					
	45				8.3	41.6	3.1	13.3	52.3	7.2	43.2	3.1	13.7	54.0	105 - 115					
	50				8.9	44.3	3.2	14.0	55.1	7.7	46.1	3.2	14.5	56.9	110 - 130					
100	8	2.6	6.0	OPERATION NOT RECOMMENDED																
				10	3.8	8.8	OPERATION NOT RECOMMENDED													
	12	5.3	12.2				35	7.1	35.4	3.3	10.6	46.8	6.1	36.8	3.4	11.0	48.3	95 - 110	370 - 430	
				40	7.6	38.0	3.4	11.2	49.5	6.6	39.4	3.4	11.6	51.0	100 - 115					
				45	8.1	40.5	3.4	11.9	52.1	7.0	42.1	3.4	12.3	53.7	105 - 125					
				50	8.6	43.0	3.4	12.5	54.8	7.4	44.7	3.5	12.9	56.5	110 - 130					

Note: dP pressure drops apply to standard coils, and cupro-nickel ground water coils have higher pressure drops.

GW 570 and GW 571 Heating Performance Data

GROUND				Hyd LWT °F	HYDRONIC FLOW - 12 GPM 2.1 PSIG dP, 4.8 FT dP					HYDRONIC FLOW - 15 GPM 2.9 PSIG dP, 6.7 FT dP					REFRIGERANT PRESSURE		
EWT °F	GPM	dP psig	dP ft		TEMP RISE	CAP kBTU/h	PWR kW	COP	HE kBTU/h	TEMP RISE	CAP kBTU/h	PWR kW	COP	HE kBTU/h	Suction Pressure	Head Pressure	
25	15	2.9	6.7	115	7.3	43.9	5.1	2.5	26.5	5.9	44.0	5.0	2.6	27.1	55 - 75	390 - 420	
				100	7.6	45.5	4.4	3.1	30.6	6.1	45.7	4.3	3.1	31.1		330 - 355	
				85	7.9	47.1	3.6	3.8	34.7	6.3	47.3	3.6	3.9	35.2		268 - 295	
				70	8.1	48.7	2.9	4.9	38.7	6.5	48.9	2.9	5.0	39.2		210 - 235	
30	15	2.9	6.7	115	7.8	46.8	5.1	2.7	29.3	6.3	47.0	5.0	2.8	29.9	65 - 85	390 - 425	
				100	8.1	48.6	4.4	3.2	33.6	6.5	48.8	4.3	3.3	34.2		335 - 360	
				85	8.4	50.4	3.7	4.0	37.9	6.7	50.6	3.6	4.1	38.4		270 - 305	
				70	8.7	52.2	2.9	5.2	42.2	7.0	52.4	2.9	5.4	42.6		210 - 235	
35	15	2.9	6.7	115	8.3	49.8	5.2	2.8	32.1	6.7	50.0	5.1	2.9	32.8	70 - 90	390 - 430	
				100	8.6	51.7	4.4	3.4	36.6	6.9	52.0	4.3	3.5	37.2		335 - 365	
				85	8.9	53.7	3.7	4.3	41.1	7.2	53.9	3.6	4.4	41.6		270 - 310	
				70	9.3	55.6	2.9	5.5	45.6	7.4	55.8	2.9	5.7	46.0		210 - 240	
40	12	2.1	4.8	115	8.6	51.6	5.2	2.9	33.9	6.9	51.8	5.0	3.0	34.6	70 - 95	390 - 430	
				100	8.9	53.6	4.4	3.5	38.5	7.2	53.8	4.3	3.7	39.1		330 - 370	
				85	9.3	55.6	3.7	4.4	43.1	7.4	55.9	3.6	4.6	43.7		270 - 310	
				70	9.6	57.7	2.9	5.8	47.7	7.7	57.9	2.8	6.0	48.2		200 - 250	
	15	2.9	6.7	6.7	115	8.8	52.8	5.2	3.0	35.0	7.1	53.0	5.1	3.0	35.6	75 - 100	395 - 430
					100	9.1	54.9	4.5	3.6	39.6	7.3	55.1	4.4	3.7	40.2		335 - 370
					85	9.5	57.0	3.7	4.5	44.3	7.6	57.2	3.6	4.6	44.8		275 - 310
					70	9.8	59.0	2.9	5.9	49.0	7.9	59.3	2.9	6.0	49.5		205 - 250
45	9	1.5	3.5	115	8.8	52.8	5.2	3.0	35.2	7.1	53.0	5.0	3.1	35.9	65 - 95	390 - 430	
				100	9.1	54.9	4.4	3.7	39.9	7.4	55.1	4.3	3.8	40.5		330 - 370	
				85	9.5	57.0	3.6	4.6	44.6	7.6	57.3	3.5	4.7	45.2		270 - 310	
				70	9.9	59.1	2.9	6.0	49.3	7.9	59.4	2.8	6.2	49.8		200 - 250	
	12	2.1	4.8	4.8	115	9.1	54.5	5.2	3.1	36.6	7.4	55.2	5.1	3.2	37.9	70 - 100	395 - 430
					100	9.4	56.6	4.5	3.7	41.4	7.7	57.4	4.3	3.9	42.6		335 - 370
					85	9.8	58.8	3.7	4.7	46.2	8.0	59.6	3.6	4.9	47.4		275 - 310
					70	10.2	61.0	2.9	6.1	51.0	8.2	61.9	2.8	6.4	52.1		205 - 250
	15	2.9	6.7	6.7	115	9.3	55.8	5.3	3.1	37.8	7.5	56.0	5.2	3.2	38.4	75 - 100	400 - 430
					100	9.7	58.0	4.5	3.8	42.6	7.8	58.2	4.4	3.9	43.2		340 - 370
					85	10.0	60.2	3.7	4.7	47.5	8.1	60.5	3.6	4.9	48.1		280 - 310
					70	10.4	62.5	3.0	6.2	52.4	8.4	62.7	2.9	6.4	52.9		210 - 250
50	9	1.5	3.5	115	9.3	55.6	5.2	3.1	37.8	7.4	55.8	5.1	3.2	38.6	75 - 100	395 - 430	
				100	9.6	57.9	4.4	3.8	42.7	7.7	58.1	4.3	3.9	43.4		335 - 370	
				85	10.0	60.1	3.7	4.8	47.6	8.1	60.4	3.6	5.0	48.2		270 - 310	
				70	10.4	62.4	2.9	6.3	52.5	8.4	62.6	2.8	6.5	53.0		200 - 250	
	12	2.1	4.8	4.8	115	9.6	57.4	5.3	3.2	39.4	7.8	58.2	5.1	3.3	40.7	80 - 105	400 - 430
					100	10.0	59.7	4.5	3.9	44.4	8.1	60.5	4.4	4.1	45.6		340 - 370
					85	10.3	62.0	3.7	4.9	49.4	8.4	62.9	3.6	5.1	50.6		275 - 310
					70	10.7	64.4	2.9	6.4	54.4	8.7	65.3	2.9	6.7	55.5		205 - 250
	15	2.9	6.7	6.7	115	9.8	58.7	5.3	3.2	40.6	7.9	59.0	5.2	3.3	41.2	85 - 105	405 - 430
					100	10.2	61.1	4.5	3.9	45.7	8.2	61.4	4.4	4.1	46.3		345 - 370
					85	10.6	63.5	3.7	5.0	50.7	8.5	63.8	3.7	5.1	51.3		280 - 310
					70	11.0	65.9	3.0	6.5	55.8	8.8	66.2	2.9	6.7	56.3		210 - 250
55	9	1.5	3.5	115	9.7	58.4	5.3	3.3	40.5	7.8	58.7	5.1	3.4	41.2	85 - 115	400 - 435	
				100	10.1	60.8	4.5	4.0	45.6	8.1	61.1	4.3	4.1	46.3		340 - 375	
				85	10.5	63.2	3.7	5.0	50.6	8.5	63.5	3.6	5.2	51.3		270 - 315	
				70	10.9	65.6	2.9	6.6	55.7	8.8	65.9	2.8	6.8	56.3		200 - 255	
	12	2.1	4.8	4.8	115	10.0	60.3	5.3	3.3	42.1	8.1	61.1	5.2	3.5	43.5	90 - 120	405 - 435
					100	10.5	62.8	4.5	4.1	47.3	8.5	63.6	4.4	4.2	48.6		345 - 375
					85	10.9	65.2	3.7	5.1	52.5	8.8	66.1	3.6	5.3	53.8		275 - 315
					70	11.3	67.7	2.9	6.8	57.7	9.2	68.7	2.9	7.0	58.9		205 - 255
	15	2.9	6.7	6.7	115	OPERATION NOT RECOMMENDED					8.3	62.0	5.2	3.5	44.1	95 - 125	410 - 435
					100	OPERATION NOT RECOMMENDED					8.6	64.5	4.5	4.2	49.3		345 - 375
					85	OPERATION NOT RECOMMENDED					8.9	67.1	3.7	5.3	54.5		280 - 315
					70	OPERATION NOT RECOMMENDED					9.3	69.6	2.9	7.0	59.7		210 - 255
60	9	1.5	3.5	115	10.2	61.2	5.3	3.4	43.1	8.2	61.5	5.2	3.5	43.9	95 - 130	405 - 435	
				100	10.6	63.8	4.5	4.2	48.4	8.5	64.1	4.4	4.3	49.1		345 - 375	
				85	11.1	66.3	3.7	5.2	53.7	8.9	66.6	3.6	5.4	54.3		280 - 315	
				70	11.5	68.9	2.9	6.9	59.0	9.2	69.2	2.8	7.2	59.5		210 - 255	
	12	2.1	4.8	4.8	115	OPERATION NOT RECOMMENDED					8.5	64.1	5.2	3.6	46.2	110 - 135	410 - 435
					100	OPERATION NOT RECOMMENDED					8.9	66.7	4.4	4.4	51.6		350 - 375
					85	OPERATION NOT RECOMMENDED					9.3	69.4	3.6	5.6	56.9		285 - 315
					70	OPERATION NOT RECOMMENDED					9.6	72.1	2.9	7.4	62.3		215 - 255
	70	9	1.5	3.5	115	OPERATION NOT RECOMMENDED					9.0	67.2	5.2	3.8	49.3	120 - 150	417 - 445
					100	OPERATION NOT RECOMMENDED					9.3	70.0	4.4	4.6	54.8		353 - 381
					85	OPERATION NOT RECOMMENDED					9.7	72.8	3.6	5.9	60.4		286 - 323
					70	OPERATION NOT RECOMMENDED					10.1	75.7	2.8	7.8	66.0		220 - 270
12	2.1	4.8	4.8	OPERATION NOT RECOMMENDED													
				15	2.9	6.7	OPERATION NOT RECOMMENDED										

Note: dP pressure drops apply to standard coils, and cupro-nickel ground water coils have higher pressure drops.

GW 570 and GW 571 Cooling Performance Data

GROUND				Hyd LWT °F	HYDRONIC FLOW - 12 GPM 2.1 PSIG dP, 4.8 FT dP					HYDRONIC FLOW - 15 GPM 2.9 PSIG dP, 6.7 FT dP					REFRIGERANT PRESSURE					
EWT °F	GPM	dP psig	dP ft		TEMP DROP	CAP kBTU/h	PWR kW	EER	HR kBTU/h	TEMP DROP	CAP kBTU/h	PWR kW	EER	HR kBTU/h	Suction Pressure	Head Pressure				
50	9	1.5	3.5	35	7.9	47.4	2.8	17.2	56.9	6.6	49.4	2.8	17.7	58.9	80 - 100	220 - 260				
				40	8.9	53.7	2.8	19.0	63.3	7.4	55.9	2.8	19.6	65.6	85 - 105					
				45	10.0	59.9	2.9	20.8	69.7	8.3	62.3	2.9	21.4	72.3	90 - 110					
				50	11.0	66.1	2.9	22.5	76.1	9.2	68.8	3.0	23.2	78.9	95 - 115					
	12	2.1	4.8	35	8.0	48.1	2.7	18.0	57.2	6.7	50.1	2.7	18.5	59.3	80 - 100	210 - 250				
				40	9.1	54.4	2.7	19.9	63.7	7.5	56.6	2.8	20.5	66.0	85 - 105					
				45	10.1	60.7	2.8	21.8	70.2	8.4	63.2	2.8	22.4	72.8	90 - 110					
				50	11.2	67.0	2.8	23.5	76.7	9.3	69.7	2.9	24.3	79.5	95 - 115					
	15	2.9	6.7	35	8.1	48.7	2.6	18.7	57.6	6.8	50.6	2.6	19.3	59.6	85 - 100	200 - 240				
				40	9.2	55.1	2.7	20.7	64.2	7.6	57.3	2.7	21.4	66.4	90 - 105					
				45	10.2	61.5	2.7	22.6	70.8	8.5	63.9	2.7	23.4	73.2	95 - 110					
				50	11.3	67.9	2.8	24.5	77.3	9.4	70.5	2.8	25.3	80.0	100 - 115					
60	9	1.5	3.5	35	7.6	45.5	3.1	14.7	56.0	6.3	47.3	3.1	15.2	58.0	80 - 100	255 - 295				
				40	8.6	51.4	3.1	16.3	62.1	7.1	53.5	3.2	16.8	64.3	90 - 110					
				45	9.5	57.3	3.2	17.8	68.2	7.9	59.6	3.2	18.4	70.7	90 - 115					
				50	10.5	63.1	3.3	19.2	74.3	8.8	65.7	3.3	19.8	77.0	95 - 120					
	12	2.1	4.8	35	7.7	46.1	3.0	15.4	56.3	6.4	48.0	3.0	15.9	58.3	80 - 110	245 - 285				
				40	8.7	52.1	3.1	17.1	62.5	7.2	54.2	3.1	17.6	64.7	90 - 110					
				45	9.7	58.0	3.1	18.6	68.6	8.1	60.4	3.1	19.2	71.1	90 - 115					
				50	10.7	64.0	3.2	20.1	74.8	8.9	66.6	3.2	20.8	77.6	95 - 125					
	15	2.9	6.7	35	7.8	46.7	2.9	16.0	56.6	6.5	48.5	2.9	16.6	58.5	85 - 100	235 - 275				
				40	8.8	52.7	3.0	17.7	62.9	7.3	54.8	3.0	18.4	65.0	95 - 110					
				45	9.8	58.8	3.0	19.4	69.1	8.1	61.1	3.0	20.0	71.5	95 - 115					
				50	10.8	64.8	3.1	20.9	75.4	9.0	67.4	3.1	21.7	78.0	100 - 125					
65	9	1.5	3.5	35	7.4	44.5	3.2	13.7	55.6	6.2	46.3	3.3	14.1	57.5	85 - 105	275 - 315				
				40	8.4	50.2	3.3	15.2	61.5	7.0	52.3	3.3	15.6	63.7	90 - 110					
				45	9.3	55.9	3.4	16.5	67.5	7.8	58.2	3.4	17.0	69.9	95 - 120					
				50	10.3	61.7	3.5	17.9	73.4	8.6	64.2	3.5	18.4	76.1	95 - 120					
	12	2.1	4.8	35	7.5	45.1	3.1	14.3	55.8	6.3	46.9	3.2	14.8	57.8	85 - 105	265 - 305				
				40	8.5	50.9	3.2	15.9	61.8	7.1	53.0	3.2	16.3	64.0	90 - 110					
				45	9.4	56.7	3.3	17.3	67.9	7.9	59.0	3.3	17.8	70.3	95 - 120					
				50	10.4	62.5	3.3	18.7	73.9	8.7	65.1	3.4	19.3	76.6	100 - 120					
	15	2.9	6.7	35	7.6	45.7	3.1	14.9	56.1	6.3	47.5	3.1	15.4	58.0	90 - 105	255 - 295				
				40	8.6	51.6	3.1	16.5	62.2	7.1	53.6	3.1	17.1	64.3	95 - 110					
				45	9.6	57.4	3.2	18.0	68.3	8.0	59.7	3.2	18.6	70.6	100 - 120					
				50	10.6	63.3	3.3	19.4	74.4	8.8	65.8	3.3	20.1	77.0	100 - 120					
70	9	1.5	3.5	OPERATION NOT RECOMMENDED																
				12	2.1	4.8	35	5.5	44.1	3.3	13.4	55.3	6.1	45.9	3.3	13.8	57.3	85 - 105	280 - 325	
							40	6.2	49.7	3.4	14.8	61.2	6.9	51.8	3.4	15.2	63.4	90 - 110		
							45	6.9	55.4	3.4	16.1	67.1	7.7	57.6	3.5	16.6	69.5	95 - 120		
	50	7.6	61.0				3.5	17.4	73.0	8.5	63.5	3.5	17.9	75.6	100 - 125					
	15	2.9	6.7	35	5.6	44.7	3.2	13.9	55.6	6.2	46.4	3.2	14.4	57.4	90 - 105	270 - 315				
				40	6.3	50.4	3.3	15.3	61.6	7.0	52.4	3.3	15.9	63.6	95 - 110					
				45	7.0	56.1	3.4	16.7	67.5	7.8	58.3	3.4	17.3	69.8	100 - 120					
				50	7.7	61.8	3.4	18.1	73.5	8.6	64.2	3.4	18.7	75.9	100 - 125					
	80	9	1.5	3.5	OPERATION NOT RECOMMENDED															
					12	2.1	4.8	35	5.3	42.1	3.6	11.7	54.4	5.8	43.8	3.6	12.0	56.3	85 - 105	315 - 365
								40	5.9	47.4	3.7	12.9	60.0	6.6	49.3	3.7	13.2	62.0	90 - 110	
45								6.6	52.7	3.8	14.0	65.5	7.3	54.9	3.8	14.4	67.8	95 - 115		
50		7.3	58.0	3.8				15.1	71.1	8.1	60.4	3.9	15.6	73.6	100 - 120					
15		2.9	6.7	35	5.3	42.6	3.5	12.1	54.7	5.9	44.3	3.5	12.5	56.4	90 - 105	305 - 355				
				40	6.0	48.0	3.6	13.4	60.3	6.7	49.9	3.6	13.8	62.2	95 - 110					
				45	6.7	53.4	3.7	14.6	65.9	7.4	55.5	3.7	15.1	68.1	100 - 120					
				50	7.3	58.8	3.7	15.7	71.6	8.1	61.1	3.8	16.2	73.9	105 - 125					
90		9	1.5	3.5	OPERATION NOT RECOMMENDED															
					12	2.1	4.8	OPERATION NOT RECOMMENDED												
		15	2.9	6.7				35	6.8	40.6	3.8	10.6	53.7	5.6	42.2	3.8	11.0	55.3	90 - 105	340 - 390
	40				7.6	45.7	3.9	11.7	59.0	6.3	47.4	3.9	12.1	60.8	95 - 110					
	45				8.5	50.7	4.0	12.7	64.3	7.0	52.7	4.0	13.2	66.3	105 - 115					
50	9.3	55.8	4.1	13.7	69.6	7.7	57.9	4.1	14.2	71.9	110 - 130									
100	9	1.5	3.5	OPERATION NOT RECOMMENDED																
				12	2.1	4.8	OPERATION NOT RECOMMENDED													
	15	2.9	6.7				35	6.4	38.6	4.1	9.3	52.7	5.3	40.1	4.1	9.7	54.2	95 - 110	370 - 430	
				40	7.2	43.3	4.2	10.3	57.7	6.0	45.0	4.2	10.6	59.4	100 - 115					
				45	8.0	48.0	4.3	11.2	62.7	6.7	49.9	4.3	11.5	64.6	105 - 125					
50	8.8	52.7	4.4	12.0	67.7	7.3	54.8	4.4	12.4	69.8	110 - 130									

Note: dP pressure drops apply to standard coils, and cupro-nickel ground water coils have higher pressure drops.

