



ECR is pleased to announce the release of a select line of Energy Star certified ECM (electronically commutated motor) variable speed oil furnaces. The variable speed blower motor and Energy Star efficiency will decrease electrical/fuel consumption and increase comfort for the homeowner. An additional selling feature is the eligibility for government and utility rebates. (Check your local area)

What are the advantages of an ECM Variable Speed Motor?



The variable speed ECM (electronically commutated motor) blower reduces electrical consumption of the furnace. When used in continuous fan mode the ECM motor consumes 60-80 watts compared to 400 watts for a conventional PSC motor. At full load the ECM motor is 20% more efficient than a conventional motor. The ECM motor increases comfort by gently delivering conditioned air to the home through soft starts and stops. Appliance specific programming also allows optimized heat rise based for the burner nozzle selected by the installer.

Soft Start: The ECM variable speed motor will slowly ramp up to the required operating speed. This feature in the heating cycle allows the heat exchanger to reach operating temperature before the set heat speed, which minimizes noise and increases comfort.

Soft Stop: At the end of the heating cycle, the ECM variable speed motor will slowly ramp down. This feature allows for increased energy efficiency and reduced noise levels.

Dehumidification: A dehumidification feature has been programmed into the variable speed motor. At the start of each cooling cycle, the variable speed motor will run at 82% of the rated airflow for 7.5 minutes. After 7.5 minutes has elapsed, the motor will increase to 100% of the rated airflow. This profile is used to provide dehumidification and improve system efficiency by removing latent heat and decreasing humidity.

What changes from a conventional PSC motor oil furnace to an ECM variable speed oil furnace?

The fan (blower) timer board (figure 1), the blower motor and wiring harness (figure 2) are different on the ECM variable speed oil furnace. All other components remain the same.

Figure 1

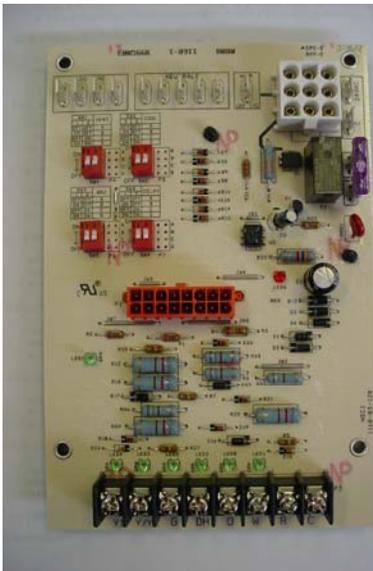


Figure 2



What models are available?

HMLV Highboy Variable Speed • BMLV Lowboy Variable Speed • WMLV Multiposition Variable Speed

Specifications

	Chimney Vent					
	HighBoy		LowBoy		Multiposition	
Model	<i>HMLV 80C</i>	<i>HMLV 80C RF</i>	<i>BMLV 80B</i>	<i>BMLV 80B RF</i>	<i>WMLV 80C</i>	<i>WMLV 80C RF</i>
BTU Input	91,000	91,000	86,000	86,000	91,500	91,500
Firing Rate	0.65	0.65	0.65	0.65	0.65	0.65
Nozzle (Factory Std.)	0.65/80°A	0.60/60°W	0.65/80°A	0.60/60°W	0.65/80°A	0.60/60°W
Burner Model	Beckett AF	Riello 40F3	Beckett AF	Riello 40F3	Beckett AF	Riello 40F3
Motor	1/2 HP ECM	1/2 HP ECM	1/2 HP ECM	1/2 HP ECM	1/2 HP ECM	1/2 HP ECM
Cooling Capacity (tons)	1.5 - 3	1.5 - 3	1.5 - 3	1.5 - 3	1.5 - 3	1.5 - 3
Breech	Front	Front	Rear	Rear	Front	Front
AFUE	83%	85%	83%	85%	83%	85%
Part Number	31308076	31308078	32308076	32308078	34308076	34308078

	Direct Vent					
	HighBoy		LowBoy		Multiposition	
Model	<i>HMLV 80C B2U</i>	<i>HMLV 80C RBU</i>	<i>BMLV 80B B2U</i>	<i>BMLV 80B RBU</i>	<i>WMLV 80CB2U</i>	<i>WMLV 80C RBU</i>
BTU Input	91,000	91,000	86,000	86,000	91,500	91,500
Firing Rate	0.65	0.65	0.65	0.65	0.65	0.65
Nozzle (Factory Std.)	0.60/60°A	0.60/60°W	0.60/60°A	0.60/60°W	0.60/60°A	0.60/60°W
Burner Model	Beckett AFII 85	Riello 40BF3	Beckett AFII 85	Riello 40BF3	Beckett AFII 85	Riello 40BF3
Motor	1/2 HP ECM	1/2 HP ECM				
Cooling Capacity (tons)	1.5 - 3	1.5 - 3	1.5 - 3	1.5 - 3	1.5 - 3	1.5 - 3
Breech	Front	Front	Rear	Rear	Front	Front
AFUE	83%	85%	83%	85%	83%	85%
Part Number	31308077C	31308079C	32308077C	32308079C	34308077C	34308079C

When are the ECM Variable Speed Energy Star Oil Furnaces available?

The furnaces can be orderd effective immediately. Normal lead times apply.

I have additional questions?

Please contact Customer Service at 800-325-5479.