MLA
Mini-Split
Low Ambient Single Zone Heat Pump Systems - R-410A - 60 Hz

RESIDENTIAL / COMMERCIAL PRODUCT SPECIFICATIONS

MWMA Wall-Mounted
Non-Ducted Indoor Unit

M22A/M33A Cassette
Non-Ducted Indoor Unit

Wireless
Remote Controller
(furnished with
Wall-Mount,
Cassette, Console and
Ceiling/Floor
Non-Ducted Models)

MCFA/MCFB Ceiling/Floor-Mount
Non-Ducted Indoor Unit

MFMA Floor-Mount Console
Non-Ducted Indoor Unit

MMDB Medium Static Ducted Indoor Unit
with Wired Remote Controller (furnished)
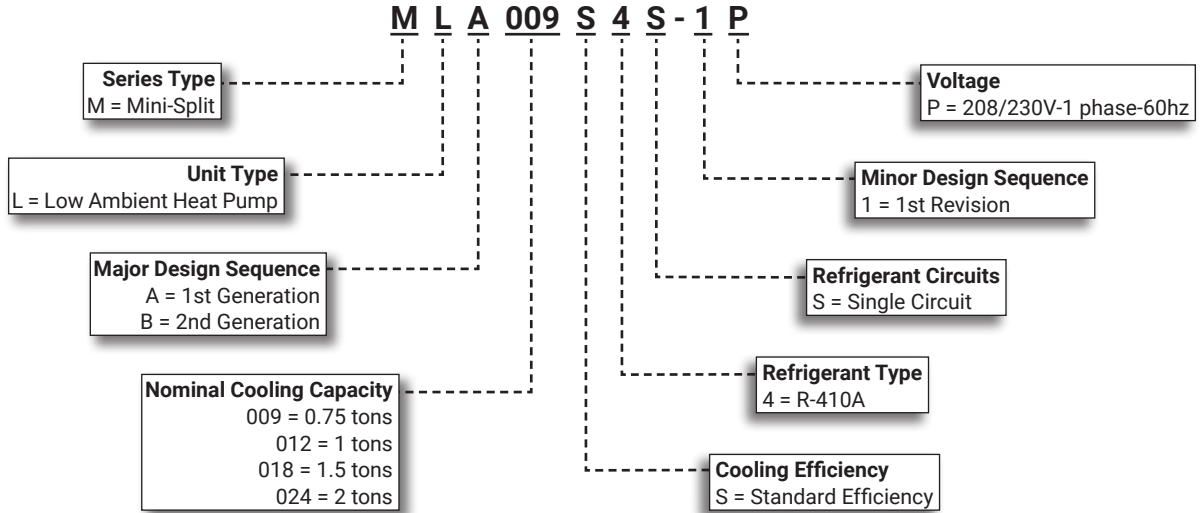
MLA Heat Pump Outdoor Units

ENERGY STAR

Certain models
have earned the
ENERGY STAR®
mark by meeting
strict energy
efficiency guidelines
set by the US EPA.
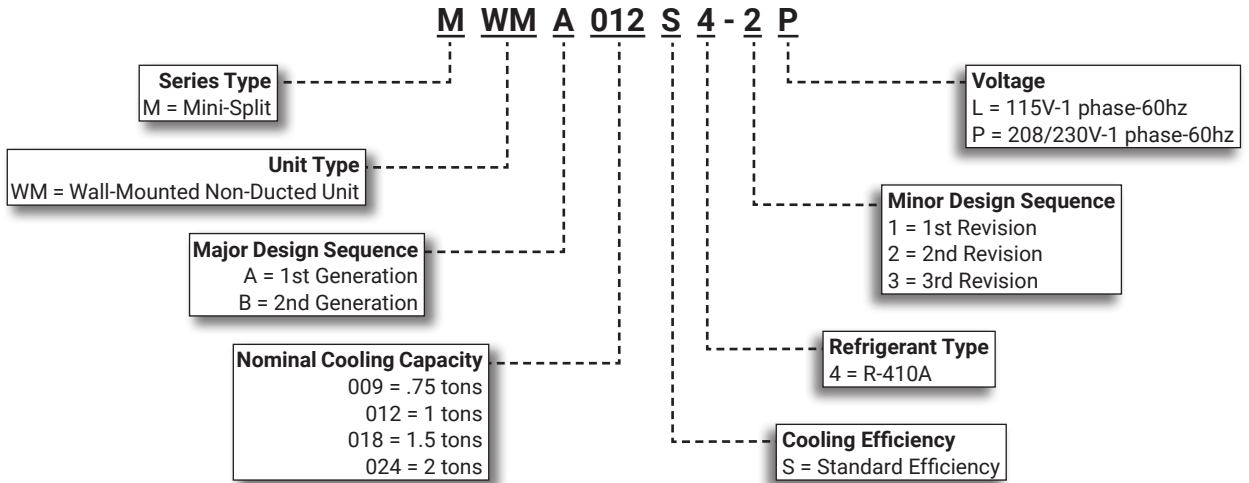
SEER - up to 24.00
HSPF - up to 12.5
0.75 to 2 Tons
Cooling Capacity - 9,000 to 24,000 Btuh
Heating Capacity - 10,000 to 24,000 Btuh
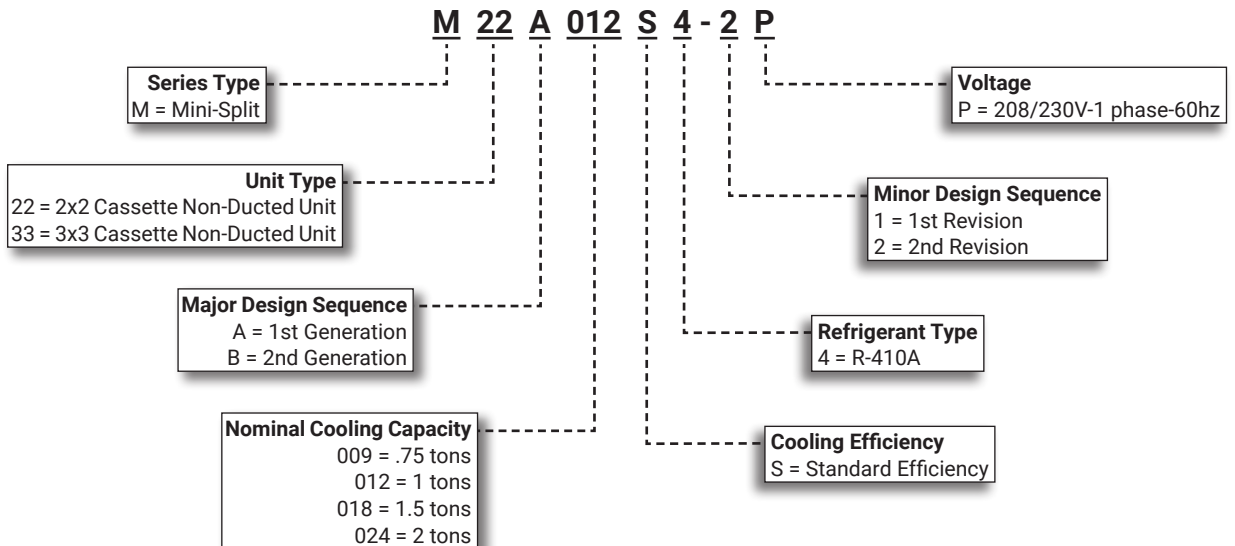
MODEL NUMBER IDENTIFICATION
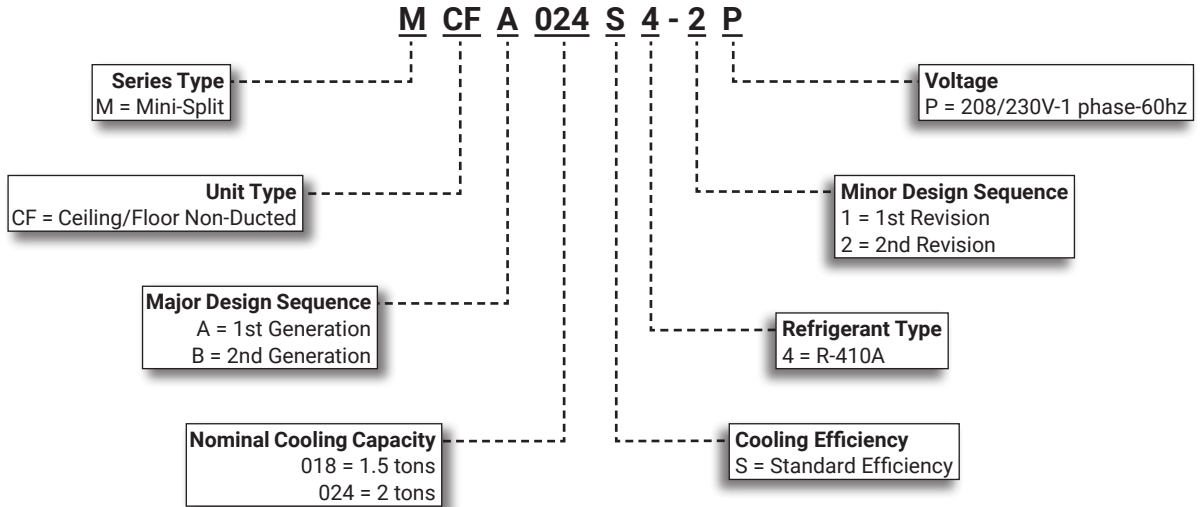
OUTDOOR SINGLE ZONE HEAT PUMP UNITS

M L A 009 S 4 S - 1 P

Series Type
M = Mini-Split

Unit Type
L = Low Ambient Heat Pump

Major Design Sequence
A = 1st Generation
B = 2nd Generation

Nominal Cooling Capacity
009 = 0.75 tons
012 = 1 tons
018 = 1.5 tons
024 = 2 tons

Voltage
P = 208/230V-1 phase-60hz

Minor Design Sequence
1 = 1st Revision

Refrigerant Circuits
S = Single Circuit

Refrigerant Type
4 = R-410A

Cooling Efficiency
S = Standard Efficiency

WALL-MOUNTED INDOOR UNITS

M WM A 012 S 4 - 2 P

Series Type
M = Mini-Split

Unit Type
WM = Wall-Mounted Non-Ducted Unit

Major Design Sequence
A = 1st Generation
B = 2nd Generation

Nominal Cooling Capacity
009 = .75 tons
012 = 1 tons
018 = 1.5 tons
024 = 2 tons

Voltage
L = 115V-1 phase-60hz
P = 208/230V-1 phase-60hz

Minor Design Sequence
1 = 1st Revision
2 = 2nd Revision
3 = 3rd Revision

Refrigerant Type
4 = R-410A

Cooling Efficiency
S = Standard Efficiency

CASSETTE NON-DUCTED INDOOR UNITS

M 22 A 012 S 4 - 2 P

Series Type
M = Mini-Split

Unit Type
22 = 2x2 Cassette Non-Ducted Unit
33 = 3x3 Cassette Non-Ducted Unit

Major Design Sequence
A = 1st Generation
B = 2nd Generation

Nominal Cooling Capacity
009 = .75 tons
012 = 1 tons
018 = 1.5 tons
024 = 2 tons

Voltage
P = 208/230V-1 phase-60hz

Minor Design Sequence
1 = 1st Revision
2 = 2nd Revision

Refrigerant Type
4 = R-410A

Cooling Efficiency
S = Standard Efficiency

MODEL NUMBER IDENTIFICATION

CEILING/FLOOR NON-DUCTED INDOOR UNITS

M CF A 024 S 4 - 2 P

Series Type
M = Mini-Split

Unit Type
CF = Ceiling/Floor Non-Ducted

Major Design Sequence
A = 1st Generation
B = 2nd Generation

Nominal Cooling Capacity
018 = 1.5 tons
024 = 2 tons

Voltage
P = 208/230V-1 phase-60hz

Minor Design Sequence
1 = 1st Revision
2 = 2nd Revision

Refrigerant Type
4 = R-410A

Cooling Efficiency
S = Standard Efficiency

FLOOR-MOUNT CONSOLE NON-DUCTED INDOOR UNITS

M FM A 012 S 4 - 1 P

Series Type
M = Mini-Split

Unit Type
FM = Floor Mount Non-Ducted

Major Design Sequence
A = 1st Generation

Nominal Cooling Capacity
012 = 1 tons

Voltage
P = 208/230V-1 phase-60hz

Minor Design Sequence
1 = 1st Revision

Refrigerant Type
4 = R-410A

Cooling Efficiency
S = Standard Efficiency

MEDIUM STATIC DUCTED INDOOR UNITS

M MD B 012 S 4 - 2 P

Series Type
M = Mini-Split

Unit Type
MD = Medium Static Ducted Unit

Major Design Sequence
B = 2nd Generation

Nominal Cooling Capacity
009 = .75 tons
012 = 1 tons
018 = 1.5 tons
024 = 2 tons

Voltage
P = 208/230V-1 phase-60hz

Minor Design Sequence
1 = 1st Revision
2 = 2nd Revision

Refrigerant Type
4 = R-410A

Cooling Efficiency
S = Standard Efficiency

CONTENTS

APPROVALS AND WARRANTY

APPROVALS

- AHRI Standard 210/240 certified with Addenda 1 and 2
- ENERGY STAR® certified units (certain models) are designed to use less energy, help save money on utility bills, and help protect the environment
- Rated According to U.S. Department of Energy (DOE) test procedures
- Indoor and outdoor units and components UL and CEC bonded for grounding to meet safety standards for servicing
- ETL certified for the U.S. and Canada
- Meets 2014 Florida Building Code Wind Design Criteria
  - Ultimate Wind Speed – 186 miles per hour
  - Risk Categories – III and IV
  - Wind Exposures – C and D
  - Mean Roof Heights – Up to 60 feet above ground

WARRANTY

- Compressor - Limited seven years
- All other covered components - Limited five years

NOTE - Refer to Lennox Equipment Limited Warranty certificate included with unit for specific details.

FEATURES   OUTDOOR UNITS

APPLICATIONS

NOTE - MLA Outdoor Units Cannot Be Matched With -1 Indoor Units!

- 0.75 through 2 ton
- Single phase power supply (208/230V)
- Outdoor unit sound levels as low as 52 dBA
- Indoor unit sound levels as low as 26.5 dBA
- Ductless mini-split systems provide a wide range of capacities and applications and provide an alternative when a ducted system is impractical or cost prohibitive
- Units shipped completely factory assembled, internally piped, and wired

NOTE - Outdoor unit is designed for outdoor use.

NOTE - it is recommended that Medium Static Ducted Indoor Units not be installed in unconditioned spaces with temperatures above 100°F.

REFRIGERATION SYSTEM

R-410A Refrigerant
- Non-chlorine, ozone friendly
- Unit is factory pre-charged

Outdoor Coil
- Aluminum fins fitted to copper tubes
- Wire grille guard provided

Outdoor Fan
- Direct drive fan moves large air volumes uniformly through entire outdoor coil for high refrigeration capacity
- Fan guard provided

Refrigerant Line Connections, Service Valve
- Flare connection lines are located on side of unit cabinet
- Fully serviceable brass service valve prevents corrosion and provides access to refrigerant system

COMPRESSOR

Variable Frequency Rotary Compressor
- Compressor features high efficiency operation
- Balanced for reduced vibration and quiet operation
- Brushless DC motor uses powerful Neodymium magnets, which are approximately 15-20 times stronger than ferrite magnets used in conventional AC compressors

Compressor Crankcase Heater
- Protects against liquid refrigerant migration that can occur during low ambient operation

CONTROLS

DC Inverter Control
- Provides continuous operation, while adjusting capacity according to room temperature
- The accurate sensing of cooling loads prevents frequent changes in capacity and ensures efficient, economical operation

Inverter Module Protection
- Protects against differences in current, voltage and temperature
- Displays code on the indoor unit indicating a need for servicing

CONTROLS (continued)

Outdoor Unit Microprocessor
- Electronic expansion valve control
- Automatic compressor timed-off protection (3 minutes)
- Temperature sensor
- LEDs on control display error codes and assist in troubleshooting
- 4-Way reversing valve control

Electronic Expansion Valve
- Furnished on all models

Compressor Overcurrent Protection
- Overcurrent protection can result due to any of the following:
  - Ambient temperature is too high
  - Locked rotor on the compressor
  - Outdoor air is blocked or restricted

Condenser High Temperature Protection
- Condenser high temperature can occur due to any of the following conditions:
  - High outdoor ambient
  - Outdoor fan blocked
  - Outdoor coil blocked
- The outdoor coil thermistor continuously monitors the temperature and communicates with the microprocessor
- Depending on the temperature measured, the compressor will be allowed to increase the frequency if needed to meet the load or is forced to run at the current or reduced frequency
- If the temperature becomes excessively high the compressor will be de-energized

Compressor Discharge Temperature Protection
- The compressor discharge line thermistor continuously monitors the temperature and communicates with the microprocessor
- Depending on the temperature measured, the compressor will be allowed to increase the frequency to meet the load or is forced to run at the current or reduced frequency
- If the temperature becomes excessively high, the compressor will be de-energized

Voltage Protection
- Protects unit from low or high voltage fluctuations

Terminal Strip
- Furnished for easy wiring connections

Automatic Piping/Wiring Correction
- Automatically checks piping/wiring connections
- A "Check Switch" on outdoor unit control reviews zone wiring and piping connections and displays "CE" if all connections are correct
- If a unit(s) is not connected to the correct zone the control will automatically remap the wiring to the correct zone based on indoor unit size

Defrost Control
- Defrost cycle is automatically enabled if there is a build-up of frost on the outdoor coil
- Outdoor fan operation is terminated during the defrost cycle
- Indoor fan changes to ultra low speed during the defrost cycle to help bring warm refrigerant back to the outdoor coil to assist during defrost operation
- Defrost LED is lit on the indoor unit panel on the front cover during a defrost cycle

Reversing Valve
- 4-way interchange reversing valve effects a rapid change in direction of refrigerant flow resulting in quick changeover from cooling to heating and vice versa
- Valve operates on pressure differential between outdoor unit and indoor unit of the system

CABINET
- Constructed of heavy gauge steel
- Tabs on unit base allow secure mounting to slab
- Condensate drain outlets furnished on unit base

NOTE - Drain must be field furnished.
- Pan heater prevents ice build-up in the bottom of the unit during heating operation
- Access cover for power and control wiring connections
- Access cover for service valves

WALL-MOUNTED INDOOR UNITS

- Low-sound, three-speed Wall Mount with LED display offers three access points for refrigerant outlet pipes: left, right or rear
- The front panel can be raised for accessible wiring and maintenance
- Swing louver angles to 90°
- Unit installs horizontally on a vertical wall
- Pre-Heat Function - Delays the operation of the fan until the indoor coil has reached a pre-determined temperature which prevents the discharge of cold air while the system is operating in the "heating" mode
- LED Readout - Mounted on unit. LED displays unit operation status, and codes for maintenance and servicing
- Auto Restart - Automatically restores the previous function setting if power is interrupted
- Cooling Override - Button on the indoor unit allows a temporary 30 minute override of the system for forced "AUTO" or "COOLING" operation
- Flare Connections - Equipped with liquid and gas flare fittings for quick and secure piping
- Multi-Refrigerant Outlet - Allows left, right, or rear access for refrigeration line connection
- Three Speed Fan - Fan functions at three speeds: low, medium and high
- Air Filter - Cleanable air filter is furnished as standard

CASSETTE INDOOR UNITS

- Low-sound and encased in galvanized steel, the Cassette unit with LED display offers 360° airflow for immediate, equal distribution of wide-range cooling and heating
- 360° Airflow Panel - Allows for even, wide-range cooling and heating
- Pre-Heat Function - Delays the operation of the fan until the indoor coil has reached a pre-determined temperature which prevents the discharge of cold air while the system is operating in the "heating" mode
- LED Readout/Infrared Receiver Panel - Mounted on unit. LEDs display unit operation status, and codes for maintenance and servicing
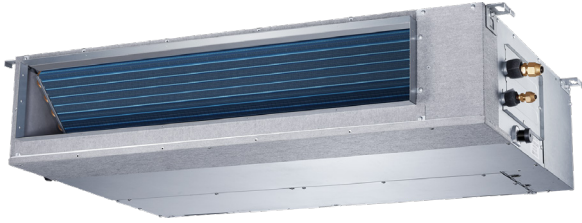- Infrared receiver for use with wireless remote controller (furnished)
- Auto Restart - Automatically restores the previous function setting if power is interrupted
- Cooling Override - Button on the indoor unit allows a temporary 30 minute override of the system for forced "AUTO" or "COOLING" operation
- Built-In Condensate Pump - 27-1/2 in. maximum lift
- Compact Design - Allows accessible wiring and space-saving installation with reduced width and depth
- Flare Connections - Equipped with liquid and gas flare fittings for quick and secure piping
- Three Speed Fan - Fan functions at three speeds: low, medium and high
- Turbo Fan With Backward Curved Blades - Reduces sound levels and air resistance
- Air Filter - Cleanable air filter is furnished as standard

NOTE - The cassette panel must be ordered separately. See Specifications table for ordering information.

