

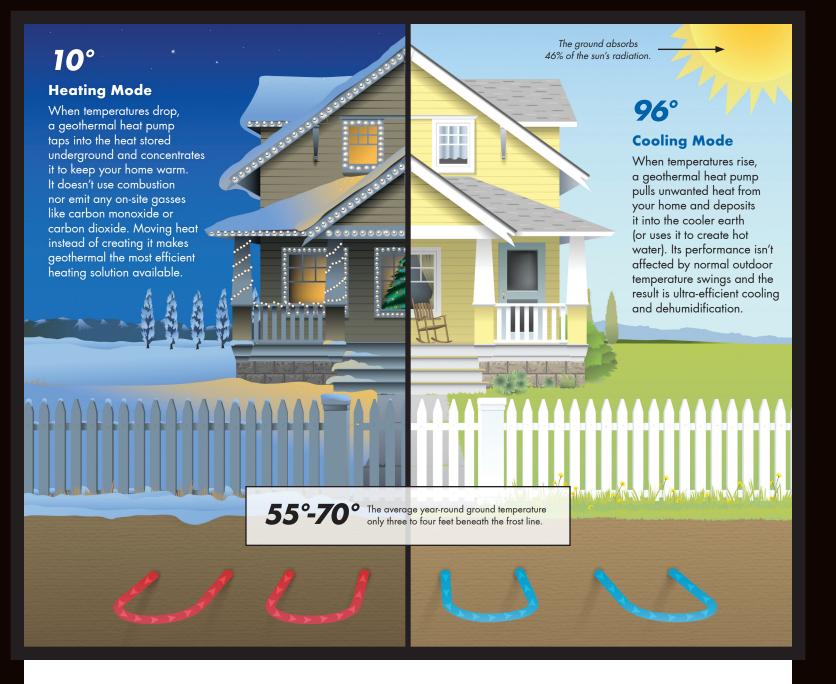
Y5A MODEL | 30 EER & 5.0 COP

AFFINITY" SERIES WITH LOW GWP

# **GEOTHERMAL HEAT PUMPS**

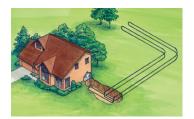






## **Geothermal Earth Loops**

A geothermal system uses a series of underground pipes called a "loop." A loop is the secret behind a geothermal system's amazing efficiencies and the biggest difference from ordinary heating and cooling technologies.



#### Horizontal Loop

A typical home needs 1/4 to 3/4 of an acre to utilize a horizontal loop, and trenches are dug using a backhoe or chain trencher. High density polyethylene pipes are inserted, and the trenches are backfilled.



### **Vertical Loop**

A typical home requires three to five bore holes, dug with a drilling rig. A pair of pipes with special u-bend fittings is inserted into the holes.



#### **Pond Loop**

A ½ acre, 8-foot-deep pond is usually sufficient for the average home. A series of coiled, closed loops are sunk to the bottom of the body of water and are used for heat transfer.



# **Open Loop**

An open loop utilizes a well that has an adequate capacity to provide water flow for both domestic use and the geothermal unit. Most units require 3-10 GPM. depending on size and model



## Efficiency

Geothermal heat pumps are much more efficient than traditional heating and cooling systems. The York® Affinity™ Y5A is rated with an amazing 30 EER and 5.0 COP, which makes it one of the most efficient dual stage units on the market. Efficiency translates into savings.



#### **Cost effective**

Geothermal heat pumps are so efficient that any added cost over traditional equipment is usually recovered in just a few years. And because they have a lifespan of 20-25 years, your investment will last longer and your return on investment will grow year by year.



#### Safe

No combustion or flames are used to operate a geothermal heat pump, making it a safe choice for your home and family. Our systems merely move heat to and from the ground rather than by burning natural gas, propane, or oil.



#### All-in-One

One York® geothermal heat pump will provide heating, cooling, and supplemental hot water for your home. A variety of sizes and configurations are available, so no matter your home or climate, a geothermal heat pump will work for you.



### **Environmentally responsible**

Since our units don't burn expensive, polluting fossil fuels, they're the most environmentally responsible options available today. Replacing a furnace and/or air conditioner with geothermal can minimize acid rain threats, air pollution, and the greenhouse effect.



## Affordable peace of mind

York® Affinity™ Y5A units come with warranties up to 10 years for parts and labor allowances. Other options are available, so see your York® Contractor for details.











## Features of the Affinity™ Series

#### **Dual Capacity Compressor:**

Allows the unit to operate at two speeds rather than running at one high speed all the time. The Affinity™ Y5A can operate more frequently in a lower speed to satisfy the needs of your home while saving energy.