GW 770 and GW 771 Heating Performance Data

GROUND				Hyd LWT °F	HYDRONIC FLOW - 15 GPM 2.9 PSIG dP, 6.7 FT dP					HYDRONIC FLOW - 18 GPM 3.9 PSIG dP, 9.0 FT dP					REFRIGERANT PRESSURE		
EWT °F	GPM	dP psig	dP ft		TEMP RISE	CAP kBTU/h	PWR kW	COP	HE kBTU/h	TEMP RISE	CAP kBTU/h	PWR kW	COP	HE kBTU/h	Suction Pressure	Head Pressure	
25	18	1.0	2.3	115	6.9	51.8	6.2	2.4	30.6	5.8	52.0	6.1	2.5	31.3	55 - 75	390 - 420	
				100	7.1	53.2	5.3	3.0	35.2	5.9	53.4	5.1	3.0	35.9		330 - 355	
				85	7.3	54.5	4.3	3.7	39.9	6.1	54.7	4.2	3.8	40.4		268 - 295	
				70	7.5	55.9	3.3	4.9	44.5	6.2	56.1	3.3	5.0	45.0		210 - 235	
30	18	1.0	2.3	115	7.5	56.1	6.2	2.6	34.8	6.3	56.3	6.1	2.7	35.6	65 - 85	390 - 425	
				100	7.7	57.7	5.3	3.2	39.6	6.4	57.9	5.2	3.3	40.3		335 - 360	
				85	7.9	59.2	4.3	4.0	44.4	6.6	59.5	4.2	4.1	45.0		270 - 305	
				70	8.1	60.8	3.4	5.2	49.2	6.8	61.0	3.3	5.4	49.7		210 - 235	
35	18	1.0	2.3	115	8.1	60.4	6.3	2.8	39.1	6.7	60.7	6.1	2.9	39.8	70 - 90	390 - 430	
				100	8.3	62.2	5.3	3.4	44.0	6.9	62.4	5.2	3.5	44.7		335 - 365	
				85	8.5	63.9	4.4	4.3	49.0	7.1	64.2	4.3	4.4	49.6		270 - 310	
				70	8.8	65.7	3.5	5.6	53.9	7.3	66.0	3.4	5.7	54.5		210 - 240	
40	15	0.7	1.6	115	8.4	63.2	6.2	3.0	42.0	7.1	63.5	6.1	3.1	42.8	70 - 95	390 - 430	
				100	8.7	65.1	5.3	3.6	47.0	7.3	65.4	5.2	3.7	47.8		330 - 370	
				85	8.9	67.0	4.4	4.5	52.1	7.5	67.3	4.3	4.6	52.8		270 - 310	
				70	9.2	69.0	3.5	5.8	57.1	7.7	69.3	3.4	6.0	57.7		200 - 250	
	18	1.0	2.3	115	8.6	64.7	6.3	3.0	43.3	7.2	65.0	6.1	3.1	44.0	75 - 100	395 - 430	
				100	8.9	66.7	5.4	3.6	48.4	7.4	67.0	5.2	3.7	49.1		335 - 370	
				85	9.2	68.7	4.4	4.5	53.5	7.7	68.9	4.3	4.7	54.1		275 - 310	
				70	9.4	70.6	3.5	5.9	58.6	7.9	70.9	3.4	6.1	59.2		205 - 250	
45	12	0.5	1.2	115	8.7	65.4	6.2	3.1	44.3	7.3	65.6	6.0	3.2	45.2	65 - 95	390 - 430	
				100	9.0	67.4	5.3	3.7	49.4	7.5	67.7	5.1	3.9	50.2		330 - 370	
				85	9.3	69.4	4.4	4.6	54.5	7.7	69.7	4.3	4.8	55.2		270 - 310	
				70	9.5	71.5	3.5	6.0	59.6	8.0	71.8	3.4	6.2	60.2		200 - 250	
	15	0.7	1.6	115	9.0	67.4	6.3	3.2	46.1	7.6	68.4	6.1	3.3	47.6	70 - 100	395 - 430	
				100	9.3	69.5	5.3	3.8	51.3	7.8	70.5	5.2	4.0	52.8		335 - 370	
				85	9.6	71.6	4.4	4.7	56.5	8.1	72.6	4.3	4.9	57.9		275 - 310	
				70	9.8	73.7	3.5	6.1	61.7	8.3	74.8	3.4	6.4	63.0		205 - 250	
	18	1.0	2.3	115	9.2	69.1	6.3	3.2	47.5	7.7	69.3	6.2	3.3	48.3	75 - 100	400 - 430	
				100	9.5	71.2	5.4	3.9	52.8	7.9	71.5	5.3	4.0	53.5		340 - 370	
				85	9.8	73.4	4.5	4.8	58.1	8.2	73.7	4.4	4.9	58.7		280 - 310	
				70	10.1	75.5	3.6	6.2	63.3	8.4	75.8	3.5	6.4	63.9		210 - 250	
50	12	0.5	1.2	115	9.3	69.4	6.2	3.3	48.3	7.7	69.7	6.0	3.4	49.2	75 - 100	395 - 430	
				100	9.6	71.7	5.3	4.0	53.5	8.0	72.0	5.2	4.1	54.3		335 - 370	
				85	9.9	73.9	4.4	4.9	58.8	8.2	74.2	4.3	5.0	59.5		270 - 310	
				70	10.1	76.1	3.5	6.3	64.0	8.5	76.4	3.4	6.5	64.7		200 - 250	
	15	0.7	1.6	115	9.6	71.7	6.3	3.3	50.2	8.1	72.6	6.1	3.5	51.8	80 - 105	400 - 430	
				100	9.9	73.9	5.4	4.0	55.6	8.3	75.0	5.2	4.2	57.1		340 - 370	
				85	10.2	76.2	4.5	5.0	60.9	8.6	77.3	4.4	5.2	62.4		275 - 310	
				70	10.5	78.5	3.6	6.4	66.3	8.8	79.6	3.5	6.7	67.7		205 - 250	
	18	1.0	2.3	115	9.8	73.4	6.3	3.4	51.7	8.2	73.7	6.2	3.5	52.5	85 - 105	405 - 430	
				100	10.1	75.7	5.4	4.1	57.2	8.4	76.0	5.3	4.2	57.9		345 - 370	
				85	10.4	78.1	4.5	5.1	62.6	8.7	78.4	4.4	5.2	63.3		280 - 310	
				70	10.7	80.4	3.6	6.5	68.1	9.0	80.7	3.5	6.7	68.7		210 - 250	
55	12	0.5	1.2	115	9.8	73.5	6.2	3.5	52.3	8.2	73.8	6.1	3.6	53.2	85 - 115	400 - 435	
				100	10.1	75.9	5.3	4.2	57.7	8.5	76.3	5.2	4.3	58.5		340 - 375	
				85	10.4	78.3	4.5	5.1	63.1	8.7	78.7	4.4	5.3	63.8		270 - 315	
				70	10.8	80.8	3.6	6.6	68.5	9.0	81.1	3.5	6.8	69.2		200 - 255	
	15	0.7	1.6	115	10.1	75.9	6.3	3.5	54.4	8.5	76.9	6.1	3.7	56.0	90 - 120	405 - 435	
				100	10.4	78.4	5.4	4.2	59.9	8.8	79.4	5.3	4.4	61.5		345 - 375	
				85	10.8	80.8	4.5	5.2	65.4	9.1	82.0	4.4	5.5	66.9		275 - 315	
				70	11.1	83.3	3.6	6.7	70.9	9.4	84.5	3.5	7.0	72.4		205 - 255	
	18	1.0	2.3	115	OPERATION NOT RECOMMENDED					8.3	62.0	5.2	3.5	44.1	95 - 125	410 - 435	
				100	OPERATION NOT RECOMMENDED					8.6	64.5	4.5	4.2	49.3		345 - 375	
				85	OPERATION NOT RECOMMENDED					8.9	67.1	3.7	5.3	54.5		280 - 315	
				70	OPERATION NOT RECOMMENDED					9.3	69.6	2.9	7.0	59.7		210 - 255	
60	12	0.5	1.2	115	10.3	77.6	6.2	3.6	56.3	8.7	77.9	6.1	3.8	57.2	95 - 130	405 - 435	
				100	10.7	80.2	5.4	4.4	61.8	8.9	80.5	5.2	4.5	62.7		345 - 375	
				85	11.0	82.8	4.5	5.4	67.4	9.2	83.2	4.4	5.5	68.2		280 - 315	
				70	11.4	85.4	3.7	6.8	72.9	9.5	85.8	3.6	7.1	73.6		210 - 255	
	15	0.7	1.6	115	OPERATION NOT RECOMMENDED					9.0	81.2	6.2	3.9	60.2	110 - 135	410 - 435	
				100	OPERATION NOT RECOMMENDED					9.3	83.9	5.3	4.6	65.8		350 - 375	
				85	OPERATION NOT RECOMMENDED					9.6	86.6	4.5	5.7	71.4		285 - 315	
				70	OPERATION NOT RECOMMENDED					9.9	89.3	3.6	7.3	77.1		215 - 255	
	70	12	0.5	1.2	115	OPERATION NOT RECOMMENDED					9.6	86.1	6.1	4.1	65.2	120 - 150	417 - 445
					100	OPERATION NOT RECOMMENDED					9.9	89.1	5.3	4.9	71.0		353 - 381
					85	OPERATION NOT RECOMMENDED					10.2	92.1	4.5	6.0	76.8		286 - 323
					70	OPERATION NOT RECOMMENDED					10.6	95.1	3.7	7.6	82.6		220 - 270
15	0.7	1.6	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED									
			18	1.0	2.3	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED						

Note: dP pressure drops apply to standard coils, and cupro-nickel ground water coils have higher pressure drops.

GW 770 and GW 771 Cooling Performance Data

GROUND				Hyd LWT °F	HYDRONIC FLOW - 15 GPM 2.9 PSIG dP, 6.7 FT dP					HYDRONIC FLOW - 18 GPM 3.9 PSIG dP, 9.0 FT dP					REFRIGERANT PRESSURE		
EWT °F	GPM	dP psig	dP ft		TEMP DROP	CAP kBTU/h	PWR kW	EER	HR kBTU/h	TEMP DROP	CAP kBTU/h	PWR kW	EER	HR kBTU/h	Suction Pressure	Head Pressure	
50	12	0.5	1.2	35	8.5	63.8	3.2	19.9	74.7	7.4	66.4	3.2	20.5	77.5	80 - 100	220 - 260	
				40	9.1	68.3	3.2	21.0	79.4	7.9	71.1	3.3	21.7	82.3	85 - 105		
				45	9.7	72.8	3.3	22.2	84.0	8.4	75.8	3.3	22.8	87.1	90 - 110		
				50	10.0	77.3	3.3	23.3	88.6	8.9	80.5	3.4	24.0	91.9	95 - 115		
	15	0.7	1.6	35	8.6	64.6	3.1	20.8	75.3	7.5	67.3	3.1	21.4	78.0	80 - 100	210 - 250	
				40	9.2	69.2	3.1	22.0	79.9	8.0	72.0	3.2	22.7	82.9	85 - 105		
				45	9.8	73.8	3.2	23.2	84.6	8.5	76.8	3.2	23.9	87.8	90 - 110		
				50	10.4	78.3	3.2	24.3	89.3	9.1	81.5	3.3	25.1	92.6	95 - 115		
	18	1.0	2.3	35	8.7	65.5	3.0	21.6	75.8	7.6	68.1	3.0	22.3	78.4	85 - 100	200 - 240	
				40	9.3	70.1	3.1	22.9	80.6	8.1	72.9	3.1	23.7	83.4	90 - 105		
				45	10.0	74.7	3.1	24.1	85.3	8.6	77.7	3.1	24.9	88.3	95 - 110		
				50	10.6	79.4	3.1	25.3	90.1	9.2	82.5	3.1	26.2	93.2	100 - 115		
60	12	0.5	1.2	35	8.2	61.5	3.7	16.5	74.2	7.1	64.0	3.8	17.0	76.9	80 - 100	255 - 295	
				40	8.9	66.7	3.8	17.7	79.5	7.7	69.4	3.8	18.2	82.4	90 - 110		
				45	9.6	71.9	3.8	18.9	84.9	8.3	74.8	3.8	19.4	87.9	90 - 115		
				50	10.3	77.0	3.8	20.0	90.2	8.9	80.2	3.9	20.6	93.5	95 - 120		
	15	0.7	1.6	35	8.3	62.3	3.6	17.2	74.6	7.2	64.9	3.7	17.8	77.3	80 - 110	245 - 285	
				40	9.0	67.6	3.7	18.5	80.0	7.8	70.3	3.7	19.1	82.9	90 - 110		
				45	9.7	72.8	3.7	19.7	85.4	8.4	75.8	3.7	20.3	88.5	90 - 115		
				50	10.4	78.1	3.7	20.9	90.8	9.0	81.3	3.8	21.6	94.1	95 - 125		
	18	1.0	2.3	35	8.4	63.1	3.5	17.9	75.2	7.3	65.6	3.5	18.5	77.7	85 - 100	235 - 275	
				40	9.1	68.5	3.6	19.2	80.6	7.9	71.1	3.6	19.9	83.3	95 - 110		
				45	9.8	73.8	3.6	20.5	86.1	8.5	76.7	3.6	21.2	89.0	95 - 115		
				50	10.5	79.1	3.6	21.8	91.5	9.1	82.2	3.6	22.5	94.6	100 - 125		
65	12	0.5	1.2	35	8.0	60.3	4.0	15.1	74.0	7.0	62.8	4.0	15.6	76.6	85 - 105	275 - 315	
				40	8.8	65.9	4.0	16.3	79.6	7.6	68.6	4.1	16.8	82.5	90 - 110		
				45	9.5	71.4	4.1	17.5	85.3	8.3	74.3	4.1	18.1	88.3	95 - 120		
				50	10.3	76.9	4.1	18.7	90.9	8.9	80.1	4.2	19.3	94.2	95 - 120		
	15	0.7	1.6	35	8.2	61.1	3.9	15.8	74.3	7.1	63.6	3.9	16.3	77.0	85 - 105	265 - 305	
				40	8.9	66.7	3.9	17.1	80.1	7.7	69.5	3.9	17.6	82.9	90 - 110		
				45	9.6	72.3	3.9	18.3	85.8	8.4	75.3	4.0	18.9	88.9	95 - 120		
				50	10.4	77.9	4.0	19.6	91.5	9.0	81.1	4.0	20.2	94.9	100 - 120		
	18	1.0	2.3	35	8.3	61.9	3.8	16.4	74.8	7.2	64.4	3.8	17.0	77.3	90 - 105	255 - 295	
				40	9.0	67.6	3.8	17.8	80.6	7.8	70.3	3.8	18.4	83.3	95 - 110		
				45	9.8	73.3	3.8	19.1	86.4	8.5	76.2	3.9	19.7	89.3	100 - 120		
				50	10.5	79.0	3.9	20.3	92.2	9.1	82.1	3.9	21.1	95.4	100 - 120		
70	12	0.5	1.2	OPERATION NOT RECOMMENDED											85 - 105	280 - 325	
				35	7.5	60.0	4.1	14.5	74.0	6.9	62.4	4.2	15.0	76.6			90 - 110
	15	0.7	1.6	40	8.2	65.9	4.2	15.8	80.1	7.6	68.6	4.2	16.3	83.0	95 - 120	270 - 315	
				45	9.0	71.9	4.2	17.1	86.2	8.3	74.8	4.2	17.6	89.3	100 - 125		
				50	9.7	77.8	4.2	18.4	92.3	9.0	81.0	4.3	18.9	95.6	100 - 105		
				35	7.6	60.8	4.0	15.1	74.5	7.0	63.1	4.0	15.6	76.9	95 - 110		
	18	1.0	2.3	40	8.3	66.8	4.1	16.5	80.6	7.7	69.4	4.1	17.0	83.3	100 - 120		
				45	9.1	72.8	4.1	17.8	86.8	8.4	75.7	4.1	18.4	89.7	100 - 125		
				50	9.9	78.8	4.1	19.1	92.9	9.1	81.9	4.1	19.8	96.1	100 - 125		
				OPERATION NOT RECOMMENDED											85 - 105		
	80	12	0.5	1.2	OPERATION NOT RECOMMENDED											85 - 105	315 - 365
					35	7.2	57.6	4.6	12.5	73.4	6.7	60.0	4.7	12.8	76.0		
40					8.0	64.3	4.7	13.8	80.2	7.4	66.9	4.7	14.2	83.0	95 - 115		
45					8.9	70.9	4.7	15.1	87.0	8.2	73.8	4.8	15.5	90.0	100 - 120		
15		0.7	1.6	35	7.3	58.4	4.5	12.9	73.8	6.7	60.7	4.5	13.4	76.1	90 - 105	305 - 355	
				40	8.1	65.1	4.6	14.3	80.6	7.5	67.7	4.6	14.8	83.3	95 - 110		
				45	9.0	71.8	4.6	15.7	87.5	8.3	74.7	4.6	16.2	90.4	100 - 120		
				50	9.8	78.6	4.6	17.0	94.4	9.1	81.6	4.6	17.6	97.5	105 - 125		
90		12	0.5	1.2	OPERATION NOT RECOMMENDED											90 - 105	340 - 390
					35	7.5	56.0	5.0	11.2	73.1	6.5	58.2	5.0	11.6	75.4		
		15	0.7	1.6	40	8.5	63.5	5.0	12.6	80.7	7.3	65.9	5.1	13.0	83.2	105 - 115	
					45	9.5	70.9	5.1	13.9	88.2	8.2	73.7	5.1	14.4	91.1	110 - 130	
	50				10.4	78.3	5.1	15.3	95.8	9.0	81.4	5.1	15.8	98.9			
	OPERATION NOT RECOMMENDED											95 - 110					
100	12	0.5	1.2	OPERATION NOT RECOMMENDED											95 - 110	370 - 430	
				35	7.2	53.7	5.5	9.8	72.4	6.2	55.8	5.5	10.1	74.6			100 - 115
	15	0.7	1.6	40	8.2	61.8	5.5	11.2	80.7	7.1	64.2	5.6	11.5	83.2	105 - 125		
				45	9.3	69.9	5.6	12.5	89.0	8.1	72.6	5.6	13.0	91.8	110 - 130		
				50	10.4	78.0	5.6	13.9	97.2	9.0	81.1	5.6	14.4	100.4			
				OPERATION NOT RECOMMENDED													

