

GAS FURNACES

SL297UHNV(K)

DAVE LENNOX SIGNATURE® COLLECTION

Upflow / Horizontal | Two-Stage Heat | Variable Speed Blower | Refrigerant Detection | 60Hz

RESIDENTIAL

PRODUCT SPECIFICATIONS (EHB)

AFUE - 97.5%

Meets NOx Limit of 14 ng/L

Input - 40,000 to 80,000 Btuh

Nominal Add-on Cooling - 2 to 5 Tons

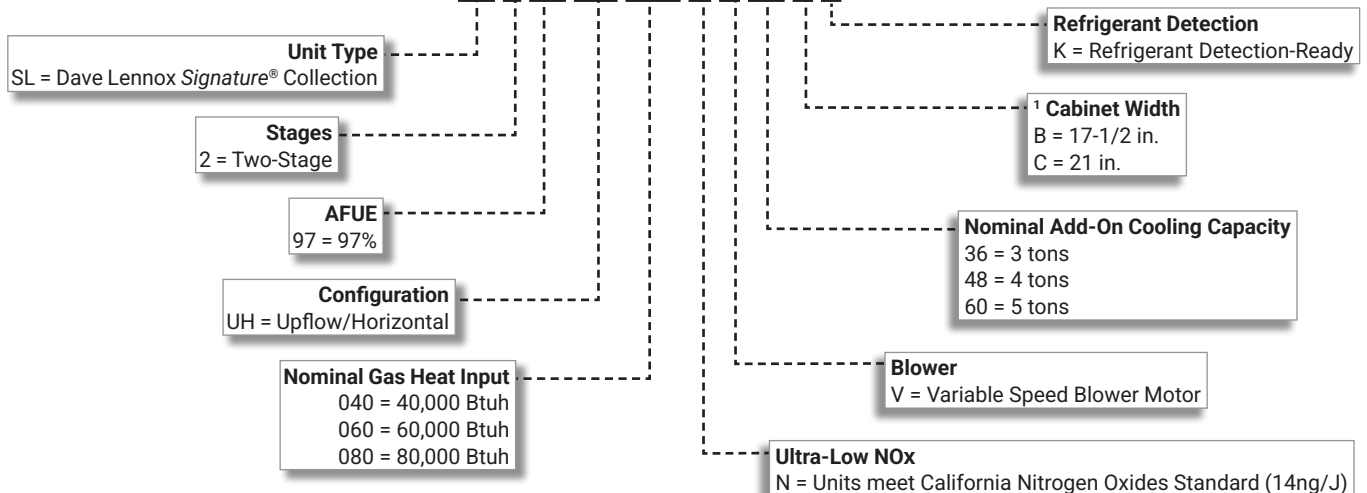


S40 Smart Wi-Fi
Communicating Thermostat
(Required - Not Furnished)



MODEL NUMBER IDENTIFICATION

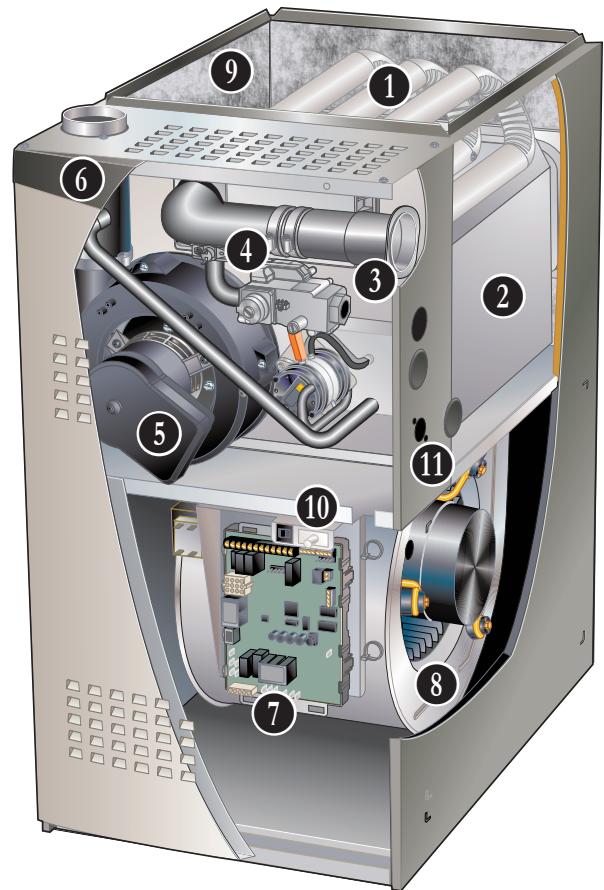
SL 2 97 UH 060 N V 36 B K



¹ Indoor coils with the same letter designation physically matches the furnace.

FEATURE HIGHLIGHTS

1. Heat Exchanger Assembly
2. Secondary Heat Exchanger
3. SureLight® Hot Surface Ignitor
4. Modulating Gas Control Valve
5. Variable-Speed Combustion Air Inducer
6. Thermal Switch
7. SureLight® Integrated Furnace Control
8. Variable Speed Direct Drive Blower
9. Insulated Cabinet
10. Safety Interlock Switch
11. Gas Piping And Electrical Inlets



NOTE - SL297UHN(K) FURNACES ARE NATURAL GAS ONLY!
NOTE - SL297UHN(K) FURNACES CANNOT BE TWINNED!
NOTE - NOT AVAILABLE IN ALL AREAS!
CONTACT YOUR NEAREST LENNOX SALES OFFICE FOR DETAILS.

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APPROVALS AND WARRANTY

APPROVALS

- AHRI Certified
- CSA International Certified
- Tested and rated according to US DOE test procedures and FTC labeling regulations
- Approved by the California Energy Commission and meets California Nitrogen Oxides Standard (NOx) limits of 14 ng/J
- Units are approved for installations from 0 - 7500 ft.
- ENERGY STAR® certified units are designed to use less energy, help save money on utility bills, and help protect the environment
- ISO 9001 Registered Manufacturing Quality System
- Blower data from unit tests conducted in Lennox Laboratory air test chamber
- All models meet UL 60335-2-40 Refrigerant Detector Requirements

NOTE - This furnace has not been CSA International design certified for installation in mobile homes, recreational vehicles, or outdoors.

California Only

- These furnaces **meet** the South Coast Air Quality Management District (SCAQMD) Rule 1111 and San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 4905 NOx emission limit (14 ng/J) and can be installed within the SCAQMD, SJVAPCD, Bay area and San Diego Air Pollution Control District (SDAPCD)

WARRANTY

- Heat Exchanger:
 - Limited lifetime (twenty year transferable) in residential applications
 - Limited ten years in non-residential applications
- All other covered components:
 - Limited ten years in residential installations
 - Limited one year in non-residential installations

NOTE - Refer to Lennox® Basic Limited Warranty at www.Lennox.com for additional details.

FEATURES

APPLICATIONS

- Input capacities of 40,000, 60,000 and 80,000 Btuh
- Energy efficiency (AFUE) - 97.5%
- Upflow, horizontal-left or horizontal-right applications
- Utility room, alcove, closet, crawl space, basement or attic installation
- Lennox add-on indoor coils, high-efficiency air cleaners and humidifiers can easily be added to furnace
- Shipped factory assembled with all controls installed and wired
- Removable bottom seal panel shipped in place for side return air is easily removed for bottom/end return air applications
- Each unit factory test operated to ensure proper operation

Zoning Applications

- May be used with the Lennox Lennox® Smart Zoning System with the Lennox® Communicating Thermostat
- Lennox® Smart Zoning System provides direct feedback to the furnace, controlling both airflow and heat output to match the comfort requirements for up to four zones

HEATING SYSTEM

- 1 Heat Exchanger Assembly**
 - Heavy gauge aluminized steel heat exchanger
 - Tubular type design
 - Designed for normal expansion and contraction with maximum efficiency and minimum resistance to air flow
- 2 Secondary heat exchanger condenser coil constructed of aluminum fins fitted to stainless steel tubes**
 - Coil is factory tested for leaks
 - Condensate drain header box assembly located on front of coil
 - Laboratory life cycle tested in excess of industry standards
 - Compact size permits low overall design of furnace cabinet

Header Box

- Header box on end of condenser coil collects flue condensate for disposal through condensate drains
- Drains are located on each side of the cabinet for easy field installation of condensate drain trap
- Only one drain is used, the other drain is sealed
- Condensate drain trap is included for field installation

FEATURES

HEATING SYSTEM (continued)

Flue Condensate Trap Assembly

- Field installed outside the conditioned air stream
- Assembly can be mounted on either side of cabinet in upflow applications
- Assembly is mounted below the cabinet in horizontal applications
- Can also be mounted remotely (up to 5 ft. away) from unit
- See Installation Instructions
- 90° street elbow furnished for ease of drain trap installation
- Drain connection can be made with field provided PVC pipe, PVC coupling, or vinyl tubing with hose clamp
- Drain cap on trap allows easy cleaning and winterizing

3 SureLight® Hot Surface Ignitor

- Tough, reliable, long-life, trouble-free performance
- Silicon nitride ignitor
- Cemented to steatite block for protection against current leakage
- Ignition leads are constructed of nickel plated copper and are enclosed in high temperature Teflon® insulation for dependable operation

4 Modulating Gas Control Valve

- 24 volt redundant combination modulating gas control valve combines manual shut off switch (On-Off), automatic electric valve (dual) and gas pressure regulation into a compact combination control

5 Variable-Speed Combustion Air Inducer

- Electronically Commutated Motor (ECM) heavy duty variable speed blower prepurges heat exchanger and safely vents flue products
- Dual pressure switches (low fire/high fire) prove blower operation before allowing gas valve to open
- Operates only during heating cycle

6 Thermal Switch

- Factory installed on air/fuel intake assembly
- Provides protection from abnormal operating conditions
- Automatic reset

Limit Control

- Primary limit is accurately located on vestibule panel
- Automatic reset

Optional Accessories

Muffler (US Only)

- Significantly reduces outdoor operating sound levels
- Installed vertically in the exhaust piping
- See Optional Accessory Dimension Drawing

DIRECT VENT SEALED COMBUSTION SYSTEM

- Furnace features a “sealed combustion” system and can only be installed in Direct Vent applications
- In Direct Vent applications, combustion air is supplied from outdoors and flue gases are discharged outdoors

NOTE - Lennox has approved the use of DuraVent® PolyPro®, Centrotherm InnoFlue® and ECCO Polypropylene Vent™ manufactured vent pipe and terminations as an alternative to PVC vent pipe. Must be ordered separately. Tested and listed to the ULC S636 standard in Canada.

NOTE - The polypropylene venting system must follow the uninsulated and unconditioned space vent lengths listed in the table on Page 15. Refer to the Installation Instructions for additional details.

Optional Accessories

Flue Coupling

- Assists with exhaust flue piping connection and servicing
- Includes flexible one 2-inch rubber coupling and two adjustable bands
- Approved for all Lennox 90% furnaces

Vent Termination Kits

- Facilitates installation of combustion air intake pipe and flue exhaust pipe
- Refer to venting table in this bulletin to determine pipe size needed and proper termination kit required
- See Optional Accessories table and dimension drawings

Concentric Termination Kit

- 2 or 3 inch kit contains concentric termination assembly, reducer bushing and 45° elbow
- 2 inch kit for 040 and 060 models contains an outdoor exhaust accelerator
- Kit requires single hole penetration of roof or wall for installation
- Roof Termination Flashing Kit available for use 2 inch Kits
- CSA certified

Flush-Mount Termination Kit

- Kit contains flush-mount termination, accelerator, mounting template and hardware
- Kit may be used with 2, 2-1/2 or 3 inch pipe

Wall Assembly Termination Kits

Close Couple (US Only)

- 2 or 3 inch kit consists of close-couple, side-by-side PVC piping with galvanized steel wall cover plate for
- Seals and isolates intake and exhaust piping penetration of wall
- Piping spacing and length is sized for proper wall installations
- CSA certified

Close Couple WTK (Canada Only)

- 2 or 3 inch kit contains one insulated faceplate, one insulated exhaust pipe, elbow and fittings

FEATURES

DIRECT VENT SEALED COMBUSTION SYSTEM

(continued)

NOTE - Maintain a maximum of 6 inches between the inlet and outlet openings in the installation of the pipes.