CEILING/FLOOR MOUNT INDOOR UNITS

- Low-sound, three-speed Ceiling and Floor Mount models with LED display has a multi-blade fan that distributes air vertically and horizontally with a wide angle sweeping motion

- Two installation options are available:

  1. Horizontally against the ceiling

  2. Vertically against the floor/wall

- **Pre-Heat Function** - Delays the operation of the fan until the indoor coil has reached a pre-determined temperature which prevents the discharge of cold air while the system is operating in the "heating" mode

- **LED Readout/Infrared Receiver Panel** - Mounted on unit. LEDs display unit operation status, and codes for maintenance and servicing

- Infrared receiver for use with wireless remote controller (furnished)

NOTE - Readout panel design varies depending on unit size.

- **Auto Restart** - Automatically restores the previous function setting if power is interrupted

- **Cooling Override** - Button on the indoor unit allows a temporary 30 minute override of the system for forced "AUTO" or "COOLING" operation

- **Flare Connections** - Equipped with liquid and gas flare fittings for quick and secure piping

- **Multi-Refrigerant Outlet** - Allows left, right, or rear access for refrigeration line connection

- **Three Speed Fan** - Fan functions at three speeds: low, medium and high

- **Air Filter** - Cleanable air filter is furnished as standard

FLOOR MOUNT CONSOLE INDOOR UNIT

- Low-sound, three-speed Floor Mount Console model with LED display has a multi-blade fan that distributes air vertically and horizontally with a wide angle sweeping motion

- Installed vertically against the floor/wall

- Swing louver angles to 90°

- **Pre-Heat Function** - Delays the operation of the fan until the indoor coil has reached a pre-determined temperature which prevents the discharge of cold air while the system is operating in the "heating" mode

- **LED Readout/Infrared Receiver Panel** - Mounted on unit. LEDs display unit operation status, and codes for maintenance and servicing

- Infrared receiver for use with wireless remote controller (furnished)

- **Auto Restart** - Automatically restores the previous function setting if power is interrupted

- **Cooling Override** - Button on the indoor unit allows a temporary 30 minute override of the system for forced "AUTO" or "COOLING" operation

- **Flare Connections** - Equipped with liquid and gas flare fittings for quick and secure piping

- **Condensate Drain Connection** - Rear of unit

- **Condensate Flex Adaptor** - Flex adaptor and hose clamps are furnished for drain connection

- **Three Speed Fan** - Fan functions at three speeds: low, medium and high

- **Air Filter** - Cleanable air filter is furnished as standard

- **Hanging Brackets (2)** - Furnished for installation

MEDIUM STATIC DUCTED INDOOR UNITS

- Slim, compact design for limited space requirements. Installs out of sight between the drop ceiling and ceiling slab with ducted distribution to the indoor space

- Pre-Heat Function - Delays the operation of the fan until the indoor coil has reached a pre-determined temperature which prevents the discharge of cold air while the system is operating in the "heating" mode

- LED Readout Panel - Mounted in the unit control box unit. LEDs display unit operation status, and codes for maintenance and servicing

- Auto Restart - Automatically restores the previous function setting if power is interrupted

- Cooling Override - Button on the indoor unit allows a temporary 30 minute override of the system for forced "AUTO" or "COOLING" operation

- Built-In Condensate Pump - 27-1/2 inch lift

- Duct Connections - Return air connections can be made horizontally or from the bottom of the unit with interchangeable panel

- Flare Connections - Equipped with liquid and gas flare fittings for quick and secure piping

- Three Speed Fan - Fan functions at three speeds: low, medium and high

- Air Filter - Cleanable air filter is furnished as standard

AUTO CHANGEOVER OPERATION

- If the indoor unit is set to "AUTO" mode the unit will operate in cooling, heating or fan mode based on temperature setting

- Fan runs in auto mode

WIRELESS REMOTE CONTROLLER

Furnished with Wall-Mount, Cassette, Floor Console and Ceiling/Floor Indoor Units.

· Complete remote control of system
· Maximum operating range is 25 ft.
· Operates on two AAA 1.5V batteries (furnished)
· Wireless remote controller holder furnished
· Holder can be mounted on a wall for easy access
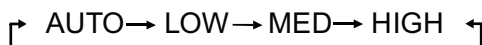· Mounting screws furnished
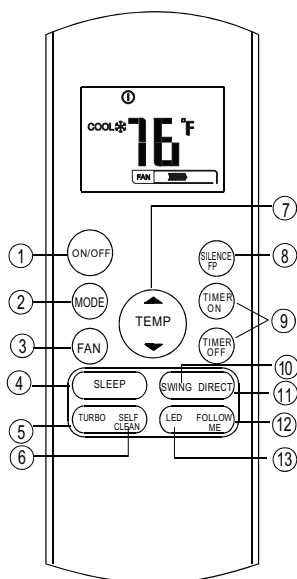
1 ON/OFF Button
· Turns system on and off

2 MODE Button
· Select system operation modes
· Push button to cycle through each setting

AUTO → COOL → DRY → HEAT → FAN
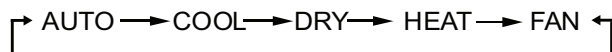
3 FAN Button
· Select fan speed
· Push button to cycle through each setting

AUTO → LOW → MED → HIGH

NOTE - Not available in AUTO or DRY modes.

4 SLEEP Button
· Enables the system to automatically increase cooling or decrease heating (in 2°F increments) per hour for the first 2 hours, then maintain a steady temperature for 5 hours
· System reverts back to previous operation mode after 7 total hours of operation

NOTE - To cancel, push the "MODE", "FAN SPEED" or "ON/OFF" buttons.

NOTE - SLEEP mode is only available when the unit is in COOL, HEAT or AUTO mode.

5 TURBO Button
· Enables the unit to reach the preset temperature during cooling or heating operation in the shortest time

6 SELF CLEAN Button
· Automatically cleans and dries the evaporator coil at the end of the cooling season, preventing any odors or mildew

7 UP/DOWN Buttons ▲ ▼
· Increase or decrease the indoor temperature in one degree increments (maximum 86°F, minimum 62°F)

NOTE - Temperature cannot be adjusted in FAN mode.

NOTE - Press and hold and buttons together for 3 seconds to alternate the temperature display between the °C and °F scale.

8 SILENCE/FP Button
· **Silence** - Operates the compressor at low frequency and low fan speed to reduce operating sound levels to a minimum
· **FP** - Only available during heating operation - Unit will operate at a set temperature of 46°F

NOTE - To cancel, push the "ON/OFF", "SLEEP", "FP", "MODE", "FAN SPEED", "UP/DOWN" buttons.

9 TIMER ON / TIMER OFF Buttons
· TIMER ON (initiates an auto-on time sequence)
· TIMER OFF (initiates an auto-off time sequence)
· Can be used separately or together
· Each press of the button increases the time in 30 minute increments up to 10 hours
· Above 10 hours each press of the button will increase the auto-timed setting by 60 minutes up to 24 hours

NOTE - To cancel, set timer to 0.0 or turn remote off and on.

10 SWING Button
· Used to stop or start horizontal louver auto swing feature

### 11 DIRECT Button
· Used to change the louver movement and set the desired up/down air flow direction
· The louver angle changes 6° for each press of the button

12 FOLLOW ME Button
· Allows remote temperature sensing of the room at the remote controller location

13 LED Button
· Turns the LCD display backlight on the indoor unit on or off

WIRELESS REMOTE CONTROLLER OPERATION
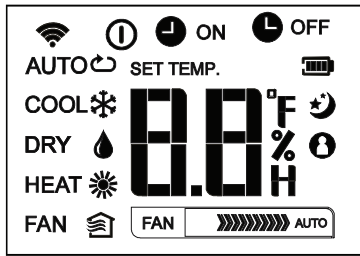
Mode display

AUTO ↻   COOL ❄   DRY 💧

HEAT ☀   FAN 🏠

📶	Displayed when data transmitted.
⏻	Displayed when remote controller is ON.
🔋	Battery display (low battery detection)

🕐 ON	Displayed when TIMER ON time is set.
🕐 OFF	Displayed when TIMER OFF time is set.
8.8	Show set temperature or room temperature, or time under TIMER setting.

🌙	Displayed in Sleep Mode operation.
👤	Indicated that the air conditioner is operating in Follow me mode

Fan speed indication

FAN 》》》	Low speed
FAN 》》》》	Medium speed
FAN 》》》》》	High speed
FAN AUTO	Auto fan speed

Note - During unit operation only the active functions will be shown on the display.

Auto Operation
1. Press the MODE button to select Auto.
2. Press the UP/DOWN button to set the desired temperature.
3. Press the ON/OFF button to start the air conditioner.

Cooling /Heating/Fan Operation
1. Press the MODE button to select COOL, HEAT or FAN mode.
2. Press the UP/DOWN buttons to set the desired temperature.
3. Press the FAN button to select the fan speed in four steps- Auto, Low, Med,or High.
4. Press the ON/OFF button to start the air conditioner.

Dehumidifying Operation
1. Press the MODE button to select DRY mode.
2. Press the UP/DOWN buttons to set the desired temperature.
3. Press the ON/OFF button to start the air conditioner.

Timer ON/OFF Operation
1. Press the TIMER ON or TIMER OFF button. The remote controller shows TIMER ON or TIMER OFF icon, the previous Auto-on time setting and the signal "H" will be shown on the LCD display area.
2. Push the TIMER ON or TIMER OFF button again to set desired time. Each time you press the button, the time increases by 30 minutes between 0 and 10 hours and by 60 minutes between 10 and 24 hours.
3. After setting the TIMER ON or TIMER OFF there will be a one second delay before the remote controller transmits the signal to the unit. After approximately 2 seconds, the signal "H" will disappear and the set temperature will re-appear on the LCD display window.

WIRED REMOTE CONTROLLER

**Furnished with Ducted Indoor Units.**
**NOTE** - Can be ordered separately for non-ducted indoor units.

FEATURES
- Permanent Memory - Maintains clock, fan speed and mode of operation settings following power outages
- Dimensions (H x W x D) - 4-3/4 x 4-3/4 x 7/8 in.
- Additional hardware is furnished for installation
- Wiring - Controller uses 5-wire shielded 20 ft. (6 m) cable (furnished) for easy low voltage connection to the indoor unit
- Maximum cable length is 40 ft. (12 m)

DISPLAY
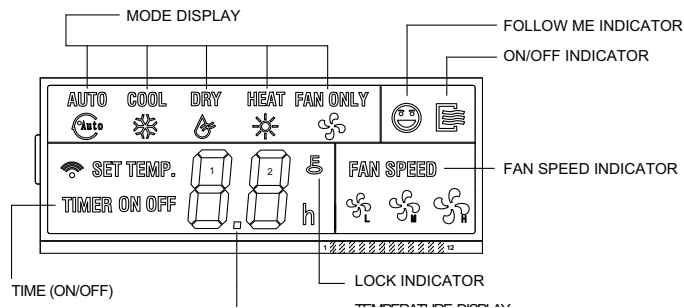
BUTTONS AND FUNCTIONS
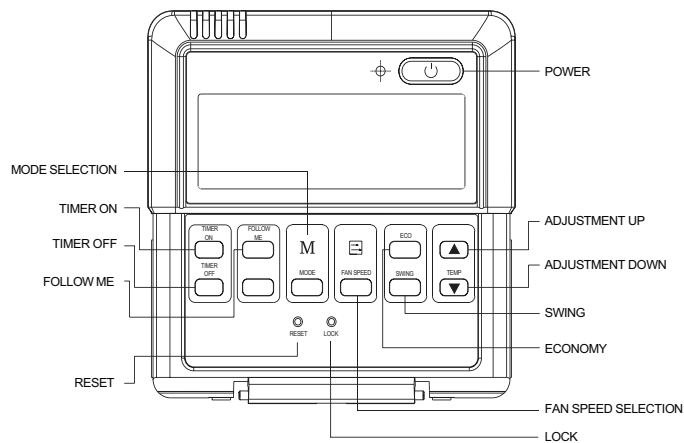
MODE Button
- Select system operation modes. Push button to cycle through each setting

POWER Button
- Turns system on and off

FAN SPEED Button
- Selects fan speed. Each button press cycles through the following settings on display
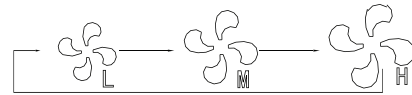
NOTE - Not available in **AUTO** mode.

TIMER ON / TIMER OFF Buttons
- TIMER ON (initiates an auto-on time sequence)
- TIMER OFF (initiates an auto-off time sequence) can be used separately or together
- Each press of the button increases the time in 30 minute increments up to 10 hours
- Above 10 hours each press of the button will increase the auto-timed setting by 60 minutes up to 24 hours

NOTE - To cancel, set timer to 0.0.

UP/DOWN Buttons ▲ ▼
- Increase or decrease the indoor temperature in two degree increments (maximum 88°F, minimum 62°F).

NOTE - Temperature cannot be adjusted in FAN mode.

NOTE - Press and hold and buttons together for 3 seconds to alternate the temperature display between the °C and °F scale.

SWING Button
- Used to stop or start horizontal louver auto swing feature

ECONOMY Button
- Maintains the most comfortable temperature and saves energy

RESET Button (Recessed)
- Resets Controller to factory settings. Recessed to prevent tampering

LOCK Button (Recessed)
- Locks Controller buttons to prevent tampering with settings

OPTIONAL ACCESSORIES

Extension Cable for Wired Remote Controller
- 20 ft. cable for easy low voltage connection to the indoor unit
- Extends cable to maximum 40 ft. length

WIRED PROGRAMMABLE CONTROLLER

M0STAT64Q-1

- Wired programmable local controller for mini-split indoor units with convenient timed schedules for daily operation
- Up to 8 events per day
- Schedule start time, mode, setpoint, and fan speed
- Compatible with all indoor units
- Copy/paste function for easy duplication of events to other days
- Built-in system diagnostics
- Large, back-lit, easy-to-read LCD screen with digital display

BUTTONS AND FUNCTIONS

POWER Button
- Turn system on and off

FAN SPEED Button
- Scroll through fan speeds (Auto - Low - Med - High)

MODE Button
- Use + and − buttons to scroll through available operation modes (Auto / Cool / Dry / Fan / Heat)

PLUS (+) and MINUS (−) Buttons
- Setpoint adjustment (62-86°F)
- Select days of the week when setting a schedule
- Select mode of operation

SWING Button
- Stop or start horizontal (up/down) louver auto swing
- Controls swing oscillation and louver angle in 6° increments

TIMER Button
- Sets current time of day (24 hour clock)
- Setup weekly schedules or to setup timed operation for the indoor unit
- Stop/Stop timed operation

DAY OFF / DEL Button
- Disable specific days/schedules of the week
- Delete a specific event

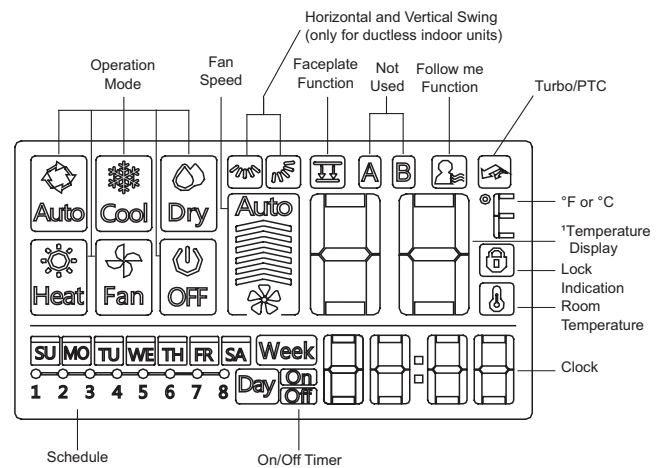CONFIRM Button
- Confirms each step when managing schedules

BACK/TURBO Button
- Turbo sets indoor unit fan speed to high for a factory-set time period

COPY/FOLLOW ME Button
- Toggles between room temperature sensing from the indoor unit or the controller

DISPLAY

¹ Displays cooling setpoint, heating setpoint or room temperature

- Audible tone when a button is pressed (can be disabled)
- Lock function disables buttons to prevents tampering
- Controller uses 4-wire shielded 20 ft. (6 m) cable (furnished) for easy low voltage connection to the indoor unit
- Adaptor cables are furnished for various indoor unit connections

NOTE - Cable for longer lengths must be ordered separately.

NOTE - Maximum cable length is 164 ft. (50 m).