Note: dP pressure drops apply to standard coils, and cupro-nickel ground water coils have higher pressure drops.

GW 870 and GW 871 Heating Performance Data

GROUND				Hyd LWT °F	HYDRONIC FLOW - 16 GPM 2.9 PSIG dP, 6.7 FT dP					HYDRONIC FLOW - 20 GPM 4.0 PSIG dP, 9.2 FT dP					REFRIGERANT PRESSURE	
EWT °F	GPM	dP psig	dP ft		TEMP RISE	CAP kBTUh	PWR kW	COP	HE kBTUh	TEMP RISE	CAP kBTUh	PWR kW	COP	HE kBTUh	Suction Pressure	Head Pressure
25	20	1.2	2.8	115	7.6	60.4	6.8	2.6	37.2	6.1	60.6	6.6	2.7	38.0	55 - 75	390 - 420
				100	7.6	60.6	6.1	2.9	39.8	6.1	60.9	6.0	3.0	40.6		330 - 355
				85	7.6	60.9	5.4	3.3	42.5	6.1	61.1	5.3	3.4	43.1		268 - 295
				70	7.6	61.1	4.7	3.8	45.1	6.1	61.4	4.6	3.9	45.7		210 - 235
30	20	1.2	2.8	115	8.1	64.8	6.9	2.8	41.4	6.5	65.0	6.7	2.8	42.2	65 - 85	390 - 425
				100	8.1	65.1	6.1	3.1	44.2	6.5	65.4	6.0	3.2	45.0		335 - 360
				85	8.2	65.5	5.4	3.5	47.0	6.6	65.8	5.3	3.6	47.7		270 - 305
				70	8.2	65.9	4.7	4.1	49.9	6.6	66.1	4.6	4.2	50.5		210 - 235
35	20	1.2	2.8	115	8.6	69.1	6.9	2.9	45.6	6.9	69.4	6.7	3.0	46.4	70 - 90	390 - 430
				100	8.7	69.6	6.2	3.3	48.6	7.0	69.9	6.0	3.4	49.4		335 - 365
				85	8.8	70.1	5.4	3.8	51.6	7.0	70.4	5.3	3.9	52.3		270 - 310
				70	8.8	70.6	4.7	4.4	54.6	7.1	70.9	4.6	4.5	55.3		210 - 240
40	16	0.8	1.8	115	9.0	71.8	6.9	3.1	48.3	7.2	72.1	6.7	3.2	49.3	70 - 95	390 - 430
				100	9.0	72.4	6.1	3.5	51.5	7.3	72.7	6.0	3.6	52.4		330 - 370
				85	9.1	73.0	5.4	4.0	54.6	7.3	73.3	5.2	4.1	55.4		270 - 310
				70	9.2	73.6	4.6	4.7	57.8	7.4	73.9	4.5	4.8	58.5		200 - 250
	20	1.2	2.8	115	9.2	73.5	7.0	3.1	49.8	7.4	73.8	6.8	3.2	50.6	75 - 100	395 - 430
				100	9.3	74.1	6.2	3.5	53.0	7.4	74.4	6.0	3.6	53.8		335 - 370
				85	9.3	74.7	5.4	4.0	56.2	7.5	75.0	5.3	4.1	56.9		275 - 310
				70	9.4	75.3	4.7	4.7	59.4	7.6	75.6	4.6	4.9	60.1		205 - 250
45	12	0.5	1.2	115	9.2	73.7	6.8	3.2	50.4	7.4	74.0	6.7	3.3	51.3	65 - 95	390 - 430
				100	9.3	74.4	6.1	3.6	53.6	7.5	74.7	5.9	3.7	54.5		330 - 370
				85	9.4	75.1	5.3	4.1	56.9	7.5	75.4	5.2	4.3	57.8		270 - 310
				70	9.5	75.8	4.6	4.9	60.2	7.6	76.1	4.4	5.0	61.0		200 - 250
	16	0.8	1.8	115	9.5	76.1	6.9	3.2	52.4	7.7	77.1	6.7	3.4	54.1	70 - 100	395 - 430
				100	9.6	76.8	6.2	3.7	55.8	7.8	77.8	6.0	3.8	57.4		335 - 370
				85	9.7	77.5	5.4	4.2	59.1	7.9	78.5	5.2	4.4	60.7		275 - 310
				70	9.8	78.2	4.6	5.0	62.4	7.9	79.3	4.5	5.2	63.9		205 - 250
20	1.2	2.8	115	9.7	77.9	7.0	3.3	54.0	7.8	78.2	6.8	3.4	54.9	75 - 100	400 - 430	
			100	9.8	78.6	6.2	3.7	57.4	7.9	78.9	6.1	3.8	58.2		340 - 370	
			85	9.9	79.3	5.4	4.3	60.8	8.0	79.6	5.3	4.4	61.5		280 - 310	
			70	10.0	80.0	4.7	5.0	64.2	8.0	80.4	4.5	5.2	64.8		210 - 250	
50	12	0.5	1.2	115	9.7	77.9	6.9	3.3	54.3	7.8	78.2	6.7	3.4	55.3	75 - 100	395 - 430
				100	9.8	78.6	6.1	3.8	57.8	7.9	79.0	5.9	3.9	58.7		335 - 370
				85	9.9	79.4	5.3	4.4	61.3	8.0	79.8	5.2	4.5	62.1		270 - 310
				70	10.0	80.2	4.5	5.2	64.7	8.1	80.6	4.4	5.3	65.5		200 - 250
	16	0.8	1.8	115	10.0	80.3	7.0	3.4	56.5	8.1	81.4	6.8	3.5	58.3	80 - 105	400 - 430
				100	10.1	81.1	6.2	3.8	60.0	8.2	82.3	6.0	4.0	61.7		340 - 370
				85	10.2	82.0	5.4	4.5	63.6	8.3	83.1	5.2	4.6	65.2		275 - 310
				70	10.3	82.8	4.6	5.3	67.1	8.4	83.9	4.5	5.5	68.7		205 - 250
20	1.2	2.8	115	10.3	82.3	7.1	3.4	58.2	8.3	82.6	6.9	3.5	59.1	85 - 105	405 - 430	
			100	10.4	83.1	6.2	3.9	61.8	8.3	83.4	6.1	4.0	62.6		345 - 370	
			85	10.5	83.9	5.4	4.5	65.3	8.4	84.3	5.3	4.6	66.1		280 - 310	
			70	10.6	84.8	4.6	5.3	68.9	8.5	85.1	4.5	5.5	69.6		210 - 250	
55	12	0.5	1.2	115	10.2	82.0	6.9	3.5	58.3	8.2	82.3	6.8	3.6	59.3	85 - 115	400 - 435
				100	10.4	82.9	6.1	4.0	61.9	8.3	83.2	6.0	4.1	62.9		340 - 375
				85	10.5	83.8	5.3	4.6	65.6	8.4	84.2	5.2	4.8	66.5		270 - 315
				70	10.6	84.7	4.5	5.5	69.2	8.5	85.1	4.4	5.7	70.0		200 - 255
	16	0.8	1.8	115	10.6	84.6	7.0	3.5	60.6	8.6	85.8	6.8	3.7	62.4	90 - 120	405 - 435
				100	10.7	85.5	6.2	4.0	64.3	8.7	86.7	6.0	4.2	66.1		345 - 375
				85	10.8	86.5	5.4	4.7	68.0	8.8	87.7	5.3	4.9	69.7		275 - 315
				70	10.9	87.4	4.6	5.6	71.7	8.9	88.6	4.5	5.8	73.4		205 - 255
20	1.2	2.8	115	OPERATION NOT RECOMMENDED					8.7	87.0	6.9	3.7	63.3	95 - 125	410 - 435	
			100	OPERATION NOT RECOMMENDED					8.8	87.9	6.1	4.2	67.0		345 - 375	
			85	OPERATION NOT RECOMMENDED					8.9	88.9	5.3	4.9	70.7		280 - 315	
			70	OPERATION NOT RECOMMENDED					9.0	89.8	4.5	5.8	74.4		210 - 255	
60	12	0.5	1.2	115	10.8	86.1	7.0	3.6	62.3	8.6	86.5	6.8	3.7	63.3	95 - 130	405 - 435
				100	10.9	87.1	6.2	4.1	66.1	8.8	87.5	6.0	4.3	67.0		345 - 375
				85	11.0	88.2	5.3	4.8	69.9	8.9	88.5	5.2	5.0	70.8		280 - 315
				70	11.1	89.2	4.5	5.8	73.7	9.0	89.6	4.4	6.0	74.6		210 - 255
	16	0.8	1.8	115	OPERATION NOT RECOMMENDED					9.0	90.1	6.9	3.8	66.6	110 - 135	410 - 435
				100	OPERATION NOT RECOMMENDED					9.1	91.2	6.1	4.4	70.4		350 - 375
				85	OPERATION NOT RECOMMENDED					9.2	92.2	5.3	5.1	74.3		285 - 315
				70	OPERATION NOT RECOMMENDED					9.3	93.3	4.5	6.1	78.1		215 - 255
70	12	0.5	1.2	115	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED					120 - 150	417 - 445
				100	OPERATION NOT RECOMMENDED					9.5	94.8	6.9	4.0	71.3		353 - 381
				85	OPERATION NOT RECOMMENDED					9.6	96.0	6.1	4.6	75.4		286 - 323
				70	OPERATION NOT RECOMMENDED					9.7	97.3	5.2	5.5	79.5		220 - 270
20	0.8	1.8	OPERATION NOT RECOMMENDED													
			1.2	2.8	OPERATION NOT RECOMMENDED											

Note: dP pressure drops apply to standard coils, and cupro-nickel ground water coils have higher pressure drops.