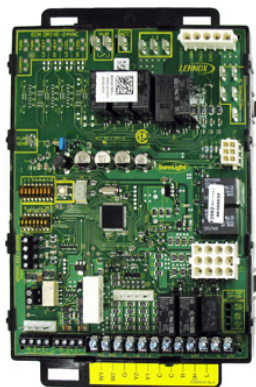
Roof Termination Flashing Kit

- For vertical venting through a roof
- 2 or 3 inch kit contains two neoprene rubber roof flashings
- Vent pipe and insulation not furnished
- Flashing Kit can also be used with Concentric Vent Termination Kits used in vertical venting rooftop applications

CONTROLS

7 SureLight® Integrated Furnace Control (Lennox® Communicating)

- Advanced control communicates information about various operating parameters in the furnace to the optional Lennox® Communicating Thermostat to constantly maintain the highest level of comfort and performance available
- **Auto Configuration** - On start-up the control automatically sends a description of the unit to the optional Lennox® Communicating Thermostat to automatically configure the number of stages and features available
- Terminals for connecting a conventional heating/cooling thermostat are also provided on the control
- Control also features Innovative AirFlex™ technology which allows custom blower settings based on the application
- **Thermostat Control** - For optimal performance, the use of a high-quality, digital two-stage thermostat with adjustable settings for first stage/second stage, on/off differentials and adjustable stage timers is recommended



Furnace Input Staging Options

Thermostat Type	Input Staging Available
Lennox® Communicating Thermostat	Two-Stage (65 and 100%)
Two-Stage (Conventional)	
Single-Stage (Conventional)	

- **Safety Controls** - Flame sensor utilizes flame rectification for safe and reliable operation
- Should flame fail to ignite, control will initiate 4 re-attempts at ignition before locking out unit operation for 60 minutes
- Watchguard type circuit automatically resets ignition control after one hour of continuous thermostat demand after unit lockout, eliminating nuisance calls for service

- **Display LED** - Seven segment LED displays alpha-numeric information related to diagnostics as well as system operation and status
 - Diagnostic codes are held in non-volatile memory, immune from power interruptions
 - Holds up to ten diagnostic codes in order of occurrence for recall on demand
 - Port on blower door allows for easy viewing

DIP Switch Settings

- **Select Thermostat Used** - Single-Stage or Two-Stage
- Two selectable second stage recognition times (7 and 12 minutes) are available on the control when the furnace is used with a single-stage thermostat
- When used with a two-stage thermostat, furnace will only initiate second stage operation with a second stage thermostat demand
- **Heating Speeds** - A combination of DIP switch settings allow the following motor speed selection settings within the heating speed selected for fine tuning air volume:
 - Factory default
 - 6%, 12%, 18% or 24% increase
 - 6%, 12% or 18% decrease
 - See Blower Performance tables
- **Cooling Speeds** - A combination of DIP switch settings allow the following motor speed selection settings within the cooling speed selected for fine tuning air volume:
 - Factory default
 - 10% increase
 - 10% decrease
 - See Blower Performance tables
- **Blower Speed Ramping (Cooling Mode)** - DIP switch settings allow one of four blower speed profiles during cooling operation
 - **Profile A (factory setting)** - Motor runs at 50% for 30 seconds, then at 82% for 7-1/2 minutes, then at 100% (if needed) until demand is satisfied. Once demand is met, motor runs at 50% for 30 seconds, then ramps down to stop
 - **Profile B** - Motor runs at 82% for 7-1/2 minutes and then at 100% (if needed) until demand is satisfied. Once demand is met, motor ramps down to stop
 - **Profile C** - Motor runs at 100% until demand is satisfied. Once demand is met, motor runs at 100% for 60 seconds, then ramps down to stop
 - **Profile D** - Motor runs at 100% until demand is satisfied. Once demand is met, motor ramps down to stop
- **Dehumidification (Active or Humiditrol® Option)** - A jumper on the control must be clipped to enable active dehumidification and/or operation with a Humiditrol® Whole-Home Dehumidification System
- A humidity controlling thermostat or device is also required
- During a call for cooling, air volume is automatically reduced, forcing humidity removal by the air conditioner or heat pump system (single stage units or two-stage units running at 2nd stage)

FEATURES

CONTROLS (continued)

- After the humidity has reached the desired set-point the cooling air volume returns to its designed rate
- A dehumidification signal from the thermostat reduces the cooling cfm to 70% of the requested cooling cfm
- **Dual-Fuel Operation** - A jumper on the control must be clipped to enable operation with a single or two-stage heat pump
- The indoor blower is started without delay when a call for heat is received
- **Two-Stage Compressor Operation** - A jumper on the control must be clipped to enable operation with a two-stage compressor
- The cooling blower speeds for first and second stage cooling will be dictated by the applicable DIP switch settings
- **Lennox System Operations Monitor Connection** - Monitors outdoor unit operation (communicating mode)
- **Blower On/Off Time (Heating)** - Blower on time is fixed at 30 seconds, blower off time is adjustable from 60, 90, 120 and 180 seconds (factory setting - 120 seconds)
- **Blower On/Off Time (Cooling)** - For air-conditioning applications, blower on time is 2 seconds following thermostat demand for cooling
- See Blower Speed Ramping (Cooling Mode) profiles for various blower off details
- Controls evaporator humidity by controlling blower and compressor speed on two-stage outdoor units when used with the Lennox® Communicating Thermostat or the CS7500 Thermostat
- **Continuous Blower Speed** - Adjustable continuous blower speed is a percentage of the high cooling speed selection
- Two selectable options (via DIP switch settings) of 28% and 38% (default setting)
- **Accessory Terminal** - One accessory terminal furnished for additional power supply requirements for 120 volt (less than 1 amp) powered air cleaners
- One unpowered pair of contacts are provided for humidifier connections and may be connected to 24V or 120V
- Control is factory installed in the unit control box

24 Volt Transformer (40VA)

- Furnished and factory installed on outside of control box
- Circuit breaker (furnished) is wired in series

Field Wiring Make-Up Box

- Furnished for line voltage wiring
- Factory installed internally on left side of furnace
- Box may be installed internally on right side of furnace

Refrigeration Detection System (RDS)

(Part of the SureLight® Integrated Furnace Control)

- Complies with UL 60335-2-40 approved standard
- Required for all systems using R-454B refrigerant
- Plug-in connection to the RDS Coil Sensor
- Supports up to two RDS Coil Sensors (factory setting)
- Used as an interface between indoor unit and thermostat to control system
- Ensures safe operation for systems equipped with R-454B refrigerant
- If R-454B refrigerant is detected, the refrigerant detection system will stop compressor and/or heating operation and operate the blower to reduce concentrations in the conditioned space
- Once safe levels are reached the HVAC system will resume normal operation
- Low GWP test button for troubleshooting
- Alarm/Zone relay interface can trigger an external alarm if R-454B refrigerant is detected and open all zone dampers (if part of a zoning system) if R-454B refrigerant is detected
- Power is disabled to non-communicating thermostats to prevent demand if R-454B refrigerant is detected
- On system start-up blower will run for five minutes and any thermostat demands are disabled

Optional Accessories

Thermostat

- Thermostat is not furnished with unit
- See Page 10

Transformer (75VA)

- Recommended when furnace is used with zoning or defrost thermostats and other 24V accessories requiring a higher VA rating
- Circuit breaker (furnished) is wired in series
- Replaces the standard 40VA transformer

FEATURES

BLOWER

8 Variable Speed Direct Drive Blower

- Each blower assembly statically and dynamically balanced
- Blower assembly easily removed for servicing

Variable Speed Blower Motor

- Variable speed motor maintains specified air volume from 0 through 0.8 in. w.g. (heating) and 0 through 1.0 in. w.g. (Cooling) static range
- Variable speed operation is achieved by the use of an ECM (Electronically Commutated Motor) motor
- Motor is controlled by furnace control
- Change in blower speed is easily accomplished by simple DIP switch change on furnace control
- See Blower Data tables
- Motor is resiliently mounted

NOTE - When furnaces are used with the Lennox® Smart Zoning System and the Lennox Communicating Thermostat, the blower motor operates from predetermined minimum - maximum air volumes to satisfy zone requirements.

CABINET

- Low-profile, narrow width allows easy installation
- Heavy-gauge, cold rolled steel construction
- Pre-painted cabinet finish
- Flanges provided on supply air opening for ease of plenum connection or alignment with indoor coil
- 9** • Insulated with foil faced insulation on sides and back of heating compartment and mat faced insulation in blower compartment
- Sealed blower compartment
- Inner blower compartment access panel seals blower compartment from air leakage
- Cabinet door can be removed without any tools
- Complete service access
- 10** • Safety interlock switch automatically shuts off power to unit when blower compartment access door is removed
- 11** • Gas piping inlet is provided on right side of cabinet
- Electrical inlets are provided on both sides of cabinet

Bottom/Side Return Air Entry

- Upflow/horizontal with bottom return air entry:
 - Remove furnished bottom seal panel from cabinet
- Upflow only with side return-air entry:
 - Corners are marked on either side of cabinet for return air cut-out
- See dimension drawings

NOTE - 60C size units that require air volumes over 1800 cfm must have one of the following:

- Single side return air and Optional Return Air Base with transition that must accommodate required 20 x 25 x 1 inch air filter to maintain proper velocity
- Bottom return air
- Return air from both sides
- Bottom and one side return air
- See Blower Performance Tables for additional information

Coil Match-Up

- All furnaces exactly match Lennox cased upflow indoor coils and horizontal indoor coils with same letter designation (A, B, C, D) in model number
- No adaptor required
- Engaging holes furnished on cabinet for alignment
- Lennox uncased coils match furnaces without any overhang but require an optional adaptor base or field fabricated transition to match furnace opening
- See coil bulletin for additional information

Low Leakage Cabinet

- All models have less than 2% air leakage
- Meets ANSI/ASHRAE Standard 193-2010 "Method of Test for Determining the Air Tightness of HVAC Equipment"

FEATURES

CABINET (continued)

Optional Accessories

Condensate Drain Heat Cable Kits

- Self-limiting wattage heat cable prevents condensate drain from freezing in unconditioned areas
- Available in 6 or 24 ft. lengths

Horizontal Suspension Kit

- Provides suspension of unit and indoor coil in horizontal applications
- Allows complete service access
- Consists of corner mounted hanging brackets with vibration isolators, return air end support rail and hardware for assembly
- Metal hanging straps must be field provided

Crawl Space Vent Drain Kit

- Allows venting through a crawl space for upflow and horizontal applications
- Kit for Canada is certified to ULC S636
- Includes 2 or 3 inch sanitary tee, 2 inch PVC assembly, PVC boot and clamp

Return Air Base

NOTE - On furnaces with side return air and condensate trap on the same side of the cabinet, a field fabricated transition or Return Air Base is required when using an IAQ product higher than 14-3/16 inches installed next to the unit and serviced from the front. IAQ products higher than 20 inches require a field fabricated transition.

NOTE - Must be used for 60C size models with air volumes over 1800 cfm in upflow applications when only one side return is required.

- Cabinet is shipped flat for easy field assembly
- Pre-painted steel to match the furnace
- See Dimension Drawing

High Performance Economizer (Commercial Applications Only)

- Designed for applications requiring outdoor air to be utilized in a commercial HVAC system
- Allows the entry of fresh outdoor air for free cooling, reducing the requirement for mechanical cooling
- Heavy gauge galvanized steel cabinet lined with thick fiberglass insulation
- Mixed air sensor, outdoor air sensor and 24VAC transformer furnished
- Approved for California Title 24 building standards. ASHRAE 90.1-2010 compliant
- See separate Product Specifications bulletin for additional information and available control and sensor options

NOTE - Economizer is not Lennox® communicating compatible.

