



A WELL-GROUNDED SOLUTION.

GEOFINITY

WATER-TO-AIR GEOTHERMAL HEAT PUMPS



The **Geofinity GF** (water-to-air) series is a high-efficiency, eco-friendly forced-air heating and cooling system designed as the ultimate comfort solution. The **Geofinity GC** (water-to-air/water) series provides the same forced-air comfort of the GF series, along with the ability to use hydronic heating for radiant floors, domestic hot water¹, pools/spas and snow melting capabilities. Both series are available in vertical and horizontal configurations to meet any space requirements.

Engineered exclusively with the environmentally-friendly R410a, the units integrate the most advanced user-friendly controls available on the market today.

Applications include:

- Forced-air heating & cooling
- Direct hydronic heating & cooling
- Radiant floor heating
- Domestic hot water
- Pool/spa heating
- Snow melting

Standard Features:

The Orb Controller – This award winning controller offers complete operating, monitoring, control and diagnostics capabilities. The Orb is a fully-integrated intelligence system that provides real-time data trending and analysis on-site or via email.

This gives contractors the ability to call end-users to notify them of a service requirement before one has even been realized in the home.² For homeowners, it means instant access to real-time energy use, efficiency and CO₂ emissions.

PSC Blower Motor – For single-speed applications (low, medium or high).

MERV 13 2" Air Filter – High performance, all-season, extremely durable filter system offers superior air filtration and indoor air quality.

Scroll Compressors – Hermetically sealed scroll compressors provide years of efficient, quiet and reliable performance.

Steel Cabinet Construction – Fully insulated, polyester powder coated and corrosion resistant cabinet combines quiet operation and long lasting good looks.

Oversized Heat Exchangers – Modine's Geofinity systems are designed with oversized coaxial heat exchangers, producing increased efficiencies and greater cost savings.



Analog Temperature Sensors – Properly located sensors allow for real time performance data collection, assisting the Orb controls for optimal unit operation.

10-Year Limited Warranty – Not only do end users have a piece of worldclass equipment with Geofinity, they also have peace of mind in the form of a 10-year limited warranty standard on all units.

Optional Features:

Dual Speed Compressor – A two-stage scroll compressor allows the compressor to operate at a lower capacity when partial conditioning is required, saving energy while maintaining a pleasant living environment.

Desuperheater – Provides supplemental domestic hot water whenever the unit is running by preheating the potable water supply being delivered to the hot water tank. Comes with an internally mounted circulating pump.

Cupronickel Heat Exchanger – Used for applications where harsh water conditions exist on the source and/or load side.

EC Motor – Variable speed ECM adjusts fan speeds to a constant rate regardless of external static pressure, resulting in consistent, gentle air circulation.

Electric Heater – Add-on component for auxiliary back-up electric heat.

1. When equipped with optional Desuperheater/Hot Water Generator.
2. Requires additional equipment and set-up.

Modine and Geofinity - Innovators from the Start

In 1922, company-founder A.B. Modine moved the company into the HVAC industry with his historic invention of the hydronic unit heater. Today, that same innovative, entrepreneurial spirit continues through Geofinity.

For nearly a century, Modine has been a trusted name for commercial, industrial and residential heating, ventilating and air-conditioning solutions. Hundreds of thousands of HVAC-related products bear the Modine badge across North America along with other popular Modine brands such as the Hot Dawg® and Effinty³³® unit heaters, and the Atherion® packaged ventilation system. Modine is also well versed in the geothermal industry, building classroom geothermal systems for colleges and K-12 schools for the past 15 years.

Geothermal solutions are nothing new to Modine, as the company continues to move the technology forward with Geofinity – giving end users a new way to receive a well-grounded solution.



Company founder A.B. Modine

The right geothermal unit begins with the right controller.

The Orb control is the most advanced, fully-integrated operating, monitoring and diagnostic technology available today.

Benefits of the Orb are found in:

- Start-up/System Commissioning – Advanced system design configuration and tailoring without touching the unit. Simply stated, this means your system is practically plug-and-play ready the day it's installed
- Diagnostics – Vast array of critical sensors and component data/status continuously provided
- Monitoring – Complete system, energy and performance functionality
- Serviceability and Troubleshooting – Diagnose and solve problems before they even happen



