## SL280UHV(K)

### DAVE LENNOX SIGNATURE® COLLECTION

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

RESIDENTIAL PRODUCT SPECIFICATIONS (EHB)

AFUE - 80%

Input - 66,000 to 132,000 Btuh Nominal Add-on Cooling - 2 to 5 Tons

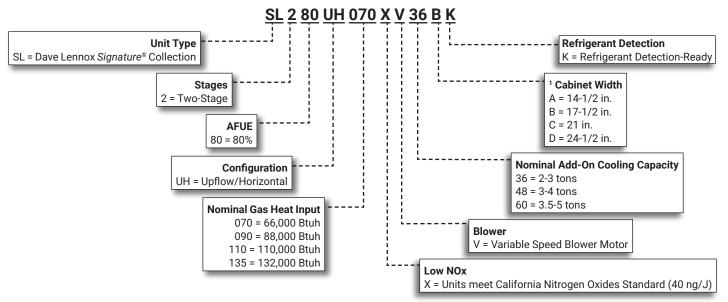




S40 Smart Wi-Fi Communicating Thermostat (Not Furnished)



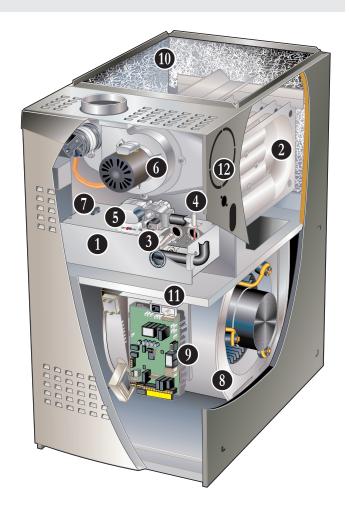
#### MODEL NUMBER IDENTIFICATION



<sup>&</sup>lt;sup>1</sup> Indoor coils with the same letter designation physically matches the furnace.

#### **FEATURE HIGHLIGHTS**

- 1. SilentComfort™ Technology
- 2. Lennox Duralok™ Heat Exchanger Assembly
- 3. Inshot Burners
- 4. SureLight® Hot Surface Ignitor
- 5. Two-Stage Gas Control Valve
- 6. Two-Speed Combustion Air Inducer
- 7. Flame Roll-Out Switch
- 8. Variable Speed Direct Drive Blower
- 9. SureLight® Integrated Furnace Control
- 10. Insulated Cabinet
- 11. Safety Interlock Switch
- 12. Gas Piping and Electrical Inlets



NOTE - SL280UHV(K) FURNACES ARE NOT AVAILABLE IN CANADA! NOTE - SL280UHV(K) FURNACES CANNOT BE TWINNED!

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#### APPROVALS AND WARRANTY

#### **APPROVALS**

- · AHRI Certified
- Tested and rated according to US DOE test procedures and FTC labeling regulations
- 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 <u>do not meet</u> 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 cannot be installed within the SCAQMD, SJVAPCD and Bay Area
- All "X" model furnaces are approved by the California Energy Commission and meets California Nitrogen Oxides Standard (NOx) limits of 40 ng/J

#### **WARRANTY**

- · Heat Exchanger:
  - · Limited twenty years 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 66,000, 88,000, 110,000 and 132,000 Btuh
- Energy efficiency (AFUE) 80%
- Compact cabinet
- 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
- Ready for installation in upflow or horizontal right-hand position without any modifications
- **NOTE** Horizontal left-hand position requires repositioning of pressure switch.
- 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**

- Can be used with the 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 SilentComfort™ Technology
  - Patent pending burner sound enclosure and extra cabinet insulation reduces operating sound levels
- 2 Lennox Duralok™ Heat Exchanger Assembly
  - Heavy gauge aluminized steel heat exchanger
  - · Crimped seam clamshell design
  - Designed for normal expansion and contraction
  - · Minimum resistance to air flow
  - Laboratory life cycle tested in excess of industry standards
  - Compact size permits low overall design of furnace cabinet

## 3 Inshot Burners

- Aluminized steel inshot burners provide efficient, troublefree operation
- Burner venturi mixes air and gas in correct proportion for proper combustion
- Burner assembly is removable from the unit as a single component for ease of service

### **HEATING SYSTEM (continued)**

- 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<sup>®</sup> insulation for dependable operation

## 5 Two-Stage Gas Control Valve

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

## Two-Speed Combustion Air Inducer

- Heavy duty, permanent split capacitor (PSC) two-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
- Direct access allows inducer assembly to be rotated 90° clockwise or counterclockwise to facilitate easy vent attachment

## 7 Flame Rollout Switches (2)

- · Factory installed on burner box
- Switches provide protection from abnormal operating conditions
- · Manual reset

#### Limit Controls

- Primary limit located on vestibule panel
- · Secondary limit located on blower housing
- · Automatic reset

#### Optional Accessories

#### High Altitude Pressure Switch Kit

• Required on most units for proper unit operation at altitudes from 4501 to 10,000 ft.

#### Natural Gas to LPG/Propane Conversion Kit

 Required for field changeover from natural gas to LPG/ Propane

#### LPG/Propane to Natural Gas Conversion Kit

 Required for field changeover from LPG/Propane to natural gas

#### Vent Adaptor (Upflow Applications Only)

- Allows venting through a masonry chimney without the need of a flue liner
- Manual reset temperature sensor protects against abnormal operating conditions
- Sensor wiring may be routed from either side of adaptor



- · Minimum winter design temperatures:
  - -10°F when used with interior masonry chimneys
  - +5°F when used with exterior masonry chimneys

**NOTE** - Refer to Winter Design Temperatures Map on page 11 for application information. Also refer to the installation instructions for detailed information.

#### **BLOWER**

- Nariable 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 though 0.80 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 the furnace control
- · Motor is resiliently mounted
- · See Blower Data tables

**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.

#### **CONTROLS**

9 SureLight® Integrated Furnace Control (Lennox® Communicating)

- Advanced control communicates information about various operating parameters in the furnace to the optional Lennox<sup>®</sup> Communicating Thermostat to constantly maintain the highest level of comfort and performance available
- Auto Configuration On startup 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 <sup>®</sup> Communicating Thermostat	
Two-Stage (Conventional)	Two-Stage (65 and 100%)
Single-Stage (Conventional)	

- Safety Controls Flame sensor utilizes flame rectification for safe and reliable operation
- Should flame fail to ignite, control will initiate 4 reattempts 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 alphanumeric 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)
- 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)

#### **CONTROLS** (continued)

- · 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

#### 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

#### **Optional Accessories**

#### Thermostat

- · Thermostat is not furnished with unit
- · See page 9

#### 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

#### **CABINET**

- Low-profile, narrow width allows easy installation
- · Heavy-gauge, cold rolled steel construction
- Pre-painted finish
- Flue outlet on top of cabinet for upflow applications, can be relocated to either side of cabinet for horizontal applications
- Flanges provided on supply air opening for ease of plenum connection or alignment with indoor coil
- 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
- Safety interlock switch automatically shuts off power to unit when inner blower compartment access panel is removed
- 12 · Gas piping and electrical inlets are provided in 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 and 60D 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

**NOTE** - See Blower Performance Tables for additional information.

#### **CABINET** (continued)

#### 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"

### **Optional Accessories**

#### 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

#### 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 and 60D 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 available for field installation
- Rack has filter door for easy filter servicing
- Flanges on rack allow easy duct connection
- See dimension drawing

#### Air Filter and Rack Kit for Upflow Side Return Air

- · Applications 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 easy filter servicing
- Flanges on rack allow easy 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<sup>®</sup> (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 CO<sub>2</sub>, particulates and VOC's providing real-time overall air quality
- 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
- Smart home automation compatible with Amazon Alexa<sup>®</sup>, Google Assistant, Control4<sup>®</sup> and Building36<sup>®</sup>
- 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

#### E30 Smart Wi-Fi Thermostat

- 4 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<sup>™</sup> (geo-fencing), equipment maintenance reminders and scheduling
- Smart home automation compatible with Apple HomeKit™, Amazon Alexa® and Google Assistant
- 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

#### M30 Smart Wi-Fi Thermostat

- 4 Htg.-2 Clg.
- 7-day, universal, programmable, touchscreen thermostat
- Humidification / dehumidification / dewpoint measurement and control, Humiditrol ® control



- Smooth Setback Recovery and compressor short-cycle protection
- One-Touch Away Mode, Smart Away<sup>™</sup> (geo-fencing), equipment maintenance reminders and scheduling
- Smart home automation compatible with Apple HomeKit™, Amazon Alexa® and Google Assistant
- 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			ı
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 A	r Purifiers		
HCWHAP1	8 x 7 x 16.5		23V99
Healthy Climate® Ultraviolet Germicidal I	19		I
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
Lennox <sup>®</sup> Smart Room Sensor	4 x 5-1/2 x 3		22V25
Lennox <sup>®</sup> 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
E30 Smart Wi-Fi Thermostat	5 x 7-1/2 x 1		20A65
M30 Smart Wi-Fi Thermostat	3-5/16 x 4-5/16 x 7/8		15Z69
Thermostat Accessories			
Discharge Air Temperature Sensor (For Sensor)	40, E30)		88K38
Remote Outdoor Air Temperature Sensor	(For dual-fuel and Humiditrol®)		X2658

<sup>&</sup>lt;sup>1</sup> Optional for service diagnostics (S40/E30).