FILTER (not furnished)

- Filter and provisions for external mounting must be field provided

Optional Accessories

Air Filter and Rack Kit for Horizontal Return Air (End)

Applications

- Washable or vacuum cleanable polyurethane frame type filter and external end return air rack
- Rack has filter door for servicing
- Flanges on rack for duct connection
- Field installed
- See dimension drawing

Air Filter and Rack Kit for Upflow Side Return Air

NOTE - Not for use with Return Air Base

- Washable or vacuum cleanable polyurethane frame type filter and external side return air rack available for field installation
- Available in single and ten pack kits
- Rack has filter door for servicing
- Flanges on rack for duct connection
- Field installs on either side of unit cabinet
- See dimension drawing

INDOOR AIR QUALITY PRODUCT OPTIONS

Dave Lennox *Signature*® Collection PureAir® S Air Purification System

- Photo-catalytic Oxidation - The UVA lamp activates the photo-catalyst on the PureAir Cartridge that captures and destroys odors and chemical vapors as they flow through the PCO3S
- Carbon Clean 16® (MERV 16) media filter captures more than 95% of particles 0.3 microns and larger and more than 90% of particles 0.01 microns and larger
- Multiple sensors in the cabinet automatically detect and report to the S40 Smart Wi-Fi Thermostat (Required)
 - Dirty air filter status
 - Air filter life notification (%)
 - UVA lamp operational status (On or Off)
 - UVA lamp life notification (%)
- Highest airflow performance and lowest pressure drop compared to a leading brand.
- Long life filters and UVA lamp life up to one year



Healthy Climate® Media Air Cleaner

- High performance in a narrow 7 in. cabinet
- Available with MERV 11, 13, or 16 rated filters
- Multi-position heavy gauge steel cabinet will support furnace/coil or air handler and associated duct work
- Tool-less entry
- Tool-less assembly for quick installation



Healthy Climate® Whole Home In Duct Air Purifiers

- Compact Duct Mounted Design
- Effective against odors and VOC's
- Certified Ozone free
- UVC lamp and carbon cells



Healthy Climate® Ultraviolet Germicidal Lights

- Compact duct mounted design
- Single or dual applications
- Certified ozone free
- Effective against odors to help keep the system clean
- Safety Interlocks (Additional UVC Compliance Kit for UL 60335-2-40 is available for A2L applications)
- Low power consumption
- Available for 24V or 110/230V
- Up to 1340 microwatts /cm² output (dual lamp model)



Lennox™ Smart Air Quality Monitor

- Designed to work with the S40 Smart Wi-Fi Thermostat
- Continually monitors CO₂, particulates and VOC's providing real-time overall air quality score
- Works in conjunction with PureAir® S Air Purification System and Heat Recovery Ventilators (HRV) and Energy Recovery Ventilators (ERV) to automatically operate the blower to provide clean air



NOTE - Please refer to the individual Product Specifications for these products for full information.

CONTROL OPTIONS

S40 Smart Wi-Fi Thermostat

- Recognizes and connects to all Lennox® Communicating products to automatically configure and control the heating/cooling system
- Advanced communicating controls in specific heating and cooling units, PureAir™ S Air Purification System and Healthy Climate® HRV/ERV (Heat/Energy) Recovery Ventilators transmit information about various operating parameters to the thermostat to constantly maintain the most comfortable and efficient operating conditions possible
- Lennox Smart Room Sensors, Lennox Wireless Extenders and Lennox Smart Air Quality Monitor can be added to the system
- One-Touch Away Mode, Smart Away™ (geo-fencing), equipment maintenance reminders and scheduling
- Smart home automation compatible with Amazon Alexa®, Google Assistant, Control4®, Building36® and Matter
- Lennox® Home App controls temperature, fan operation, set programs/schedules and set Away mode on a smartphone
- Lennox Smart Tech App allows the installer to commission the system and remotely turn the system on and off during setup or service call on a smartphone



NOTE - When S40 Thermostats are used with a Lennox® communicating furnace and a conventional (non-communicating) heat pump for dual-fuel applications, the optional Equipment Interface Module (EIM) is required for proper operation.

E40 Smart Wi-Fi Thermostat

- 3 Htg.-2 Clg.
- 7-day, universal, programmable, touchscreen thermostat
- Controls dehumidification during cooling mode and humidification during heating mode
- Smooth Setback Recovery and compressor short-cycle protection
- One-Touch Away Mode, Smart Away™ (geo-fencing), equipment maintenance reminders and scheduling
- Smart home automation compatible with Amazon Alexa®, Google Assistant, Control4®, Building36® and Matter
- Lennox® Home App controls temperature, fan operation, set programs/schedules and set Away mode on a smartphone
- Lennox Smart Tech App allows the installer to commission the system and remotely turn the system on and off during setup or service call on a smartphone



M40 Smart Wi-Fi Thermostat

- 3 Htg.-2 Clg.
- 7-day, universal, programmable, touchscreen thermostat
- Smooth Setback Recovery and compressor short-cycle protection
- One-Touch Away Mode, Smart Away™ (geo-fencing), equipment maintenance reminders and scheduling
- Smart home automation compatible with Apple HomeKit™, Amazon Alexa®, Google Assistant and Matter
- Lennox® Home App controls temperature, fan operation, set programs/schedules and set Away mode on a smartphone
- Lennox Smart Tech App allows the installer to commission the system and remotely turn the system on and off during setup or service call on a smartphone



NOTE - Please refer to the individual Product Specifications for these products for full information.

INDOOR AIR QUALITY PRODUCT OPTIONS - ORDERING

NOTE - Refer to the individual Product Specifications documents for additional accessories and maintenance items.

Description	Dimensions	Furnace Width	Order Number
PureAir® S Air Purification System			
PCO3S-16-16	17-1/2 x 8-3/4 x 26-1/2	A/B/C	Y8904
PCO3S-20-16	21-1/8 x 8-3/4 x 26-1/2	C/D	Y8903
Healthy Climate® Media Air Cleaner			
HCC16-28 (Cabinet)	17-1/2 x 28-1/2 x 7	A/B/C	Y2920
HCC16-28 (Cabinet) 4-pack	17-1/2 x 28-1/2 x 7	---	Y2921
HCF16-16 (Filter) MERV 16	16 x 25 x 5	---	X6672
HCXF16-16 (Expandable Filter) MERV 16	16 x 25 x 5	---	X8306
HCF16-13 MERV 13	16 x 25 x 5	---	19L16
HCF16-11 (Filter) MERV 11	16 x 25 x 5	---	X6670
HCXF16-11 (Expandable Filter) MERV 11	16 x 25 x 5	---	X8303
HCC20-28 (Cabinet)	21 x 28-1/2 x 7	C/D	X6661
HCC20-28 (Cabinet) 4-pack	21 x 28-1/2 x 7	---	X7751
HCF20-16 (Filter) MERV 16	20 x 25 x 5	---	X6675
HCXF20-16 (Expandable Filter) MERV 16	20 x 25 x 5	---	X8307
HCF20-13 MERV 13	20 x 25 x 5	---	19L17
HCF20-11 (Filter) MERV 11	20 x 25 x 5	---	X6673
HCXF20-11 (Expandable Filter) MERV 11	20 x 25 x 5	---	X8304
Healthy Climate® Whole Home In Duct Air Purifiers			
HCWHAP1	8 x 7 x 16.5	---	23V99
Healthy Climate® Ultraviolet Germicidal Lights			
UVC-24V (24V) 17-1/2 in.	Ballast 4-3/4 x 2-1/4 x 2	---	X9423
UVC-41W-S (110/230V) 17-1/2 in.	Ballast 11-3/4 x 2-3/4 x 1-5/8	---	X9424
UVC-41W-D (110/230V) 17-1/2 in.	Ballast 11-3/4 x 2-3/4 x 1-5/8	---	X9425
CONTROLS - ORDERING			
S40 Smart Wi-Fi Thermostat	5 x 7-1/4 x 1	---	22V24
E40 Smart Wi-Fi Thermostat	3-3/8 x 5-3/8 x 1	---	30L26
Lennox® Smart Room Sensor	4 x 5-1/2 x 3	---	22V25
Lennox® Smart Air Quality Monitor	3-5/8 x 4-3/8 x 1-3/8	---	21P02
Lennox® Wireless Extender	4 x 5-1/2 x 2-1/2	---	22V26
M40 Smart Wi-Fi Thermostat	3-5/16 x 4-5/16 x 7/8	---	30L27
Thermostat Accessories			
¹ Discharge Air Temperature Sensor (For S40, E40)			88K38
² Remote Outdoor Air Temperature Sensor (For E40/L40) (For dual-fuel and Humiditrol®)			X2658

¹ Optional for service diagnostics (S40/E40).

² Remote Outdoor Air Temperature Sensor is used with conventional (non-Lennox® Communicating) outdoor units (sensor is furnished with Lennox® Communicating outdoor units). Allows the thermostat to display outdoor temperature. Required in dual-fuel and Humiditrol® applications.

SPECIFICATIONS

Gas	Model	SL297UH040NV36BK	SL297UH060NV36BK	
Heating Performance	¹ AFUE	97.5%	97.5%	
	High Fire	Input - Btuh	40,000	60,000
		Output - Btuh	39,000	58,000
		Temperature rise range - °F	30 - 60	45 - 75
		Gas Manifold Pressure (in. w.g.)	0.05	0.05
	Natural Gas			
	Low Fire	Input - Btuh	26,000	39,000
		Output - Btuh	25,000	38,000
		Temperature rise range - °F	20 - 50	30 - 60
		Gas Manifold Pressure (in. w.g.)	0.05	0.05
Natural Gas				
High static - in. w.g.	Heating	0.8	0.8	
	Cooling	1.0	1.0	
Connections	Intake / Exhaust Pipe (PVC)	2 / 2	2 / 2	
	Gas pipe size IPS	1/2	1/2	
	Condensate Drain Trap (PVC pipe) - i.d.	3/4	3/4	
	with furnished 90° street elbow	3/4 slip x 3/4 MIPT	3/4 slip x 3/4 MIPT	
	with field supplied (PVC coupling) - o.d.	3/4 slip x 3/4 MPT	3/4 slip x 3/4 MPT	
Indoor Blower	Wheel diameter x width - in.	10 x 9	10 x 9	
	Motor output - hp	1/2	1/2	
	Tons of add-on cooling	2 - 3	2 - 3	
	Air Volume Range - cfm	498 - 1334	471 - 1329	
Electrical Data	Voltage	120 volts - 60 hertz - 1 phase		
	Blower motor full load amps	7.7	7.7	
	Maximum overcurrent protection	15	15	
Shipping Data	lbs. - 1 package	136	139	

NOTE - Filters and provisions for mounting are not furnished and must be field provided.

¹ Annual Fuel Utilization Efficiency based on DOE test procedures and according to FTC labeling regulations. Isolated combustion system rating for non-weatherized furnaces.

SPECIFICATIONS

Gas	Model	SL297UH080NV48CK	SL297UH080NV60CK	
Heating Performance	¹ AFUE	97.5%	97.5%	
	High Fire	Input - Btuh	80,000	80,000
		Output - Btuh	78,000	78,000
		Temperature rise range - °F	45 - 75	35 - 65
		Gas Manifold Pressure (in. w.g.)	0.05	0.05
	Natural Gas			
	Low Fire	Input - Btuh	52,000	52,000
		Output - Btuh	51,000	51,000
		Temperature rise range - °F	30 - 60	30 - 60
		Gas Manifold Pressure (in. w.g.)	0.05	0.05
Natural Gas				
High static - in. w.g.	Heating	0.8	0.8	
	Cooling	1.0	1.0	
Connections	Intake / Exhaust Pipe (PVC)	2 / 2	2 / 2	
	Gas pipe size IPS	1/2	1/2	
	Condensate Drain Trap (PVC pipe) - i.d.	3/4	3/4	
	with furnished 90° street elbow	3/4 slip x 3/4 MIPT	3/4 slip x 3/4 MIPT	
	with field supplied (PVC coupling) - o.d.	3/4 slip x 3/4 MPT	3/4 slip x 3/4 MPT	
Indoor Blower	Wheel diameter x width - in.	11 x 11	11 x 11	
	Motor output - hp	3/4	1.0	
	Tons of add-on cooling	2.5 - 4	3 - 5	
	Air Volume Range - cfm	575 - 1685	870 - 2140	
Electrical Data	Voltage	120 volts - 60 hertz - 1 phase		
	Blower motor full load amps	10.1	12.8	
	Maximum overcurrent protection	15	15	
Shipping Data	lbs. - 1 package	164	164	

NOTE - Filters and provisions for mounting are not furnished and must be field provided.

