

# **ECOER GAS FURNACE**

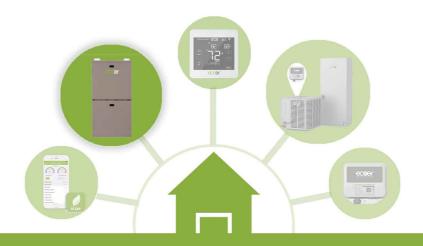
96% AFUE High Efficiency



#### Make Ecoer Furnace Warm Your Home

Ecoer launched its first condensing furnace MGH series. It is an ideal solution for efficiently heating your house with an AFUE heating efficiency of 96%. Ecoer utilizes multiple technologies to provide its customers a high quality and energy-saving furnace. A new generation of furnace opens a new era of heating.

Ecoer is committed to creating a comfortable home environment for every family. The Ecoer furnace will heat your home and accompany your family through the cold days.



### **Features**

**96% AFUE** 

**Energy Star Rated** 

Two-Stage Design



Multipoise Design

13-ECM Motors

Flexibility

#### **Benefits**

- High Efficiency: Up to 96% AFUE heating efficiency ENERGY STAR rated.
- Comfortable: Two-stage design can prevent temperature swings and keep furnace run longer.
- 3-way multipoise design: Flexibility in multiple types of installations, available in upflow (right or left return) and horizontal orientations.
- Hassle-free installation: Field convertible gas type for hassle-free installation, all furnaces come standard with a natural gas to propane gas conversion kit.
- 2 stage x13 ECM motors: For all models for quiet and efficient operation.
- Hot-surface ignition: Dependable operation.
- Durable parts: Durable aluminized steel tubular heat exchanger and stainless-steel secondary heat exchanger.
- Pairs with Ecoer heat pump: Reaching up to 18 SEER.
- Compact design: Low Profile cabinet construction allows for installation in tight spaces. Convenient left or right-hand connection for gas and electric service.
- High-quality cabinet: The cabinet is painted galvanized steel with an anti-rust coating, that passes a 500 hours salt spray
- LED fault diagnostics: Quick and easy service calls.

### Why Ecoer



- Up to 96% AFUE heating efficiency ENERGY STAR rated
- Save on your energy bills
- Economical for your family
- High and Low Fire Setting
- Easy Switch



### Flexibility

#### Multiple types of installations

Available in up-flow (right or left return) and horizontal orientations

#### Pairs with Ecoer Heat Pump

Works well with Ecoer family of products, achieving up to 18 SEER

#### Warranty

- 5-year parts limited warranty
- 20-year heat exchanger limited warranty



- (1) For full details on the warranty terms and conditions visit www.ecoer.com
- (2) Required to be qualified for local regulations and HVAC standards

# COMPONENTS





- Air Intake
- B High/Low Fire Pressure Switches
- Ignitor
- Burners
- Flue
- Flame Sensor
- G Gas Valve
- Inducer
- CondensateOverflow Switch
- Secondary Heat Exchanger
- **K** Control Board
- Blower Motor





Warm Your Home with Ecoer Gas Furnace











# **Technical Information**

Cabinet Size(W)		Unit		MGH96M080B3A	MGH96M080C4A	MGH96M100C5A	MGH96M100D5A	MGH96M120D5A	
Capillet Cize(W)	Inch		17.5 21 24.5					1.5	
Cabinet Size(D*H)	Inch		(28-1/2)*(33-3/4)						
Gas Type	-		Natural Gas/Propane Gas						
AFUE	%		96						
	NG/LP (High)	Btu/h	60000	80000	80000	100000	100000	120000	
Input	NG/LP (Low)	Btu/h	39000	52000	52000	65000	65000	78000	
Output	NG/LP (High)	Btu/h	57000	76000	76000	95000	95000	106500	
	NG/LP (Low)	Btu/h	37000	49000	49000	62000	62000	75000	
Air Temperature Rise	°F		30-60		35-	<u>.</u> -65	······································	40-70	
Design Max.Outlet Air Temperature	°F		160	165				170	
Certified EXT Static Pressure	Heating	in.WC	0.12	0.15	0.15	0.2	0.2	0.2	
	Cooling	in.WC	0.5	0.5	0.5	0.5	0.5	0.5	
Tons AC	Tons	i	1.5/2	<u>:</u> /2.5/3	2.5/3/3.5/4		3.5/4/4.5/5	<u>:</u>	
Power supply	V-Ph-Hz		115V/60HZ/1PH						
Max Overcurrent Protection (MOP)	Amps		15 20						
Blower Motor Full Load	Amps		8	8	7.8	11.5	10.5	10.5	
Blower Motor Full Codu				İ			10.3	10.5	
Circulating Blower Motor	Type	la ele	- x13 ECM ch 12 3/8 12 3/4						
	Diameter Blower	Inch				12 3/4			
	Height Blower	Inch	8 11 1/4						
Motor Speeds	Number of speeds 5								
	Speed Setting	S	High/Mid-High/Mid/Mid-Low/Low						
	RPM		1050 (rated)						
Power Input	(High)	W	63±10%						
	(Low)	W	39±10% 44±10				44±10%		
Circulating Fan Motor	Motor Horsepower	HP		3/4			1		
Max.Inlet Gas Pressure	Nature Gas	in.WC	10.5						
	Propane Gas	in.WC	13						
Min.Inlet Gas Pressure	Nature Gas	in.WC	4.5						
	Propane Gas	in.WC	11						
Nature Gas Working Pressure	in.WC		High Fire: 3.5 Low Fire: 1.6						
Propane Gas Working Pressure	in.WC		High Fire: 10 Low Fire: 4						
	#		rign Fire. TO Low Fire. 4						
Natural Gas Orifice (0-2000 Feet)	#		45 55						
Propane Gas Orifice (0-2000 Feet)	#						-		
Number of Burners	÷ took		3	4	4	5	5	6	
Primary Heat Exchanger Diameter	Inch					3/4	_	T	
Primary Heat Exchanger	# Tubes		3	4	4	5	5	6	
Secondary Exchanger Diameter	Inch					/8		:	
Secondary Heat Exchanger	# Tubes	:	33	33	39	39	48	48	
Pressure Switch Factory Setting		in.WC	1.1						
	(Low)	in.WC	0.55						
Rollout Switch - Resettable	Off/On	°F			30	00			
Inlet High Temperature Limit	Off/On	°F	150/120	130/100		150	/120		
Switch :	in.NPT 1/2								
Switch  Gas Connection Size					1.	/2			
						/2 urface			

<sup>\*</sup> All units come standard with a natural gas to propane gas conversion kit

### **About Ecoer**

# The Most Innovative Residential Ducted Heat Pump and AC System Available

Ecoer Inc. was established in 2016. We are a US company focusing on offering the best ducted Residential Air Conditioner and Heat Pump systems using Inverter and "Smart" IoT Technology.

Ecoer has grown to multiple locations in 4 countries: the United States, Canada, Japan and China. Ecoer both designs it's equipment and owns all rights to its technology.

Ecoer's goals are to provide a high efficiency product at an affordable price, simplify the inverter install process and connect the contractor to the homeowner and their systems. By doing this, we hope to see more inverters used in the US residential market, making it easier and faster to install for the contractor and helping save money and energy, with a quicker and more accurate response time for the homeowner.

#### **Ecoer's Mission Statement is:**

Making your home Green and Smart.









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