

# WARD HEATING PRODUCTS

2018 CATALOGUE

## Geothermal



# 2 GEOTHERMAL

## Vertical Water to Air Geothermal Heat Pump

### Bard Geo-Tec Geothermal Heat Pump

The Bard GeoTec™ Geothermal (Water Source) Packaged Heat Pump delivers economical year-round comfort by utilizing nature's most abundant and efficient solar energy collector – the earth. The GV Series heat pumps are designed for low water flow rates and offer cooling efficiencies up to 30.6 EER and heating efficiencies up to 5.4 COP on ground water, and cooling efficiencies up to 26.2 EER and heating efficiencies up to 4.8 COP on ground loop.

All units are shipped pre-wired for fast, easy installation in residential or commercial buildings. They are available in five popular, vertical self-contained models. Left hand or right hand option in same cabinet. Unit shipped as right hand and can quickly and easily be field converted to left hand.

### Technical Advantages

- Suitable for ground water or earth loop applications (Earth loop is Energy Star)
- Comes with Scroll Compressor
- UL and Canadian UL Listed, AHRI 13256-1 Certified
- Comes with Cupro-Nickel Water Coil
- Slide-in Electric Heater Packages Available
- Factory Installed Domestic Hot Water Heat Exchanger
- Comes with Variable Speed ECM Blower Motor standard
- 10Year Warranty on Parts & Heat Transfer Coils
- Energy Star Canada Qualified



Nominal Capacity	Model Number	Domestic Hot Water Heat Exchanger	Coaxial Water Coil Type	Matching Hot Water Pump Module	Matching Constant Flow Valve	Weight (lbs)
2 Ton	O GV27S3AAC	Standard	Copper	GVDM-26	CFV-5	340
3 Ton	O GV38S3AAC	Standard	Copper	GVDM-26	CFV-6	345
4 Ton	O GV51S3AAC	Standard	Copper	GVDM-26	CFV-7	390
5 Ton	O GV61S3AAC	Standard	Copper	GVDM-26	CFV-9	440
6 Ton	O GV71S3AAC	Standard	Copper	GVDM-26	CFV-10	450
2 Ton	O GV27S3AAN	Standard	Cupro-Nickel	GVDM-26	CFV-5	340
3 Ton	O GV38S3AAN	Standard	Cupro-Nickel	GVDM-26	CFV-6	345
4 Ton	O GV51S3AAN	Standard	Cupro-Nickel	GVDM-26	CFV-7	390
5 Ton	O GV61S3AAN	Standard	Cupro-Nickel	GVDM-26	CFV-9	440
6 Ton	O GV71S3AAN	Standard	Cupro-Nickel	GVDM-26	CFV-10	450

### Electric Heater Options

Model Number	KW	Available on Models	Volts / Phase
O EH3GSVA-A05C	4.5/3.38	GV27S1 and GV38S1	240/208 – 1 PH
O EH3GSVA-A09C	9.0/6.75	GV27S1 and GV38S1	240/208 – 1 PH
O EH3GSVA-A14C	13.3/10.13	GV27S1 and GV38S1	240/208 – 1 PH
O EH5GSVA-A09C	9.0/6.75	GV51S1 to GV71S1	240/208 – 1 PH
O EH5GSVA-A14C	13.3/10.13	GV51S1 to GV71S1	240/208 – 1 PH
O EH5GSVA-A18C	18.0/13.5	GV51S1 to GV71S1	240/208 – 1 PH

### Domestic Hot Water Heating Module

Model Number	For Use With	Description
O GVDM-26	GV Models	Hot Water Desuperheater Pump Module (Required to utilize GV's factory installed hot water heat exchanger) 115-60-1 with 6 foot cord. 5/8" OD copper water line connections.

