

# gas furnaces



**GTH2E Two-Stage – ECM**  
**Up To 94.9% AFUE Gas Furnace**  
4 Position Natural Gas or Propane



**GTHC Single Stage**  
**95% AFUE Gas Furnace**  
4 Position Natural Gas or Propane



**GTHB Single Stage**  
**Up To 93% AFUE Gas Furnace**  
4 Position Natural Gas or Propane



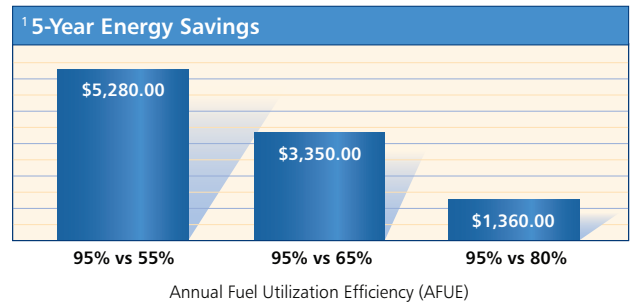
*keeping families warm for more than 60 years*

# Higher AFUE translates into significantly lower fuel bills

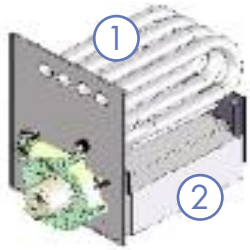
(AFUE = Annual Fuel Utilization Efficiency)

If your furnace is 25 years old or older, chances are that it is only 55% or 65% efficient. Refer to the chart at right to see the savings you could realize by installing an Olsen today.

Higher AFUE = More heat for every dollar spent. AFUE works much like the miles-per-gallon rating on a car – the higher the rating, the lower the fuel costs. Installing a higher AFUE furnace can also equal cash back – energy-efficiency rebates or incentives may be available from the government or utility in your area.



## Superior heat exchanger design delivers higher AFUE!



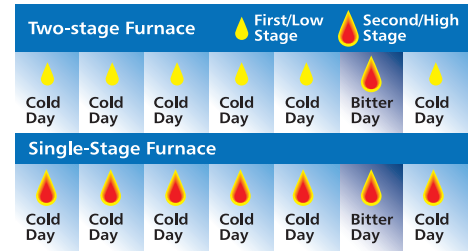
- 1. Triple pass primary heat exchanger** – Constructed of aluminized steel, Olsen’s highly-efficient triple-pass tubular design has a large surface area to maximize heat transfer into your home. The wrinkle-bend aluminized tube design ensures a longer-lasting heat exchanger by eliminating the stress points and hot spots found in competing designs.
- 2. Heat recovery coil** – The secondary stainless steel heat exchanger extracts the remaining heat from flue gases so that up to 95%, or 95 cents, of your fuel dollar is converted to heat for your home.

## GTH2E two-stage technology delivers two furnaces in one

**The furnace must be sized for the coldest day of the year** – The full capacity of your furnace is not always required to meet heating needs on a cold day. So how do you access only a portion of your furnace’s heating capability?

The GTH2E’s two-stage furnace design will match lower heat demands by burning less fuel in a first/low stage, with the capability to provide more heat in the second/high stage on the days it is needed.

A single-stage furnace can only operate at full capacity, and must cycle on and off when heat is required. The GTH2E runs for longer periods, delivering only the heat required at a slower fan speed, which drastically reduces temperature swings and increases overall comfort.



## GTH2E variable speed (ECM) technology

**Lower operating costs** – At full load the ECM motor is 20% more efficient than a conventional motor. On continuous fan speed, the ECM motor consumes 60 to 80 watts compared to 400 watts for a conventional motor.

**Soft start and stop = Less noise and increased overall comfort** – The variable speed motor ramps up gradually until it reaches the required air flow and ramps down slowly before shutdown. The operation is so quiet you will rarely notice when your furnace turns on and off.



In heating mode, the initial rush of cold air and noise created by conventional motors is eliminated. Reduced temperature swings and gradual heat gain increase the overall comfort delivered by the system. In cooling mode, the motor speed is reduced during the first several minutes of operation. This increases the system’s ability to remove maximum humidity from the airflow, increasing comfort in your home.

<sup>1</sup> This chart depicts potential energy savings from the GTH2E. Data used for this example was 80,000 BTU heat load, 7000 Degree Days F per annum, fuel cost @ 1.08 per therm or .38 per cubic metre. Actual savings may vary, depending on your local weather patterns and fuel rates, lifestyle and the air infiltration integrity of your building envelope. The cost savings presented are for demonstration purposes only and do not constitute a guarantee of performance for any product.

# gas furnace selection guide

FURNACE MODEL

FEATURES	GTHB Ultra Max 4	GTHC Ultra Max 4	GTH2E Ultra Max 2E
<b>Efficiency</b>	High	High	High
Annual Fuel Utilization Efficiency (AFUE)			
Triple-pass tubular aluminized heat exchanger	•	•	•
Stainless steel secondary heat exchanger	•	•	•
Aluminized multi-port in-shot burners	•	•	•
Silicone nitrate hot surface igniter	•	•	•
Fast opening gas valve	•	•	
Two-stage gas valve			•
Foil-faced cabinet insulation	•	•	•
<b>Air Flow Management</b>			
Permanently Separated Capacitor (PSC) Motor	•	•	
Electronically Commutated Motor (ECM)			
<b>Noise Reduction</b>			
Insulated blower compartment			•
Dynamically balanced blower assembly	•	•	•
Variable speed blower motor			•
<b>Installation</b>			
4-position installation options	•	•	
Field convertible to propane (LP)	•	•	•
High-altitude kit available	•	•	•
<b>Warranty</b>			
<sup>1</sup> 5-year parts warranty	•	•	•
<sup>1</sup> Limited lifetime heat exchanger warranty	•		•
<sup>2</sup> Peace-of-mind limited replacement warranty		•	•

ECR's home comfort products are designed to provide years of **trouble-free** operation

The "Comfort Plus" Extended Warranty program complements ECR's Standard Product Warranty by providing labour coverage and additional years of parts coverage depending on the plan purchased. If you sell your home, the "Comfort Plus" warranty can be transferred to the purchaser, adding to the value of your home. Ask your installer for details on the "Comfort Plus" Extended Warranty program.