¹ Annual Fuel Utilization Efficiency based on DOE test procedures and according to FTC labeling regulations. Isolated combustion system rating for non-weatherized furnaces.

OPTIONAL ACCESSORIES - ORDER SEPARATELY

NOTE - FURNACES CANNOT BE TWINNED!

			“B” Width Models	“C” Width Models
CABINET ACCESSORIES				
Horizontal Suspension Kit - Horizontal only			51W10	51W10
Return Air Base - Upflow only			50W98	50W99
High Performance Economizer (Commercial Only)			10U53	10U53
CONDENSATE DRAIN KITS				
Condensate Drain Heat Cable		6 ft.	26K68	26K68
		24 ft.	26K69	26K69
Crawl Space Vent Drain Kit		US	51W18	51W18
		Canada	15Z70	15Z70
CONTROLS				
Transformer (75VA)			27J32	27J32
FILTER KITS				
¹ Air Filter and Rack Kit	Horizontal (end)	Size of filter - in.	87L96	87L97
			18 x 25 x 1	20 x 25 x 1
	Side Return	Single	44J22	44J22
		Ten Pack	66K63	66K63
		Size of filter - in.	16 x 25 x 1	16 x 25 x 1
TERMINATION KITS				
See Installation Instructions for specific venting information.				
Direct Vent	Concentric	US - 2 in.	71M80	69M29
		3 in.	- - -	60L46
		Canada - 2 in.	44W92	44W92
		3 in.	- - -	44W93
	Flush-Mount	US - 2, 2-1/2 or 3 in.	51W11	51W11
		Canada - 2, 2-1/2 or 3 in.	51W12	51W12
	Wall - Close Couple	US - 2 in.	22G44	- - -
		3 in.	44J40	44J40
	Wall - Close Couple WTK	Canada - 2 in.	30G28	- - -
		3 in.	81J20	81J20
	Roof Termination Flashing Kit (no vent pipe - 2 flashings)	2 in.	15F75	15F75
		3 in.	44J41	44J41
VENTING				
Flue Coupling		2 in.	17H92	17H92

¹ Cleanable polyurethane, frame-type filter.

NOTE - Termination Kits (44W92, 44W93, 30G28, 51W12, 81J20) and Crawl Space Vent Drain Kit (15Z70) are certified to ULC S636 standard for use in Canada only.

HIGH ALTITUDE OPERATION

NOTE - Units may be installed at altitudes up to 7500 ft. above sea level.

INSTALLATION CLEARANCES

Sides	¹ 1 inches (25 mm)
Rear	1 inches (25 mm)
Top/Plenum	1 inch (25 mm)
Front	1 inches (25 mm)
Front (service/alcove)	24 inches (610 mm)
Floor	² Combustible

NOTE – Air for combustion must conform to the methods outlined in the National Fuel Gas Code (NFPA 54/ANSI-Z223.1) or the National Standard of Canada CAN/CSA-B149.1 Natural Gas and Propane Installation Code”.

NOTE – In the U.S. flue sizing must conform to the methods outlined in the current National Fuel Gas Code (NFPA 54/ANSI-Z223.1) or applicable provisions of local building codes. In Canada flue sizing must conform to the methods outlined in National Standard of Canada CAN/CSA-B149.1.

¹ Allow proper clearances to accommodate condensate trap and vent pipe installation.

² Do not install the furnace directly on carpeting, tile, or other combustible materials other than wood flooring.

OUTDOOR TERMINATION KIT USAGE

Input Size	Vent Pipe Diameter (in.)	Standard Terminations				Concentric Terminations			Muffler
		Flush Mount Kit	Wall Kit		Field Fabricated Exhaust Accelerator Size Required	Concentric Kit			
			2 inch	3 inch		1-1/2 inch	2 inch	3 inch	2 inch
			51W11 (US) 4 51W12 (CA)	22G44 (US) 4 30G28 (CA)		44J40 (US) 4 81J20 (CA)	71M80 (US) 4 44W92 (CA)	69M29 (US) 4 44W92 (CA)	60L46 (US) 4 44W93 (CA)
040	2	3 YES	YES	1 YES	1-1/2 in.	2 YES	---	---	YES
	3	3 YES	YES	1 YES	1-1/2 in.	2 YES	---	---	YES
060	2	3 YES	YES	1 YES	1-1/2 in.	2 YES	---	---	YES
	3	3 YES	YES	1 YES	1-1/2 in.	2 YES	---	---	YES
080	2	3 YES	---	YES	2 in.	---	YES	YES	YES
	3	3 YES	---	YES	2 in.	---	YES	YES	YES

NOTE - Standard Terminations do not include any vent pipe or elbows external to the structure.

Any vent pipe or elbows external to the structure must be included in total vent length calculations. See Vent Length Tables.

¹ Requires field provided 1-1/2 in. outdoor exhaust accelerator.

² Concentric Kits **71M80** and **44W92** include 1-1/2 in. outdoor exhaust accelerator, required when used with 045 and 070 input models. Accelerator is not used with 090, 110, 135 input models.

³ Flush Mount Kit **51W11** and **51W12** includes 1-1/2 in. outdoor exhaust accelerator, required when used with 045, 070 and 090 input models. Accelerator is not used with 110 or 135 input models.

⁴ Termination Kits **30G28**, **44W92**, **44W93**, **51W12** and **81J20** are certified to ULC S636 standard for use in Canada only.

VENT LENGTHS - UNINSULATED EXHAUST PIPE IN UNCONDITIONED SPACE - FEET

¹ Winter Design Temperatures	Vent Pipe Diameter	Unit Input Size					
		040		060		080	
		² Maximum Uninsulated Exhaust Vent Length (ft.)					
		PVC	³ PolyPro/ InnoFlue/ ECCO	PVC	³ PolyPro/ InnoFlue/ ECCO	PVC	³ PolyPro/ InnoFlue/ ECCO
32 to 21°F	2 in.	21	18	33	30	46	42
	3 in.	12	12	21	21	30	30
20 to 1°F	2 in.	11	9	19	17	28	25
	3 in.	N/A	N/A	9	9	16	16
0 to −20°F	2 in.	6	4	12	10	19	16
	3 in.	N/A	N/A	N/A	N/A	8	8

¹ Refer to 99% Minimum Design Temperature table provided in the current edition of the ASHRAE Handbook-Fundamentals.

² Maximum Equivalent Vent Length permitted is defined as Total Length (linear feet) of vent pipe, plus equivalent length (ft.) of fittings, plus equivalent length (ft.) of termination.

VENTING NOTES - Concentric Terminations are equivalent to 5 ft. of straight pipe and should be included when measuring total pipe length.

One 90° elbow is equivalent to 5 feet of straight vent pipe.

Two 45° elbows are equal to one 90° elbow.

One 45° elbow is equivalent to 2.5 feet of straight vent pipe.

³ PolyPro® poly-propylene vent pipe is a registered trademark of DuraVent®.

InnoFlue® is a registered trademark of Centrotherm Eco Systems.

ECCO Polypropylene Vent™ is a registered trademark of ECCO Manufacturing™.

VENT LENGTHS

STANDARD TERMINATION AT ELEVATION 0 - 4500 FT.

Pipe Size		2 in.			3 in.		
Input		040	060	080	040	060	080
No. of 90 ELL	1	81	66	44	138	137	118
	2	76	61	39	133	132	113
	3	71	56	34	128	127	108
	4	66	51	29	123	122	103
	5	61	46	24	118	117	98
	6	56	41	19	113	112	93
	7	51	36	14	108	107	88
	8	46	31	N/A	103	102	83
	9	41	26	N/A	98	97	78
	10	36	21	N/A	93	92	73

STANDARD TERMINATION AT ELEVATION 4501 - 6000 FT.

Pipe Size		2 in.			3 in.		
Input		040	060	080	040	060	080
No. of 90 ELL	1	81	41	34	138	105	100
	2	76	36	29	133	100	95
	3	71	31	24	128	95	90
	4	66	26	19	123	90	85
	5	61	21	14	118	85	80
	6	56	16	9	113	80	75
	7	51	11	N/A	108	75	70
	8	46	N/A	N/A	103	70	65
	9	41	N/A	N/A	98	65	60
	10	36	N/A	N/A	93	60	55

STANDARD TERMINATION AT ELEVATION 6001 - 7500 FT.

Pipe Size		2 in.			3 in.		
Input		040	060	080	040	060	080
No. of 90 ELL	1	81	29	24	138	105	100
	2	76	24	19	133	100	95
	3	71	19	14	128	95	90
	4	66	14	9	123	90	85
	5	61	9	N/A	118	85	80
	6	56	N/A	N/A	113	80	75
	7	51	N/A	N/A	108	75	70
	8	46	N/A	N/A	103	70	65
	9	41	N/A	N/A	98	65	60
	10	36	N/A	N/A	93	60	55

VENT LENGTHS

CONCENTRIC TERMINATION AT ELEVATION 0 - 4500 ft.

Pipe Size		2 in.			3 in.		
Input		040	060	080	040	060	080
No. of 90 ELL	1	73	58	42	121	121	114
	2	68	53	37	116	116	109
	3	63	48	32	111	111	104
	4	58	43	27	106	106	99
	5	53	38	22	101	101	94
	6	48	33	17	96	96	89
	7	43	28	12	91	91	84
	8	38	23	N/A	86	86	79
	9	33	18	N/A	81	81	74
	10	28	13	N/A	76	76	69

CONCENTRIC TERMINATION AT ELEVATION 4501 - 6000 FT.

Pipe Size		2 in.			3 in.		
Input		040	060	080	040	060	080
No. of 90 ELL	1	73	33	32	121	89	89
	2	68	28	27	116	84	84
	3	63	23	22	111	79	79
	4	58	18	17	106	74	74
	5	53	13	12	101	69	69
	6	48	N/A	N/A	96	64	64
	7	43	N/A	N/A	91	59	59
	8	38	N/A	N/A	86	54	54
	9	33	N/A	N/A	81	49	49
	10	28	N/A	N/A	76	44	44

CONCENTRIC TERMINATION AT ELEVATION 6001 - 7500 FT.

Pipe Size		2 in.			3 in.		
Input		040	060	080	040	060	080
No. of 90 ELL	1	73	27	22	121	89	89
	2	68	22	17	116	84	84
	3	63	17	12	111	79	79
	4	58	12	7	106	74	74
	5	53	7	N/A	101	69	69
	6	48	N/A	N/A	96	64	64
	7	43	N/A	N/A	91	59	59
	8	38	N/A	N/A	86	54	54
	9	33	N/A	N/A	81	49	49
	10	28	N/A	N/A	76	44	44

VENT LENGTHS (EXHAUST) - VENTILATED ATTIC OR CRAWLSPACE INTAKE AIR - FEET

STANDARD TERMINATION AT ELEVATION 0 - 4500 FT.

Pipe Size		2 in.			3 in.		
Input		040	060	080	040	060	080
No. of 90 ELL	1	71	56	34	118	117	98
	2	66	51	29	113	112	93
	3	61	46	24	108	107	88
	4	56	41	19	103	102	83
	5	51	36	14	98	97	78
	6	46	31	9	93	92	73
	7	41	26	4	88	87	68
	8	36	21	N/A	83	82	63
	9	31	16	N/A	78	77	58
	10	26	11	N/A	73	72	53

STANDARD TERMINATION AT ELEVATION 4501 - 6000 FT.