GW 870 and GW 871 Cooling Performance Data

GROUND				Hyd LWT °F	HYDRONIC FLOW - 16 GPM 2.9 PSIG dP, 6.7 FT dP					HYDRONIC FLOW - 20 GPM 4.0 PSIG dP, 9.2 FT dP					REFRIGERANT PRESSURE					
EWT °F	GPM	dP psig	dP ft		TEMP DROP	CAP kBTU/h	PWR kW	EER	HR kBTU/h	TEMP DROP	CAP kBTU/h	PWR kW	EER	HR kBTU/h	Suction Pressure	Head Pressure				
50	12	0.5	1.2	35	9.7	78.0	4.0	19.6	91.6	8.1	81.2	4.0	20.2	94.9	80 - 100	220 - 260				
				40	9.9	78.9	4.1	19.4	92.8	8.2	82.1	4.1	20.0	96.1	85 - 105					
				45	10.0	79.8	4.2	19.2	93.9	8.3	83.0	4.2	19.8	97.4	90 - 110					
				50	10.1	80.7	4.2	19.0	95.1	8.4	84.0	4.3	19.6	98.6	95 - 115					
	16	0.8	1.8	35	9.9	79.0	3.9	20.5	92.2	8.2	82.3	3.9	21.1	95.6	80 - 100	210 - 250				
				40	10.0	79.9	3.9	20.3	93.4	8.3	83.2	4.0	20.9	96.8	85 - 105					
				45	10.1	80.8	4.0	20.1	94.6	8.4	84.2	4.1	20.7	98.0	90 - 110					
				50	10.2	81.7	4.1	19.9	95.8	8.5	85.1	4.1	20.5	99.3	95 - 115					
	20	1.2	2.8	35	10.0	80.1	3.8	21.3	92.9	8.3	83.2	3.8	22.0	96.1	85 - 100	200 - 240				
				40	10.1	81.0	3.8	21.1	94.1	8.4	84.2	3.9	21.8	97.3	90 - 105					
				45	10.2	81.9	3.9	20.9	95.3	8.5	85.1	3.9	21.6	98.6	95 - 110					
				50	10.4	82.8	4.0	20.7	96.5	8.6	86.1	4.0	21.4	99.8	100 - 115					
60	12	0.5	1.2	35	9.4	75.4	4.4	17.1	90.4	7.8	78.5	4.5	17.6	93.7	80 - 100	255 - 295				
				40	9.6	76.6	4.5	16.9	92.0	8.0	79.7	4.6	17.5	95.3	90 - 110					
				45	9.7	77.8	4.6	16.8	93.6	8.1	81.0	4.7	17.4	97.0	90 - 115					
				50	9.9	79.1	4.7	16.7	95.2	8.2	82.3	4.8	17.2	98.6	95 - 120					
	16	0.8	1.8	35	9.5	76.4	4.3	17.8	91.0	8.0	79.5	4.3	18.4	94.3	80 - 110	245 - 285				
				40	9.7	77.6	4.4	17.7	92.6	8.1	80.8	4.4	18.3	95.9	90 - 110					
				45	9.9	78.9	4.5	17.6	94.2	8.2	82.1	4.5	18.2	97.6	90 - 115					
				50	10.0	80.1	4.6	17.5	95.8	8.3	83.4	4.6	18.0	99.2	95 - 125					
	20	1.2	2.8	35	9.7	77.4	4.2	18.5	91.6	8.0	80.4	4.2	19.2	94.7	85 - 100	235 - 275				
				40	9.8	78.7	4.3	18.4	93.2	8.2	81.7	4.3	19.1	96.4	95 - 110					
				45	10.0	79.9	4.4	18.3	94.8	8.3	83.1	4.4	19.0	98.0	95 - 115					
				50	10.2	81.2	4.5	18.2	96.4	8.4	84.4	4.5	18.8	99.7	100 - 125					
65	12	0.5	1.2	35	9.3	74.0	4.6	16.0	89.9	7.7	77.1	4.7	16.5	93.1	85 - 105	275 - 315				
				40	9.4	75.5	4.7	15.9	91.7	7.9	78.6	4.8	16.4	94.9	90 - 110					
				45	9.6	76.9	4.9	15.8	93.5	8.0	80.0	4.9	16.3	96.8	95 - 120					
				50	9.8	78.3	5.0	15.8	95.2	8.2	81.5	5.0	16.2	98.6	95 - 120					
	16	0.8	1.8	35	9.4	75.0	4.5	16.7	90.4	7.8	78.1	4.5	17.2	93.6	85 - 105	265 - 305				
				40	9.6	76.5	4.6	16.6	92.2	8.0	79.6	4.6	17.1	95.5	90 - 110					
				45	9.7	77.9	4.7	16.6	94.0	8.1	81.1	4.8	17.1	97.3	95 - 120					
				50	9.9	79.3	4.8	16.5	95.8	8.3	82.6	4.9	17.0	99.2	100 - 120					
	20	1.2	2.8	35	9.5	76.0	4.4	17.4	91.0	7.9	79.0	4.4	18.0	94.0	90 - 105	255 - 295				
				40	9.7	77.5	4.5	17.3	92.8	8.1	80.5	4.5	17.9	95.9	95 - 110					
				45	9.9	78.9	4.6	17.2	94.6	8.2	82.0	4.6	17.8	97.7	100 - 120					
				50	10.0	80.4	4.7	17.1	96.4	8.4	83.5	4.7	17.7	99.6	100 - 120					
70	12	0.5	1.2	OPERATION NOT RECOMMENDED																
				16	0.8	1.8	35	9.2	73.7	4.7	15.7	89.8	7.7	76.7	4.7	16.2	92.9	85 - 105	280 - 325	
							40	9.4	75.3	4.8	15.6	91.8	7.8	78.4	4.9	16.1	95.0	90 - 110		
							45	9.6	76.9	4.9	15.6	93.8	8.0	80.1	5.0	16.1	97.1	95 - 120		
	50	9.8	78.5				5.0	15.6	95.8	8.2	81.8	5.1	16.0	99.2	100 - 125					
	20	1.2	2.8	35	9.3	74.7	4.6	16.3	90.3	7.8	77.6	4.6	16.9	93.3	90 - 105	270 - 315				
				40	9.5	76.3	4.7	16.3	92.3	7.9	79.3	4.7	16.8	95.4	95 - 110					
				45	9.7	78.0	4.8	16.2	94.4	8.1	81.0	4.8	16.8	97.5	100 - 120					
				50	9.9	79.6	4.9	16.2	96.4	8.3	82.7	4.9	16.7	99.5	100 - 125					
	80	12	0.5	1.2	OPERATION NOT RECOMMENDED															
					16	0.8	1.8	35	8.9	71.1	5.1	13.9	88.5	7.4	74.0	5.2	14.3	91.6	85 - 105	315 - 365
								40	9.1	73.0	5.3	13.9	90.9	7.6	76.0	5.3	14.3	94.1	90 - 110	
45								9.4	75.0	5.4	13.9	93.4	7.8	78.1	5.4	14.4	96.6	95 - 115		
50		9.6	76.9	5.5				14.0	95.8	8.0	80.1	5.6	14.4	99.1	100 - 120					
20		1.2	2.8	35	9.0	72.0	5.0	14.4	89.0	7.5	74.8	5.0	14.9	91.9	90 - 105	305 - 355				
				40	9.2	74.0	5.1	14.4	91.5	7.7	76.9	5.1	15.0	94.4	95 - 110					
				45	9.5	76.0	5.2	14.5	93.9	7.9	78.9	5.3	15.0	96.9	100 - 120					
				50	9.7	78.0	5.4	14.5	96.3	8.1	81.0	5.4	15.0	99.4	105 - 125					
90		12	0.5	1.2	OPERATION NOT RECOMMENDED															
					16	0.8	1.8	OPERATION NOT RECOMMENDED												
		20	1.2	2.8				35	8.7	69.3	5.4	12.8	87.7	7.2	72.0	5.4	13.3	90.5	90 - 105	340 - 390
	40				9.0	71.6	5.5	12.9	90.6	7.4	74.4	5.6	13.4	93.5	95 - 110					
	45				9.2	74.0	5.7	13.0	93.4	7.7	76.9	5.7	13.5	96.4	105 - 115					
	50				9.5	76.3	5.8	13.1	96.2	7.9	79.3	5.9	13.5	99.3	110 - 130					
100	12	0.5	1.2	OPERATION NOT RECOMMENDED																
				16	0.8	1.8	OPERATION NOT RECOMMENDED													
	20	1.2	2.8				35	8.3	66.6	5.8	11.5	86.5	6.9	69.2	5.8	11.9	89.1	95 - 110	370 - 430	
				40	8.7	69.3	6.0	11.6	89.7	7.2	72.0	6.0	12.0	92.5	100 - 115					
				45	9.0	72.0	6.1	11.7	92.9	7.5	74.8	6.2	12.2	95.8	105 - 125					
				50	9.3	74.7	6.3	11.9	96.2	7.8	77.6	6.3	12.3	99.2	110 - 130					

Note: dP pressure drops apply to standard coils, and cupro-nickel ground water coils have higher pressure drops.

GW 1100 and GW 1101 Heating Full Load Performance Data

GROUND				Hyd LWT °F	HYDRONIC FLOW - 16 GPM 3.4 PSIG dP, 7.9 FT dP					HYDRONIC FLOW - 20 GPM 4.0 PSIG dP, 9.2 FT dP					REFRIGERANT PRESSURE		
EWT °F	GPM	dP psig	dP ft		TEMP RISE	CAP kBTU/h	PWR kW	COP	HE kBTU/h	TEMP RISE	CAP kBTU/h	PWR kW	COP	HE kBTU/h	Suction Pressure	Head Pressure	
25	30	2.6	6.0	115	11.4	91.3	10.3	2.6	56.3	9.2	91.7	10.0	2.7	57.5	55 - 75	390 - 420	
				100	11.7	93.2	8.8	3.1	63.3	9.4	93.6	8.6	3.2	64.4		330 - 365	
				85	11.9	95.2	7.3	3.8	70.3	9.6	95.5	7.1	3.9	71.3		268 - 295	
				70	12.1	97.1	5.8	4.9	77.4	9.7	97.5	5.6	5.1	78.2		210 - 235	
30	30	2.6	6.0	115	11.9	94.9	10.3	2.7	59.9	9.5	95.3	10.0	2.8	61.1	65 - 85	390 - 425	
				100	12.1	97.0	8.8	3.2	67.1	9.7	97.3	8.6	3.3	68.1		335 - 360	
				85	12.4	99.0	7.3	4.0	74.2	9.9	99.4	7.1	4.1	75.2		270 - 305	
				70	12.6	101.1	5.8	5.1	81.4	10.2	101.5	5.6	5.3	82.2		210 - 235	
35	30	2.6	6.0	115	12.3	98.5	10.2	2.8	63.5	9.9	98.8	10.0	2.9	64.7	70 - 90	390 - 430	
				100	12.6	100.7	8.8	3.4	70.8	10.1	101.1	8.5	3.5	71.9		335 - 365	
				85	12.9	102.9	7.3	4.1	78.1	10.3	103.3	7.1	4.3	79.1		270 - 310	
				70	13.1	105.1	5.8	5.3	85.4	10.6	105.5	5.6	5.5	86.3		210 - 240	
40	24	1.7	3.9	115	12.5	99.6	10.1	2.9	65.1	10.0	100.1	9.9	3.0	66.5	70 - 95	390 - 430	
				100	12.7	101.9	8.7	3.5	72.4	10.2	102.4	8.4	3.6	73.6		330 - 370	
				85	13.0	104.3	7.2	4.2	79.7	10.5	104.7	7.0	4.4	80.8		270 - 310	
				70	13.3	106.6	5.7	5.5	87.0	10.7	107.0	5.6	5.6	88.0		200 - 250	
	30	2.6	6.0	6.0	115	12.8	102.0	10.2	2.9	67.1	10.2	102.4	10.0	3.0	68.3	75 - 100	395 - 430
					100	13.0	104.4	8.7	3.5	74.6	10.5	104.8	8.5	3.6	75.7		335 - 370
					85	13.3	106.8	7.3	4.3	82.0	10.7	107.2	7.1	4.4	83.0		275 - 310
					70	13.6	109.1	5.8	5.5	89.4	11.0	109.6	5.6	5.7	90.3		205 - 250
45	20	1.2	2.8	115	12.5	99.9	10.0	2.9	65.9	10.0	100.4	9.7	3.0	67.2	65 - 95	390 - 430	
				100	12.8	102.3	8.5	3.5	73.2	10.3	102.8	8.3	3.6	74.4		330 - 370	
				85	13.1	104.7	7.1	4.3	80.5	10.5	105.2	6.9	4.5	81.6		270 - 310	
				70	13.4	107.1	5.7	5.6	87.8	10.8	107.6	5.5	5.7	88.8		200 - 250	
	24	1.7	3.9	3.9	115	12.9	103.1	10.1	3.0	68.6	10.5	104.5	9.8	3.1	71.0	70 - 100	395 - 430
					100	13.2	105.6	8.7	3.6	76.1	10.7	107.0	8.4	3.7	78.3		335 - 370
					85	13.5	108.0	7.2	4.4	83.5	11.0	109.5	7.0	4.6	85.7		275 - 310
					70	13.8	110.5	5.7	5.7	91.0	11.2	112.0	5.6	5.9	93.0		205 - 250
	30	2.6	6.0	6.0	115	13.2	105.6	10.2	3.0	70.7	10.6	106.0	10.0	3.1	72.0	75 - 100	400 - 430
					100	13.5	108.1	8.7	3.6	78.3	10.9	108.5	8.5	3.7	79.4		340 - 370
					85	13.8	110.6	7.3	4.5	85.9	11.1	111.1	7.1	4.6	86.9		280 - 310
					70	14.1	113.1	5.8	5.7	93.4	11.4	113.6	5.6	5.9	94.3		210 - 250
50	20	1.2	2.8	115	12.9	103.3	10.0	3.0	69.3	10.4	103.8	9.7	3.1	70.6	75 - 100	395 - 430	
				100	13.2	105.8	8.5	3.6	76.7	10.6	106.3	8.3	3.8	78.0		335 - 370	
				85	13.5	108.4	7.1	4.5	84.2	10.9	108.8	6.9	4.6	85.3		270 - 310	
				70	13.9	110.9	5.7	5.7	91.6	11.1	111.4	5.5	5.9	92.6		200 - 250	
	24	1.7	3.9	3.9	115	13.3	106.6	10.1	3.1	72.1	10.8	108.1	9.8	3.2	74.5	80 - 105	400 - 430
					100	13.7	109.2	8.6	3.7	79.7	11.1	110.7	8.4	3.9	82.0		340 - 370
					85	14.0	111.8	7.2	4.6	87.3	11.3	113.4	7.0	4.8	89.5		275 - 310
					70	14.3	114.4	5.7	5.9	94.9	11.6	116.0	5.6	6.1	97.0		205 - 250
	30	2.6	6.0	6.0	115	13.6	109.2	10.2	3.1	74.3	11.0	109.6	10.0	3.2	75.6	85 - 105	405 - 430
					100	14.0	111.8	8.7	3.8	82.0	11.2	112.3	8.5	3.9	83.2		345 - 370
					85	14.3	114.5	7.3	4.6	89.7	11.5	115.0	7.1	4.8	90.8		280 - 310
					70	14.6	117.2	5.8	5.9	97.4	11.8	117.6	5.6	6.1	98.4		210 - 250
55	20	1.2	2.8	115	13.3	106.7	10.0	3.1	72.7	10.7	107.1	9.7	3.2	74.1	85 - 115	400 - 435	
				100	13.7	109.4	8.5	3.8	80.3	11.0	109.8	8.3	3.9	81.5		340 - 375	
				85	14.0	112.0	7.1	4.6	87.8	11.3	112.5	6.9	4.8	89.0		270 - 315	
				70	14.3	114.7	5.7	5.9	95.4	11.5	115.2	5.5	6.1	96.4		200 - 255	
	24	1.7	3.9	3.9	115	13.8	110.1	10.1	3.2	75.6	11.2	111.6	9.8	3.3	78.1	90 - 120	405 - 435
					100	14.1	112.8	8.6	3.8	83.4	11.4	114.4	8.4	4.0	85.7		345 - 375
					85	14.4	115.6	7.2	4.7	91.1	11.7	117.2	7.0	4.9	93.4		275 - 315
					70	14.8	118.3	5.7	6.1	98.8	12.0	120.0	5.6	6.3	101.0		205 - 255
	30	2.6	6.0	6.0	115	OPERATION NOT RECOMMENDED					11.3	113.2	10.0	3.3	79.2	95 - 125	410 - 435
					100	OPERATION NOT RECOMMENDED					11.6	116.0	8.5	4.0	86.9		345 - 375
					85	OPERATION NOT RECOMMENDED					11.9	118.8	7.1	4.9	94.7		280 - 315
					70	OPERATION NOT RECOMMENDED					12.2	121.7	5.6	6.3	102.4		210 - 255
60	20	1.2	2.8	115	13.8	110.1	10.0	3.2	76.1	11.1	110.5	9.7	3.3	77.5	95 - 130	405 - 435	
				100	14.1	112.9	8.5	3.9	83.8	11.3	113.4	8.3	4.0	85.1		345 - 375	
				85	14.5	115.7	7.1	4.8	91.5	11.6	116.2	6.9	4.9	92.7		280 - 315	
				70	14.8	118.5	5.7	6.1	99.2	11.9	119.0	5.5	6.3	100.2		210 - 255	
	24	1.7	3.9	3.9	115	OPERATION NOT RECOMMENDED					11.5	115.1	9.8	3.4	81.7	110 - 135	410 - 435
					100	OPERATION NOT RECOMMENDED					11.8	118.1	8.4	4.1	89.5		350 - 375
					85	OPERATION NOT RECOMMENDED					12.1	121.0	7.0	5.1	97.2		285 - 315
					70	OPERATION NOT RECOMMENDED					12.4	124.0	5.6	6.5	105.0		215 - 255
70	20	1.2	2.8	115	OPERATION NOT RECOMMENDED					11.7	117.3	9.7	3.6	84.4	120 - 150	417 - 445	
				100	OPERATION NOT RECOMMENDED					12.0	120.4	8.3	4.3	92.2		353 - 381	
				85	OPERATION NOT RECOMMENDED					12.4	123.5	6.9	5.3	100.0		286 - 323	
				70	OPERATION NOT RECOMMENDED					12.7	126.6	5.5	6.8	107.9		220 - 270	
70	24	1.7	3.9	115	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED							
				100	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED							
70	30	2.6	6.0	115	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED							
				100	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED							

Note: dP pressure drops apply to standard coils, and cupro-nickel ground water coils have higher pressure drops.