<sup>&</sup>lt;sup>2</sup> 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.

#### 99% WINTER DESIGN TEMPERATURES FOR THE CONTIGUOUS UNITED STATES



This map is a necessarily generalized guide to temperatures in the contiguous Unites States. Temperatures shown for areas such as mountainous regions and large urban centers may not be accurate. The data used to develop this map was taken from the 1993 ASHRAE Fundamentals Handbook (Chapter 24, Table 1: Climate Conditions for the United States). Reprinted with permission from NFPA 54: National Fuel Gas Code 1999, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association on the referenced subject, which is represented only by the standard in its entirety.

#### **INSTALLATION CLEARANCES**

#### **UPFLOW POSITION**

Vent Type	Type B1	Type C
Sides	0 (0)	1 0 (0)
Rear	0 (0)	0 (0)
Тор	1 (25)	1 (25)
Front	2-1/4 (57)	2-1/4 (57)
Front (service/alcove)	24 (610)	24 (610)
Floor	Combustible	Combustible
Flue	1 (25)	6 (152)

- NOTE Air for combustion must conform to the methods outlined in the National Fuel Gas Code (NFPA 54/ANSI-Z223.1).
- 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.
- <sup>1</sup> Left side requires 4 in. if single wall vent is used on 14-1/2 in. cabinets, 2 in. on 17-1/2 in. cabinets.

## HORIZONTAL POSITION

Vent Type	Type B1	Type C
End	<sup>1</sup> 2 (51)	<sup>1</sup> 2 (51)
Rear	0 (0)	0 (0)
Тор	1 0 (0)	1 0 (0)
Front	2-1/4 (57)	2-1/4 (57)
Front (service)	24 (610)	24 (610)
Floor	Combustible	Combustible
Flue	1 (25)	6 (152)

- NOTE Air for combustion must conform to the methods outlined in the National Fuel Gas Code (NFPA 54/ANSI-Z223.1).
- 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.
- Line contact installation permissible between jacket top or sides and building joists

<b>SPECIFICATIO</b>	NS				
Gas		Model	SL280UH070V36AK	SL280UH090V36BK	SL280UH090V48BK
Heating		Model - Low NOx	SL280UH070XV36AK		SL280UH090XV48BK
Performance		<sup>1</sup> AFUE	80%	80%	80%
	High	Input - Btuh	66,000	88,000	88,000
	Fire	Output - Btuh	52,000	70,000	70,000
		Temperature rise range - °F	40 - 70	40 - 70	40 - 70
		Gas Manifold Pressure (in. w.g.)	3.5 / 10	3.5 / 10	3.5 / 10
		Nat. Gas / LPG/Propane			
	Low	Input - Btuh	43,000	57,000	57,000
	Fire	Output - Btuh	35,000	47,000	47,000
		Temperature rise range - °F	25 -55	25 -55	25 -55
		Gas Manifold Pressure (in. w.g.)	1.7 / 4.5	1.7 / 4.5	1.7 / 4.5
		Nat. Gas / LPG/Propane			
High static - in. w.g.		Heating	0.8	0.8	0.8
		Cooling	1.0	1.0	1.0
Connections		Flue connection – in. round	4	4	4
		Gas pipe size IPS	1/2	1/2	1/2
Indoor		Wheel diameter x width - in.	10 X 8	10 X 9	11-1/2 X 9
Blower		Motor output - hp	1/2	1/2	1.0
		Tons of add-on cooling	2 - 3	2 - 3.5	2.5 - 4
		Air Volume Range - cfm	606 - 1345	498 - 1393	679 - 2002
Electrical Data		Voltage		0 volts - 60 hertz - 1 pha	
		Blower motor full load amps	7.7	7.7	12.8
		Maximum overcurrent protection	15	15	20
Shipping Data		lbs 1 package	128	143	154

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

<sup>&</sup>lt;sup>2</sup> Flue connection on the unit is 4 in. diameter. Most applications will require 5 in. venting and field supplied 4 x 5 in. adaptor. See Venting Tables in the Installation Instructions for detailed information.

Gas		Model	SL280UH090V60CK	SL280UH110V60CK	SL280UH135V60DK
Heating		Model - Low NOx	SL280UH090XV60CK	SL280UH110XV60CK	
Performance		<sup>1</sup> AFUE	80%	80%	80%
	High	Input - Btuh	88,000	110,000	132,000
	Fire	Output - Btuh	70,000	87,000	105,000
		Temperature rise range - °F	35 - 65	35 - 65	40 - 70
		Gas Manifold Pressure (in. w.g.)	3.5 / 10.0	3.5 / 10.0	3.5 / 10.0
		Nat. Gas / LPG/Propane			
	Low	Input - Btuh	57,000	72,000	86,000
	Fire	Output - Btuh	47,000	58,000	69,000
		Temperature rise range - °F	25 -55	25 -55	25 -55
		Gas Manifold Pressure (in. w.g.)	1.7 / 4.5	1.7 / 4.5	1.7 / 4.5
		Nat. Gas / LPG/Propane			
High static - in. w.g.		Heating	0.8	0.8	0.8
		Cooling	1.0	1.0	1.0
Connections		Flue connection - in. round	4	4	<sup>2</sup> <b>4</b>
		Gas pipe size IPS	1/2	1/2	1/2
Indoor		Wheel diameter x width - in.	11-1/2 X 10	11-1/2 X 10	11-1/2 X 11
Blower		Motor output - hp	1.0	1.0	1.0
		Tons of add-on cooling	3 - 5	3 - 5	3.5 - 5
		Air Volume Range - cfm	826 - 2305	812 - 2125	828 - 2257
Electrical Data		Voltage	12	0 volts - 60 hertz - 1 pha	ise
		Blower motor full load amps	12.8	12.8	12.8
		Maximum overcurrent protection	20	20	20
Shipping Data		lbs 1 package	173	181	199

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

<sup>&</sup>lt;sup>1</sup> Annual Fuel Utilization Efficiency based on DOE test procedures and according to FTC labeling regulations. Isolated combustion system rating for non-weatherized furnaces.

<sup>&</sup>lt;sup>1</sup> Annual Fuel Utilization Efficiency based on DOE test procedures and according to FTC labeling regulations. Isolated combustion system rating for non-weatherized furnaces.

<sup>&</sup>lt;sup>2</sup> Flue connection on the unit is 4 in. diameter. Most applications will require 5 in. venting and field supplied 4 x 5 in. adaptor. See Venting Tables in the Installation Instructions for detailed information.

## **OPTIONAL ACCESSORIES - ORDER SEPARATELY**

NOTE - FURNACES CANNOT BE TWINNED!

			"A" Width Models	"B" Width Models	"C" Width Models	"D" Width Models
CABINET ACCESSORIES				'		'
Horizontal Suspension Kit	- Horizontal only	51W10	51W10	51W10	51W10	
Return Air Base - Upflow or	nly		65W75	50W98	50W99	51W00
High Performance Econom	izer (Commercial Only)	10U53	10U53	10U53	10U53	
CONTROLS						
Transformer (75VA)			27J32	27J32	27J32	27J32
FILTERS						
<sup>1</sup> Air Filter and Rack Kit	Horizontal (end)	Horizontal (end)		87L96	87L97	87L98
		Size of filter - in.	14 x 25 x 1	18 x 25 x 1	20 x 25 x 1	25 x 25 x 1
	Side Return	Single	44J22	44J22	44J22	44J22
		Ten Pack	66K63	66K63	66K63	66K63
		Size of filter - in.	16 x 25 x 1			
VENTING					•	
Vent Adaptor - 6 in. conn. s	size upflow applications	18M79	18M79	18M79	18M79	

<sup>&</sup>lt;sup>1</sup> Cleanable polyurethane, frame-type filter.

