



### Lowboy

BCL, BFL, BML, BMLV 60,000-224,000 BTU





Highboy

HML, HMLV, HTL, HTLV 60,000 – 140,000 BTU





### Multiposition

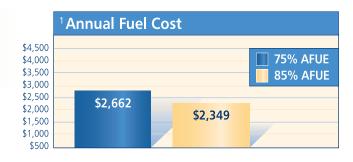
WML, WMLV, MPL 60,000 – 123,000 BTU



# **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!

**Double pass heat exchanger** – Constructed of heavy-gauge metal, the Olsen high-efficiency heat exchanger has a large surface area to maximize heat transfer into your home. The two paths create added flue gas turbulence, which increases efficiency.

**Dual clean outs –** Easily-accessible dual clean outs allow for quick and efficient routine maintenance of the heat exchanger.



## **Industry-leading selection** of Energy Star® certified models

Olsen's selection of Energy Star® models are available in each configuration: Lowboy, Highboy and Multiposition. These certified models require a higher energy efficiency of 85% AFUE, which reduces the cost of operation over the lifetime of the furnace. Ask your installer or refer to the oil furnace performance chart to find Energy Star® certified models.



### Cabinet vestibule protects burner and controls

while reducing noise



Virtually all Olsen furnaces come standard with a vestibule or it is available as an option. The vestibule protects the controls and burner from accidental contact and reduces the operational noise of the furnace.

<sup>&</sup>lt;sup>1</sup> This chart depicts potential energy costs. Data used for this example was 80,000 BTU heat load, 6000 Degree Days F per annum, fuel cost @ \$3 per gallon or \$0.79 per litre. Actual costs may vary, depending on your local weather patterns and fuel rates, lifestyle and the air infiltration integrity of your building envelope. This chart is for demonstration purposes only and does not constitute a guarantee of performance for any product.

|  |      | LOW  | BOY  |       | HIGHBOY |       |       |       | MULTIPOSITION |       |       |
|--|------|------|------|-------|---------|-------|-------|-------|---------------|-------|-------|
| FEATURES   | BML  | BMLV | BCL  | BFL   | HML     | HMLV  | HTL   | HTLV  | WML           | WMLV  | MPL   |
| Burner   |      |      |      |       |         |       |       |       |               |       |       |
| Beckett burner                                   | •    | •    | •    | •     | •       | •     | •     | •     | •             | •     | •     |
| Beckett NX burner                                |      |      |      |       |         |       |       | •     |               |       |       |
| Riello burner                                    | •    | •    | •    | •     | •       | •     | •     | •     | •             | •     | •     |
| Clean cut oil pump & flame retention burner head | •    | •    | •    | •     | •       | •     | •     | •     | •             | •     | •     |
| Heat Exchanger                                   |      |      |      |       |         |       |       |       |               |       |       |
| Two-pass heavy gauge exchanger                   | •    | •    | •    | •     | •       | •     | •     | •     | •             | •     | •     |
| Ceramic fibre combustion chamber                 | •    | •    | •    | •     | •       | •     | •     | •     | •             | •     | •     |
| Foil-faced cabinet insulation                    | •    | •    | •    | •     | •       | •     | •     | •     | •             | •     | •     |
|  |      |      |      |       |         |       |       |       |               |       |       |
| Air Flow Management                              |      |      |      |       |         |       |       |       |               |       |       |
| Single-speed belt drive motor                    | •    |      | •    | •     |         |       |       |       |               |       |       |
| Multiple-speed direct drive PSC motor            | •    |      | •    | •     | •       |       | •     |       | •             |       | •     |
| Variable-speed direct drive ECM                  |      | •    |      |       |         | •     |       | •     |               | •     |       |
| 5-ton cooling model available                    |      |      | •    | •     |         |       | •     | •     |               |       |       |
|  |      |      |      |       |         |       |       |       |               |       |       |
| Noise Reduction                                  |      |      |      |       |         |       |       |       |               |       |       |
| Ceramic fibre combustion chamber                 | •    | •    | •    | •     | •       | •     | •     | •     | •             | •     | •     |
| Dynamically balanced blower assembly             | •    | •    | •    | •     | •       | •     | •     | •     | •             | •     | •     |
| Variable speed blower motor                      |      | •    |      |       |         | •     |       | •     |               | •     |       |
|  |      |      |      |       |         |       |       |       |               |       |       |
| Installation & Maintenance                       |      |      |      |       |         |       |       |       |               |       |       |
| Chimney vent                                     | •    | •    | •    | •     | •       | •     | •     | •     | •             | •     | •     |
| Direct side wall vent                            | •    | •    | •    | •     | •       | •     |       |       | •             | •     | •     |
| Upflow   | •    | •    | •    | •     | •       | •     | •     | •     |               |       |       |
| Downflow/horizontal                              |      |      |      |       |         |       |       |       | •             | •     | •     |
| Breech   | Rear | Rear | Rear | Front | Front   | Front | Front | Front | Front         | Front | Front |
| Dual clean-out ports                             | •    | •    | •    | •     | •       | •     | •     | •     | •             | •     | •     |
| Warranty   |      |      |      |       |         |       |       |       |               |       |       |
| *5-year parts warranty                           | •    | •    | •    | •     | •       | •     | •     | •     | •             | •     | •     |
| *Limited lifetime heat                           |      |      |      |       |         |       | _     |       |               |       | -     |
| exchanger warranty                               | •    | •    | •    | •     | •       | •     | •     | •     | •             | •     | •     |

