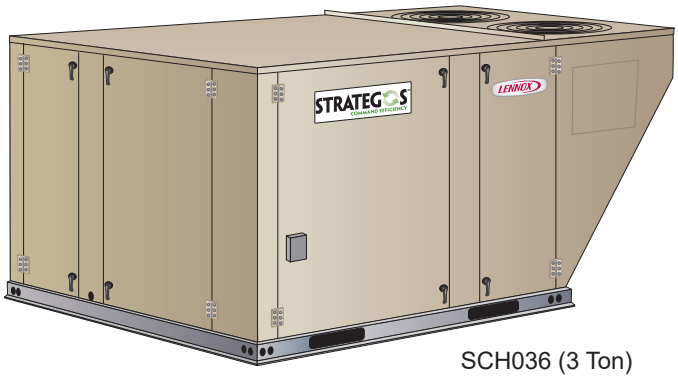
SCH

STRATEGOS® ROOFTOP UNITS

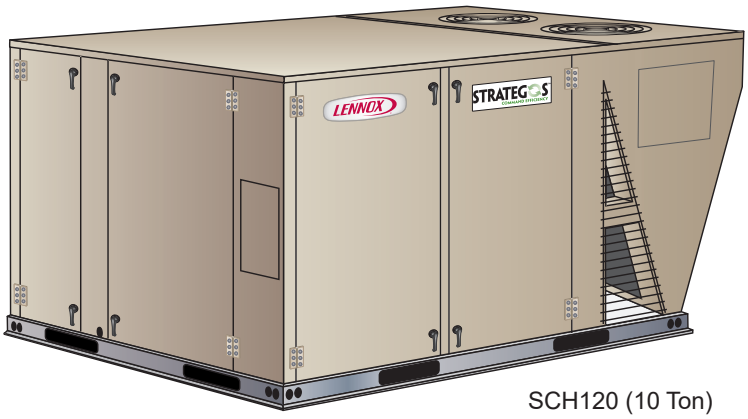
High Efficiency | Lennox® CORE Controller | Environ™ Coil | R-454B | 60Hz

COMMERCIAL
PRODUCT SPECIFICATIONS (EHB)

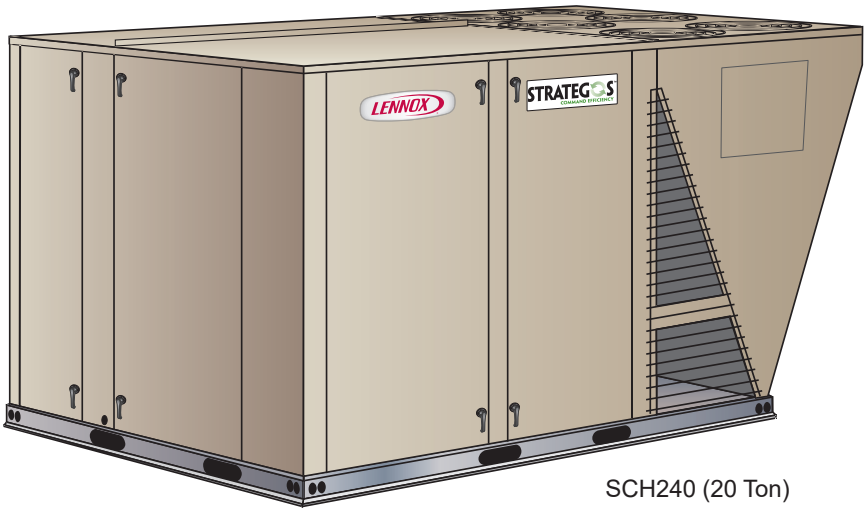
3 to 20 Tons
Net Cooling Capacity - 35,500 to 228,000 Btuh
Optional Electric Heat - 10 to 90 kW



SCH036 (3 Ton)
SCH060 (5 Ton)



SCH120 (10 Ton)



SCH240 (20 Ton)

STRATEGOS™ COMMAND EFFICIENCY

LENNOX CORE CONTROL SYSTEM

Environ™ Coil System

MSAV™ MULTI-STAGE AIR VOLUME

Humiditrol

SMARTWIRE™ SYSTEM

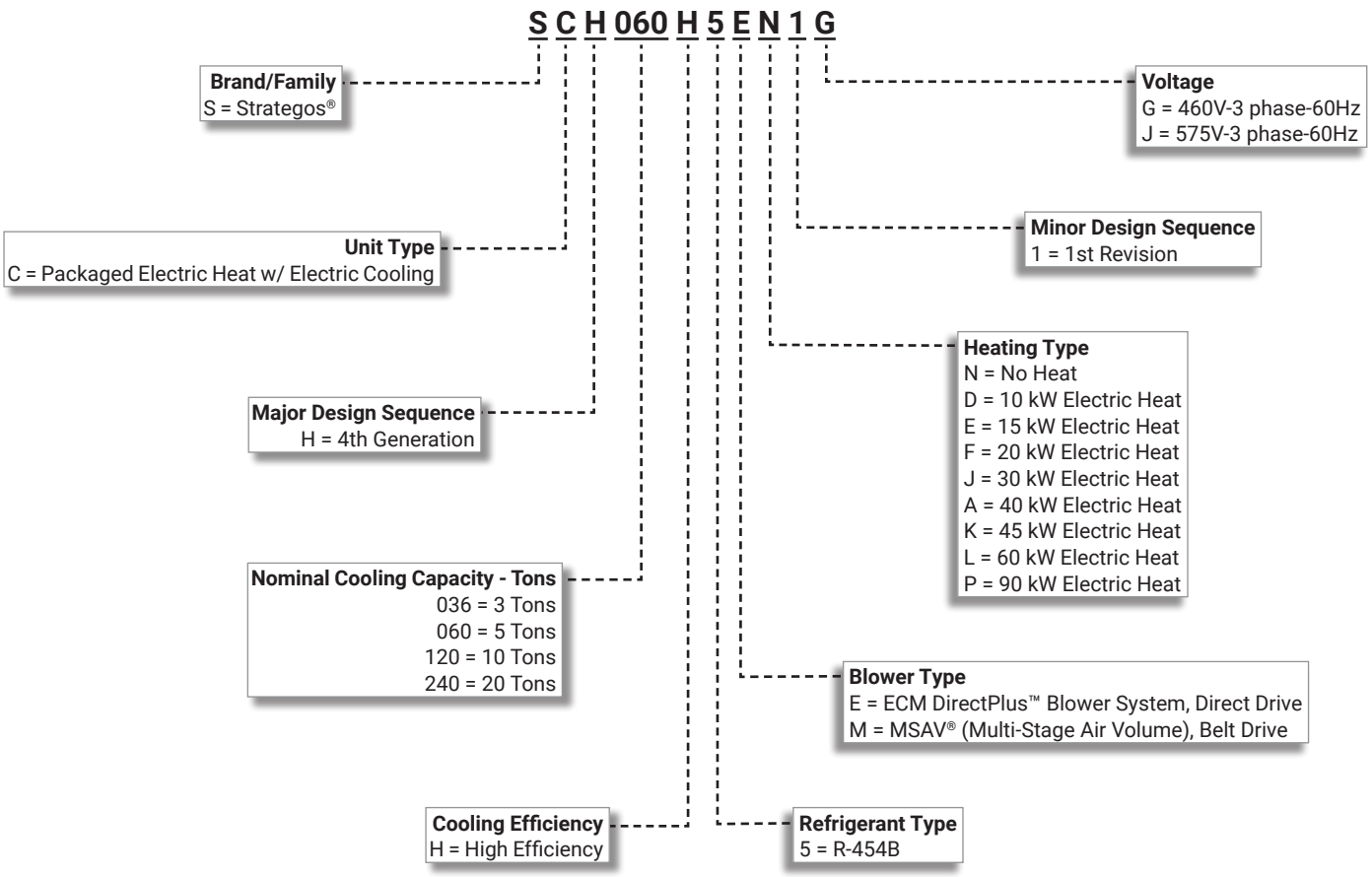
ASHRAE Standard 90.1

ENERGY STAR

Certain models have earned the ENERGY STAR® mark by meeting strict energy efficiency guidelines set by the US EPA.

Form Number 211101 | April 2025
Supersedes all previous versions

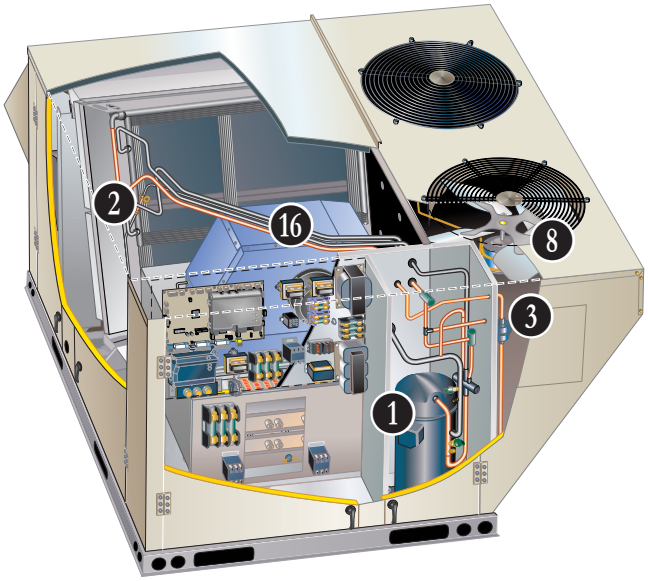
MODEL NUMBER IDENTIFICATION



CONTENTS

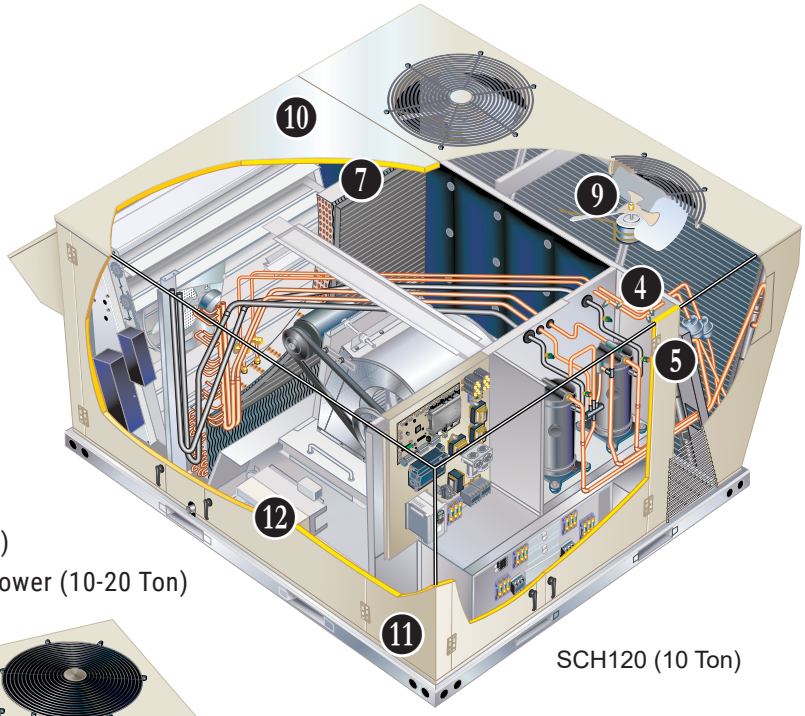
FEATURE HIGHLIGHTS

Lennox' Strategos® packaged rooftop unit product line was created to save energy with intelligence by offering some of the highest energy efficiency ratings available with a powerful, easy to use unit controller. This makes Strategos® rooftop units perfect for business owners looking for an HVAC product with the lowest total cost of ownership



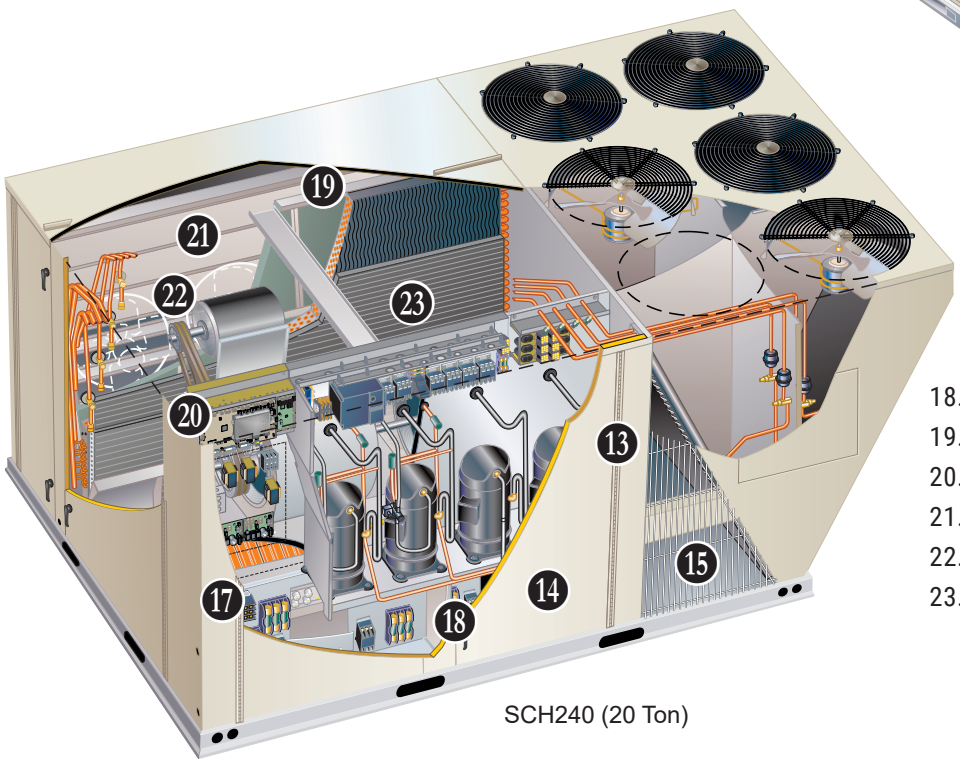
SCH036 (3 Ton)
SCH060 (5 Ton)

1. Scroll Compressor
2. Thermal Expansion Valve
3. Filter/Drier
4. High Pressure Switch
5. Low Pressure Switch
6. Environ™ Coil System
7. Evaporator Coil
8. Variable Speed ECM Outdoor Coil Fan Motors (3-5 Ton)



SCH120 (10 Ton)

9. Outdoor Coil Fan Motors (10-20 Ton)
10. Heavy Gauge Steel Cabinet
11. Power Entry
12. Fully Insulated
13. Hinged Access Panels
14. Access panel
15. Grill Guards
16. DirectPlus™ Direct Drive ECM Blower (3-5 Ton)
17. MSAV® (Multi-Stage Air Volume) Belt Drive Blower (10-20 Ton)



SCH240 (20 Ton)

18. Electric Heat (option)
19. Air Filters
20. Lennnox® CORE Unit Controller
21. Economizer (option)
22. Power Exhaust Fans (option)
23. Humiditrol® Dehumidification (option)

APPROVALS AND WARRANTY

APPROVALS

- AHRI Standard 210/240-2023 certified (3 and 5 ton models)
- AHRI Standard 340/360-2023 certified (10 and 20 ton models)
- ETL and CSA listed
- All models meet DOE 2023 energy efficiency standards and UL 60335-2-40 Refrigerant Detector Requirements
- Unit and components ETL, NEC and CEC bonded for grounding to meet safety standards for servicing
- ENERGY STAR® certified (036, 060 and 240 models only)
- ISO 9001 Registered Manufacturing Quality System

WARRANTY

- Compressors - Limited five years
- Environ™ Coil System - Limited three years
- Lennox® CORE Control System - Limited three years
- Variable-Frequency Drive (VFD) (120-240 Models) - Limited five years
- High Performance Economizers (optional) - Limited five years
- All other covered components - Limited one year

FEATURES AND BENEFITS

COOLING SYSTEM

- Designed to maximize sensible and latent cooling performance at design conditions
- System operation from 0°F to 125°F without additional controls

R-454B Refrigerant

- Low GWP (Global Warming Potential)
- Zero ODP (Ozone Depletion Potential)
- Low Toxicity/Lower Flammability - A2L
- Unit is factory pre-charged

1 Scroll Compressors

- Two-stage (3 to 5 ton) for increased part load efficiency
- One two-stage and one single-stage for increased part load efficiency (10 ton models)
- Four single-stage (20 ton models)
- Resiliently mounted on rubber grommets
- Quiet operation

Compressor Crankcase Heater

- Protects against refrigerant migration that can occur during low ambient operation or during extended off cycles

2 Thermal Expansion Valve (TXV)

- Ensures optimal performance throughout the application range
- Removable element head

3 Filter/Drier

- Solid core, molecular-sieve, high capacity filter/drier

4 High Pressure Switch

- Protects the compressor from overload conditions such as dirty condenser coils, blocked refrigerant flow or loss of outdoor fan operation
- Automatic reset

5 Low Pressure Switch

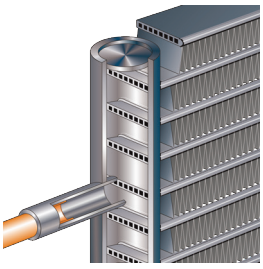
- Protects the compressors from low pressure conditions such as low refrigerant charge or low/no airflow
- Automatic reset

Indoor Coil Freeze Protection

- Protects the evaporator coil from damaging ice buildup due to conditions such as low/no airflow or low refrigerant charge

6 Environ™ Coil System

- Condenser (all models) and evaporator (3 and 5 ton models)
- Lightweight, all aluminum brazed fin construction
- Constructed of three components
  - A flat extrusion tube
  - Fins in-between the flat extrusion tube
  - Two refrigerant manifolds



Environ™ Coil System Features:

- Improved heat transfer performance due to high primary surface area (flat tubes) versus secondary surface (fins)
- Smaller internal volume (reduced refrigerant charge)
- High durability
- All aluminum construction
- Fewer brazed joints
- Compact design
- Reduced unit weight
- Easy maintenance/cleaning
- Mounting brackets with rubber inserts which secures coil to unit providing vibration dampening and corrosion protection
- Angled cabinet design protects coil from damage

FEATURES AND BENEFITS

COOLING SYSTEM (continued)

7 Evaporator Coil (10 and 20 ton models)
- Copper tube construction
- Enhanced rippled-edge aluminum fins
- Flared shoulder tubing connections
- Silver soldered construction for improved heat transfer
- Factory leak tested
- Row-split coils on multi-stage air volume models
- Cross-row circuiting with rifled copper tubing optimizes both sensible and latent cooling capacity

Condensate Drain Pan
- Plastic pan, sloped to meet drainage requirements of ASHRAE 62.1
- Drain connection extends outside unit

Condensate Drain Trap
- EPDM high density rubber material

8 Variable-Speed ECM Outdoor Coil Fan Motors (036-060 Only)
- Fan speed is controlled by the Lennnox® CORE unit controller
- Thermal overload protected
- Totally enclosed
- Permanently lubricated ball bearings
- Shaft up
- Wire basket mount

9 Outdoor Coil Fan Motors (120/240 Only)
- Permanent split capacitor
- Thermal overload protected
- Totally enclosed
- Permanently lubricated ball bearings
- Shaft up
- Wire basket mount

Outdoor Coil Fan
- PVC coated fan guard

Required Selections

Cooling Capacity
- Specify nominal cooling capacity of the unit

Options/Accessories

Factory or Field Installed

Drain Pan Overflow Switch
- Monitors condensate level in drain pan
- Shuts down unit if drain becomes clogged

LOW GWP REFRIGERANT DETECTION SYSTEM (RDS)

- Complies with UL 60335-2-40 approved standard
- Required for all systems using R-454B refrigerant
- Factory installed on all units
- Consists of a leak detection sensor(s) and a mitigation control
- Ensures safe operation for systems equipped with R-454B refrigerant
- Sensor(s) monitors indoor coil area for any refrigerant leaks if they occur
- If a leak is detected the refrigerant detection system will prevent compressor and heating operation until a leak is no longer detected
- Refrigeration detection system energizes blower while a leak is detected to mitigate any concentrations of refrigerant from the unit and the system

CABINET

10 Construction
- Heavy-gauge steel panels
- Full perimeter heavy-gauge galvanized steel base rail (provides structural integrity for transportation, handling, and installation)
- Base rails have rigging holes
- Fork slots (two sides on the 3 and 5 ton models, three sides on the 10 and 20 ton models)
- Raised edges around duct and power entry openings in the bottom of the unit for water protection

Airflow
- Units are shipped in downflow (vertical) configuration

11 Power Entry
- Electrical lines can be routed through the unit base or through horizontal access knock-outs

12 Exterior Panels
- Constructed of heavy-gauge, galvanized steel
- Textured pre-paint with polyurethane finish
- Cyclic salt fog and UV exposure up to 1680 hours per ASTM D5894

13 Insulation
- Fully insulated with non-hygroscopic fiberglass insulation (conditioned areas)
- Unit base is fully insulated
- Base insulation serves as an air seal to the roof curb, eliminating the need to add a seal during installation

14 Hinged Access Panels
- Economizer/filter section
- Blower section
- Compressor/controls/heat section
- Hinges are constructed of galvanized-steel
- Panel seals and quarter-turn latching handles provide a tight air and water seal

15 Grille Guards
- Protects space between outdoor coils and main cabinet

CABINET (Continued)

Options/Accessories

Factory Installed

Corrosion Protection

- Completely flexible immersed coating
- Electrodeposited dry film process
- AST ElectroFin E-Coat
- ASTM B117 / DIN 53167 Salt Spray - 15,000+ hours
- ASTM G85 Annex A3 SWAAT Modified Salt Spray - 3000 hours
- VA Master Construction Specification Division 23 for High Humidity Installations
- CID AA-52474A (GSA)

Option 1:

- Coated indoor and outdoor coil assemblies (including tube sheets)
- Painted cabinet interior

Option 2:

- Coated outdoor coil assembly (including tube sheets)

Field Installed

Combination Coil/Hail Guards

- Heavy gauge steel frame
- Painted to match cabinet
- Expanded metal mesh protects outdoor coil

BLOWER

16 DirectPlus™ Direct Drive ECM Blower System (036-060 Models Only)

- High-efficiency, variable-speed ECM (electronically commutated) motor
- Aerodynamically optimized impeller
- Backward curved blades mounted directly onto the rotor
- Combines the motor and electronics into one unit

- Eliminates the need for a variable-frequency drive
- Ramps the blower up or down to meet comfort needs
- Blower assembly slides out of unit for servicing

- Air inlet grill reduces indoor sound levels without affecting air performance

17 MSAV® (Multi-Stage Air Volume) Belt Drive Blower System (120-240 Models Only)

- Supply air variable frequency drive (VFD)
- Stages the amount of supply blower airflow according to compressor stages, heating demand, ventilation demand or smoke alarm
- Alters frequency and voltage of the power supply to the blower to control speed
- The amount of airflow for each stage can be set according to a parameter in the Lennnox® CORE unit controller
- Unit is shipped from the factory with preset airflow
- The VFD has an operational range of –40 to 125°F outdoor air ambient temperature
- Lower operating costs are obtained when the blower is operated on lower speeds
- Overload protected
- Equipped with ball bearings
- All blower motors 5 hp and above meet minimum energy efficiency standards in accordance with the Energy Independence and Security Act (EISA) of 2007
- Forward curved blades
- Double inlet
- Blower wheel is statically and dynamically balanced
- Equipped with ball bearings
- Adjustable pulley (allows speed change during commissioning).
- Blower assembly slides out of unit for servicing

NOTE - Units equipped a Variable Frequency Drive (VFD) are designed to operate on balanced, three-phase power. Operating units on unbalanced three-phase power will reduce the reliability of all electrical components in the unit. Unbalanced power is a result of the power delivery system supplied by the local utility company. Factory-installed inverters are sized to drive blower motors with an equivalent current rating using balanced three-phase power. If unbalanced three-phase power is supplied the installer must replace the existing factory-installed inverter with an inverter that has a higher current rating to allow for the imbalance. Refer to the installation instructions for additional information and replacement information.