Pipe Size		2 in.			3 in.		
Input		040	060	080	040	060	080
No. of 90 ELL	1	71	31	24	118	85	80
	2	66	26	19	113	80	75
	3	61	21	14	108	75	70
	4	56	16	9	103	70	65
	5	51	11	N/A	98	65	60
	6	46	N/A	N/A	93	60	55
	7	41	N/A	N/A	88	55	50
	8	36	N/A	N/A	83	50	45
	9	31	N/A	N/A	78	45	40
	10	26	N/A	N/A	73	40	35

STANDARD TERMINATION AT ELEVATION 6001 - 7500 FT.

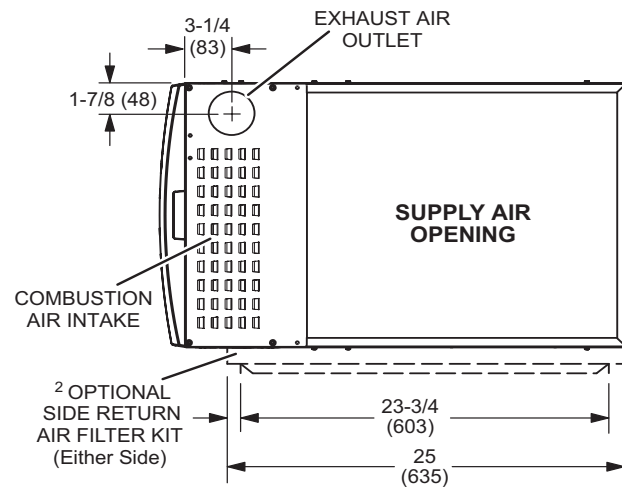
Pipe Size		2 in.			3 in.		
Input		040	060	080	040	060	080
No. of 90 ELL	1	71	19	14	118	85	80
	2	66	14	9	113	80	75
	3	61	9	N/A	108	75	70
	4	56	N/A	N/A	103	70	65
	5	51	N/A	N/A	98	65	60
	6	46	N/A	N/A	93	60	55
	7	41	N/A	N/A	88	55	50
	8	36	N/A	N/A	83	50	45
	9	31	N/A	N/A	78	45	40
	10	26	N/A	N/A	73	40	35

¹ NOTE - 60C size units that require air volumes over 1800 cfm must have one of the following:

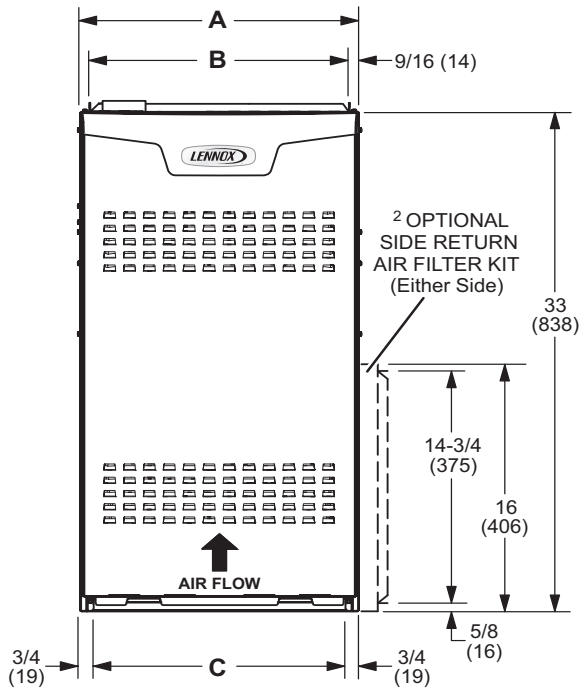
1. Single side return air and Optional Return Air Base with transition that must accommodate required 20 x 25 x 1 inch (508 x 635 x 25 mm) air filter to maintain proper velocity.
2. Bottom return air.
3. Return air from both sides.
4. Bottom and one side return air.

See Blower Performance Tables for additional information.

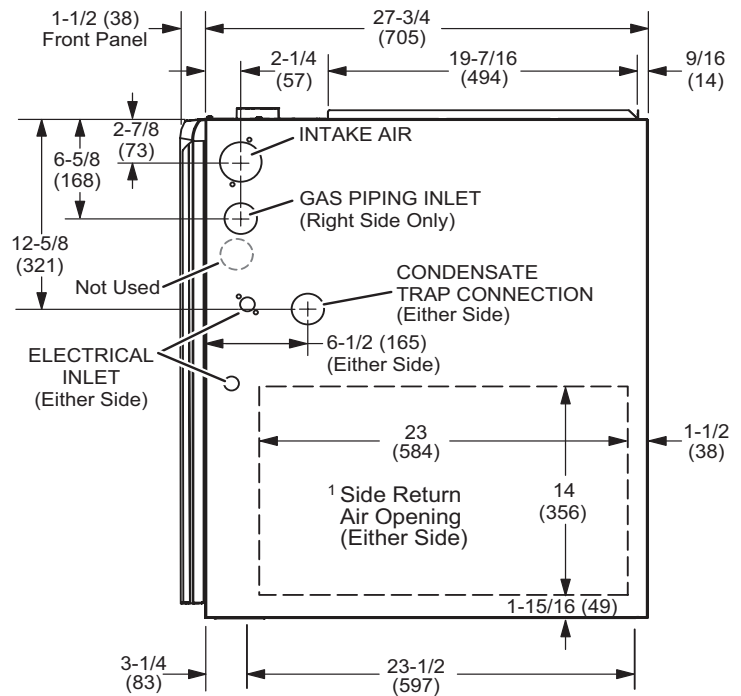
² Optional Side Return Air Filter Kit is not for use with the Optional Return Air Base.



TOP VIEW



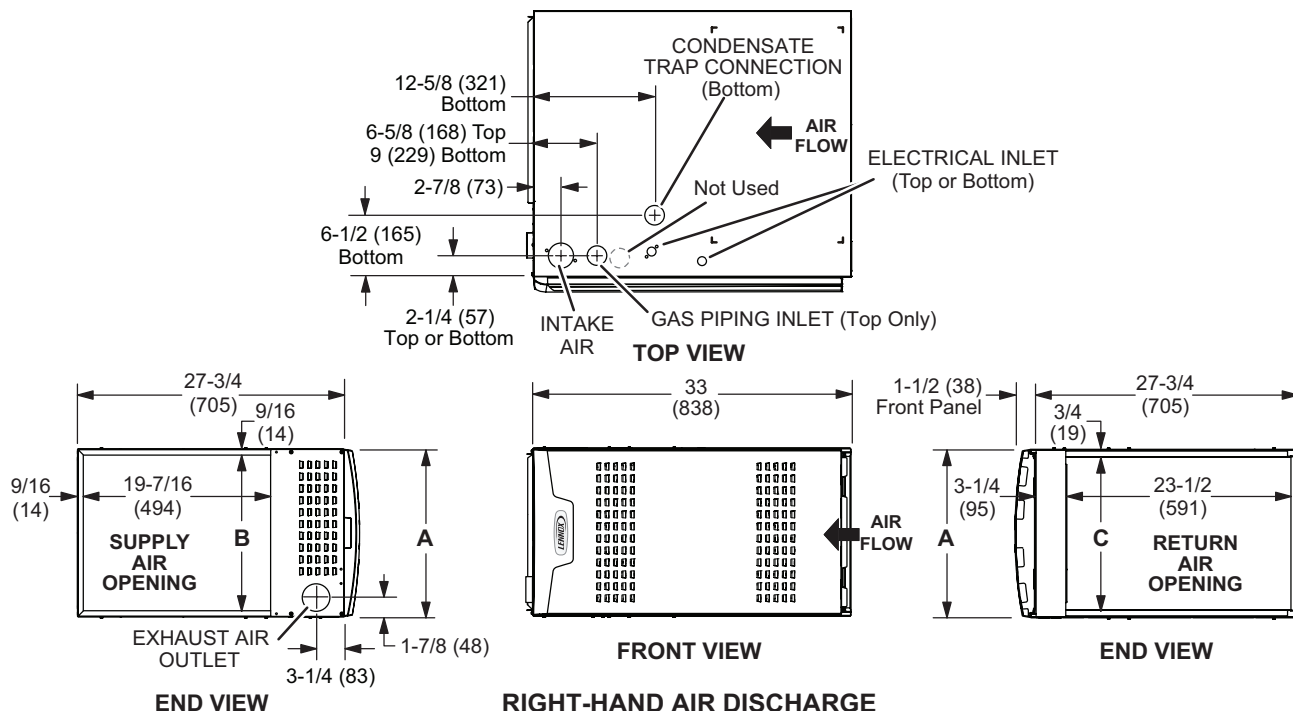
FRONT VIEW



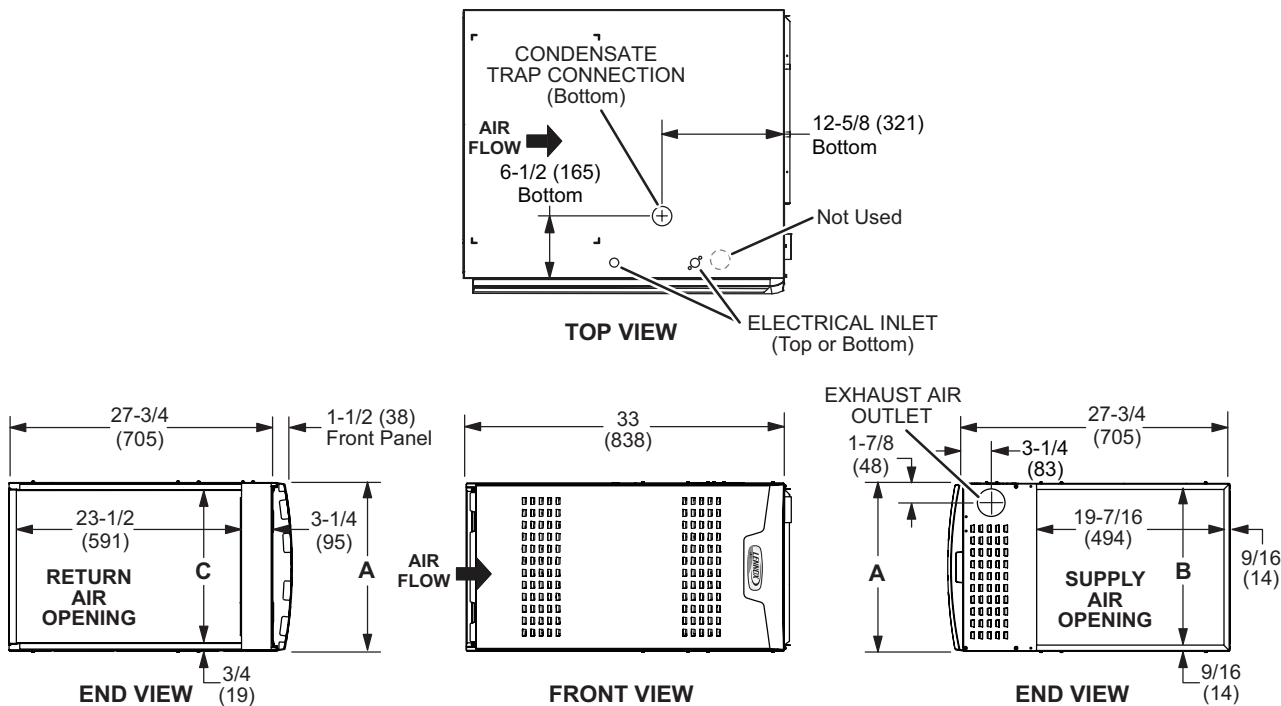
SIDE VIEW

Model No.	A		B		C	
	in.	mm	in.	mm	in.	mm
SL297UH040NV36BK SL297UH060NV36BK	17-1/2	446	16-3/8	416	16	406
SL297UH080NV48CK SL297UH080NV60CK	21	533	19-7/8	505	19-1/2	495

