



PRODUCT SPECIFICATIONS

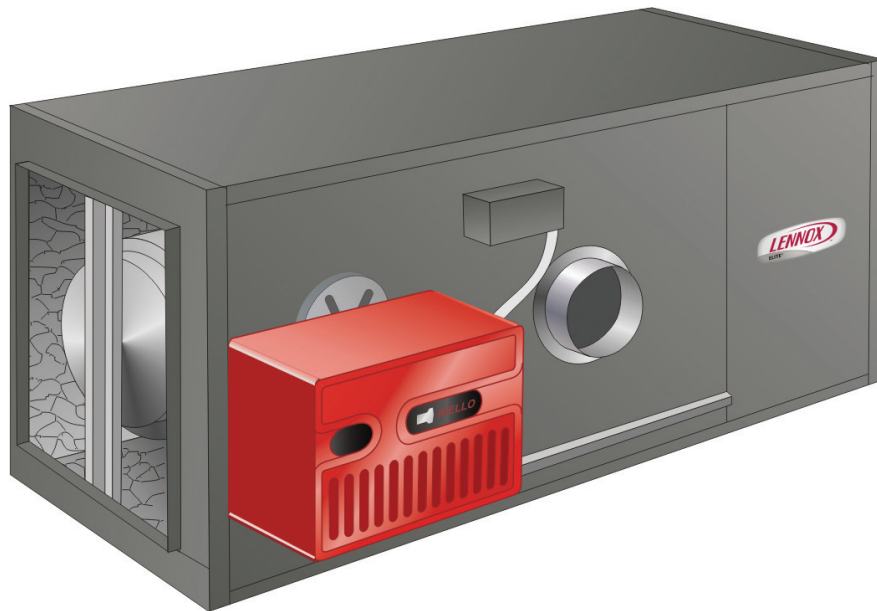
OIL FURNACES

OHR25

ELITE® SERIES

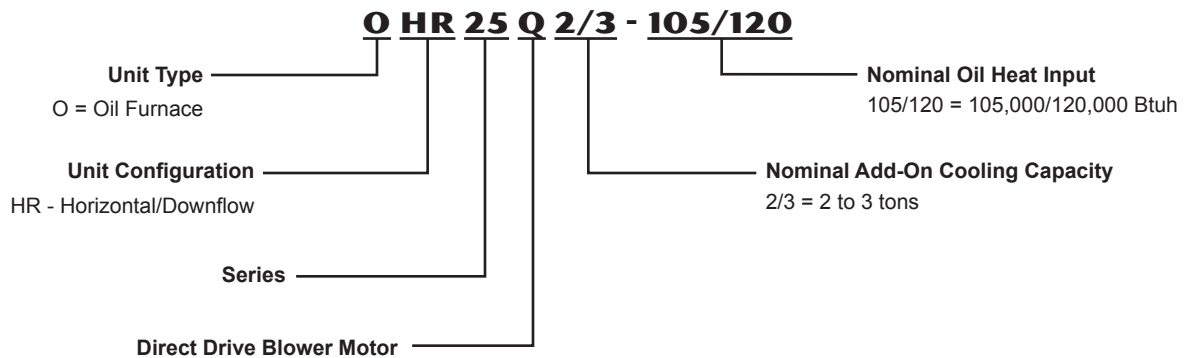
Horizontal/Downflow

Bulletin No. 210443
February 2011
Supersedes October 2010



AFUE - Up to 83.5%
Input - 105,000 to 120,000 Btuh
Nominal Add-on Cooling - 2 to 3 Tons