- Hardware for mounting furnished
- Mounts to standard electrical junction box (not furnished)
- Lithium battery furnished
- Power Supply: 5 VDC
- Dimensions (H x W x D): 4-7/8 x 4-3/4 x 3/4 in. (124 x 121 x 19 mm)

OPTIONAL ACCESSORIES

Extension Cable for Wired Programmable Controller
- 20 ft. cable for easy low voltage connection to the indoor unit
- Extends cable to 40 ft. (12 m) length

OUTDOOR UNITS

Condenser Pad
- Provides permanent foundation for outdoor units
- One-piece lightweight structural foam and molded from high-density polyethylene (HDPE)
- Lightweight, easy to carry and install
- Textured finish provides a non-skid surface so outdoor unit sits securely in one place
- UV stable

Disconnects
- Positive unit disconnect
- Single door enclosure
- Fused and non-fused models available

Fuses
- 30 and 60 amp fuses available

Hail Guards
- Protects outdoor coils on all sides without inhibiting airflow or performance
- Self-tapping screws provided for installation
- Flat shape allows for outdoor units to be placed close together
- Each kit contains all required guards
- Order one hail guard kit per outdoor unit module

Indoor/Outdoor Wiring Cable
- 14-gauge, 4-conductor wire
- THHN (Thermoplastic High Heat-resistant Nylon-coated) wire
- Suitable for wet or dry locations
- Rated up to 600V

Refrigerant Line Sets
- Refrigerant lines are shipped refrigeration clean
- Lines are cleaned, dried, pressurized and sealed at factory

Wall Brackets
- Heavy duty 1/8 in. thick steel brackets for supporting outdoor units
- Mount at any height to allow for easy maintenance under units
- Pre-punched holes for easy installation
- Powder coated gray finish
- Load rating 600 lbs. per pair

Whips
- Heavy duty electrical whips are available in 8 and 10 gauge sizes
- 6 ft. lengths
- Weatherproof metal conduit

INDOOR UNITS

Condensate Pumps
- Quietly and efficiently removes condensate
- See Optional Accessories Table for available pumps

### A/C Easy Tee® Condensate Cleanout
- Condensate drain service port
- Flexible and easy to use with nitrogen, water or shop vac
- Screw cap on top allows easy access to condensate drain line

SPEEDICHANNEL™ SYSTEM

- SpeediChannel™ is a channel system covers system line sets
- Two-part system has a base and a cover
- Base is fastened to a wall or ceiling with plastic clips (SpeediClip™) that snap into a channel already molded into the base
- Cover fits on top of the base
- Manufactured from rigid PVC, which is UL rated and resistant to UV light
- System is a natural color that closely matches typical mini-split outdoor units
- Can be painted as desired to match any wall color

Typical Application
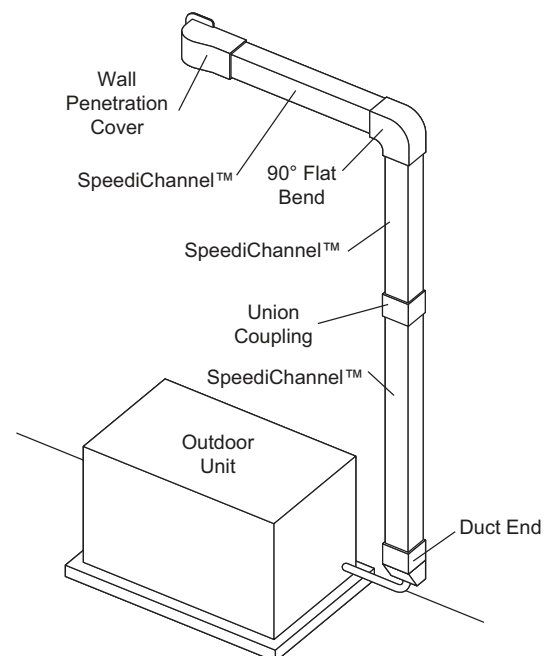
SPEEDICHANNEL™ SYSTEM (continued)

SpeediChannel™ Starter Kit
- The starter kit includes (1) Coupling, (1) Wall Penetration, (1) Inside Elbow, (1) Long Radius Flat Bend, (10) SpeediclipsTM, (10) 11 in. Cable Ties, and (1) SpeediChannel Instruction Booklet

Duct End
- Duct Ends are used to terminate a run of SpeediChannel™ to a small opening just large enough for the line set and condensate drain line to pass through

Flat Wall Escutcheon
- Flat Wall Escutcheons are used to cover a rough opening in a soffit, wall, or ceiling penetration

  - One side of the escutcheon is flat to allow for a SpeediChannel™ to run along a wall and to penetrate through an adjacent wall or ceiling
  - This is the most common type of wall penetration
  - Furnished in two parts, the escutcheon easily snaps onto the SpeediChannel™

Flex Joint
- A Flex Joint is an accordion-style piece of SpeediChannel™
- The flex joint can be extremely flexible when routing a SpeediChannel™ system around an obstacle
- Each joint is 20 in. long and can be combined together for longer flex runs
- The flex joint does not require the use of a union coupling
- The flex joint slides tightly inside the SpeediChannel™ system

T-Joint
- T-Joints are used for creating a tee connection between three pieces of SpeediChannel™
- Each tee is individually packed and furnished with stainless steel screws
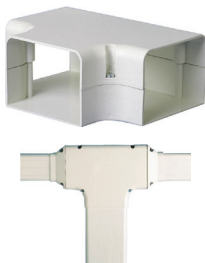
Union Coupling
- Union Couplings are used for joining two pieces of SpeediChannel™
- Each coupling is individually packed and furnished with stainless steel screws

Wall Penetration Cover
- Wall penetration covers are used to transition from the SpeediChannel™ system to a through wall penetration
- Wall covers are designed to allow for easy installation, even after the line set has been installed
- A hooking and fastening arrangement allows for quick installation
- Each wall cover is individually packed, and furnished with stainless steel screws to attach the wall cover to the base
- Three screws are necessary to fasten the wall cover to the wall construction, regardless of the type of installed system

45° and 90° Flat Bend Elbows
- 45º Flat Bends are used to route the SpeediChannel™ around obstacles
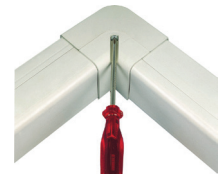- Each bend is individually packed and furnished with stainless steel screws

45°   90°

90° Inside Elbow
- 90º Inside Elbows are used to route the SpeediChannel™ around an inside corner
- Each elbow is individually packed and furnished with stainless steel screws

Mount Block White Qty. (2) 14 in. and (2) 36 in.
- Mount Blocks are used as mounting bases when outdoor units must be bolted down
- End caps (for aesthetics) come furnished with mounting bolts
- Maximum load capacity is 900 pounds per mounting block
- Installation temperatures range from -4ºF to 140ºF
- Mount blocks fit all mini-split outdoor units with a sliding rail feature

		0.75	1	1.5	2
Nominal Size - Tons		0.75	1	1.5	2
Outdoor Unit Model No.		MLA009S4S	MLA012S4S	MLA018S4S	MLA024S4S
Ambient Temperature Operating Range - °F	Cooling	–22 - 122	–22 - 122	–22 - 122	–22 - 122
	Heating	–22 - 86	–22 - 86	–22 - 86	–22 - 86
Energy Star Certified?		Yes	Yes	Yes	Yes
Sound Data (dBA)	Cooling	52	52	56	57
	Heating	57	57	59	60
Refrigerant	Charge furnished (R-410A)	3 lbs. 3 oz.	3 lbs. 3 oz.	4 lbs. 3 oz.	5 lbs. 7 oz.
	Maximum line length with furnished charge - ft.	25	25	25	25
	Additional charge required per ft. - oz.	0.16	0.16	0.16	0.32
Compressor	No. and Type	Rotary	Rotary	Rotary	Rotary
	Refrigerant oil type	Ester Oil VG74	Ester Oil VG74	POE VG74	POE VG74
	Refrigerant oil charge - oz.	16.9	16.9	22.7	22.7
Connections - in.	Liquid/Gas pipe (flare)	1/4 / 3/8	1/4 / 1/2	1/4 / 1/2	3/8 / 5/8
	Maximum refrigerant pipe length - ft.	82	82	98	164
	Max. difference in level of indoor unit - ft.	33	33	66	82
Outdoor Fan	(No.) Diameter - in.	(1) 17	(1) 17	(1) 19	(1) 22
	Total air volume - cfm	1120	1180	1355	2355
	rpm	810	810	850	810
Outdoor Coil	Number of rows	2	2	2	2
	Fins per inch	18	18	18	19
	Fin type	Hydrophilic aluminum			
	Tube outside diameter - in.	3/8	3/8	3/8	3/8
	Tube type	Rifled copper tubing			
	Net face area - ft.^{2}	4.73	4.73	5.19	8.16
Design Pressure	PSIG	550/340	550/340	550/340	550/340
Shipping Data	Net/Shipping weight (lbs.)	88/94	88/94	108/115	136/149
ELECTRICAL DATA					
Electrical Characteristics - 60 Hz - 1 Phase		208/230V	208/230V	208/230V	208/230V
[1] Maximum Overcurrent Protection (amps)		15	15	25	30
[2] Minimum circuit ampacity		9	9	18	20
Outdoor Fan Motor	Rated load amps	0.38	0.38	0.42	0.5
	Output - W	40	40	44	120

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

[1] HACR type circuit breaker or fuse.

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

SPECIFICATIONS   WALL-MOUNTED INDOOR UNITS

Model No.	MWMA009S4	MWMA012S4	MWMA018S4	MWMA024S4
Nominal Tons	0.75	1	1.5	2
Power Supply - 60 hz - 1 phase	208/230V	208/230V	208/230V	208/230V
Rated load amps	0.2	0.2	0.4	0.5
Output (W)	20	20	58	60
Room Temperature Range (°F) — Cooling	62 - 90	62 - 90	62 - 90	62 - 90
Room Temperature Range (°F) — Heating	32 - 86	32 - 86	32 - 86	32 - 86
Air Volume - cfm (High/Medium/Low)	370/270/195	370/275/200	530/410/295	695/625/485
Sound Data (dBA) - Low/Medium/High	26.5/33.4/41.7	28.6/35.8/45.1	30.9/36.3/46.2	35.1/44.5/51.7
Piping Connections - Liquid/Gas - o.d. - flare - in.	1/4 / 3/8	1/4 / 1/2	1/4 / 1/2	3/8 / 5/8
Drain connection o.d. - in.	1	1	1	1
Net/Shipping weights - lbs.	20 / 26	20 / 27	27 / 35	40 / 54

SPECIFICATIONS   CASSETTE INDOOR UNITS

Model No.	M22A009S4	M22A012S4	M22A018S4	M33A024S4
Nominal Tons	0.75	1	1.5	2
Power Supply - 60 hz - 1 phase	208/230V	208/230V	208/230V	208/230V
Rated load amps	0.9	1.0	1.5	1.5
Output (W)	46	46	46	42
Room Temperature Range (°F) — Cooling	62 - 90	62 - 90	62 - 90	62 - 90
Room Temperature Range (°F) — Heating	32 - 86	32 - 86	32 - 86	32 - 86
Air Volume - cfm (High/Medium/Low)	375/300/255	380/310/260	560/485/415	700/635/575
Sound Data (dBA) - Low/Medium/High	33/37/41	36/39/43	36/39/44	43/47/51
Piping Connections - Liquid/Gas - o.d. - flare - in.	1/4 / 3/8	1/4 / 1/2	1/4 / 1/2	3/8 / 5/8
Drain connection o.d. - in.	1	1	1	1-1/4
Net/Shipping weights - lbs. — Body	32 / 38	36 / 41	36 / 42	47 / 55

REQUIRED COMPONENTS - ORDERED SEPARATELY

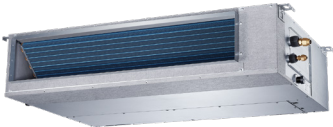|	M22A009S4	M22A012S4	M22A018S4	M33A024S4
Cassette Panel	13X04 (M0STAT62Q-1)	13X04 (M0STAT62Q-1)	13X04 (M0STAT62Q-1)	13X05 (M0STAT63Q-1)
Net/Shipping weights - lbs.	6 / 10	6 / 10	6 / 10	12 / 18

SPECIFICATIONS - CEILING/FLOOR MOUNT INDOOR UNITS

Model No.	MCFB018S4	MCFA024S4
Nominal Tons	1.5	2
Power Supply - 60 hz - 1 phase	208/230V	208/230V
Rated load amps	1.5	1.5
Output (W)	55	55
Room Temperature Range (°F) Cooling	62 - 90	62 - 90
Room Temperature Range (°F) Heating	32 - 86	32 - 86
Air Volume - cfm (High/Medium/Low)	580/520/465	760/710/600
Sound Data (dBA) - Low/Medium/High	39/44/47	42/48/53
Piping Connections - Liquid/Gas - o.d. - flare - in.	1/4 / 1/2	3/8 / 5/8
Drain connection o.d. - in.	1	1
Net/Shipping weights - lbs.	55 / 66	59 / 70

SPECIFICATIONS   FLOOR MOUNT CONSOLE INDOOR UNITS

Model No.	MFMA012S4
Nominal Tons	1
Power Supply - 60 hz - 1 phase	208/230V
Rated load amps	1
Output (W)	20
Room Temperature Range (°F) Cooling	62 - 90
Room Temperature Range (°F) Heating	32 - 86
Air Volume - cfm (High/Medium/Low)	365/318/248
Sound Data (dBA) - Low/Medium/High	35/40/45
Piping Connections - Liquid/Gas - o.d. - flare - in.	1/4 / 1/2
Drain connection o.d. - in.	5/8
Net/Shipping weights - lbs.	33 / 43

SPECIFICATIONS - MEDIUM STATIC DUCTED INDOOR UNITS

Model No.	MMDB009S4	MMDB012S4	MMDB018S4	MMDB024S4
Nominal Tons	0.75	1	1.5	2
Power Supply - 60 hz - 1 phase	208/230V	208/230V	208/230V	208/230V
Rated load amps	1.09	1.0	1.2	1.5
Output (W)	55	55	160	160
Room Temperature Range (°F) Cooling	62 - 90	62 - 90	62 - 90	62 - 90
Room Temperature Range (°F) Heating	32 - 86	32 - 86	32 - 86	32 - 86
Air Volume - cfm (High/Medium/Low)	340/270/165	340/270/165	505/430/350	735/660/415
External Static Pressure (in. w.g)	0 - 0.16	0 - 0.16	0 - 0.40	0 - 0.64
Sound Data (dBA) - Low/Medium/High	25/32/38	26/33.5/38	35/37/39	36/41/44
Piping Connections - Liquid/Gas - o.d. - flare - in.	1/4 / 3/8	1/4 / 1/2	1/4 / 1/2	3/8 / 5/8
Drain connection o.d. - in.	1	1	1	1
Net/Shipping weights - lbs.	38 / 49	38 / 49	54 / 66	87 / 103

OPTIONAL ACCESSORIES - ORDER SEPARATELY

Description		Catalog No.	Size 009	Size 012	Size 018	Size 024
OUTDOOR UNIT						
Condenser Pad (18 x 38 x 3)		**Y5014**	•	•	•	•
Disconnects	30 amp, fused, 1 ph	**27P37**	•	•	•	•
	60 amp, non-fused, 1 ph	**27P39**	•	•	•	•
Fuses	30A	**83P75**	•	•	•	•
	60A	**83P77**	•	•	•	•
Hail Guards	M9GARD14Q-1	**15D25**	•	•	N/A	N/A
	M9GARD15Q-1	**15D26**	N/A	N/A	•	N/A
	M9GARD17Q-1	**15D28**	N/A	N/A	N/A	•
Line Sets	1/4 in. x 3/8 in. x 25 ft.	**90X53**	•	N/A	N/A	N/A
	1/4 in. x 3/8 in. x 50 ft.	**X0258**	•	N/A	N/A	N/A
	1/4 in. x 1/2 in. x 25 ft.	**90X52**	N/A	•	•	N/A
	1/4 in. x 1/2 in. x 50 ft.	**X0259**	N/A	•	•	N/A
	3/8 in. x 5/8 in. x 25 ft.	**X8406**	N/A	N/A	N/A	•
	3/8 in. x 5/8 in. x 50 ft.	**X8407**	N/A	N/A	N/A	•
Wall Brackets	30 inch	**X1727**	•	•	•	•
Whips	10 Gauge - 1/2 in. x 6 ft.	**29P54**	•	•	•	•
	8 Gauge - 3/4 in. x 6 ft.	**27P44**	•	•	•	•
INDOOR UNIT						
[1] Diversitech Condensate Pumps with Reservoir	ClearVue Mini™ - 7.9 US gallons per hour, 35 ft. lift - 120-240V	**Y5170**	•	•	•	•
	Mini-Split Pump - 4 US gallons per hour, 20 ft. lift - 115V	**Y7946**	•	•	N/A	N/A
	Mini-Split Pump - 4 US gallons per hour, 20 ft. lift - 230V	**Y7949**	•	•	•	•
[1] Blue Diamond® Condensate Pumps with Reservoir	MicroBlue® - 1.3 US gallons per hour, 6 ft. lift - 110-230V	**14T74**	•	•	•	N/A
	MaxiBlue® - 3.7 US gallons per hour, 16.5 ft. lift - 208/230V	**14T69**	N/A	N/A	N/A	•
	MultiTank Kit	**14T75**	N/A	N/A	N/A	•
	Sensor Cable Extension - 16 ft.	**14T76**	•	•	•	•
A/C Easy Tee® Condensate Cleanout		**Y7947**	•	•	•	•
CONTROLS						
Wired Remote Controller (Furnished With All Ducted Models) M0STAT61Q-1		**14A66**	•	•	•	•
Extension Cable for Wired Remote Controller - 20 ft.		**Y8008**	•	•	•	•

NOTE - The Wired Remote Controller above is furnished as standard with the indoor ducted models.
    As an option, the Wired Remote Controller can be ordered for a wall-mount, cassette, floor console or ceiling/floor mount unit if desired.

Description		Catalog No.	009	012	018	024
Wired Programmable Controller M0STAT64Q-1		**15D30**	•	•	•	•
Extension Cable for Wired Programmable Controller - 20 ft. M0CTRL64Q-1		**Y8738**	•	•	•	•
Indoor/Outdoor Wiring Cable - 14 Gauge, 4 conductor wire, THHN, 250 ft.		**Y2067**	•	•	•	•
SPEEDICHANNEL™ SYSTEM						
SpeediChannel™ Starter Kit - 4 in.		**Y3387**	•	•	•	•
SpeediChannel - 4 in. x 6-1/2 ft. (qty. 6)		**Y3388**	•	•	•	•
Union Coupling - 4 in.		**Y3389**	•	•	•	•
90° Flat Bend Elbow - 4 in.		**Y3390**	•	•	•	•
90° Inside Elbow - 4 in.		**Y3391**	•	•	•	•
45° Flat Bend Elbow - 4 in.		**Y3392**	•	•	•	•
Flex Joint - 4 in.		**Y3393**	•	•	•	•
T-Joint - 4 in.		**Y3394**	•	•	•	•
Duct End - 4 in.		**Y3395**	•	•	•	•
Flat Wall Escutcheon - 4 in.		**Y3396**	•	•	•	•
Wall Penetration Cover - 4 in.		**Y3399**	•	•	•	•
Mount Block (White) Qty, 2 - 14 in.		**Y3397**	•	•	•	•
Mount Block (White) Qty, 2 - 36 in.		**Y3398**	•	•	•	•

