# PHOENIX

96% Efficient Commercial and Residential Hot Water Heaters



• Super Efficient • Super Durable • Super Reliable • Super Quiet • Super Versatile



# Phoenix Condensing Water Heater

From the maker of the popular Munchkin condensing boiler. Phoenix is the pinnacle of 10 years of product evolution and field experience resulting in a super durable, reliable, quiet and cost-effective ultra high efficiency water heater.

## Super Efficient

- 96% thermal efficiency
- 2" foam insulation 1.5%/hr standby lost
- Load matching modulation
- No standing pilot light

## Super Reliable

Spark ignition

 Euro reliable and field tested components

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## Super Durable

- 316L Stainless steel tank
- Cupronickel/Stainless steel combustion chamber
- Millions of key components in use worldwide
- Reduced cycling adds component life
- 30 years of tank know-how and 75,000 condensing water heaters installed

## Super Quiet

• Whisper quiet: .45dB at 5 ft.

# Commercial Application

Larger demands for the Laundry – Apartment Buildings – Restaurants – Hotel and other commercial jobs. The Phoenix is the perfect fit for both Residential and Commercial.

## Lots of Hot Water

Modern homes with multiple bathrooms and whirlpool baths need high amounts of hot water to meet large peak loads. Commercial applications also require fast recovery and large amounts of hot water. The Phoenix is the perfect fit.

# The Right Choice: Low $NO_x$

The Phoenix reduces carbon emissions over standard versus traditional heaters.

## Affordable

High efficiency is now more cost-effective with the never-ending increase in the cost of fuel.

# Residential Application

Modern homes with multiple bathrooms and whirlpool baths need high-capacity water heaters to meet large peak loads.

# Phoenix...96% Efficient Hot Water and Heating

# Extremely Versatile Appliance

With the Phoenix the designer has an extremely versatile appliance that can be used in many applications commercially and residentially. The Phoenix can be used in hotels, restaurants, schools, homes and many more applications. Easy to Install

One vent ... One gas line ... Total Heat.



#### Combine Heating and Hot Water with Cooling:

- Heating and Cooling with Air Handlers or Chilled Water
- 96% Water Heating and Space Heating Efficiency
- Reduced Ducting with Multiple Units
- Improve Comfort through Zoning
- Single Vent and Gas ConnectionTwo Stage or Variable Speed

#### Commercial Hot Water

- 96% Water Heating
  Efficiency
- Easy to Install
  Small Foot Print, Light Weight Construction
- Sealed Combustion – Vents in Plastic Pipe
- Pays for itself after a few years of operation
- Supplies more Hot Water versus conventional system with same fire rate
- Load Matching



### **RADIANT** Heating

- Unsurpassed comfort
- 96% Water Heating and Space Heating Efficiency
- No ducting
- Easy zoning
- Super quiet

# **Compact Size**

Uses minimal floor space and is rated zero clearance to combustible surfaces.

# Flexible PVC Venting

Phoenix can exhaust up to 85 feet with flexible venting options to meet the requirements of any job.



### **Phoenix Modulation**



The Phoenix electronic control adjusts the burner firing rate to match demand exactly. The burner firing rate increases as the demand increases and decreases as the hot water demand approaches the required temperature set point. This load matching modulation dramatically reduces on/off cycling, resulting in longer component life, reliability and higher system efficiency.

### Phoenix Gas-Fired Water Heater Specifications

The Phoenix is constructed in various tank sizes and input ranges to match even the most challenging job.	Model	Input Modulation	Gallon Consoity	First Hr.	100° Pice	Thermal	Hojaht	Diamotor	Donth
	WOUEI	Woundtion	Capacity	ndully	nise	Eniciency	пенуш	Didilleter	Deptil
	PH199-119	66,000–199,000	119	335 gal	230	96.1%	74	27	40
	PH130-119	44,000–130,000	119	257 gal	152	96.1%	74	27	40
	PH100-119	44,000–100,000	119	214 gal	117	96.3%	74	27	40
	PH199-80	66,000–199,000	80	314 gal	229	94.8%	72	23	36
	PH130-80	44,000–130,000	80	227 gal	150	95.4%	72	23	36
	PH100-80	44,000–100,000	80	189 gal	116	95.8%	72	23	36
	PH199-55	66,000–199,000	55	295 gal	229	95%	52	23	36
	PH130-55	44,000–130,000	55	205 gal	148	93.7%	52	23	36
	PH100-55	44,000–100,000	55	169 gal	115	94.8%	52	23	36

Recovery ratings are based on thermal efficiency testing performed at a government recognized certified laboratory. ANSI 21.10.3-1998



# How PHOENIX works

The Phoenix is a super insulated stainless steel water storage tank fitted with a combustion chamber submerged in the tank water. When the burner is fired, the hot combustion gases heat the combustion chamber walls, transferring the heat directly to the surrounding water. The hot gases travel into the secondary heat exchange coils where even more heat is transferred to the water condensing the combustion gases and wringing yet more heat from the gases. Finally the cool, LowNox combustion air is vented via plastic pipe to the outdoors.