LEFT-HAND AIR DISCHARGE

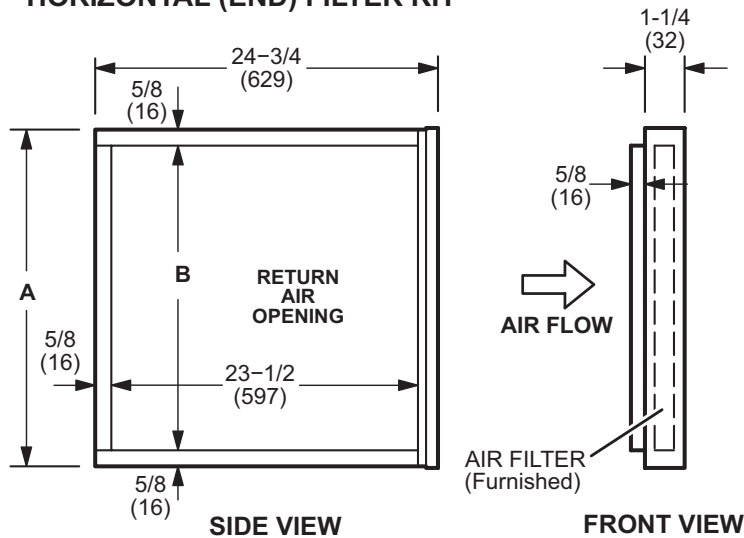


RIGHT-HAND AIR DISCHARGE



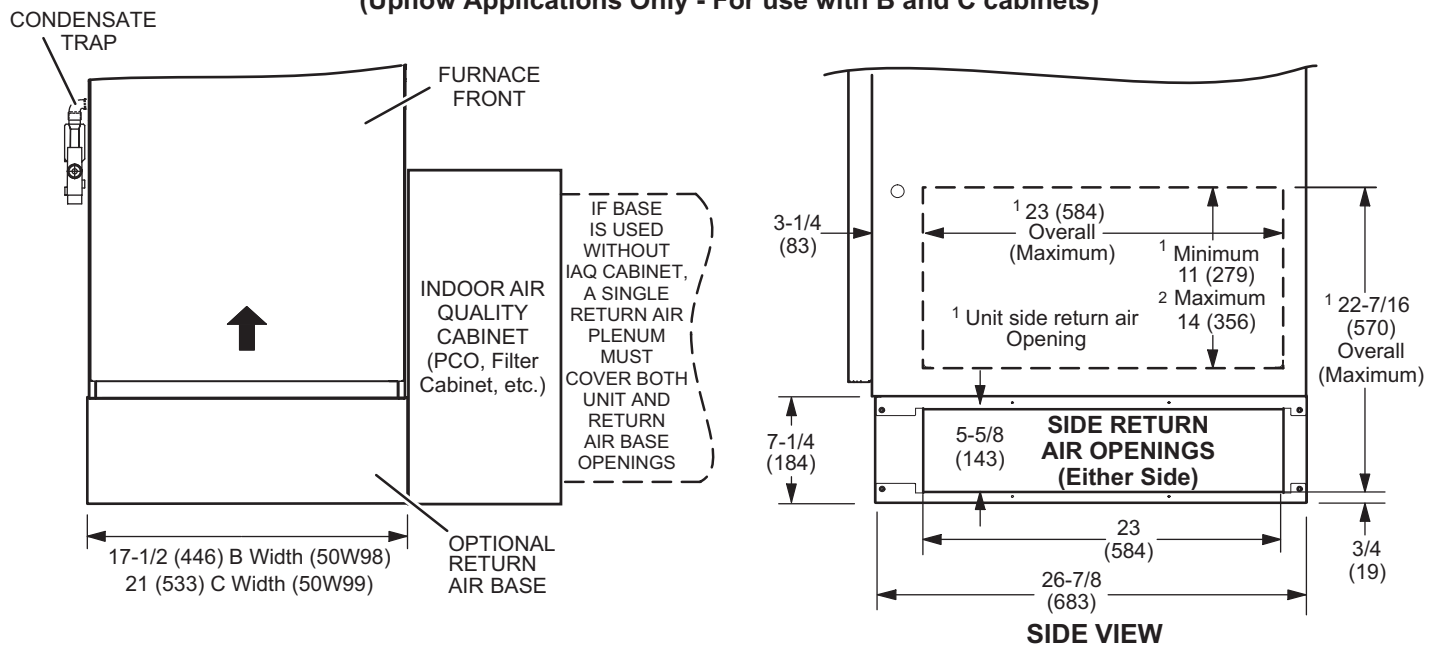
Model No.	A		B		C	
	in.	mm	in.	mm	in.	mm
SL297UH040NV36BK SL297UH060NV36BK	17-1/2	446	16-3/8	416	16	406
SL297UH080NV48CK SL297UH080NV60CK	21	533	19-7/8	505	19-1/2	495

HORIZONTAL (END) FILTER KIT



Furnace Cabinet Width	Catalog Number	A		B	
		in.	mm	in.	mm
B	87L96	18	457	16-3/4	425
C	87L97	21	533	18-3/4	476

**Optional Return Air Base
(Upflow Applications Only - For use with B and C cabinets)**

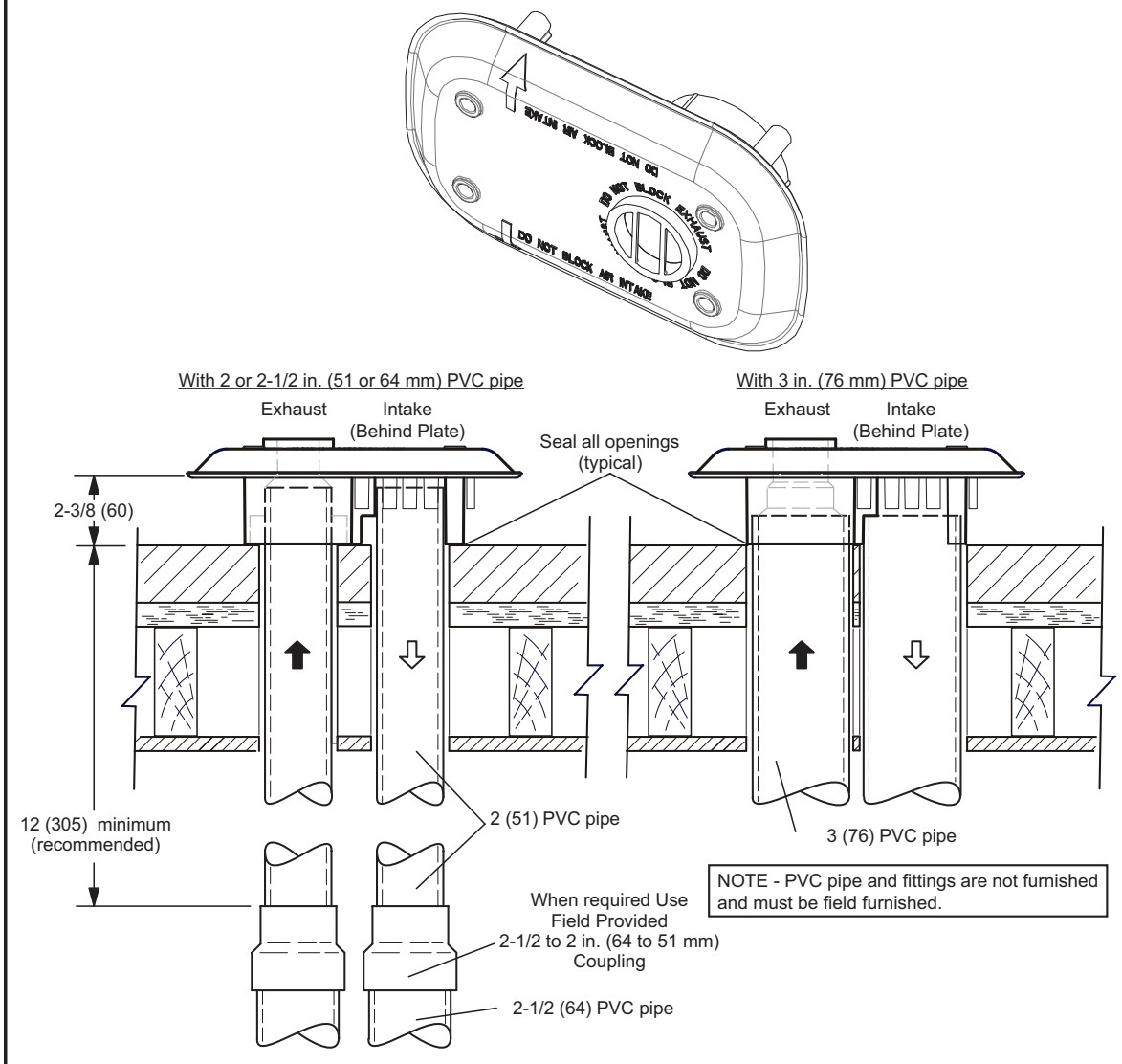


NOTE- Optional Side Return Air Filter Kits are not for use with Optional Return Air Base.

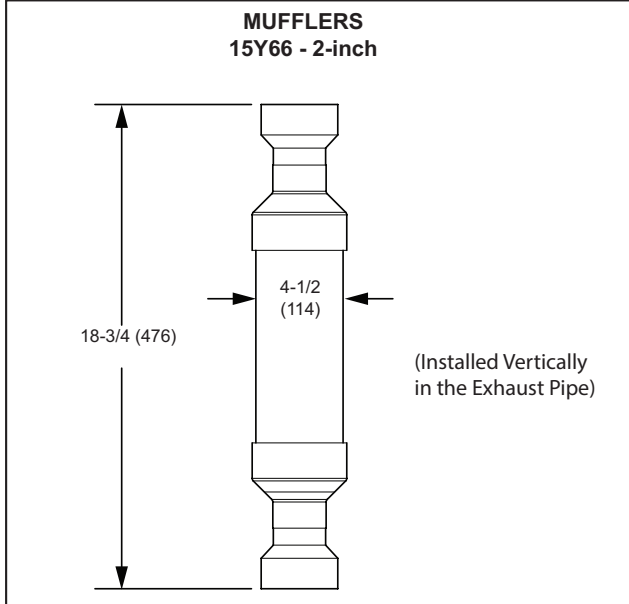
¹ Both the unit return air opening and the base return air opening must be covered by a single plenum or IAQ cabinet. Minimum unit side return air opening dimensions for units requiring 1800 cfm or more of air (W x H): 23 x 11 in. (584 x 279 mm). The opening can be cut as needed to accommodate plenum or IAQ cabinet while maintaining dimensions shown. Side return air openings must be cut in the field. There are cutting guides stenciled on the cabinet for the side return air opening. The size of the opening must not extend beyond the markings on the furnace cabinet.

² To minimize pressure drop, the largest opening height possible, up to 14 in. (356 mm), is preferred.