[1] Y7946, Y7949 and 14T74 condensate pumps can be installed inside the indoor units. All other pumps must be installed external to the indoor unit.
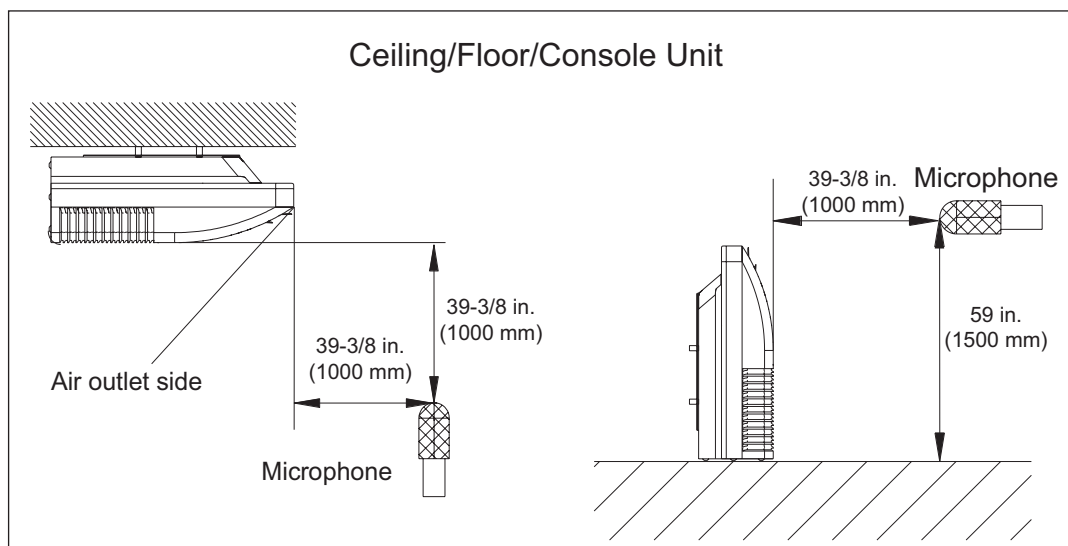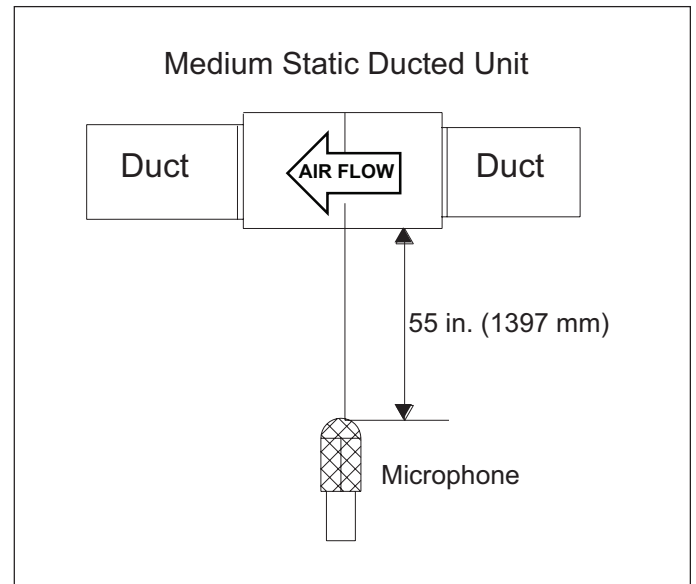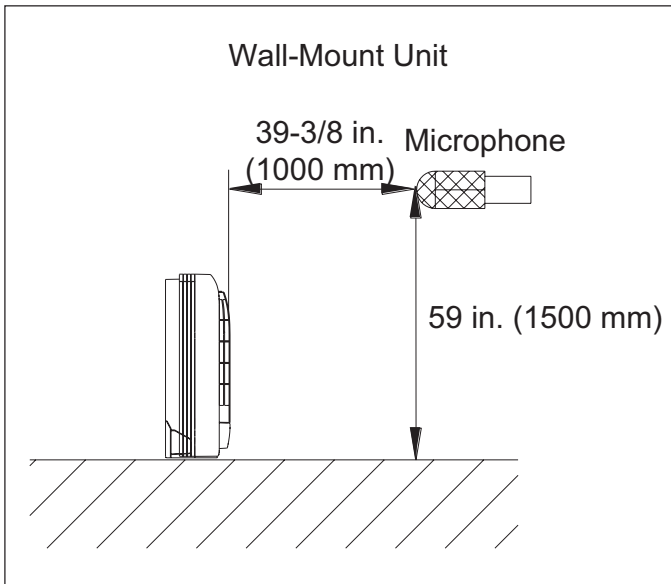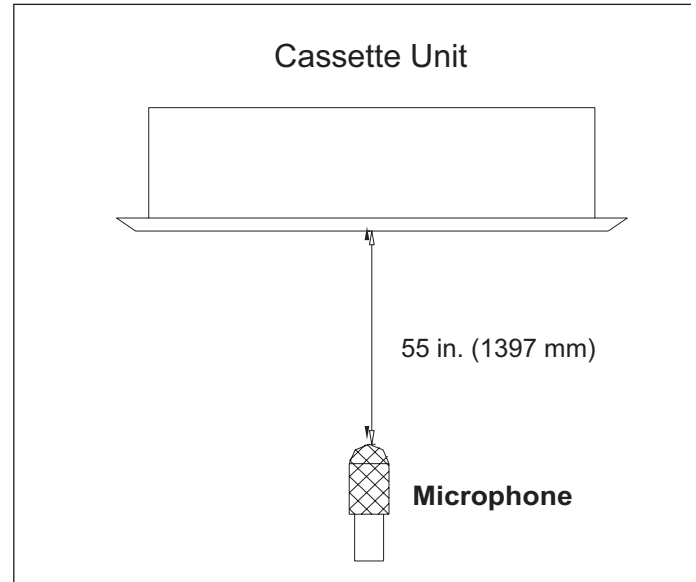
AHRI SYSTEM MATCHES

Indoor Unit Type	Outdoor Unit	Indoor Unit	Cooling Capacity	SEER	EER	Heat Capacity High	Low	HSPF (IV)	AHRI Reference	Energy Star?
Wall-Mounted Non-Ducted	MLA009S4S-1P	MWMA009S4-3P	9,000	24	14.5	10,900	6,900	10.5	201796632	Yes
	MLA012S4S-1P	MWMA012S4-3P	12,000	22	12.5	12,000	7,800	10	201796633	Yes
	MLA018S4S-1P	MWMA018S4-2P	17,000	20	12.5	18,000	10,800	10	9920044	Yes
	MLA024S4S-1P	MWMA024S4-2P	24,000	20	12.5	24,000	15,400	10	9920047	Yes
Cassette Non-Ducted	MLA009S4S-1P	M22A009S4-2P	9,000	19.5	13	10,000	6,700	10	9920039	No
	MLA012S4S-1P	M22A012S4-2P	12,000	19	12.5	12,000	8,200	10	9920042	No
	MLA018S4S-1P	M22A018S4-2P	16,000	19	12.5	18,000	12,000	9.6	9920045	No
	MLA024S4S-1P	M33A024S4-2P	24,000	19.5	11	24,000	16,200	10.5	9920048	No
Ceiling/Floor Mount Non-Ducted	MLA018S4S-1P	MCFB018S4-2P	17,000	18.5	12.5	18,000	12,900	10	9956319	No
	MLA024S4S-1P	MCFA024S4-2P	24,000	19	11.5	24,000	17,200	11	9920049	No
Floor Mount Console Non-Ducted	MLA012S4S-1P	MFMA012S4	12,000	19.4	12.5	12,000	9,600	10.5	205747587	No
Medium Static Ducted	MLA009S4S-1P	MMDB009S4-2P	9,000	23	13.5	10,000	7,200	12	10528569	Yes
	MLA012S4S-1P	MMDB012S4-2P	12,000	20.5	12.5	12,000	8,500	11.0	10528570	Yes
	MLA018S4S-1P	MMDB018S4-2P	16,500	19.6	12.5	19,000	13,400	11.0	10528571	Yes
	MLA024S4S-1P	MMDB024S4-2P	24,000	20.5	12.5	24,000	17,200	12.5	10528572	Yes

Ratings are AHRI certified to AHRI Standard 210/240-2008;
  • Cooling Ratings - 80°F dry bulb/67°F wet bulb entering indoor coil air and 95°F wet bulb/75°F dry bulb outdoor air temperature.
  • High Temperature Heating Ratings - 70°F dry bulb/60°F wet bulb entering indoor coil air and 47°F dry bulb/43°F wet bulb outdoor air temperature.
  • Low Temperature Heating Ratings - 70°F dry bulb/60°F wet bulb entering indoor coil air and 17°F dry bulb/15°F wet bulb outdoor air temperature.

To convert HSPF from Region IV to Region V - Divide by 1.15.

Outdoor Unit

Microphone

H

39-3/8 in.
(1000 mm)

Note: H= 0.5 × height of outdoor unit

Cassette Unit

55 in. (1397 mm)

Microphone

Wall-Mount Unit

39-3/8 in. Microphone
(1000 mm)

59 in. (1500 mm)

Medium Static Ducted Unit

Duct

AIR FLOW

Duct

55 in. (1397 mm)

Microphone

Ceiling/Floor/Console Unit

Air outlet side

39-3/8 in.
(1000 mm)

39-3/8 in.
(1000 mm)

Microphone

39-3/8 in. Microphone
(1000 mm)

59 in.
(1500 mm)

COOLING CAPACITY

Outdoor Temperature - °F (Dry Bulb)	Indoor Temperature - °F (Dry Bulb / Wet Bulb)							
	65°F / 54°F		70°F / 59°F		75°F / 63°F		80°F / 67°F	
	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh
−22	8.91	6.41	9.62	6.94	10.49	7.47	11.27	8.01
−13	9.33	6.74	10.08	7.31	10.99	7.87	11.73	8.43
−4	9.67	7.03	10.50	7.61	11.33	8.19	12.16	8.78
0	9.77	7.10	10.61	7.69	11.45	8.28	12.29	8.88
5	9.91	7.20	10.76	7.80	11.61	8.40	12.46	9.00
15	10.18	7.40	11.05	8.01	11.93	8.63	12.80	9.24
25	10.46	7.84	11.27	8.43	12.08	9.01	12.89	9.59
35	10.74	8.29	11.49	8.84	12.23	9.39	12.98	9.94
45	11.02	8.74	11.71	9.26	12.39	9.77	13.07	10.29
55	11.31	9.19	11.92	9.67	12.54	10.16	13.16	10.64
65	11.59	9.64	12.14	10.09	12.70	10.54	13.25	10.99
75	11.87	10.09	12.36	10.51	12.85	10.92	13.34	11.34
85	12.15	10.32	12.58	10.69	13.02	11.06	13.45	11.43
95	10.82	9.07	11.57	9.83	11.78	10.01	12.58	10.69
105	9.50	7.83	10.26	8.72	10.54	8.95	11.70	9.95
115	8.27	7.03	8.95	7.61	9.64	8.19	10.32	8.77
122	7.13	6.06	7.76	6.60	8.39	7.13	9.02	7.67

HEATING CAPACITY

Outdoor Temperature - °F (Dry Bulb)	Indoor Temperature - °F (Dry Bulb)			
	60°F	65°F	70°F	75°F
	Total mBtuh	Total mBtuh	Total mBtuh	Total mBtuh
−22	4.02	3.64	3.26	2.88
−13	6.54	6.45	6.35	6.26
−5	9.38	9.24	9.11	8.97
0	10.57	10.41	10.26	10.11
5	11.15	10.99	10.83	10.67
17	12.61	12.01	11.40	10.79
19.4	12.81	12.39	11.97	11.54
24.8	13.64	13.09	12.53	11.98
32	14.29	13.70	13.10	12.51
35	14.66	14.45	14.24	14.03
39.2	15.29	14.93	14.56	14.20
44.6	15.82	15.40	14.98	14.56
47	16.22	15.68	15.14	14.60
53.6	17.32	16.45	15.57	14.70
57	17.89	16.84	15.79	14.75

COOLING CAPACITY

Outdoor Temperature - °F (Dry Bulb)	Indoor Temperature - °F (Dry Bulb / Wet Bulb)							
	65°F / 54°F		70°F / 59°F		75°F / 63°F		80°F / 67°F	
	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh
−22	9.09	6.54	9.82	7.08	10.70	7.62	11.49	8.17
−13	9.51	6.88	10.28	7.45	11.21	8.02	11.97	8.60
−4	9.86	7.17	10.71	7.76	11.56	8.36	12.40	8.95
0	9.97	7.25	10.83	7.85	11.68	8.45	12.54	9.05
5	10.11	7.34	10.97	7.96	11.84	8.57	12.71	9.18
15	10.38	7.54	11.27	8.17	12.16	8.80	13.06	9.42
25	10.67	8.00	11.49	8.59	12.32	9.19	13.15	9.78
35	10.95	8.46	11.72	9.02	12.48	9.58	13.24	10.14
45	11.24	8.92	11.94	9.44	12.64	9.97	13.33	10.50
55	11.53	9.38	12.16	9.87	12.79	10.36	13.42	10.85
65	11.82	9.83	12.38	10.29	12.95	10.75	13.52	11.21
75	12.11	10.29	12.61	10.72	13.11	11.14	13.61	11.57
85	12.39	10.53	12.83	10.91	13.28	11.28	13.72	11.66
95	11.04	9.26	11.80	10.03	12.01	10.21	12.83	10.90
105	9.68	7.98	10.47	8.90	10.75	9.13	11.93	10.14
115	8.43	7.17	9.13	7.76	9.83	8.35	10.53	8.95
122	7.27	6.18	7.92	6.73	8.56	7.27	9.20	7.82

HEATING CAPACITY

Outdoor Temperature - °F (Dry Bulb)	Indoor Temperature - °F (Dry Bulb)			
	60°F	65°F	70°F	75°F
	Total mBtuh	Total mBtuh	Total mBtuh	Total mBtuh
−22	4.06	3.68	3.29	2.91
−13	7.10	7.00	6.89	6.79
−5	10.40	10.25	10.10	9.94
0	12.09	11.92	11.74	11.56
5	12.46	12.28	12.10	11.92
17	13.58	13.12	12.45	11.79
19.4	13.72	13.27	12.81	12.36
24.8	14.33	13.75	13.17	12.59
32	14.52	13.92	13.53	13.43
35	14.66	14.45	14.24	14.03
39.2	15.29	14.93	14.56	14.20
44.6	15.82	15.40	14.98	14.56
47	16.22	15.68	15.14	14.60
53.6	17.32	16.45	15.57	14.70
57	17.89	16.84	15.79	14.75

COOLING CAPACITY

Outdoor Temperature - °F (Dry Bulb)	Indoor Temperature - °F (Dry Bulb / Wet Bulb)							
	65°F / 54°F		70°F / 59°F		75°F / 63°F		80°F / 67°F	
	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh
−22	14.53	10.88	15.14	11.46	15.99	12.04	16.68	12.61
−13	15.22	11.46	15.85	12.06	16.74	12.67	17.37	13.28
−4	15.77	11.93	16.51	12.57	17.26	13.20	18.00	13.83
0	15.87	12.01	16.62	12.65	17.37	13.29	18.12	13.92
5	16.00	12.11	16.75	12.75	17.51	13.39	18.27	14.03
15	16.01	12.26	16.81	12.95	17.61	13.65	18.42	14.34
25	16.02	12.41	16.87	13.16	17.71	13.90	18.56	14.64
35	15.78	12.52	16.71	13.35	17.64	14.19	18.57	15.02
45	15.54	12.63	16.55	13.55	17.56	14.48	18.57	15.40
55	15.57	12.74	16.39	13.75	17.48	14.76	18.57	15.78
65	15.59	13.16	16.67	14.24	17.74	15.33	18.81	16.16
75	15.88	13.59	16.94	14.74	17.99	15.89	19.05	17.04
85	16.70	14.32	17.64	15.52	18.58	16.72	19.52	17.92
95	16.21	14.17	17.46	15.36	18.71	16.56	19.96	17.76
105	14.50	12.67	15.75	13.86	17.00	15.05	18.25	16.24
115	11.77	10.28	13.02	11.46	14.27	12.64	15.52	13.81
122	8.40	7.33	9.65	8.49	10.90	9.65	12.15	10.81

HEATING CAPACITY

Outdoor Temperature - °F (Dry Bulb)	Indoor Temperature - °F (Dry Bulb)			
	60°F	65°F	70°F	75°F
	Total mBtuh	Total mBtuh	Total mBtuh	Total mBtuh
−22	11.99	12.21	12.42	12.64
−13	15.57	15.34	15.11	14.89
−5	18.03	17.77	17.51	17.25
0	18.77	18.49	18.22	17.95
5	19.31	19.16	19.00	18.85
17	20.05	19.92	19.79	19.66
19.4	20.84	20.70	20.57	20.44
24.8	21.63	21.49	21.35	21.22
32	22.42	22.28	22.14	22.00
35	24.01	23.86	23.71	23.56
39.2	24.14	23.99	23.84	23.69
44.6	24.32	24.17	24.02	23.87
47	25.00	24.85	24.70	24.55
53.6	26.88	26.73	26.58	26.43
57	27.85	27.70	27.55	27.40

COOLING CAPACITY 024

Outdoor Temperature - °F (Dry Bulb)	Indoor Temperature - °F (Dry Bulb / Wet Bulb)							
	65°F / 54°F		70°F / 59°F		75°F / 63°F		80°F / 67°F	
	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh
−22	21.60	15.58	22.07	16.18	22.88	16.77	23.47	17.37
−13	22.62	16.40	23.11	17.03	23.96	17.66	24.45	18.28
−4	23.44	17.09	23.37	17.54	24.30	18.19	24.74	18.65
0	23.69	17.15	23.73	17.66	24.56	18.37	24.99	18.98
5	23.17	17.02	23.93	17.75	24.69	18.48	25.45	19.21
15	23.17	17.04	24.00	17.80	24.83	18.56	25.66	19.32
25	22.77	16.80	23.93	17.78	25.08	18.76	26.23	19.74
35	22.38	16.56	23.86	17.76	25.33	18.96	26.80	20.15
45	21.99	16.33	23.79	17.74	25.58	19.16	27.38	20.57
55	21.60	16.09	23.72	17.72	25.84	19.36	27.95	20.99
65	21.21	15.85	23.65	17.70	26.09	19.56	28.53	21.41
75	20.82	15.62	23.58	17.69	26.34	19.76	29.10	21.83
85	20.62	15.46	23.21	17.41	25.81	19.35	28.40	21.30
95	18.75	14.06	21.86	16.40	22.93	18.70	24.00	18.00
105	16.88	12.66	18.72	14.04	20.56	15.42	22.40	16.80
115	15.89	11.91	16.25	12.19	16.62	12.46	16.98	12.74
122	14.97	11.23	15.32	11.49	15.67	11.75	16.02	12.02

HEATING CAPACITY 024

Outdoor Temperature - °F (Dry Bulb)	Indoor Temperature - °F (Dry Bulb)			
	60°F	65°F	70°F	75°F
	Total mBtuh	Total mBtuh	Total mBtuh	Total mBtuh
−22	15.20	15.13	15.05	14.98
−13	20.13	19.84	19.54	19.25
−5	24.24	23.89	23.54	23.18
0	25.49	25.61	25.72	25.83
5	26.34	26.19	26.03	25.88
17	26.66	26.50	26.34	26.19
19.4	27.55	27.10	26.65	26.21
24.8	27.82	27.39	26.96	26.44
32	28.13	27.85	27.28	27.10
35	28.30	28.10	27.90	27.70
39.2	28.89	28.67	28.44	28.22
44.6	29.79	29.74	29.68	29.63
47	30.36	30.30	30.24	30.18
53.6	31.92	31.85	31.78	31.71
57	32.72	32.65	32.57	32.50