#### **GAS HEAT ACCESSORIES Natural Gas** LPG/Propane **Natural Gas to** LPG/Propane **High Altitude High Altitude High Altitude Pressure Switch Kit** LPG/Propane Kit to Natural Gas Kit Input **Orifice Kit Orifice Kit** 0 - 4500 ft. 4501 - 7500 ft. 7501 - 10,000 ft. 0 - 7500 ft. 0 - 7500 ft. 7501- 10,000 ft. 7501- 10,000 ft. No Change 070 No Change 73W35 11K51 77W09 73W37 11K46 090 No Change 69W56 73W35 11K51 77W09 73W37 11K46 77W09 110 73W35 73W37 No Change 69W56 11K51 11K46 77W09 73W37 135 No Change 73W33 73W34 11K51 11K46

### HIGH ALTITUDE DERATE

NOTE - Units may be installed at altitudes up to 4500 ft. above sea level without any modifications.

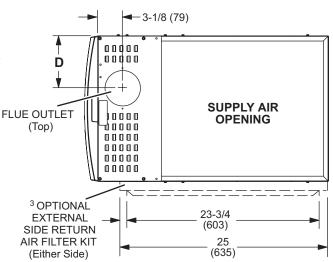
At altitudes above 4500 ft. units must be derated to match information in the shaded area shown below.

NOTE - This is the only permissible derate for these units.

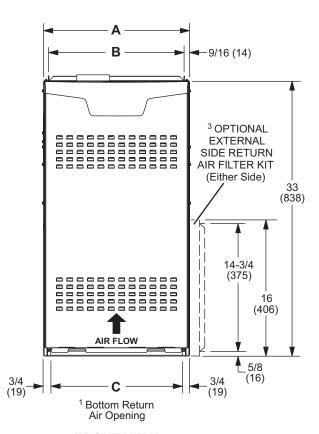
		Gas Manifold Pressure (Outlet) in. w.g.										
	0 - 4500 Feet					4501 -75	500 Feet		7501 - 10,000 ft.			
Input	Natural Gas		S LPG/Propane Natural Gas LPG/Pro		ropane	1 Natui	ral Gas	LPG/P	ropane			
	High Fire	Low Fire	High Fire	Low Fire	High Fire	Low Fire	High Fire	Low Fire	High Fire	Low Fire	High Fire	Low Fire
070	3.5	1.7	10	4.5	3.4	1.6	10	4.5	3.5	1.7	10	4.5
090	3.5	1.7	10	4.5	3.2	1.5	10	4.5	3.5	1.7	10	4.5
110	3.5	1.7	10	4.5	3.2	1.5	10	4.5	3.5	1.7	10	4.5
135	3.5	1.7	10	4.5	2.8	1.6	10	4.5	3.5	1.7	10	4.5

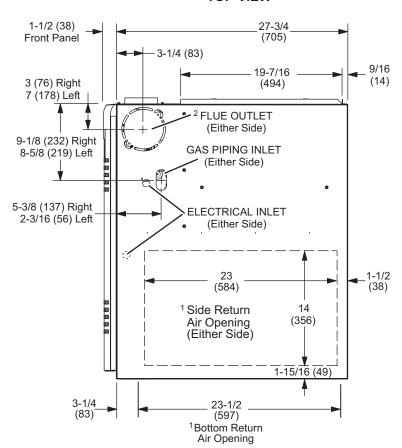
<sup>&</sup>lt;sup>1</sup> Natural Gas High Altitude Orifice Kit required.

- <sup>1</sup> NOTE 60C and 60D size units that require air volumes over 1800 cfm must have one of the following:
- Single side return air <u>and</u> 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.
- <sup>2</sup> Flue outlet may be horizontal but furnace must be
- vented vertically
  <sup>3</sup> Optional External Side Return Air Filter Kit is not for use with the optional Return Air Base.



#### **TOP VIEW**

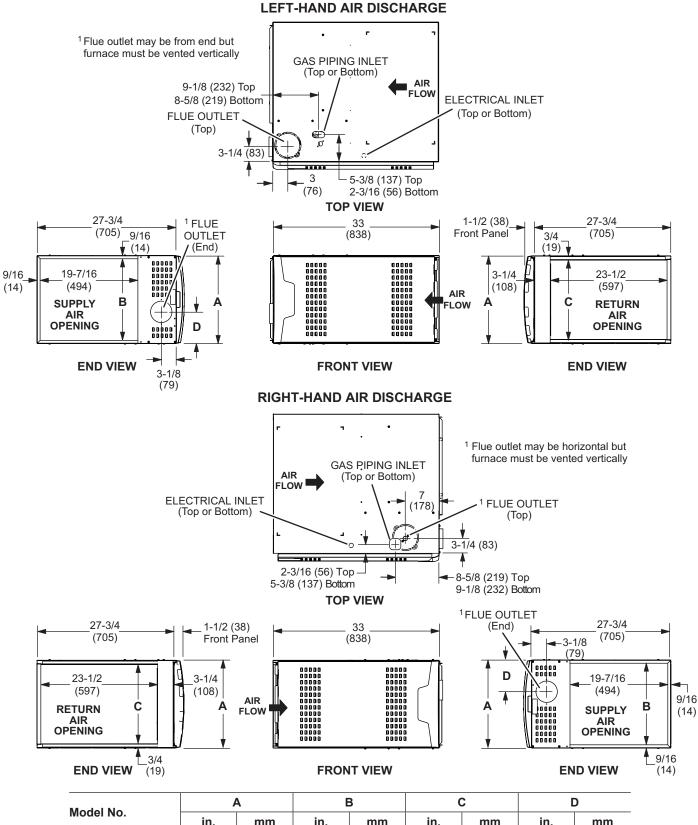




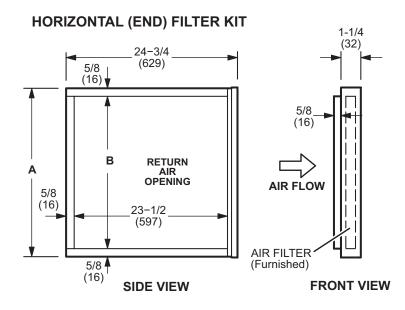
#### **FRONT VIEW**

SIDE VIEW

NA	Α		В		С		D			
Model No.	in.	mm	in.	mm	in.	mm	in.	mm		
SL280UH070V36A	14-1/2	368	13-3/8	340	13	330	4-3/4	121		
SL280UH090V36B	47.4/0	47.4/0	47.4/0	440	16-3/8	440	40	406	6-1/4	450
SL280UH090V48B	17-1/2	446	10-3/0	416	16	406	0-1/4	159		
SL280UH090V60C	04	500	40.7/0	504	40.4/0	405	0	000		
SL280UH110V60C	21	533	19-7/8	504	19-1/2	495	8	203		
SL280UH135V60D	24-1/2	622	23-3/8	594	23	584	9-3/4	248		

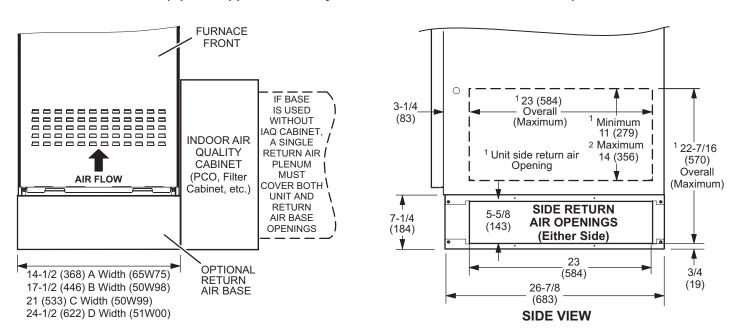


Model No	Α		В		С		D	
Model No.	in.	mm	in.	mm	in.	mm	in.	mm
SL280UH070V36AK	14-1/2	368	13-3/8	340	13	330	4-3/4	121
SL280UH090V36BK SL280UH090V48BK	17-1/2	446	16-3/8	416	16	406	6-1/4	159
SL280UH090V60CK SL280UH110V60CK	21	533	19-7/8	504	19-1/2	495	8	203
SL280UH135V60DK	24-1/2	622	23-3/8	594	23	584	9-3/4	248



Furnace	Catalog		<b>A</b>	В		
Cabinet Width	Number	in.	mm	in.	mm	
Α	87L95	14	356	12-3/4	324	
В	87L96	18	457	16-3/4	425	
С	87L97	21	533	18-3/4	476	
D	87L98	25	635	23-3/4	603	

## Optional Return Air Base (Upflow Applications Only - For use with A, B, C and D cabinets)



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

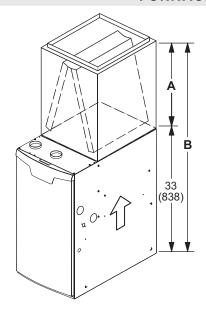
<sup>2</sup> To minimize pressure drop, the largest opening height possible, up to 14 in. (356 mm), is preferred.