<sup>1</sup> Subject to the limitations set out in the warranty. For warranty information visit [www.olsenhvac.com](http://www.olsenhvac.com).

<sup>2</sup> GTH2E and GTHC peace-of-mind limited replacement warranty. If the GTH2E or GTHC heat exchanger fails within the first five years, ECR International will supply a new GTH2E or GTHC furnace.

# gas furnace specifications

## PERFORMANCE

	AFUE	Input (BTU)	Output (BTU)	Max CFM @ .20 WC	Max CFM @ .50 WC
<b>GTH2E</b>					
GTH2E060-3	94.9%	<sup>1</sup> 60,000	<sup>1</sup> 58,000	845	600 - 1200
GTH2E080-3	92.9%	<sup>1</sup> 80,000	<sup>1</sup> 76,000	1385	600 - 1200
GTH2E080-4	92.9%	<sup>1</sup> 80,000	<sup>1</sup> 76,000	1385	800 - 1600
GTH2E100-5	94.0%	<sup>1</sup> 100,000	<sup>1</sup> 95,000	1740	800 - 2000
GTH2E120-5	93.8%	<sup>1</sup> 120,000	<sup>1</sup> 115,000	2190	800 - 2000

<b>Ultra Max 4</b>					
GTHC050-3	95%	48,000	45,000	1328	1199
GTHC065-3	95%	64,000	60,000	1621	1524
GTHC080-3	95%	80,000	76,000	1717	1408
GTHC080-5	95%	80,000	76,000	2172	1965
GTHC100-3	95%	96,000	91,000	1951	1692
GTHC100-5	95%	96,000	91,000	2305	2150

GTHB040-3	93%	40,000	37,000	1000	800
GTHB060-3	93%	60,000	56,000	1300	1200
GTHB080-3	93%	80,000	75,000	1500	1200
GTHB080-4	93%	80,000	75,000	1900	1600
GTHB100-3	92.6%	100,000	94,000	700	1200
GTHB100-5	92.6%	100,000	94,000	2200	2000
GTHB120-5	92.1%	120,000	111,000	2400	2000

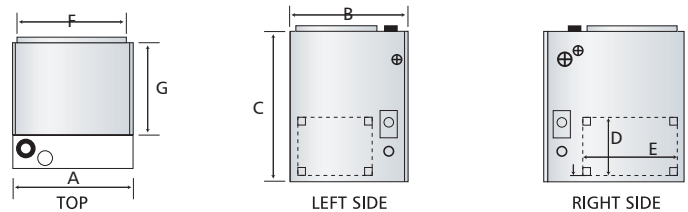
<sup>1</sup> BTU listed is the highest firing rate (second stage). First stage is 60% of the BTU listed.

## DIMENSIONS All measurements in inches

	Width (A)	Depth (B)	Height (C)	Supply Air (F x G)	Return Air (D x E)	Maximum Venting Length (feet)
<b>GTH2E</b>						
GTH2E060-3	17	29	40	16 x 20	14 x 22	100
GTH2E080-3	18 1/2	29	40	17 1/2 x 20	14 x 22	100
GTH2E080-4	18 1/2	29	40	17 1/2 x 20	14 x 22	100
GTH2E100-5	20 1/2	29	40	19 1/2 x 20	14 x 22	100
GTH2E120-5	23 1/2	29	40	22 1/2 x 20	14 x 22	100

<b>Ultra Max 4</b>						
GTHC050-3	17	29	40	16 x 20	14 x 22	100
GTHC065-3	18 1/2	29	40	17 1/2 x 20	14 x 22	75
GTHC080-3	20 1/2	29	40	19 1/2 x 20	14 x 22	100
GTHC080-5	20 1/2	29	40	19 1/2 x 20	14 x 22	100
GTHC100-3	23 1/2	29	40	22 1/2 x 20	14 x 22	100
GTHC100-5	23 1/2	29	40	22 1/2 x 20	14 x 22	100

GTHB040-3	17	29	40	16 x 20	14 x 22	100
GTHB060-3	17	29	40	16 x 20	14 x 22	100
GTHB080-3	18 1/2	29	40	17 1/2 x 20	14 x 22	100
GTHB080-4	18 1/2	29	40	17 1/2 x 20	14 x 22	100
GTHB100-3	20 1/2	29	40	19 1/2 x 20	14 x 22	100
GTHB100-5	20 1/2	29	40	19 1/2 x 20	14 x 22	100
GTHB120-5	23 1/2	29	40	22 1/2 x 20	14 x 22	100



Ask your installer about our central air conditioners and heat pumps!

## YOUR ASSURANCE OF QUALITY

Olsen furnaces are designed, tested, and assembled to ensure that you get the very best in home heating comfort and value. Each furnace meets or exceeds all recognized safety, performance efficiency standards.

All product specifications reflect available information at the time of printing. ECR reserves the right to revise or modify products without notice.



2210 Dwyer Avenue, Utica NY 13504-4729  
 Phone: (315) 797-1310 • Fax: (866) 432-7329  
 e-mail: [info@ecrinternational.com](mailto:info@ecrinternational.com)  
 web site: [www.ecrinternational.com](http://www.ecrinternational.com)