<sup>\*</sup>As per the limitations set out in the 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.



### Variable speed (ECM) technology

uses less electricity





**ECM (Electronically Commutated Motor) = 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 60-80 watts compared to 400 watts for a conventional motor.

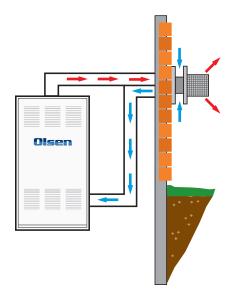
Soft start and stop = Less noise and increased overall comfort. The variable speed motor ramps up gradually until it reaches the required air flow and ramps down slowly before shutdown. The operation is so quiet you will rarely notice when your furnace turns on and off.

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.







Direct Sidewall Venting is an effective alternate method of venting combustion products through an outside wall of the house, rather than up a traditional chimney. This method utilizes the burner to efficiently exhaust products of combustion from the heating equipment.

#### **FEATURES AND BENEFITS**

- Direct Sidewall Vent allows for overall increase in installed appliance efficiency.
- The Olsen Direct Sidewall Vent kit has been designed for flexibility in installation. All vent-to-appliance adapters are included.
- Every Direct Sidewall Vent installation requires an Olsen Vent Terminal in addition
  to the venting kit described above. The Olsen Vent Terminal utilizes a two-pipe
  combustion air/exhaust gas configuration. Because outside air is used for
  combustion, the system provides greater efficiency and safety in new, tightly
  sealed houses.
- Only one wall opening is required for concentric vent.
- The burner provides the necessary pressure for adequate venting of flue products no additional motors or controls are required.

## oil furnace specifications

#### **PERFORMANCE**

#### **Description Glossary**

B2U = direct sidewall vent Beckett; RBU = direct sidewall vent Riello; RF = Riello burner; NX = Beckett NX burner; .5 = air conditioning ready; .2 = heating only; DD = direct drive; SS = belt drive; TS = 5-ton model; ECM = variable speed motor