<sup>&</sup>lt;sup>1</sup> 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.

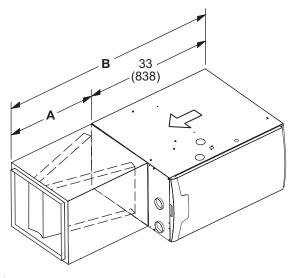


### **UPFLOW POSITION - CASED**

	0.1 0.10_2						
Model		Α		В			
CK40CT	C35/CX35	in.	mm	in.	mm		
CK40CT-18/24A CK40CT-18/24B	C35/CX35-18/24A C35/CX35-18/24B	16-1/2	419	49-1/2	1257		
CK40CT-24A CK40CT-24B	C35/CX35-24A C35/CX35-24B	18-1/2	470	51-1/2	1308		
CK40CT-30A CK40CT-30B	C35/CX35-30A C35/CX35-30B	22-1/2	572	55-1/2	1410		
CK40CT-30/36A CK40CT-30/36B CK40CT-30/36C	C35/CX35-30/36A C35/CX35-30/36B C35/CX35-30/36C	24-1/2	622	57-1/2	1461		
CK40CT-36A CK40CT-36B	C35/CX35-36A C35/CX35-36B	24-1/2	622	57-1/2	1461		
CK40CT-48B CK40CT-48C	C35/CX35-48B C35/CX35-48C	27-1/2	699	60-1/2	1537		
CK40CT-49C	C35/CX35-49C	29-1/2	749	62-1/2	1588		
CK40CT-50/60C	C35/CX35-50/60C	27-1/2	699	60-1/2	1537		
CK40CT-60C	CX35-60C	31-1/2	800	64-1/2	1638		
CK40CT-60D	CX35-60D	29-1/2	749	62-1/2	1588		

### **UPFLOW POSITION - UNCASED**

Model		Α		В		
CK40UT	C35	in.	mm	in.	mm	
CK40UT-18/24A CK40UT-18/24B	C35-18/24A C35-18/24B	14-1/8	359	47-1/8	1197	
CK40UT-24A CK40UT-24B	C35-24A C35-24B	16-3/8	416	49-3/8	1254	
CK40UT-30A CK40UT-30B	C35-30A C35-30B	20-3/4	527	53-3/4	1365	
CK40UT-30/36A CK40UT-30/36B CK40UT-30/36C	C35-30/36A C35-30/36B C35-30/36C	22-1/4	565	55-1/4	1403	
CK40UT-36A CK40UT-36B	C35-36A C35-36B	22-3/8	568	55-3/8	1407	
CK40UT-48B CK40UT-48C	C35-48B C35-48C	26-1/4	667	59-1/4	1505	
CK40UT-49C	C35-49C	28-1/2	724	61-1/2	1562	
CK40UT-50/60C	C35-50/60C	25-7/8	657	58-7/8	1495	
CK40UT-60C	C35-60C	30-5/8	778	63-5/8	1616	
CK40UT-60D	C35-60D	28	711	61	1549	



### **HORIZONTAL POSITION**

Model		Α		В			
CK40HT	CHX35	in.	mm	in.	mm		
CK40HT-18A	CHX35-18A						
CK40HT-24A	CHX35-24A						
CK40HT-24B	CHX35-24B						
CK40HT-30B	CHX35-30B						
CK40HT-36A	CHX35-36A	26-1/2	673	59-1/2	1511		
CK40HT-36B	CHX35-36B						
CK40HT-36C	CHX35-36C						
CK40HT-42C	CHX35-42C						
CK40HT-48C	CHX35-48C						
CK40CT-30A	CHX35-30A						
CK40CT-42B	CHX35-42B						
CK40CT-48B	CHX35-48B	31-1/2	880	64-1/2	1638		
CK40CT-51/61C	CHX35-51/61C						
CK40CT-60D	CHX35-60D						

## SL280UH070V36AK 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	
<sup>1</sup> Heating Speed DIP Switch Settings	First Stage Heating Speed - cfm	Second Stage Heating Speed - cfm
+24%	1045	1145
+18%	985	1080
+12%	940	1035
+6%	880	960
Factory Default	850	925
-6%	785	875
-12%	745	815
-18%	680	745
	COOLING	

	COOLING														
<sup>1</sup> Cooling Speed		First Stage Coo	ling Speed - cfm	1	Second Stage Cooling Speed - cfm										
DIP Switch Settings	Low	Medium-Low	Medium-High	² High	Low	Medium-Low	Medium-High	² High							
+	755	805	865	975	1015	1095	1190	1330							
Factory Default	700 740		790	885	940	1005	1100	1205							
-	645	680	725	800	850	920	1000	1100							

<sup>1</sup> 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.

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.

#### SL280UH070V36AK BLOWER MOTOR WATTS (COOLING)

<sup>1</sup> Coolin	ng Speed					М	otor V	Vatts		rious	Exter	nal S	tatic l	Press	ures	in. w	/g.				
	Switch					First	Stage	)				Second Stage									
Set	tings	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
+ Setting	9																				
	Low	65	84	103	122	141	159	178	196	215	234	132	157	180	203	225	247	268	289	309	334
Cooling	Med-Low	74	94	115	135	155	175	194	213	232	253	165	189	214	238	262	284	305	327	348	374
Speed	Med-High	87	110	133	155	175	195	215	234	253	276	212	237	262	288	314	339	363	387	411	438
	High	120	144	149	172	193	214	234	253	272	290	288	313	342	369	396	422	449	476	502	530
Factory	Default																				
	Low	56	73	91	108	125	142	159	177	195	212	102	126	149	172	193	214	234	253	272	297
Cooling	Med-Low	62	81	99	117	136	154	172	190	209	227	128	152	176	199	220	242	262	283	303	327
Speed	Med-High	71	91	111	131	151	170	189	208	227	247	166	191	216	240	263	286	308	330	351	377
	High	91	115	138	160	181	201	221	240	259	283	218	243	269	295	320	345	370	394	418	444
- Setting	9								,				,								
	Low	48	64	79	95	110	126	142	159	175	190	78	99	121	142	162	182	201	220	239	261
Cooling	Med-Low	53	70	86	103	119	136	153	171	188	204	95	120	143	166	187	207	227	246	266	290
	Med-High	59	77	95	112	130	148	166	184	202	220	127	150	174	196	218	239	260	280	301	325
	High	73	93	113	133	153	173	192	211	229	250	167	191	216	241	265	287	310	331	353	379

<sup>&</sup>lt;sup>2</sup> Factory default setting.

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

## SL280UH070V36AK BLOWER PERFORMANCE (less filter) SINGLE SIDE RETURN AIR

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

	HEATING												
<sup>1</sup> Heating Speed DIP Switch Settings	First Stage Heating Speed - cfm	Second Stage Heating Speed - cfm											
+24%	1050	1165											
+18%	1000	1110											
+12%	940	1040											
+6%	895	975											
Factory Default	820	935											
-6%	775	855											
-12%	735	805											
-18%	685	750											
	COOLING												

	COOLING														
<sup>1</sup> Cooling Speed		First Stage Coo	ling Speed - cfm	1	Second Stage Cooling Speed - cfm										
DIP Switch Settings	Low	Medium-Low	Medium-High	² High	Low	Medium-Low	Medium-High	² High							
+	755	805	865	975	1015	1095	1190	1330							
Factory Default	700 740		790	885	940	1005	1100	1205							
-	645	680	725	800	850	920	1000	1100							

<sup>1</sup> 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.

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.