### ISO 13256-1 Performance Data ①

MODEL	System Capacity Modulation	Fluid Flow Rate GPM	Airflow CFM	Ground Loop Heat Pump Tested & Certified to ISO 13256-1:1998			
				Cooling Brine Full Load 77°F Part Load 68°F		Heating Brine Full Load 32°F Part Load 41°F	
				Capacity BTUH	EER BTU/W	Capacity BTUH	COP
GV27	Full	7	1000	27,000	17.7	20,000	4.1
	Part	7	800	21,800	26.2	17,800	4.8
GV38	Full	9	1300	38,500	17.1	28,600	3.9
	Part	9	900	28,200	25.4	23,600	4.4
GV51	Full	12	1500	50,000	16.7	37,000	3.6
	Part	12	1150	39,000	23.0	30,500	4.0
GV61	Full	15	1600	61,500	16.6	47,500	3.6
	Part	15	1300	47,500	22.1	39,000	3.9
GV71	Full	16	1750	70,000	15.0	53,600	3.7
	Part	16	1450	56,000	19.5	47,000	4.0

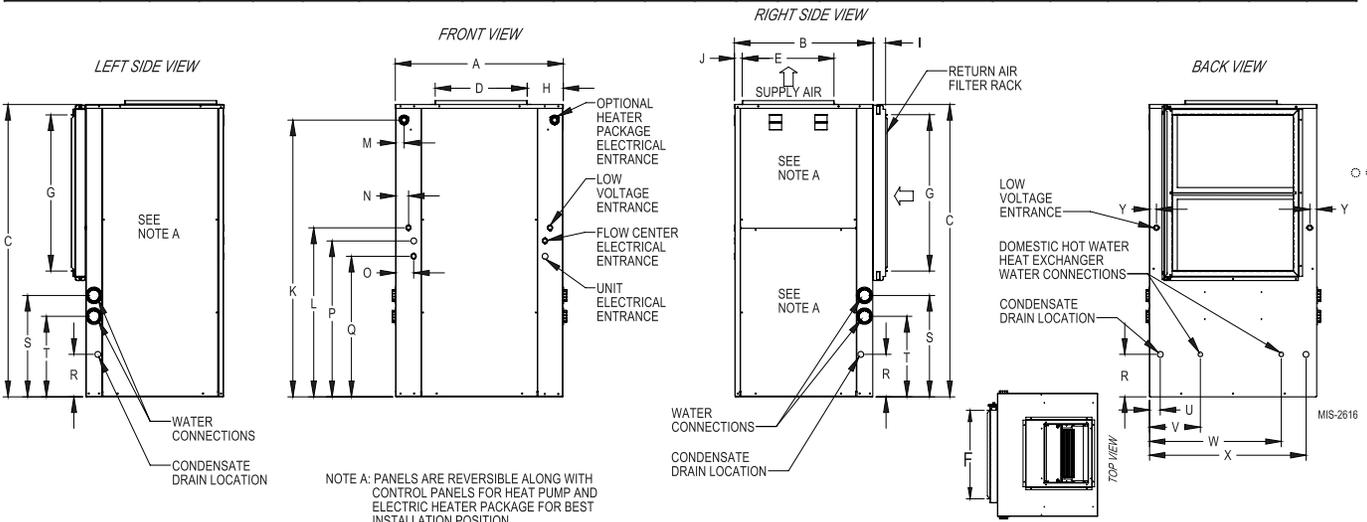
  

MODEL	System Capacity Modulation	Fluid Flow Rate GPM	Airflow CFM	Ground Water Heat Pump Tested & Certified to ISO 13256-1:1998			
				Cooling — EWT 59°F		Heating — EWT 50°F	
				Capacity BTUH	EER BTU/W	Capacity BTUH	COP
GV27	Full	5	1000	30,600	22.4	27,000	4.9
	Part	5	800	23,000	30.6	19,800	5.4
GV38	Full	6	1300	41,000	20.7	37,000	4.4
	Part	6	900	29,400	29.6	25,800	4.8
GV51	Full	7	1500	54,000	20.6	45,500	4.2
	Part	7	1150	40,000	27.0	33,500	4.5
GV61	Full	9	1600	66,000	20.3	58,500	4.0
	Part	9	1300	49,500	26.3	43,000	4.3
GV71	Full	10	1750	73,500	18.1	67,500	4.1
	Part	10	1450	56,500	22.0	51,500	4.3

① ISO Standard 13256-1:1998, "Water to Air and Brine to Air Heat Pumps", which includes watt allowance for water pumping.  
Cooling capacity based on 80.6°F DB, 66.2°F WB entering air temperature. Heating capacity based on 68°F DB entering air temperature.