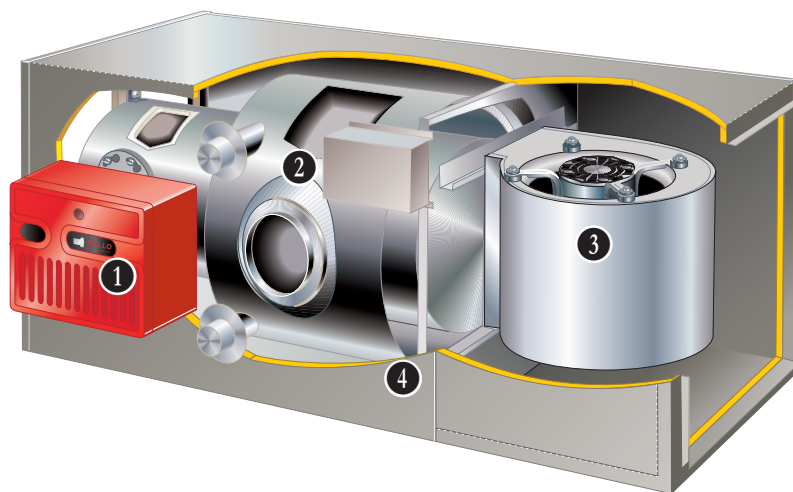
MODEL NUMBER IDENTIFICATION



FEATURES

CONTENTS

Accessory Dimensions	5
Blower Data	5
Dimensions	6
Features.	2
Installation Clearances	4
Model Number Identification	1
Optional Accessories	4
Specifications	4



EQUIPMENT WARRANTY

Heat exchanger - limited lifetime warranty in residential applications, twenty years in non-residential applications.

Oil burner and all other covered components - limited five year warranty in residential applications, one year in non-residential applications.

Refer to the Lennox Equipment Limited Warranty certificate included with the equipment for details.

APPROVALS

Units have been rated and tested according to U.S. Department of Energy (DOE) test procedures and Federal Trade Commission (FTC) labeling regulations.

Units are certified by AHRI.

Units are ETL/Intertek listed.

Developed in accordance with ISO 9001 quality standards.

APPLICATIONS

Designed to be installed in either horizontal or downflow position.

Designed for reduced clearances to combustibles.

Optional additive floor base is available for installation in the downflow position on combustible floors.

Units can be installed on a slab or suspended in a crawl space, basement, utility room or furnace room. Units are not approved for attic installations.

Lennox add-on indoor coil, remote air conditioner, powered air cleaner and humidifier can easily be added to the furnace.

Each unit is completely factory assembled with all controls installed and wired.

HEATING SYSTEM

1 Reillo Oil Burner

All burners are thoroughly quality-tested to ensure the highest performance in residential and light commercial applications.

Electronic control box combines uninterrupted ignition, five-second safety shutoff, and a ten-second prepurge cycle controlling the solenoid valve for smoke-free starts.

High-speed, permanent split capacitor (PSC) motor, with an exclusive low-voltage tap for the primary control and automatic reset on thermal overload, provides for low power consumption, long-life and maintenance-free operation.

Integrated fuel pump is driven directly from the PSC motor via a nylon drive key which eliminates coupling failure while maximizing stability and efficiency.

High static pressure combustion head with the ideal flame geometry burns ultra-clean. A titanium end cone eliminates air tube failure.

Sound deadening acoustic insulation inside the heavy-gauge metal cover provides quiet operation, even at full output.

Balanced high-efficiency fan.

Electronic operated air shutter that automatically closes the air intake when the burner is not operating, eliminating heat loss through the burner and enhancing burner efficiency.

2 EZ Clean Heat Exchanger

Streamlined drum type heat exchanger exposes maximum surface area to the air stream with minimum air resistance.

Constructed of heavy gauge steel for maximum service life.

Strategically placed ports allow easy cleaning.

Heavy gauge mounting channels are provided in cabinet base for support of heat exchanger.

Combustion Chamber

All models have a factory installed, specially designed alumina silica ceramic fiber combustion chamber.

Combustion chamber can withstand temperatures of up to 2550°F resulting in more complete combustion and higher efficiencies.

Flame Inspection Tube

Conveniently located at the front of the unit.

Opening is large enough for normal inspection mirror.

FEATURES

HEATING SYSTEM (CONTINUED)

OPTIONS

Oil Filter

Recommended for proper oil filtration. See Specifications table for order number.

Two Stage Oil Pump

Two stage oil pump is available. See Specifications table for order number.

CONTROLS

Fan/Limit Control

Factory installed on vestibule panel.

Control has two switches.

One switch opens the limit circuit if the temperature exceeds the preset safety limit (automatic reset).

The second switch turns the fan on and off.

Control turns blower on when the preset temperature is reached; approximately 60 to 90 seconds after burner ignites.

Temperature-start fan control assures proper blower operation and has adjustable blower-off temperature setting.

Blower Cooling Relay

Blower cooling relay activates the blower operation during the cooling cycle.

Limit Control

Factory installed in opening on front of furnace.

Control has fixed temperature setting and protects unit from abnormal operating conditions.

Barometric Draft Control

Furnished as standard equipment and field installed in flue pipe.

Transformer

24 volt (40VA) control transformer with circuit breaker is furnished as standard and factory installed.