2012 AHR Innovation Award
Winner in Building Automation



GF Series Data (water-to-air) ISO 13256-2 Performance Data									
		Ground Water				Ground Loop			
		59° F		50° F		77° F		32° F	
Model		Cooling	EER	Heating	COP	Cooling	EER	Heating	COP
018	Full	21,500	28.3	19,300	5.1	18,500	19.4	14,600	4.0
024	Full	25,800	20.7	24,700	4.6	26,000	17.6	20,700	4.1
	Part	20,300	28.3	18,200	5.2	19,300	24.2	17,400	4.8
036	Full	43,600	19.7	37,400	4.4	37,900	17.4	29,900	3.9
	Part	31,900	26.9	25,700	4.5	27,300	20.6	23,200	4.1
048	Full	51,850	22.5	47,950	4.7	47,100	17.0	37,800	4.1
	Part	38,650	27.4	35,400	5.3	38,700	24.6	31,700	4.8
060	Full	64,500	21.6	63,800	4.8	61,400	16.6	49,250	4.0
	Part	50,700	30.0	44,700	5.0	44,750	23.6	38,300	4.4
066	Full	71,400	20.4	72,300	4.5	64,800	15.8	57,600	4.0
	Part	58,600	23.6	54,700	4.8	55,900	20.8	47,900	4.3

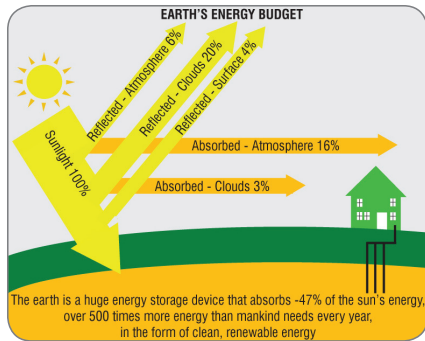
GC Series Data (water-to-air/water combo) ISO 13256-2 Performance Data									
		Ground Water				Ground Loop			
		59° F		50° F		77° F		32° F	
Model		Cooling	EER	Heating	COP	Cooling	EER	Heating	COP
036	Full	39,700	20.9	36,300	4.4	36,800	16.1	29,400	3.8
	Part	29,500	28.7	26,000	5.1	27,100	23.6	22,900	4.5
048	Full	47,000	19.1	46,400	4.6	47,000	17.0	34,900	4.1
	Part	37,600	23.7	30,600	4.7	35,600	20.2	29,900	4.4
060	Full	65,000	19.5	64,700	4.4	61,600	15.6	53,000	3.9
	Part	46,800	24.6	47,500	4.8	44,400	20.4	42,600	4.4
066	Full	74,000	19.5	74,000	4.5	70,000	15.8	60,300	4.0
	Part	54,700	23.5	55,600	4.8	51,700	20.0	49,800	4.4

GEO EXCHANGE SYSTEMS

The most efficient, environmentally-friendly and cost effective method of heating and cooling technology available today.

Residential and light-commercial geothermal systems, such as Modine's Geofinity line, harness the renewable thermal energy stored in the Earth (ground source) or just below the surface of a large body of water (water source). This energy is then used to deliver forced-air heating and cooling, hot and chilled water and dehumidification to residential and commercial spaces.

Ground source heat pumps are the most commonly applied geothermal system today. They take the natural heating and cooling properties of the Earth to create "free energy" for a given space. The beautiful thing for end users is that only a small amount of electrical energy is needed to capture, move and concentrate this energy.



WHY CHOOSE A GEOTHERMAL SYSTEM?

Accessibility – A Geofinity system operates the same whether you are in Minneapolis or Miami. Heat is moved into the earth in the summer, and removed from the earth in the winter.

Flexibility – A single unit is capable of supplying all of the heating, cooling and domestic hot water required.

Decreased Maintenance – With one-third of the moving parts as traditional HVAC equipment, Geofinity systems require little maintenance.

System Performance – Maximized efficiency is a certainty thanks to the industry-leading, proprietary Orb controls, standard on all residential units.

Clean – Geofinity systems produce zero carbon monoxide and greenhouse gas emissions.

Extremely Cost Effective – Operating efficiencies of Geofinity systems can provide up to 70% savings versus traditional heating and cooling equipment.

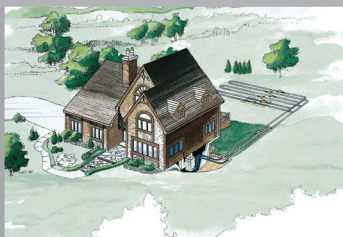
Respectable ROI – By combining efficiency gains with federal rebates – up to 30% total cost – end users can expect a solid return on their investment in the near future.

WHAT ARE MY GEO-FIELD OPTIONS?



Vertical Loop System

Used with limited land area. Holes drilled 10-20' apart, 100-400' deep. Significant drilling improvements now limit land-disturbance during installation process.



Horizontal Loop System

The most cost effective solution when land is available. Trenches dug by backhoe or trencher 6' deep.



Pond/Lake Loop System

May be lowest cost option if adequate water available (1/2 acre x 8' deep). Supply and return pipes run to/from lake.



Open-Loop System

Used when abundance of well-water available. Ground water pumped from the well and discharged in a secondary well.



To learn more visit

www.ModineHVAC.com

or call 1.877.679.4GE0 (4436)

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