GW 1100 and GW 1101 Cooling Full Load Performance Data

GROUND				Hyd LWT °F	HYDRONIC FLOW - 16 GPM 3.4 PSIG dP, 7.9 FT dP					HYDRONIC FLOW - 20 GPM 4.0 PSIG dP, 9.2 FT dP					REFRIGERANT PRESSURE					
EWT °F	GPM	dP psig	dP ft		TEMP DROP	CAP kBTUh	PWR kW	EER	HR kBTUh	TEMP DROP	CAP kBTUh	PWR kW	EER	HR kBTUh	Suction Pressure	Head Pressure				
50	20	1.2	2.8	35	12.2	97.8	5.7	17.3	117.1	10.2	101.8	5.7	17.8	121.3	80 - 100	220 - 260				
				40	12.8	102.6	5.7	18.1	121.9	10.7	106.8	5.7	18.6	126.3	85 - 105					
				45	13.4	107.4	5.7	18.9	126.8	11.2	111.8	5.7	19.5	131.4	90 - 110					
				50	14.0	112.2	5.7	19.7	131.6	11.7	116.8	5.8	20.3	136.4	95 - 115					
	24	1.7	3.9	35	12.4	99.1	5.5	18.1	117.8	10.3	103.2	5.5	18.6	122.1	80 - 100	210 - 250				
				40	13.0	103.9	5.5	18.9	122.7	10.8	108.2	5.6	19.5	127.2	85 - 105					
				45	13.6	108.8	5.5	19.8	127.6	11.3	113.3	5.6	20.4	132.2	90 - 110					
				50	14.2	113.7	5.5	20.6	132.5	11.8	118.3	5.6	21.2	137.3	95 - 115					
	30	2.6	6.0	35	12.6	100.4	5.3	18.8	118.7	10.4	104.3	5.4	19.4	122.6	85 - 100	200 - 240				
				40	13.2	105.3	5.4	19.7	123.6	10.9	109.4	5.4	20.3	127.8	90 - 105					
				45	13.8	110.2	5.4	20.5	128.6	11.5	114.6	5.4	21.3	132.9	95 - 110					
				50	14.4	115.2	5.4	21.4	133.5	12.0	119.7	5.4	22.2	138.1	100 - 115					
60	20	1.2	2.8	35	11.6	92.8	6.3	14.7	114.3	9.7	96.6	6.4	15.1	118.3	80 - 100	255 - 295				
				40	12.3	98.5	6.4	15.3	120.4	10.3	102.5	6.5	15.8	124.6	90 - 110					
				45	13.0	104.2	6.5	16.0	126.4	10.8	108.5	6.6	16.5	130.9	90 - 115					
				50	13.7	109.9	6.6	16.6	132.5	11.4	114.4	6.7	17.1	137.2	95 - 120					
	24	1.7	3.9	35	11.8	94.0	6.1	15.4	114.9	9.8	97.9	6.2	15.8	119.0	80 - 110	245 - 285				
				40	12.5	99.8	6.2	16.0	121.0	10.4	103.9	6.3	16.5	125.3	90 - 110					
				45	13.2	105.6	6.3	16.7	127.1	11.0	109.9	6.4	17.2	131.7	90 - 115					
				50	13.9	111.4	6.4	17.3	133.3	11.6	115.9	6.5	17.9	138.1	95 - 125					
	30	2.6	6.0	35	11.9	95.2	6.0	16.0	115.6	9.9	99.0	6.0	16.5	119.4	85 - 100	235 - 275				
				40	12.6	101.1	6.1	16.7	121.8	10.5	105.1	6.1	17.3	125.8	95 - 110					
				45	13.4	107.0	6.2	17.4	128.0	11.1	111.2	6.2	18.0	132.3	95 - 115					
				50	14.1	112.8	6.3	18.0	134.2	11.7	117.2	6.3	18.7	138.7	100 - 125					
65	20	1.2	2.8	35	11.3	90.2	6.6	13.6	112.9	9.4	94.0	6.7	14.0	116.9	85 - 105	275 - 315				
				40	12.1	96.4	6.8	14.2	119.6	10.0	100.4	6.9	14.6	123.8	90 - 110					
				45	12.8	102.6	6.9	14.8	126.3	10.7	106.8	7.0	15.2	130.7	95 - 120					
				50	13.6	108.8	7.1	15.3	133.0	11.3	113.2	7.2	15.8	137.7	95 - 120					
	24	1.7	3.9	35	11.4	91.5	6.4	14.2	113.4	9.5	95.2	6.5	14.6	117.4	85 - 105	265 - 305				
				40	12.2	97.7	6.6	14.8	120.2	10.2	101.7	6.7	15.3	124.4	90 - 110					
				45	13.0	104.0	6.7	15.4	126.9	10.8	108.2	6.8	15.9	131.4	95 - 120					
				50	13.8	110.2	6.9	16.0	133.7	11.5	114.7	6.9	16.5	138.4	100 - 120					
	30	2.6	6.0	35	11.6	92.7	6.3	14.8	114.1	9.6	96.3	6.3	15.3	117.8	90 - 105	255 - 295				
				40	12.4	99.0	6.4	15.4	120.9	10.3	102.9	6.4	16.0	124.9	95 - 110					
				45	13.2	105.3	6.6	16.1	127.7	10.9	109.5	6.6	16.6	131.9	100 - 120					
				50	14.0	111.7	6.7	16.7	134.5	11.6	116.0	6.7	17.2	139.0	100 - 120					
70	20	1.2	2.8	OPERATION NOT RECOMMENDED																
				35	11.1	88.9	6.8	13.2	112.0	9.3	92.6	6.8	13.6	115.8	85 - 105	280 - 325				
				40	12.0	95.6	6.9	13.8	119.3	10.0	99.6	7.0	14.2	123.5	90 - 110					
				45	12.8	102.3	7.1	14.3	126.7	10.7	106.5	7.2	14.8	131.1	95 - 120					
	50	13.6	109.1	7.3	14.9	134.1	11.4	113.5	7.4	15.3	138.8	100 - 125								
	24	1.7	3.9	35	11.3	90.1	6.6	13.7	112.6	9.4	93.6	6.6	14.2	116.2	90 - 105	270 - 315				
				40	12.1	96.9	6.8	14.3	120.0	10.1	100.7	6.8	14.8	123.9	95 - 110					
				45	13.0	103.7	7.0	14.9	127.4	10.8	107.8	7.0	15.4	131.6	100 - 120					
				50	13.8	110.5	7.1	15.5	134.9	11.5	114.8	7.2	16.0	139.3	100 - 125					
	80	20	1.2	2.8	OPERATION NOT RECOMMENDED															
					35	10.5	83.8	7.4	11.3	109.0	8.7	87.3	7.5	11.7	112.7	85 - 105	315 - 365			
					40	11.4	91.5	7.7	11.9	117.6	9.5	95.2	7.7	12.3	121.7	90 - 110				
45					12.4	99.1	8.0	12.5	126.3	10.3	103.2	8.0	12.8	130.6	95 - 115					
50		13.3	106.8	8.2	13.0	134.9	11.1	111.1	8.3	13.4	139.5	100 - 120								
24		1.7	3.9	35	10.6	84.9	7.2	11.8	109.5	8.8	88.3	7.2	12.2	112.9	90 - 105	305 - 355				
				40	11.6	92.7	7.5	12.4	118.2	9.6	96.3	7.5	12.8	121.9	95 - 110					
				45	12.6	100.4	7.8	13.0	126.9	10.4	104.4	7.8	13.4	130.9	100 - 120					
				50	13.5	108.2	8.0	13.5	135.6	11.2	112.4	8.1	13.9	139.9	105 - 125					
90		20	1.2	2.8	OPERATION NOT RECOMMENDED															
					35	10.0	79.8	7.8	10.2	106.5	8.3	82.9	7.9	10.6	109.7	90 - 105	340 - 390			
					40	11.1	88.5	8.2	10.8	116.4	9.2	91.9	8.2	11.2	120.0	95 - 110				
	45				12.1	97.2	8.6	11.4	126.3	10.1	101.0	8.6	11.8	130.2	105 - 115					
	50	13.2	105.8	8.9	11.9	136.3	11.0	110.0	9.0	12.3	140.5	110 - 130								
	24	1.7	3.9	OPERATION NOT RECOMMENDED																
				100	20	1.2	2.8	OPERATION NOT RECOMMENDED												
								35	9.3	74.6	8.4	8.8	103.4	7.8	77.5	8.5	9.2	106.4	95 - 110	370 - 430
								40	10.5	84.3	8.9	9.5	114.6	8.8	87.6	8.9	9.8	118.0	100 - 115	
	45	11.7	93.9					9.3	10.0	125.8	9.8	97.6	9.4	10.4	129.6	105 - 125				
	50	12.9	103.5		9.8	10.6	137.0	10.8	107.6	9.8	10.9	141.1	110 - 130							

Note: dP pressure drops apply to standard coils, and cupro-nickel ground water coils have higher pressure drops.

GW 1100 and GW 1101 Heating Part Load Performance Data

GROUND				Hyd LWT °F	HYDRONIC FLOW - 16 GPM 3.4 PSIG dP, 7.9 FT dP					HYDRONIC FLOW - 20 GPM 4.0 PSIG dP, 9.2 FT dP					REFRIGERANT PRESSURE		
EWT °F	GPM	dP psig	dP ft		TEMP RISE	CAP kBTU/h	PWR kW	COP	HE kBTU/h	TEMP RISE	CAP kBTU/h	PWR kW	COP	HE kBTU/h	Suction Pressure	Head Pressure	
25	30	2.6	6.0	115	5.7	45.5	4.6	2.9	29.8	4.6	45.7	4.5	3.0	30.3	65 - 85	375 - 400	
				100	5.7	46.0	4.0	3.4	32.4	4.6	46.1	3.9	3.5	32.9		310 - 335	
				85	5.8	46.4	3.3	4.1	35.0	4.7	46.6	3.3	4.2	35.4		240 - 265	
				70	5.9	46.9	2.7	5.1	37.6	4.7	47.1	2.7	5.2	38.0		180 - 210	
30	30	2.6	6.0	115	5.9	47.1	4.6	3.0	31.3	4.7	47.3	4.5	3.1	31.9	73 - 92	380 - 405	
				100	6.0	48.2	4.0	3.5	34.6	4.8	48.4	3.9	3.6	35.1		315 - 340	
				85	6.2	49.3	3.4	4.3	37.8	4.9	49.5	3.3	4.4	38.3		250 - 275	
				70	6.3	50.4	2.7	5.4	41.0	5.1	50.6	2.7	5.5	41.5		190 - 215	
35	30	2.6	6.0	115	6.1	48.7	4.6	3.1	32.9	4.9	48.9	4.5	3.2	33.4	80 - 100	380 - 405	
				100	6.3	50.4	4.0	3.7	36.7	5.1	50.6	3.9	3.8	37.3		320 - 345	
				85	6.5	52.2	3.4	4.5	40.6	5.2	52.4	3.3	4.6	41.1		250 - 275	
				70	6.7	53.9	2.8	5.7	44.5	5.4	54.1	2.7	5.9	44.9		190 - 215	
40	24	1.7	3.9	115	6.1	49.1	4.6	3.1	33.4	4.9	49.3	4.5	3.2	34.0	80 - 105	380 - 405	
				100	6.4	51.4	4.0	3.8	37.8	5.2	51.7	3.9	3.9	38.4		320 - 345	
				85	6.7	53.8	3.4	4.7	42.2	5.4	54.0	3.3	4.8	42.8		255 - 280	
				70	7.0	56.1	2.8	5.9	46.7	5.6	56.4	2.7	6.1	47.2		190 - 215	
	30	2.6	6.0	6.0	115	6.3	50.3	4.7	3.2	34.4	5.0	50.5	4.5	3.3	35.0	85 - 105	380 - 405
					100	6.6	52.7	4.0	3.8	38.9	5.3	52.9	3.9	3.9	39.4		320 - 345
					85	6.9	55.1	3.4	4.7	43.4	5.5	55.3	3.3	4.9	43.9		255 - 280
					70	7.2	57.5	2.8	6.0	47.9	5.8	57.7	2.7	6.2	48.4		190 - 215
45	20	1.2	2.8	115	6.1	49.1	4.6	3.2	33.5	4.9	49.3	4.4	3.3	34.1	80 - 107	380 - 410	
				100	6.5	52.0	4.0	3.8	38.4	5.2	52.2	3.9	4.0	39.0		315 - 345	
				85	6.9	54.8	3.4	4.8	43.4	5.5	55.1	3.3	4.9	43.9		255 - 285	
				70	7.2	57.7	2.8	6.1	48.3	5.8	58.0	2.7	6.3	48.8		190 - 210	
	24	1.7	3.9	3.9	115	6.3	50.6	4.6	3.2	34.9	5.1	51.3	4.5	3.3	36.0	85 - 112	380 - 410
					100	6.7	53.6	4.0	3.9	39.9	5.4	54.4	3.9	4.1	41.0		315 - 345
					85	7.1	56.6	3.4	4.9	45.0	5.7	57.4	3.3	5.1	46.1		255 - 285
					70	7.4	59.6	2.8	6.2	50.0	6.0	60.4	2.7	6.5	51.1		190 - 210
	30	2.6	6.0	6.0	115	6.5	51.9	4.7	3.3	35.9	5.2	52.1	4.6	3.3	36.5	90 - 112	385 - 410
					100	6.9	54.9	4.1	4.0	41.1	5.5	55.1	4.0	4.1	41.6		320 - 345
					85	7.2	57.9	3.4	4.9	46.2	5.8	58.2	3.4	5.1	46.7		260 - 285
					70	7.6	61.0	2.8	6.3	51.4	6.1	61.2	2.8	6.5	51.8		195 - 210
50	20	1.2	2.8	115	6.3	50.6	4.6	3.2	35.0	5.1	50.8	4.5	3.3	35.6	88 - 115	380 - 415	
				100	6.8	54.1	4.0	4.0	40.5	5.4	54.3	3.9	4.1	41.1		320 - 350	
				85	7.2	57.6	3.4	5.0	46.0	5.8	57.8	3.3	5.2	46.6		255 - 285	
				70	7.6	61.1	2.8	6.4	51.6	6.1	61.3	2.7	6.6	52.1		195 - 225	
	24	1.7	3.9	3.9	115	6.5	52.2	4.6	3.3	36.4	5.3	52.9	4.5	3.4	37.5	93 - 120	385 - 415
					100	7.0	55.8	4.0	4.1	42.0	5.7	56.6	3.9	4.2	43.2		320 - 350
					85	7.4	59.4	3.4	5.1	47.7	6.0	60.2	3.3	5.3	48.9		255 - 285
					70	7.9	63.0	2.8	6.6	53.4	6.4	63.9	2.7	6.8	54.5		195 - 225
	30	2.6	6.0	6.0	115	6.7	53.4	4.7	3.3	37.5	5.4	53.7	4.6	3.4	38.1	98 - 120	390 - 415
					100	7.1	57.1	4.1	4.1	43.2	5.7	57.4	4.0	4.2	43.8		325 - 350
					85	7.6	60.8	3.5	5.2	49.0	6.1	61.1	3.4	5.3	49.5		260 - 285
					70	8.1	64.5	2.8	6.6	54.8	6.5	64.8	2.8	6.8	55.3		200 - 225
55	20	1.2	2.8	115	6.5	52.1	4.6	3.3	36.4	5.2	52.3	4.5	3.4	37.1	94 - 121	385 - 415	
				100	7.0	56.2	4.0	4.1	42.5	5.6	56.4	3.9	4.3	43.2		320 - 350	
				85	7.5	60.3	3.4	5.2	48.7	6.1	60.5	3.3	5.4	49.3		255 - 285	
				70	8.0	64.4	2.8	6.7	54.8	6.5	64.7	2.7	6.9	55.4		195 - 225	
	24	1.7	3.9	3.9	115	6.7	53.7	4.7	3.4	37.9	5.4	54.5	4.5	3.5	39.0	99 - 126	385 - 415
					100	7.2	58.0	4.0	4.2	44.2	5.9	58.8	3.9	4.4	45.3		320 - 350
					85	7.8	62.2	3.4	5.3	50.4	6.3	63.1	3.4	5.5	51.6		255 - 285
					70	8.3	66.4	2.8	6.8	56.7	6.7	67.4	2.8	7.1	57.9		195 - 225
	30	2.6	6.0	6.0	115	OPERATION NOT RECOMMENDED					5.5	55.2	4.6	3.5	39.6	95 - 125	410 - 435
					100	OPERATION NOT RECOMMENDED					6.0	59.6	4.0	4.4	46.0		345 - 375
					85	OPERATION NOT RECOMMENDED					6.4	64.0	3.4	5.5	52.4		280 - 315
					70	OPERATION NOT RECOMMENDED					6.8	68.3	2.8	7.1	58.7		210 - 255
60	20	1.2	2.8	115	6.7	53.6	4.6	3.4	37.9	5.4	53.8	4.5	3.5	38.5	105 - 132	385 - 415	
				100	7.3	58.3	4.0	4.3	44.6	5.9	58.6	3.9	4.4	45.2		325 - 350	
				85	7.9	63.0	3.4	5.4	51.3	6.3	63.3	3.3	5.6	51.9		260 - 285	
				70	8.5	67.7	2.8	7.0	58.1	6.8	68.0	2.8	7.2	58.6		195 - 225	
	24	1.7	3.9	3.9	115	OPERATION NOT RECOMMENDED					5.6	56.1	4.5	3.6	40.6	110 - 135	410 - 435
					100	OPERATION NOT RECOMMENDED					6.1	61.0	4.0	4.5	47.5		350 - 375
					85	OPERATION NOT RECOMMENDED					6.6	65.9	3.4	5.7	54.4		285 - 315
					70	OPERATION NOT RECOMMENDED					7.1	70.9	2.8	7.4	61.3		215 - 255
	70	20	1.2	2.8	115	OPERATION NOT RECOMMENDED					5.7	56.8	4.5	3.7	41.4	123 - 146	395 - 415
					100	OPERATION NOT RECOMMENDED					6.3	62.8	3.9	4.7	49.4		330 - 350
					85	OPERATION NOT RECOMMENDED					6.9	68.8	3.4	6.0	57.3		270 - 290
					70	OPERATION NOT RECOMMENDED					7.5	74.7	2.8	7.8	65.2		205 - 225
70	24	1.7	3.9	115	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED							
				100	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED							
70	30	2.6	6.0	115	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED							
				100	OPERATION NOT RECOMMENDED					OPERATION NOT RECOMMENDED							

Note: dP pressure drops apply to standard coils, and cupro-nickel ground water coils have higher pressure dro