Units	Width A	Depth B	Height C	Supply		Return		H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
				Duct	Flange	Width	Height																		
				D	E	F	G																		
GV27 - 38S1	27-5/8	26	48	13-7/8	13-7/8	18	22-3/4	6-7/8	2-7/16	1-1/2	45-1/4	31-5/8	1-5/8	2-1/4	3-1/4	29-1/16	25-13/16	8-3/16	19-1/2	15-1/2	2-1/16	7-3/8	23-1/8	25-7/16	1-1/4
GV51 - 71S1	32-5/8	27	55-5/8	17-7/8	17-7/8	23-1/2	29-7/8	7	2-7/16	1-1/2	52-7/8	32-1/4	1-5/8	2-1/2	3-1/2	29-3/4	26-13/16	8-1/16	19-5/16	15-5/16	2-1/16	9-7/8	25-5/8	30-7/16	1-5/16

AIR FILTERS (Factory Supplied)			
Units	Size	Quantity	Efficiency Rating
GV27 - 38	20 x 25 x 2	1	MERV 6
GV51 - 71	16 x 25 x 2	2	MERV 6



# 2 GEOTHERMAL

## Modular Water to Air Geothermal Heat Pump

### Bard Geotrio Modular Geothermal Heat Pump

#### Three Sections. One Solid Unit.

Bard is the first to design a multi-component geothermal unit. The Geo-Trio's three main parts, A-Coil, Blower and Compressor, are each self-contained. When installed, the units lock together. The end result is one solid unit similar to a traditional unit, but with significantly more configuration options.

#### Constructed For Easier Installation.

Three pieces means installers can configure the blower, coil and compressor in the way that makes the most sense for each specific installation. The unit can be placed almost anywhere from attic to crawlspace. The installer can bring each piece in separately and assemble it in its final location. Each section is compact and can be easily handled. Whether it is an older home, limited space or a new construction, the Geo-Trio has been designed and constructed for EASY INSTALLATION.

#### Technical Advantages

- R410A Refrigerant
- AHRI Certified & Canadian Energy Star Qualified
- Copper or Cupro-Nickel Coaxial Coil
- Domestic Hot Water Heat Exchanger (Factory Installed with GVDM26 Pump Module included)
- Step Capacity Scroll Compressor
- Canadian ETL Listed
- In-Duct Electric Heater Packages
- Patent Pending
- Variable Speed ECM Blower Motor

**10 Year  
Compressor  
& Parts  
Warranty**



Nominal Capacity	Model Number	Domestic Hot Water Heat Exchanger	Coaxial Water Coil Type	Matching Hot Water Pump Module	Matching Constant Flow Valve
3 Ton	O GTC36S1-ADC	Standard	Copper	GVDM-26	CFV-6
3 Ton	O GTC36S1-ADN	Standard	Cupro-Nickel	GVDM-26	CFV-6
4 Ton	O GTC48S1-ADC	Standard	Copper	GVDM-26	CFV-7
4 Ton	O GTC48S1-ADN	Standard	Cupro-Nickel	GVDM-26	CFV-7
5 Ton	O GTC60S1-ADC	Standard	Copper	GVDM-26	CFV-9
5 Ton	O GTC60S1-ADN	Standard	Cupro-Nickel	GVDM-26	CFV-9

#### Separate Sections for GEO-TRIO Heat Pump

To create a complete GEO-TRIO section A, B & C sections must be ordered or choose from complete units listed above.