OPTIONS

Thermostat

See Thermostat bulletins in Controls section and Lennox Price Book.

BLOWER

- ③ Units are equipped with quiet, direct drive blowers. All models have three-speed motors.

Blower slides out of unit for servicing.

PSC motor is dynamically balanced, resiliently mounted and has integral overload protection.

A choice of blower speeds is available on each motor. See blower performance tables.

Blower speed adjustment is made with a simple change in wiring.

CABINET

- ④ Constructed of heavy gauge steel with a pre-painted, textured finish.

Entire heating section is lined with foil faced insulation, keeping cabinet surface temperatures low.

Large blower door allows complete service access to blower.

Blower compartment is fully insulated.

Units are shipped for horizontal installation with left hand air discharge. For field change to right hand air discharge, rotate unit 180° end for end, and reposition burner and flue connection.

For conversion to downflow position, turn unit on end and reposition burner.

All models have knockouts provided in cabinet for suspending in horizontal position. See dimension drawing.

OPTIONS

Downflow Combustible Flooring Base

Additive base is required for heating only units installed in the downflow position on combustible floors. Not required in add-on cooling applications.

Base must be ordered extra for field installation. See Specification table and dimension drawing.

FILTERS

Filters are not furnished and must be ordered extra.

Access is provided in blower compartment for filter removal and servicing.

OPTIONS

Filter Kit

Filter kit is available for field installation. See Specifications table for order number.

Kit is mounted internal to unit and contains filter rails, stiffening rods and washable polyurethane filters.

SPECIFICATIONS

		Model Number	OHR25Q2/3-105/120
Oil Heating Performance	Input - Btuh - Low		105,000
		¹ High	120,000
	Output - Btuh - Low		85,000
		¹ High	96,000
	² AFUE - Low		83.5%
		¹ High	83.0%
Oil Burner	Nozzle Rating - US gph - Low		.65
	¹ High		.75
	Nozzle Spray angle		80° B
	Flue Size Diameter - in.		6
	Oil Burner Pump		1 Stage
	Oil Burner Pump Pressure - psig		140
	Blower Data	Blower wheel nominal diameter x width - in.	
Blower motor output - hp		1/2	
Nominal cooling that can be added - Tons		2 to 3	
Shipping weight - lbs. 1 package			260
Electrical characteristics			115V-60hz-1ph
	Maximum overcurrent protection (amps)		15

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

Blocked Flue Switch Kit (Canada only)		10W52
Downflow Comustible Flooring Base		35K07
Filter Kit	Catalog number	35K05
	Number & size of filters - in.	(2) 10-1/4 x 20-1/2 x 1
Oil Filters	10 micron without mounting bracket	81P89
	10 micron with mounting bracket	53P92
	Replacement cartridge - 10 micron, 45 gph	53P93
	Filter restriction indicator gauge	53P90
Two-Stage Oil Pump		65A44

¹ Nozzle must be field provided for field conversion to higher heating input.

² Annual Fuel Utilization Efficiency based on U.S. DOE test procedures and FTC labeling regulations. Isolated combustion system rating for non-weatherized furnaces.

INSTALLATION CLEARANCES

HORIZONTAL

Top of Cabinet	1 in.
*Bottom & Rear of Cabinet	1 in.
Front of Cabinet	24 in.
Service Clearance (Front)	24 in.
End of Supply Plenum	0 in.
Supply Air Opening	0 in.
Return Air Opening	0 in.
Above Horiz. Warm Air Duct Within 3 ft. of Furnace	0 in.
Flue Pipe Horizontal	7 in.
Flue Pipe Vertical	7 in.

DOWNFLOW

Approved for closet or alcove installation. When installing in a closet, two ventilation openings must be provided in the closet door; one 6 in. from the top and one 6 in. from the bottom. Each opening should be 7 x 14 in.

Bottom of Plenum & Duct work	1 in.
Plenum Sides	1 in.
Side of Cabinet	1 in.
Rear of Cabinet	1 in.
Front of Cabinet	16 in.
Service Clearance (Front)	24 in.
Flue Pipe Horizontal	1 in.
Flue Pipe Vertical	7 in.
Return Air Opening	0 in.
*Floor	*Combustible

*NOTE - When furnace is installed on combustible floor, 1 in. spacer legs must be installed to elevate unit off of mounting surface.

*Clearance for installation on combustible floor if optional combustible flooring base is installed between the furnace and floor. Not required in add-on cooling applications.

