
TECHNICAL SPECIFICATIONS

O4 Series Oil Furnaces

Lowboy

Highboy/Horizontal

Downflow/Horizontal

The O4 Series Oil Furnace combines time proven design in the Classic Low Boy, High Boy, and Downflow configurations. The High Boy and Downflow models can be configured for horizontal applications. The units are multi-fired for a wide range of outputs (.50 to 2.0 G.P.H. depending on model). Classic design, versatility and reliability are important attributes that oil heat professionals have come to rely upon.

FEATURES and BENEFITS

- **Cabinet Construction** – 22 gauge steel cabinet ensures strength and quiet operation.
- **Finish** – Thermoset powder coat 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.
- **Blower** – Direct drive type. Permanently lubricated, resilient mounted except O4LD-231A which is belt drive.
- **Blower Motor** – Designed for heavy-duty, continuous operation. Thermally protected. Four-speed is standard. O4LD-231A uses a single speed motor. A pulley change is required to change speeds.
- **Blower Assembly** – Entire unit with motor can be easily removed for servicing.
- **Filters Included in all Models** – Filter and rack built in on O4LD models. Filter and rack packaged with O4HD and O4MD 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.
- **Air Conditioning** – Pre-wired fan center relay is standard on all models except O4LD-231A.



Note: All oil fired furnaces manufactured after May 1, 2005 **for sale in Canada** require additional safety devices that will shut down the Oil Burner if the Flue Vent becomes blocked. (See Replacement Parts List for Part Numbers).

Low Boy Front & Rear Flue Outlet

O4LD-098A-12-R (Compact)

O4LD-140A-16-(F,R)

O4LD-168A-16-(F,R)

O4LD-231A-20-R

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

SYSTEM SPECIFICATIONS:

Model Number O4LD-	Output BTUH	AFUE	Blower Performance CFM @ 0.5" w.c.	Flow Rate G.P.H.	Angle of Spray	Filter Size	Ship Wt.
098A-12-R	60,000(2)(3) 75,000(3) 82,000(1)(3)	84.0 82.3 81.5	644, 944, 1090, 1117	0.50 0.65 0.70	70° W 70° W 70° W	20 x 20	240
140A-16-(F,R)	79,000 90,000 101,000 117,000(1)	82.7 84.1 83.1 83.0	665, 1065, 1445, 1585	0.65 0.75 0.85 1.00	80° A 80° A 80° A 80° A	20 x 25	290
168A-16-(F,R)	130,000 143,000(1)	80.0 83.5	665, 1065, 1445, 1585	1.10 1.20	70° A 60° A	20 x 25	290
231A-20-R	188,000(1) 224,000	78.0 78.0	2034-2164 (With Furnished Belt Drive Pulleys)	1.65 2.00	70° B 70° B	20 x 25	540

(1) Factory Setting.

(2) FO head required for proper combustion.

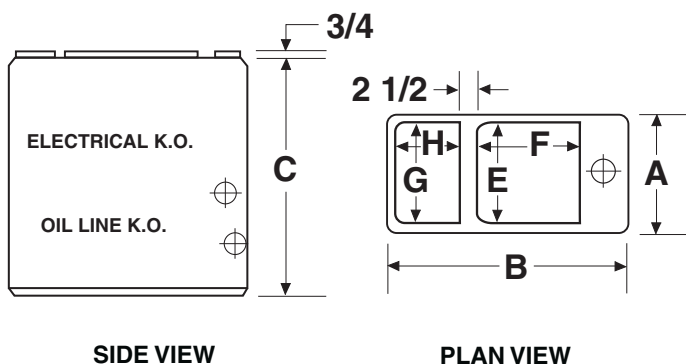
(3) Low firing rate baffle required when using a 0.50 gallon nozzle.

DIMENSIONS:

