

GEOTHERMAL LIQUID TO WATER DC INVERTER HEAT PUMPS

The Hydro Solar DC inverter Liquid to Water GEO Series is a multi-applications heat pump that can be used for space heating, space cooling, domestic hot water pre-heating, heat recovery and hot tub/swimming pool water heating and cooling.

Features of the GEO Series

A liquid to water geothermal heat pump with DC Inverter Panasonic Compressor and Carel Controller that uses Modbus Protocol. The heat pump can be used for open and closed loop geothermal configuration. Other features:

Use of low Global Warming Potential (GWP) R32
refrigerant

- Hot water supply temperature from 35°C/95°F to 55°C/131°F
- Chilled water supply temperature from 7°C/44.6°F to 12°C/53.6°F
- Capacities 40, 60 and 80 MBH
- Power supply 220-240/1/60
- Space heating and space cooling function
- Dedicated domestic hot water (DHW) pre-heating function (Up to 55°C/131°F) at full heat pump capacity

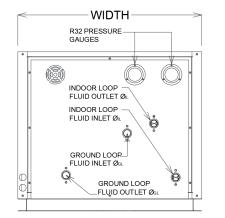
- Heat recovery function
- 2-pipe or 4-pipe configuration in combination with DHW pre-heating
- Titanium ground loop heat exchanger that can be used for dumping heat into a swimming pool or hot tub
- WIFI adapter for easy monitoring and remote diagnostics