Blower Proving

- Monitors blower operation
- Shuts down unit if blower stops

NOTE - Field installed on 036-060 models, field or factory installed on 120-240 models.

FEATURES AND BENEFITS

ELECTRICAL

SmartWire™ System
- Advanced wiring connectors
- Keyed and color-coded to prevent miswiring
- Wire coloring scheme is standardized across all models
- Each connection is intuitively labeled to make troubleshooting and servicing quick and easy

Circuit Breakers
- HACR type
- For overload and short circuit protection
- Factory wired
- Current sensitive and temperature activated
- Manual reset
- Mounted in the power entry panel

Electrical Plugs
- Positive connection electrical plugs connect common accessories and maintenance parts for easy removal or installation

Short-Circuit Current Rating (SCCR)
- Higher short circuit protection up to 35kA

Required Selections

Voltage Choice
- Specify when ordering base unit

Options/Accessories

Factory Installed

GFI Service Outlets (2)
NOTE - Required and must be ordered with all units!
- 115V ground fault circuit interrupter (GFCI) type
- Non-powered, field wired

Factory or Field Installed

18 Electric Heat
- Helix wound nichrome elements
- Time delay for element staging
- Individual element limit controls
- Wiring harness
- May be four-stage controlled in zone sensor mode
- All required components are included

Field Installed

GFI Weatherproof Cover
- Single-gang cover
- Heavy-duty UV-resistant polycarbonate case construction
- Hinged base cover with gasket

INDOOR AIR QUALITY

Options/Accessories

Factory or Field Installed

19 Standard Air Filters
- MERV 8 (Minimum Efficiency Reporting Value) based on ASHRAE 52.2 efficiency
- Disposable
- 2 inch pleated

Healthy Climate® MERV 13 High Efficiency Air Filters
- MERV 13 (Minimum Efficiency Reporting Value) based on ASHRAE 52.2 efficiency
- Disposable
- 2 inch pleated

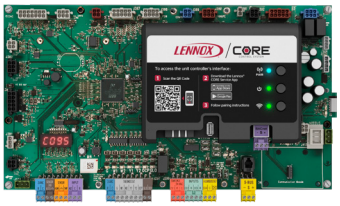
Indoor Air Quality (CO_2) Sensor
- Monitors CO_2 levels and reports to unit controller which adjusts economizer dampers as needed
- MSAV (multi-stage air volume) units with an economizer require a CO_2 sensor to modulate the economizer damper and maintain the desired minimum amount of fresh outdoor air
- CO_2 sensor can be installed in either the occupied zone or the return air duct

Field Installed

Replacement Filter Media Kit With Frame (240 Only)
- Replaces existing pleated filter media
- Includes washable metal mesh screen and metal frame
- Clip holds replaceable non-pleated filter

CONTROL SYSTEM

LENNOX® CORE CONTROL SYSTEM



20 The Lennox® CORE Control System is designed to accelerate equipment install and service. Standard with all Strategos® rooftop units, control system integrates key technologies that lower installation costs, drive system efficiency, and protect your investments.

The Lennox® CORE Unit Controller is a microprocessor-based controller that provides flexible control of all unit functions.

CORE Mobile Service App

- Guided Setup with progress indicators, detailed help, and exportable summaries to manage simple, trouble-free setup, reducing commissioning times
- Enhanced Test Functionality provides real-time sensor readings, trending, and reports that enable easy troubleshooting
- Ability to set and configure parameters of the CORE Control System to manage sequence of operation
- Economizer test function ensures economizer is operating correctly

Download on the App Store | ANDROID APP ON Google play

Additional Features:

- Built-In 7-Segment Display shows Unit Status and active alarms for easy troubleshooting
- Buttons for test and clearing delays
- SmartWire™ System with keyed and removable screw terminals ensure correct field wiring
- Built-in BACnet MS/TP and IP allow open integration to building management systems.
- Two-port Ethernet Switch enables daisy chaining for BACnet IP and automatic firmware updates

NOTE - Unit Internet Connection required.

- Profile setup copies key settings between units with the same configuration to reduce setup time
- USB port allows a technician to download and transfer unit information to help verify service was performed
- USB software updates on the Lennox® CORE Unit Controller enhance functionality without the need to change components
- Unit Controller Software

Configurable Built-In Functions

- Discharge Air Cooling Control
- Up to three distinct Cooling Airflows in Thermostat Mode
- Programmable independent heating, ventilation and cooling blower speeds
- Discharge Air Heating Control
- Economizer Control Options (See Economizer / Exhaust Air / Outdoor Air sections)
- Exhaust Fan Control Modes for fresh air damper position
- Configurable Morning Warm-up
- Night Setback Mode
- Fresh Air Tempering for Improved Ventilation
- Demand Control Ventilation
- Low Ambient Controls for operation down to 0°F
- Humiditrol® Operation
- Enhanced Dehumidification (Latent Demand Control without reheat)

Component Protection / Unit Safeguards:

- Compressor Time-Off Delay
- Adjustable Blower On/Off Delay
- Return Air Temperature Limit Control
- Safety Switch Input allows Controller to respond to a external safety switch trip
- Service Relay Output
- Thermostat Bounce Delay
- Smoke Alarm Mode has four choices (unit off, positive pressure, negative pressure, purge)
- "Strike Three" Protection
- Gas Valve Time Delay Between First and Second Stage
- Minimum Compressor Run Time

Control Methods / Interfaces:

- DDC and 24V Thermostat
- BACnet MS/TP and IP
- LONTalk (Factory Option)
- Lennox S-BUS
- Zone Temperature Sensor Input
- Dehumidistat and Humidity Sensor Inputs
- Indoor Air Quality Inputs (2)
- Built-in Control Parameter Defaults
- Permanent Diagnostic Code Storage
- Field Adjustable Control Parameters (Over 200 settings)
- Multiple Configurable Digital Inputs
- LED Indicators
- PC Interface connects the Lennox® CORE Unit Controller to a PC with the Lennox Unit Controller Software

NOTE - Lennox® CORE Control System features vary with the type of rooftop unit in which the control is installed.

CONTROL SYSTEM

LENNOX® CORE CONTROL SYSTEM (Continued)

Control Options

Factory Installed

Dirty Filter Switch
- Senses static pressure increase indicating dirty filter condition

Factory or Field Installed

Smoke Detector
- Photoelectric type
- Installed in supply air section, return air section or both sections
- Available with power board and single sensor (supply or return) or power board and two sensors (supply and return)
- Power board located in unit control compartment

Interoperability via BACnet® or LonTalk® Protocols
- Communication compatible with third-party automation systems that support the BACnet Application Specific Controller device profile, LonMark® Space Comfort Controller functional profile, or LonMark Discharge Air Controller functional profile

Field Installed

Blower Proving
- Monitors blower operation
- Shuts down unit if blower stops

NOTE - Field installed on 036-060 models, field or factory installed on 120-240 models.

Commercial Control Systems

Thermostats
- Control system and thermostat options

OPTIONS / ACCESSORIES

21 ECONOMIZER

Factory or Field Installed
- Economizer operation is set and controlled by the Lennnox® CORE Unit Controller
- Simple plug-in connections from economizer to unit controller
- All Strategos rooftop units are equipped with factory installed CEC Title 24 approved sensors for outside, return and discharge air temperature monitoring

NOTE - Optional sensors may be used instead of unit sensors to determine whether outdoor air is suitable for free cooling. See Options/Accessories table.

High Performance Economizer Features
- Outdoor air hood is furnished
- Approved for California Title 24 building standards.
- Low leakage dampers are Air Movement and Control Association International (AMCA) Class 1A Certified - Maximum 3 CFM per sq. ft. leakage at 1 in. w.g.
- ASHRAE 90.1-2010 compliant
- Linked damper action
- High torque 24-volt fully-modulating spring return damper motor
- Return air and outdoor air dampers
- Plug-in connections to unit

NOTE - High Performance Economizers are not approved for use with enthalpy controls in Title 24 applications.

NOTE - The Free Cooling setpoint for Title 24 applications must be set based on the Climate Zone where the system is installed. See Section 140.4 “Prescriptive Requirements for Space Conditioning Systems” of the California Energy Commission’s 2022 Building Energy Efficiency Standards.

NOTE - Refer to Installation Instructions for complete setup information.

ECONOMIZER (continued)

Options / Accessories

Factory or Field Installed

Differential Enthalpy Control (Not for Title 24)
- Order two Single Enthalpy Controls
- One is field installed in the return air section
- One is installed in the outdoor air section
- Allows the economizer control to select between outdoor air or return air, whichever has lower enthalpy

Field Installed

Global Control (Not for Title 24)
- The unit controller communicates with a DDC system with one global sensor (enthalpy or sensible)
- Determines whether outside air is suitable for free cooling on all units connected to the control system
- Sensor must be field provided

EXHAUST AIR

Factory Installed

22 Power Exhaust Fan(s) (120 and 240 Models Only)
- Installs external on 10 ton model with economizer option
- Installs internal to 20 ton models with economizer option
- Provides exhaust air pressure relief
- Interlocked to run when supply air blower is operating
- Fan runs when outdoor air dampers are 50% open (adjustable)
- Fan motor is overload protected
- 10-ton model includes steel cabinet and hood painted to match unit

120 Model
- One, 1/2 hp motor
- Five fan blades
- Total power input - 300 Watts
- Total air volume of 4085 cfm at 0.05 in. w.g.

240 Model
- Three, 1/3 hp motors
- 20 in. diameter, five fan blades
- Total power input - 1200 Watts
- Total air volume of 10,200 cfm at 0 in. w.g.

Barometric Relief Dampers
- Allows relief of excess air
- Dampers prevent blow back and outdoor air infiltration during off cycle
- Outdoor air hood is furnished with field installed barometric relief dampers for 120-240 models with Power Exhaust
- See Options/Accessories table

OUTDOOR AIR

Factory Installed

Motorized Outdoor Air Dampers (240 Models Only)
- Linked mechanical dampers
- Fully modulating spring return damper motor
- Installed in unit
- Outdoor air hood with bird screen included

Manual Outdoor Air Dampers (240 Models Only)
- Adjustable slide damper
- Installed in unit
- Outdoor air hood with bird screen included

ROOF CURBS

Factory Installed

Curb Alignment (240 Models Only)
- Adapter plate mates new unit to existing roof curb for easy replacement of older SCE240 models

Field Installed

Hybrid Roof Curbs, Downflow
- Interlocking tabs fasten corners together
- No tools required for assembly
- Can also be fastened together with furnished hardware
- Available in 14 and 24 inch heights
- See Options/Accessories table

HUMIDITROL® DEHUMIDIFICATION SYSTEM OPTION

23 OVERVIEW

- Factory installed option designed to control humidity
- Provides dehumidification on demand using ASHRAE 90.1 recommended method for comfort conditioning humidity control
- Unit comes equipped with one row reheat coil, solenoid valve and humidity controller

BENEFITS

- Improves indoor air quality
- Helps prevents damage due to high humidity levels
- Improves comfort levels by reducing space humidity levels

OPERATION

No Dehumidification Demand

- The unit will operate conventionally whenever there is a demand for cooling or heating and no dehumidification demand
- Free cooling is only permitted when there is no demand for dehumidification

Dehumidification Demand Only

- Reheat operation will initiate on a dehumidification demand and does not require a cooling demand
- The unit will operate in the dehumidification mode until the relative humidity of the conditioned space is below the setpoint
- The reheat coil is sized to provide 68°F to 75°F supply air during reheat operation
- This reduces sensible cooling capacity and extends compressor run time to control humidity when the cooling load is low
- A solenoid valve diverts hot gas from the compressor to the reheat coil
- The cooled and dehumidified air from the evaporator is reheated as it passes through the reheat coil
- The de-superheated and partially condensed refrigerant continues to the outdoor condenser coil where condensing is completed
- The unit will continue to operate in this mode until the dehumidification demand is satisfied

NOTE - See Sequence of Operation for additional information.

Dehumidification and Cooling Demand (Thermostat/ Room Sensor Application)

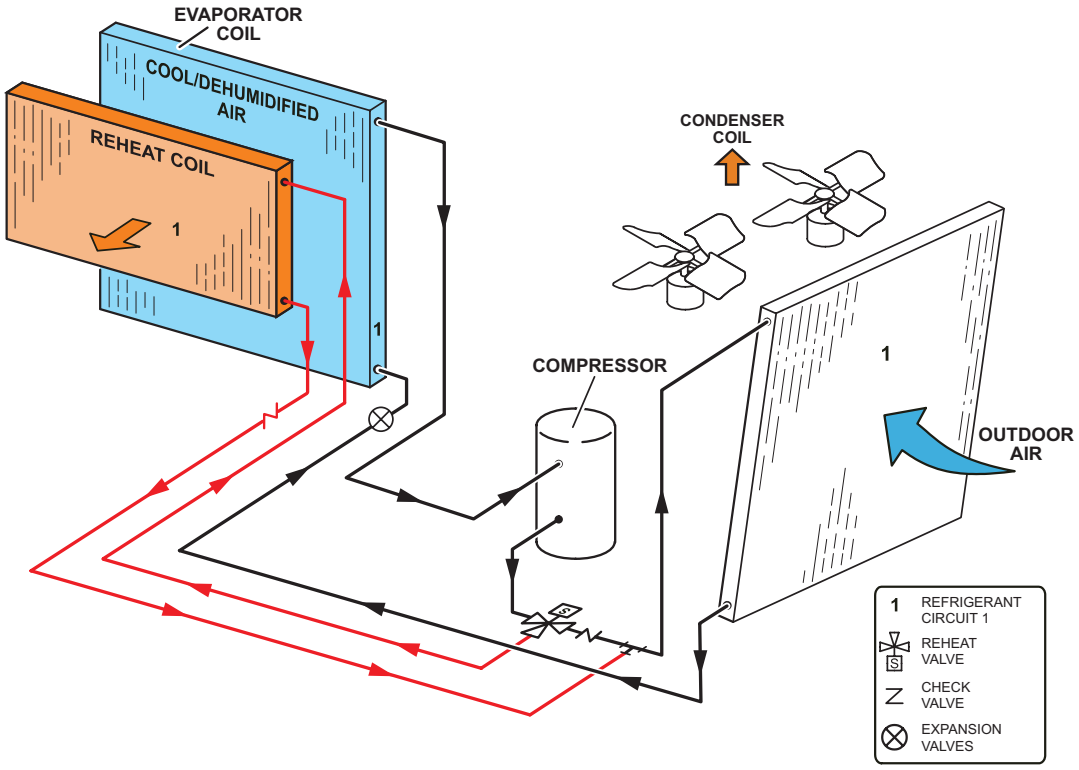
Two-stage compressor models (036 and 060)

- If both a dehumidification and a Y1 cooling demand occur, the system will operate in the full cooling mode at first stage indoor air flow
- If a Y2 cooling demand occurs along with a dehumidification demand, the system operates in full cooling mode at full cooling airflow until the Y2 cooling demand is satisfied
- Then the system will revert to the dehumidification mode if a dehumidification mode demand is present

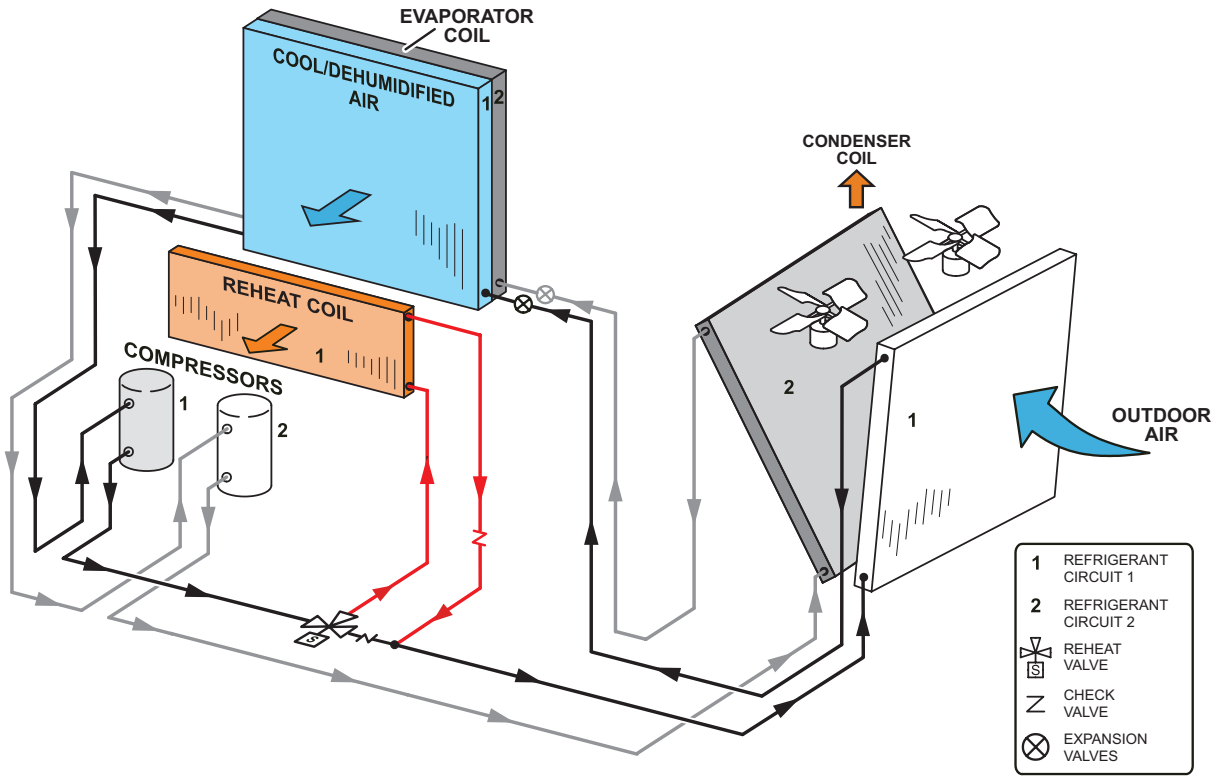
Two-stage/Single-stage compressor model (120)
Single Speed Compressor model (240)

- If both a dehumidification and a full cooling demand occur, the system will operate in cooling until the cooling demand is satisfied
- Then the system will energize the dehumidification mode

