

# oil furnaces



## 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



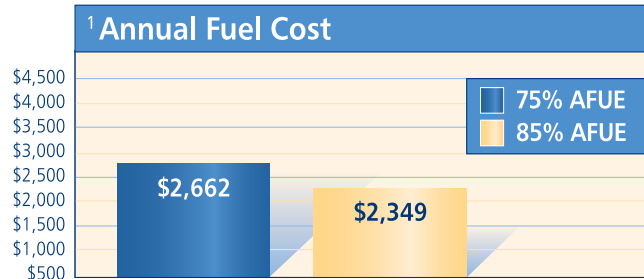
*keeping families warm for more than 60 years*

# 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!

**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>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.

# oil furnace selection guide

FURNACE MODEL

FEATURES	LOWBOY				HIGHBOY				MULTIPOSITION		
	BML	BMLV	BCL	BFL	HML	HMLV	HTL	HTLV	WML	WMLV	MPL
<b>Burner</b>											
Beckett burner	•	•	•	•	•	•	•	•	•	•	•
Beckett NX burner								•			
Riello burner	•	•	•	•	•	•	•	•	•	•	•
Clean cut oil pump & flame retention burner head	•	•	•	•	•	•	•	•	•	•	•
<b>Heat Exchanger</b>											
Two-pass heavy gauge exchanger	•	•	•	•	•	•	•	•	•	•	•
Ceramic fibre combustion chamber	•	•	•	•	•	•	•	•	•	•	•
Foil-faced cabinet insulation	•	•	•	•	•	•	•	•	•	•	•
<b>Air Flow Management</b>											
Single-speed belt drive motor	•		•	•							
Multiple-speed direct drive PSC motor	•		•	•	•		•		•		•
Variable-speed direct drive ECM		•						•		•	
5-ton cooling model available			•	•				•		•	
<b>Noise Reduction</b>											
Ceramic fibre combustion chamber	•	•	•	•	•	•	•	•	•	•	•
Dynamically balanced blower assembly	•	•	•	•	•	•	•	•	•	•	•
Variable speed blower motor		•					•			•	
<b>Installation &amp; Maintenance</b>											
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	•	•	•	•	•	•	•	•	•	•	•
<b>Warranty</b>											
*5-year parts warranty	•	•	•	•	•	•	•	•	•	•	•
*Limited lifetime heat exchanger warranty	•	•	•	•	•	•	•	•	•	•	•

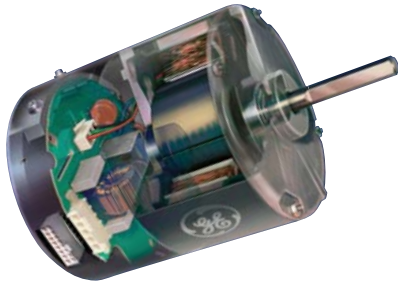
\*As per the limitations set out in the warranty.

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.