Order Number	Section	Can be Used with Model(s)	Volts / Phase
O GTA360UD1-A	A - A Coil	GTC36S1	240/208 - 1 PH
O GTA4860UD1-A	A - A Coil	GTC48S1 & GTC60S1	240/208 - 1 PH
O GTB1-A	B - Blower	GTC36S1 to GTC60S1	240/208 - 1 PH
O GTC36S1-ADCX	C - Compressor	GTC36S1 - Copper	240/208 - 1 PH
O GTC36S1-ADNX	C - Compressor	GTC36S1 - Cupro Nickel	240/208 - 1 PH
O GTC48S1-ADCX	C - Compressor	GTC48S1 - Copper	240/208 - 1 PH
O GTC48S1-ADNX	C - Compressor	GTC48S1 - Cupro Nickel	240/208 - 1 PH
O GTC60S1-ADCX	C - Compressor	GTC60S1 - Copper	240/208 - 1 PH
O GTC60S1-ADNX	C - Compressor	GTC60S1 - Cupro Nickel	240/208 - 1 PH

#### In-Duct Electric Heater Packages

Order Number	KW	Available on Models	Volts / Phase
O 8604-080	5.0/3.75	GTC36S1 to GTC60S1	240/208 - 1 PH
O 8604-081	9.8/7.35	GTC36S1 to GTC60S1	240/208 - 1 PH
O 8604-082	14.7/11.0	GTC36S1 to GTC60S1	240/208 - 1 PH
O 8604-083	19.2/14.4	GTC36S1 to GTC60S1	240/208 - 1 PH
O GTCFHK1-A10	10	Geo-Trio Counterflow Heater 10KW	
O GTCFHK1-A20	20	Geo-Trio Counterflow Heater 20KW	

## Bard GeoTrio Setup Configurations & Accessories

### Four Easy Setup Configurations

**1. Upflow Configuration**

**2. Counterflow Configuration**

**3. Horizontal Configuration**

\*Can be remotely located (ie. Basement / Mechanical Room with other sections in crawl-space or attic)

**4. Dual Fuel Application**

Using Cased "A" Coil & Compressor Modules ONLY.  
Can be located up to 50' away

**See detailed configuration videos in the geothermal section of [www.wardheating.com](http://www.wardheating.com)**

### Cased "A" Coil Section - Used for Dual Fuel Applications

Order Number	Section	Can be Used with Model(s)	Volts / Phase
O GTADP-3642-B	A-A Coil	GTC36S1	240/208 – 1 PH
O GTADP-3642-C	A-A Coil	GTC36S1	240/208 – 1 PH
O GTADP-4860-C	A-A Coil	GTC48S1/GTC60S1	240/208 – 1 PH

### Refrigerant Connections for Geotrio

Part No.	Line Sets for GEO-TRIO
O GTLS-SK2-1	Line Set Stub Kit with Single Pair Ends
O GTLS-SK4-1	Line Set Stub Kit with Dual Ends
O GTLS-03-1	3 Foot Line Set with Fittings
O GTLS-15-1	15 Foot Line Set with Fittings
O GTLS-25-1	25 Foot Line Set with Fittings
O GTLS-35-1	35 Foot Line Set with Fittings
O GTLS-50-1	50 Foot Line Set with Fittings

### Horizontal Drain Pan Kit for Geotrio

Part No.	Miscellaneous Installation Accessories
O GTHZ1	Horizontal Drain Pan for GTA "A-Coil" Sections

### Remote Condenser Cover for Geotrio

Part No.	Miscellaneous Installation Accessories
O GTLID	Top Cover for GTC Condensing sections when installed as a split system