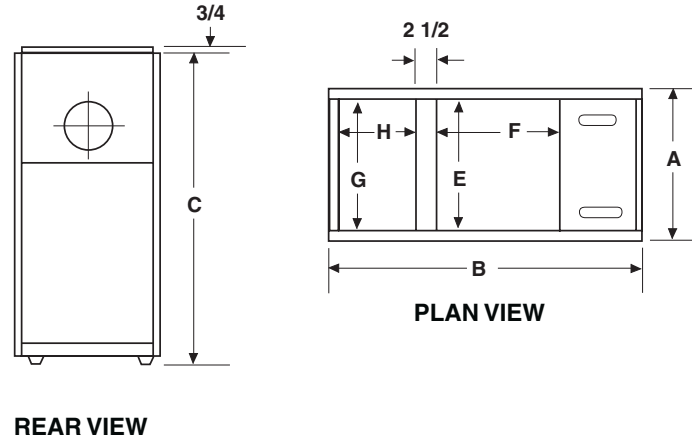
Model Number O4LD-	Cabinet Size			Supply Plenum		Return Plenum		Diameter of Flue Pipe
	Width A	Depth B	Height C	Width E	Depth F	Width G	Depth H	
098A-12-R	22	51 1/2	32 3/4	20 1/2	18 5/8	20 1/2	18 5/8	5
140A-16-(F,R)	22	51 1/2	41	20 1/2	18 5/8	20 1/2	18 5/8	6
168A-16-(F,R)	22	51 1/2	41	20 1/2	18 5/8	20 1/2	18 5/8	6
231A-20-R	26	57 3/4*	57	24	22	24	22	7

*Depth B of the 231A-20-R cabinet without the burner is 49", with the burner attached it's 57 3/4."

Front Flue



Rear Flue



High Boy/Horizontal

O4HD-091A-12-FA
O4HD-140A-16-FA

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

SYSTEM SPECIFICATIONS:

Model Number O4HD-	Output BTUH	AFUE	Blower Performance CFM @ 0.5" w.c.	Flow Rate G.P.H.	Angle of Spray	Filter Size	Ship Wt.
091A-12-FA	58,000(2)(3)	83.0	960, 1028, 1074, 1091	0.50	70° W	16 x 25	240
	73,000(1)(3)	81.0		0.65	70° W		
	79,000(3)	80.5		0.70	70° W		
140A-16-FA	90,000(3)	82.0	1305, 1432, 1586, 1663	0.75	70° W	16 x 25	280
	100,000	81.0		0.85	70° W		
	118,000(1)	80.0		1.00	70° W		

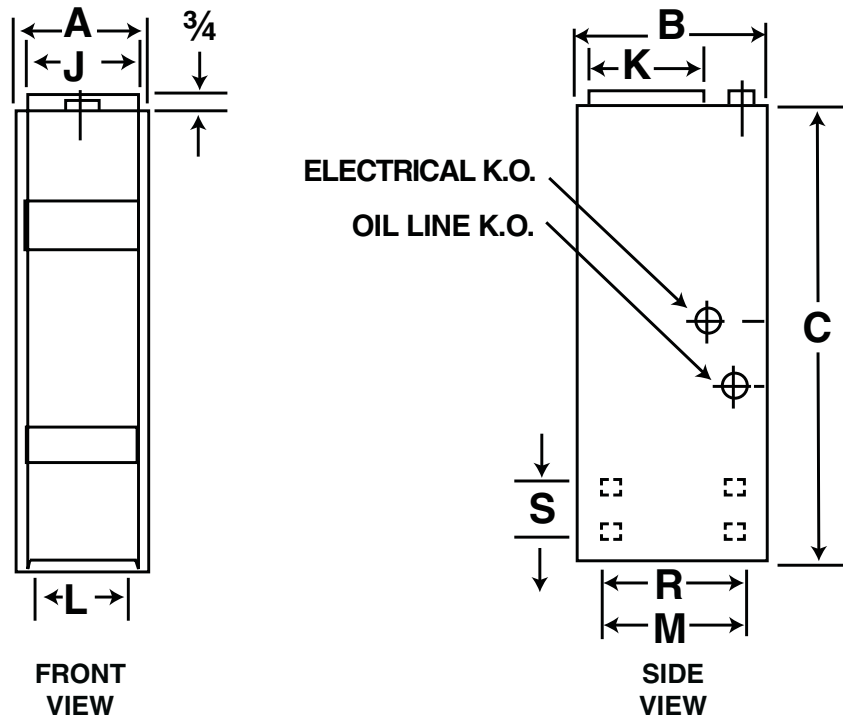
(1) Factory setting.

(2) FO head required for proper combustion.

(3) Low firing rate baffle required.