#### SL28UH070V36AK BLOWER MOTOR WATTS (COOLING)

<sup>1</sup> Coolir	ng Speed		Motor Watts @ Various Ext											ernal Static Pressures - in. wg.									
	Switch					First	Stage					Second Stage											
Set	tings	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0		
+ Setting	3																						
	Low	65	84	103	122	141	159	178	196	215	234	132	157	180	203	225	247	268	289	309	334		
Cooling	Med-Low	74	94	115	135	155	175	194	213	232	253	165	189	214	238	262	284	305	327	348	374		
Speed	Med-High	87	110	133	155	175	195	215	234	253	276	212	237	262	288	314	339	363	387	411	438		
	High	120	144	149	172	193	214	234	253	272	290	288	313	342	369	396	422	449	476	502	530		
Factory	Default																						
	Low	56	73	91	108	125	142	159	177	195	212	102	126	149	172	193	214	234	253	272	297		
Cooling	Med-Low	62	81	99	117	136	154	172	190	209	227	128	152	176	199	220	242	262	283	303	327		
Speed	Med-High		91	111	131	151	170	189	208	227	247	166	191	216	240	263	286	308	330	351	377		
	High	91	115	138	160	181	201	221	240	259	283	218	243	269	295	320	345	370	394	418	444		
- Setting	3																						
	Low	48	64	79	95	110	126	142	159	175	190	78	99	121	142	162	182	201	220	239	261		
Cooling	Med-Low	53	70	86	103	119	136	153	171	188	204	95	120	143	166	187	207	227	246	266	290		
Speed	Med-High	59	77	95	112	130	148	166	184	202	220	127	150	174	196	218	239	260	280	301	325		
	High	73	93	113	133	153	173	192	211	229	250	167	191	216	241	265	287	310	331	353	379		

<sup>&</sup>lt;sup>2</sup> Factory default setting.

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

# SL280UH090V36BK 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	
<sup>1</sup> Heating Speed DIP Switch Settings	First Stage Heating Speed - cfm	Second Stage Heating Speed - cfm
+24%	1300	1420
+18%	1250	1335
+12%	1185	1285
+6%	1145	1240
Factory Default	1070	1170
-6%	1015	1100
-12%	970	1035
-18%	880	980
	COOLING	
1.0 !! 0	First Otana Osalina Osasal Info	0

	COOLING														
<sup>1</sup> Cooling Speed		First Stage Coo	ling Speed - cfm	1	Second Stage Cooling Speed - cfm										
DIP Switch Settings	Low	Medium-Low	Medium-High	² High	Low	Medium-Low	Medium-High	<sup>2</sup> High							
+	665	795	875	1020	1030	1210	1315	1435							
Factory Default	605	740	815	925	940	1105	1210	1305							
-	530	685	745	845	855	1005	1095	1185							

<sup>1</sup> 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.

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.

#### SL280UH090V36BK BLOWER MOTOR WATTS (COOLING)

¹ Coolin	ng Speed					М	otor V	Vatts	@ Va	rious	Exter	ernal Static Pressures - in. wg.									
	Switch					First	Stage	)				Second Stage									
Set	tings	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
+ Setting	9																				
	Low	39	57	75	89	101	113	125	137	149	166	98	122	143	165	186	208	230	252	270	294
Cooling	Med-Low	54	73	93	112	131	148	164	179	195	216	148	174	199	222	246	269	293	316	341	365
Speed	Med-High	65	86	107	127	149	169	187	204	221	245	188	213	239	265	290	316	342	367	392	418
	High	94	118	120	141	162	184	204	222	240	258	236	263	291	319	347	374	401	427	453	482
Factory	Default																				
	Low	35	52	67	79	91	102	113	124	133	149	76	98	120	141	162	184	204	222	240	264
Cooling	Med-Low	47	65	84	102	118	133	146	160	174	193	118	141	164	186	209	231	253	276	298	321
Speed	Med-High	55	76	95	115	135	152	168	184	200	222	148	174	199	222	246	269	293	316	341	365
	High	73	95	117	138	159	180	200	218	236	260	182	208	233	259	284	310	335	360	386	411
- Setting	3																				
	Low	31	46	59	70	80	91	101	109	116	131	61	82	103	122	143	162	180	197	213	236
Cooling	Med-Low	40	58	76	92	105	118	130	142	154	172	89	113	135	156	178	199	221	241	259	283
Speed	Med-High	47	66	85	104	120	135	149	163	176	197	114	137	160	182	205	227	249	272	294	317
	High	60	81	101	121	142	161	178	195	211	234	141	166	190	214	238	261	284	307	331	355

<sup>&</sup>lt;sup>2</sup> Factory default setting.

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

## SL280UH090V36BK BLOWER PERFORMANCE (less filter) SINGLE SIDE RETURN AIR

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

HEATING												
<sup>1</sup> Heating Speed DIP Switch Settings	First Stage Heating Speed - cfm	Second Stage Heating Speed - cfm										
+24%	1305	1425										
+18%	1250	1350										
+12%	1195	1290										
+6%	1135	1230										
Factory Default	1070	1165										
-6%	995	1100										
-12%	935	1030										
-18%	870	960										
	COOLING											
1 Cooling Spood	First Stage Cooling Speed ofm	Second Stage Cooling Speed ofm										

			COC	DLING								
<sup>1</sup> Cooling Speed		First Stage Coo	ling Speed - cfm	1	Second Stage Cooling Speed - cfm							
DIP Switch Settings	Low	Medium-Low	Medium-High	² High	Low	Medium-Low	Medium-High	<sup>2</sup> High				
+	611	731	830	971	995	1160	1274	1376				
Factory Default	575	674	748	870	889	1075	1160	1270				
-	519	604	691	786	808	952	1056 1147					

<sup>1</sup> 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.

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.

#### SL280UH090V36BK BLOWER MOTOR WATTS (COOLING)

						Motor	r Watt	s @ Va	arious	Exter	nal St	atic P	ressu	res - iı	n. wg.				
	ng Speed th Settings				First	Stage							S	econo	d Stag	е			
DIP SWILL	ii Settiligs	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							,	•								,	•		
	Low	27	41	57	72	88	105	123	135	82	99	123	148	173	199	220	244	266	290
Cooling	Med-Low	44	59	80	99	119	138	158	177	129	151	184	214	235	264	290	316	342	368
Speed	Med-High	56	75	95	114	135	153	174	189	167	205	230	264	285	317	347	365	394	423
	High	81	95	120	144	170	191	217	234	219	249	273	312	339	379	404	431	459	485
Factory D	efault						,	•								,	•	•	
	Low	24	34	50	70	83	96	110	124	63	85	105	131	147	174	193	214	243	264
Cooling	Med-Low	36	50	68	86	106	121	144	159	92	123	148	173	203	221	249	266	297	317
Speed	Med-High	43	61	81	106	123	144	160	182	129	151	184	214	235	264	290	316	342	368
	High	62	88	107	123	145	169	189	209	170	199	234	259	291	311	334	367	389	412
- Setting							,	•								,	•		
	Low	18	29	45	59	74	86	98	113	52	67	92	113	129	156	175	197	209	232
Cooling	Med-Low	29	44	58	79	93	111	129	141	76	97	116	141	159	185	206	235	250	282
0009	Med-High	36	52	67	86	108	126	144	161	89	121	139	167	192	219	243	269	292	310
	High	53	70	94	109	129	153	174	189	118	144	178	198	226	256	278	302	328	352

<sup>&</sup>lt;sup>2</sup> Factory default setting.

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

## SL280UH090V48BK 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	
<sup>1</sup> Heating Speed DIP Switch Settings	First Stage Heating Speed - cfm	Second Stage Heating Speed - cfm
+24%	1280	1410
+18%	1220	1340
+12%	1155	1270
+6%	1095	1205
Factory Default	1035	1135
-6%	970	1070
-12%	910	1000
-18%	845	930
	COOLING	
		1

			COC	DLING				
<sup>1</sup> Cooling Speed		First Stage Coo	ling Speed - cfm	1	S	econd Stage Co	oling Speed - cf	m
DIP Switch Settings	Low	Medium-Low	Medium-High	² High	Low	Medium-Low	Medium-High	<sup>2</sup> High
+	735	920	1030	1170	1010	1320	1520	1710
Factory Default	670	840	965	1070	920	1175	1400	1560
-	590	755	865	995	820	1045	1255	1440

<sup>1</sup> 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.

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.