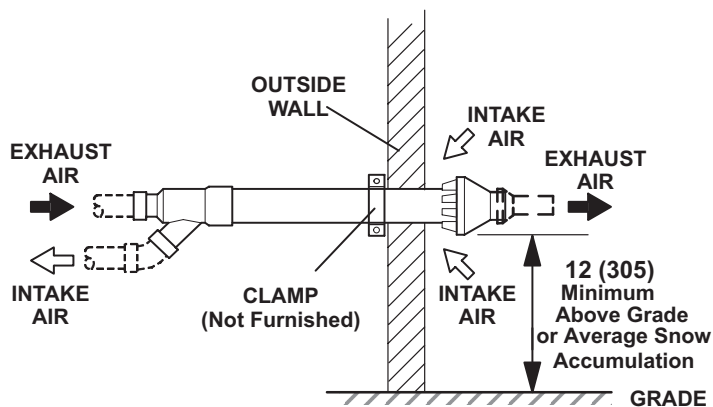
FLUSH-MOUNT VENT TERMINATION KIT 51W11 (US) or 51W12 (CANADA)



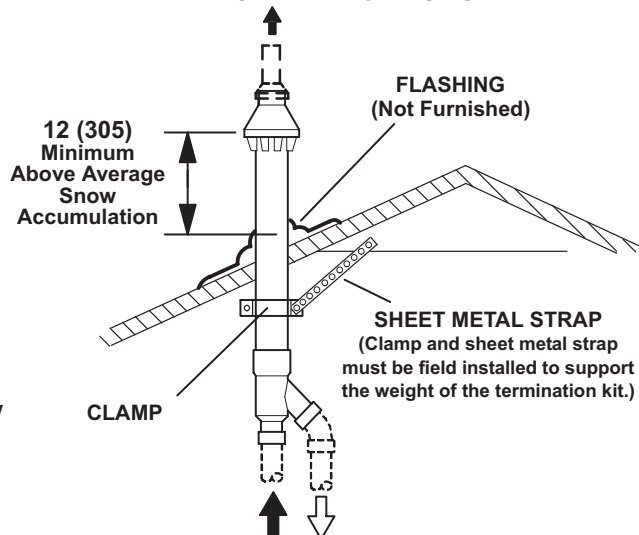
MUFFLERS
15Y66 - 2-inch



**CONCENTRIC WALL
TERMINATION APPLICATIONS**



**CONCENTRIC ROOF
TERMINATION APPLICATIONS**

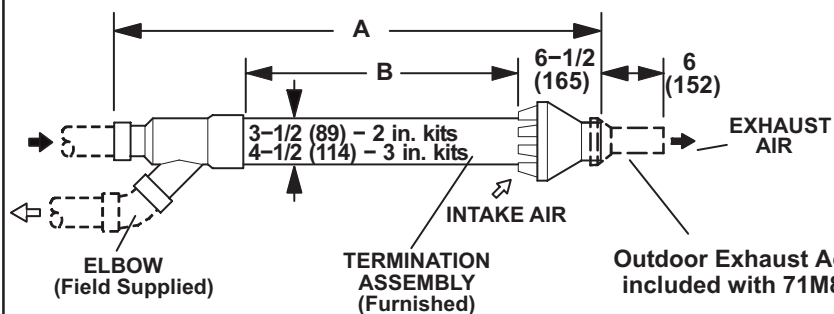


71M80 / 69M29 / 44W92 – 2 inch kits

60L46 / 44W93 – 3 inch kits

See Installation Instructions for additional information.

Note - Field provided reducer may be required to adapt different vent pipe sizes to termination.



Cat. No.	A		B	
	in.	mm	in.	mm
71M80 69M29	33-3/8	848	16-3/4	425
44W92 (Canada)	29	737	15-1/2	394
60L46	38-7/8	987	21-3/16	538
44W93 (Canada)	36-1/8	918	19-1/2	495

NOTE – Typical illustration for dimensions only. Design may vary depending on kit ordered.

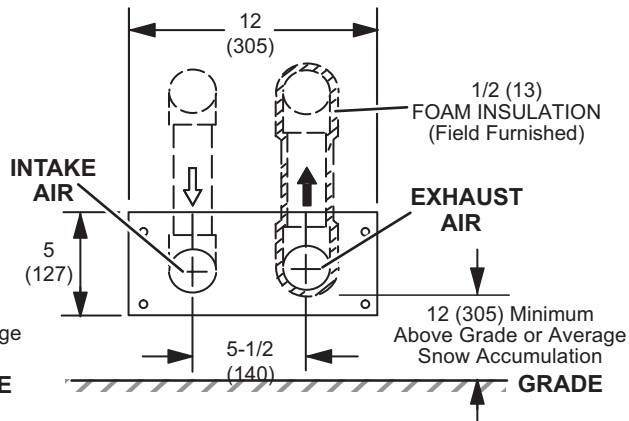
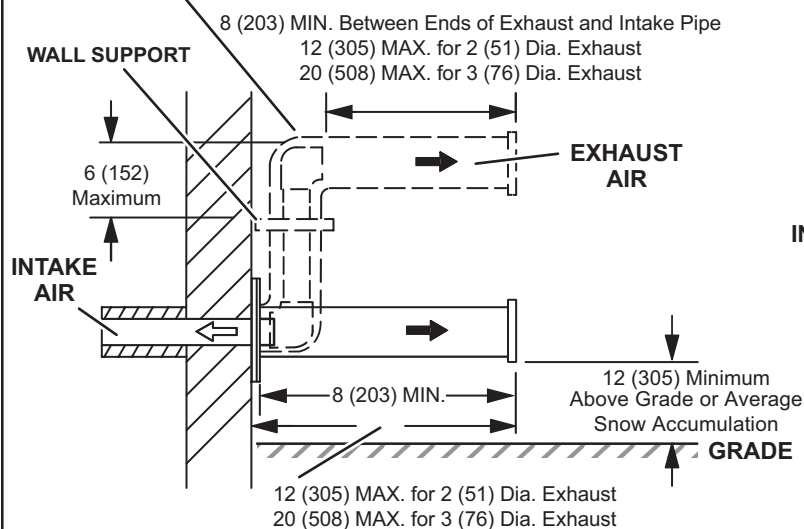
**WALL TERMINATION KITS (CLOSE-COUPLE)
EXTENDED VENT FOR GRADE CLEARANCE**

**2 inch (51 mm) 22G44 (US)
3 inch (76 mm) 44J40 (US)**

See Installation Instructions for additional information.

Note - Field provided reducer may be required to adapt different vent pipe sizes to termination.

If Intake and Exhaust Pipe is less than 12 in. (305 mm)
above snow accumulation or other obstructions,
field fabricated piping must be installed.



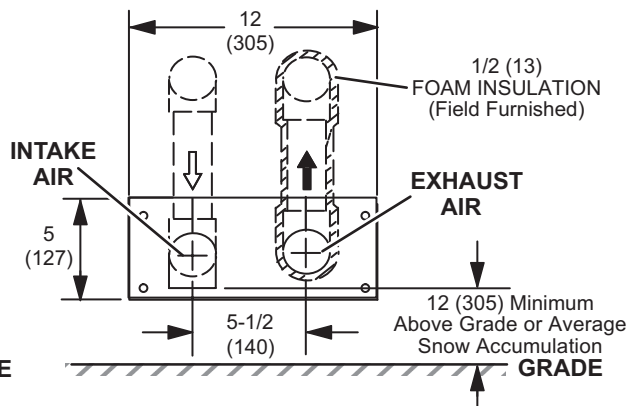
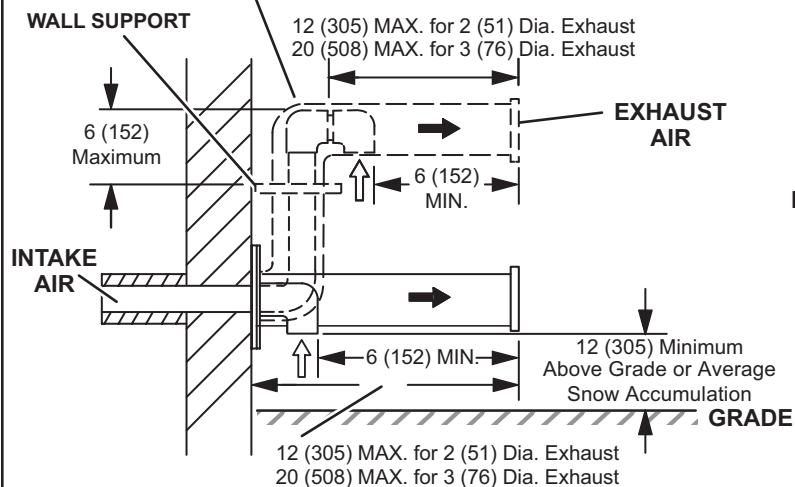
**WALL TERMINATION KITS (CLOSE-COUPLE)
EXTENDED VENT FOR GRADE CLEARANCE**

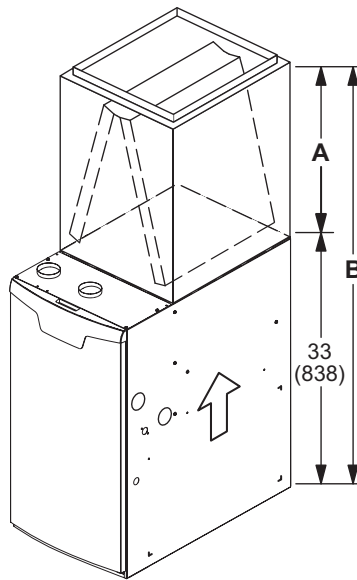
**2 inch (51 mm) 30G28 (WTK Canada)
3 inch (76 mm) 81J20 (WTK Canada)**

See Installation Instructions for additional information.

Note - Field provided reducer may be required to adapt different vent pipe sizes to termination.

If Intake and Exhaust Pipe is less than 12 in. (305 mm)
above snow accumulation or other obstructions,
field fabricated piping must be installed.



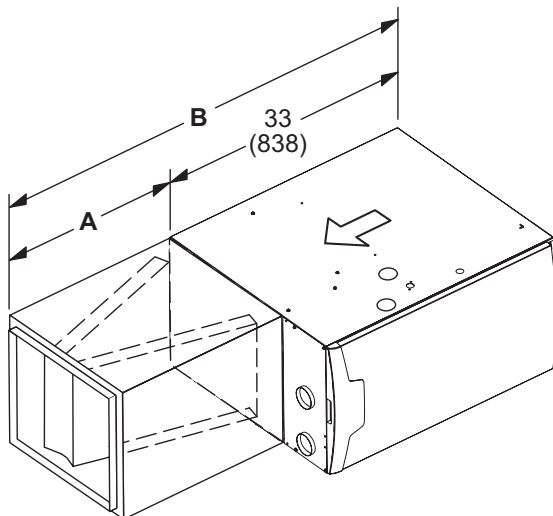


UPFLOW POSITION - CASSED

Model	A		B	
	in.	mm	in.	mm
CK40CT				
CK40CT-18/24B	16-1/2	419	49-1/2	1257
CK40CT-24B	18-1/2	470	51-1/2	1308
CK40CT-30B	22-1/2	572	55-1/2	1410
CK40CT-30/36B	24-1/2	622	57-1/2	1461
CK40CT-30/36C				
CK40CT-36B	24-1/2	622	57-1/2	1461
CK40CT-36C				
CK40CT-48B	27-1/2	699	60-1/2	1537
CK40CT-48C				
CK40CT-49C	29-1/2	749	62-1/2	1588
CK40CT-50/60C	27-1/2	699	60-1/2	1537
CK40CT-60C	31-1/2	800	64-1/2	1638

UPFLOW POSITION - UNCASSED

Model	A		B	
	in.	mm	in.	mm
CK40UT				
CK40UT-18/24B	14-1/8	359	47-1/8	1197
CK40UT-24B	16-3/8	416	49-3/8	1254
CK40UT-30B	20-3/4	527	53-3/4	1365
CK40UT-30/36B	22-1/4	565	55-1/4	1403
CK40UT-30/36C				
CK40UT-36C				
CK40UT-36B	22-3/8	568	55-3/8	1407
CK40UT-48B	26-1/4	667	59-1/4	1505
CK40UT-48C				
CK40UT-49C	28-1/2	724	61-1/2	1562
CK40UT-50/60C	25-7/8	657	58-7/8	1495
CK40UT-60C	30-5/8	778	63-5/8	1616



HORIZONTAL POSITION

Model	A		B	
	in.	mm	in.	mm
CK40HT				
CK40HT-24B				
CK40HT-30B				
CK40HT-36A	26-1/2	673	59-1/2	1511
CK40HT-36B				
CK40HT-36C				
CK40HT-42C				
CK40HT-48C				
CK40CT-42B	31-1/2	880	64-1/2	1638
CK40CT-48B				
CK40CT-51/61C				

BLOWER DATA

SL297UH040NV36BK BLOWER PERFORMANCE (less filter)

BOTTOM RETURN AIR

0 through 0.8 in. w.g. (Heating) and 0 through 1.0 in. w.g. (Cooling) External Static Pressure Range

HEATING

¹ Heating Speed DIP Switch Settings	First Stage Heating Speed - cfm	Second Stage Heating Speed - cfm
+24%	1120	1250
+18%	1060	1195
+12%	1000	1130
+6%	940	1070
Factory Default	875	1000
-6%	835	935
-12%	780	860
-18%	720	810

COOLING

¹ Cooling Speed DIP Switch Settings	First Stage Cooling Speed - cfm				Second Stage Cooling Speed - cfm			
	Low	Medium-Low	Medium-High	² High	Low	Medium-Low	Medium-High	² High
+	600	726	814	925	905	1065	1187	1334
Factory Default	550	664	752	832	826	977	1104	1225
-	498	610	683	769	741	882	1014	1123

¹ Cooling and heating speeds are based on a combination of DIP switch settings on the furnace control. Refer to Installation Instructions for specific DIP Switch Settings.