|                       | Model                    | Vent    | AFUE<br>% | Energy Star | Nozzle<br>Factory<br>Standard | **Firing<br>Rate<br>USGPH | Output<br>BTU/h | ***Optional<br>Output (000)<br>BTU/h | Burner<br>Model   | Blower            | Max CFM<br>@<br>0.5 WC |
|-----------------------|--------------------------|---------|-----------|-------------|-------------------------------|---------------------------|-----------------|--------------------------------------|-------------------|-------------------|------------------------|
|                       | Lowboy                   | el -    |           |             | 0.45.4000                     | 0.45                      | 77.500          | 50.00                                | 2 1 15            | 200 21 21         | 2440                   |
|                       | BML 80B .5 1/2 DD        | Chimney | 83        |             | 0.65 / 80°A                   | 0.65                      | 76,500          | 59-98                                | Beckett AF        | PSC Direct Drive  | 1462                   |
|                       | BML 80B .2 1/2 SS        | Chimney | 83        |             | 0.65 / 80°A                   | 0.65                      | 76,500          | 59-98                                | Beckett AF        | * Belt Drive      | *                      |
|                       | BML 80B RF .5 1/2 DD     | Chimney | 85        | •           | 0.60 / 60°W                   | 0.65                      | 76,500          | 59-87                                | Riello 40F3       | PSC Direct Drive  | 1462                   |
|                       | BCL 100S RF .5 1/2 DD    | Chimney | 85.5      | •           | 0.75 / 60°W                   | 0.85                      | 101,000         | 79-117                               | Riello 40F3       | PSC Direct Drive  | 1585                   |
|                       | BCL 120S .5 1/2 DD TS    | Chimney | 85        | •           | 1.00 / 80°A                   | 1.00                      | 117,000         | 79-117                               | Beckett AF        | PSC Direct Drive  | 1585                   |
|                       | BCL 120S .2 1/3 SS       | Chimney | 85        | •           | 1.00 / 80°A                   | 1.00                      | 117,000         | 79-117                               | Beckett AF        | * Belt Drive      | *                      |
|                       | BCL 120ST .5 1.0 DD      | Chimney | 85        | •           | 1.00 / 80°A                   | 1.00                      | 117,000         | 79-117                               | Beckett AF        | PSC Direct Drive  | 2016                   |
|                       | BCL 145S .5 1/2 DD TS    | Chimney | 83.5      |             | 1.20 / 60°A                   | 1.20                      | 143,000         | 130-143                              | Beckett AF        | PSC Direct Drive  | 1585                   |
| VENT                  | BCL 145S .2 1/2 SS       | Chimney | 83.5      |             | 1.20 / 60°A                   | 1.20                      | 143,000         | 130-143                              | Beckett AF        | * Belt Drive      | *                      |
| CHIMNEY VENT          | BCL 145ST .5 1.0 DD      | Chimney | 83.5      |             | 1.20 / 60°A                   | 1.20                      | 143,000         | 130-143                              | Beckett AF        | PSC Direct Drive  | 2016                   |
| 害                     | BCL 190 .25 COMPLETE     | Chimney | 78        |             | 1.65 / 70°B                   | 1.65                      | 188,000         | 166-188                              | Beckett AF        | * Belt Drive      | *                      |
|                       | BCL 190/225 .5 COMPLETE  | Chimney | 78        |             | 1.75 / 70°B                   | 1.75                      | 224,000         | 196-224                              | Beckett AF        | * Belt Drive      | *                      |
|                       | BFL 100 RF .5 1/2 DD     | Chimney | 85        | •           | 0.75 / 60°W                   | 0.85                      | 101,000         | 79-117                               | Riello 40F3       | PSC Direct Drive  | 1585                   |