BLOWER DATA

OHR25Q2/3-105/120 BLOWER PERFORMANCE

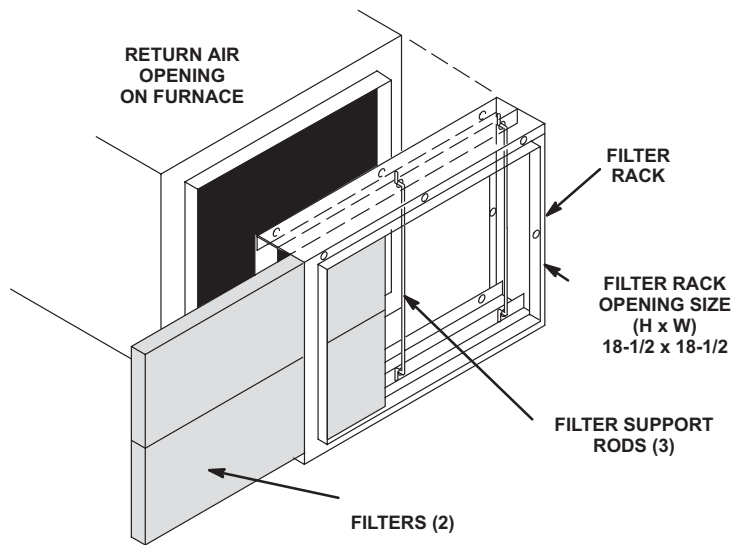
External Static Pressure (in. w.g.)	Air Volume (cfm) at Various Blower Speeds		
	High	Medium	Low
.20	1470	1360	1070
.30	1400	1300	1040
.40	1330	1230	1020
.50	1260	1160	980
.60	1180	1085	920

NOTE - All air data is measured external to the unit with the air filter in place.

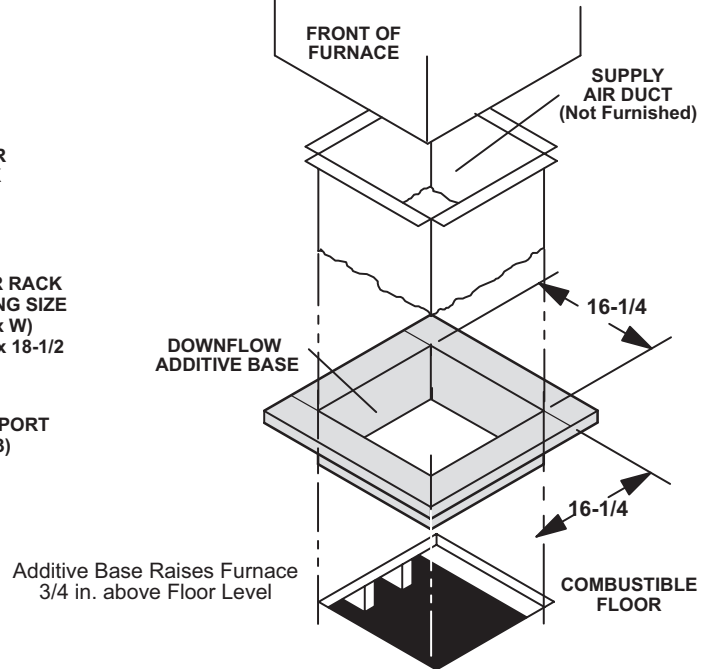
Note - Shaded areas are not recommended for heating.

ACCESSORY DIMENSIONS - INCHES (MM)

Optional Filter Kit

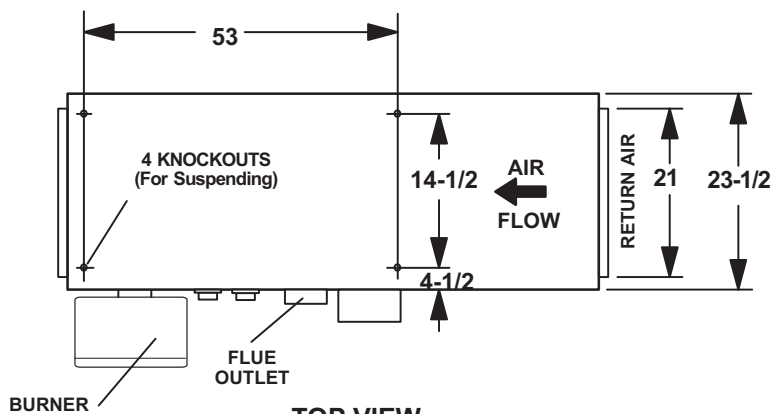


Optional Downflow Combustible Floor Base

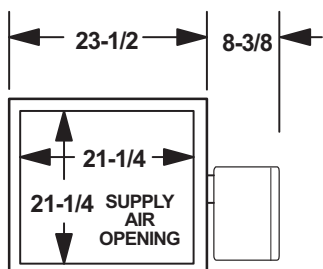


DIMENSIONS - INCHES (MM)