Heating and Cooling Capacities

	GEO040V1LM								GEO060V1LM							GEO080V1LM										
	Outdoor Loop Electrical Indoor Loop						Outdoor Loop Electrical Indoor Loop						Outdoor Loop Electrical				Indooi	Indoor Loop								
PERFORMANCE	Entering Liquid Temperature	Heat Absorbed	Power Input	Coefficient of Performance	Entering Liquid Temperature	Flow (USGPM)	Leaving Liquid Temperature (@ Max Flow)	Heating Capacity	PERFORMANCE	Entering Liquid Temperature	Heat Absorbed	Power Input	Coefficient of Performance	Entering Liquid Temperature	Flow (USGPM)	Leaving Liquid Temperature (@ Max Flow)	Heating Capacity	PERFORMANCE	Entering Liquid Temperature	Heat Absorbed	Power Input	Coefficient of Performance	Entering Liquid Temperature	Flow (USGPM)	Leaving Liquid Temperature (@ Max Flow)	Heating Capacity
- NNO	(°F)	Btu/Hr	KW	COP	(°F)	Nominal	(°F)	Btu/Hr	DRN	(°F)	Btu/Hr	KW	COP	(°F)	Nominal	(°F)	Btu/Hr	NR N	(°F)	Btu/Hr	KW	COP	(°F)	Nominal	(°F)	Btu/Hr
RFC	23	18,799	3.79	2.5	104	7.04	113	31,730	INE	23	28,659	5.6	2.5	104	10.6	113	47,765	RF	23	38,076	7.44	2.5	104	14.1	113	63,459
	30	24,804	3.63	3	104	8.37	112.9	37,189		30	35,380	5.23	3	104	11.9	112.9	53,224		30	49,881	7.28	3	104	16.7	112.9	74,718
HEATING	35	30,877	3.35	3.7	104	9.25	113.1	42,306	HEATING	35	46,128	4.98	3.7	104	14.1	112.9	63,118	HEATING	35	61,276	6.64	3.7	104	18.5	113	83,930
AT	45	35,483	3.25	4.2	104	10.13	113.2	46,571	EAT	45	53,702	4.86	4.2	104	15.4	113.1	70,283	AT	45	69,669	6.38	4.2	104	20.7	112.8	91,436
Ξ	60	40,396	2.94	5	104	10.57	113.5	50,426	Ξ	60	60,014	4.21	5.2	104	15.9	113.3	74,377	里	60	79,666	5.55	5.2	104	21.1	113.3	98,601
	23	10,679	4.47	1.7	122	5.72	131	25,930		23	14,739	6.18	1.7	122	7.9	131	35,824		23	27,704	8.68	1.9	122	12.8	130.9	57,318
	30	15,490	4.16	2.1	122	6.6	130.9	29,683		30	22,723	6.04	2.1	122	9.7	130.9	43,330		30	34,084	8.41	2.2	122	13.6	131.2	62,777
	35	19,515	4.08	2.4	122	7.48	130.9	33,436		35	26,885	5.62	2.4	122	10.1	131.1	46,059		35	41,658	7.89	2.5	122	15	131.1	68,577
	45	23,951	3.68	2.9	122	7.93	131.2	36,506		45	32,344	5.12	2.9	122	11	131	49,812		45	49,130	7.2	3	122	16.3	131	73,695
	60	28,830	3.25	3.6	122	8.81	131	39,918		60	39,202	4.41	3.6	122	11.9	131.1	54,248		60	57,318	6.4	3.6	122	17.6	130.9	79,154
	Outdoor Loop Electrical Indoor Loop				Outdoor Loop Electrical Indoor Loo			r Loop		Outdoor Loop			Electrical			Indoor Loop										
COOLING PERFORMANCE	Entering Liquid Temperature	Heat Absorbed	Power Input	Coefficient of Performance	Entering Liquid Temperature	Flow (USGPM)	Leaving Liquid Temperature (@ Max Flow)	Cooling Capacity	COOLING PERFORMANCE	Entering Liquid Temperature	Heat Absorbed	Power Input	Coefficient of Performance	Entering Liquid Temperature	Flow (USGPM)	Leaving Liquid Temperature (@ Max Flow)	Cooling Capacity	PERFORMANCE	Entering Liquid Temperature	Heat Absorbed	Power Input	Coefficient of Performance	Entering Liquid Temperature	Flow (USGPM)	Leaving Liquid Temperature (@ Max Flow)	Cooling Capacity
	(°F)	Btu/Hr	KW	COP	(°F)	Nominal	(°F)	Btu/Hr	9	(°F)	Btu/Hr	KW	COP	(°F)	Nominal	(°F)	Btu/Hr	9	(°F)	Btu/Hr	KW	COP	(°F)	Nominal	(°F)	Btu/Hr
	55	41,692	2.58	5.7	53.6	11.01	44.5	50,495	DLIN	55	91,675	4.02	5.7	53.6	17.2	44.6	77,960	COOLING	55	113,442	5.05	5.6	53.6	21.1	44.5	96,213
l 8	65	38,485	2.62	5.3	53.6	10.57	44.7	47,424	ö	65	87,240	4.12	5.2	53.6	16.3	44.7	73,183	l õ	65	108,871	5.11	5.2	53.6	20.3	44.6	91,436
	75	34,766	2.61	4.9	53.6	9.69	44.6	43,671	Ŭ	75	84,203	4.18	4.9	53.6	15.4	44.6	69,942	Ĭ	75	104,606	5.16	4.9	53.6	19.4	44.7	87,001
1	85	31,730	2.9	4.2	53.6	9.25	44.6	41,624	1	85	76,731	4.29	4.2	53.6	13.6	44.5	62,095	1	85	101,706	5.71	4.2	53.6	18.5	44.7	82,224
	90	30,331	2.96	4	53.6	8.81	44.5	40,430		90	75,162	4.38	4	53.6	13.2	44.5	60,218		90	101,501	5.95	4	53.6	18.1	44.6	81,201

Dimensions



VENTILATION FAN GRILLE (x2)

OPERATING DIMENSIONS AND WEIGHTS

MODEL	WIDTH	DEPTH	HEIGHT	WEIGHT			
GEO040V1LM	750mm / 30"	750mm / 30"	650mm / 26"	105 Kg / 231 Lb			
GEO060V1LM	750mm / 30"	750mm / 30"	710mm / 28"	113 Kg / 249 Lb			
GEO080V1LM	750mm / 30"	750mm / 30"	830mm / 33"	142 Kg / 313 Lb			

SHIPPING DIMENSIONS AND WEIGHTS

MODEL	WIDTH	DEPTH	HEIGHT	WEIGHT			
GEO040V1LM	780mm / 31"	780mm / 31"	780mm / 31"	113 Kg / 249 Lb			
GEO060V1LM	780mm / 31"	780mm / 31"	840mm / 33"	122 Kg / 269 Lb			
GEO080V1LM	780mm / 31"	780mm / 31"	960mm / 38"	150 Kg / 330 Lb			

CAREL

DC INVERTER

Aqua Solanor Inc.

is the owner of

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Rev. : 2024/03/05

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Modbus