

O4 Series Oil Furnaces with Variable Speed Blower

Model 04HD-091A-V-F 04HD-140A-V-F

The heart of the O4 series furnace with variable speed blower is the ECM motor (electronically commutated motor). The ECM consists of a brushless DC type motor with a microprocessor based variable speed drive. The drive continuously monitors RPM and torque output of the motor. This information is fed into pre-programmed algorithms in the microprocessor for correct motor output to maintain constant airflow regardless of external static pressure. The microprocessor stores delay profiles to optimize the efficiency and performance of the split system. The variable speed blower steps through intermediate airflows during the on and off profiles. This results in smoother, more efficient operation with quiet, gradual starts and stops.

FEATURES and BENEFITS

- Warranty The best warranty in the business! 8 years on parts and a limited lifetime heat exchanger warranty.
 Also includes our consumer quality pledge . . . if the heat exchanger fails in the first 5 years, we replace the entire unit.
- Cabinet Construction 22 gauge steel cabinet ensures strength and quiet operation.
- Finish Thermoset powder paint for greater durability.
- Firing Rates Multi-firing rates for a wide range of applications.
- Burner Equipped with industry leading Beckett burner which includes cleancut pump, PSC motor, and solid state controls. Factory pre-wired, pre-assembled and tested. Ready to connect to fuel supply line.
- Barometric Draft Control Included with all models.
- Heat Exchanger Proven heat exchanger design featuring 100% welded construction for maximum performance. Large, accessible heat exchanger clean-out ports.
- **Radiator**—"Wrap-around" type for maximum heat transfer.



High Boy/Horizontal

- Variable Speed Blower Maximizes air conditioner and heat pump efficiencies. On selected units, SEER ratings up to 16 and HSPF ratings up to 8.5 are ARI listed.
- Blower Assembly Entire unit with motor can be easily removed for servicing.
- Filters Included in all Models Filter and rack packaged with O4HD models.
- Insulation Spun glass and aluminum foil for "hand cool" cabinet.
- Access Door Easily removed for access to burner and controls. Completely enclosed controls and burner in most units.
- A.F.U.E. Ratings up to 84%.

High Boy/Horizontal

Caution - All oil furnaces require proper set-up and installation by a certified oil heat technician.

SYSTEM SPECIFICATIONS:

Model		Heating		Blower Performance				
Number	BTU	Capacity		CFM Range	Nozzle	Angle	Filter	Ship
O4HD-	Input	BTU/HR	AFUE		G.P.H.	of Spray	Size	Wt.
091A-V-F	70,000	58,000	83.0	720 - 1870	0.50	70° A	16 x 25	190
	91,000	73,000	81.0		0.65	70° A		
	(1)98,000	19,000	80.5		0.70	70° A		
140A-V-F	105,000	87,700	83.5	720 - 1870	0.75	70° W	16 x 25	270
	119,000	98,800	83.0		0.85	70° W		
	(1)140,000	113,400	81.0		1.00	70° W		

⁽¹⁾ Factory setting

Nominal Blower Size	11 x 10			
Maximum Motor HP	3/4			
Motor Type	Programable Variable Speed			
RPM Range	300-1300			
Cooling CFM Range*	720-1870			
Heating Airflow Range*	720-1870			

Airflow is held constant regardless of external static pressure within the HP and RPM limits of the motor

DIMENSIONS:

Model	Cabinet Size			Supply Plenum		Return Plenum		Diameter
Number	Width	Depth	Height	Width	Depth	Width	Depth	of
O4HD-	Α	В	С	D	E	F	G	Flue Pipe
091A-V-F	22	22-1/8 (3)	55 1/4	19	19	18	18	5
140A-V-F	22-1/4	22-1/4	62	20 1/2	20 1/2	18	18	6