### Filter Rack for Geotrio

Part No.	Description
O FR23	Filter Rack 16x25x1 with MERV 2 Filter

# 2 GEOTHERMAL

## Bard Geo-Delta Water to Water Heat Pumps



### Bard Geo-Delta Series Water-to-Water

Bard is pleased to announce the release of their GW Series water-to-water heat pumps. The GW-Series Water-to-Water comfort system offers many hydronic options: radiant floor heating, domestic water heating, pool and spa heating, and snow/ice melt. Reverse cycle models can also be coupled with fan coil units where hot or cold water is passed through a water coil in an air handler to supply conditioned air to be distributed through a ducted supply and return air system

#### Features:

- Multi-Capacity Two-Stage
- Step Capacity Compressor
- Reversible Control Panel
- Coaxial Source and Load Coils
- Domestic Hot Water Generator
- Galvanized 16 Gauge Steel Cabinet

### Bard GW Series Water Source Heating/Cooling Units

Nominal Capacity	Model Number	Hot Water Generation	Source Coil	Load Coil	Voltage	Ship Wt (lbs)
2 Ton	O GW0241S1-A1RCCX	Yes	Copper	Copper	230/208-1-60	335
3 Ton	O GW0361S1-A1RCCX	Yes	Copper	Copper	230/208-1-60	340
4 Ton	O GW0481S1-A1RCCX	Yes	Copper	Copper	230/208-1-60	385
5 Ton	O GW0601S1-A1RCCX	Yes	Copper	Copper	230/208-1-60	405
6 Ton	O GW0701S1-A1RCCX	Yes	Copper	Copper	230/208-1-60	440
2 Ton	O GW0241S1-A1RNCX	Yes	Cupro	Copper	230/208-1-60	335
3 Ton	O GW0361S1-A1RNCX	Yes	Cupro	Copper	230/208-1-60	340
4 Ton	O GW0481S1-A1RNCX	Yes	Cupro	Copper	230/208-1-60	385
5 Ton	O GW0601S1-A1RNCX	Yes	Cupro	Copper	230/208-1-60	405
6 Ton	O GW0701S1-A1RNCX	Yes	Cupro	Copper	230/208-1-60	440

### Bard GW Series Water Source Heating Only Units

Nominal Capacity	Model Number	Hot Water Generation	Source Coil	Load Coil	Voltage	Ship Wt (lbs)
2 Ton	O GW0241S1-AXHCCX	No	Copper	Copper	230/208-1-60	335
3 Ton	O GW0361S1-AXHCCX	No	Copper	Copper	230/208-1-60	340
4 Ton	O GW0481S1-AXHCCX	No	Copper	Copper	230/208-1-60	385
5 Ton	O GW0601S1-AXHCCX	No	Copper	Copper	230/208-1-60	405
6 Ton	O GW0701S1-AXHCCX	No	Copper	Copper	230/208-1-60	440
2 Ton	O GW0241S1-AXHNCX	No	Cupro	Copper	230/208-1-60	335
3 Ton	O GW0361S1-AXHNCX	No	Cupro	Copper	230/208-1-60	340
4 Ton	O GW0481S1-AXHNCX	No	Cupro	Copper	230/208-1-60	385
5 Ton	O GW0601S1-AXHNCX	No	Cupro	Copper	230/208-1-60	405
6 Ton	O GW0701S1-AXHNCX	No	Cupro	Copper	230/208-1-60	440
2 Ton	O GW0241S1-A1HCCX	Yes	Copper	Copper	230/208-1-60	335
3 Ton	O GW0361S1-A1HCCX	Yes	Copper	Copper	230/208-1-60	340
4 Ton	O GW0481S1-A1HCCX	Yes	Copper	Copper	230/208-1-60	385
5 Ton	O GW0601S1-A1HCCX	Yes	Copper	Copper	230/208-1-60	405
6 Ton	O GW0701S1-A1HCCX	Yes	Copper	Copper	230/208-1-60	440
2 Ton	O GW0241S1-A1HNCX	Yes	Cupro	Copper	230/208-1-60	335
3 Ton	O GW0361S1-A1HNCX	Yes	Cupro	Copper	230/208-1-60	340
4 Ton	O GW0481S1-A1HNCX	Yes	Cupro	Copper	230/208-1-60	385
5 Ton	O GW0601S1-A1HNCX	Yes	Cupro	Copper	230/208-1-60	405
6 Ton	O GW0701S1-A1HNCX	Yes	Cupro	Copper	230/208-1-60	440

### Vortex Water to Water Heat Pumps

Vortex Water to Water heat pumps use the stable ground temperature to produce useful hot water for Winter heating or cold water for Summer cooling.