GW 1100 and GW 1101 Cooling Part Load Performance Data

GROUND				Hyd LWT °F	HYDRONIC FLOW - 16 GPM 3.4 PSIG dP, 7.9 FT dP					HYDRONIC FLOW - 20 GPM 4.0 PSIG dP, 9.2 FT dP					REFRIGERANT PRESSURE					
EWT °F	GPM	dP psig	dP ft		TEMP DROP	CAP kBTUh	PWR kW	EER	HR kBTUh	TEMP DROP	CAP kBTUh	PWR kW	EER	HR kBTUh	Suction Pressure	Head Pressure				
50	20	1.2	2.8	35	5.9	47.3	2.6	18.5	56.0	4.9	49.2	2.6	19.0	58.0	100 - 115	190 - 220				
				40	6.6	53.0	2.5	21.2	61.5	5.5	55.1	2.5	21.8	63.8	110 - 125					
				45	7.3	58.7	2.4	24.0	67.0	6.1	61.1	2.5	24.8	69.5	120 - 135					
				50	8.0	64.4	2.4	27.0	72.5	6.7	67.0	2.4	27.8	75.2	130 - 145					
	24	1.7	3.9	35	6.0	47.9	2.5	19.3	56.4	5.0	49.9	2.5	19.9	58.4	97 - 115	185 - 215				
				40	6.7	53.7	2.4	22.2	61.9	5.6	55.9	2.4	22.8	64.2	105 - 125					
				45	7.4	59.5	2.4	25.1	67.5	6.2	61.9	2.4	25.9	70.1	118 - 135					
				50	8.2	65.2	2.3	28.3	73.1	6.8	67.9	2.3	29.1	75.9	125 - 145					
	30	2.6	6.0	35	6.1	48.5	2.4	20.1	56.8	5.0	50.4	2.4	20.8	58.7	95 - 105	180 - 210				
				40	6.8	54.4	2.4	23.0	62.4	5.7	56.5	2.4	23.9	64.6	105 - 115					
				45	7.5	60.3	2.3	26.1	68.1	6.3	62.6	2.3	27.0	70.5	115 - 130					
				50	8.3	66.1	2.3	29.4	73.8	6.9	68.7	2.3	30.4	76.4	125 - 140					
60	20	1.2	2.8	35	5.7	45.4	2.9	15.8	55.2	4.7	47.3	2.9	16.3	57.1	100 - 115	215 - 255				
				40	6.4	50.8	2.8	17.8	60.6	5.3	52.9	2.9	18.4	62.7	110 - 125					
				45	7.0	56.3	2.8	19.8	65.9	5.9	58.6	2.9	20.5	68.3	120 - 135					
				50	7.7	61.7	2.8	21.9	71.3	6.4	64.2	2.8	22.5	73.9	130 - 145					
	24	1.7	3.9	35	5.8	46.0	2.8	16.6	55.5	4.8	47.9	2.8	17.1	57.5	97 - 115	210 - 250				
				40	6.4	51.5	2.8	18.7	60.9	5.4	53.6	2.8	19.2	63.1	107 - 120					
				45	7.1	57.0	2.7	20.8	66.4	5.9	59.4	2.8	21.4	68.8	118 - 135					
				50	7.8	62.5	2.7	22.9	71.8	6.5	65.1	2.8	23.6	74.5	125 - 145					
	30	2.6	6.0	35	5.8	46.6	2.7	17.2	55.9	4.8	48.4	2.7	17.8	57.7	95 - 105	205 - 245				
				40	6.5	52.2	2.7	19.4	61.4	5.4	54.2	2.7	20.1	63.5	107 - 117					
				45	7.2	57.8	2.7	21.6	66.9	6.0	60.0	2.7	22.3	69.2	118 - 128					
				50	7.9	63.3	2.7	23.8	72.4	6.6	65.8	2.7	24.6	74.9	125 - 140					
65	20	1.2	2.8	35	5.6	44.5	3.0	14.7	54.8	4.6	46.3	3.0	15.2	56.7	100 - 120	240 - 270				
				40	6.2	49.8	3.0	16.4	60.1	5.2	51.8	3.1	17.0	62.2	112 - 130					
				45	6.9	55.0	3.0	18.2	65.4	5.7	57.3	3.1	18.7	67.8	123 - 140					
				50	7.5	60.3	3.0	19.9	70.7	6.3	62.8	3.1	20.5	73.3	130 - 145					
	24	1.7	3.9	35	5.6	45.1	2.9	15.4	55.0	4.7	46.9	3.0	15.9	57.0	95 - 115	235 - 265				
				40	6.3	50.4	2.9	17.2	60.4	5.2	52.5	3.0	17.7	62.6	110 - 125					
				45	7.0	55.8	2.9	19.0	65.8	5.8	58.1	3.0	19.6	68.2	120 - 135					
				50	7.6	61.1	2.9	20.8	71.2	6.4	63.7	3.0	21.4	73.8	125 - 145					
	30	2.6	6.0	35	5.7	45.7	2.9	16.0	55.4	4.7	47.5	2.9	16.6	57.2	95 - 108	230 - 260				
				40	6.4	51.1	2.9	17.9	60.8	5.3	53.1	2.9	18.5	62.9	107 - 117					
				45	7.1	56.5	2.9	19.7	66.3	5.9	58.7	2.9	20.4	68.5	118 - 128					
				50	7.7	62.0	2.9	21.6	71.7	6.4	64.4	2.9	22.4	74.2	125 - 140					
70	20	1.2	2.8	OPERATION NOT RECOMMENDED																
				24	1.7	3.9	35	5.5	44.1	3.1	14.4	54.6	4.6	45.9	3.1	14.8	56.5	100 - 115	250 - 285	
							40	6.2	49.3	3.1	15.9	59.9	5.1	51.4	3.1	16.4	62.1	108 - 120		
							45	6.8	54.6	3.1	17.5	65.2	5.7	56.8	3.2	18.0	67.6	120 - 135		
	50	7.5	59.8				3.2	19.0	70.5	6.2	62.2	3.2	19.5	73.1	130 - 145					
	30	2.6	6.0	35	5.6	44.7	3.0	14.9	54.9	4.6	46.5	3.0	15.4	56.7	98 - 110	245 - 280				
				40	6.2	50.0	3.0	16.5	60.3	5.2	51.9	3.0	17.1	62.5	108 - 118					
				45	6.9	55.3	3.0	18.1	65.7	5.7	57.4	3.1	18.8	68.3	119 - 129					
				50	7.6	60.6	3.1	19.7	71.1	6.3	62.9	3.1	20.4	74.0	130 - 140					
	80	20	1.2	2.8	OPERATION NOT RECOMMENDED															
					24	1.7	3.9	35	5.3	42.2	3.4	12.5	53.7	4.4	44.0	3.4	12.9	55.6	100 - 115	280 - 282
								40	5.9	47.2	3.4	13.7	58.9	4.9	49.1	3.5	14.1	61.0	110 - 125	
45								6.5	52.1	3.5	14.9	64.1	5.4	54.2	3.5	15.3	66.3	120 - 135		
50		7.1	57.0	3.6				16.0	69.2	5.9	59.4	3.6	16.4	71.7	130 - 145					
30		2.6	6.0	35	5.3	42.8	3.3	13.0	54.0	4.4	44.5	3.3	13.5	55.7	100 - 110	245 - 280				
				40	6.0	47.8	3.4	14.3	59.2	5.0	49.7	3.4	14.8	61.1	110 - 120					
				45	6.6	52.8	3.4	15.4	64.5	5.5	54.9	3.4	16.0	66.6	120 - 130					
				50	7.2	57.8	3.5	16.6	69.7	6.0	60.1	3.5	17.2	72.0	130 - 140					
90		20	1.2	2.8	OPERATION NOT RECOMMENDED															
					24	1.7	3.9	OPERATION NOT RECOMMENDED												
		30	2.6	6.0				35	5.1	40.9	3.6	11.4	53.1	4.2	42.5	3.6	11.8	54.7	100 - 110	310 - 350
	40				5.7	45.6	3.7	12.4	58.2	4.7	47.4	3.7	12.8	60.0	110 - 120					
	45				6.3	50.3	3.8	13.3	63.2	5.2	52.3	3.8	13.7	65.3	120 - 130					
	50				6.9	55.0	3.9	14.1	68.3	5.7	57.2	3.9	14.6	70.5	130 - 140					
100	20	1.2	2.8	OPERATION NOT RECOMMENDED																
				24	1.7	3.9	OPERATION NOT RECOMMENDED													
	30	2.6	6.0				35	4.9	39.0	3.9	10.1	52.2	4.0	40.5	3.9	10.4	53.7	100 - 111	340 - 385	
				40	5.4	43.4	4.0	10.8	57.1	4.5	45.1	4.0	11.2	58.8	111 - 121					
				45	6.0	47.8	4.2	11.5	62.0	5.0	49.7	4.2	11.9	64.0	122 - 132					
50	6.5	52.3	4.3	12.1	67.0	5.4	54.3	4.3	12.6	69.1	132 - 142									

Note: dP pressure drops apply to standard coils, and cupro-nickel ground water coils have higher pressure drops.

GW 2400 Heating Performance Data

GROUND				Hyd LWT °F	First Stage HYDRONIC FLOW - 40 GPM 3.4 PSIG dP, 7.9 FT dP					Second Stage HYDRONIC FLOW - 40 GPM 3.4 PSIG dP, 7.9 FT dP					Second Stage REFRIGERANT PRESSURE	
EWT °F	GPM	dP psig	dP ft		TEMP DROP	CAP kBTU/h	PWR kW	COP	HE kBTU/h	TEMP DROP	CAP kBTU/h	PWR kW	COP	HE kBTU/h	Suction Pressure	Head Pressure
25	60	5.6	13.0	70	5.9	117.4	5.3	6.5	99.4	10.6	211.6	10.6	5.8	175.4	60 - 70	195 - 215
				85	5.7	113.4	6.7	5.0	90.6	10.4	204.4	13.4	4.5	162.1		255 - 275
				100	5.5	109.3	8.1	4.0	81.8	10.2	197.2	16.3	3.6	148.7		315 - 335
				115	5.3	105.3	9.5	3.3	73.0	10.0	190.0	19.1	3.0	135.4		375 - 395
30	60	5.6	13.0	70	6.3	126.4	5.4	6.9	108.2	11.3	225.8	10.8	6.2	189.1	65 - 75	195 - 215
				85	6.1	121.7	6.7	5.3	98.7	11.1	218.9	13.6	4.7	174.8		255 - 275
				100	5.8	116.9	8.1	4.2	89.3	10.8	211.9	16.4	3.8	160.4		315 - 335
				115	5.6	112.2	9.5	3.5	79.9	10.6	205.0	19.2	3.2	146.1		375 - 395
35	60	5.6	13.0	70	6.8	135.4	5.4	7.3	116.9	12.0	240.0	10.9	6.5	202.8	70 - 80	200 - 220
				85	6.5	130.0	6.8	5.6	106.9	11.7	231.7	13.7	5.0	187.5		260 - 280
				100	6.2	124.6	8.1	4.5	96.8	11.4	223.3	16.5	4.0	172.1		320 - 340
				115	6.0	119.1	9.5	3.7	86.7	11.1	215.0	19.2	3.4	156.8		380 - 400
40	60	5.6	13.0	70	7.2	144.4	5.5	7.7	125.7	12.7	254.2	11.1	6.7	216.5	75 - 90	200 - 220
				85	6.9	138.3	6.8	5.9	115.0	12.4	247.3	13.8	5.3	200.1		265 - 285
				100	6.6	132.2	8.2	4.7	104.3	12.0	240.3	16.5	4.3	183.8		325 - 345
				115	6.3	126.1	9.5	3.9	93.6	11.7	233.3	19.3	3.5	167.4		385 - 405
50	60	5.6	13.0	70	8.1	162.3	5.6	8.5	143.3	14.1	282.7	11.4	7.3	243.9	85 - 105	205 - 225
				85	7.7	154.8	6.9	6.6	131.3	13.7	273.5	14.1	5.7	225.5		265 - 285
				100	7.4	147.4	8.2	5.2	119.3	13.2	264.5	16.7	4.6	207.2		330 - 350
				115	7.0	140.0	9.6	4.3	107.4	12.8	255.0	19.4	3.8	188.8		390 - 410

GW 2400 Cooling Performance Data

GROUND				Hyd LWT °F	First Stage HYDRONIC FLOW - 40 GPM 3.4 PSIG dP, 7.9 FT dP					Second Stage HYDRONIC FLOW - 40 GPM 3.4 PSIG dP, 7.9 FT dP					Second Stage REFRIGERANT PRESSURE	
EWT °F	GPM	dP psig	dP ft		TEMP DROP	CAP kBTU/h	PWR kW	EER	HR kBTU/h	TEMP DROP	CAP kBTU/h	PWR kW	EER	HR kBTU/h	Suction Pressure	Head Pressure
50	60	5.6	13.0	35	6.3	126.3	4.4	28.6	141.4	11.1	222.6	9.6	23.3	255.3	80 - 90	175-205
				40	6.7	133.9	4.5	29.8	149.2	11.7	234.9	9.6	23.7	268.7		
				45	7.1	141.4	4.5	31.1	157.0	12.4	247.2	10.2	24.2	282.1		
				50	7.5	149.0	4.6	32.3	164.7	13.0	259.5	10.6	24.6	295.5		
70	60	5.6	13.0	35	5.7	113.7	6.0	19.1	134.0	10.5	209.4	12.9	16.2	252.4	85 - 95	260 - 290
				40	6.1	122.4	6.0	20.3	142.9	11.2	223.7	13.2	16.9	268.9		
				45	6.5	131.0	6.1	21.6	151.7	11.9	238.0	13.6	17.5	284.4		
				50	7.0	139.6	6.1	2.8	160.5	12.6	252.3	13.9	18.1	299.8		
80	60	5.6	13.0	35	5.4	107.4	6.7	16.0	130.4	10.1	202.8	14.6	13.9	252.5	90 - 100	290 - 325
				40	5.8	116.6	6.8	17.2	139.7	10.9	218.1	14.9	14.6	269.0		
				45	6.3	125.8	6.8	18.4	149.1	11.7	233.5	15.3	15.3	285.5		
				50	6.7	134.9	6.9	19.6	158.4	12.4	248.8	15.6	15.9	302.1		
90	60	5.6	13.0	35	5.1	101.1	7.5	13.5	126.7	9.8	196.2	16.2	12.1	251.6	95 - 105	325 - 365
				40	5.5	110.8	7.5	14.7	136.6	10.6	212.6	16.6	12.8	269.1		
				45	6.0	120.5	7.6	15.9	146.4	11.4	228.9	16.9	13.5	286.7		
				50	6.5	130.2	7.6	17.0	156.3	12.3	245.2	17.3	14.2	304.2		
100	60	5.6	13.0	35	4.7	94.9	8.3	11.5	123.0	9.5	189.6	17.9	10.6	250.7	95 - 105	370 - 405
				40	5.3	105.1	8.3	12.6	133.4	10.3	207.0	18.3	11.3	269.3		
				45	5.8	115.3	8.4	13.8	143.8	11.2	224.3	18.6	12.0	287.8		
				50	6.3	125.5	8.4	14.9	154.2	12.1	241.6	19.0	12.7	306.4		

GW 3600 Heating Performance Data

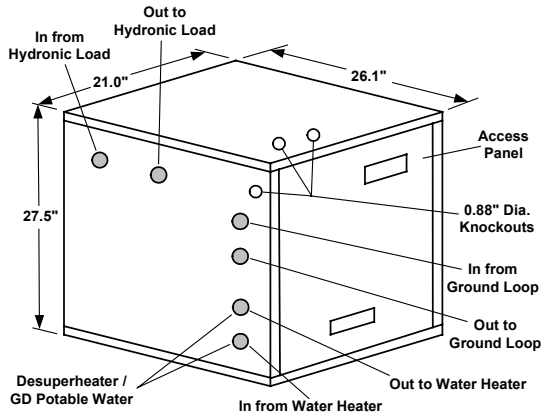
GROUND				Hyd LWT °F	First Stage HYDRONIC FLOW - 54 GPM 3.3 PSIG dP, 7.6 FT dP					Second Stage HYDRONIC FLOW - 54 GPM 3.3 PSIG dP, 7.6 FT dP					Second Stage REFRIGERANT PRESSURE	
EWT °F	GPM	dP psig	dP ft		TEMP DROP	CAP kBTU/h	PWR kW	COP	HE kBTU/h	TEMP DROP	CAP kBTU/h	PWR kW	COP	HE kBTU/h	Suction Pressure	Head Pressure
25	78	6.0	13.8	70	6.9	187.6	9.2	5.9	156.0	12.6	331.3	16.4	5.9	275.4	50 - 70	195 - 215
				85	6.6	177.5	10.8	4.8	140.8	11.9	313.4	20.1	4.6	244.8		260 - 280
				100	6.2	167.4	12.3	4.0	125.5	11.2	295.4	23.8	3.6	214.1		320 - 340
				115	5.8	157.2	13.8	3.3	110.2	10.5	277.4	27.5	3.0	183.5		380 - 400
30	78	6.0	13.8	70	7.4	199.7	9.3	6.3	167.9	13.5	350.4	16.8	6.1	293.2	55 - 75	195 - 215
				85	7.0	189.3	10.8	5.1	152.2	12.8	333.8	20.4	4.8	264.1		260 - 280
				100	6.6	178.9	12.3	4.2	136.7	12.1	317.1	24.1	3.9	235.0		320 - 340
				115	6.2	168.5	13.9	3.5	121.1	11.3	300.5	27.7	3.2	205.9		383 - 403
35	78	6.0	13.8	70	7.8	211.8	9.4	6.6	179.8	14.5	369.4	17.1	6.3	310.9	57 - 80	195 - 215
				85	7.4	201.1	10.0	5.4	163.9	13.7	354.1	20.7	5.0	283.4		260 - 280
				100	7.1	190.4	12.4	4.5	148.0	13.0	338.9	24.3	4.1	255.8		320 - 340
				115	6.7	179.7	14.0	3.8	132.0	12.2	323.6	28.0	3.4	228.3		385 - 405
40	78	6.0	13.8	70	8.3	223.9	9.4	6.9	191.7	15.4	388.4	17.5	6.5	328.7	60 - 85	195 - 215
				85	7.9	212.9	11.0	5.7	175.4	14.6	374.5	21.1	5.2	302.7		260 - 280
				100	7.5	201.9	12.5	4.7	159.2	13.9	360.7	24.6	4.3	276.7		320 - 340
				115	7.1	190.9	14.1	4.0	142.9	13.1	346.8	28.2	3.6	250.6		385 - 405
50	78	6.0	13.8	70	9.2	248.0	9.6	7.6	215.4	17.2	426.5	18.2	6.8	364.3	65 - 98	195 - 215
				85	8.8	236.5	11.1	6.2	198.5	16.4	415.3	21.7	5.6	341.3		260 - 280
				100	8.3	224.9	12.7	5.2	181.6	15.6	404.2	25.1	4.7	318.4		320 - 340
				115	7.9	213.3	14.3	4.4	164.7	14.8	393.0	28.6	4.0	295.4		390 - 410