DIMENSIONS:

Model Number O4HD-	Cabinet Size			Supply Plenum		Bottom Return		Side Return Air K.O.		Diameter of Flue Pipe
	Width A	Depth B	Height C	Width J	Depth K	Width L	Depth M	Width R	Depth S	
091A-12-FA	22	31	49 1/2	20 1/2	20	14	22	22	14	5
140A-16-FA	22	31	58 1/8	20 1/2	20	14	22	22	14	6



Downflow/Horizontal

O4MD-091A-12-FA

O4MD-140A-16-FA

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

SYSTEM SPECIFICATIONS:

Model Number O4MD-	Output BTUH	AFUE	Blower Performance CFM @ 0.5" w.c.	Flow Rate G.P.H.	Nozzle Type	Filter Size	Ship Wt.
091A-12-FA Optional Vestibule Kit Available	58,000(4) 75,000(1) 85,600	83.0 82.4 81.5	763, 1063, 1220, 1291	0.50 0.65 0.75	80° A 80° A 80° A	20 x20	263
140A-16-FA No Vestibule Kit Available	85,500 96,000 112,000(1) 123,000(2)	81.5 80.7 80.1 80.0	1365, 1466, 1544, 1659	0.75 0.85 1.00 1.10	80° A 80° A 60° A 70° A	20 x20	320

(1) Factory setting

(2) Conversion kit for 123,000 Btuh output use #546012

(3) Front Vestibule add 8 3/4"

(4) Low firing rate baffle required when using a 0.50 gallon nozzle.

DIMENSIONS:

Model Number O4MD-	Cabinet Size			Supply Plenum		Return Plenum		Diameter of Flue Pipe
	Width	Depth	Height	Width	Depth	Width	Depth	
	A	B	C	D	E	F	G	
091A-12-FA	22	22-1/8 (3)	54 5/8	19	19	18	18	5
140A-16-FA	22-1/4	22-1/4	62	20 1/2	20 1/2	18	18	6

ACCESSORIES:

O4MD-091 non-combustible floor base

Part # 546011

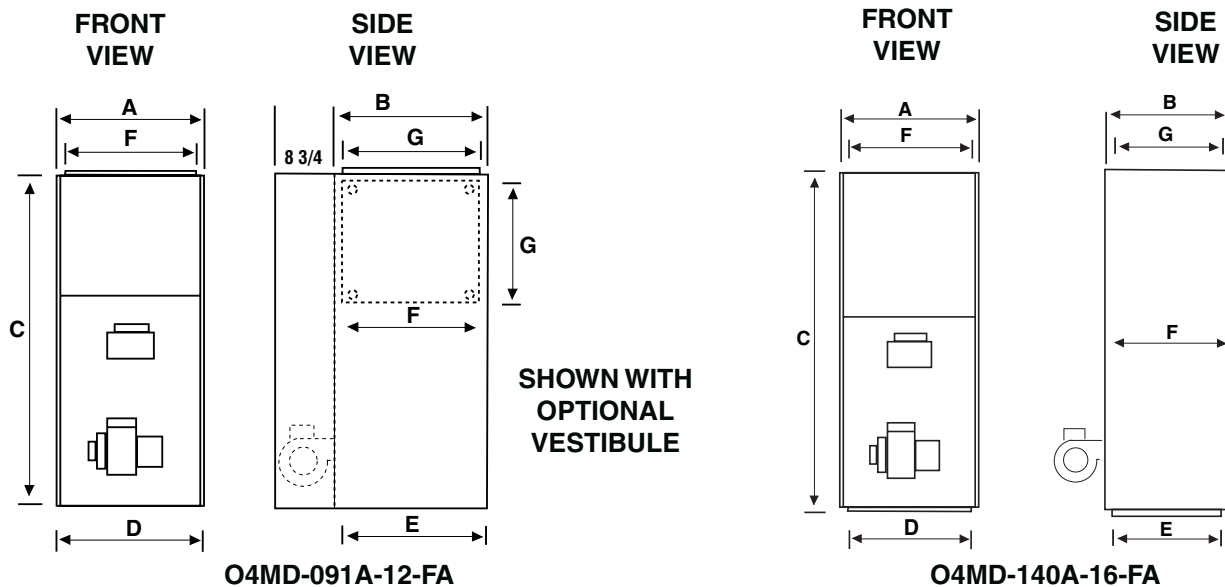
O4MD-140 non-combustible floor base

Part # 546010

O4MD-091 Front Vestibule Kit

Part # 546014A

(for sku 544106A)



012D-1008

Nortek Global HVAC LLC will furnish a replacement for any part of this product which fails in normal use and service within the terms and conditions of the warranty.

For complete details of the Limited Warranty, including applicable terms and conditions, see your local installer or contact the Nortek Global HVAC LLC warranty department for a copy.



Before purchasing appliance, read important energy cost and efficiency information available from your retailer. Specifications and illustrations subject to change without notice and without incurring obligations. Printed in U.S.A. (10/08)