- **Energy efficient:** clean, renewable energy from the ground plus electricity to achieve efficiencies equivalent to nearly 500% compared to electric baseboard
- **Modular:** Use multiple units joined together for large projects.
- **Flexible:** can be used for forced air heating/cooling, radiant infloor, domestic hot water, pool heating. Alone or in all together.
- **Energy efficient:** state of the art scroll compressors
- **Quiet:** state of the art scroll compressors and well insulated cabinets ensure whisper-quiet performance.

Nominal Capacity	Model Number	Source Coil	Compressor	Load & Source Water Connection	Voltage V/Hz/Ph
3 Ton	ECO W2W36-S	Copper	Single Stage	1"	230/60/1
4.5 Ton	ECO W2W52-S	Copper	Single Stage	1"	230/60/1
5 Ton	ECO W2W60-S	Copper	Single Stage	1-1/4"	230/60/1
6 Ton	ECO W2W72-S	Copper	Single Stage	1-1/4"	230/60/1
7 Ton	ECO W2W84-S	Copper	Single Stage	1-1/4"	230/60/1
3 Ton	ECO W2W36-T	Copper	Two Stage	1"	230/60/1
6 Ton	ECO W2W72-T	Copper	Two Stage	1-1/4"	230/60/1
3 Ton	ECO W2W36-S-CN	Cupro	Single Stage	1"	230/60/1
4.5 Ton	ECO W2W52-S-CN	Cupro	Single Stage	1"	230/60/1
5 Ton	ECO W2W60-S-CN	Cupro	Single Stage	1-1/4"	230/60/1
6 Ton	ECO W2W72-S-CN	Cupro	Single Stage	1-1/4"	230/60/1
7 Ton	ECO W2W84-S-CN	Cupro	Single Stage	1-1/4"	230/60/1
3 Ton	ECO W2W36-T-CN	Cupro	Two Stage	1"	230/60/1
6 Ton	ECO W2W72-T-CN	Cupro	Two Stage	1-1/4"	230/60/1

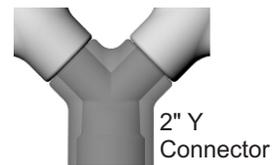
### Geo-Solar Headers

Geo-solar is changing the way the Geo does business.

Reverse return, excessive joints, wasted pipe and wasted time plagues installers everywhere and on every job. Simple human error can create a major problem, especially if the problem manifests after the job is buried. Introducing the Geo-Solar Header!

North American made, the Geo-Solar Header has a limited lifetime warranty. The substrate plastic has a 100-year lifespan.

The Geo Solar Products Header is available in 3-, 4-, 5-, and 6-zone configurations. For zones of more than 6, a Y connector is available for purchase to be fused to the header.



Order Number	Description
<b>O GSP3TH</b>	3 Ton Manifold (each)
<b>O GSP4TH</b>	4 Ton Manifold (each)
<b>O GSP5TH</b>	5 Ton Manifold (each)
<b>O GSP6TH</b>	6 Ton Manifold (each)
<b>O GSPY1-1/4</b>	1-1/4" Y Connector for Headers
<b>O GSPY2</b>	2" Y Connector for Headers

**Note: Two Manifolds Normally Required Per Job**

# 2 GEOTHERMAL

## Geothermal Installation Accessories

### Thermostats

Part No.	Model No.	Description
O 8403-060		Digital Programmable Thermostat-Up to 3 stage heat-Heat/Cool or Heat Pump, 1 or 2 stage compressors
O 8403-061		Remote Outdoor Sensor Air Temperature
O 8403-062		Remote Indoor Sensor Air Temperature
O 8405-005		Locking thermostat cover - Clear acrylic construction - Size 7-1/4" L x 9-3/4" W x 3-3/8" H
O 8405-007		Locking thermostat cover - Beige painted steel - Size 7-1/8" L x 9-5/8" W x 3-1/4" H