MWMA009S4 AND MWMB009S4 - COOLING
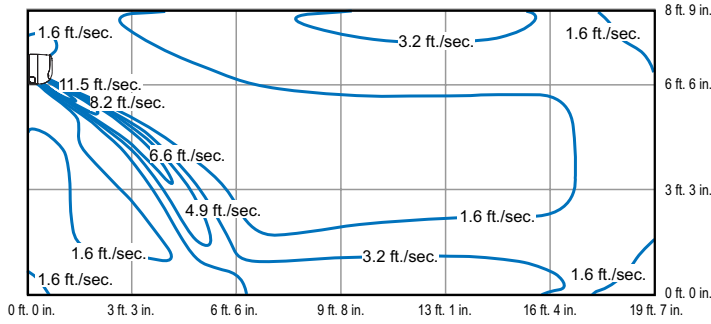
MWMA009S4 AND MWMB009S4 - HEATING
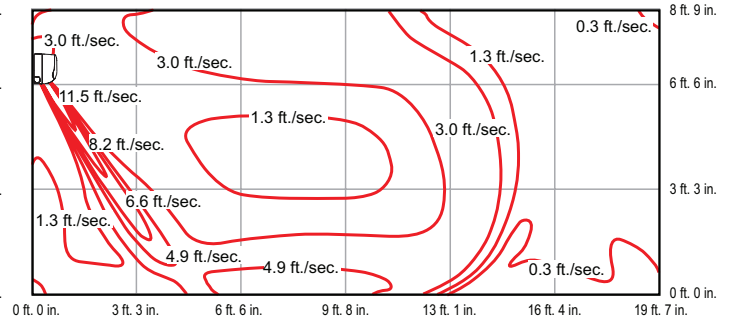
MWMA012S4 AND MWMB012S4 - COOLING
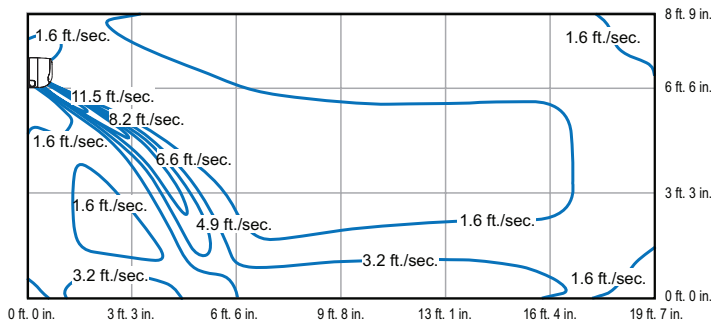
MWMA012S4 AND MWMB012S4 - HEATING
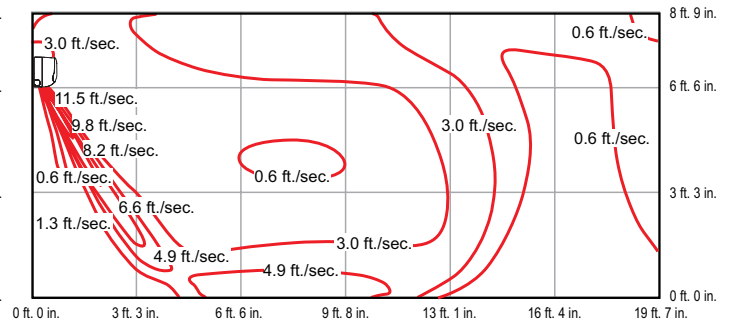
MWMA018S4 - COOLING
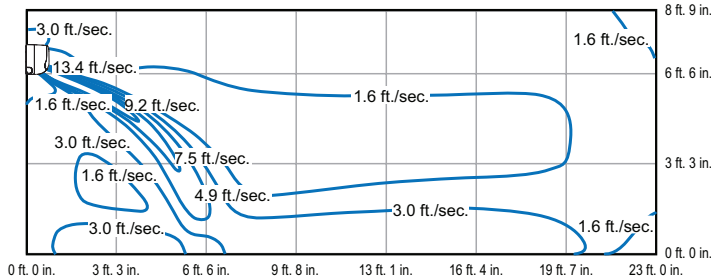
MWMA018S4 - HEATING
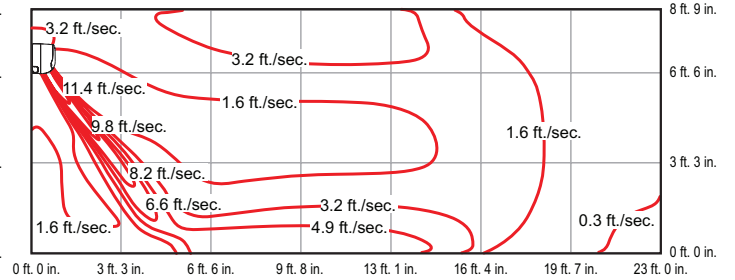
MWMA024S4 - COOLING
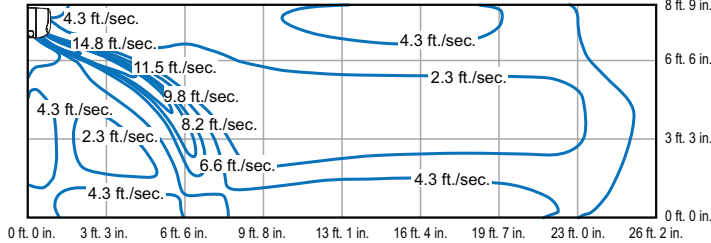
MWMA024S4 - HEATING
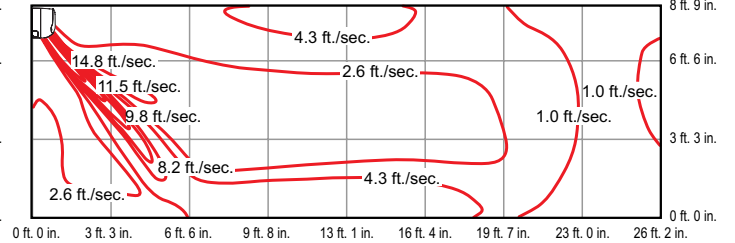
M22A009S4 AND M22A012S4 - COOLING
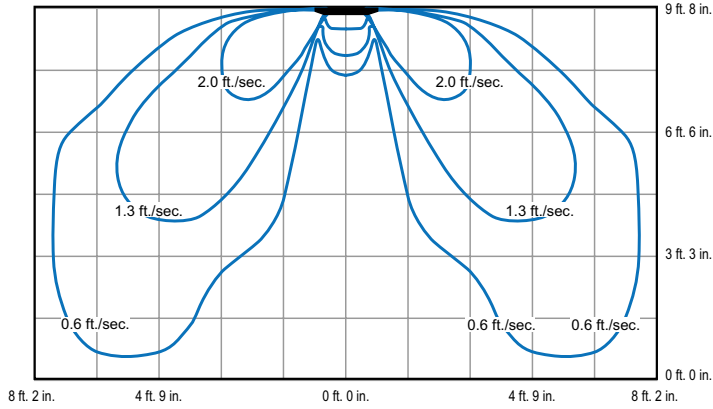
M22A009S4 AND M22A012S4 - HEATING
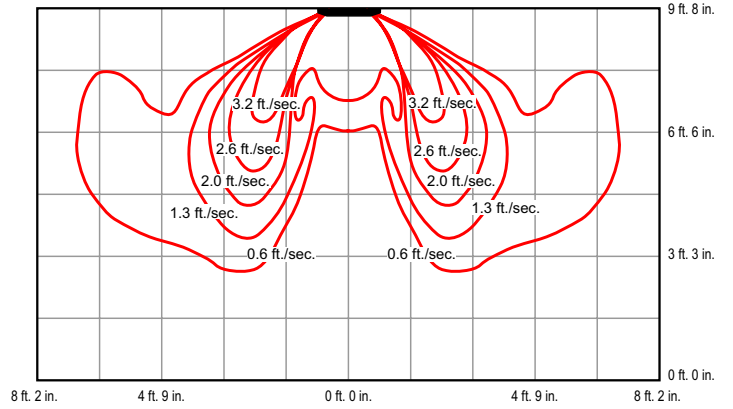
M22A018S4 - COOLING

Measurement = ft./sec.
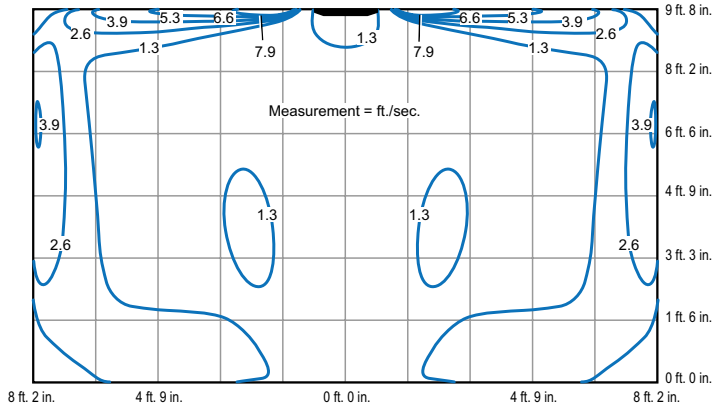
M22A018S4 - HEATING

Measurement = ft./sec.
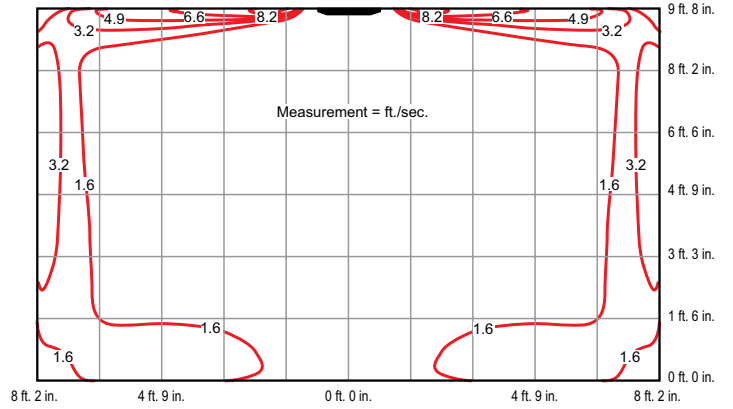
M33A024S4 - COOLING
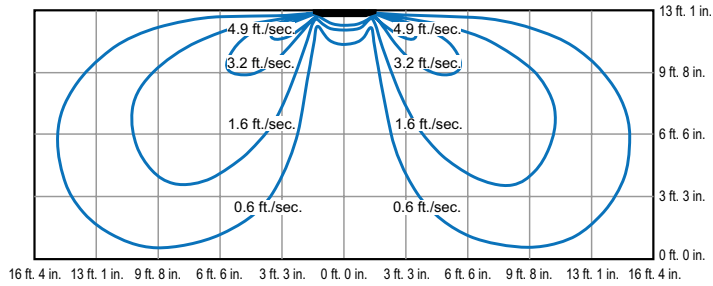
M33A024S4 - HEATING
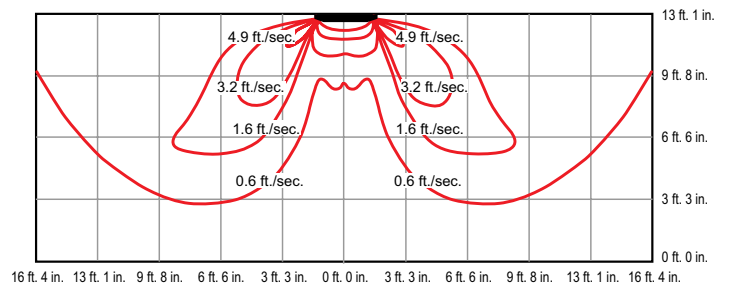
MCFB018S4 AND MCFA024S4 - COOLING - CEILING
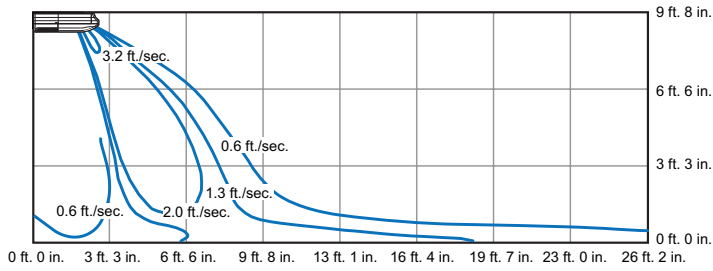
MCFB018S4 AND MCFA024S4 - HEATING - CEILING
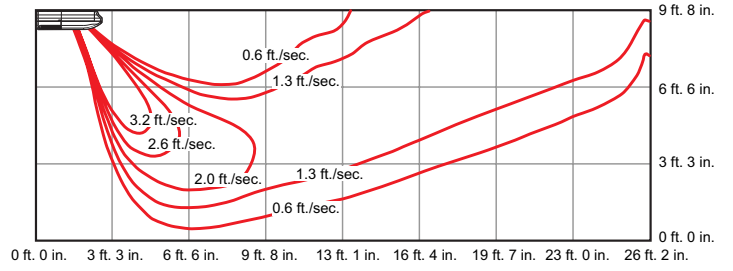
MCFB018S4 AND MCFA024S4 - COOLING - FLOOR
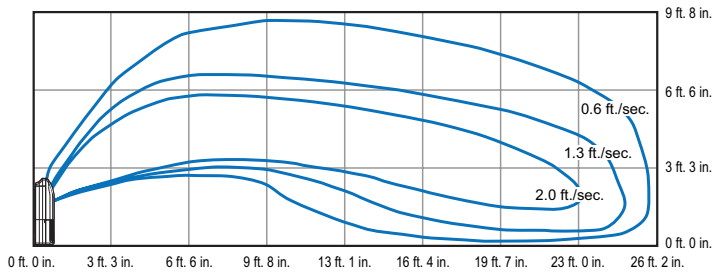
MCFB018S4 AND MCFA024S4 - HEATING - FLOOR
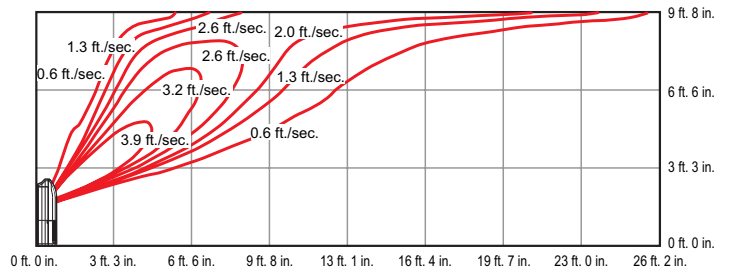
MFMA012S4 - COOLING - FLOOR
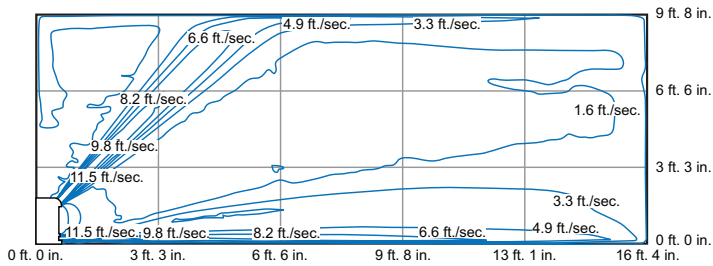
MFMA012S4 - HEATING - FLOOR
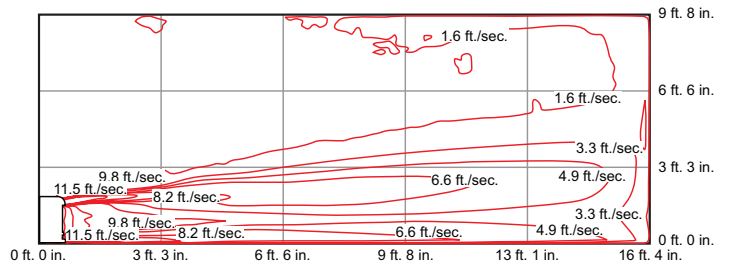
MMDB009S4
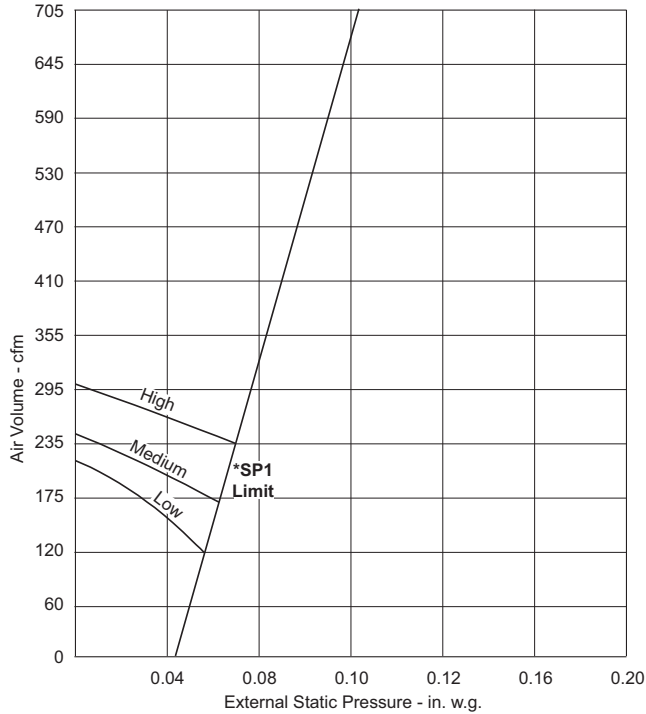
SP1 Limit airflow rate setting on the controller.
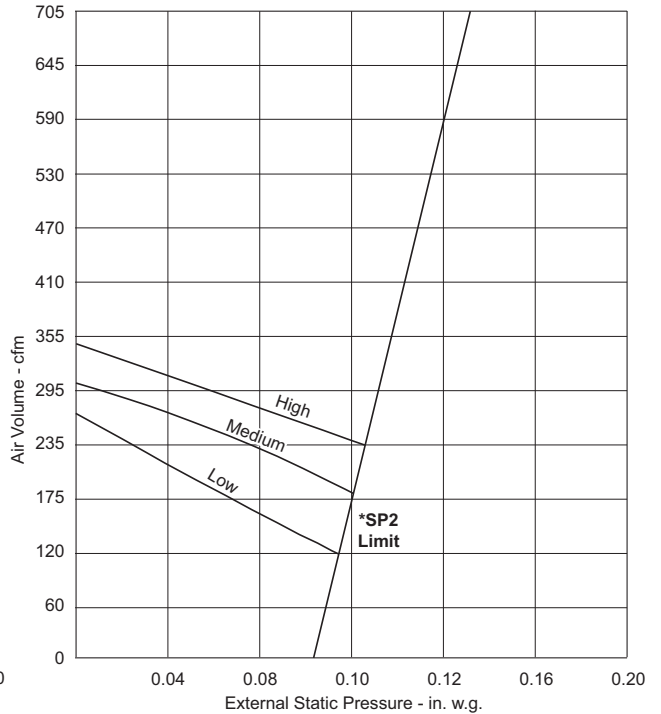
SP2 Limit airflow rate setting on the controller.
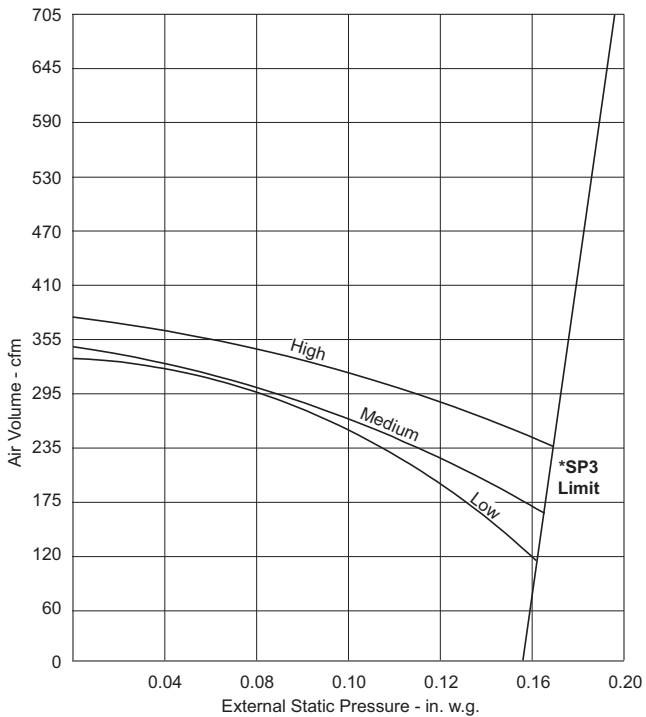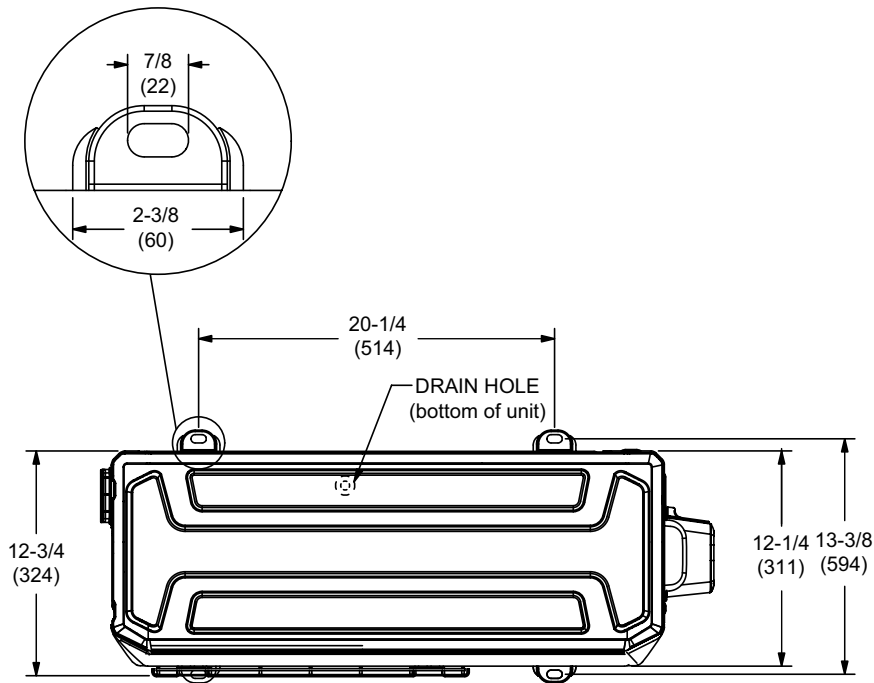