**Controls:** Sophisticated Aurora Advanced Controls provide easy-to-use but extensive troubleshooting capabilities as well as advanced two-way communication between components Provides energy, refrigeration and performance monitoring. Enables communicating zoning and Symphony remote diagnostics

**Blower Motor:** An ECM variable speed blower motor operates at only the speed needed for the greatest in efficiency and savings.

**Aurora Interface Diagnostic Port:** Technicians can diagnose and service your system without even opening the unit by utilizing the external communication port and interface tool.

IntelliStart®: This optional soft starter reduces start-up amperage by 60% of normal draw to reduce noise, eliminate light flicker, and increase compressor life.

**Coated Coaxial Heat** Exchanger: Coaxial heat exchanger life is extended by our proprietary coating that protects against condensation at temperatures below 50°F.

Hot Water Generation: A hot water assist option preheats your water and delivers it to your hot water heater. The longer the unit operates, the greater the amount of hot water generated.

## All-Aluminum Air Coil:

Affinity<sup>TM</sup> Y5A units feature aluminum air coils for durability and extended system life.

Cabinet: A professional grade powder-coat finish provides long-lasting beauty and protection. The unit is fully insulated with cleanable foil-backed insulation that ensures quiet operation.

Filter and Filter Rack: A high performance MERV 11 pleated filter comes standard.

R-454B: Affinity low GWP models utilize R-454B, our most eco-friendly refrigerant.

# Make a smart choice: York®

Choosing the right contractor is the first step in selecting the best system for your home. Your York® Contractor is trained to give you professional home comfort services, including:



- An evaluation of factors such as your home's size, age, number of rooms, climate characteristics and utility costs
- A system recommendation that fits your family's comfort needs, your home, your lifestyle and your budget
- The assurance of proper installation and customer care, including warranties and maintenance options

# Stay comfortable for years to come.

York® is proud to offer the YorkCare™ Comfort Plan. It's designed to maintain your system as well as your peace of mind. With YorkCare™ you get total protection that ensures your unit is effective and efficient for years to come.

What's more, your York® Contractor offers maintenance agreements that provide upkeep while maximizing the warranty provisions. Ask about the YorkCare™ Comfort Plan. A little extra coverage is always a comforting idea.

# Long story short—our history.



You've probably enjoyed York® engineering for years without even knowing it. We have, after all, designed and implemented heating and cooling systems in some of the world's most famous structures, including the U.S. Capitol building, the Sydney Opera House, the entire U.S. Navy nuclear submarine fleet, and

even venues such as your local mall and corner bank.

There's a reason people trust us with the big jobs. We've been doing this a long time. Over 135 years, in fact. In that time, we developed the first successful room air conditioner and cooled the world's first theater, hotel and office building. We're constantly leading the industry in our design and our technology. And our commitment has earned our products the



Good Housekeeping Seal of Approval. No matter what the scale, chances are we've developed an efficient, durable and effective solution for it.





Homeowners who install an ENERGY STAR® rated geothermal system in the U.S. are eligible for a 30% federal tax credit. The 30% credit will last through 2032 and can be claimed on equipment and installation costs with no upper limit. The credit is scheduled to decrease to 26% in 2033 then to 22% in 2034, so act now for the most savings!

# ISO/AHRI/ASHRAE Performance Ratings (13256-1)

AFFINITY™ Y5A MODEL						
MODEL & SIZE		CLOSED LOOP		OPEN LOOP		
		COOLING (EER)	HEATING (COP)	COOLING (EER)	HEATING (COP)	
DUAL CAPACITY	018	Full Load	19.8	4.2	27.0	5.0
		Part Load	24.8	4.7	29.5	5.1
	024	Full Load	19.2	4.1	25.2	4.9
		Part Load	26.6	4.6	31.8	5.2
	030	Full Load	20.3	4.0	27.5	4.8
		Part Load	28.7	4.3	35.9	4.9
	036	Full Load	20.8	4.5	28.4	5.3
		Part Load	30.0	5.0	35.6	5.5
	042	Full Load	19.2	4.4	26.6	5.2
		Part Load	26.9	4.9	32.7	5.5
	048	Full Load	18.9	4.4	24.9	5.1
		Part Load	27.3	5.0	32.7	5.5
	060	Full Load	19.3	4.1	24.2	4.7
		Part Load	26.5	4.4	31.4	4.9
	072	Full Load	18.3	4.0	23.1	4.6
		Part Load	25.1	4.2	29.7	4.6

For additional product details, such as weight and dimensions, visit www.york-geothermal.com or ask your York® Contractor.



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