### Field-Installed Hard Start Kits

Part No.	Model No.	Description
O SK111		Hard Start Kit for GV27 & GV38
O SK118		Hard Start Kit for GV51 & GV61
O SK120		Hard Start Kit for GV71

### Circulating Pumps



Order #	Description
UP UPS15-58FC	GRUNDFOS Circulator 1/25hp, 3spd, 115V, Cast Iron Flange
UP GPD15-6SF	WALRUS Circulator 1/25hp, 3spd, 115V, Cast Iron Flange
UP GPD25-10SF	WALRUS Circulator 1/6hp, 3spd, 115V, Cast Iron Flange
UP GPD25-12F	WALRUS Circulator 1 speed, 230V, Cast Iron Flange

### Bock Geothermal Water Storage Tanks

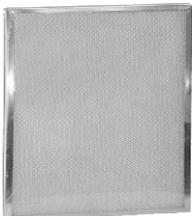


#### Features:

- C-Glass cobalt-enriched porcelain enamel glass lined tank
- Ecomate insulation (Does not contribute to global warming)
- Steel exterior with powder coat finish
- Factory installed brass drain valve
- Four 2" or 2.5" NPT connections, one top outlet & three side supply/return
- Five year limited tank warranty

Model	Description	T & P Relief Valve Conn.	Inlet/Return Conn.	Hot Outlet Conn.	Shipping Weight (lbs)
BOC 30ST	30 Gallon Storage Tank	3/4"	2"1/2"	2"	148
BOC 50ST	50 Gallon Storage Tank	3/4"	2"1/2"	2"	186
BOC 80ST	80 Gallon Storage Tank	3/4"	2"1/2"	2"	247
BOC 119ST	119 Gallon Storage Tank	1"	2"1/2"	2"	382

### Electrostatic Air Filters



These Electrostatic Air Filters fit into the existing framework of Water-to-Air Geothermal Heat Pumps. The filter does so by generating its own static charge. They are also a permanent, washable alternative that appeal to cost conscious and environmentally minded customers.

Order Number	Description	Nominal Size
O EFSMALL	Electrostatic Air Filter for Bard GV27 & GV38 Units	20"x25"x2"
O EFLARGE	Electrostatic Air Filter for Bard GV51 to GV71 Units	32"x25"x2"

**Ground Loop Pumps and Accessories**

Model Number	Description
<b>O DORFC-1</b>	Single Pump (22 feet max. head @ 16 GPM) 1" pipe connections, enclosed cabinet, 230V-60Hz-1phase
<b>O DORFC-2</b>	Dual Pump (44 feet max. head @ 16 GPM) 1" pipe connections, enclosed cabinet, 230V-60Hz-1phase
<b>O DORGPT-1</b>	Geo-Prime non pressurized tank with double o-ring fittings: designed for use with DORFC Loop Flow Centres to create a non-pressurized flow centre system.
<b>O DORLFCK-1</b>	Loop Flow Centre Kit contains: 2 of 1" barbed 90' double o-ring elbows with ¼" FPT ports and 8603-026 pres/temp test plugs 2 of 1" barbed straight double o-ring fittings (for loop flow centre connection on heat pump side) 1 of 12ft section of 1" ID 150psi hose 8 of 1" SS hose clamps
<b>Note:</b>	Order 1 of the following for loop-side connections to loop flow centre
<b>O DORB1-S-4HC</b>	2 of 1" barbed straight double o-ring fittings with 4 of 1" SS hose clamps
<b>O DORF125-S</b>	2 of 1.25" fusion straight double o-ring fittings
<b>O HK1-25</b>	1 of 25' section of PSI hose