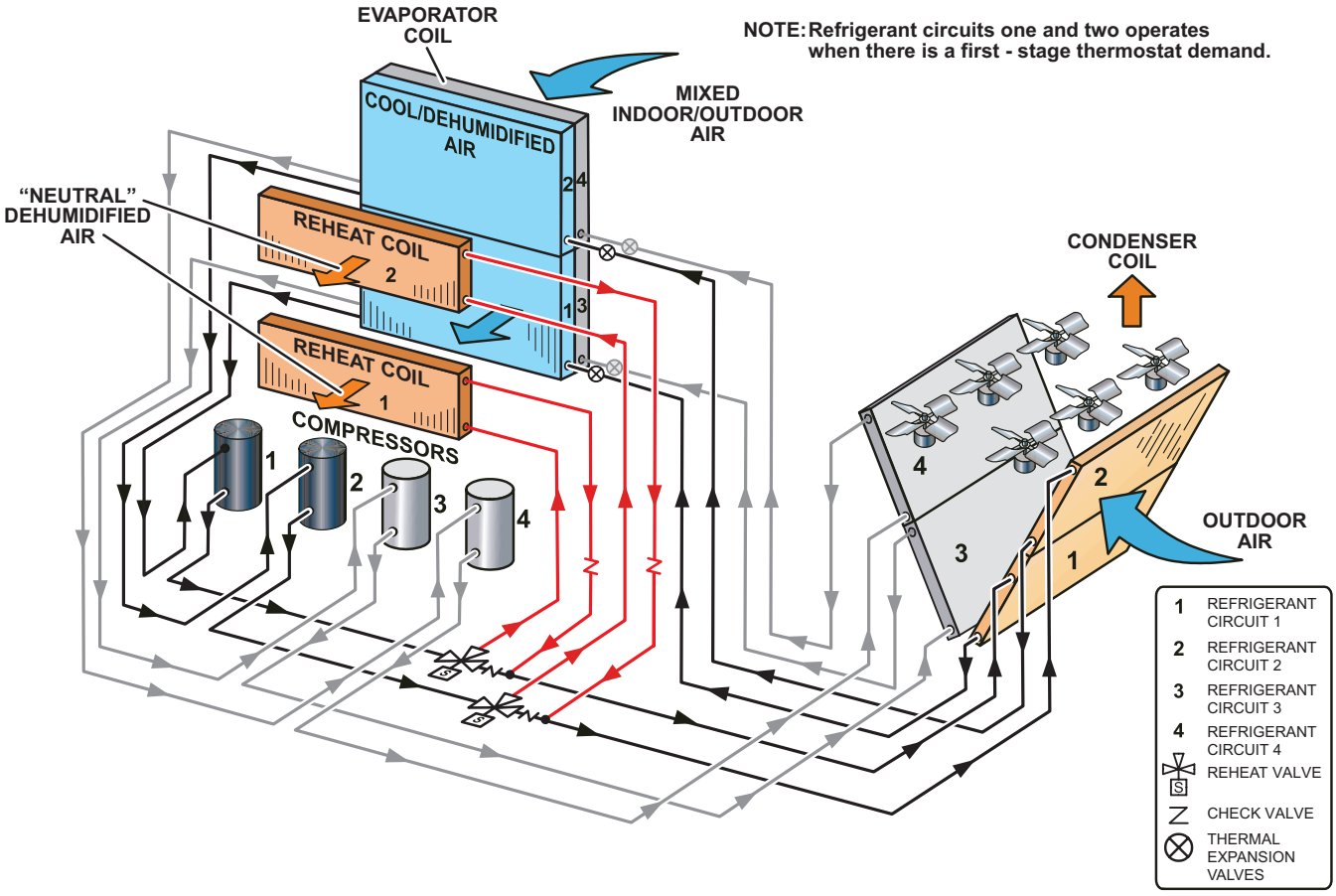
REFRIGERANT SCHEMATIC - 036H-60H MODELS



REFRIGERANT SCHEMATIC - 120H MODEL



REFRIGERANT SCHEMATIC - 240H MODEL



Objective: Outline the unit functions as a result of room thermostat or zone sensor demands.

Given: When economizer is present, it will function as initial part of the unit cooling system. When not present, unit will function as if outdoor ambient is high and sensed as not suitable.

DIRECT DRIVE SYSTEM OPERATION (3 AND 5 TONS MODELS):

Note: DirectPlus™ direct drive units feature ECM condenser fans that are staged to match the compressor's capacity. When the compressor is operating at first stage, the condenser fan is operating at low speed. The condenser fan switches to high speed when the compressor switches to second stage to match operation.

Modulating Outdoor Air Damper:

Damper minimum positions #1 and 2 are adjusted during unit setup to provide minimum fresh air requirements at the indicated supply air blower speeds per ASHRAE 62.1.

- Supply air blower is off and the outdoor air damper is closed
- Supply air blower is on low speed and the outdoor air damper is at minimum position 1
- Supply air blower is on high speed and the outdoor air damper is at minimum position 2

[1] Unit Features an Economizer and Outdoor Air is Suitable

Cooling - Thermostat (Up to 2 stages Y1, Y2) or Zone Sensor Mode (Up to 3 stages Y1, Y2, Y3)

Y1 Demand:

1st: Compressor is off, supply air blower is on low speed, economizer modulates (minimum to maximum open position) to maintain 55°F supply air temperature (default unit controller setting)

2nd: After 5 minutes (default unit controller setting), supply air blower switches to high speed. Economizer continues modulating with supply air blower on high speed to maintain 55°F supply air temperature

Y2 Demand:

1st: Compressor is off, supply fan is on high speed, and economizer modulates to maintain 55°F supply air temperature

2nd: Economizer opens to maximum. If economizer stays at maximum open for 3 minutes (default unit controller setting) compressor is energized and operates at first stage while supply fan stays on high speed

[1] Outdoor air suitability is determined by the energy state of outdoor ambient (enthalpy or sensible) and its ability to achieve the desired free cooling effects. Outdoor air suitability can also be determined by a third party controller and provided to the RTU via a network connection.

Y3 Demand:

1st: Economizer is at maximum open and compressor operates at first stage. If economizer stays at maximum open for 3 minutes (default unit controller setting) compressor switches to second stage operation while supply fan stays on high speed

Unit Does Not Feature An Economizer Or Outdoor Air Is Not Suitable

Cooling - Thermostat or Zone Sensor (Up to 2 stages Y1, Y2)

Y1 Demand:

1st: Compressor operates at first stage and supply air blower operates at low speed

Y2 Demand:

1st: Compressor operates at second stage and supply air blower operates at high speed

DIRECT DRIVE SYSTEM OPERATION (3 AND 5 TONS MODELS) (CONTINUED):

Dehumidification Mode (economizer free cooling is locked out):

Unit features the Humiditrol® Dehumidification option.

No Y1, Y2 Demand but a call for dehumidification:

1st: Compressor operates at second stage, supply air blower operates at low speed, and the reheat valve is energized

Y1 Demand:

1st: Compressor operates at second stage, outdoor fan operates at high speed, supply air blower operates at low speed and the reheat valve is de-energized

Y2 Demand:

1st: Compressor operates at second stage, supply air blower operates at high speed, and the reheat valve is de-energized

Heating Mode (Thermostat or Zone Sensor- Electric Heat)

Note: Heating mode is the same for all control options

W1 Demand:

1st stage electric heat is energized and the supply air blower operates at heating speed.

W2 Demand:

2nd stage electric heat is energized and the supply air blower operates at heating speed (20 or 30 kW electric heat option only).

Objective: Outline the unit functions as a result of room thermostat or zone sensor demands.

Given: When economizer is present, it will function as an integral part of the unit cooling system. When not present, unit will function as if economizer is present but outdoor ambient is high and sensed as not suitable.

UNIT OPERATION WITH 2-STAGE THERMOSTAT (2 COOL AND 2 HEAT STAGES, Y1, Y2, W1, W2)

SUPPLY AIR BLOWER SPEED

Unit has following supply air blower speed setting:

- Ventilation Speed
- Cooling Speed - Low
- Cooling Speed - High
- Heating Speed
- Smoke Speed (Used only in smoke removal option - not discussed)

[1] Unit Features An Economizer And Outdoor Air Is Suitable

Cooling - Thermostat Mode (Y1, Y2)

Y1 Demand:

All compressors are off, supply air blower is on low cooling speed to minimize blower power consumption, economizer modulates (minimum to maximum open position) to maintain 55°F supply air temperature (default unit controller setting).

Y2 Demand:

All compressors are off, supply air blower is on high cooling speed providing higher cooling capacity, and economizer modulates to maintain 55°F supply air temperature.

If economizer stays at maximum open for 3 minutes, compressor 1 is energized while supply air blower stays on high cooling speed providing maximum cooling capacity.

[1] Outdoor air suitability is determined by the energy state of outdoor ambient (enthalpy or sensible) and its ability to achieve the desired free cooling effects. Outdoor air suitability can also be determined by a third party controller and provided to the rooftop unit via a network connection.

Unit Does Not Feature An Economizer Or Outdoor Air Is Not Suitable

Y1 Demand:

1st Compressor operates and supply air blower operates at low cooling speed.

Y2 Demand:

All compressors operate and supply air blower operates at high cooling speed.

Dehumidification Mode

If a unit with Humiditrol® Dehumidification Option receives a call for dehumidification, economizer free cooling is locked out.

Call For Dehumidification, No Y1, Y2 Demand:

1st stage compressor operates, supply air blower operates at low cooling speed, and the reheat valve is energized.

Y1 Demand With A Call For Dehumidification:

All compressors operate, supply air blower operates at high cooling speed and the reheat valve is energized.

Y2 Demand With A Call For Dehumidification:

All compressors operate, supply air blower operates at high cooling speed, and the reheat valve is de-energized.

UNIT OPERATION WITH ZONE SENSOR AND 3-STAGE THERMOSTAT (3 COOL AND 2 HEAT STAGES, Y1, Y2, Y3 AND W1, W2)

SUPPLY AIR BLOWER SPEED

Unit has following supply air blower speed setting:

- Ventilation Speed
- Cooling Speed - Low
- Cooling Speed - Medium
- Cooling Speed - High
- Heating Speed
- Smoke Speed (Used only in smoke removal option - not discussed)

[1] Unit Features An Economizer And Outdoor Air Is Suitable

Cooling - Thermostat or Zone Sensor Mode (Y1, Y2, Y3)

Y1 Demand:

All compressors are off, supply air blower is on low cooling speed to minimize blower power consumption, economizer modulates (minimum to maximum open position) to maintain 55°F supply air temperature (default unit controller setting).

Y2 Demand:

All compressors are off, supply air blower is on high cooling speed providing higher cooling capacity, and economizer modulates to maintain 55°F supply air temperature.

If economizer stays at maximum open for 3 minutes, compressor 1 is energized while supply air blower stays on high cooling speed providing maximum cooling capacity. After compressors are energized the economizer stays at maximum open.

Y3 Demand:

Compressors 1 and 2 are energized while supply air blower stays on high cooling speed.

[1] Outdoor air suitability is determined by the energy state of outdoor ambient (enthalpy or sensible) and its ability to achieve the desired free cooling effects. Outdoor air suitability can also be determined by a third party controller and provided to the rooftop unit via a network connection.

Unit Does Not Feature An Economizer Or Outdoor Air Is Not Suitable

Y1 Demand:

Compressor 1 operates and supply air blower operates at low cooling speed.

Y2 Demand:

Compressor 1 operates at part load with compressor 2 ON, and supply air blower operates at medium cooling speed.

Y3 Demand:

All compressors operate and supply air blower operates at high cooling speed.

Dehumidification Mode

If a unit with Humiditrol® Dehumidification Option receives a call for dehumidification, economizer free cooling is locked out.

Call For Dehumidification, No Y1, Y2 demand:

1st stage compressor operates, supply air blower operates at low cooling speed, and the reheat valve is energized.

Y1 Demand With A Call For Dehumidification:

All compressors operate, supply air blower operates at high cooling speed and the reheat valve is energized.

Y2 Demand With A Call For Dehumidification:

All compressors operate, supply air blower operates at high cooling speed and the reheat valve is energized.

Y3 Demand With A Call For Dehumidification:

All compressors operate, supply air blower operates at high cooling speed, and the reheat valve is deenergized.

UNIT OPERATION WITH ZONE SENSOR AND 3-STAGE THERMOSTAT (3 COOL AND 2 HEAT STAGES, Y1, Y2, Y3 AND W1, W2) (CONTINUED)

Heating Mode (Electric Heat)

NOTE - Heating mode is the same for all control options

W1 Demand:

1st stage electric heat is energized and the supply air blower operates at heating speed.

W2 Demand:

2nd stage electric heat is energized and the supply air blower operates at heating speed (20 or 60 kW electric heat option only).

Modulating Outdoor Air Damper

The minimum damper position for “occupied low blower” and “occupied high blower” is adjusted during unit setup to provide minimum fresh air requirements per ASHRAE 62.1 at the corresponding supply air blower speeds.

- When supply air blower is off or the unit is in unoccupied mode, the outdoor air damper is closed.
- When unit is in occupied mode and supply air blower is operating at a speed below the “midpoint” blower speed, the outdoor air damper is at minimum “low blower” position.
- When unit is in occupied mode and supply air blower is operating at a speed equal to or above the “midpoint” blower speed, the outdoor air damper is at minimum “high blower” position.

NOTE - The “midpoint” blower speed is an average of the minimum and maximum blower speed (minimum speed + maximum speed divided by 2).

Power Exhaust Operation

NOTE - Power exhaust operation is the same for all control options

Power exhaust blower operates when economizer outdoor air dampers are 50% open (adjustable) and when supply air blower speed is above 70% (adjustable) of full speed.

Objective: Outline the unit functions as a result of room thermostat or zone sensor demands.

Given: When economizer is present, it will function as an integral part of the unit cooling system. When not present, unit will function as if economizer is present but outdoor ambient is high and sensed as not suitable.

UNIT WITH 2-STAGE THERMOSTAT (2 COOLING STAGES, Y1, Y2)

SUPPLY AIR BLOWER SPEED

Unit has the following supply air blower speed settings:

- Ventilation Speed
- Cooling Speed - Low
- Cooling Speed - High
- Heating Speed
- Smoke Speed (Used only in smoke removal option - not discussed)

[1] Unit Features An Economizer And Outdoor Air Is Suitable

Y1 Demand:

All compressors are off, supply air blower is on low cooling speed to minimize blower power consumption, economizer modulates (minimum to maximum open position) to maintain 55°F supply air temperature (default unit controller setting).

Y2 Demand:

All compressors are off, supply air blower is on high cooling speed providing higher cooling capacity, and economizer modulates to maintain 55°F supply air temperature.

If economizer stays at maximum open for 3 minutes, 1st stage compressors (compressor 1 and 2) are energized while supply air blower stays on high cooling speed providing maximum cooling capacity.

[1] Outdoor air suitability is determined by the energy state of outdoor ambient (enthalpy or sensible) and its ability to achieve the desired free cooling effects. Outdoor air suitability can also be determined by a third party controller and provided to the RTU via a network connection.

Unit Does Not Feature An Economizer Or Outdoor Air Is Not Suitable

Y1 Demand:

1st stage compressors operate and supply air blower operates at low cooling speed.

Y2 Demand:

All compressors operate and supply air blower operates at high cooling speed.

Dehumidification Mode

If a unit with Humiditrol® Dehumidification Option receives a call for dehumidification, economizer free cooling is locked out.

Call For Dehumidification, No Y1, Y2 Demand:

1st stage compressors (1 & 2) operate, supply air blower operates at low cooling speed, and the reheat valves are energized.

Y1 Demand With A Call For Dehumidification:

All compressors operate, supply air blower operates at high cooling speed and the reheat valves are energized.

Y2 Demand With A Call For Dehumidification:

All compressors operate, supply air blower operates at high cooling speed, and the reheat valves are de-energized.

UNIT WITH ZONE SENSOR (4 COOLING STAGES, Y1, Y2, Y3, Y4)

SUPPLY AIR BLOWER SPEED

Unit has following supply air blower speed setting:

- Ventilation Speed
- Cooling Speed - Low
- Cooling Speed - Medium-Low
- Cooling Speed - Medium-High
- Cooling Speed - High
- Heating Speed
- Smoke Speed (Used only in smoke removal option - not discussed)

[1] Unit Features An Economizer And Outdoor Air Is Suitable

Y1 Demand:

All compressors are off, supply air blower is on low cooling speed to minimize blower power consumption, economizer modulates (minimum to maximum open position) to maintain 55°F supply air temperature (default unit controller setting).

Y2 Demand:

All compressors are off, supply air blower is on high cooling speed providing higher cooling capacity, and economizer modulates to maintain 55°F supply air temperature.

If economizer stays at maximum open for 3 minutes, compressor 1 is energized while supply air blower stays on high cooling speed. After compressor 1 is energized the economizer stays at maximum open.

Y3 Demand:

Compressor 1 and 2 are energized while supply air blower is on high cooling speed providing even higher cooling capacity.

Y4 Demand:

All compressors are energized while supply air blower is on high cooling speed providing maximum cooling capacity.

[1] Outdoor air suitability is determined by the energy state of outdoor ambient (enthalpy or sensible) and its ability to achieve the desired free cooling effects. Outdoor air suitability can also be determined by a third party controller and provided to the RTU via a network connection.

Unit Does Not Feature An Economizer Or Outdoor Air Is Not Suitable

Y1 Demand:

Compressor 1 operates and supply air blower operates at low cooling speed.

Y2 Demand:

Compressors 1 and 2 operate and supply air blower operates at medium-low cooling speed.

Y3 Demand:

Compressors 1, 2, and 3 operate and supply air blower operates at medium-high cooling speed.

Y4 Demand:

All compressors operate and supply air blower operates at high cooling speed.

UNIT WITH ZONE SENSOR (4 COOLING STAGES, Y1, Y2, Y3, Y4) (CONTINUED)

Dehumidification Mode

If a unit with Humiditrol® Dehumidification Option receives a call for dehumidification, economizer free cooling is locked out.

Call For Dehumidification, No Y1, Y2, Y3, Y4 Demand:

Compressors 1 and 2 operate, supply air blower operates at medium-low cooling speed, and both reheat valves are energized.

Y1 Demand With A Call For Dehumidification:

Compressors 1, 2, and 3 operate, supply air blower operates at high cooling speed and both reheat valves are energized.

Y2 Demand With A Call For Dehumidification:

All compressors operate, supply air blower operates at high cooling speed and both reheat valves are energized.

Y3 Demand With A Call For Dehumidification:

All compressors operate, supply air blower operates at high cooling speed, and the reheat valve of compressor 1 is energized while the reheat valve of compressor 2 is de-energized.

Y4 Demand With A Call For Dehumidification:

All compressors operate, supply air blower operates at high cooling speed, and the reheat valves are de-energized.

Heating Mode (Electric Heat)

NOTE - Heating mode is the same for all control options.

W1 Demand:

1st stage electric heat is energized and the supply air blower operates at heating speed.

W2 Demand:

2nd stage electric heat is energized and the supply air blower operates at heating speed (45, 60 or 90 kW electric heat option only).

Modulating Outdoor Air Damper

The minimum damper position for “occupied low blower” and “occupied high blower” is adjusted during unit setup to provide minimum fresh air requirements per ASHRAE 62.1 at the corresponding supply air blower speeds.

- When supply air blower is off or the unit is in unoccupied mode, the outdoor air damper is closed.
- When unit is in occupied mode and supply air blower is operating at a speed below the “midpoint” blower speed, the outdoor air damper is at minimum “low blower” position.
- When unit is in occupied mode and supply air blower is operating at a speed equal to or above the “midpoint” blower speed, the outdoor air damper is at minimum “high blower” position.

NOTE - The “midpoint” blower speed is an average of the minimum and maximum blower speed (minimum speed + maximum speed divided by 2).

Power Exhaust Operation

NOTE - Power exhaust operation is the same for all control options

MSAV® models are equipped with 2-stage power exhaust fans. Power exhaust fans operate when economizer outdoor air dampers are 50% open (adjustable). Power exhaust operates in 1st stage (one fan) up to 70% of supply air blower speed. 2nd stage power exhaust fans (both fans) operate when supply air blower speed is above 70% (adjustable) of full speed.