#### SL280UH090V48BK BLOWER MOTOR WATTS (COOLING)

							- 1		- /												
<sup>1</sup> Coolir	ng Speed					М	otor V	Vatts	@ Va	rious	Exter	nal S	tatic l	Press	ures	in. w	/g.				
	Switch					First	Stage	•							S	econo	d Stag	ge			
Set	tings	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
+ Setting	3																				
	Low	54	70	83	99	114	129	145	160	176	191	80	110	136	159	179	201	224	249	275	297
Cooling	Med-Low	67	98	117	134	153	172	193	216	238	256	144	176	215	251	284	317	347	377	404	444
	Med-High		114	141	166	187	210	232	257	285	308	219	262	303	340	378	412	447	480	510	554
	High	100	85	181	213	249	280	308	336	364	412	324	367	410	451	489	526	560	595	626	672
Factory	Default																				
	Low	47	60	74	89	102	116	129	147	160	174	66	99	120	138	156	175	197	220	242	262
Cooling	Med-Low	61	84	101	117	134	153	171	190	208	226	89	134	169	200	230	259	287	316	349	383
	Med-High	71	102	124	143	162	182	204	228	251	271	163	206	246	283	319	352	383	413	440	484
	High	89	122	151	178	202	226	251	277	307	332	240	282	324	361	398	433	469	503	534	577
- Setting	3																				
	Low	41	52	65	78	90	104	117	129	141	155	61	86	101	118	135	154	172	190	209	226
Cooling	Med-Low	55	72	87	102	118	135	150	166	183	198	84	115	143	168	190	212	235	261	289	312
	Med-High		89	106	122	139	159	178	197	217	234	94	150	191	226	260	290	321	350	378	423
	High	75	106	132	152	171	191	214	238	264	284	174	220	260	297	336	370	401	432	460	506

<sup>&</sup>lt;sup>2</sup> Factory default setting.

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

## SL280UH090V48BK BLOWER PERFORMANCE (less filter) SINGLE SIDE 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												
<sup>1</sup> Heating Speed DIP Switch Settings	First Stage Heating Speed - cfm	Second Stage Heating Speed - cfm											
+24%	1280	1410											
+18%	1220	1340											
+12%	1155	1270											
+6%	1095	1205											
Factory Default	1035	1135											
-6%	970	1070											
-12%	910	1000											
-18%	845	930											
	COOLING												

			cod	DLING				
<sup>1</sup> Cooling Speed		First Stage Coo	ling Speed - cfm	1	S	econd Stage Co	oling Speed - cf	m
DIP Switch Settings	Low	Medium-Low	Medium-High	² High	Low	Medium-Low	Medium-High	<sup>2</sup> High
+	640	900	1015	1175	1005	1295	1500	1670
Factory Default	570	780	930	1040	895	1160	1345	1500
-	530	700	810	955	795	1050	1210	1405

<sup>1</sup> 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.

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.

#### SL280UH090V48BK BLOWER MOTOR WATTS (COOLING)

						Motor	Watt	s @ Va	arious	Exter	nal St	atic P	ressu	res - iı	n. wg.				
	ng Speed th Settings				First	Stage							S	econo	d Stag	е			
Dii Owito	ii oettiiigs	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																			
	Low	54	68	85	102	120	142	159	177	107	133	148	172	201	226	253	274	301	327
Cooling	Med-Low	85	105	124	145	166	186	206	227	179	214	247	276	312	339	370	399	433	464
Speed	Med-High	112	135	157	184	208	233	258	284	261	305	348	379	421	453	490	523	565	602
	High	139	172	201	234	270	294	326	352	369	414	462	506	547	597	643	691	735	781
Factory D	efault																		
	Low	46	59	77	87	106	118	143	152	93	115	134	153	172	195	219	242	260	286
Cooling	Med-Low	56	76	95	120	136	162	175	196	132	163	192	214	244	276	307	338	368	402
Speed	Med-High	88	106	130	149	173	198	222	238	192	231	266	303	342	370	410	444	462	493
	High	118	141	161	194	223	248	275	302	273	333	365	396	432	460	503	546	579	635
- Setting																			
	Low	43	53	70	83	97	110	120	135	72	88	112	133	150	175	191	205	230	245
Cooling	Med-Low	56	72	86	106	124	141	158	176	111	134	154	185	215	235	260	284	311	336
Speed	Med-High	69	90	109	129	152	168	187	205	152	182	210	244	276	307	338	370	401	432
	High	94	119	138	158	181	207	233	250	211	248	284	316	355	385	419	450	487	521

<sup>&</sup>lt;sup>2</sup> Factory default setting.

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

## SL280UH090V48BK BLOWER PERFORMANCE (less filter) SIDE RETURN AIR WITH OPTIONAL RETURN AIR BASE

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

	HEATING	
<sup>1</sup> Heating Speed DIP Switch Settings	First Stage Heating Speed - cfm	Second Stage Heating Speed - cfm
+24%	1295	1425
+18%	1235	1355
+12%	1170	1290
+6%	1110	1220
Factory Default	1045	1150
-6%	980	1080
-12%	920	1010
-18%	855	945
	COOLING	
<sup>1</sup> Cooling Speed	First Stage Cooling Speed - cfm	Second Stage Cooling Speed - cfm

			COC	DLING								
<sup>1</sup> Cooling Speed		First Stage Coo	ling Speed - cfm	1	Second Stage Cooling Speed - cfm							
DIP Switch Settings	Low	Medium-Low	Medium-High	² High	Low	Medium-Low	Medium-High	<sup>2</sup> High				
+	660	905 1030 1175				1290	1495	1675				
Factory Default	600	760	930	1045	905	1125	1345	1525				
-	535	700	850	970	815	1040	1225	1385				

<sup>1</sup> 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.

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.

#### SL280UH090V48BK BLOWER MOTOR WATTS (COOLING)

						Moto	r Watts	s @ Va	arious	us External Static Pressures - in. wg.									
	ng Speed th Settings				First	Stage							S	econo	d Stag	е			
Dii Owito	ii oettiigs	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																			
	Low	54	65	84	101	122	138	156	169	104	128	146	170	193	224	244	266	300	326
Cooling	Med-Low	74	97	120	137	158	177	197	216	160	189	216	254	287	319	351	385	416	449
Speed	Med-High	102	125	147	174	200	223	248	272	238	279	319	350	391	422	457	489	529	564
	High	134	165	193	224	259	283	313	340	346	386	426	470	510	554	596	640	680	722
Factory D	efault																		
	Low	47	59	74	89	105	123	139	150	88	107	131	150	173	196	217	241	263	285
Cooling	Med-Low	61	82	101	118	144	158	177	194	123	150	183	213	243	279	300	331	353	393
Speed	Med-High	85	104	130	151	173	196	216	239	180	219	250	294	333	368	399	428	463	497
	High	113	131	151	187	211	238	264	291	263	312	349	387	426	455	489	522	568	608
- Setting																			
	Low	40	53	69	83	93	104	122	129	69	85	107	127	149	169	187	201	222	237
Cooling	Med-Low	50	66	84	101	116	136	153	172	105	126	146	174	199	223	247	272	295	319
Speed	Med-High	65	86	109	127	146	167	187	207	135	166	195	227	262	289	319	348	380	411
	High	92	112	134	156	175	200	221	245	195	230	264	298	334	367	401	434	469	503

<sup>&</sup>lt;sup>2</sup> Factory default setting.

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

SL280UH090V60CK BLOWER PERFORMANCE (less filter)

BOTTOM RETURN AIR, RETURN AIR FROM BOTH SIDES OR RETURN AIR FROM BOTTOM AND ONE SIDE

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

	HEATING	
<sup>1</sup> Heating Speed DIP Switch Settings	First Stage Heating Speed - cfm	Second Stage Heating Speed - cfm
+24%	1420	1565
+18%	1355	1490
+12%	1285	1415
+6%	1215	1335
Factory Default	1145	1260
-6%	1080	1185
-12%	1010	1110
-18%	940	1035
<u>'</u>	COOLING	
4.0 11 0 1		

			COC	DLING						
<sup>1</sup> Cooling Speed		First Stage Coo	ling Speed - cfm	1	S	econd Stage Co	Cooling Speed - cfm			
DIP Switch Settings	Low	Medium-Low	Medium-High	² High	Low	Medium-Low	Medium-High	<sup>2</sup> High		
+	1080	1210	1385	1615	1505	1710	1950	2260		
Factory Default	985	1105	1260	1470	1375	1540	1800	2055		
-	880	1000	1140	1335	1235	1395	1590	1890		

<sup>1</sup> 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.

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.