GW 3600 Cooling Performance Data

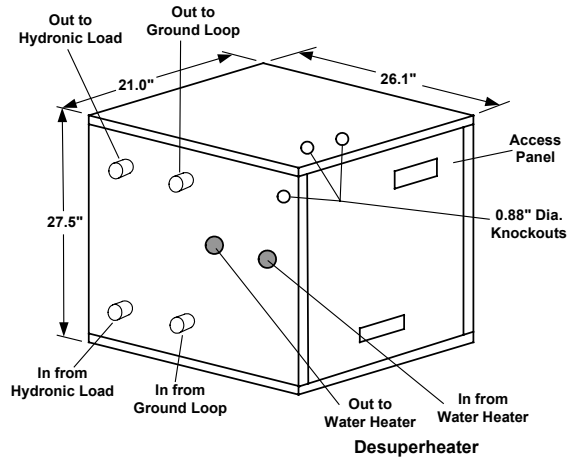
GROUND				Hyd LWT °F	First Stage HYDRONIC FLOW - 54 GPM 3.3 PSIG dP, 7.6 FT dP					Second Stage HYDRONIC FLOW - 54 GPM 3.3 PSIG dP, 7.6 FT dP					Second Stage REFRIGERANT PRESSURE		
EWT °F	GPM	dP psig	dP ft		TEMP DROP	CAP kBTU/h	PWR kW	EER	HR kBTU/h	TEMP DROP	CAP kBTU/h	PWR kW	EER	HR kBTU/h	Suction Pressure	Head Pressure	
50	78	6.0	13.8	35	6.6	182.0	7.8	23.3	208.6	11.1	299.1	15.3	19.5	351.4	62 - 72	165 - 196	
				40	7.4	192.6	7.8	24.6	219.2	12.5	318.3	15.4	20.7	370.8			66 - 76
				45	8.3	203.3	7.8	26.0	229.8	13.8	337.4	15.5	21.8	390.2			70 - 80
				50	9.1	213.7	7.8	27.3	240.4	15.2	356.5	15.6	22.9	409.5			75 - 85
70	78	6.0	13.8	35	6.1	170.4	9.9	17.3	204.0	10.6	290.6	20.0	14.5	359.0	63 - 73	250 - 280	
				40	6.8	180.7	9.9	18.2	214.5	11.7	306.7	20.1	15.2	375.4			68 - 78
				45	7.5	191.1	10.0	19.2	225.1	12.8	322.7	20.2	15.9	391.8			72 - 82
				50	8.1	201.4	10.0	20.1	235.6	13.9	338.8	20.3	16.7	408.2			77 - 87
80	78	6.0	13.8	35	5.8	164.6	10.9	15.1	201.7	10.4	286.3	22.4	12.8	362.8	64 - 74	290 - 325	
				40	6.4	174.8	11.0	15.9	212.2	11.4	300.9	22.5	13.4	377.7			69 - 79
				45	7.1	185.0	11.1	16.7	222.7	12.3	315.4	22.6	13.9	392.6			73 - 83
				50	7.7	195.2	11.1	17.5	233.2	13.3	329.9	22.7	14.5	407.5			77 - 87
90	78	6.0	13.8	35	5.5	158.8	11.9	13.3	199.4	10.2	282.0	24.8	11.4	366.5	65 - 75	335 - 360	
				40	6.1	168.9	12.0	14.1	209.9	11.0	295.1	24.9	11.9	380.0			69 - 79
				45	6.7	179.0	12.1	14.8	220.3	11.8	308.1	25.0	12.3	393.4			74 - 84
				50	7.2	189.0	12.2	15.4	230.8	12.7	321.1	25.1	12.8	406.9			78 - 88
100	78	6.0	13.8	35	5.3	153.0	12.9	11.8	197.1	9.9	277.8	27.1	10.2	370.3	66 - 76	380 - 410	
				40	5.8	163.0	13.1	12.5	207.5	10.6	289.3	27.3	10.6	382.3			70 - 80
				45	6.3	172.9	13.2	13.1	218.0	11.3	300.8	27.4	11.0	394.2			75 - 85
				50	6.7	182.9	13.3	13.7	228.4	12.0	312.3	27.5	11.3	406.2			79 - 89

Physical Dimensions – Ultra Hydronic Models

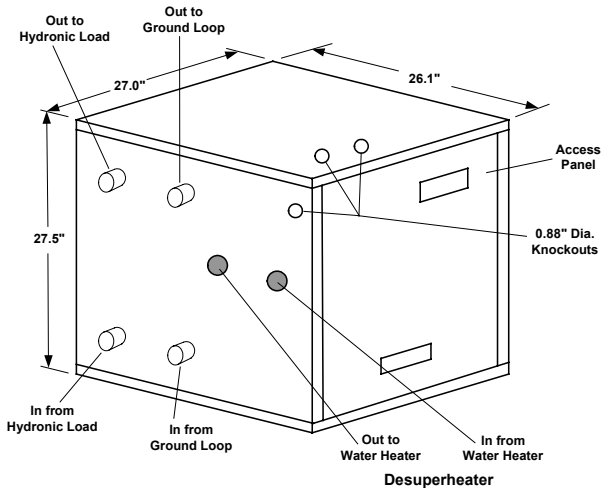
GD 37/57 and GW 37/47 Series



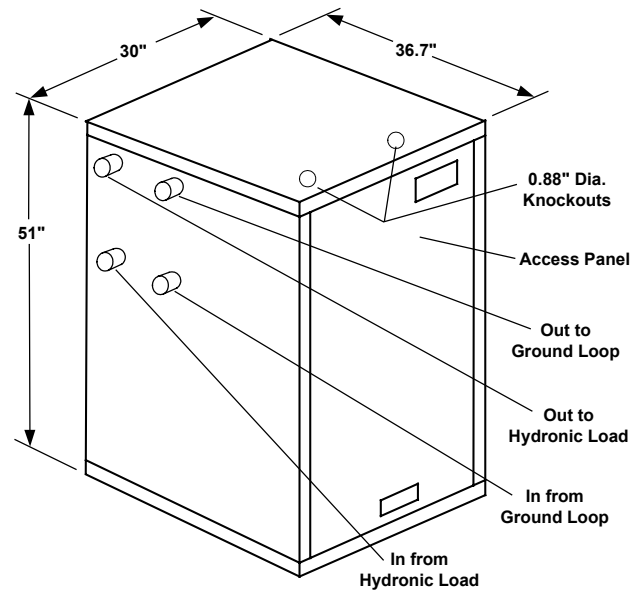
GW 57 Series



GW 77 Through 110 Series



GW 240 and 360 Series



Model	Ground		Hydronic		Desuperheater
	Inlet	Outlet	Inlet	Outlet	
GD37/57, GW37/47	1.0 FPT	1.0 FPT	1.0 FPT	1.0 FPT	1.0 FPT
*GW57-110x-x-UxxO	1.25 MPT	1.25 MPT	1.25 MPT	1.25 MPT	1.0 FPT
*GW87x-x-UxxO	1.25 MPT	1.25 MPT	1.25 MPT	1.25 MPT	1.0 FPT
*GW57-110x-x-UxxN	1.0 FPT	1.0 FPT	1.25 MPT	1.25 MPT	1.0 FPT
*GW110x-x-UxxO	1.25 MPT	1.25 MPT	1.25 MPT	1.25 MPT	1.0 FPT
*GW240	2.0 MPT	2.0 MPT	2.0 MPT	2.0 MPT	Not Available
*GW360	2.0 MPT	2.0 MPT	2.0 MPT	2.0 MPT	Not Available

*Note: GW 77-110 have a 1-1/2" support rails. This height is in addition to the height shown in the drawing.

*Note: GW240 and GW360 have a 2" support rail. This height is in addition to the height shown in the drawing.

Physical Data

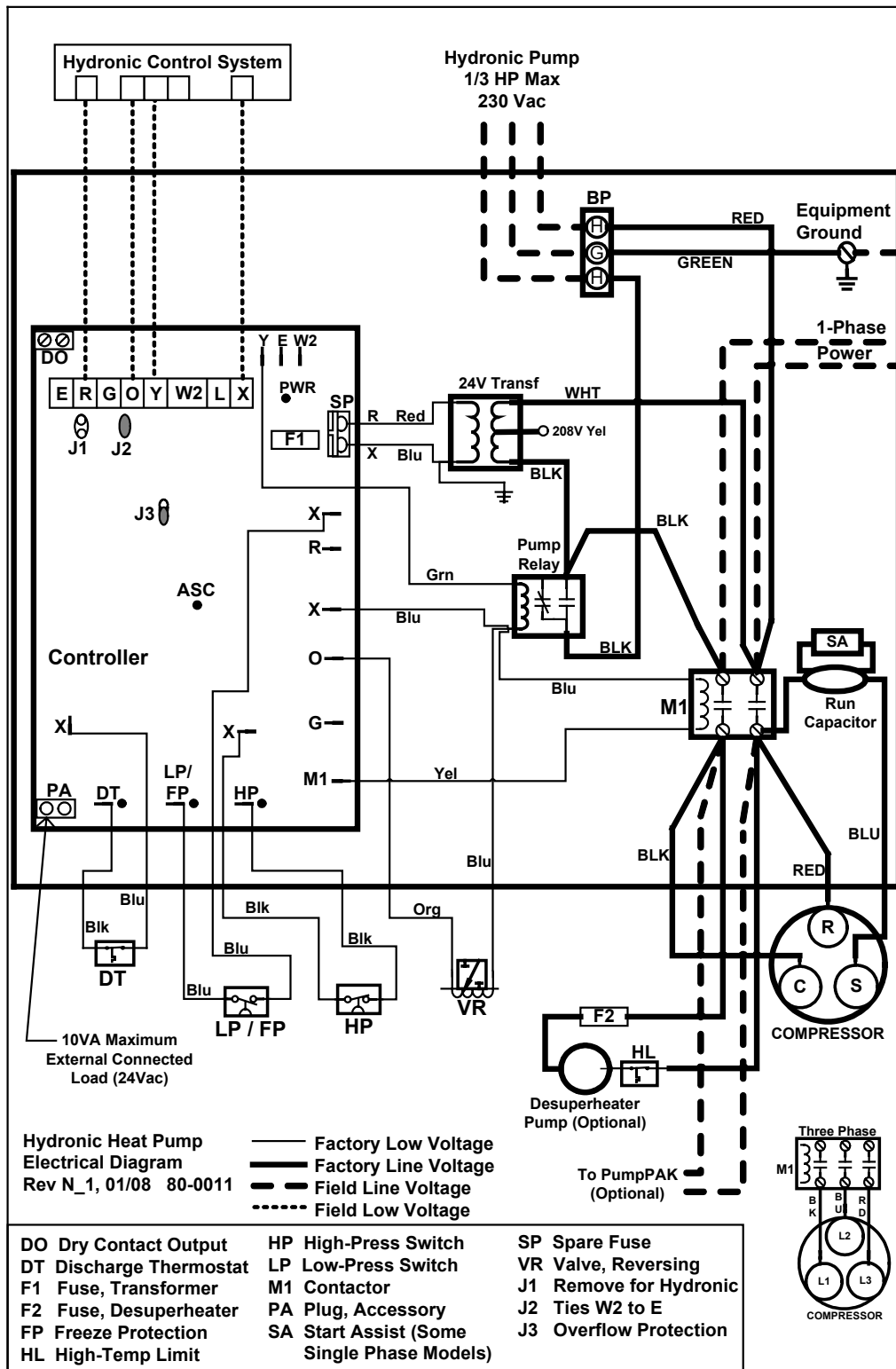
	Ultra							
	37	47	57	77	87	110	240	360
Compressor	Compliant Scroll							
Expansion Device	Thermostatic							
Desuperheater Pump	1/150 HP						None	
Transformer (VA)	50 or 55						150	
Weight (lbs)	230	305	325	385	415	465	800	1010

Electrical Data (all HCAR-type circuit breaker per NEC)

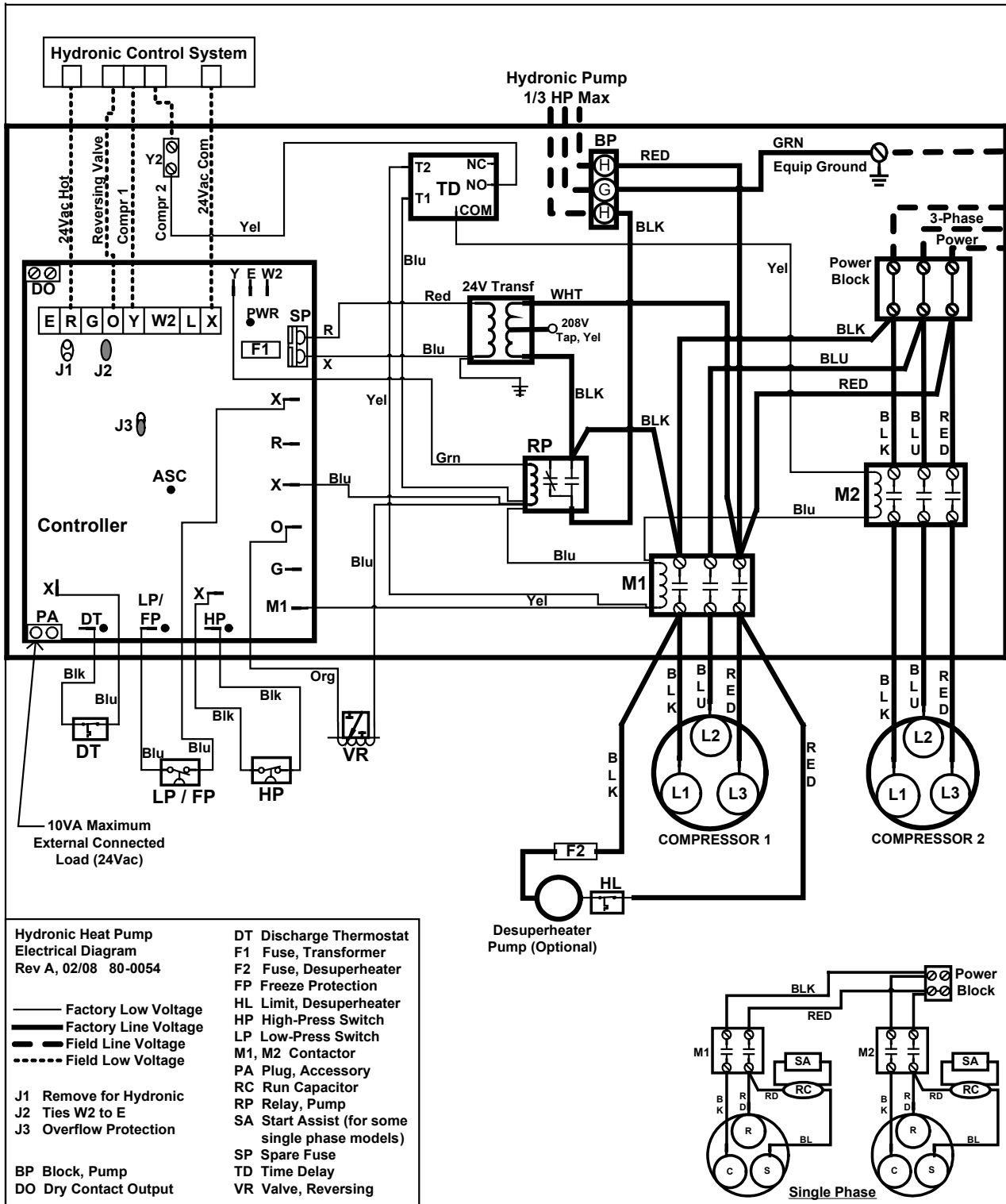
(GD, GW) – (*HCAR-type circuit breaker per NEC)