**DORFC-2**



**DORGPT-1**



**DORB1-90-4HC**



**DORB1-S-4HC**



**DORF125-S**

**Ground Loop Service Accessories**

Part No.	Description
<b>O DORCL1-90</b>	2 of 90" Double o-ring quick connect cam-lever male fittings for flush attachment to loop flow centre
<b>O CLB1-S</b>	2 of 1" straight barbed quick connect cam-lever female fittings to connect to DORCL1-90 fittings above
<b>O GGK-1</b>	1 of Geo-Gooser w/ shut off valve, 0-100 PSI gauge, garden hose connection, P/T fitting 1/8" probe
<b>O DORGHMT</b>	1 of Double o-ring x male garden hose adapter fitting for loop flow centre (to burp/boost loop)



**DORCL1-90**



**CLB1-S**



**GGK-1**



**DORGHMT**

**Water Supply Valves**

Part No.	Description
<b>O 8603-033</b>	Water Supply Valve. ¾" FPT 24V brass slow open/close valve with end switch
<b>O 8603-006</b>	Water Supply Valve. 1" FPT 24V PVC solenoid valve and internal manual bleed lever
<b>O 8603-038</b>	Water Supply Valve 1"FTP 24V brass slow open/close ball valve with end switch



**8603-033**



**8603-006**

# 2 GEOTHERMAL

## Fittings & Loop Accessories

### Ground Water / Water Loop Accessories

Model Number	Description
O GWK-1	<b>Ground Water Kit contains:</b> 2 of 1" MPT 90' double o-ring elbows with 1/4" FPT ports and 8603-026 pres/temp test plugs 1 of 1" FPT 24V brass motorized slow open/close valve with end switch. See 8603-030
O CFV-5	Constant Flow Valve 5GPM, 3/4" FPT for GV27 Unit
O CFV-6	Constant Flow Valve 6GPM, 3/4" FPT for GV38 Unit
O CFV-7	Constant Flow Valve 7GPM, 3/4" FPT for GV51 Unit
O CFV-9	Constant Flow Valve 9GPM, 3/4" FPT for GV61 Unit
O CFV-10	Constant Flow Valve 10GPM, 3/4" FPT for GV71 Unit
O CFV-12	Constant Flow Valve 12GPM, 3/4" for Gv71 Unit
O CFV-15	Constant Flow Valve 15GPM, 3/4" for Gv71 Unit
O CFV-18	Constant Flow Valve 18GPM, 3/4" for Gv71 Unit

### Individual Double O-Ring Fitting Packs (Qty 2 per pack)

Individual Double O-Ring Fitting Packs (Qty 2 per pack)	
O DORB1-90-4HC	2 of 1" barbed 90' double o-ring elbows with 1/4" FPT ports, 8603-026 pres / temp test plugs and 4 of 1" SS hose clamps
O DORB1-S-4HC	2 of 1" barbed straight double o-ring fittings with 4 of 1" SS hose clamps
O DORMP1-90	2 of 1" MPT 90' double o-ring elbows with 1/4" FPT ports and 8603-026 pres/temp test ports
O DORMP1-S	2 of 1" MPT straight double o-ring fittings
O DORFP1-S	2 of 1" FPT straight double o-ring fittings
O DORS1-S	2 of 1" copper sweat straight double o-ring fittings with 1/4" FPT ports and 8603-026



### Ground Water / Water Loop Accessories

Ground Water / Water Loop Service Accessories	
O 8603-012	Flow Meter 1-10 GPM, 3/4" FPT
O 8603-017	Flow Meter, 1-17 GPM, 1" FPT
O 8603-026	1/4" Pressure / Temperature Test Plug
O 8603-027	1/4" FPT Gauge Adapter with 1/8" heavy duty probe
O 8603-028	1/4" MPT 0 to 100 PSI Gauge
O 8603-029	Pocket Thermometer, 1/8" Probe 0 to +220 deg. F