OPTIONS / ACCESSORIES

Item Description			Order Number	Size 036	060	120	240
COOLING SYSTEM							
Corrosion Protection	Coated indoor/outdoor coil assemblies, painted cabinet interior		Factory	O	O	O	O
	Coated outdoor coil assembly		Factory	O	O	O	O
Drain Pan Overflow Switch			**21Z07**	OX	OX	OX	OX
BLOWER - SUPPLY AIR							
ECM DirectPlus™, Direct Drive, MSAV® (Multi-Stage Air Volume)		1.5 hp	Factory	O	O		
Belt Drive, MSAV® (Multi-Stage Air Volume)		3 hp	Factory			O	
		5 hp	Factory				O
		7.5 hp	Factory				O
CABINET							
Combination Coil/Hail Guards			**19H54**	X	X		
			19H55			X	
			13T16				X
CONTROLS							
Commercial Controls		LonTalk® Module	Factory	O	O	O	O
Dirty Filter Switch			Factory	O	O	O	O
Smoke Detectors	Supply or Return (Power board and one sensor)		**10B40**	OX	OX		
			10B42			OX	OX
	Supply and Return (Power board and two sensors)		**10B41**	OX	OX		
			10B43			OX	OX
ELECTRICAL							
Voltage 60 Hz		460V - 3 phase	Factory	O	O	O	O
		575V - 3 phase	Factory	O	O	O	O
GFI Service Outlets (**REQUIRED**)	20 amp non-powered, field-wired (all voltages)		Factory	O	O	O	O
Weatherproof Cover for GFI			**10C89**	X	X	X	X
ELECTRIC HEAT							
10 kW		460V-3ph	Factory	O	O		
15 kW		460V or 575V-3ph	Factory	O	O	O	
20 kW		460V-3ph	Factory		O	O	
30 kW		460V or 575V-3ph	Factory		O	O	O
40 kW		460V-3ph	Factory				O
45 kW		460V or 575V-3ph	Factory			O	
60 kW		460V or 575V-3ph	Factory			O	O
90 kW		460V or 575V-3ph	Factory				O
HUMIDITROL® CONDENSER REHEAT OPTION							
Humiditrol® Dehumidification Option			Factory	O	O	O	O

NOTE - Order numbers shown are for ordering field installed accessories.
OX - Configure To Order (Factory Installed) or Field Installed
O = Configure To Order (Factory Installed)
X = Field Installed

OPTIONS / ACCESSORIES

Item Description		Order Number	Size 036	060	120	240
INDOOR AIR QUALITY						
Air Filters						
Standard Air Filters	MERV 8 (16 x 20 x 2 - Order 4 per unit)	**54W20**	OX	OX		
	MERV 8 (20 x 25 x 2 - Order 4 per unit)	**50W61**			OX	
	MERV 8 (20 x 20 x 2 - Order 12 per unit)	**54W21**				OX
Healthy Climate® High Efficiency Air Filters	MERV 13 (16 x 20 x 2 - Order 4 per unit)	**52W37**	OX	OX		
	MERV 13 (20 x 25 x 2 - Order 4 per unit)	**52W41**			OX	
	MERV 13 (20 x 20 x 2 - Order 12 per unit)	**52W39**				OX
Replacement Media Filter With Metal Mesh Frame 20 x 20 x 2 Order 12 per unit (includes non-pleated filter media)		**44N60**				X
Indoor Air Quality (CO_2) Sensors						
Sensor - Wall-mount, off-white plastic cover with LCD display		**77N39**	X	X	X	X
Sensor - Wall-mount, off-white plastic cover, no display		**23V86**	X	X	X	X
Sensor - Black plastic case, LCD display, rated for plenum mounting		**87N52**	X	X	X	X
Sensor - Black plastic case, no display, rated for plenum mounting		**23V87**	X	X	X	X
CO_2 Sensor Duct Mounting Kit - for downflow applications		**23Y47**	X	X	X	X
Aspiration Box - for duct mounting non-plenum rated CO_2 sensors (**77N39**)		**90N43**	X	X	X	X
ECONOMIZER						
High Performance Economizer (Approved for California Title 24 Building Standards / AMCA Class 1A Certified)						
ULL Performance Economizer - Includes Outdoor Air Hood		Factory	O	O	O	
(Global Sensor, field provided, order Barometric Relief Dampers separately)		**18X87**				OX
Economizer Controls						
Differential Enthalpy (Not for Title 24)	Order 2	**21Z09**	OX	OX	OX	OX
Global Control	Sensor Field Provided	Factory	O	O	O	O
Barometric Relief Dampers						
Barometric Relief Dampers (No Hood)		Factory	O	O		
Barometric Relief Dampers With Power Exhaust Fans (Hood Furnished)		Factory			O	
Barometric Relief Dampers Without Power Exhaust Fans (No Hood)		Factory			O	
Barometric Relief Dampers Without Power Exhaust Fans (Hood Furnished)		Factory				O
POWER EXHAUST						
Standard Static		Factory			O	O
OUTDOOR AIR						
Motorized Outdoor Air Dampers with Outdoor Air Hood and Bird Screen		**18X89**				X
Manual Outdoor Air Damper with Outdoor Air Hood and Bird Screen		**18X88**				X
ROOF CURBS						
Hybrid Roof Curbs, Downflow, 14 in. height		**11F70**	X	X		
		11F72			X	
	Full Perimeter	**11F74**				X
Hybrid Roof Curbs, Downflow 24 in. height		**11F71**	X	X		
		11F73			X	
	Full Perimeter	**11F75**				X
Curb Alignment (Adapter plate mates new unit to existing roof curb for replacement of LCE240)		Factory				O

NOTE - Order numbers shown are for ordering field installed accessories.
OX - Configure To Order (Factory Installed) or Field Installed
O = Configure To Order (Factory Installed)
X = Field Installed

SPECIFICATIONS — DIRECT DRIVE | 3 - 5 TON

Model		SCH036H5E	SCH060H5E
Nominal Tonnage		3	5
Efficiency Type		High	High
Blower Type		MSAV® (Multi-Stage Air Volume) (Direct Drive ECM)	MSAV® (Multi-Stage Air Volume) (Direct Drive ECM)
Cooling Performance	Gross Cooling Capacity - Btuh	37,000	60,300
	[1] Net Cooling Capacity - Btuh	35,500	58,000
	AHRI Rated Air Flow - Cfm	1200/850	1750/1300
	Total Unit Power	2.6	4.7
	[1] SEER2 (Btuh/Watt) - 460V/575V-3ph	17.0	16.1
	[1] EER2 (Btuh/Watt) - 460V/575V-3ph	13.5	12.4
Refrigerant Charge	Refrigerant Type	R-454B	R-454B
	Without Reheat Option	5 lbs. 2 oz.	5 lbs. 6 oz.
	With Reheat Option	5 lbs. 8 oz.	5 lbs. 5 oz.
[2] Sound Rating Number	dBA	67	78
Electric Heat Options Available		(See page 22)	
Compressor Type (Number)		Two-Stage Scroll (1)	Two-Stage Scroll (1)
Condenser Coil	Net face area - ft.^{2}	18.7	18.7
	Rows	1	1
	Fins - in.	23	23
Condenser Fan(s)	Motor (number) HP (type)	(2) 1/3 (ECM)	(2) 1/3 (ECM)
	Rpm	340-560	340-860
	Watts	90-136	90-354
	Diameter (Number) - in.	(2) 24	(2) 24
	Blades	3	3
	Total air volume - Cfm	3900	6300
Evaporator Coil	Net face area - ft.^{2}	7.02	7.02
	Rows	1	1
	Fins - in.	20	20
	Condensate drain size (NPT) - in.	(1) 1	(1) 1
	Expansion device type	Balance Port TXV, removable head	
[3] Indoor Blower	Nominal motor HP (type)	1.5 (ECM)	1.5 (ECM)
	Wheel nominal diameter x width - in.	(1) 14 x 5	(1) 14 x 5
Filters	Type of filter	MERV 8 or 13	
	Number and size - in.	(4) 16 x 20 x 2	(4) 16 x 20 x 2
Line voltage data (Volts-Phase-Hz)		460-3-60, 575-3-60	

NOTE - Net capacity includes evaporator blower motor heat deduction. Gross capacity does not include evaporator blower motor heat deduction.

[1] AHRI Certified to AHRI Standard 210/240; 95°F outdoor air temperature and 80°F db/67°F wb entering evaporator air; minimum external duct static pressure.

[2] Sound Rating Number rated in accordance with test conditions included in AHRI Standard 270-95.

[3] Using total air volume and system static pressure requirements determine from blower performance tables rpm and motor output required. Maximum usable output of motors furnished are shown. In Canada, nominal motor output is also maximum usable motor output. If motors of comparable output are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

SPECIFICATIONS — BELT DRIVE | 10 - 20 TON

Model			SCH120H5M	SCH240H5M	
Nominal Tonnage			10	20	
Efficiency Type			High	High	
Blower Type			MSAV® (Multi-Stage Air Volume) (Belt Drive)	MSAV® (Multi-Stage Air Volume) (Belt Drive)	
Cooling Performance		Gross Cooling Capacity - Btuh	123,500	236,000	
		[1] Net Cooling Capacity - Btuh	120,000	228,000	
		AHRI Rated Air Flow - cfm	3800	7100	
		Total Unit Power	10	18.8	
		[1] IEER (Btuh/Watt)	15.6	17.0	
		[1] EER (Btuh/Watt)	12.0	12.2	
Refrigerant Charge		Refrigerant Type	R-454B	R-454B	
	Without Reheat Option	Circuit 1	7 lbs. 0 oz.	6 lbs. 11 oz.	
		Circuit 2	4 lbs. 13 oz.	6 lbs. 1 oz.	
		Circuit 3	- - -	5 lbs. 1 oz.	
		Circuit 4	- - -	5 lbs. 3 oz.	
	With Reheat Option	Circuit 1	7 lbs. 0 oz.	7 lbs. 12 oz.	
		Circuit 2	5 lbs. 2 oz.	7 lbs. 3 oz.	
		Circuit 3	- - -	5 lbs. 5 oz.	
		Circuit 4	- - -	5 lbs. 6 oz.	
[2] Sound Rating Number		dBA	89	92	
Electric Heat Options Available			(See page 22)		
Compressor Type (Number)			Two-Stage Scroll (1) Single-Stage Scroll (1)	Single-Stage Scroll (4)	
Condenser Coil		Net face area - ft.^{2}	45.7	68.3	
		Rows	1	1	
		Fins - in.	23	23	
Condenser Fan(s)		Motor (number) HP (type)	(2) 1/2 (PSC)	(6) 1/3 (PSC)	
		Rpm	1075	1075	
		Watts	1160	1900	
		Diameter (Number) - in.	(2) 24	(6) 24	
		Blades	4	3	
		Total air volume - Cfm	10,000	22,500	
Evaporator Coil		Net face area - ft.^{2}	13.54	32.2	
		Tube diameter - in.	3/8	3/8	
		Number of rows	4	3	
		Fins per inch	14	14	
		Condensate drain size (NPT) - in.	(1) 1	(1) 1	
		Expansion device type	Balance Port TXV, removable head		
[3] Indoor Blower		Nominal motor HP	3	5	7.5
		RPM Range (Standard Static)	Drive #3 - 660-900 rpm	Drive #4 - 520-685 rpm	Drive #7 - 770-965 rpm
		RPM Range (High Static)	Drive #4 - 865-1080 rpm	Drive #5 - 685-865 rpm	- - -
		Wheel nominal diameter x width - in.	(1) 15 x 15	(2) 18 x 15	(2) 18 x 15
Filters		Type of filter	MERV 8 or 13		
		Number and size - in.	(4) 20 x 25 x 2	(12) 20 x 20 x 2	
Line voltage data (Volts-Phase-Hz)			460-3-60, 575-3-60		

NOTE - Net capacity includes evaporator blower motor heat deduction. Gross capacity does not include evaporator blower motor heat deduction.

[1] AHRI Certified to AHRI Standard 340/360: 95°F outdoor air temperature and 80°F db/67°F wb entering evaporator air; minimum external duct static pressure..

[2] Sound Rating Number rated in accordance with test conditions included in AHRI Standard 270-95.

[3] Using total air volume and system static pressure requirements determine from blower performance tables rpm and motor output required. Maximum usable output of motors furnished are shown. In Canada, nominal motor output is also maximum usable motor output. If motors of comparable output are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

NOTE – Units equipped with MSAV® (Multi-Stage Air Volume) are limited to a motor service factor of 1.0.

RATINGS

NOTE - For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

3 TON HIGH EFFICIENCY SCH036H5E - (PART LOAD)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	640	25.5	1.01	0.68	0.81	0.93	23.8	1.18	0.68	0.81	0.95	21.9	1.38	0.67	0.82	0.97	19.8	1.6	0.67	0.84	0.99
	800	27.6	1	0.74	0.88	1	25.8	1.17	0.74	0.89	1	23.8	1.36	0.74	0.91	1	21.5	1.59	0.75	0.94	1
	960	29.1	0.99	0.79	0.96	1	27.3	1.16	0.79	0.97	1	25.3	1.35	0.8	0.99	1	23.3	1.57	0.82	1	1
67°F	640	27.9	1	0.54	0.66	0.77	26.2	1.17	0.53	0.65	0.78	24.2	1.36	0.52	0.65	0.78	22	1.58	0.5	0.65	0.79
	800	30.1	0.98	0.58	0.71	0.85	28.2	1.15	0.57	0.71	0.85	26.2	1.34	0.56	0.71	0.87	23.9	1.56	0.55	0.72	0.89
	960	31.6	0.97	0.61	0.76	0.92	29.7	1.14	0.6	0.77	0.93	27.6	1.32	0.6	0.78	0.95	25.2	1.54	0.6	0.79	0.98
71°F	640	30.5	0.98	0.42	0.53	0.63	28.7	1.15	0.41	0.52	0.63	26.7	1.34	0.39	0.51	0.62	24.5	1.55	0.36	0.49	0.62
	800	32.7	0.96	0.44	0.56	0.69	30.9	1.13	0.42	0.55	0.69	28.8	1.31	0.41	0.55	0.69	26.4	1.53	0.39	0.54	0.69
	960	34.3	0.95	0.46	0.6	0.74	32.4	1.11	0.44	0.59	0.74	30.2	1.3	0.43	0.59	0.75	27.8	1.51	0.41	0.59	0.76

3 TON HIGH EFFICIENCY SCH036H5E - (FULL LOAD)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	960	34.1	2.02	0.66	0.81	0.98	31.7	2.28	0.66	0.83	1	29.1	2.58	0.67	0.85	1	26.4	2.93	0.68	0.88	1
	1200	36.4	2.02	0.72	0.92	1	33.9	2.28	0.73	0.94	1	31.3	2.58	0.75	0.97	1	28.7	2.93	0.77	1	1
	1440	38.7	2.04	0.79	1	1	36.3	2.29	0.81	1	1	33.8	2.59	0.84	1	1	31.1	2.93	0.87	1	1
67°F	960	37.1	2.03	0.51	0.64	0.77	34.6	2.28	0.51	0.64	0.78	31.8	2.58	0.5	0.64	0.8	29	2.93	0.49	0.65	0.83
	1200	39.4	2.04	0.55	0.7	0.87	36.7	2.29	0.55	0.71	0.9	33.9	2.59	0.55	0.72	0.93	30.8	2.93	0.55	0.74	0.97
	1440	41.1	2.05	0.59	0.77	0.97	38.3	2.3	0.59	0.79	1	35.3	2.59	0.59	0.81	1	32.2	2.93	0.6	0.84	1
71°F	960	40.3	2.05	0.39	0.5	0.61	37.7	2.3	0.37	0.49	0.62	34.9	2.59	0.36	0.49	0.62	31.9	2.93	0.34	0.49	0.63
	1200	42.6	2.06	0.4	0.54	0.67	39.9	2.31	0.39	0.54	0.68	36.9	2.6	0.38	0.54	0.69	33.7	2.93	0.37	0.54	0.71
	1440	44.4	2.07	0.42	0.58	0.74	41.4	2.32	0.41	0.58	0.76	38.3	2.6	0.41	0.59	0.78	35.1	2.94	0.4	0.59	0.81

5 TON HIGH EFFICIENCY SCH060H5E - (PART LOAD)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	1070	43.5	1.66	0.68	0.81	0.93	40	1.96	0.67	0.81	0.94	36.3	2.3	0.67	0.82	0.96	32.3	2.7	0.66	0.83	0.99
	1335	46.9	1.62	0.73	0.88	1	43.4	1.92	0.73	0.89	1	39.6	2.27	0.73	0.91	1	35.5	2.66	0.74	0.93	1
	1600	49.7	1.58	0.78	0.95	1	46.3	1.89	0.79	0.96	1	42.3	2.22	0.8	0.98	1	38.3	2.63	0.81	1	1
67°F	1070	47.6	1.61	0.54	0.66	0.77	44.3	1.91	0.52	0.65	0.77	40.5	2.26	0.51	0.64	0.78	36.3	2.66	0.49	0.64	0.79
	1335	51.1	1.56	0.57	0.71	0.84	47.8	1.87	0.56	0.71	0.85	43.7	2.22	0.55	0.71	0.87	39.3	2.59	0.54	0.71	0.89
	1600	53.7	1.53	0.61	0.76	0.91	50.2	1.84	0.6	0.76	0.93	46.1	2.18	0.59	0.77	0.95	41.5	2.57	0.59	0.79	0.98
71°F	1070	52	1.55	0.42	0.53	0.63	48.7	1.85	0.4	0.51	0.63	44.9	2.21	0.38	0.5	0.62	40.5	2.58	0.35	0.48	0.62
	1335	55.8	1.52	0.44	0.56	0.69	52.2	1.82	0.42	0.55	0.68	48.2	2.16	0.4	0.54	0.69	43.8	2.57	0.37	0.53	0.69
	1600	58.4	1.49	0.45	0.6	0.74	54.8	1.79	0.44	0.59	0.74	50.6	2.14	0.42	0.58	0.75	46	2.55	0.4	0.58	0.76

5 TON HIGH EFFICIENCY SCH060H5E - (FULL LOAD)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	1600	58.2	3.3	0.66	0.82	0.98	53.6	3.73	0.67	0.84	1	48.9	4.23	0.67	0.86	1	43.9	4.81	0.68	0.89	1
	2000	62.6	3.33	0.73	0.92	1	57.8	3.75	0.74	0.94	1	52.9	4.25	0.75	0.98	1	48	4.83	0.77	1	1
	2400	66.6	3.35	0.8	1	1	62	3.78	0.81	1	1	57.2	4.28	0.84	1	1	52.4	4.86	0.87	1	1
67°F	1600	63.6	3.33	0.51	0.64	0.78	58.7	3.75	0.5	0.64	0.79	53.7	4.25	0.5	0.65	0.81	48.5	4.84	0.49	0.65	0.84
	2000	67.9	3.36	0.55	0.7	0.87	62.7	3.78	0.55	0.71	0.9	57.4	4.28	0.55	0.72	0.93	51.9	4.86	0.54	0.74	0.97
	2400	71	3.39	0.59	0.77	0.97	65.7	3.8	0.59	0.79	0.99	60.1	4.3	0.59	0.81	1	54.5	4.88	0.6	0.84	1
71°F	1600	69.5	3.37	0.38	0.5	0.62	64.4	3.79	0.37	0.49	0.62	59.2	4.29	0.35	0.49	0.62	53.7	4.87	0.33	0.48	0.63
	2000	74.1	3.41	0.4	0.54	0.68	68.6	3.82	0.39	0.54	0.69	62.9	4.32	0.37	0.54	0.7	57.1	4.9	0.36	0.54	0.72
	2400	77.1	3.44	0.42	0.58	0.74	71.5	3.85	0.41	0.58	0.76	65.5	4.34	0.4	0.59	0.78	59.5	4.92	0.39	0.59	0.81

RATINGS

NOTE - For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

10 TON HIGH EFFICIENCY SCH120H5M (1 COMPRESSOR - FULL LOAD)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	1920	53.2	1.52	1	0.95	0.94	51	1.79	1	0.95	0.94	48.4	2.11	1	0.95	0.94	45.2	2.48	1	0.95	0.95
	2400	56.8	1.49	1	0.95	0.95	54.5	1.76	1	0.95	0.95	51.6	2.09	1	0.95	0.95	48.3	2.46	0.94	0.96	0.95
	2880	59.4	1.46	0.94	0.96	0.95	57	1.75	0.95	0.96	0.95	53.9	2.07	0.97	0.96	0.95	50.5	2.44	0.97	0.96	0.95
67°F	1920	55.9	1.49	1	1	0.93	53.5	1.77	1	1	0.94	50.6	2.1	1	1	0.95	46.9	2.47	1	1	0.96
	2400	58.1	1.47	1	1	0.96	55.5	1.76	1	1	0.96	52.1	2.08	1	1	0.96	48.6	2.45	1	0.92	0.96
	2880	59.7	1.46	1	0.93	0.96	57.1	1.74	1	0.94	0.96	53.9	2.07	1	0.96	0.96	50.6	2.44	1	0.97	0.97
71°F	1920	59.2	1.46	1	1	1	56.7	1.75	1	1	1	53.4	2.07	1	1	1	49.9	2.44	1	1	1
	2400	61.6	1.44	1	1	1	58.6	1.73	1	1	1	55.5	2.06	1	1	1	51.9	2.43	1	1	1
	2880	63.2	1.43	1	1	1	60.2	1.72	1	1	0.93	57.1	2.05	1	1	0.95	53.3	2.42	1	1	0.97

10 TON HIGH EFFICIENCY SCH120H5M (2 COMPRESSORS - PART LOAD / FULL LOAD)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	2560	97.6	5.6	0.68	0.83	0.98	91.4	6.41	0.69	0.85	1	84.7	7.3	0.7	0.87	1	77.8	8.31	0.72	0.93	1
	3200	102.9	5.6	0.72	0.93	1	96.6	6.4	0.76	0.95	1	90.1	7.31	0.78	0.98	1	82.7	8.3	0.81	1	1
	3840	107.6	5.59	0.79	1	1	101.1	6.4	0.82	1	1	94.7	7.29	0.87	1	1	87.9	8.29	0.9	1	1
67°F	2560	104.1	5.59	0.54	0.66	0.78	98.1	6.4	0.54	0.66	0.8	91.1	7.3	0.53	0.68	0.84	83.7	8.29	0.54	0.69	0.87
	3200	109.9	5.58	0.58	0.71	0.89	103.1	6.39	0.58	0.72	0.93	96.1	7.29	0.59	0.74	0.95	88.2	8.29	0.6	0.77	1
	3840	114.2	5.58	0.61	0.78	0.98	106.8	6.39	0.61	0.8	1	99.3	7.28	0.62	0.83	1	91.2	8.29	0.63	0.87	1
71°F	2560	110.9	5.57	0.41	0.53	0.64	104.1	6.38	0.4	0.53	0.65	97.3	7.28	0.4	0.53	0.65	89.6	8.27	0.4	0.54	0.67
	3200	116.8	5.56	0.43	0.56	0.69	109.6	6.37	0.43	0.56	0.71	102.2	7.27	0.43	0.58	0.73	94.3	8.28	0.42	0.59	0.74
	3840	120.9	5.56	0.45	0.6	0.75	113.7	6.37	0.45	0.61	0.78	105.9	7.27	0.45	0.62	0.81	97.6	8.27	0.45	0.64	0.84