|                       | BFL 120 .5 1/2 DD TS     | Chimney | 83        |             | 1.00 / 80°A                   | 1.00                      | 117,000         | 79-117                               | Beckett AF        | PSC Direct Drive  | 2016                   |
|                       | BFL 120 .2 1/3 SS        | Chimney | 83        |             | 1.00 / 80°A                   | 1.00                      | 117,000         | 79-117                               | Beckett AF        | * Belt Drive      | *                      |
|                       | BFL 120T .5 1.0 DD       | Chimney | 83        |             | 1.00 / 80°A                   | 1.00                      | 117,000         | 79-117                               | Beckett AF        | PSC Direct Drive  | 2016                   |
|                       | BFL 145 .2 1/2 DD        | Chimney | 83        |             | 1.20 / 60°A                   | 1.20                      | 143,000         | 130-143                              | Beckett AF        | PSC Direct Drive  | 1585                   |
|                       | BFL 145 .2 1/2 SS        | Chimney | 83        |             | 1.20 / 60°A                   | 1.20                      | 143,000         | 130-143                              | Beckett AF        | * Belt Drive      | *                      |
|                       | BFL 145T .5 1.0 DD       | Chimney | 83        |             | 1.20 / 60°A                   | 1.20                      | 143,000         | 130-143                              | Beckett AF        | PSC Direct Drive  | 2016                   |
|                       | BML 80B B2U .5 1/2 DD    | Direct  | 83.5      |             | 0.60 / 60°A                   | 0.65                      | 76,500          | 59-87                                | Beckett AF II 85  | PSC Direct Drive  | 1462                   |
| VENT                  | BML 80B RBU .5 1/2 DD    | Direct  | 85        | •           | 0.60 / 60°W                   | 0.65                      | 76,500          | 59-87                                | Riello 40BF3      | PSC Direct Drive  | 1462                   |
| DIRECT VENT           | BCL 100S B2U .2 1/2 DD   | Direct  | 85        | •           | 0.85 / 80°A                   | 0.85                      | 101,000         | 79-117                               | Beckett AF II 150 | PSC Direct Drive  | 1585                   |
|                       | BFL 100 B2U .2 1/2 DD    | Direct  | 84        |             | 0.85 / 80°A                   | 0.85                      | 101,000         | 79-117                               | Beckett AF II 150 | PSC Direct Drive  | 1585                   |
|                       | DHIV 00D F 1 /0 DD       | Chimney | 83        |             | 0.65 / 80°A                   | 0.65                      | 76,500          | 59-98                                | Beckett AF        | ECM Direct Drive  | 1380                   |
| ECM VARIABLE<br>SPFFD | BMLV 80B RF .5 1/2 DD    | Chimney | 85        | •           | 0.60 / 60°W                   | 0.65                      | 76,500          | 59-98                                | Riello 40F3       | ECM Direct Drive  | 1380                   |
| A VAR                 | BMLV 80B B2U .5 1/2 DD   | Direct  | 83.5      |             | 0.60 / 60°A                   | 0.65                      | 76,500          | 59-87                                | Beckett AF II 85  | ECM Direct Drive  | 1380                   |
| EO                    | BMLV 80B RBU .5 1/2 DD   | Direct  | 85        | •           | 0.60 / 60°W                   | 0.65                      | 76,500          | 59-87                                | Riello 40BF3      | ECM Direct Drive  | 1380                   |
|                       | DINEY OOD RDO .5 1/ 2 DD | Diroci  | - 03      |             | 0.00 / 00 11                  | 0.03                      | 70,300          | 37 07                                | NOIO TODI O       | ECHI DIIOCI DIIVO | 1000                   |
