

Thermo Pride®

Premiere Oil Furnace Dependable Craftsmanship with Maximum Comfort

When you want to experience exceptional comfort, increased efficiency, and quieter operation while still receiving the handcrafted quality and proven warranty of Thermo Pride's traditional oil furnace, select the Premiere Oil Furnace with the ECM variable-speed blower motor. Since the ECM motor automatically adjusts its speed for varying heating and cooling modes your home's maximum comfort is achieved.



ECM Blower Motor

Saving to Experience

Since the ECM variable-speed blower motor uses less electricity than a conventional blower motor, not only will you have increased comfort, but you can also save money (based on 0.08/kWh electric cost).

1. Annual Savings for heating your house — average \$58
2. Annual Saving for heating and cooling your house — average \$76
3. When using a constant fan that runs for air filtration, your annual savings can average \$480 for just heating your house or \$429 for heating and cooling your house.

"This Furnace is much quieter. Heats rooms that were cool with previous furnace. So far we have used less kw of power each month compared to the previous year."

Bob Williams, VP of Roscoe Energy Systems & Oil Company

Some of the ECM benefits include:

- quieter start up, greater efficiency, and more comfortable operation due to infinite fan motor speeds
- delivery of comfortable airflow in both the heating and cooling modes. On a call for heat or cooling the blower motor starts at the slower speed and builds to the correct running speed
- automatically compensates for restricted ducts or a dirty air filter by increasing the motor speed (routine filter cleaning is still recommended.)
- energy bills will be lower due to quieter efficiency of the ECM motor (especially when you run the blower for long periods of time.)
- reduced fan speeds will run quietly and save energy when the blower runs constantly as with air filtration, for example.



ECM Specifications

Model Number *	OL5-85...E		OL11-105...E		OH5-85...E		OH11-105...E		
CFM from .1 - .6" W/C									
Cooling (100 cfm steps available for A/C)	A/C Tonnage Selection								
		A/C CFMs	Continuous Fan						
	2 ton	800	500	800	500	800	500	800	500
	2.5 ton	1000	500	1000	500	1000	500	1000	500
	3 ton	1200	600	1200	600	1200	600	1200	600
	3.5 ton	1400	700	1400	700	1400	700	1400	700
Heating (at approx. rated input BTU)	Air Temperature Rise Selection								
		Heating CFM		Heating CFM		Heating CFM		Heating CFM	
	57° Rise	1400		—		1400		—	
	63° Rise	1260		1500		1260		1500	
	69° Rise	1162		1350		1162		1350	
	75° Rise	1050		1245		1050		1245	
83° Rise	938		1125		938		1125		

The standard motor size may not support this cfm at high static pressures.
 * Model numbers end with 'E' to signify ECM motor.

Additional Features

General

- Eliminates the need for air temp thermostat to control fan cycling by using time instead.
- Selectable blower turn-on and turn-off delays to adjust comfort & efficiency (turn-on: 30, 60, 120 & 240 sec; turn off: 2, 4, 6 & 8 min)
- Three blower operating choices: HEAT, COOL & FAN for best efficiency for each mode.
- Reduces A/C blower speed 50% on demand to increase dehumidification.
- Cooling blower delays of 10 seconds on, and 45 seconds off to enhance cooling comfort and efficiency.

Cycle Control

- 4 minute minimum A/C off time to reduce Short-Cycle related failures.
- A high limit will cause the blower run at the selected HEAT speed. It will then run for the HEAT turn off time afterwards in the absence of a HEAT call.
- Blower operation will “time out” before mode is switched between HEAT & COOL to prevent stress related evaporator failures.
- Burner Cut-Off on high limit

Speed Control

- Selectable air temperature (heat) rise from Return to Supply Plenum (choose from: 63, 69, 75 and 85°F)
- Selectable CFM rates for matching A/C tonnages. These CFM selections support from 2.0 to 3.5 tons.
- Maximum CFM's are limited by the maximum RPM of the ECM motor and the duct static pressure. Please refer to the manual addendum for guidelines.

Diagnostics

- Control Input LED's indicate active thermostat input lines.
- Diagnostic LED indicate:
 1. Active Operation (turn full on during burner or compressor operation)
 2. A HIGH LIMIT condition. (flash on/off at 2 ½ times per second)