10 TON HIGH EFFICIENCY SCH120H5M (2 COMPRESSORS - FULL LOAD)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	3200	119.4	6.66	0.68	0.85	0.99	112.8	7.49	0.69	0.86	1	105.9	8.43	0.7	0.88	1	98.6	9.5	0.72	0.91	1
	4000	125.8	6.73	0.74	0.93	1	118.8	7.55	0.77	0.96	1	112.1	8.51	0.79	0.99	1	104.2	9.58	0.81	1	1
	4800	131	6.77	0.83	1	1	124.1	7.61	0.84	1	1	116.8	8.56	0.86	1	1	109.4	9.63	0.91	1	1
67°F	3200	126.9	6.74	0.55	0.67	0.8	120.3	7.58	0.55	0.67	0.82	112.7	8.52	0.56	0.69	0.85	104.4	9.58	0.55	0.71	0.88
	4000	133.1	6.8	0.58	0.73	0.9	124.9	7.62	0.58	0.74	0.93	117.3	8.56	0.59	0.76	0.96	109.4	9.63	0.61	0.79	1
	4800	136.8	6.84	0.62	0.8	1	128.8	7.66	0.62	0.82	1	120.9	8.6	0.63	0.84	1	112.2	9.67	0.64	0.91	1
71°F	3200	134.9	6.82	0.41	0.54	0.65	126.8	7.65	0.41	0.54	0.65	119.1	8.59	0.4	0.54	0.67	111.6	9.66	0.4	0.56	0.69
	4000	140.4	6.87	0.44	0.57	0.71	132.8	7.71	0.44	0.58	0.72	124.3	8.64	0.44	0.59	0.74	116.1	9.71	0.44	0.6	0.77
	4800	144.8	6.92	0.46	0.62	0.78	136.5	7.75	0.47	0.63	0.8	128.1	8.69	0.46	0.64	0.83	119.5	9.76	0.46	0.65	0.86

RATINGS

NOTE - For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

20 TON HIGH EFFICIENCY SGH240H5M (2 COMPRESSORS - PART LOAD)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	3200	124.4	4.40	0.74	0.86	0.97	118.5	5.24	0.75	0.87	0.98	112.3	6.06	0.76	0.88	0.99	105.3	6.90	0.77	0.9	1
	4000	132.2	4.40	0.79	0.92	1	125.9	5.25	0.8	0.93	1	119.1	6.07	0.81	0.94	1	111.1	6.91	0.82	0.97	1
	4800	137.7	4.40	0.83	0.97	1	131.2	5.25	0.84	0.98	1	123.8	6.07	0.86	1	1	116.4	6.92	0.87	1	1
67°F	3200	131.2	4.40	0.6	0.72	0.84	125.2	5.25	0.6	0.73	0.85	118.7	6.07	0.59	0.73	0.86	111.1	6.91	0.59	0.74	0.87
	4000	139.2	4.40	0.63	0.77	0.89	132.6	5.25	0.63	0.78	0.9	125.2	6.07	0.63	0.79	0.92	117.3	6.92	0.64	0.81	0.94
	4800	144.9	4.41	0.66	0.82	0.94	137.7	5.26	0.66	0.83	0.96	129.9	6.08	0.67	0.84	0.98	122	6.92	0.67	0.85	1
71°F	3200	138.2	4.40	0.46	0.59	0.7	131.9	5.25	0.45	0.59	0.71	124.9	6.07	0.44	0.58	0.71	117.3	6.92	0.44	0.59	0.72
	4000	146.7	4.41	0.47	0.61	0.75	139.4	5.26	0.47	0.62	0.76	131.8	6.08	0.46	0.62	0.77	124.1	6.93	0.46	0.63	0.79
	4800	152.9	4.41	0.49	0.65	0.8	144.8	5.26	0.48	0.65	0.81	137	6.08	0.48	0.66	0.82	128.9	6.93	0.48	0.67	0.84

20 TON HIGH EFFICIENCY SGH240H5M (4 COMPRESSORS - FULL LOAD)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	6400	238.2	12.53	0.76	0.88	0.98	223.2	14.25	0.77	0.9	0.99	209.7	16.11	0.78	0.91	1	193.8	18.19	0.8	0.93	1
	8000	251.7	12.56	0.81	0.94	1	237.3	14.28	0.82	0.96	1	222.6	16.14	0.84	0.97	1	205.8	18.21	0.86	1	1
	9600	262.7	12.58	0.86	0.99	1	247.6	14.30	0.88	1	1	232.2	16.15	0.89	1	1	216.5	18.22	0.91	1	1
67°F	6400	254.3	12.57	0.59	0.73	0.86	238.9	14.29	0.6	0.74	0.87	223.1	16.14	0.59	0.76	0.89	205.8	18.20	0.6	0.77	0.91
	8000	265.7	12.58	0.63	0.8	0.92	249.6	14.30	0.63	0.81	0.94	232.9	16.15	0.64	0.83	0.95	215	18.21	0.65	0.85	0.98
	9600	274.5	12.59	0.66	0.85	0.97	257.9	14.31	0.68	0.86	0.99	240.4	16.16	0.69	0.88	1	222.1	18.22	0.7	0.9	1
71°F	6400	269.3	12.59	0.44	0.58	0.71	253.8	14.31	0.43	0.58	0.72	236.9	16.15	0.43	0.59	0.74	220	18.22	0.42	0.59	0.76
	8000	282.2	12.60	0.46	0.62	0.77	265.3	14.32	0.45	0.63	0.79	248.1	16.17	0.45	0.64	0.81	229.7	18.22	0.45	0.65	0.83
	9600	291	12.61	0.48	0.66	0.83	273.6	14.33	0.48	0.67	0.84	255.1	16.18	0.48	0.68	0.86	236	18.23	0.48	0.7	0.89

HUMIDITROL® DEHUMIDIFICATION SYSTEM RATINGS

3 TON HIGH EFFICIENCY SCH036H5E WITH HUMIDITROL® OPERATING - DIRECT DRIVE

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	640	25.42	1.56	0.44	0.57	0.70	21.56	1.70	0.38	0.53	0.68	17.68	1.87	0.29	0.47	0.66	13.76	2.07	0.15	0.39	0.62
	800	27.19	1.61	0.47	0.62	0.77	22.60	1.74	0.40	0.59	0.77	17.94	1.91	0.30	0.53	0.76	13.23	2.11	0.13	0.44	0.75
	960	28.38	1.64	0.51	0.68	0.85	23.03	1.77	0.44	0.65	0.86	17.68	1.93	0.33	0.61	0.88	12.26	2.13	0.12	0.53	0.90
67°F	640	29.06	1.60	0.33	0.44	0.55	25.13	1.74	0.26	0.39	0.52	21.14	1.91	0.16	0.31	0.47	17.14	2.11	0.02	0.21	0.40
	800	31.27	1.66	0.34	0.47	0.60	26.51	1.79	0.26	0.42	0.57	21.73	1.95	0.15	0.34	0.53	16.91	2.14	-0.03	0.21	0.46
	960	32.76	1.70	0.36	0.51	0.66	27.26	1.82	0.27	0.45	0.63	21.79	1.98	0.14	0.37	0.60	16.21	2.17	-0.08	0.23	0.53
71°F	640	32.97	1.65	0.24	0.34	0.43	28.91	1.79	0.16	0.28	0.39	24.82	1.95	0.07	0.20	0.33	20.68	2.15	-0.07	0.09	0.25
	800	35.56	1.71	0.24	0.35	0.47	30.61	1.84	0.15	0.29	0.42	25.72	1.99	0.04	0.20	0.36	20.77	2.18	-0.14	0.06	0.26
	960	37.40	1.75	0.25	0.38	0.51	31.76	1.87	0.15	0.31	0.46	26.11	2.01	0.02	0.21	0.40	20.30	2.22	-0.20	0.04	0.29

5 TON HIGH EFFICIENCY SCH060H5E WITH HUMIDITROL® OPERATING - DIRECT DRIVE

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	1070	36.06	2.79	0.40	0.56	0.71	30.82	3.01	0.33	0.51	0.69	25.51	3.30	0.22	0.44	0.66	19.96	3.66	0.05	0.33	0.61
	1335	38.26	2.88	0.44	0.62	0.80	31.86	3.10	0.36	0.58	0.79	25.28	3.38	0.24	0.51	0.78	18.69	3.74	0.02	0.40	0.77
	1600	39.78	2.95	0.49	0.70	0.90	32.32	3.16	0.40	0.66	0.91	24.73	3.45	0.27	0.61	0.93	17.02	3.80	0.02	0.52	0.92
67°F	1070	41.44	2.88	0.27	0.40	0.54	36.03	3.10	0.18	0.34	0.49	30.43	3.38	0.07	0.25	0.43	24.87	3.75	-0.10	0.13	0.35
	1335	44.17	2.97	0.28	0.44	0.60	37.56	3.19	0.19	0.38	0.56	30.79	3.47	0.05	0.28	0.51	23.87	3.83	-0.17	0.13	0.42
	1600	46.08	3.05	0.31	0.49	0.67	38.38	3.26	0.20	0.42	0.64	30.55	3.54	0.05	0.32	0.59	22.63	3.89	-0.22	0.15	0.52
71°F	1070	47.23	2.97	0.16	0.28	0.40	41.61	3.19	0.07	0.21	0.34	35.84	3.48	-0.04	0.12	0.27	29.92	3.83	-0.20	-0.01	0.17
	1335	50.49	3.08	0.16	0.30	0.44	43.63	3.29	0.06	0.22	0.38	36.61	3.57	-0.08	0.11	0.30	29.49	3.93	-0.28	-0.04	0.19
	1600	52.74	3.16	0.16	0.32	0.48	44.83	3.37	0.05	0.24	0.43	36.76	3.65	-0.11	0.12	0.35	28.58	4.00	-0.36	-0.07	0.23

10 TON HIGH EFFICIENCY SCH120H5M WITH HUMIDITROL® OPERATING (PART LOAD) - MSAV®

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	1920	43.70	2.6	0.56	0.76	0.94	33.16	2.8	0.46	0.74	0.93	22.62	3.0	0.28	0.71	0.93	12.80	3.4	-0.18	0.65	0.92
	2400	45.97	2.7	0.63	0.88	0.95	34.36	2.8	0.57	0.90	0.94	23.72	3.1	0.45	0.92	0.94	13.68	3.4	0.14	0.94	0.93
	2880	49.10	2.7	0.72	0.96	0.95	37.21	2.9	0.68	0.96	0.95	26.10	3.2	0.62	0.96	0.95	15.63	3.5	0.46	0.96	0.95
67°F	1920	50.42	2.7	0.35	0.54	0.74	39.18	2.9	0.22	0.47	0.72	28.75	3.1	0.01	0.36	0.69	18.59	3.4	-0.42	0.14	0.65
	2400	52.63	2.7	0.40	0.64	0.86	40.81	2.9	0.28	0.59	0.86	29.63	3.2	0.10	0.51	0.89	18.85	3.5	-0.28	0.37	0.92
	2880	54.20	2.8	0.47	0.72	0.95	41.97	3.0	0.36	0.70	0.97	29.95	3.2	0.16	0.66	0.97	18.44	3.5	-0.25	0.59	0.98
71°F	1920	57.13	2.8	0.21	0.38	0.56	46.02	2.9	0.06	0.29	0.49	35.32	3.2	-0.11	0.14	0.41	24.96	3.5	-0.58	-0.11	0.29
	2400	59.71	2.8	0.25	0.44	0.64	47.69	3.0	0.10	0.35	0.61	36.00	3.3	-0.15	0.20	0.55	24.90	3.6	-0.61	-0.03	0.45
	2880	61.22	2.9	0.25	0.49	0.72	48.73	3.1	0.15	0.43	0.71	36.56	3.3	-0.08	0.30	0.69	24.21	3.6	-0.54	0.07	0.65

10 TON HIGH EFFICIENCY SCH120H5E WITH HUMIDITROL® OPERATING (FULL LOAD) - MSAV®

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	3200	103.47	5.2	0.66	0.81	0.95	91.70	5.8	0.64	0.81	0.97	80.05	6.6	0.61	0.83	0.99	68.00	7.4	0.58	0.82	1.01
	4000	107.62	5.2	0.72	0.90	1.02	95.47	5.9	0.70	0.91	1.03	82.57	6.7	0.68	0.92	1.03	69.57	7.5	0.69	0.95	1.04
	4800	113.15	5.3	0.78	0.98	1.03	99.69	6.0	0.78	1.00	1.03	86.54	6.7	0.80	1.02	1.03	73.01	7.5	0.79	1.04	1.04
67°F	3200	112.93	5.3	0.49	0.65	0.78	101.10	5.9	0.47	0.63	0.78	89.21	6.7	0.43	0.61	0.78	77.15	7.5	0.38	0.58	0.79
	4000	117.62	5.3	0.53	0.71	0.86	104.86	6.0	0.49	0.69	0.88	91.74	6.7	0.45	0.68	0.89	77.56	7.5	0.40	0.67	0.91
	4800	122.50	5.4	0.57	0.77	0.95	108.55	6.0	0.56	0.78	0.97	94.25	6.8	0.52	0.77	1.00	79.73	7.6	0.47	0.78	1.03
71°F	3200	122.86	5.3	0.36	0.50	0.64	110.76	6.0	0.32	0.47	0.62	98.97	6.8	0.26	0.44	0.61	85.66	7.6	0.19	0.40	0.58
	4000	127.85	5.4	0.36	0.53	0.69	114.56	6.1	0.33	0.51	0.68	100.90	6.8	0.27	0.46	0.67	87.42	7.6	0.19	0.43	0.66
	4800	133.09	5.5	0.39	0.58	0.76	118.84	6.1	0.34	0.57	0.76	104.23	6.9	0.31	0.55	0.77	89.41	7.7	0.24	0.51	0.77

20 TON HIGH EFFICIENCY SCH240H5E WITH HUMIDITROL® OPERATING (PART LOAD) - MSAV®

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	3200	124.4	4.40	0.74	0.86	0.97	118.5	5.24	0.75	0.87	0.98	112.3	6.06	0.76	0.88	0.99	105.3	6.90	0.77	0.9	1
	4000	132.2	4.40	0.79	0.92	1	125.9	5.25	0.8	0.93	1	119.1	6.07	0.81	0.94	1	111.1	6.91	0.82	0.97	1
	4800	137.7	4.40	0.83	0.97	1	131.2	5.25	0.84	0.98	1	123.8	6.07	0.86	1	1	116.4	6.92	0.87	1	1
67°F	3200	131.2	4.40	0.6	0.72	0.84	125.2	5.25	0.6	0.73	0.85	118.7	6.07	0.59	0.73	0.86	111.1	6.91	0.59	0.74	0.87
	4000	139.2	4.40	0.63	0.77	0.89	132.6	5.25	0.63	0.78	0.9	125.2	6.07	0.63	0.79	0.92	117.3	6.92	0.64	0.81	0.94
	4800	144.9	4.41	0.66	0.82	0.94	137.7	5.26	0.66	0.83	0.96	129.9	6.08	0.67	0.84	0.98	122	6.92	0.67	0.85	1
71°F	3200	138.2	4.40	0.46	0.59	0.7	131.9	5.25	0.45	0.59	0.71	124.9	6.07	0.44	0.58	0.71	117.3	6.92	0.44	0.59	0.72
	4000	146.7	4.41	0.47	0.61	0.75	139.4	5.26	0.47	0.62	0.76	131.8	6.08	0.46	0.62	0.77	124.1	6.93	0.46	0.63	0.79
	4800	152.9	4.41	0.49	0.65	0.8	144.8	5.26	0.48	0.65	0.81	137	6.08	0.48	0.66	0.82	128.9	6.93	0.48	0.67	0.84

20 TON HIGH EFFICIENCY SCH240H5E WITH HUMIDITROL® OPERATING (FULL LOAD) - MSAV®

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	6400	238.2	12.53	0.76	0.88	0.98	223.2	14.25	0.77	0.9	0.99	209.7	16.11	0.78	0.91	1	193.8	18.19	0.8	0.93	1
	8000	251.7	12.56	0.81	0.94	1	237.3	14.28	0.82	0.96	1	222.6	16.14	0.84	0.97	1	205.8	18.21	0.86	1	1
	9600	262.7	12.58	0.86	0.99	1	247.6	14.30	0.88	1	1	232.2	16.15	0.89	1	1	216.5	18.22	0.91	1	1
67°F	6400	254.3	12.57	0.59	0.73	0.86	238.9	14.29	0.6	0.74	0.87	223.1	16.14	0.59	0.76	0.89	205.8	18.20	0.6	0.77	0.91
	8000	265.7	12.58	0.63	0.8	0.92	249.6	14.30	0.63	0.81	0.94	232.9	16.15	0.64	0.83	0.95	215	18.21	0.65	0.85	0.98
	9600	274.5	12.59	0.66	0.85	0.97	257.9	14.31	0.68	0.86	0.99	240.4	16.16	0.69	0.88	1	222.1	18.22	0.7	0.9	1
71°F	6400	269.3	12.59	0.44	0.58	0.71	253.8	14.31	0.43	0.58	0.72	236.9	16.15	0.43	0.59	0.74	220	18.22	0.42	0.59	0.76
	8000	282.2	12.60	0.46	0.62	0.77	265.3	14.32	0.45	0.63	0.79	248.1	16.17	0.45	0.64	0.81	229.7	18.22	0.45	0.65	0.83
	9600	291	12.61	0.48	0.66	0.83	273.6	14.33	0.48	0.67	0.84	255.1	16.18	0.48	0.68	0.86	236	18.23	0.48	0.7	0.89

SCH036H5E / SCH060H5E BLOWER PERFORMANCE

NOTE - Blower Table Includes Resistance For Base Unit With Electric Heat, Wet Indoor Coil And Air Filters In Place.

NOTE - MINIMUM AIR VOLUME REQUIRED FOR USE WITH OPTIONAL ELECTRIC HEAT:

SCH036H - 1020 CFM

SCH060H - 1650 CFM

Air Volume cfm	EXTERNAL STATIC PRESSURE - In. w.g.																			
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8		0.9		1.0	
	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts
900	1163	129	1253	148	1341	165	1428	181	1512	191	1587	206	1653	232	1714	266	1775	301	1835	333
1000	1315	129	1396	152	1475	174	1552	195	1626	216	1692	242	1752	277	1810	316	1870	351	1928	382
1100	1463	131	1531	164	1599	197	1666	229	1730	261	1791	295	1850	331	1907	367	1964	400	2021	432
1200	1576	173	1640	210	1705	247	1769	283	1832	319	1893	353	1952	387	2010	420	2067	452	2124	485
1300	1683	225	1749	263	1814	300	1878	337	1941	372	2002	407	2061	441	2119	474	2176	507	2235	538
1400	1796	279	1862	317	1927	354	1991	391	2054	427	2114	463	2173	497	2231	530	2289	563	2345	595
1500	1912	332	1977	371	2042	409	2105	446	2168	482	2228	517	2287	552	2345	585	2401	618	2453	652
1600	2037	368	2100	410	2163	452	2224	492	2284	532	2343	570	2399	607	2454	643	2507	679	2553	716
1700	2161	403	2221	453	2280	502	2338	548	2393	594	2445	637	2496	678	2545	718	2592	757	2633	798
1800	2271	463	2329	519	2384	574	2437	625	2487	674	2533	721	2578	765	2621	808	2663	851	2701	892
1900	2372	545	2429	602	2482	657	2533	709	2579	758	2623	805	2665	850	2705	893	2745	936	2782	977
2000	2475	631	2530	687	2582	741	2631	792	2676	840	2718	886	2758	930	2797	973	2836	1015	2872	1056
2100	2582	719	2635	774	2684	827	2731	876	2774	923	2814	968	2853	1011	2892	1054	2928	1095	2964	1136
2200	2694	811	2742	863	2789	914	2833	962	2874	1007	2913	1051	2951	1094	2987	1136	3023	1176	3058	1216
2300	2807	904	2852	954	2896	1002	2937	1048	2976	1093	3013	1136	3050	1177	3085	1218	3119	1258	3153	1298
2400	2921	998	2963	1045	3003	1091	3042	1136	3079	1179	3114	1220	3149	1261	3183	1301	3216	1341	3249	1379
Air Volume cfm	**1.1**		**1.2**		**1.3**		**1.4**		**1.5**		**1.6**		**1.7**		**1.8**		**1.9**		**2.0**	
	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts
900	1892	364	1946	393	1997	422	2047	449	2095	476	2141	501	2186	524	2229	546	2271	569	2313	592
1000	1983	413	2036	442	2086	471	2136	498	2184	525	2232	550	2278	575	2322	600	2364	625	2403	653
1100	2076	462	2128	492	2179	521	2229	549	2279	576	2328	603	2375	630	2418	659	2456	689	2489	721
1200	2180	516	2233	546	2285	575	2336	604	2386	632	2434	660	2477	690	2515	721	2547	755	2574	791
1300	2291	569	2343	600	2392	632	2437	663	2482	694	2524	726	2562	759	2595	793	2623	829	2648	866
1400	2397	628	2440	663	2477	701	2511	739	2549	775	2585	810	2619	845	2651	880	2680	916	2709	952
1500	2496	690	2529	732	2554	776	2580	820	2614	858	2648	895	2682	931	2715	965	2747	1000	2779	1034
1600	2589	758	2616	803	2638	851	2662	895	2696	932	2735	958	2775	977	2814	996	2852	1018	2887	1046
1700	2667	841	2694	886	2720	931	2747	974	2782	1008	2825	1022	2870	1026	2913	1035	2951	1056	2982	1096
1800	2736	933	2769	974	2801	1014	2833	1054	2869	1087	2911	1102	2952	1115	2988	1143	3015	1195	3031	1277
1900	2818	1017	2852	1055	2887	1094	2921	1132	2955	1167	2991	1197	3023	1238	3045	1303	3055	1400	3053	1529
2000	2907	1095	2942	1134	2976	1173	3010	1211	3043	1248	3072	1295	3092	1366	3100	1469	3094	1608	3076	1780
2100	2999	1175	3033	1214	3067	1252	3100	1290	3132	1330	3155	1394	3163	1494	3156	1635	3134	1817	3100	2032
2200	3092	1255	3125	1294	3158	1331	3191	1369	3222	1411	3238	1492	3235	1622	3213	1801	3175	2026	3124	2283
2300	3186	1336	3218	1373	3250	1411	3283	1448	3312	1493	3321	1590	3307	1750	3270	1967	3215	2234	3147	2535
2400	3280	1417	3311	1453	3342	1490	3374	1526	3402	1574	3405	1689	3379	1878	3327	2134	3256	2443	3171	2787

SCH120H5M BLOWER PERFORMANCE
NOTE - Blower Table Includes Resistance For Base Unit With Electric Heat, Wet Indoor Coil And Air Filters In Place.
NOTE - MINIMUM AIR VOLUME REQUIRED FOR USE WITH OPTIONAL ELECTRIC HEAT - 3800 CFM.
See Blower Motor / Drive Kit Table on page 34 for Motor HP and Drive Kit RPM Ranges Available.