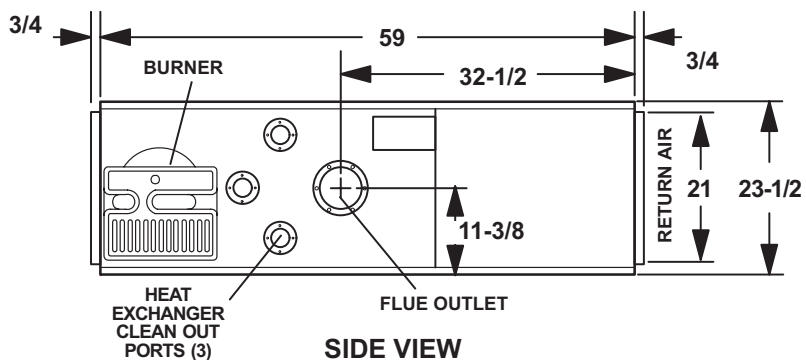
HORIZONTAL POSITION



TOP VIEW

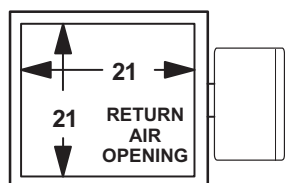


END VIEW

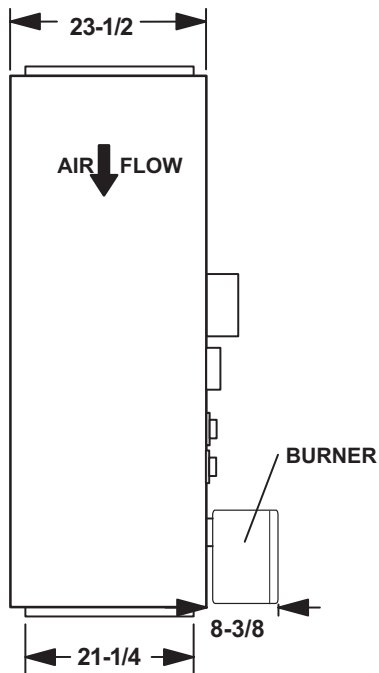


SIDE VIEW

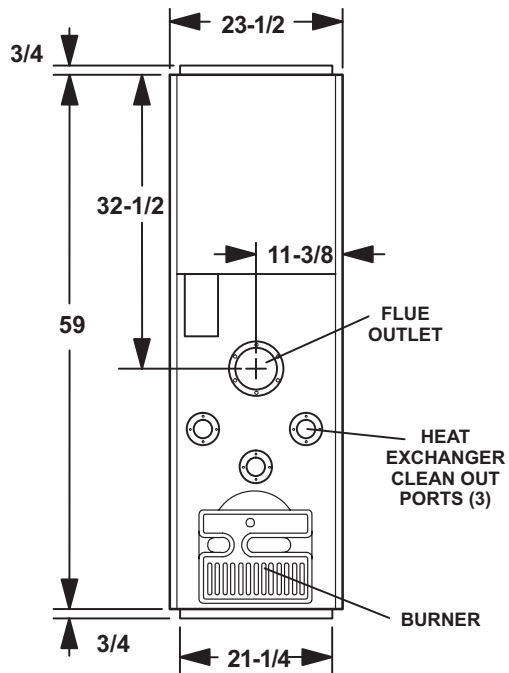
DOWNFLOW POSITION



TOP VIEW



SIDE VIEW



FRONT VIEW

REVISIONS

Sections	Description of Change
Optional Accessories	Removed Horizontal Venting Kit (obsolete).



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Contact us at 1-800-4-LENNOX

NOTE - Due to Lennox' ongoing commitment to quality, Specifications, Ratings and Dimensions subject to change without notice and without incurring liability. Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury. Installation and service must be performed by a qualified installer and servicing agency.

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