#### SL280UH090V60CK BLOWER MOTOR WATTS (COOLING)

4.0						Ma	otor V	Vatte	 എ Va	rious	Fyter	nal S	tatic I	Press	ures	in w	'n				
	ng Speed Switch					First			<u>@</u> •u	1000		a. C	tatio i	1000			d Stag	ne 91			
	tings	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
+ Setting	3		1		l				l				l	ı			l	1		l	
	Low	104	123	141	160	180	202	225	250	275	291	220	247	275	304	334	365	397	433	471	494
Cooling	Med-Low	133	154	174	196	218	242	267	294	323	340	291	324	359	395	436	486	529	564	597	640
Speed	Med-High	176	201	226	250	276	303	332	362	395	415	400	452	499	542	581	618	653	686	719	769
	High	256	287	228	254	280	308	336	367	399	392	718	750	780	808	835	862	886	910	932	965
Factory	Default																				
	Low	86	103	120	138	158	179	201	222	243	260	179	203	228	254	280	308	336	367	399	421
Cooling	Med-Low	110	128	147	166	187	209	233	258	284	299	233	261	290	320	351	383	416	454	493	517
Speed	Med-High	144	167	188	211	234	258	285	312	341	360	319	355	396	445	487	526	563	597	629	678
	High	204	230	258	286	314	343	374	408	443	466	498	542	586	626	662	696	728	757	787	833
- Setting	)																				
	Low	70	85	101	118	137	156	174	192	211	227	143	165	187	209	233	257	282	309	339	357
Cooling	Med-Low	88	105	123	141	160	182	204	225	247	264	185	210	235	262	288	317	345	376	409	431
	Med-High	117	136	156	176	197	219	243	269	295	312	250	280	310	342	375	408	443	482	529	551
	High	162	186	209	234	258	285	312	340	370	391	350	401	452	499	540	578	614	647	679	734

<sup>&</sup>lt;sup>2</sup> Factory default setting.

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

#### SL280UH090V60CK BLOWER PERFORMANCE (less filter)

**SINGLE SIDE RETURN AIR** – Air volumes in **bold** (over 1800 cfm) require Optional Return Air Base <u>and</u> field fabricated transition to accommodate 20 x 25 x 1 in. air filter in order to maintain proper air velocity.

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

o till ough o.o iii. w	9 (	9)		TING								
<sup>1</sup> Heating Speed DIP Switch Settings		First Stage Hea	ting Speed - cfm	ı	s	econd Stage He	ating Speed - cf	m				
+24%		13	860			15	500					
+18%		12	295			14	25					
+12%		12	230		1355							
+6%		11	65		1280							
Factory Default		11	00		1210							
-6%		10	)30		1135							
-12%		9	65		1065							
-18%		9	00		990							
			cod	DLING								
<sup>1</sup> Cooling Speed		First Stage Coo	ling Speed - cfm	1	S	econd Stage Co	oling Speed - cf	m				
DIP Switch Settings	Low	Medium-Low	Medium-High	² High	Low	Medium-Low	Medium-High	² High				
+	1050	1165	1335	1620	20 1515 1680 <b>1915 2</b>							
Factory Default	955	1060	1215	1480	1390	1545	1735	2060				

<sup>1</sup> 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.

1290

1220

1385

1580

1825

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

840

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.

1090

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.

945

#### SL280UH090V60CK BLOWER MOTOR WATTS (COOLING)

			Motor Watts @ Various External Static Pressures - in. wg.																
	ng Speed th Settings				First	Stage							S	econo	d Stag	е			
Dii Owito	ii oettiiigs	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																			
	Low	104	122	142	163	189	214	239	264	243	283	317	363	384	424	441	484	511	543
Cooling	Med-Low	128	150	181	205	236	259	289	317	333	351	405	444	490	523	564	604	636	668
Speed	Med-High	172	205	242	279	306	344	367	396	451	507	557	605	655	694	733	788	824	867
	High	272	307	359	386	421	447	473	520	743	795	855	906	955	1009	1049	1095	1131	1165
Factory D	efault																		
	Low	88	109	127	150	165	189	209	236	185	219	259	290	328	353	394	425	452	480
Cooling	Med-Low	104	127	147	173	201	225	248	268	246	284	328	370	397	416	460	490	519	555
Speed	Med-High	137	164	190	215	250	278	307	333	349	387	435	463	505	553	599	634	674	714
	High	224	260	298	338	365	400	438	467	597	664	717	756	820	881	907	972	1007	1039
- Setting																			
	Low	65	80	103	121	142	163	180	199	141	173	200	230	259	289	318	347	374	401
Cooling	Med-Low	82	105	125	145	166	188	203	227	187	226	252	288	323	353	388	419	444	475
Speed	Med-High	108	131	151	178	203	229	253	274	263	302	344	382	420	443	478	514	548	583
	High	159	187	213	252	281	305	338	371	393	450	494	537	586	616	672	711	752	787

<sup>&</sup>lt;sup>2</sup> Factory default setting.

SL280UH110V60CK BLOWER PERFORMANCE (less filter)

BOTTOM RETURN AIR, RETURN AIR FROM BOTH SIDES OR RETURN AIR FROM BOTTOM AND ONE SIDE

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

	HEATING	
<sup>1</sup> Heating Speed DIP Switch Settings	First Stage Heating Speed - cfm	Second Stage Heating Speed - cfm
+24%	1690	1855
+18%	1605	1765
+12%	1525	1675
+6%	1445	1585
Factory Default	1360	1495
-6%	1280	1405
-12%	1200	1315
-18%	1115	1230
	COOLING	
<sup>1</sup> Cooling Speed	First Stage Cooling Speed - cfm	Second Stage Cooling Speed - cfm
DID Curitoh		

			COC	JLING								
<sup>1</sup> Cooling Speed		First Stage Coo	ling Speed - cfm	1	S	econd Stage Co	oling Speed - cf	m				
DIP Switch Settings	Low	Medium-Low	Medium-High	² High	Low	Medium-Low	Medium-High	² High				
+	1150	1215	1340	1550	1635	1705	1855	2220				
Factory Default	1045	1095	1220	1420	1510	1565	1710	1955				
-	935	985	1095	1275	1375	1440	1555	1765				

<sup>1</sup> 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.

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.

#### SL280UH110V60CK BLOWER MOTOR WATTS (COOLING)

<sup>1</sup> Coolin	ng Speed		Motor Watts @ Various External Static Pressures - in. wg.																		
	Switch					First	Stage								S	econo	Stag	je			
Set	tings	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
+ Setting	9																				
	Low	113	139	162	183	205	229	256	286	318	334	266	303	339	373	408	440	474	508	540	577
Cooling	Med-Low	126	154	180	204	227	250	279	309	343	362	304	342	377	413	447	478	514	548	578	616
Speed	Med-High	157	187	220	251	283	315	348	383	419	448	398	434	471	506	540	573	607	641	677	711
	High	229	265	302	335	370	403	435	466	498	535	697	734	769	803	839	876	911	938	973	1011
Factory	Default																				
	Low	94	116	136	154	175	196	221	246	273	289	206	243	279	313	347	382	413	448	480	516
Cooling	Med-Low	103	127	148	167	189	211	236	263	292	309	235	269	305	341	374	407	440	472	504	540
Speed	Med-High	128	155	182	208	232	255	284	313	349	368	304	342	379	415	451	483	518	549	582	620
	High	179	213	247	279	311	343	377	412	447	478	465	501	537	573	608	643	677	711	748	783
- Setting	3																				
	Low	79	97	113	130	149	168	189	211	234	248	160	191	225	256	288	320	351	387	423	452
Cooling	Med-Low	85	106	123	141	159	180	203	226	251	266	177	213	248	281	315	347	381	415	450	483
Speed	Med-High	103	127	148	167	188	211	236	262	291	307	232	267	303	336	370	403	435	467	499	535
	High	139	169	199	225	254	282	312	347	386	407	340	377	414	450	486	520	553	587	619	658

<sup>&</sup>lt;sup>2</sup> Factory default setting.

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

#### SL280UH110V60CK BLOWER PERFORMANCE (less filter)

**SINGLE SIDE RETURN AIR** – Air volumes in **bold** (over 1800 cfm) require Optional Return Air Base <u>and</u> field fabricated transition to accommodate 20 x 25 x 1 in. air filter in order to maintain proper air velocity.