Model	Voltage Phase Frequency (Hz)	Compressor		Hydronic Pump		Without PumpPAK			PumpPAK		With PumpPAK		
		RLA	LRA	HP	FLA	Total FLA	Min. Amp.	Max Fuse	HP	FLA	Total FLA	Min. Amp.	Max Fuse
370/371	208/230-1, 60	15.4	83	1/3	3.6	--	--	--	1/3	3.6	22.6	26.5	40
	208/230-3, 60	11.5	77	1/3	3.6	15.1	18.0	25	--	--	--	--	--
	460-3, 60	5.1	35	1/3	1.1	6.2	7.5	10	--	--	--	--	--
	220/240-1, 50Hz	16.0	87	1/3	3.6	--	--	--	1/3	3.6	23.2	27.2	40
	200/220-3, 50Hz	13.4	81	1/3	3.6	17.0	20.4	30	--	--	--	--	--
	380-3, 50Hz	5.1	32	1/3	1.1	6.2	7.5	10	--	--	--	--	--
470/471	208/230-1, 60	23.1	134	1/3	3.6	--	--	--	1/3	3.6	30.3	36.1	55
	208/230-3, 60	16.0	91	1/3	3.6	19.6	23.6	35	--	--	--	--	--
	460-3, 60	7.1	46	1/3	1.1	8.2	10.0	15	--	--	--	--	--
	220/240-1, 50Hz	21.2	136	1/3	3.6	--	--	--	1/3	3.6	28.4	33.7	50
	200/220-3, 50Hz	15.6	110	1/3	3.6	19.2	23.1	35	--	--	--	--	--
	380-3, 50Hz	7.1	43	1/3	1.1	8.2	10.0	15	--	--	--	--	--
570/571	208/230-1, 60	30.1	158	1/3	3.6	--	--	--	1/3	3.6	37.3	44.8	70
	208/230-3, 60	20.5	155	1/3	3.6	24.1	29.2	45	--	--	--	--	--
	460-3, 60	9.6	75	1/3	1.1	10.7	13.1	20	--	--	--	--	--
	220/240-1, 50Hz	24.5	153	1/3	3.6	--	--	--	1/3	3.6	31.7	37.8	60
	200/220-3, 50Hz	20.5	170	1/3	3.6	24.1	29.2	45	--	--	--	--	--
	380-3, 50Hz	9.6	67	1/3	1.1	10.7	13.1	20	--	--	--	--	--
770/771	208/230-1, 60	32.1	148	1/3	3.6	--	--	--	1/2	5.4	41.1	49.1	80
	208/230-3, 60	23.2	164	1/3	3.6	26.8	32.6	55	--	--	--	--	--
	460-3, 60	11.2	75	1/3	1.1	12.3	15.1	25	--	--	--	--	--
	220/240-1, 50Hz	25.0	149	1/3	3.6	--	--	--	1/2	5.4	34.0	40.3	65
	380-3, 60	12.2	73	1/3	1.1	13.3	16.4	25	--	--	--	--	--
	200/220-3, 50Hz	21.7	178	1/3	3.6	25.3	30.7	50	--	--	--	--	--
870/871	380-3, 50Hz	11.2	68	1/3	1.1	12.3	15.1	25	--	--	--	--	--
	208/230-1, 60	32.1	185	1/3	3.6	--	--	--	1/2	5.4	41.1	49.1	80
	208/230-3, 60	25.0	164	1/3	3.6	28.6	34.9	55	--	--	--	--	--
	460-3, 60	12.2	100	1/3	1.1	13.3	16.4	25	--	--	--	--	--
	380-3, 60	13.9	94	1/3	1.1	15.0	18.5	30	--	--	--	--	--
	200/220-3, 50Hz	25.0	179	1/3	3.6	28.6	34.9	55	--	--	--	--	--
1100/1101	380-3, 50Hz	12.2	91	1/3	1.1	13.3	16.4	25	--	--	--	--	--
	208/230-1, 60	30.1 x 2	158 x 2	1/3	3.6	--	--	--	2/3	7.2	71.0	78.5	105
	208/230-3, 60	20.5 x 2	155 x 2	1/3	3.6	44.6	49.7	70	--	--	--	--	--
	460-3, 60	9.6 x 2	75 x 2	1/3	1.1	20.3	22.7	30	--	--	--	--	--
	380-3, 60	9.6 x 2	67 x 2	1/3	1.1	20.3	22.7	30	--	--	--	--	--
	200/220-3, 50Hz	20.5 x 2	170 x 2	1/3	3.6	44.6	49.7	70	--	--	--	--	--
2400	380-3, 50Hz	9.6 x 2	67 x 2	1/3	1.1	20.3	22.7	30	--	--	--	--	--
	208/230-3, 60	33.3 x 2	239 x 2	--	--	66.6	74.9	105	--	--	--	--	--
	460-3, 60	17.9 x 2	125 x 2	--	--	35.8	40.3	55	--	--	--	--	--
	380-3, 60	23.7 x 2	145 x 2	--	--	47.4	53.3	75	--	--	--	--	--
	200/220-3, 50Hz	34.6 x 2	239 x 2	--	--	69.2	77.9	110	--	--	--	--	--
	380-3, 50Hz	17.9 x 2	118 x 2	--	--	35.8	40.3	55	--	--	--	--	--
3600	575-3, 60	12.8 x 2	80 x 2	--	--	25.6	28.8	40	--	--	--	--	--
	208/230-3, 60	55.8 x 2	340 x 2	--	--	111.6	125.6	180	--	--	--	--	--
	460-3, 60	26.9 x 2	173 x 2	--	--	53.8	60.5	85	--	--	--	--	--
	380-3, 60	34.0 x 2	196 x 2	--	--	68.0	76.5	110	--	--	--	--	--
	200/220-3, 50Hz	50.6 x 2	325 x 2	--	--	101.2	113.9	160	--	--	--	--	--
	380-3, 50Hz	25.0 x 2	173 x 2	--	--	50.0	56.3	80	--	--	--	--	--
3600	575-3, 60	23.7 x 2	132 x 2	--	--	47.4	53.3	75	--	--	--	--	--

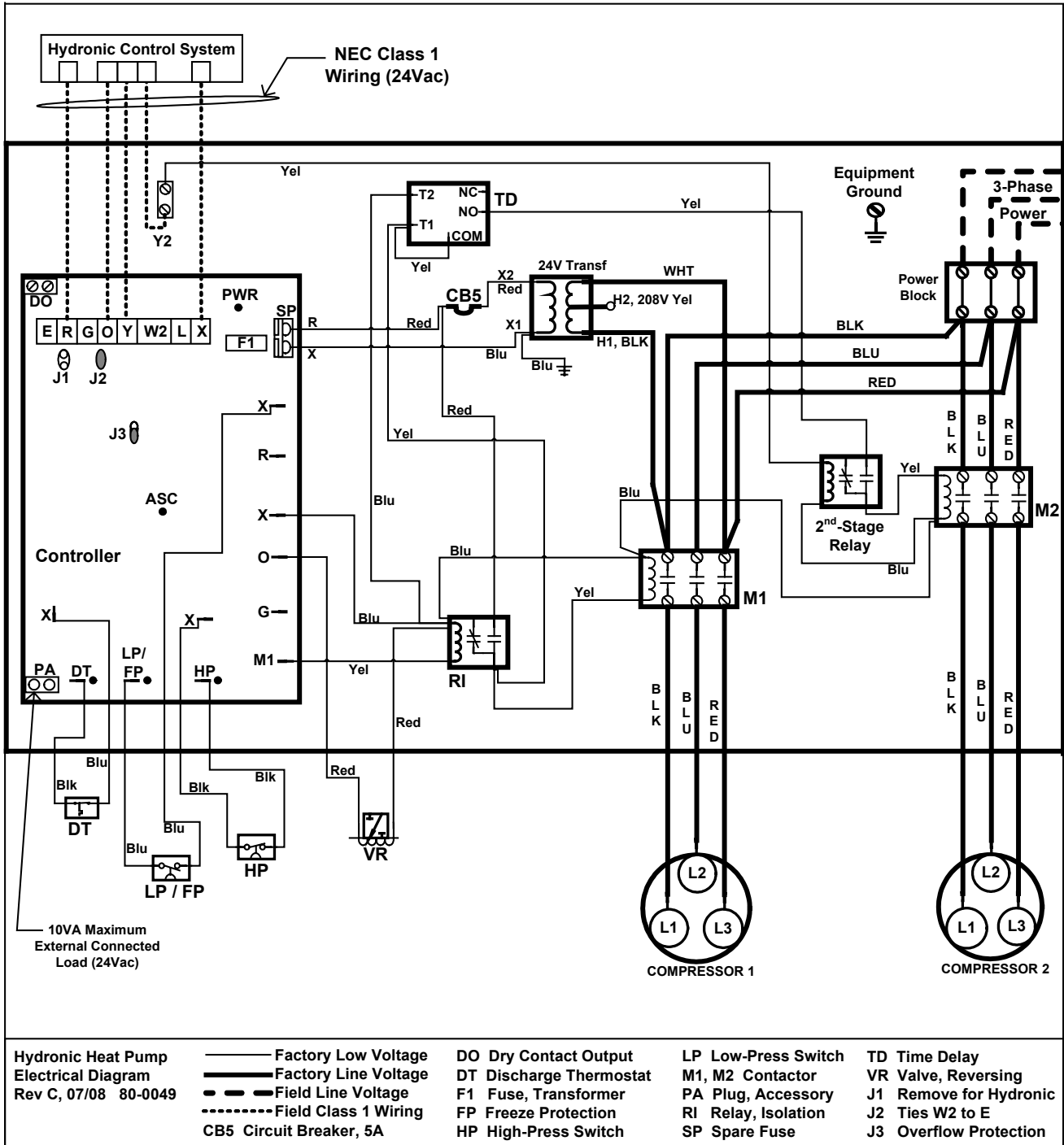
Wiring Diagram – Ultra Hydronic Models [GW37-87x-x-UxOx]



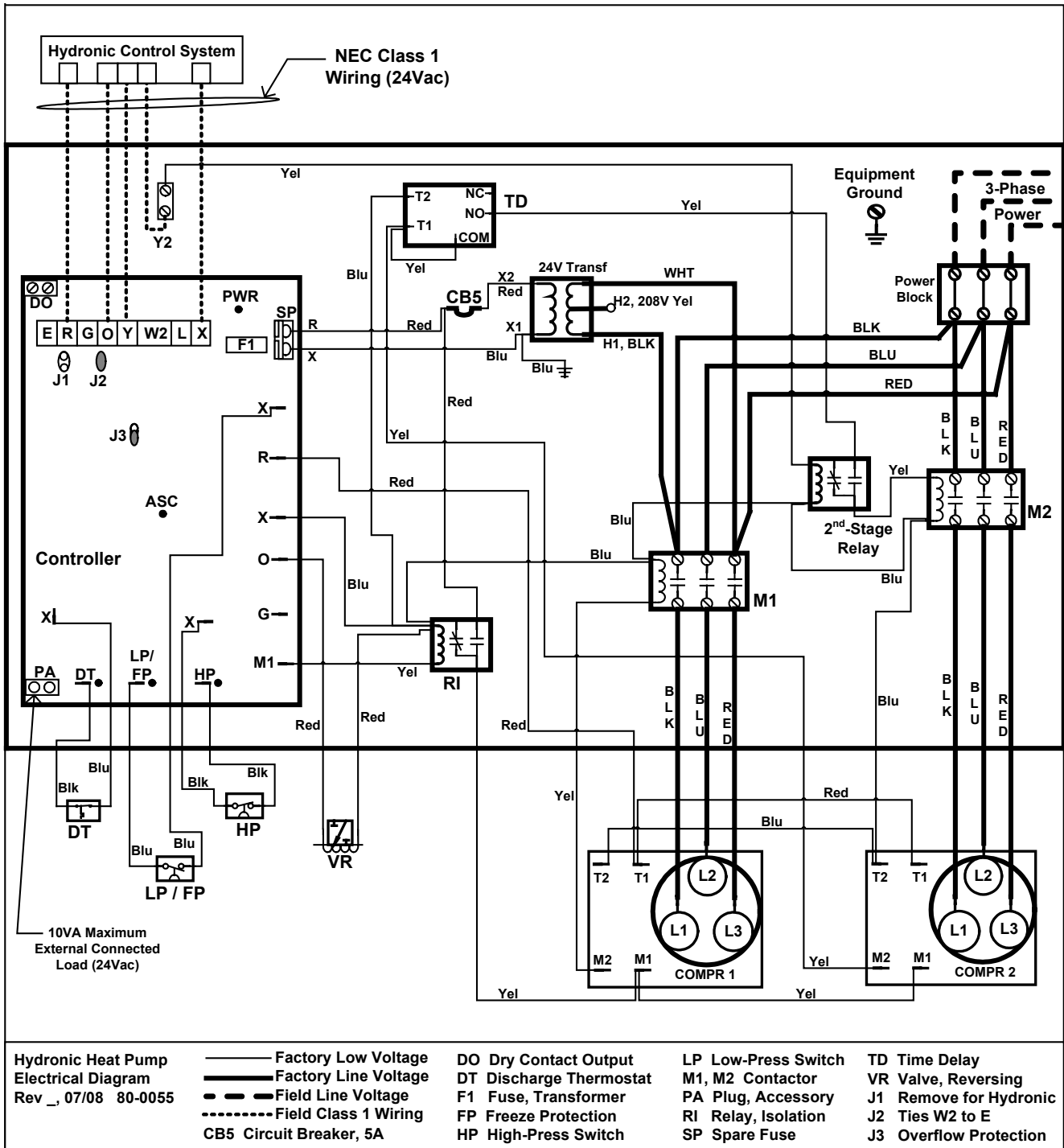
Wiring Diagram – Ultra Hydronic Models [GW110x-x-UxTx]



Wiring Diagram - Ultra Hydronic Models [GW240x-x-UxTx]



Wiring Diagram - Ultra Hydronic Models [GW360x-x-UxTx]



Correction Factors

Ground Side Flow Rates

NOMINAL GPM	HEATING		COOLING	
	BTU/hr	KW	BTU/hr	KW
60%	0.95	0.98	0.98	1.07
70%	0.97	0.98	0.98	1.05
80%	0.98	0.99	0.99	1.03
90%	0.99	0.99	0.99	1.02
100%	1.00	1.00	1.00	1.00
110%	1.01	1.00	1.01	0.99
120%	1.02	1.01	1.02	0.98
130%	1.03	1.01	1.02	0.98
140%	1.04	1.01	1.03	0.97
150%	1.05	1.02	1.03	0.96

GW, Hydronic Side Flow Rates

NOMINAL GPM	HEATING		COOLING	
	BTU/hr	KW	BTU/hr	KW
80%	0.99	1.03	0.96	0.99
90%	1.00	1.01	0.98	1.00
100%	1.00	1.00	1.00	1.00
120%	1.00	0.97	1.03	1.01
140%	1.01	0.96	1.06	1.02
160%	1.01	0.94	1.08	1.03
180%	1.01	0.93	1.09	1.04
200%	1.02	0.93	1.10	1.05

Water Coil Pressure Drop Ratings (Pure Water)*

Gnd Loop		Hyd Loop	
Flow GPM	dP PSIG	Flow GPM	dP PSIG
GW 370/371			
5	1.2	7	2.0
6	1.6	8	2.6
7	2.0	9	3.2
8	2.6	10	3.8
9	3.2	11	4.5
10	3.8		
11	4.5		
GW 470/471			
7	2.0	9	3.1
8	2.6	10	3.8
9	3.2	11	4.3
10	3.8	12	4.8
11	4.5	13	6.0
12	5.3	14	7.5
13	6.2	15	9.4
14	7.1		
15	8.0		
GW 570/571			
9	1.5	12	2.1
10	1.7	13	2.4
11	1.9	14	2.6
12	2.1	15	2.9
13	2.4	16	3.2
14	2.6	17	3.5
15	2.9	18	3.9
16	3.2		
17	3.5		
GW 770/771			
11	0.4	13	2.4
12	0.5	14	2.6
13	0.6	15	2.9
14	0.6	16	3.2
15	0.7	17	3.5
16	0.8	18	3.9
17	0.9	19	4.2
18	1.0	20	4.6
20	1.2		
22	1.5		

Gnd Loop		Hyd Loop	
Flow GPM	dP PSIG	Flow GPM	dP PSIG
GW 870/871			
12	0.5	14	3.0
13	0.6	15	3.2
14	0.6	16	3.4
15	0.7	17	3.5
16	0.8	18	3.7
17	0.9	19	3.9
18	1.0	20	4.0
20	1.2	22	4.4
22	1.5		
24	1.7		
GW 1100/1101			
16	0.8	14	3.0
18	1.0	15	3.2
20	1.2	16	3.4
22	1.5	17	3.5
24	1.7	18	3.7
26	2.0	19	3.9
28	2.3	20	4.0
30	2.6	22	4.4
32	2.9		
34	3.3		
GW 2400			
55	4.9	38	3.1
58	5.3	39	3.2
60	5.6	40	3.4
62	5.8	41	3.5
65	6.6	42	3.6
GW 3600			
75	5.6	50	2.9
80	6.4	55	3.4
85	6.9	60	3.9
90	7.4	65	4.6
95	8.0	70	5.4
100	8.7	75	6.3
		80	7.3
		85	8.5
		90	9.8
		95	11.2

*Note: dP Pressure Drops apply to standard coils, and cupro-nickel ground water coils have higher pressure drops.
 Note: Head Loss = Pressure Drop in PSI x 2.31.

NOTES

NOTES

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