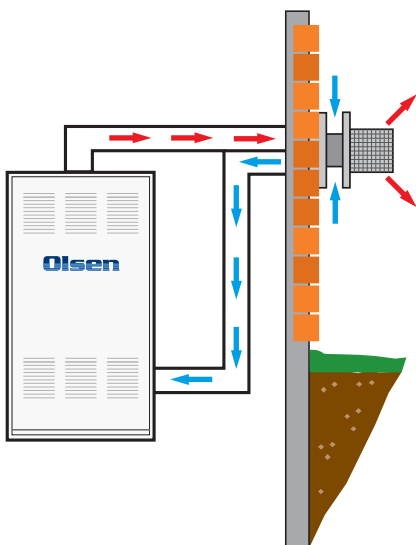
## DIRECT VENT SIDEWALL



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

## 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

## PERFORMANCE

	Model	Vent	AFUE %	 Energy Star	Nozzle Factory Standard	** Firing Rate USGPH	Output BTU/h	*** Optional Output (000) BTU/h	Burner Model	Blower	Max CFM @ 0.5 WC
<b>Lowboy</b>											
<b>CHIMNEY VENT</b>	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
	BCL 145S .2 1/2 SS	Chimney	83.5		1.20 / 60°A	1.20	143,000	130-143	Beckett AF	* Belt Drive	*
	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
	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	
<b>DIRECT VENT</b>	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
	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
	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
<b>ECM VARIABLE SPEED</b>	BMLV 80B .5 1/2 DD	Chimney	83		0.65 / 80°A	0.65	76,500	59-98	Beckett AF	ECM Direct Drive	1380
	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
	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
	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
<b>Highboy</b>											
<b>CHIMNEY VENT</b>	HML 80C .5 1/2 DD	Chimney	83		0.65 / 80°A	0.65	75,000	59-95	Beckett AF	PSC Direct Drive	1476
	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
	HTL 115DRF 1/2 DD	Chimney	85	•	0.85 / 60°W	0.95	114,600	90-115	Riello 40F3	PSC Direct Drive	1440
	HTL 120D 1/2 DD	Chimney	83		1.00 / 60°W	1.00	117,600	89-117	Beckett AF	PSC Direct Drive	1440
	HTL 140DT 3/4 DD	Chimney	83		1.20 / 60°W	1.20	139,400	129-140	Beckett AF	PSC Direct Drive	1924
<b>DIRECT VENT</b>	HML 80C B2U .5 1/2 DD	Direct	83.5		0.60 / 60°A	0.65	75,000	63-86	Beckett AF II 85	PSC Direct Drive	1476
	HML 80C RBU .5 DD	Direct	85	•	0.60 / 60°W	0.65	75,000	59-86	Riello BF3	PSC Direct Drive	1476
<b>ECM VARIABLE SPEED</b>	HMLV 80C .5 1/2 DD	Chimney	83		0.65 / 80°A	0.65	75,000	59-95	Beckett AF	ECM Direct Drive	1380
	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
	HTLV 115DRF 1/2HP ECM	Chimney	85	•	0.85 / 60°W	0.95	114,600	90-115	Riello 40F3	ECM Direct Drive	1380
	HTLV 120DNX 1/2 DD ECM	Chimney	85	•	0.90 / 60°W	1.00	117,600	93-140	Beckett NX	ECM Direct Drive	1380
	HTLV 120DTNX 1HP DD ECM	Chimney	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

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

\*\* Additional firing rates available. See installation and operation manual for details.

\*\*\* Firing range available. Burner nozzle change required in the field. AFUE will change when the firing rate is changed. Go to [www.olsenhvac.com](http://www.olsenhvac.com) for additional AFUE data.



# oil furnace specifications

## PERFORMANCE

	Model	Vent	AFUE %		Nozzle Factory Standard	** Firing Rate USGPH	Output BTU/h	*** Optional Output (000) BTU/h	Burner Model	Blower	Max CFM @ 0.5 WC
				Energy Star							
<b>Multiposition</b>											
<b>CHIMNEY VENT</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
	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
	MPL 120B .5 3/4 DD	Chimney	82		1.00 / 60°A	1.00	112,000	86-123	Beckett AF	PSC Direct Drive	1331
	MPL 120B RF .5 DD 40F5	Chimney	84		0.85 / 70°A	1.00	112,000	86-123	Riello 40F5	PSC Direct Drive	1331
<b>DIRECT VENT</b>	WML 80C B2U .5 1/2 DD	Direct	83		0.65 / 60°A	0.65	75,000	63-86	Beckett AF II 85	PSC Direct Drive	1291
	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°A	1.00	112,000	85-112	Beckett AF	PSC Direct Drive	1331
<b>ECM VARIABLE SPEED</b>	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

\*\* Additional firing rates available. See installation and operation manual for details.

\*\*\* Firing range available. Burner nozzle change required in the field. AFUE will change when the firing rate is changed. Go to [www.olsenhvac.com](http://www.olsenhvac.com) for additional AFUE data.

## DIMENSIONS All measurements in inches

Model	CABINET			PLENUM OPENING		Flue Dia.	Shipping Weight (lbs.)
	Width	Depth	Height	Supply Air	Return Air		
<b>Lowboy</b>							
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
<b>Highboy</b>							
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
<b>Multiposition</b>							
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



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