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

Heating Speed DIP Switch Settings         First Stage Heating Speed - cfm         Second Stage Heating Speed           +24%         1640         1805           +18%         1560         1715           +12%         1480         1630           +6%         1400         1545           Factory Default         1325         1455           -6%         1245         1370	
+18%       1560       1715         +12%       1480       1630         +6%       1400       1545         Factory Default       1325       1455	cfm
+12%       1480       1630         +6%       1400       1545         Factory Default       1325       1455	
+6%     1400     1545       Factory Default     1325     1455	
Factory Default 1325 1455	
·	
<b>-6%</b> 1245 1370	
<b>-12</b> % 1165 1280	
<b>-18</b> % 1085 1195	
COOLING	
<sup>1</sup> Cooling Speed First Stage Cooling Speed - cfm Second Stage Cooling Speed	cfm
DIP Switch Settings Low Medium-Low Medium-High <sup>2</sup> High Low Medium-Low Medium-Hi	<sup>2</sup> High
+ 1020 1160 1285 1550 1505 1690 <b>1855</b>	2125
Factory Default         940         1050         1155         1400         1375         1525         1685	1935

<sup>1</sup> 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.

1250

1235

1380

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

835

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.

1020

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.

945

### SL280UH110V60CK BLOWER MOTOR WATTS (COOLING)

4.0 "			Motor Watts @ Various External Static Pressures - in. wg.																
	ng Speed th Settings				First	Stage							S	econo	d Stag	е			
Dii Owito	ii oottiiigs	0.1	0.2	0.3	0.4	0.5	0.6	0.7	8.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	8.0	0.9	1.0
+ Setting																			
	Low	116	131	156	193	216	238	265	292	245	293	336	378	415	454	488	516	557	601
Cooling	Med-Low	128	156	195	216	245	280	309	335	333	381	412	454	490	535	577	618	662	704
Speed	Med-High	157	193	226	266	293	321	360	387	412	475	518	573	617	661	710	771	800	857
	High	274	303	354	388	413	460	493	524	717	786	854	898	983	1017	1071	1112	1157	1186
Factory D	efault																		
	Low	96	121	140	154	184	206	228	255	192	237	271	319	345	382	419	459	480	515
Cooling	Med-Low	108	133	156	175	207	230	253	285	248	290	328	372	405	447	474	513	540	577
Speed	Med-High	123	148	185	209	246	277	302	331	328	374	415	452	487	536	576	605	653	701
	High	202	247	285	327	364	388	426	457	511	590	647	690	739	789	843	901	947	998
- Setting																			
	Low	74	98	116	141	157	179	199	216	157	198	221	259	298	325	354	387	418	451
Cooling	Med-Low	92	111	132	155	174	197	214	243	186	232	268	289	339	365	389	429	454	479
Speed	Med-High	107	128	149	172	203	230	249	278	225	282	312	353	383	406	452	489	519	552
	High	157	186	220	261	291	321	352	386	372	427	464	526	566	608	658	706	762	808

1505

1730

<sup>&</sup>lt;sup>2</sup> Factory default setting.

SL280UH135V60DK BLOWER PERFORMANCE (less filter)

BOTTOM RETURN AIR, RETURN AIR FROM BOTH SIDES OR RETURN AIR FROM BOTTOM AND ONE SIDE

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

Ü	HEATING	
<sup>1</sup> Heating Speed DIP Switch Settings	First Stage Heating Speed - cfm	Second Stage Heating Speed - cfm
+24%	1875	2065
+18%	1785	1965
+12%	1695	1865
+6%	1605	1765
Factory Default	1515	1665
-6%	1425	1565
-12%	1330	1465
-18%	1240	1365
	COOLING	
<sup>1</sup> Cooling Speed	First Stage Cooling Speed - cfm	Second Stage Cooling Speed - cfm

			COC	DLING				
<sup>1</sup> Cooling Speed		First Stage Coo	ling Speed - cfm	1	S	econd Stage Co	ooling Speed - cf	m
DIP Switch Settings	Low	Medium-Low Medium-High <sup>2</sup> High Low		Low	Medium-Low	Medium-High	² High	
+	1075	1165	1280	1605	1455	1600	1745	2245
Factory Default	975	1070	1210	1470	1325	1455	1660	2005
-	905	975	1105	1345	1240	1325	1515	1825

<sup>1</sup> 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.

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.

#### SL280UH135V60DK BLOWER MOTOR WATTS (COOLING)

<sup>1</sup> 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	0.9	1.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
+ Setting																					
Cooling	Low	95	115	137	158	180	203	226	250	275	295	175	208	242	275	306	338	373	407	443	473
	Med-Low	114	135	158	181	205	230	255	282	310	330	214	255	293	331	368	402	438	472	505	546
Speed	Med-High	137	163	188	214	241	269	298	329	360	383	288	329	366	405	442	476	510	546	579	619
	High	222	261	204	233	259	289	319	350	383	380	649	682	720	754	786	818	851	883	915	950
Factory Default																					
Cooling Speed	Low	79	99	117	137	156	177	198	220	242	260	149	177	204	233	259	289	319	350	383	408
	Med-Low	94	115	136	157	179	201	225	249	274	293	173	208	241	273	305	339	372	407	444	474
	Med-High	122	146	169	193	219	245	271	299	328	349	241	281	322	360	395	431	467	501	534	575
	High	177	212	247	279	312	346	380	416	453	485	444	483	521	559	597	632	664	698	734	773
- Setting																					
Cooling Speed	Low	69	87	105	123	142	161	180	199	219	236	132	156	181	205	231	257	286	314	345	366
	Med-Low	78	97	117	136	156	177	199	219	239	259	147	176	203	230	258	287	316	347	380	405
	Med-High	101	122	143	165	188	211	235	260	286	306	186	223	259	295	329	363	397	433	469	504
	High	149	178	206	234	261	292	322	353	387	412	328	369	409	448	484	522	557	593	627	668

<sup>&</sup>lt;sup>2</sup> Factory default setting.

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

#### SL280UH135V60DK BLOWER PERFORMANCE (less filter)

SINGLE SIDE RETURN AIR - Air volumes in bold (over 1800 cfm) require Optional Return Air Base and field fabricated transition to accommodate 20 x 25 x 1 in. air filter in order to maintain proper air velocity.

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

o un ough old in i				TING							
<sup>1</sup> Heating Speed DIP Switch Settings		First Stage Hea	ting Speed - cfm	Second Stage Heating Speed - cfm							
+24%		18	350		2035						
+18%		17	760		1935						
+12%		16	570		1835						
+6%		15	580		1740						
Factory Default		14	190		1640						
-6%		14	100		1540						
-12%		13	310		1445						
-18%		12	225		1345						
			cod	DLING							
<sup>1</sup> Cooling Speed		First Stage Coo	ling Speed - cfm	ı	Second Stage Cooling Speed - cfm						
DIP Switch Settings	Low	Medium-Low	Medium-High	² High	Low	Medium-Low	Medium-High	² High			
+	1030	1105	1305	1635	1525	1600	1840	2255			

<sup>1</sup> 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.

1480

1340

1355

1240

1435

1315

+ **Factory Default** 

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

960

845

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.

1175

1050

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.

1005

925

### SL280UH135V60DK BLOWER MOTOR WATTS (COOLING)

<sup>1</sup> 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																				
	Low	97	120	138	165	195	220	245	279	220	259	298	333	378	410	441	486	517	543	
Cooling	Med-Low	111	140	161	190	218	255	269	306	255	298	354	389	422	455	499	549	571	616	
Speed	Med-High	148	177	218	254	288	320	359	381	359	418	459	511	557	615	655	701	747	795	
	High	268	307	357	396	430	475	503	544	704	766	831	898	941	995	1048	1103	1144	1176	
Factory Default																				
	Low	76	97	121	146	170	198	223	246	166	200	238	281	318	350	398	425	462	490	
Cooling	Med-Low	89	109	130	161	193	221	238	267	185	240	290	318	347	398	432	460	500	538	
Speed	Med-High	109	135	170	200	231	268	290	324	281	333	368	408	456	499	539	591	644	693	
	High	195	230	282	318	356	391	425	457	529	603	651	721	783	832	898	951	994	1051	
- Setting																				
Cooling Speed	Low	60	86	104	129	149	169	190	212	130	161	189	221	259	288	317	355	390	421	
	Med-Low	72	96	120	139	160	184	201	235	147	177	211	256	290	330	354	385	422	453	
	Med-High	101	123	147	167	196	221	250	274	207	245	291	331	370	413	431	475	509	543	
	High	151	181	231	261	303	327	363	399	369	431	477	535	580	638	683	723	777	827	

1635

1520

2035

1850

<sup>&</sup>lt;sup>2</sup> Factory default setting.

REVISIONS							
Sections	Description of Change						
IAQ Products	Updated.						
New Section	Added Control Options.						







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