Air Volume cfm	EXTERNAL STATIC PRESSURE - In. w.g.																							
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8		0.9		1.0		1.1		1.2		1.3	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2000	418	0.26	453	0.33	490	0.41	530	0.48	573	0.55	617	0.62	658	0.68	697	0.76	734	0.84	767	0.93	797	1.01	825	1.09	852	1.17
2200	430	0.34	465	0.42	502	0.49	543	0.56	586	0.63	630	0.70	671	0.78	709	0.86	745	0.95	778	1.04	807	1.12	835	1.21	863	1.29
2400	444	0.44	478	0.50	516	0.57	557	0.65	601	0.72	644	0.80	683	0.88	721	0.97	757	1.07	789	1.16	818	1.25	847	1.33	875	1.41
2600	458	0.53	493	0.60	530	0.67	572	0.74	616	0.82	658	0.91	697	1.00	734	1.09	769	1.19	801	1.29	830	1.38	859	1.46	888	1.55
2800	473	0.63	508	0.70	547	0.77	589	0.85	632	0.93	673	1.03	711	1.13	747	1.23	781	1.33	813	1.43	843	1.52	872	1.60	902	1.69
3000	489	0.74	525	0.81	564	0.89	607	0.97	649	1.06	688	1.16	725	1.27	761	1.38	795	1.48	826	1.58	857	1.66	887	1.75	918	1.84
3200	506	0.86	543	0.93	583	1.01	625	1.10	666	1.20	703	1.31	740	1.42	775	1.53	809	1.64	841	1.73	871	1.82	902	1.91	934	2.01
3400	525	0.99	563	1.07	603	1.15	644	1.24	682	1.36	719	1.48	755	1.59	790	1.70	824	1.80	856	1.90	887	1.99	919	2.08	951	2.18
3600	545	1.13	583	1.21	623	1.30	662	1.41	699	1.53	735	1.65	771	1.77	806	1.87	840	1.97	872	2.07	903	2.16	936	2.25	969	2.36
3800	566	1.28	604	1.36	643	1.46	679	1.58	715	1.71	752	1.84	788	1.95	823	2.06	856	2.16	889	2.25	921	2.34	954	2.43	987	2.54
4000	587	1.44	625	1.53	661	1.64	697	1.78	733	1.91	770	2.03	806	2.15	841	2.25	874	2.34	906	2.43	938	2.52	971	2.61	1005	2.71
4200	609	1.60	645	1.71	680	1.85	715	1.99	751	2.12	788	2.24	825	2.35	859	2.44	892	2.53	924	2.62	957	2.71	989	2.80	1023	2.89
4400	629	1.79	664	1.92	698	2.07	734	2.21	771	2.34	808	2.45	844	2.55	878	2.64	911	2.73	943	2.81	975	2.89	1008	2.98	1041	3.08
4600	650	2.00	683	2.15	717	2.30	753	2.44	791	2.56	829	2.66	864	2.76	897	2.84	930	2.92	962	3.00	994	3.08	1026	3.17	1060	3.26
4800	669	2.23	702	2.39	737	2.55	774	2.67	813	2.78	850	2.88	884	2.97	917	3.05	949	3.12	981	3.20	1013	3.28	1045	3.36	1079	3.45

NOTE - MSAV® (Multi-Stage Air Volume) drive is capable of 350 - 1050 rpm.

SCH240H5M BLOWER PERFORMANCE

NOTE - Blower Table Includes Resistance For Base Unit With Electric Heat, Wet Indoor Coil And Air Filters In Place.

NOTE - MINIMUM AIR VOLUME REQUIRED FOR USE WITH OPTIONAL ELECTRIC HEAT - 8000 CFM.

See Blower Motor / Drive Kit Table on page 34 for Motor HP and Drive Kit RPM Ranges Available.

Air Volume cfm	EXTERNAL STATIC PRESSURE - In. w.g.																									
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8		0.9		1.0		1.1		1.2		1.3	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2000	255	0.33	310	0.48	366	0.63	416	0.74	458	0.81	498	0.89	537	0.99	573	1.10	607	1.22	642	1.35	677	1.49	712	1.65	749	1.80
2200	258	0.37	313	0.52	369	0.67	418	0.78	460	0.85	500	0.92	538	1.03	574	1.15	609	1.27	643	1.40	678	1.55	714	1.70	751	1.86
2400	261	0.40	316	0.56	372	0.70	421	0.81	462	0.88	502	0.96	540	1.07	576	1.19	610	1.32	645	1.45	680	1.60	716	1.76	753	1.92
2600	265	0.44	319	0.60	375	0.74	423	0.85	464	0.92	505	1.00	542	1.11	578	1.24	612	1.37	646	1.51	682	1.66	718	1.82	755	1.98
2800	268	0.48	322	0.63	378	0.77	426	0.89	467	0.95	507	1.04	545	1.16	580	1.29	614	1.42	648	1.56	684	1.72	720	1.88	757	2.04
3000	272	0.51	326	0.67	382	0.81	429	0.92	470	0.99	510	1.09	547	1.21	582	1.34	616	1.48	650	1.63	686	1.78	723	1.94	759	2.10
3200	276	0.55	330	0.71	386	0.85	433	0.96	473	1.03	513	1.13	550	1.26	584	1.40	618	1.54	652	1.69	688	1.85	725	2.01	762	2.16
3400	280	0.59	335	0.74	391	0.88	437	1.00	477	1.08	516	1.18	552	1.32	587	1.46	620	1.61	655	1.76	691	1.91	727	2.07	764	2.23
3600	285	0.62	340	0.78	395	0.92	441	1.04	480	1.12	520	1.24	555	1.38	589	1.53	623	1.67	657	1.83	693	1.98	730	2.14	767	2.30
3800	290	0.66	345	0.81	400	0.96	445	1.08	484	1.17	523	1.29	559	1.44	592	1.59	626	1.74	660	1.90	696	2.06	733	2.22	770	2.38
4000	296	0.69	351	0.85	406	0.99	449	1.12	488	1.22	527	1.35	562	1.51	595	1.66	629	1.82	663	1.97	699	2.14	736	2.30	773	2.46
4200	301	0.73	358	0.88	411	1.03	453	1.17	493	1.27	531	1.41	565	1.57	599	1.73	632	1.89	666	2.05	702	2.22	739	2.39	776	2.56
4400	308	0.76	364	0.92	416	1.07	458	1.22	497	1.33	534	1.48	569	1.64	602	1.81	635	1.97	670	2.14	706	2.31	743	2.48	779	2.66
4600	315	0.80	371	0.95	422	1.12	463	1.26	502	1.39	539	1.54	573	1.71	606	1.88	639	2.05	673	2.22	710	2.40	746	2.58	783	2.76
4800	322	0.83	378	0.99	427	1.16	468	1.32	507	1.45	543	1.62	577	1.79	609	1.96	642	2.14	677	2.32	714	2.50	751	2.69	788	2.87
5000	330	0.86	386	1.03	433	1.21	473	1.38	512	1.52	547	1.69	581	1.87	613	2.05	647	2.22	682	2.41	718	2.60	755	2.79	792	2.98
5200	338	0.89	393	1.07	438	1.27	478	1.44	517	1.59	551	1.77	585	1.95	617	2.13	651	2.32	686	2.50	722	2.70	759	2.89	796	3.08
5400	346	0.92	400	1.12	444	1.33	484	1.51	522	1.67	556	1.86	589	2.04	622	2.23	655	2.41	690	2.60	727	2.79	764	2.98	801	3.17
5600	355	0.96	407	1.17	450	1.40	490	1.58	528	1.76	561	1.96	594	2.14	626	2.33	660	2.51	695	2.70	732	2.89	769	3.08	806	3.27
5800	364	1.00	414	1.23	457	1.47	496	1.65	533	1.85	566	2.06	599	2.24	631	2.43	665	2.61	701	2.81	737	3.00	774	3.19	811	3.38
6000	372	1.04	422	1.29	463	1.54	502	1.73	539	1.95	571	2.17	604	2.35	636	2.53	670	2.72	706	2.91	743	3.11	779	3.30	816	3.50
6200	381	1.08	429	1.36	470	1.62	508	1.82	544	2.05	576	2.28	609	2.46	641	2.64	676	2.82	712	3.02	749	3.22	785	3.42	822	3.62
6400	390	1.14	437	1.44	477	1.71	515	1.92	550	2.16	582	2.39	614	2.57	647	2.74	682	2.93	718	3.14	755	3.34	792	3.54	828	3.75
6600	399	1.20	444	1.53	484	1.80	521	2.02	556	2.28	587	2.51	620	2.68	653	2.85	688	3.04	725	3.25	762	3.46	798	3.67	835	3.87
6800	408	1.27	452	1.62	491	1.89	528	2.13	562	2.40	593	2.63	625	2.80	659	2.96	694	3.15	731	3.37	768	3.58	805	3.80	842	4.01
7000	417	1.35	460	1.71	498	1.99	535	2.24	568	2.52	599	2.74	631	2.91	665	3.08	700	3.27	737	3.48	775	3.70	812	3.92	848	4.14
7200	426	1.45	467	1.82	505	2.10	541	2.36	574	2.65	606	2.86	638	3.02	671	3.19	707	3.39	744	3.60	781	3.83	818	4.05	855	4.27
7400	435	1.55	475	1.93	513	2.22	548	2.49	580	2.77	612	2.98	644	3.14	677	3.31	713	3.50	750	3.72	788	3.94	825	4.17	861	4.39
7600	444	1.67	483	2.05	520	2.34	555	2.62	587	2.90	618	3.10	650	3.26	684	3.43	719	3.62	756	3.84	794	4.06	831	4.29	868	4.51
7800	452	1.80	491	2.18	528	2.47	562	2.75	594	3.02	625	3.22	657	3.38	690	3.55	726	3.74	763	3.96	800	4.18	837	4.40	874	4.62
8000	461	1.93	500	2.31	536	2.61	570	2.89	601	3.15	632	3.35	664	3.51	697	3.67	732	3.87	769	4.08	806	4.30	843	4.52	880	4.74
8200	470	2.08	508	2.45	544	2.75	577	3.03	608	3.29	639	3.47	671	3.63	704	3.80	739	3.99	775	4.20	812	4.42	849	4.64	886	4.86
8400	479	2.23	516	2.60	552	2.90	585	3.18	615	3.42	646	3.60	678	3.76	711	3.93	746	4.11	782	4.32	819	4.54	855	4.76	892	4.98
8600	488	2.39	525	2.76	560	3.05	592	3.33	623	3.56	653	3.74	685	3.89	718	4.06	752	4.24	788	4.44	825	4.66	862	4.88	898	5.10
8800	498	2.56	533	2.91	568	3.21	600	3.48	630	3.70	661	3.87	692	4.02	725	4.19	759	4.37	795	4.57	831	4.78	868	5.00	904	5.21
9000	507	2.73	542	3.08	576	3.37	608	3.63	638	3.85	668	4.01	699	4.16	732	4.32	766	4.50	802	4.69	838	4.90	874	5.12	911	5.33
9200	516	2.91	551	3.25	584	3.53	616	3.78	645	3.99	676	4.15	707	4.29	739	4.45	773	4.63	808	4.82	844	5.03	881	5.24	917	5.46
9400	526	3.09	560	3.42	593	3.69	623	3.94	653	4.13	683	4.28	714	4.43	746	4.58	780	4.76	815	4.95	851	5.15	887	5.36	923	5.58
9600	535	3.27	569	3.59	601	3.86	631	4.10	661	4.28	691	4.42	721	4.56	753	4.72	787	4.89	822	5.08	858	5.28	894	5.49	930	5.70

BLOWER DATA

MSAV® (MULTI-STAGE AIR VOLUME) BELT DRIVE KIT SPECIFICATIONS

Size	Nominal / Maximum - hp	Drive Kit Number	RPM Range
120	3	#3 #4	660 - 900 865 - 1080
240	5	#4 #5	520 - 685 685 - 865
	7.5	#7	770 - 965

FACTORY INSTALLED OPTIONS/FIELD INSTALLED ACCESSORY AIR RESISTANCE - in. w.g.

Air Volume cfm	Humiditrol Dehumidification Coil	Economizer	Filters MERV 13
036, 060 Size			
800	0.00	0.04	0.05
1000	0.00	0.04	0.07
1200	0.01	0.04	0.07
1400	0.02	0.04	0.07
1600	0.03	0.04	0.07
1800	0.04	0.05	0.07
2000	0.04	0.05	0.08
120 Size			
2000	0.03	0.06	0.03
2500	0.04	0.11	0.05
3000	0.05	0.13	0.06
3500	0.06	0.15	0.07
4000	0.08	0.19	0.08
4500	0.10	0.22	0.09
5000	0.12	0.29	0.10
5500	0.14	0.34	0.12
6000	0.15	0.52	0.13
240 Size			
3000	0.02	0.00	0.00
3500	0.04	0.00	0.00
4000	0.04	0.00	0.00
4500	0.04	0.00	0.00
5000	0.04	0.00	0.00
5500	0.06	0.01	0.01
6000	0.06	0.01	0.02
6500	0.08	0.01	0.02
7000	0.08	0.02	0.03
7500	0.10	0.02	0.04
8000	0.10	0.02	0.04
8500	0.10	0.03	0.04
9000	0.12	0.04	0.04
9500	0.14	0.04	0.06

POWER EXHAUST FANS STANDARD STATIC PERFORMANCE

120 Model		240 Model	
Return Air System Static Pressure	Air Volume Exhausted	Return Air System Static Pressure	Air Volume Exhausted
in. w.g.	cfm	in. w.g.	cfm
0.05	4085	0	10,200
0.10	3685	0.05	9700
0.15	3280	0.10	9200
0.20	2880	0.15	8600
0.25	2475	0.20	8100
- - -	- - -	0.25	7600
- - -	- - -	0.30	6900
- - -	- - -	0.35	6000
- - -	- - -	0.40	5000
- - -	- - -	0.45	4150

ELECTRICAL/ELECTRIC HEAT DATA — DIRECT DRIVE | 3 - 5 TON

Model			SCH036H5E		SCH060H5E	
[1] Voltage - 60Hz			460V-3ph	575V-3ph	460V-3ph	575V-3ph
Compressor (Non-Inverter)		Rated Load Amps	4.6	3.5	6.5	4.8
		Locked Rotor Amps	39	28.9	60	41
Outdoor Fan Motor		Full Load Amps (2 ECM)	0.3	0.3	0.7	0.7
		Total	0.6	0.6	1.4	1.4
Service Outlet 115V GFI (Amps)			20	20	20	20
Indoor Blower Motor		HP	1.5	1.5	1.5	1.5
		Type	Direct (ECM)	Direct (ECM)	Direct (ECM)	Direct (ECM)
		Full Load Amps	2.3	2.3	2.3	2.3
[2] Maximum Overcurrent Protection (MOCP)		Unit Only	15	15	15	15
[3] Minimum Circuit Ampacity (MCA)		Unit Only	9	8	12	10

ELECTRIC HEAT DATA

Electric Heat Voltage			480V	575V	480V	575V
[2] Maximum Overcurrent Protection (MOCP)	Unit+ Electric Heat	**10 kW**	20	- - -	20	- - -
		15 kW	30	25	30	25
		20 kW	- - -	- - -	35	- - -
		30 kW	- - -	- - -	50	40
[3] Minimum Circuit Ampacity (MCA)	Unit+ Electric Heat	**10 kW**	18	- - -	18	- - -
		15 kW	26	21	26	21
		20 kW	- - -	- - -	33	- - -
		30 kW	- - -	- - -	48	39

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 35kA.

[1] NOTE − Extremes of operating range are plus and minus 10% of line voltage.

[2] HACR type breaker or fuse.

[3] Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

ELECTRICAL/ELECTRIC HEAT DATA — BELT DRIVE |10 TON

Model			SCH120H5M	
[1] Voltage - 60Hz			460V-3ph	575V-3ph
Compressor (Non-Inverter)	Rated Load Amps		6.5	4.8
	Locked Rotor Amps		60	41
Compressor (Non-Inverter)	Rated Load Amps		6.6	4.8
	Locked Rotor Amps		60	41
Outdoor Fan Motors	Full Load Amps (2 Non-ECM)		1.5	1.2
	Total		3	2.4
Power Exhaust (1) 0.5 HP	Full Load Amps		1.5	1.2
Service Outlet 115V GFI (Amps)			20	20
Indoor Blower Motor	HP		3	3
	Type		Belt	Belt
	Full Load Amps		4.8	3.9
[2] Maximum Overcurrent Protection (MOCP)	Unit Only		25	20
	With (1) 0.5 HP Power Exhaust		30	20
[3] Minimum Circuit Ampacity (MCA)	Unit Only		23	18
	With (1) 0.5 HP Power Exhaust		25	19

ELECTRIC HEAT DATA

Electric Heat Voltage			480V	600V
[2] Maximum Overcurrent Protection (MOCP)	Unit+ Electric Heat	**15 kW**	30	25
		20 kW	40	- - -
		30 kW	60	45
		45 kW	80	60
		60 kW	80	70
[3] Minimum Circuit Ampacity (MCA)	Unit+ Electric Heat	**15 kW**	29	23
		20 kW	37	- - -
		30 kW	52	41
		45 kW	74	60
		60 kW	79	63
[2] Maximum Overcurrent Protection (MOCP)	Unit+ Electric Heat and (1) 0.5 HP Power Exhaust	**15 kW**	35	25
		20 kW	40	- - -
		30 kW	60	45
		45 kW	80	70
		60 kW	90	70
[3] Minimum Circuit Ampacity (MCA)	Unit+ Electric Heat and (1) 0.5 HP Power Exhaust	**15 kW**	31	25
		20 kW	38	- - -
		30 kW	53	43
		45 kW	76	61
		60 kW	81	65

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 35kA.

[1] NOTE - Extremes of operating range are plus and minus 10% of line voltage.

[2] HACR type breaker or fuse.