SP3 Limit airflow rate setting on the controller.
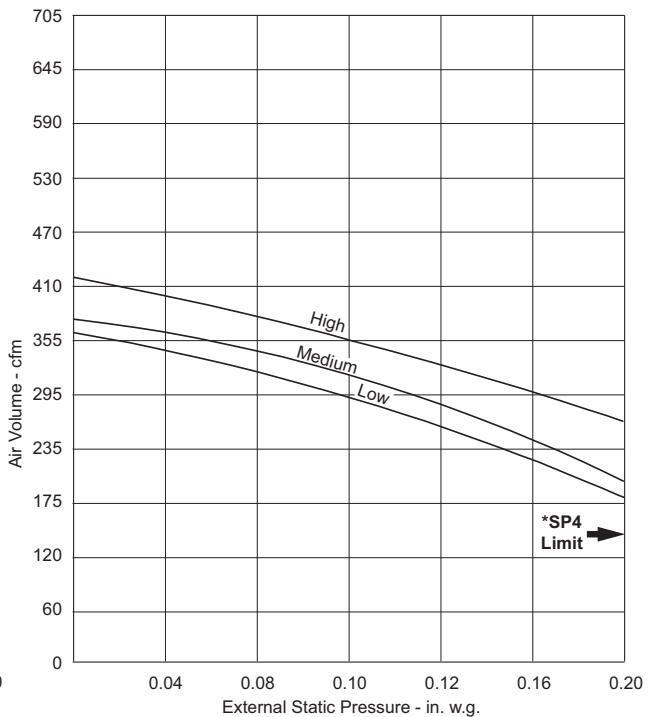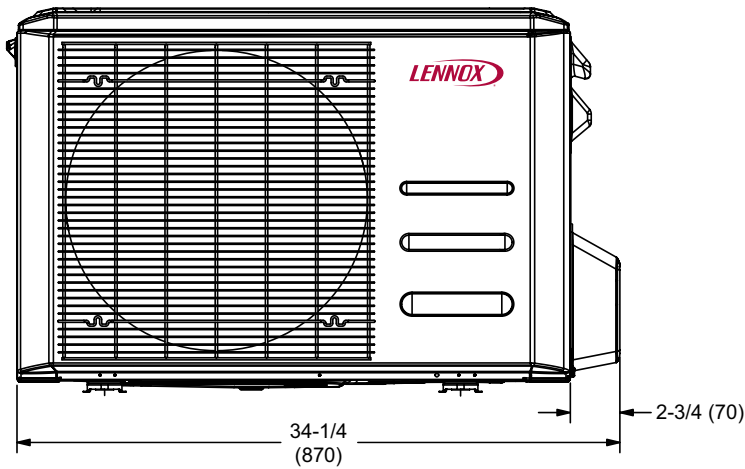

SP4 Limit airflow rate setting on the controller.

MMDB012S4
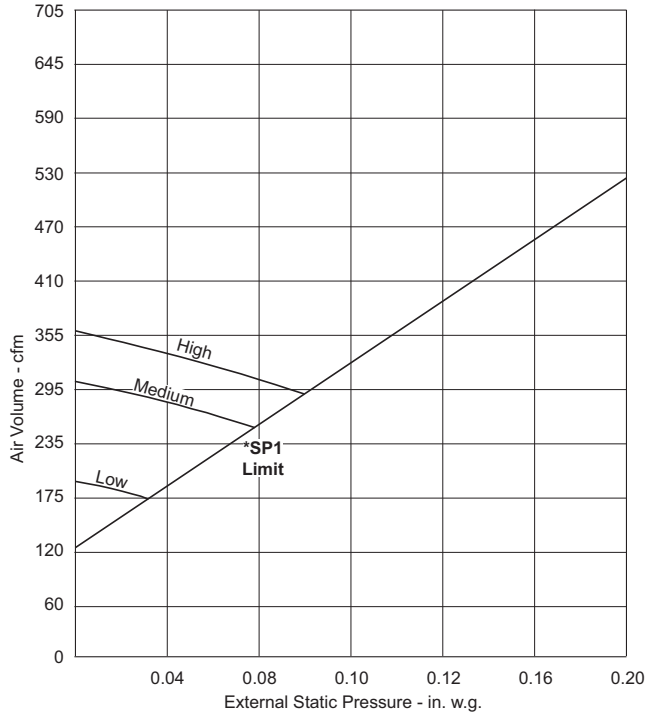
SP1 Limit airflow rate setting on the controller.
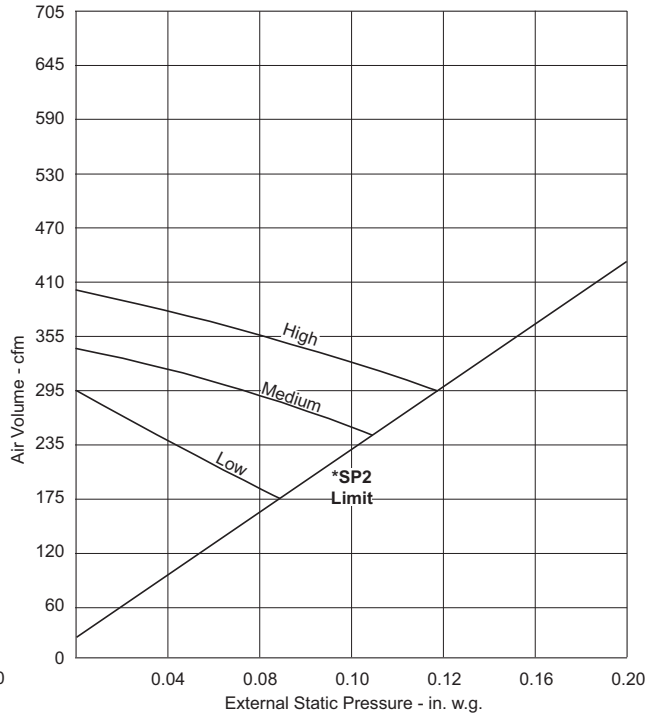
SP2 Limit airflow rate setting on the controller.
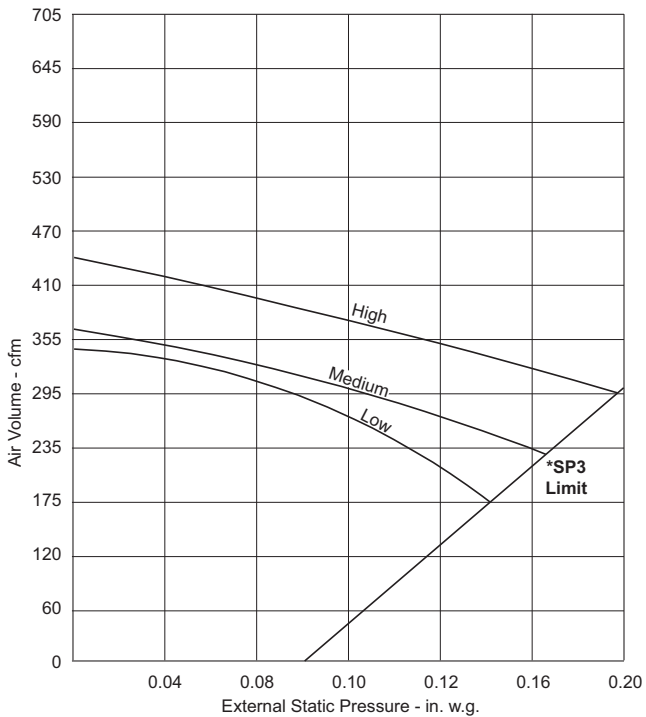
SP3 Limit airflow rate setting on the controller.
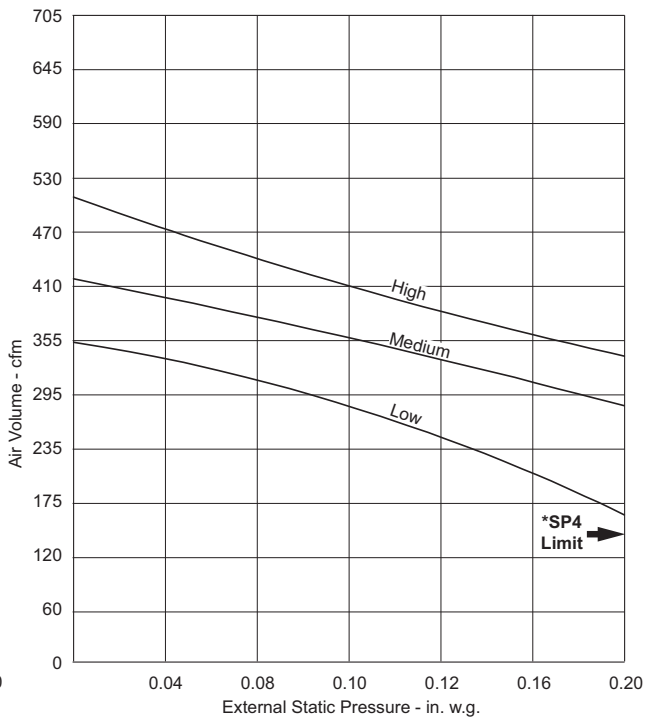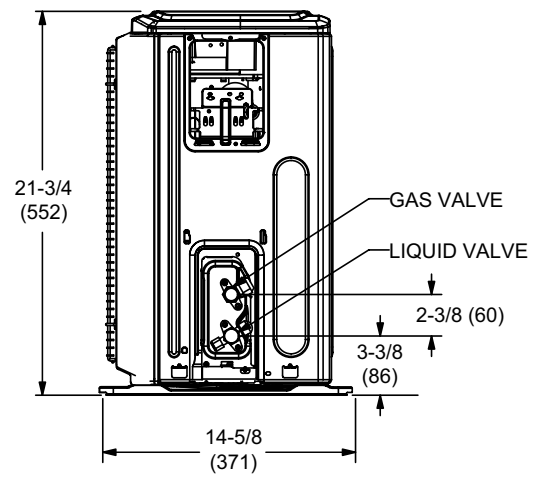

SP4 Limit airflow rate setting on the controller.

MMDB018S4
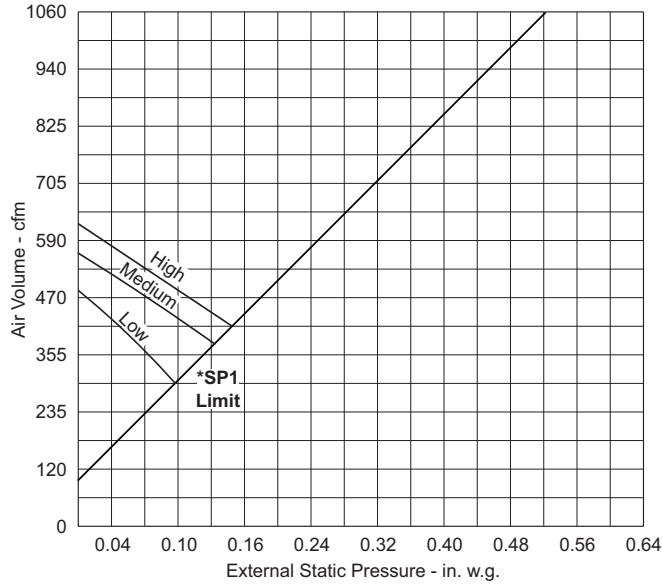
*SP1 Limit airflow rate setting on the controller.
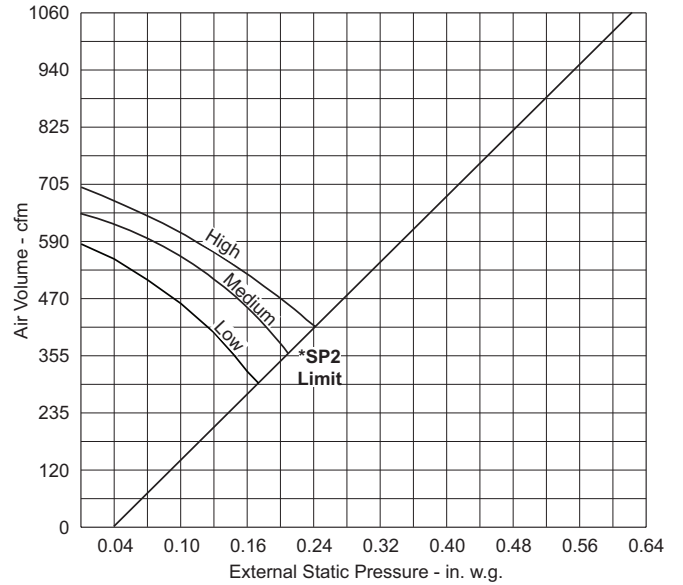
*SP2 Limit airflow rate setting on the controller.
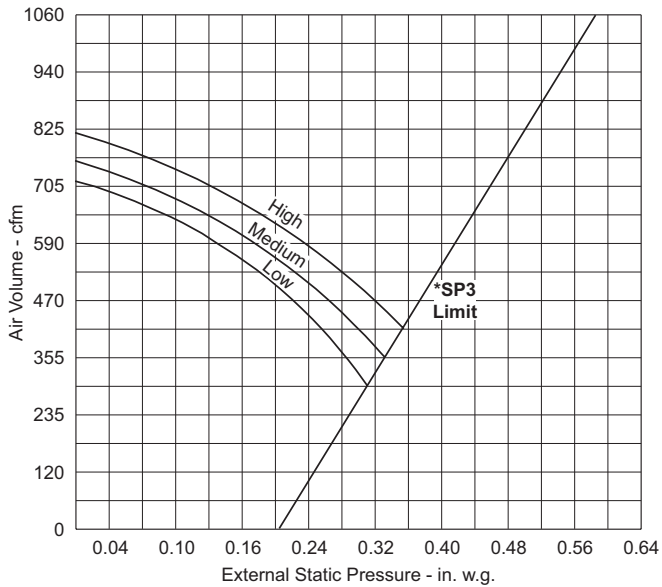
*SP3 Limit airflow rate setting on the controller.
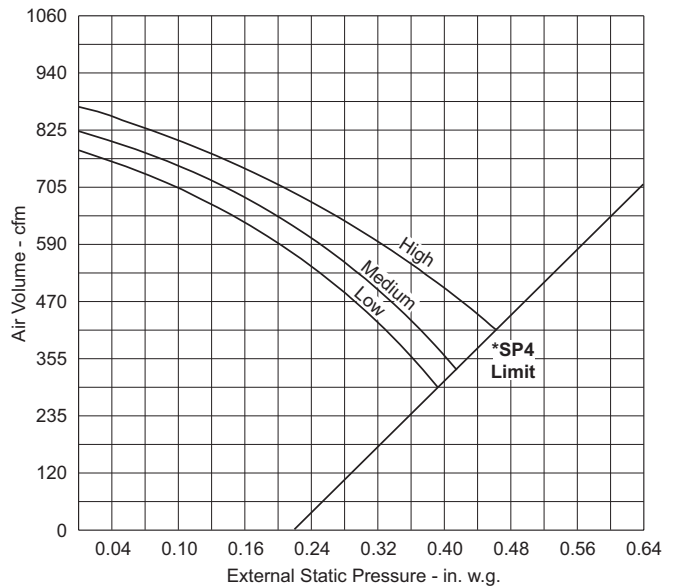
*SP4 Limit airflow rate setting on the controller.