² Factory default setting.

NOTES - The effect of static pressure is included in air volumes shown.

First stage HEAT is approximately 91% of the same second stage HEAT.

First stage COOL (two-stage air conditioning units only) is approximately 70% of the same second stage COOL speed position.

Continuous Fan Only speed is selectable at 28% and 38% of the selected second stage cooling speed - minimum 250 cfm.

Lennox® Smart Zoning System Applications - Minimum blower speed is 250 cfm.

SL297UH040NV36BK BLOWER MOTOR WATTS (COOLING)

¹ Cooling Speed DIP Switch Settings		Motor Watts @ Various External Static Pressures - in. wg.																	
		First Stage								Second Stage									
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
+ Setting																			
Cooling Speed	Low	45	62	79	96	115	131	147	162	93	113	141	166	191	215	240	261	284	306
	Med-low	65	86	108	127	146	168	188	208	132	170	201	229	256	283	309	329	349	372
	Med-High	83	106	131	157	180	205	227	251	196	229	260	288	318	347	376	404	430	456
	High	107	138	169	197	223	249	272	298	272	302	339	372	407	437	472	501	528	546
Factory Default																			
Cooling Speed	Low	39	55	70	85	101	116	133	149	75	99	119	141	165	187	210	230	252	272
	Med-low	53	73	92	112	131	146	163	182	104	134	162	192	219	243	268	292	313	334
	Med-High	71	91	114	134	156	177	198	220	149	188	221	251	279	303	325	352	377	399
	High	90	111	138	164	189	214	239	260	215	250	276	308	341	370	397	426	453	477
– Setting																			
Cooling Speed	Low	34	47	61	75	89	104	119	136	61	82	104	123	140	161	181	200	219	238
	Med-low	46	63	80	97	115	132	147	161	85	107	130	156	180	206	229	251	275	296
	Med-High	57	76	95	116	134	151	171	189	113	147	180	207	233	259	286	307	329	349
	High	73	95	116	137	159	182	205	226	163	200	234	265	292	313	339	366	391	413

BLOWER DATA

SL297UH060NV36BK BLOWER PERFORMANCE (less filter)

BOTTOM RETURN AIR

0 through 0.8 in. w.g. (Heating) and 0 through 1.0 in. w.g. (Cooling) External Static Pressure Range

HEATING

¹ Heating Speed DIP Switch Settings	First Stage Heating Speed - cfm	Second Stage Heating Speed - cfm
+24%	1000	1120
+18%	945	1060
+12%	880	1005
+6%	830	950
Factory Default	770	875
-6%	720	815
-12%	685	755
-18%	620	700

COOLING

¹ Cooling Speed DIP Switch Settings	First Stage Cooling Speed - cfm				Second Stage Cooling Speed - cfm			
	Low	Medium-Low	Medium-High	² High	Low	Medium-Low	Medium-High	² High
+	617	740	854	953	833	1020	1184	1329
Factory Default	566	674	780	869	756	911	1079	1210
-	471	609	695	789	661	800	958	1103

¹ Cooling and heating speeds are based on a combination of DIP switch settings on the furnace control. Refer to Installation Instructions for specific DIP Switch Settings.

² Factory default setting.

NOTES - The effect of static pressure is included in air volumes shown.

First stage HEAT is approximately 91% of the same second stage HEAT.

First stage COOL (two-stage air conditioning units only) is approximately 70% of the same second stage COOL speed position.

Continuous Fan Only speed is selectable at 28% and 38% of the selected second stage cooling speed - minimum 250 cfm.

Lennox® Smart Zoning System Applications - Minimum blower speed is 250 cfm.

SL297UH060NV36BK BLOWER MOTOR WATTS (COOLING)

¹ Cooling Speed DIP Switch Settings	Motor Watts @ Various External Static Pressures - in. wg.																	
	First Stage								Second Stage									
	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0

+ Setting

Cooling Speed	Low	55	67	80	93	106	122	136	151	107	124	147	165	182	202	220	235	253	269
	Med-low	74	90	110	127	143	157	173	189	157	181	206	227	251	276	295	316	333	349
	Med-High	100	119	139	159	175	189	207	223	236	262	284	306	329	354	375	397	415	431
	High	127	148	170	193	217	237	253	273	320	346	373	396	424	443	469	493	516	534

Factory Default

Cooling Speed	Low	43	60	72	84	97	110	123	137	84	104	122	141	161	177	190	204	220	236
	Med-low	61	77	92	109	124	139	154	168	124	145	166	189	210	232	250	269	285	301
	Med-High	80	100	118	136	152	169	184	199	182	206	230	251	276	300	322	343	362	378
	High	105	122	143	162	180	197	215	231	256	282	306	328	347	368	391	414	436	454

- Setting

Cooling Speed	Low	38	51	64	76	89	101	113	125	69	85	104	119	134	149	165	181	197	212
	Med-low	55	68	80	93	107	122	137	151	100	117	137	158	175	192	209	224	239	256
	Med-High	65	81	98	115	130	144	159	175	136	158	181	203	227	250	270	287	305	321
	High	82	101	121	137	156	171	186	201	192	219	241	264	288	310	335	356	375	391

BLOWER DATA

SL297UH080NV48CK BLOWER PERFORMANCE (less filter)

BOTTOM RETURN AIR

0 through 0.8 in. w.g. (Heating) and 0 through 1.0 in. w.g. (Cooling) External Static Pressure Range

HEATING

¹ Heating Speed DIP Switch Settings	First Stage Heating Speed - cfm	Second Stage Heating Speed - cfm
+24%	1315	1440
+18%	1245	1365
+12%	1175	1310
+6%	1110	1225
Factory Default	1055	1160
-6%	985	1085
-12%	905	1015
-18%	830	955

COOLING

¹ Cooling Speed DIP Switch Settings	First Stage Cooling Speed - cfm				Second Stage Cooling Speed - cfm			
	Low	Medium-Low	Medium-High	² High	Low	Medium-Low	Medium-High	² High
+	818	965	1103	1270	1050	1255	1477	1685
Factory Default	744	883	1003	1148	942	1155	1340	1526
-	575	812	895	1032	813	1033	1193	1385

¹ Cooling and heating speeds are based on a combination of DIP switch settings on the furnace control. Refer to Installation Instructions for specific DIP Switch Settings.

² Factory default setting.

NOTES - The effect of static pressure is included in air volumes shown.

First stage HEAT is approximately 91% of the same second stage HEAT.

First stage COOL (two-stage air conditioning units only) is approximately 70% of the same second stage COOL speed position.

Continuous Fan Only speed is selectable at 28% and 38% of the selected second stage cooling speed - minimum 380 cfm.

Lennox® Smart Zoning System Applications - Minimum blower speed is 380 cfm.

SL297UH080NV48CK BLOWER MOTOR WATTS (COOLING)

¹ Cooling Speed DIP Switch Settings	Motor Watts @ Various External Static Pressures - in. wg.																	
	First Stage									Second Stage								
	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0

+ Setting

Cooling Speed	Low	95	111	126	141	158	178	194	212	174	206	234	266	292	316	344	368	390	415
	Med-low	123	150	171	195	220	242	263	283	259	297	331	359	389	423	456	487	518	549
	Med-High	163	191	220	247	275	302	327	353	356	393	436	478	522	565	604	640	676	712
	High	227	260	296	324	355	381	402	439	494	549	591	637	685	729	774	808	843	876

Factory Default

Cooling Speed	Low	77	95	111	125	140	155	169	186	145	169	194	223	247	270	297	320	340	362
	Med-low	109	126	143	166	186	206	225	246	211	246	276	307	335	367	389	412	441	466
	Med-High	136	159	183	209	235	259	280	305	293	329	359	396	435	470	507	544	576	607
	High	178	209	238	271	295	324	350	374	385	428	473	519	561	599	639	679	714	748

- Setting

Cooling Speed	Low	62	80	95	109	123	136	151	164	118	137	161	182	203	222	246	268	288	307
	Med-low	95	112	126	140	156	177	194	211	167	198	226	255	283	309	335	360	383	405
	Med-High	114	130	153	173	193	214	234	256	237	268	303	328	360	386	418	447	476	503
	High	147	169	196	225	250	276	301	325	309	341	377	419	460	498	536	572	607	638

BLOWER DATA

SL297UH080NV60CK BLOWER PERFORMANCE (less filter)

BOTTOM RETURN AIR

0 through 0.8 in. w.g. (Heating) and 0 through 1.0 in. w.g. (Cooling) External Static Pressure Range

HEATING		
¹ Heating Speed DIP Switch Settings	First Stage Heating Speed - cfm	Second Stage Heating Speed - cfm
+24%	1295	1770
+18%	1230	1675
+12%	1155	1585
+6%	1075	1500
Factory Default	995	1405
-6%	905	1330
-12%	835	1235
-18%	755	1140

COOLING								
¹ Cooling Speed DIP Switch Settings	First Stage Cooling Speed - cfm				Second Stage Cooling Speed - cfm			
	Low	Medium-Low	Medium-High	² High	Low	Medium-Low	Medium-High	² High
+	1060	1265	1415	1600	1550	1755	1965	2140
Factory Default	970	1125	1285	1445	1450	1605	1805	1990
-	870	1000	1120	1285	1310	1460	1625	1790

¹ Cooling and heating speeds are based on a combination of DIP switch settings on the furnace control. Refer to Installation Instructions for specific DIP Switch Settings.

² Factory default setting.

NOTES - The effect of static pressure is included in air volumes shown.

First stage HEAT is approximately 91% of the same second stage HEAT.

First stage COOL (two-stage air conditioning units only) is approximately 70% of the same second stage COOL speed position.

Continuous Fan Only speed is selectable at 28% and 38% of the selected second stage cooling speed - minimum 450 cfm.

Lennox® Smart Zoning System Applications - Minimum blower speed is 450 cfm.

SL297UH080NV60CK BLOWER MOTOR WATTS (COOLING)

¹ Cooling Speed DIP Switch Settings		Motor Watts @ Various External Static Pressures - in. wg.																	
		First Stage								Second Stage									
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
+ Setting																			
Cooling Speed	Low	126	145	173	204	232	260	283	307	287	342	377	422	446	491	523	569	601	628
	Med-low	160	201	236	264	305	339	366	392	384	435	495	527	573	627	670	709	756	789
	Med-High	214	257	299	333	379	412	450	471	555	616	670	718	763	798	846	877	913	955
	High	312	353	400	428	458	505	537	577	770	833	884	929	962	995	1036	1062	1070	1068
Factory Default																			
Cooling Speed	Low	100	125	149	170	188	213	238	261	227	281	317	358	393	430	456	487	510	547
	Med-low	130	157	189	221	246	273	305	338	328	375	413	442	487	529	564	604	642	672
	Med-High	176	208	245	283	316	351	384	414	416	465	517	561	610	655	704	735	774	820
	High	226	278	313	358	396	426	463	486	575	631	694	743	780	830	866	909	944	976
- Setting																			
Cooling Speed	Low	76	106	129	144	164	180	198	219	183	211	252	291	323	358	380	419	447	470
	Med-low	113	139	158	181	208	236	255	281	246	284	334	364	401	440	470	497	525	561
	Med-High	132	155	183	220	253	275	304	333	330	379	412	452	489	533	568	617	652	691
	High	176	210	249	287	321	357	381	420	420	470	526	574	619	663	701	743	783	820

REVISIONS

Sections	Description of Change
Approvals	Updated California Only section to include San Diego.
Blower Data	Updated.
Specifications/Optional Accessories	Removed LPG/Propane data/kits. All models are Natural Gas only.



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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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