[3] Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

ELECTRICAL/ELECTRIC HEAT DATA — BELT DRIVE | 20 TON

Model			SCH240H5			
[1] Voltage - 60Hz			460V-3ph		575V-3ph	
Compressor (Non-Inverter)	Rated Load Amps		6.6		4.8	
	Locked Rotor Amps		60		41	
Compressor (Non-Inverter)	Rated Load Amps		6.6		4.8	
	Locked Rotor Amps		60		41	
Compressor (Non-Inverter)	Rated Load Amps		6.6		4.8	
	Locked Rotor Amps		60		41	
Compressor (Non-Inverter)	Rated Load Amps		6.6		4.8	
	Locked Rotor Amps		60		41	
Outdoor Fan Motors (6)	Full Load Amps (6 Non-ECM)		1.3		1	
	Total		7.8		6	
Power Exhaust (3) 0.33 HP	Full Load Amps		1.3		1	
	Total		3.9		3	
Service Outlet 115V GFI (Amps)			20		20	
Indoor Blower Motor	HP		5	7.5	5	7.5
	Type		Belt	Belt	Belt	Belt
	Full Load Amps		7.6	11	6.1	9
[2] Maximum Overcurrent Protection (MOCP)	Unit Only		50	50	35	45
	With (3) 0.33 HP Power Exhaust		50	60	40	45
[3] Minimum Circuit Ampacity (MCA)	Unit Only		44	48	33	37
	With (3) 0.33 HP Power Exhaust		48	52	36	40

ELECTRIC HEAT DATA

Electric Heat Voltage			480V	480V	600V	600V
[2] Maximum Overcurrent Protection (MOCP)	Unit+ Electric Heat	**30 kW**	60	60	45	50
		40 kW	70	80	- - -	- - -
		60 kW	90	90	70	70
		90 kW	125	125	100	100
[3] Minimum Circuit Ampacity (MCA)	Unit+ Electric Heat	**30 kW**	55	59	44	48
		40 kW	70	74	- - -	- - -
		60 kW	82	86	66	69
		90 kW	118	123	95	98
[2] Maximum Overcurrent Protection (MOCP)	Unit+ Electric Heat and (3) 0.33 HP Power Exhaust	**30 kW**	60	70	50	60
		40 kW	80	80	- - -	- - -
		60 kW	90	100	70	80
		90 kW	125	150	100	110
[3] Minimum Circuit Ampacity (MCA)	Unit+ Electric Heat and (3) 0.33 HP Power Exhaust	**30 kW**	60	64	48	52
		40 kW	75	79	- - -	- - -
		60 kW	87	91	70	73
		90 kW	123	127	98	102

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 35kA.

[1] NOTE - Extremes of operating range are plus and minus 10% of line voltage.

[2] HACR type breaker or fuse.

[3] Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

[4] Factory installed circuit breaker not available.

ELECTRIC HEAT CAPACITIES

Volts Input	10 kW			15 kW			20 kW			30 kW		
	kW Input	Btuh Output	Stages	kW Input	Btuh Output	Stages	kW Input	Btuh Output	Stages	kW Input	Btuh Output	Stages
440	8.4	28,700	1	12.6	43,000	1	18.3	62,600	2	25.2	86,000	2
460	9.2	31,400	1	13.8	47,100	1	19.2	65,400	2	27.5	93,900	2
480	10.0	34,200	1	15.0	51,200	1	20.0	68,200	2	30.0	102,400	2
550	8.4	28,700	1	12.6	43,000	1	18.3	62,600	2	25.2	86,000	2
575	9.2	31,400	1	13.8	47,100	1	19.2	65,400	2	27.5	93,900	2
600	10.0	34,200	1	15.0	51,200	1	20.0	68,200	2	30.0	102,400	2

ELECTRIC HEAT CAPACITIES

Volts Input	40 kW			45 kW			60 kW			90 kW		
	kW Input	Btuh Output	Stages	kW Input	Btuh Output	Stages	kW Input	Btuh Output	Stages	kW Input	Btuh Output	Stages
440	32.8	112,000	2	37.8	129,000	2	50.4	172,000	2	75.6	258,000	2
460	35.9	122,400	2	41.3	141,000	2	55.1	188,000	2	82.7	282,200	2
480	39	133,200	2	45.0	153,600	2	60.0	204,800	2	90.0	307,100	2
550	33.6	114,800	2	37.8	129,000	2	50.4	172,000	2	75.6	258,000	2
575	36.7	125,500	2	41.3	141,000	2	55.1	188,000	2	82.7	282,200	2
600	40	136,600	2	45.0	153,600	2	60.0	204,800	2	90.0	307,100	2

FIELD WIRING NOTES

- For use with copper wiring only
- Field wiring not furnished
- All wiring must conform to NEC or CEC and local electrical codes
- For specific wiring information, please refer to the installation instructions

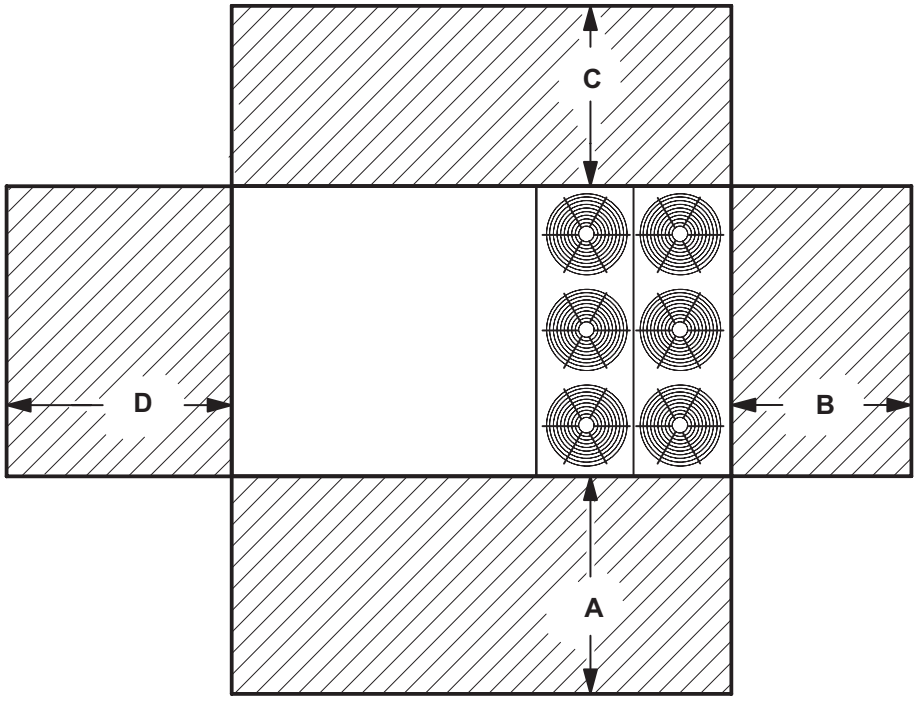
OUTDOOR SOUND DATA

Size	Octave Band Sound Power Levels dBA, re 10^{-12} Watts Center Frequency - Hz							[1] Sound Rating Number dBA
	125	250	500	1000	2000	4000	8000	
036	55	59	63	61	57	48	39	67
060	65	71	74	72	69	63	54	78
120	80	79	79	76	71	65	57	89
240	94	91	90	87	83	79	72	92

Note - The octave sound power data does not include tonal corrections.

[1] Sound Rating Number according to AHRI Standard 270-95 or AHRI Standard 370-2001 (includes pure tone penalty).Sound Rating Number is the overall A-Weighted Sound Power Level, (LWA), dB (100 Hz to 10,000 Hz).

UNIT CLEARANCES



[1] Unit Clearance		A		B		C		D		Top Clearance
		in.	mm	in.	mm	in.	mm	in.	mm	
Service Clearance	036, 060	48	1219	36	914	60	1524	60	1524	Unobstructed
	120	60	1524	36	914	60	1524	60	1524	Unobstructed
	240	72	1829	36	914	60	1524	96	2438	Unobstructed
Minimum Operation Clearance	All	36	914	36	914	36	914	36	914	Unobstructed

NOTE - Entire perimeter of unit base requires support when elevated above the mounting surface.

[1] Service Clearance - Required for removal of serviceable parts.
Minimum Operation Clearance - Required clearance for proper unit operation.

WEIGHT DATA

Model	Net		Shipping	
	lbs.	kg	lbs.	kg
SCH036 Base Unit	820	372	930	422
SCH036 Max Unit	952	432	1062	482
SCH060 Base Unit	841	382	951	431
SCH060 Max Unit	980	445	1090	494
SCH120 Base Unit	1387	629	1487	674
SCH120 Max Unit	1616	733	1716	778
SCH240 Base Unit	2603	1181	2703	1226
SCH240 Max Unit	3074	1394	3174	1440

NOTE - Base Unit is NO OPTIONS.

NOTE - Max. Unit is the unit with ALL INTERNAL OPTIONS Installed. (Max Electric Heat, Economizer, Standard Static Power Exhaust Fans, Humiditrol, Controls, etc.). Does not include accessories EXTERNAL to unit.

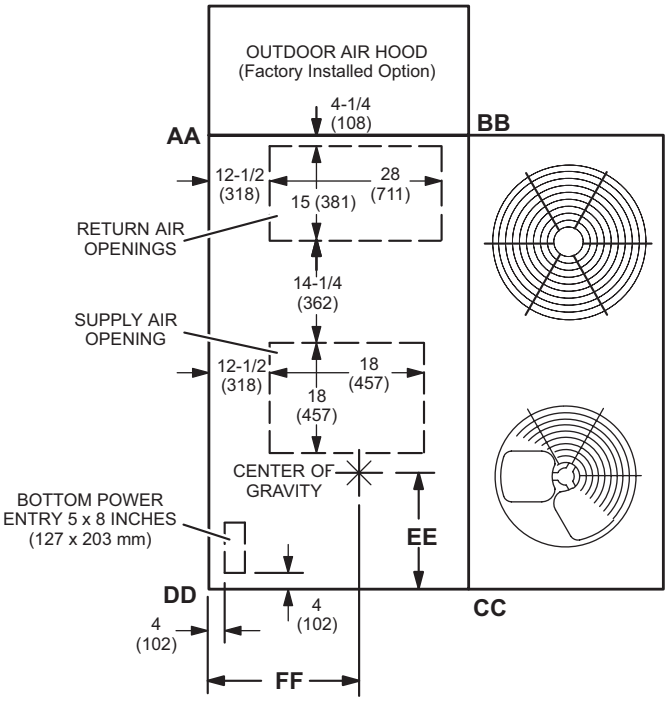
FACTORY / FIELD INSTALLED OPTIONS AND ACCESSORIES - NET WEIGHTS

Description		lbs.	kg
CABINET			
Combination Coil/Hail Guards	036 or 060	24	11
	120	25	11
	240	50	23
ECONOMIZER / OUTDOOR AIR / EXHAUST			
Economizer	036 or 060	50	23
	120	70	32
	240	138	63
Outdoor Air Dampers	240	68	31
Power Exhaust	120	28	13
	240	99	45
ELECTRIC HEAT			
Electric Heat	10 kW (036-060-120 models)	31	14
	15 kW (036-060-120 models)	31	14
	20 kW (060 and 120 models)	38	17
	30 kW (060-120 models)	38	17
	45 kW (120 models)	42	19
	60 kW (120 models)	49	22
	30 kW (240 models)	59	27
	40 kW (240 models)	76	34
	60 kW (240 models)	76	34
	90 kW (240 models)	84	38
ROOF CURBS			
Hybrid Roof Curbs, Downflow 14 in. height	036 or 060	70	32
	120	80	36
	240 (full perimeter)	115	52
Hybrid Roof Curbs, Downflow 24 in. height	036 or 060	105	48
	120	120	54
	240 (full perimeter)	170	77
HUMIDITROL® DEHUMIDIFICATION SYSTEM			
Humiditrol Dehumidification Option (Net Weight)	036 or 060	27	12
	120	57	26
	240	100	45

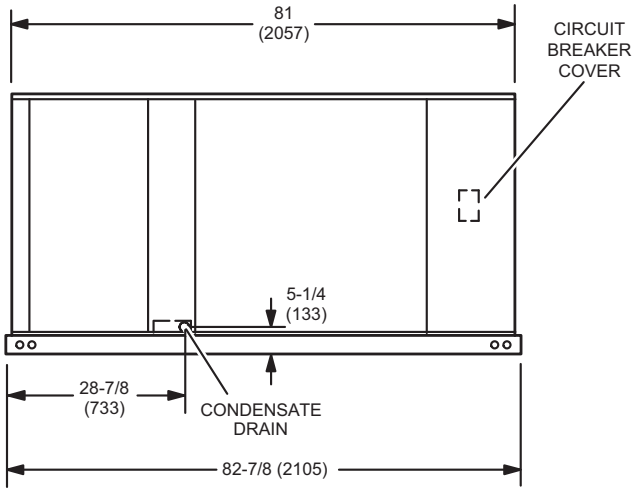
CORNER WEIGHTS | **CENTER OF GRAVITY**

Model	AA		BB		CC		DD		EE		FF	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	in.	mm	in.	mm
SCH036H Base Unit	146	66	212	96	273	124	188	85	34-7/8	886	31-3/8	797
SCH036H Max. Unit	170	77	246	112	317	144	219	99	34-7/8	886	31-3/8	797
SCH060H Base Unit	150	68	218	99	280	127	193	88	34-7/8	886	31-3/8	797
SCH060H Max. Unit	175	79	254	115	326	148	225	102	34-7/8	886	31-3/8	797

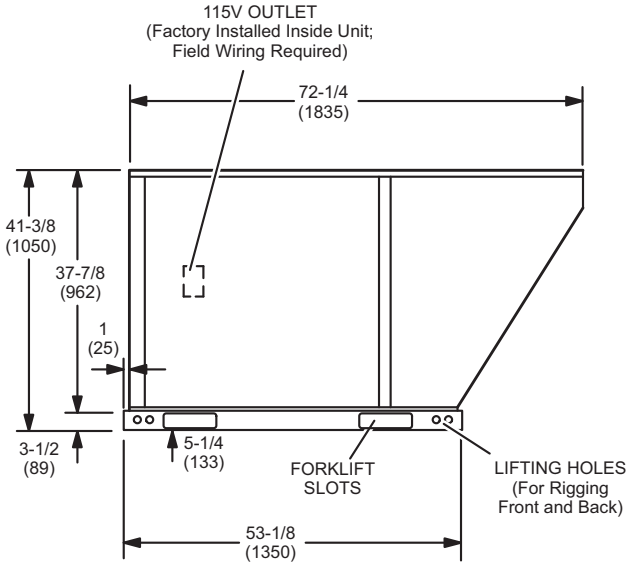
Max. Unit - The Base Unit with ALL OPTIONS Installed. (Economizer and controls)



TOP VIEW



SIDE VIEW

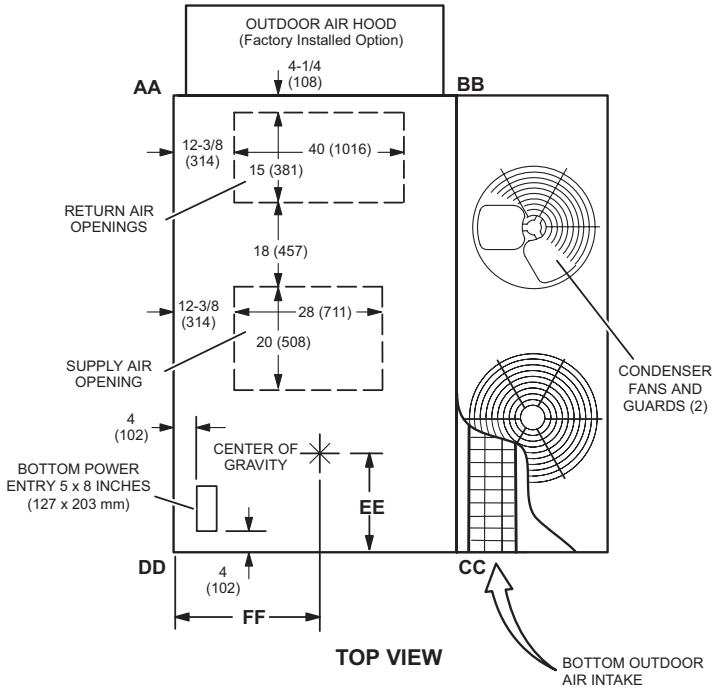


FRONT VIEW

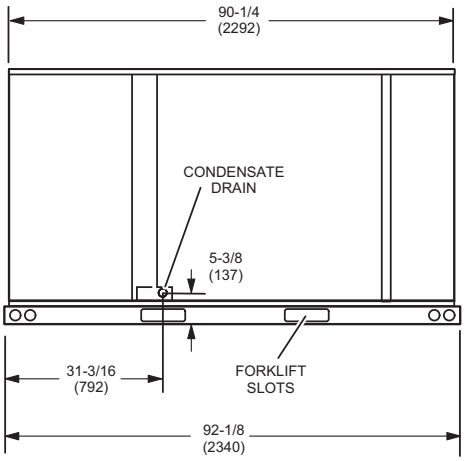
DIMENSIONS - UNIT SCH120H

CORNER WEIGHTS									CENTER OF GRAVITY			
Model	AA		BB		CC		DD		EE		FF	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	in.	mm	in.	mm
SCH120H Base Unit	438	199	298	135	264	120	387	176	41-1/4	1048	37-3/8	949
SCH120H Max. Unit	510	231	347	157	307	139	451	205	41-1/4	1048	37-3/8	949

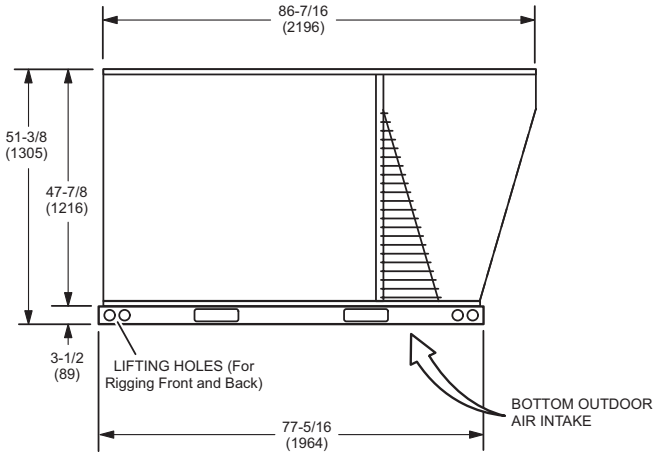
Max. Unit - The Base Unit with ALL OPTIONS Installed. (Economizer and controls)



TOP VIEW



SIDE VIEW



FRONT VIEW

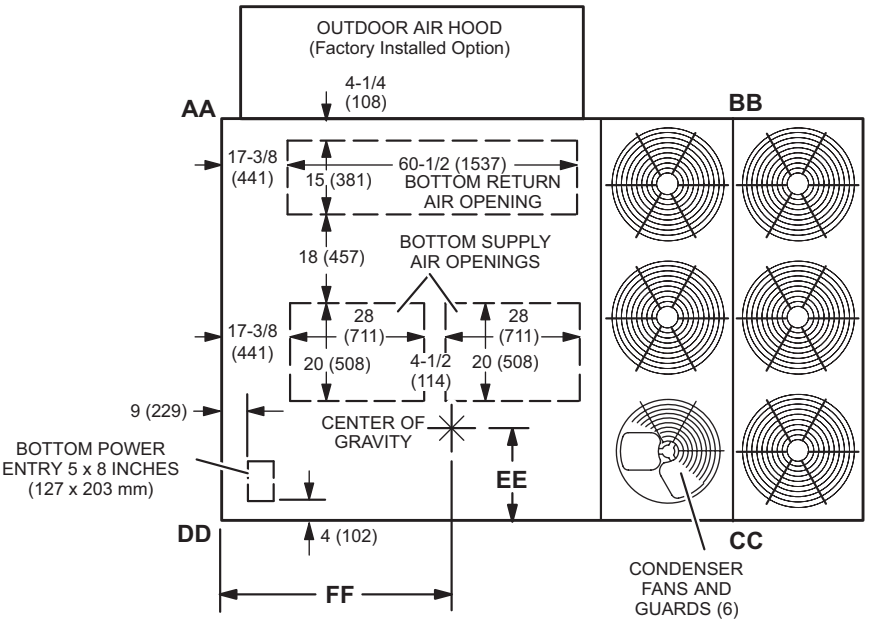
DIMENSIONS - UNIT

SCH240H

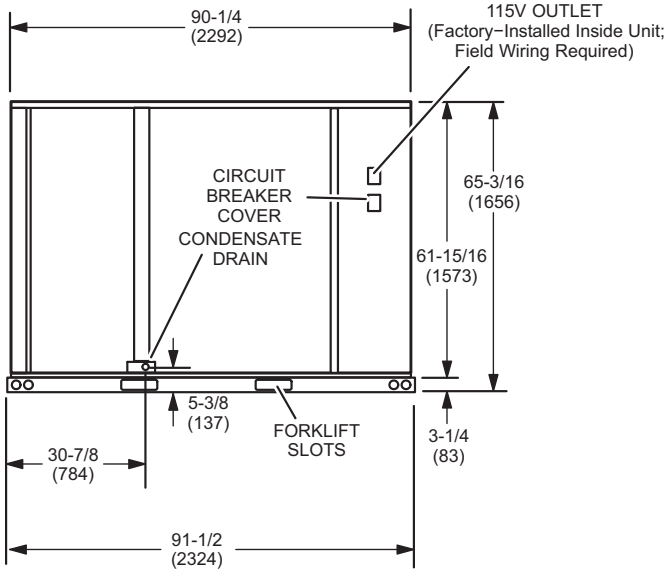
CORNER WEIGHTS | **CENTER OF GRAVITY**

Model	AA		BB		CC		DD		EE		FF	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	in.	mm	in.	mm
SCH240H Base Unit	533	242	551	250	772	350	747	339	38-1/8	968	61-1/4	1556
SCH240H Max. Unit	630	286	651	295	911	413	882	400	38-1/8	968	61-1/4	1556