MMDB024S4
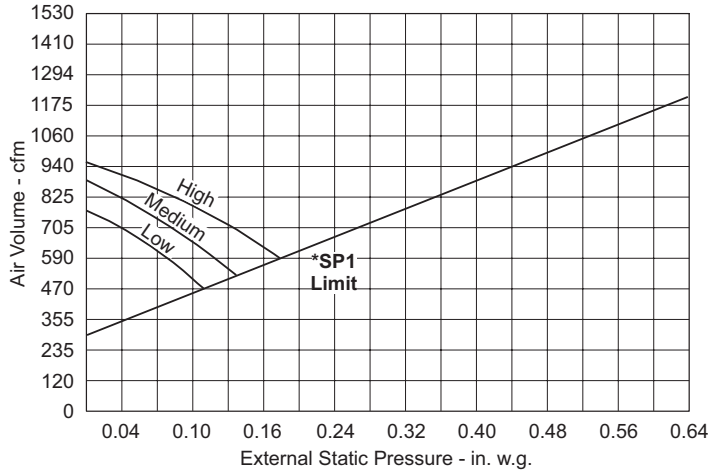
SP1 Limit airflow rate setting on the controller.
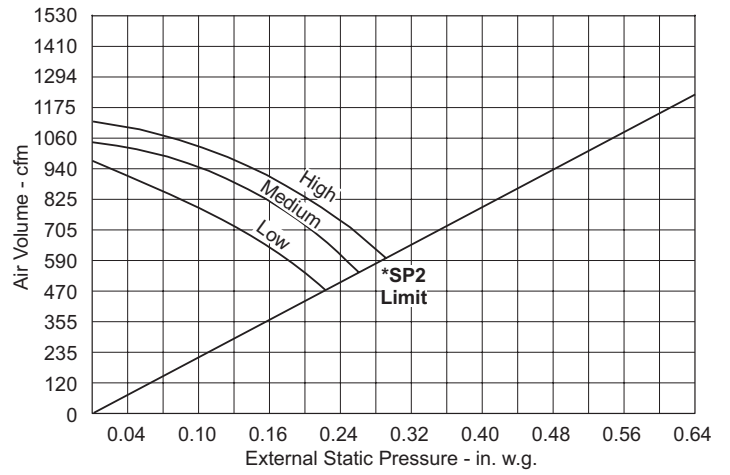
SP2 Limit airflow rate setting on the controller.
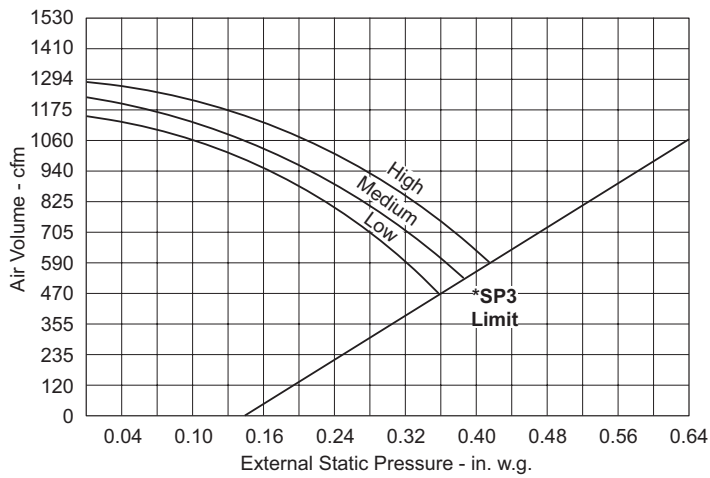
SP3 Limit airflow rate setting on the controller.
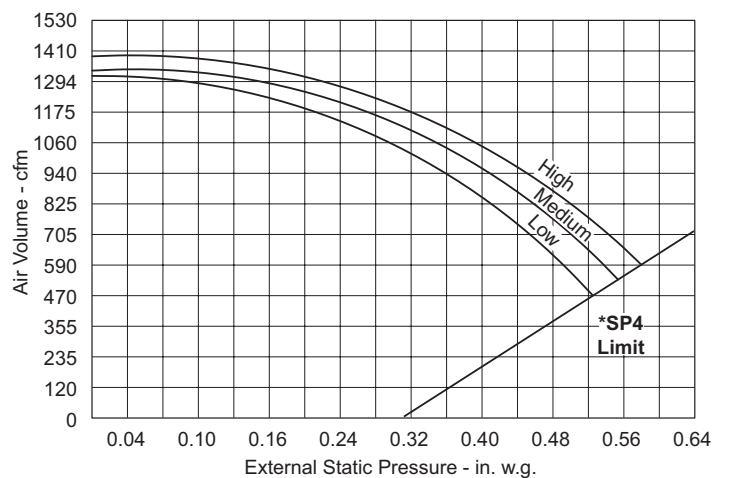
SP4 Limit airflow rate setting on the controller.

MLA009S4S, MLA012S4S

7/8
(22)

2-3/8
(60)

20-1/4
(514)

DRAIN HOLE
(bottom of unit)

12-3/4
(324)

12-1/4   13-3/8
(311)   (594)

TOP VIEW

2-3/4 (70)

34-1/4
(870)

FRONT VIEW

21-3/4
(552)

GAS VALVE

LIQUID VALVE

2-3/8 (60)

3-3/8
(86)

14-5/8
(371)

SIDE VIEW

MLA018S4S

7-7/8
(200)

1-3/8
(35)

21-1/4
(540)

DRAIN HOLE
(bottom of unit)

13-3/4
(349)

13-1/8
(333)

13-3/4
(349)

TOP VIEW

27-5/8
(702)

GAS VALVE

LIQUID VALVE

2-3/8 (60)

3-5/8
(92)

2-3/4 (70)

36
(914)

14-3/4
(375)

FRONT VIEW   **SIDE VIEW**

MLA024S4S

2-7/8
(73)

1 (25)

26-1/2
(673)

DRAIN HOLE (bottom of unit)

15-1/8
(384)

16-38
(416)

16
(406)

TOP VIEW

3-3/8 (86)

40-3/4
(1035)

FRONT VIEW

31-7/8
(810)

GAS VALVE

LIQUID VALVE

2-5/8
(67)

4-1/4
(108)

18
(457)
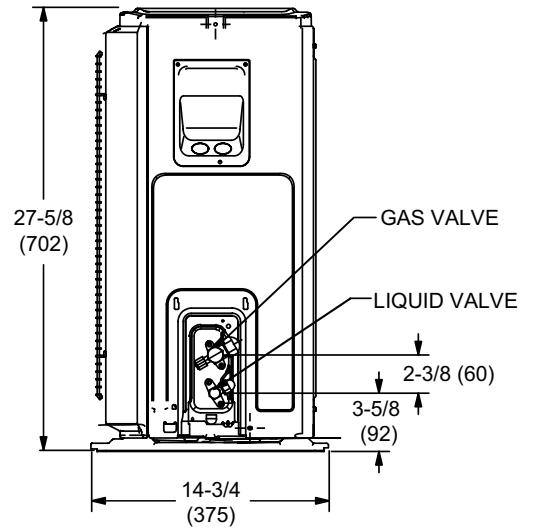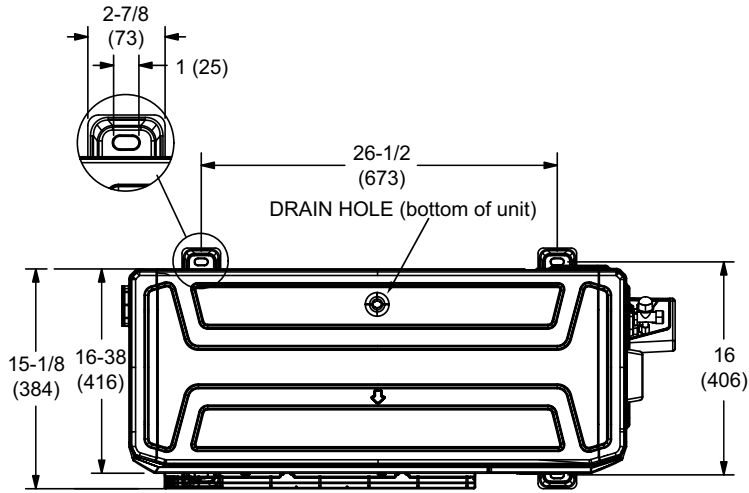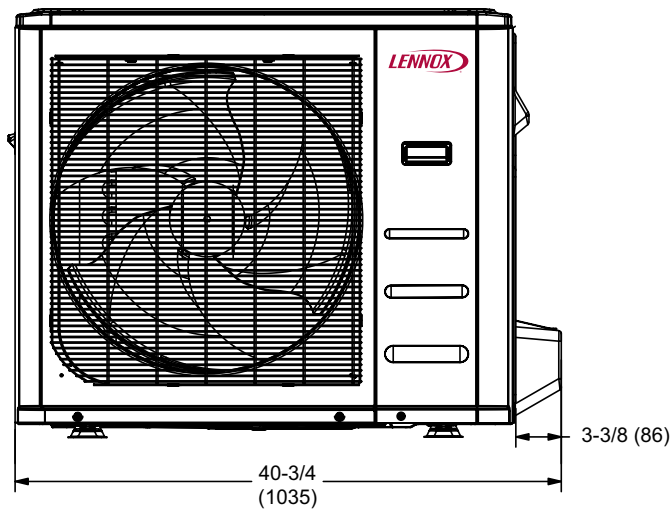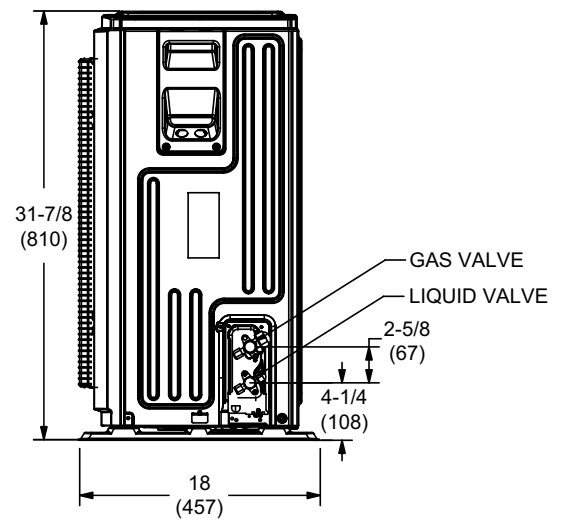
SIDE VIEW

MWMA009S4, MWMA012S4, MWMA018S4, MWMA024S4

TOP VIEW

SIDE VIEW

C

A

SIDE VIEW

D

BOTTOM VIEW
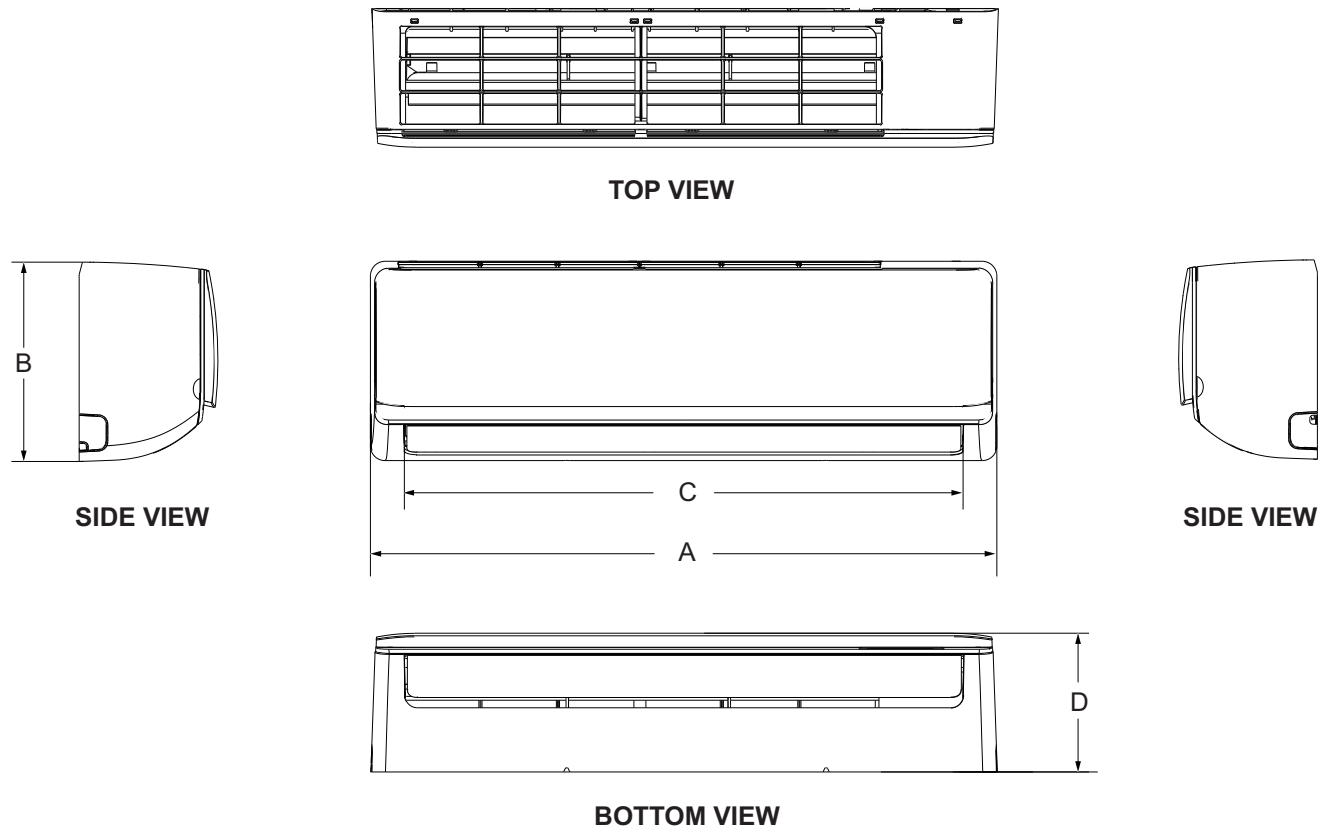
Size	A		B		C		D	
	in.	mm	in.	mm	in.	mm	in.	mm
MWMA009, 012	33-1/8	841	11	279	29-1/4	743	8-1/4	210
MWMB009, 012	32-7/8	835	11	279	29-1/4	743	7-7/8	200
MWMA018	39	991	12-3/8	314	34-3/4	883	8-5/8	219
MWMA024	46-3/4	1187	13-1/2	343	42-1/2	1080	10-1/4	260

MWMA009S4 and MWMA012S4

4-3/8 (111)
Indoor unit outline
5-1/2 (140)
11 (279)
1-3/4 (44)
1-3/4 (44)
MWMA 33-1/8 (841)
MWMB 32-7/8 (835)
1-3/8 (35)
Left rear side refrigerant pipe inlet 2-1/2 (64) diameter
Right rear side refrigerant pipe inlet 2-1/2 (64) diameter

MWMA018S4

7/8 (22)
Indoor unit outline
12-3/8 (314)
1-3/4 (45)
10-1/4 (260)
39 (991)
5-1/4 (133)
Left rear side refrigerant pipe inlet 2-1/2 (64) diameter
Right rear side refrigerant pipe inlet 2-1/2 (64) diameter

MWMA024S4

Indoor unit outline
10-1/8 (257)
10-7/8 (276)
13-1/2 (343)
1-3/4 (44)
46-3/4 (1187)
7/8 (22)
Left rear side refrigerant pipe inlet 2-1/2 (64) diameter
Right rear side refrigerant pipe inlet 2-1/2 (64) diameter

M22A009S4, M22A012S4, M22A018S4

DRAIN
CONNECTION

GAS
PIPE

LIQUID
PIPE

SIDE VIEW

10-3/8
(264)

22-1/2
(572)

20-5/8
(524)

Fresh Air Intake
(NOTE - Not Used)

LEFT SIDE VIEW

21-1/2 (546)

22-1/2 (572)

RIGHT SIDE VIEW

BOTTOM VIEW (Body)

INSTALLATION
HANGERS

LEVELING
ADJUSTMENT
NUT (4)

CEILING

AIR
OUTLET

DIFFUSER
PANEL

AIR
INLET

AIR
OUTLET

23-5/8 (600)
(Ceiling Opening)

SIDE VIEW

25-1/2
(648)

25-1/2 (648)
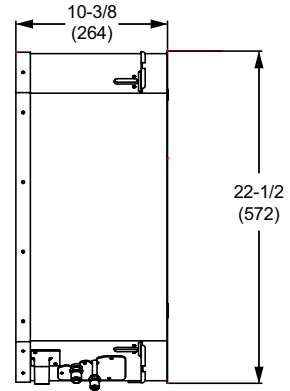
BOTTOM VIEW (Panel)

M33A024S4

GAS PIPE

LIQUID PIPE

Fresh Air Intake
(NOTE - Not Used)

30-3/4
(781)

33-1/8
(841)

8-1/8
(206)

DRAIN
CONNECTION

LEFT SIDE VIEW

26-3/4 (679)

33-1/8 (841)

BOTTOM VIEW (Body)

RIGHT SIDE VIEW

AIR
OUTLET

DIFFUSER
PANEL

AIR
INLET

AIR
OUTLET

SIDE VIEW

37-3/8
(949)

37-3/8 (949)

BOTTOM VIEW (Panel)

MCFB018S4, MCFA024S4

26-5/8
(676)

9-1/4
(235)

SIDE VIEW

FRONT VIEW

Refrigerant
Piping

2-3/8 (61)

Refrigerant
Piping Opening
3-1/2 x 7-1/4 (89 x 184)

3-1/2 (89)

B

A

8-3/4
(222)

BACK VIEW

2 (51)

Refrigerant
Piping

2-1/4 (57)

Condensate Drain
Outlets (2) each side

BOTTOM VIEW

Refrigerant
Piping Opening
4-3/4 x 5-1/2 (121 x 140)

Model No.	A		B	
	in.	mm	in.	mm
018	42	1067	37	940
024	42-1/8	1070	39	991

MFMA012S4

MFMA012S4

8-1/4 (210)

27-1/2 (699)

7-11/16 (195)

23-5/8
(600)

Hanging
Brackets (2)

SIDE VIEW

Refrigerant
Piping

FRONT VIEW

Condensate Drain
Outlet

BACK VIEW

MMDB009S4, MMDB012S4, MMDB018S4, MMDB024S4

MOUNTING LUGS (4)

ELECTRICAL CONTROL BOX

P

N

TOP VIEW

[1] FRESH AIR INTAKE
3-5/8 (92) Diameter (009 thru 018)
5 (127) Diameter (024 thru 048)

MOUNTING LUGS (4)

D

C

SIDE VIEW
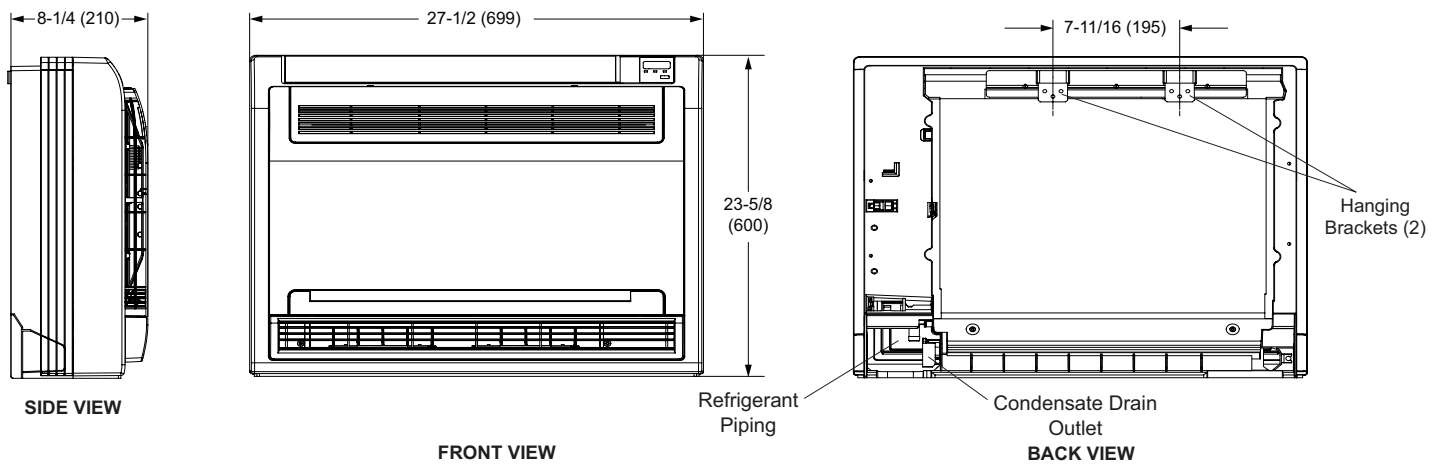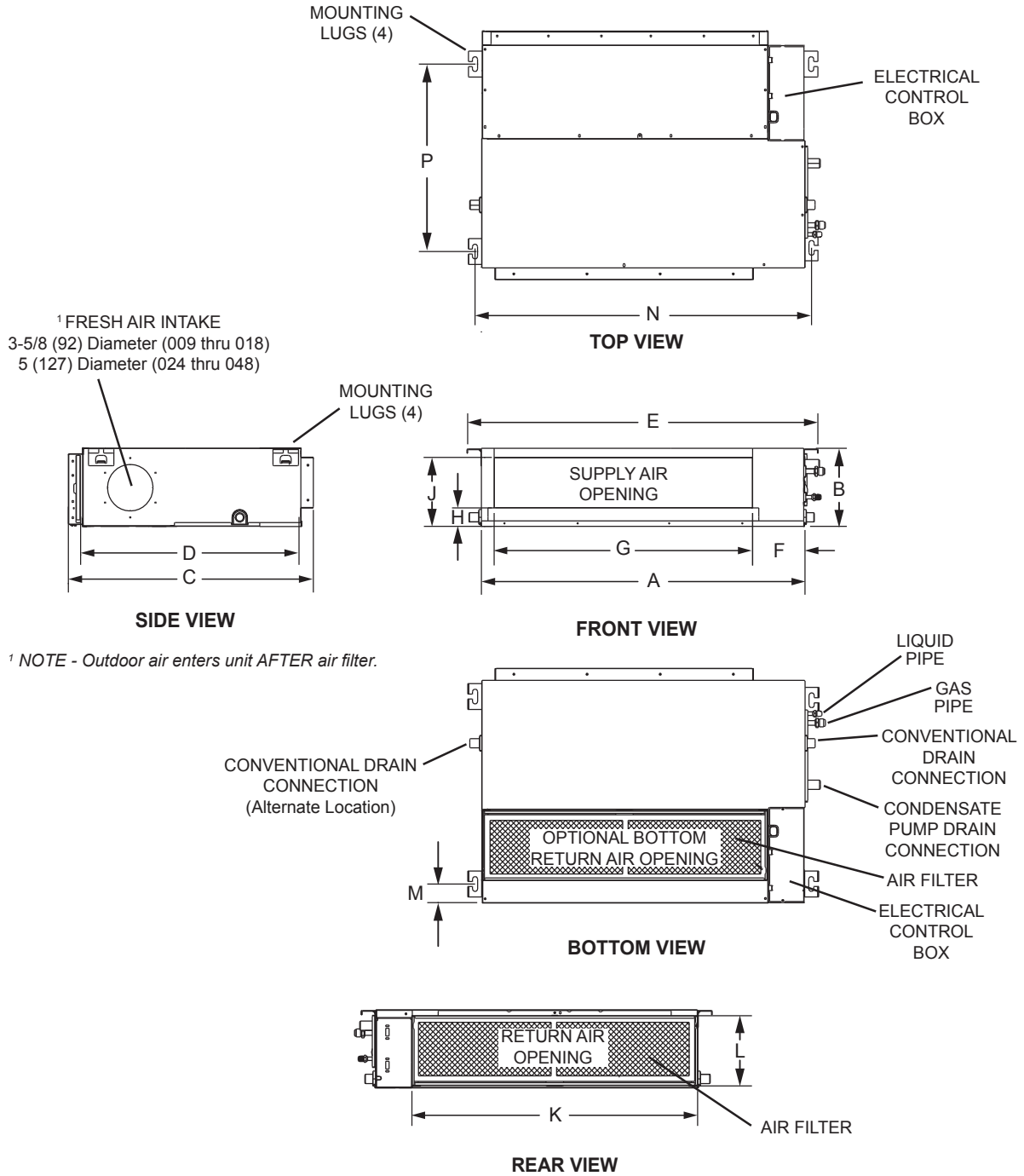
[1] NOTE - Outdoor air enters unit AFTER air filter.