|                       | Highboy                  |         |           |             |                               |                           |                 |                                      |                   |                   |                        |
|                       | HML 80C .5 1/2 DD        | Chimney | 83        |             | 0.65 / 80°A                   | 0.65                      | 75,000          | 59-95                                | Beckett AF        | PSC Direct Drive  | 1476                   |
| E                     | HML 80C RF .5 1/2 DD     | Chimney | 85        | •           | 0.60 / 60°W                   | 0.65                      | 75,000          | 59-86                                | Riello 40F3       | PSC Direct Drive  | 1476                   |
| CHIMNEY VENT          | HTL 115DRF 1/2 DD        | Chimney | 85        | •           | 0.85 / 60°W                   | 0.95                      | 114,600         | 90-115                               | Riello 40F3       | PSC Direct Drive  | 1440                   |
| WH                    | HTL 120D 1/2 DD          | Chimney | 83        |             | 1.00 / 60°W                   | 1.00                      | 117,600         | 89-117                               | Beckett AF        | PSC Direct Drive  | 1440                   |
| C                     | HTL 140DT 3/4 DD         | Chimney | 83        |             | 1.20 / 60°W                   | 1.20                      | 139,400         | 129-140                              | Beckett AF        | PSC Direct Drive  | 1924                   |
| _                     |                          |         | 83.5      |             |                               |                           |                 | 63-86                                | Beckett AF II 85  | PSC Direct Drive  | 1476                   |
| DIRECT                | HML 80C B2U .5 1/2 DD    | Direct  | 85        | •           | 0.60 / 60°A                   | 0.65                      | 75,000          |                                      | Riello BF3        | PSC Direct Drive  |                        |
|                       | TIME OOC RDO .5 DD       | Direct  |           | •           | 0.60 / 60°W                   | 0.65                      | 75,000          | 59-86                                |                   |                   | 1476                   |
|                       | HMLV 80C .5 1/2 DD       | Chimney | 83        |             | 0.65 / 80°A                   | 0.65                      | 75,000          | 59-95                                | Beckett AF        | ECM Direct Drive  | 1380                   |
| EE                    | HMLV 80C RF .5 1/2 DD    | Chimney | 85        | •           | 0.60 / 60°W                   | 0.65                      | 75,000          | 59-86                                | Riello 40F3       | ECM Direct Drive  | 1380                   |
| ECM VARIABLE SPEED    | HTLV 115DRF 1/2HP ECM    | Chimney | 85        | •           | 0.85 / 60°W                   | 0.95                      | 114,600         | 90-115                               | Riello 40F3       | ECM Direct Drive  | 1380                   |
| VARIA                 | HTLV 120DNX 1/2 DD ECM   | Chimney | 85        | •           | 0.90 / 60°W                   | 1.00                      | 117,600         | 93-140                               | Beckett NX        | ECM Direct Drive  | 1380                   |
| ECM                   | HTLV 120DTNX 1HP DD ECM  |         | 85        | •           | 0.90 / 60°W                   | 1.00                      | 117,600         | 93-140                               | Beckett NX        | ECM Direct Drive  | 2000                   |
|                       | HMLV 80C B2U .5 1/2 DD   | Direct  | 83.5      |             | 0.60 / 60°A                   | 0.65                      | 75,000          | 63-86                                | Beckett AF II 85  | ECM Direct Drive  | 1380                   |
|                       | HMLV 80C RBU .5 DD       | Direct  | 85        | •           | 0.60 / 60°W                   | 0.65                      | 75,000          | 59-86                                | Riello BF3        | ECM Direct Drive  | 1380                   |