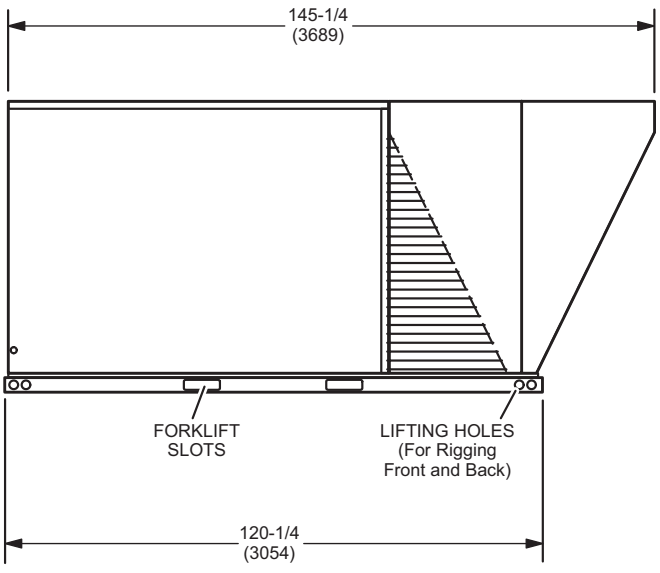
Max. Unit - The Base Unit with ALL OPTIONS Installed. (Economizer and controls)



TOP VIEW

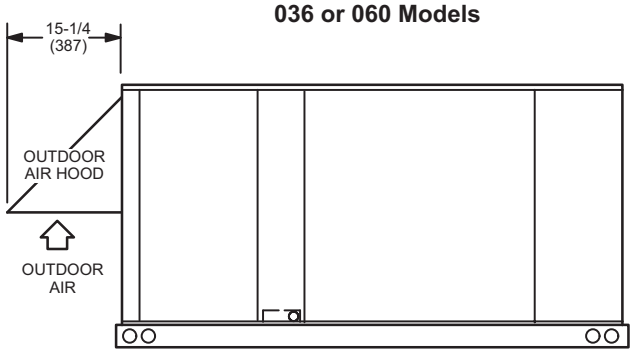


SIDE VIEW



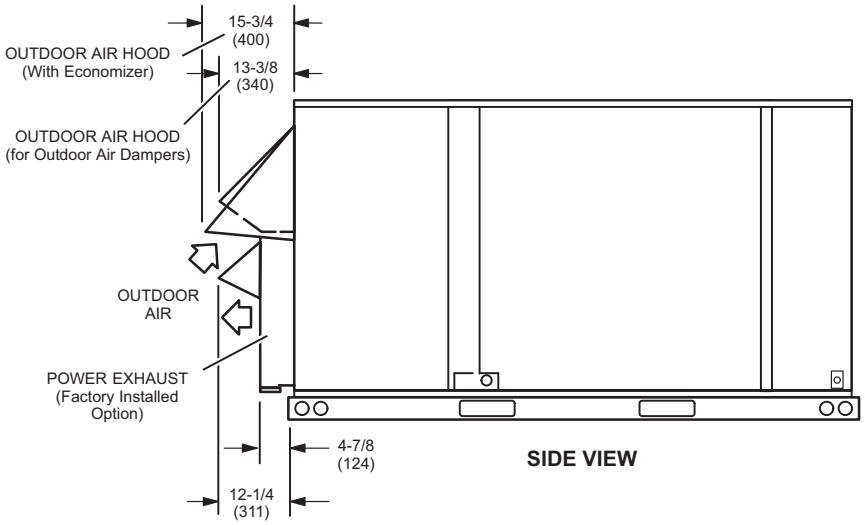
FRONT VIEW

OPTIONAL OUTDOOR AIR HOOD DETAIL
036 or 060 Models



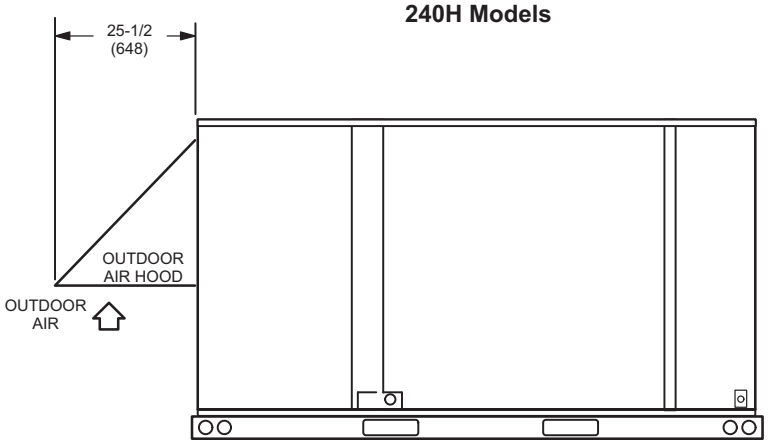
SIDE VIEW

OPTIONAL OUTDOOR AIR HOOD DETAIL
OPTIONAL POWER EXHAUST DETAIL
120H Models



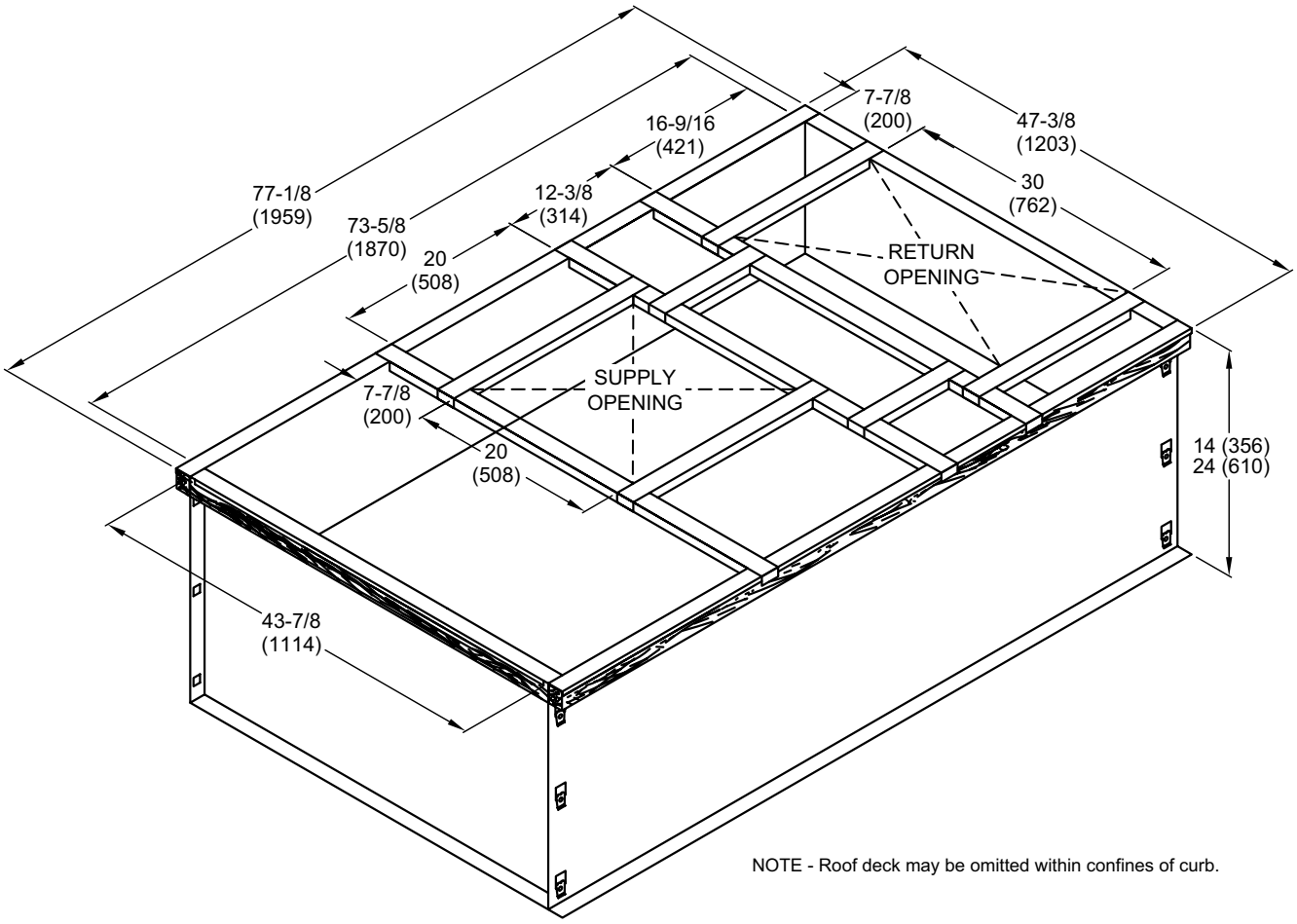
SIDE VIEW

OPTIONAL OUTDOOR AIR HOOD DETAIL
240H Models



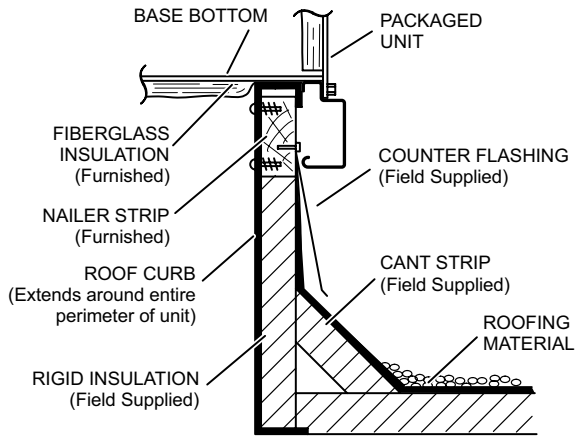
SIDE VIEW

HYBRID ROOF CURBS - 036-060 MODELS - DOUBLE DUCT OPENING

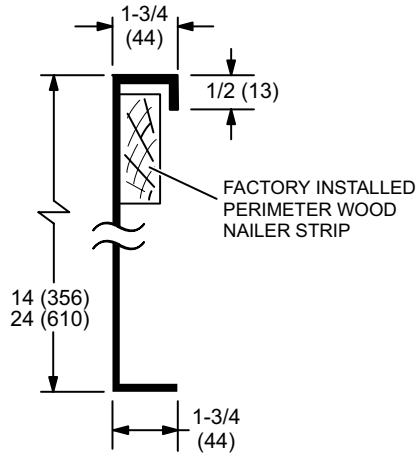


NOTE - Roof deck may be omitted within confines of curb.

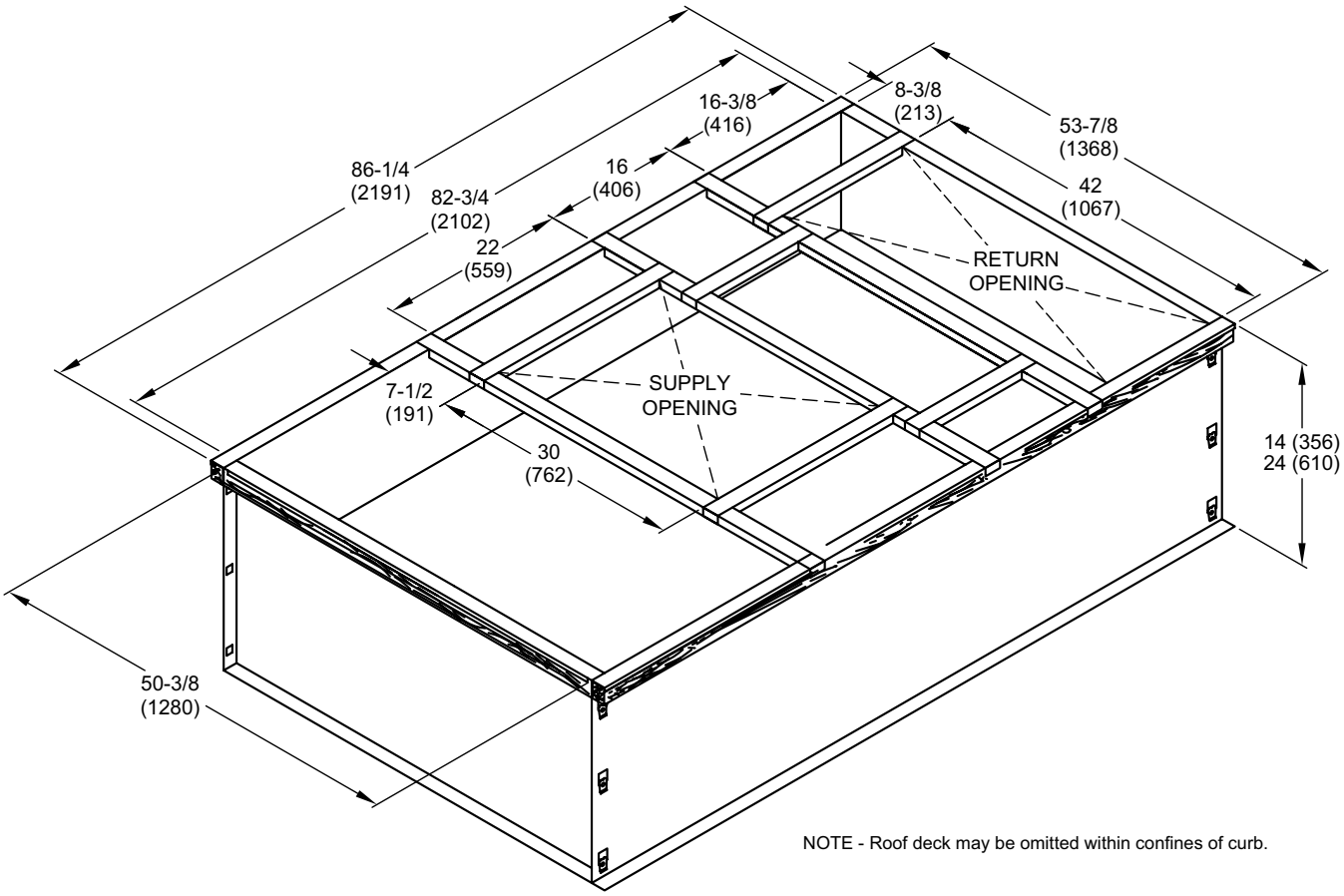
TYPICAL FLASHING DETAIL FOR ROOF CURB



DETAIL ROOF CURB

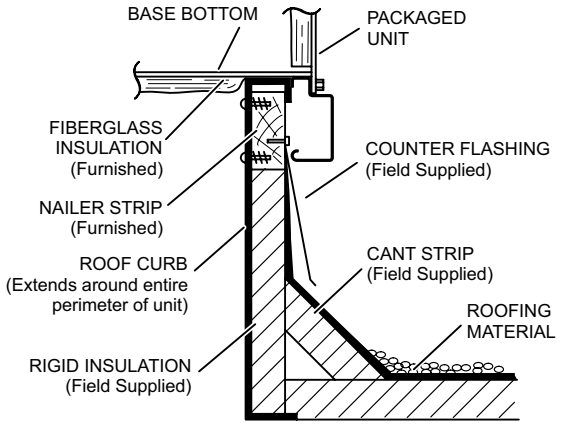


HYBRID ROOF CURBS - 120 MODEL - DOUBLE DUCT OPENING

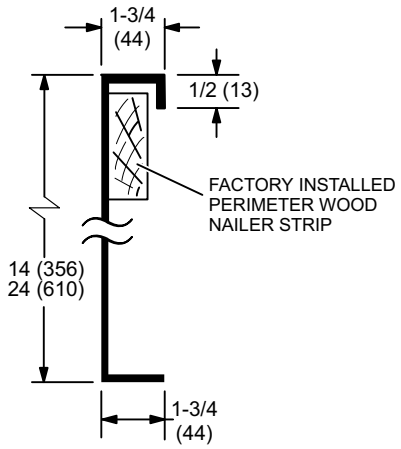


NOTE - Roof deck may be omitted within confines of curb.

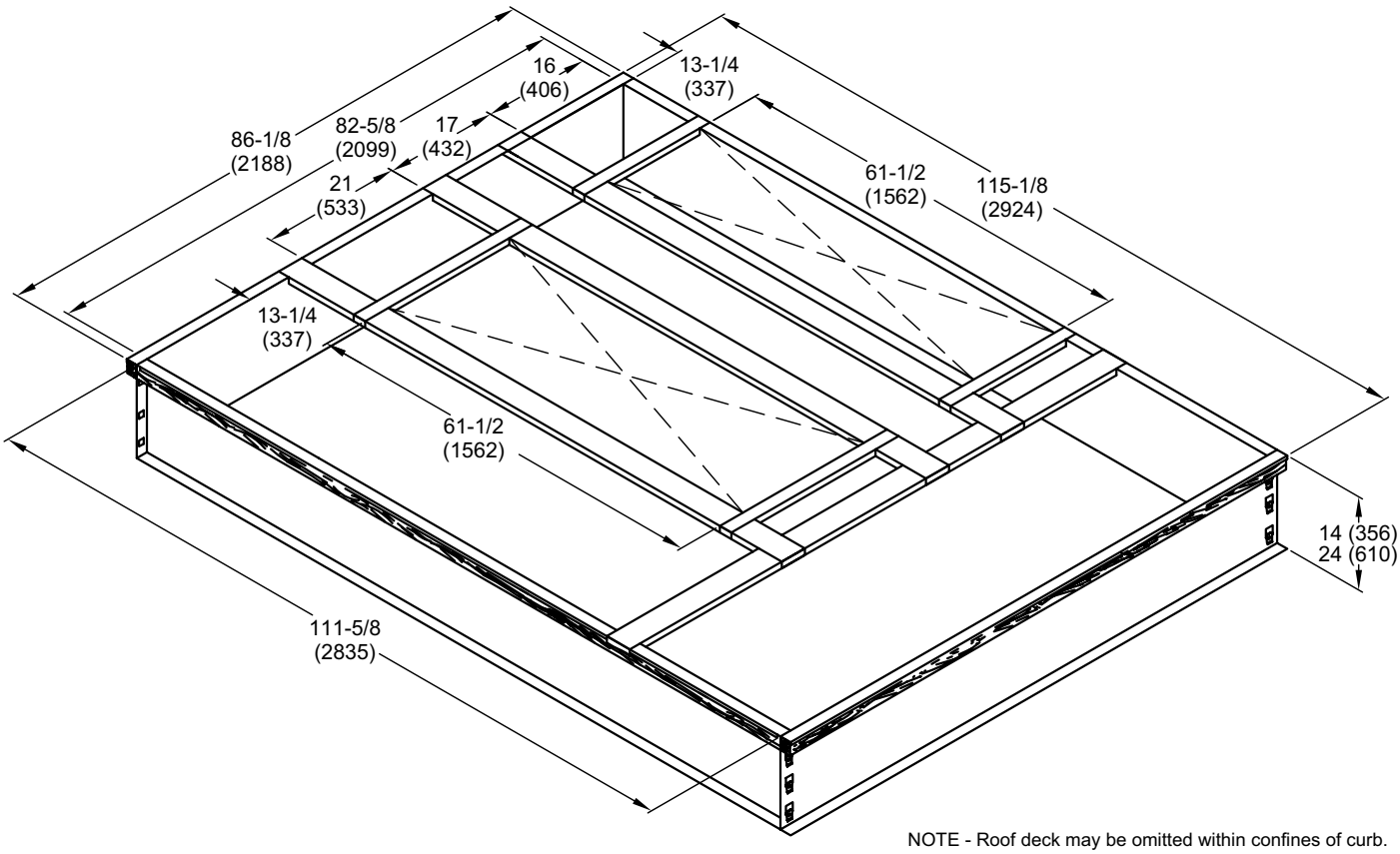
TYPICAL FLASHING DETAIL FOR ROOF CURB



DETAIL ROOF CURB

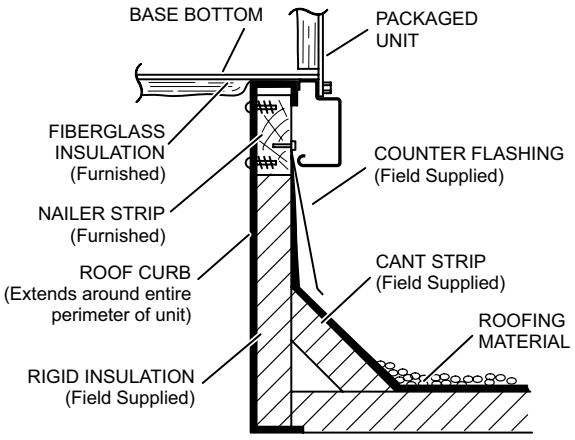


HYBRID ROOF CURBS - 240 MODEL - FULL PERIMETER - DOUBLE DUCT OPENING

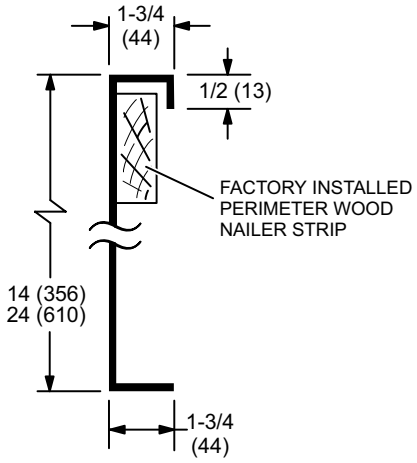


NOTE - Roof deck may be omitted within confines of curb.

TYPICAL FLASHING DETAIL FOR ROOF CURB



DETAIL ROOF CURB



REVISIONS

Sections	Description of Change
Options / Accessories	Updated Order Numbers for Indoor Air Quality (CO_2) Sensors

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