<sup>\*</sup> Unit shipped as heating only. Field modifications and additional controls required for air conditioning.

 $<sup>\</sup>ensuremath{^{**}}$  Additional firing rates available. See installation and operation manual for details.

<sup>\*\*\*</sup> Firing range available. Burner nozzle change required in the field. AFUE will change when the firing rate is changed. Go to www.olsenhvac.com for additional AFUE data.

## oil furnace specifications

#### **PERFORMANCE**

|                       | Model                  | Vent    | AFUE<br>% | Leann Mone at the typical covered by the typi | Nozzle<br>Factory<br>Standard | ** Firing<br>Rate<br>USGPH | Output *<br>BTU/h | *** Optional<br>Output (000)<br>BTU/h | Burner<br>Model  | Blower           | Max CFM<br>@<br>0.5 WC |
|-----------------------|------------------------|---------|-----------|--|-------------------------------|----------------------------|-------------------|---------------------------------------|------------------|------------------|------------------------|
|                       | Multiposition          |         |           |  |                               |                            |                   |                                       |                  |                  |                        |
| <b>=</b>              | WML 80C .5 1/2 DD      | Chimney | 83        |  | 0.65 / 80°A                   | 0.65                       | 75,000            | 58-86                                 | Beckett AF       | PSC Direct Drive | 1291                   |
| EY VE                 | WML 80C RF .5 1/2 DD   | Chimney | 85        | •  | 0.60 / 60°W                   | 0.65                       | 75,000            | 59-86                                 | Riello 40F3      | PSC Direct Drive | 1291                   |
| CHIMNEY VENT          | MPL 120B .5 3/4 DD     | Chimney | 82        |  | 1.00 / 60°A                   | 1.00                       | 112,000           | 86-123                                | Beckett AF       | PSC Direct Drive | 1331                   |
| 5                     | MPL 120B RF .5 DD 40F5 | Chimney | 84        |  | 0.85 / 70°A                   | 1.00                       | 112,000           | 86-123                                | Riello 40F5      | PSC Direct Drive | 1331                   |
| _                     | WML 80C B2U .5 1/2 DD  | Direct  | 83        |  | $0.65 / 60^{\circ} A$         | 0.65                       | 75,000            | 63-86                                 | Beckett AF II 85 | PSC Direct Drive | 1291                   |
| DIRECT                | WML 80C RBU .5 DD      | Direct  | 85        | •  | 0.60 / 60°W                   | 0.65                       | 75,000            | 59-86                                 | Riello BF3       | PSC Direct Drive | 1291                   |
|                       | MPL 120B B2U .5 3/4 DD | Direct  | 83        |  | $0.85 / 70^{\circ} A$         | 1.00                       | 112,000           | 85-112                                | Beckett AF       | PSC Direct Drive | 1331                   |
| ECM VARIABLE<br>SPEED | WMLV 80C .5 1/2 DD     | Chimney | 83        |  | 0.65 / 80°A                   | 0.65                       | 75,000            | 58-86                                 | Beckett AF       | ECM Direct Drive | 1291                   |
|                       | WMLV 80C RF .5 1/2 DD  | Chimney | 85        | •  | 0.60 / 60°W                   | 0.65                       | 75,000            | 59-86                                 | Riello 40F3      | ECM Direct Drive | 1291                   |
|                       | WMLV 80C B2U .5 1/2 DD | Direct  | 83        |  | 0.65 / 60°A                   | 0.65                       | 75,000            | 63-86                                 | Beckett AF II 85 | ECM Direct Drive | 1291                   |
|                       | WMLV 80C RBU .5 DD     | Direct  | 85        | •  | 0.60 / 60°W                   | 0.65                       | 75,000            | 59-86                                 | Riello BF3       | ECM Direct Drive | 1291                   |

<sup>\*\*</sup> Additional firing rates available. See installation and operation manual for details.

#### DIMENSIONS All measurements in inches

| Model         |        | CABINET |        | PLENUM          | Flue            | Shipping |               |
|---------------|--------|---------|--------|-----------------|-----------------|----------|---------------|
|               | Width  | Depth   | Height | Supply Air      | Return Air      | Dia.     | Weight (lbs.) |
| Lowboy        |        |         |        |                 |                 |          |               |
| BML/BMLV      | 22     | 51 1/2  | 32     | 20 1/2 x 19     | 20 1/2 x 18 5/8 | 5        | 240           |
| BCL/BFL       | 22     | 51 1/2  | 41     | 20 1/2 x 18 5/8 | 20 1/2 x 18 5/8 | 6        | 280           |
| BCL 190/225   | 26     | 49      | 56     | 24 x 22         | 24 x 22         | 7        | 390           |
| Highboy       |        |         |        |                 |                 |          |               |
| HML/HMLV      | 22     | 31      | 49 5/8 | 20 1/2 x 20     | 14 x 22         | 5        | 250           |
| HTL/HTLV      | 22     | 31      | 58     | 20 1/2 x 20     | 14 x 22         | 6        | 270           |
| Multiposition |        |         |        |                 |                 |          |               |
| WML/WMLV      | 22     | 22 1/8  | 55 1/4 | 18 x 18         | 18 x 18         | 5        | 265           |
| MPL           | 22 1/4 | 22 1/4  | 62     | 20 1/2 x 20 1/2 | 18 x 18         | 6        | 292           |



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

#### YOUR ASSURANCE OF QUALITY

Olsen Boilers products are designed, tested, and assembled to ensure that you get the very best in home heating comfort and value. Each boiler 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.

For more information on Olsen heating and cooling products contact Customer Service at (800) 325-5479







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<sup>\*\*\*</sup> Firing range available. Burner nozzle change required in the field, AFUE will change when the firing rate is changed. Go to www.olsenhvac.com for additional AFUE data.