E

SUPPLY AIR OPENING

J

H

B

G

F

A

FRONT VIEW

LIQUID PIPE

GAS PIPE

CONVENTIONAL DRAIN CONNECTION

CONDENSATE PUMP DRAIN CONNECTION

AIR FILTER

ELECTRICAL CONTROL BOX

CONVENTIONAL DRAIN CONNECTION (Alternate Location)

OPTIONAL BOTTOM RETURN AIR OPENING

M

BOTTOM VIEW

RETURN AIR OPENING

L

K

AIR FILTER

REAR VIEW

Size	A		B		C		D		E		F		G		H	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
009 thru 012	27-5/8	702	7-7/8	200	19-7/8	505	17-3/4	451	30-3/4	781	5-3/8	137	21-1/8	537	1-1/8	29
018	34-5/8	879	8-1/4	210	26-1/2	673	23-5/8	600	37-7/8	962	5-1/2	140	27-3/4	705	2	51
024	43-1/4	1099	9-3/4	248	30-1/2	775	27-1/2	699	46-1/2	1181	5-1/2	140	36-1/2	927	2	51

Size	J		K		L		M		N		P	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
009 thru 012	6	152	23-5/8	600	7-3/8	187	2	51	29-1/8	740	14-1/8	359
018	5-3/8	137	30-3/4	781	7-1/2	191	1-5/8	41	36-1/4	921	20	508
024	6-7/8	175	39-3/8	1000	9	229	1/4	6	44-7/8	1140	23-1/2	597
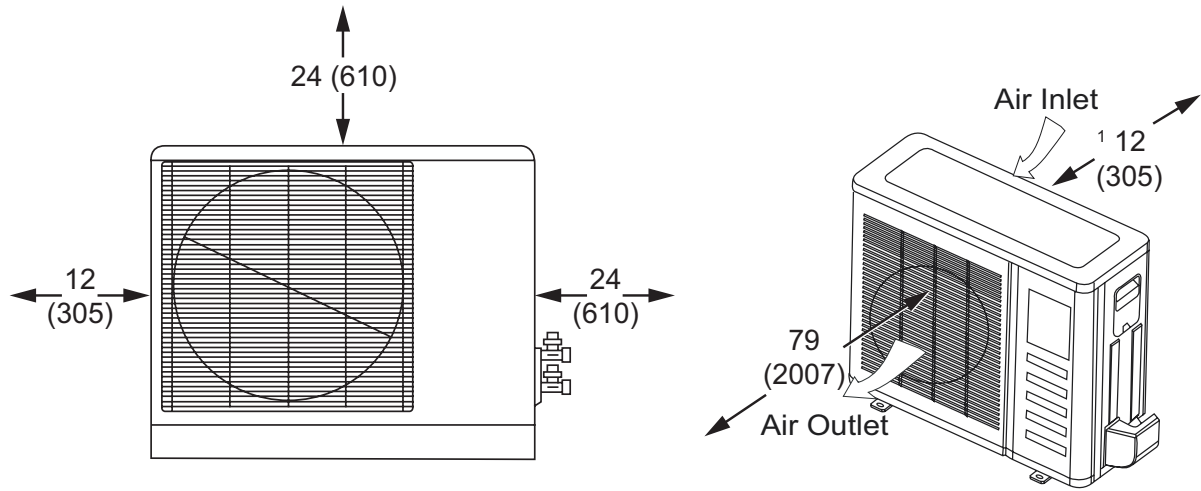
[1] Minimum rear clearance can be 6 inches (152 mm) when mounted on brackets and with no obstructions on the other three sides.
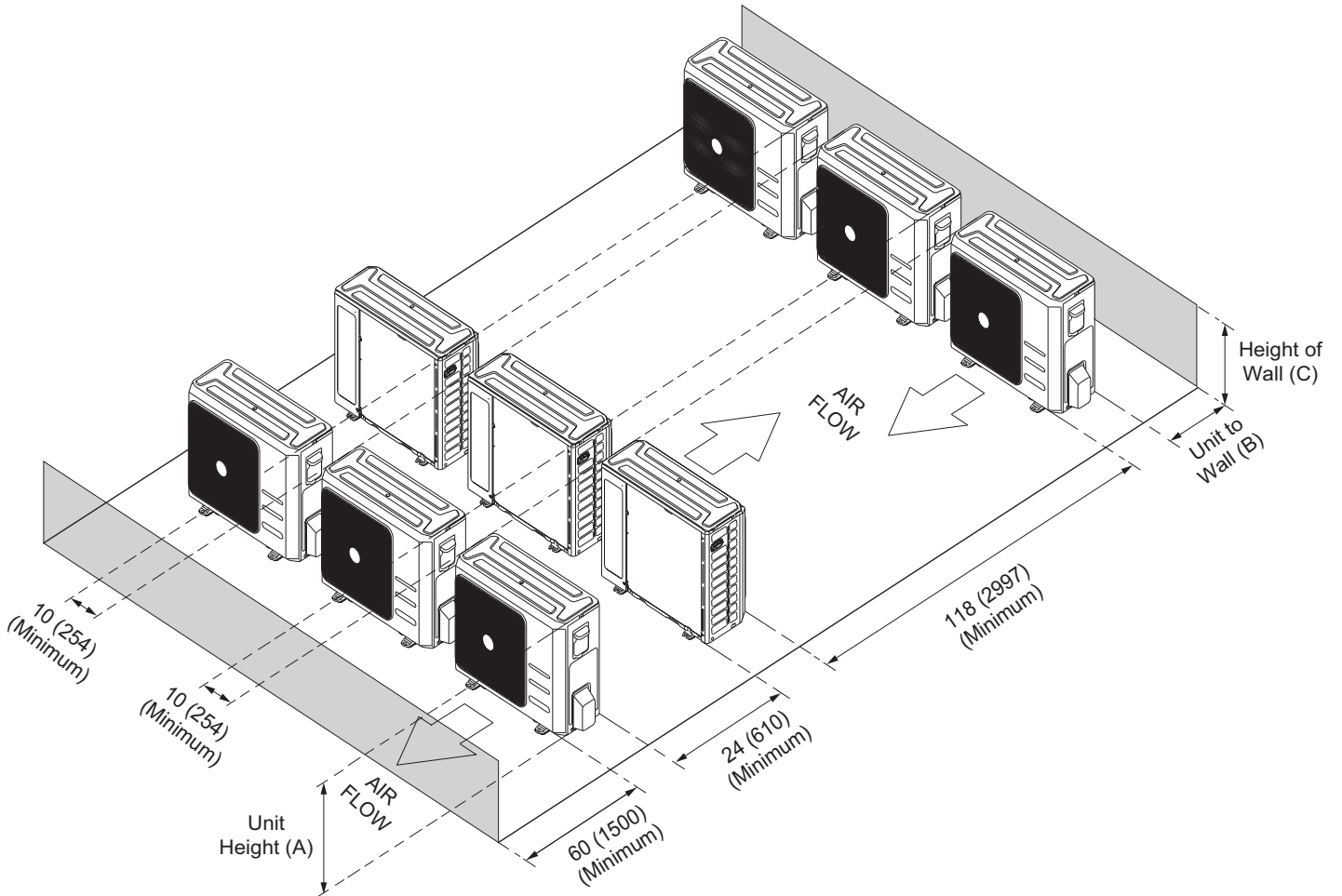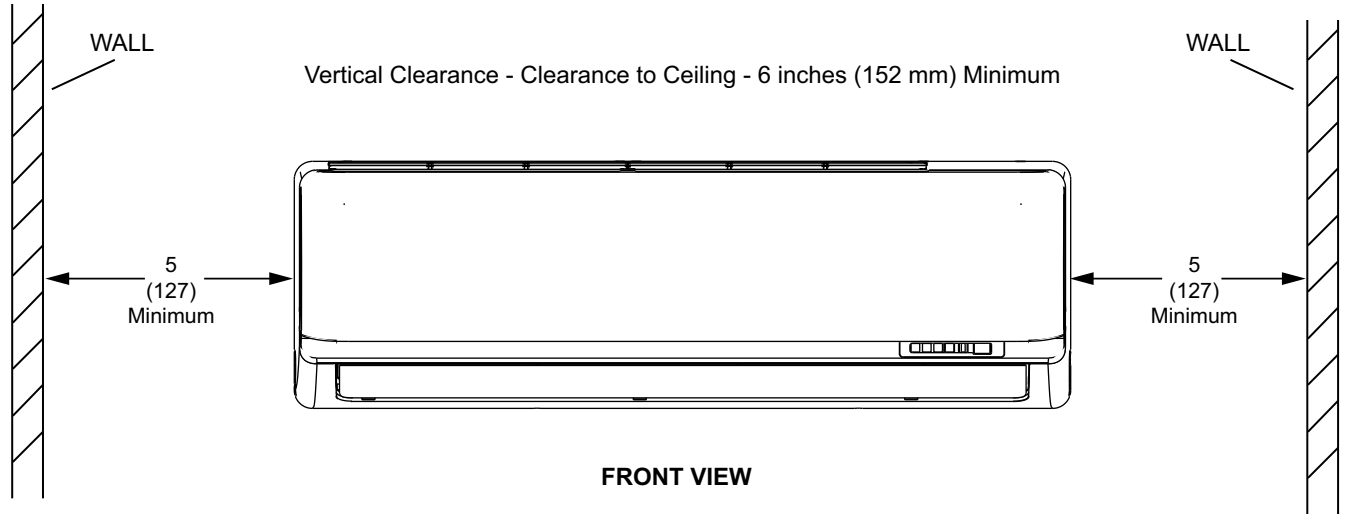
CLEARANCE NOTES FOR MULTIPLE UNITS:

If the height of the wall (C) is less than or equal to the height of the smallest unit (A), the distance from the unit to the wall (B) must be a minimum of 10 inches (254 mm).

If 1/2 the height of the unit (A) is less than the height of the wall (C), the distance from the unit to the wall (B) must be a minimum of 12 inches (305 mm).

If the height of the wall (C) is greater than the height of the unit (A), the distance from the unit to the wall (B) must be a minimum of 20 inches (508 mm).
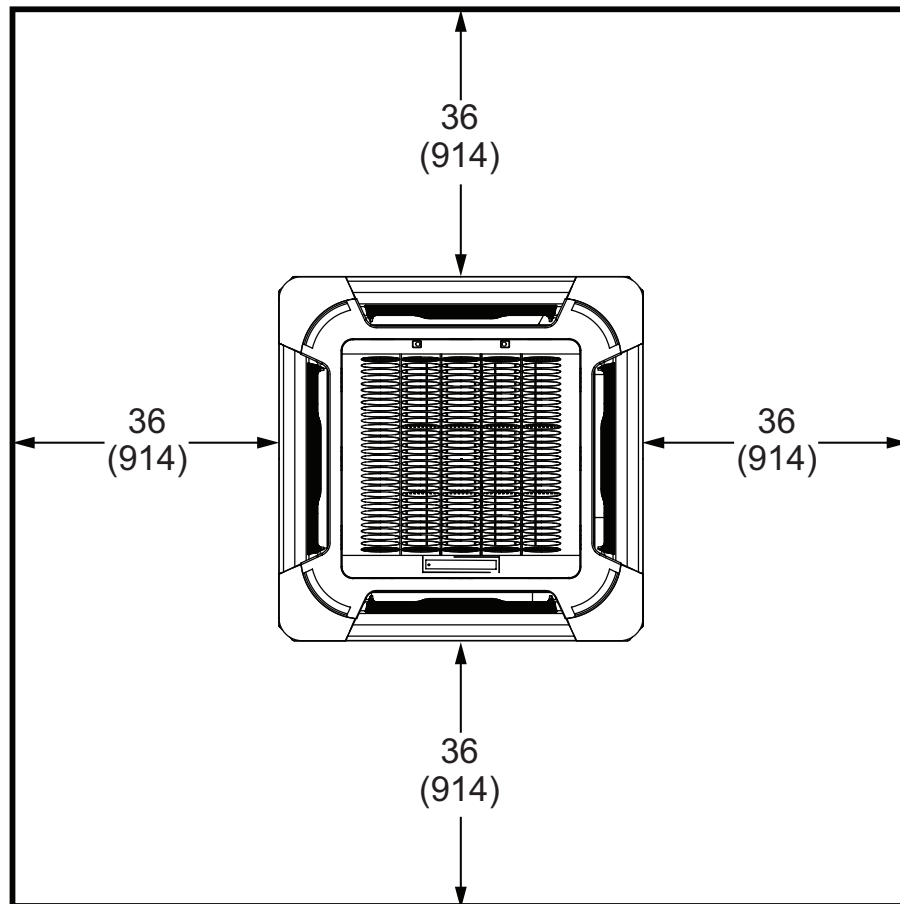
Vertical Clearance - Clearance to Ceiling - 6 inches (152 mm) Minimum

WALL

WALL

5
(127)
Minimum

5
(127)
Minimum

FRONT VIEW

Vertical Clearance - Clearance to Floor - 72 inches (1829 mm) Minimum
NOTE - Provide 96 inches (2438) clearance to floor for best performance

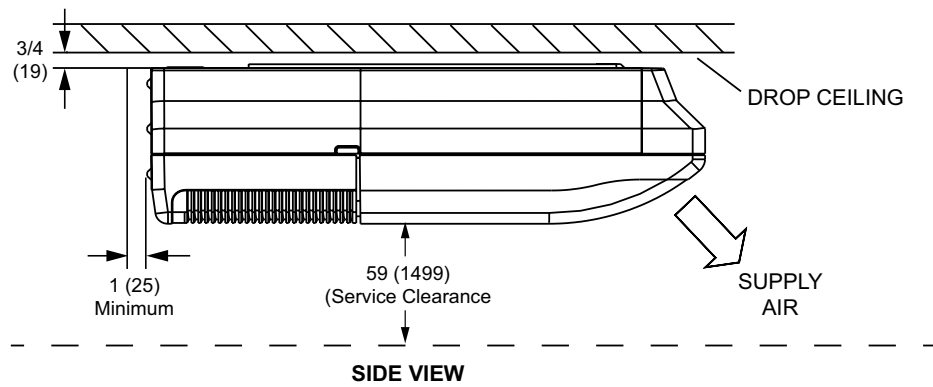INSTALLATION CLEARANCES   CASSETTE INDOOR UNITS

36
(914)
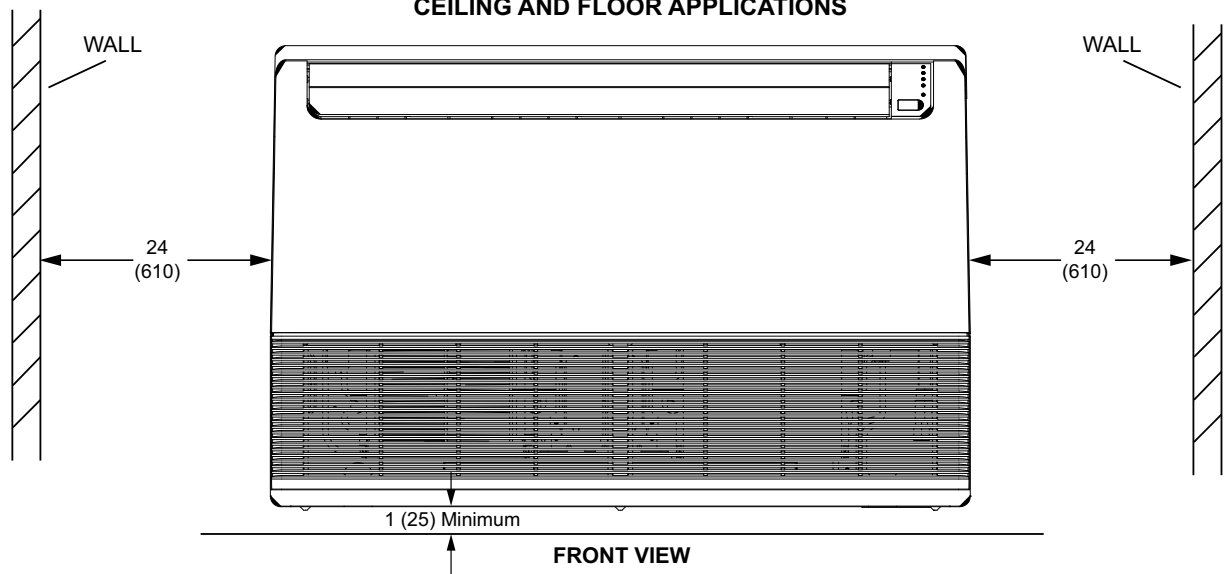
36
(914)

36
(914)

36
(914)

Minimum Vertical Clearances:
Minimum Clearance from Structural Ceiling to Drop Ceiling:
10-1/4 inches (260 mm)
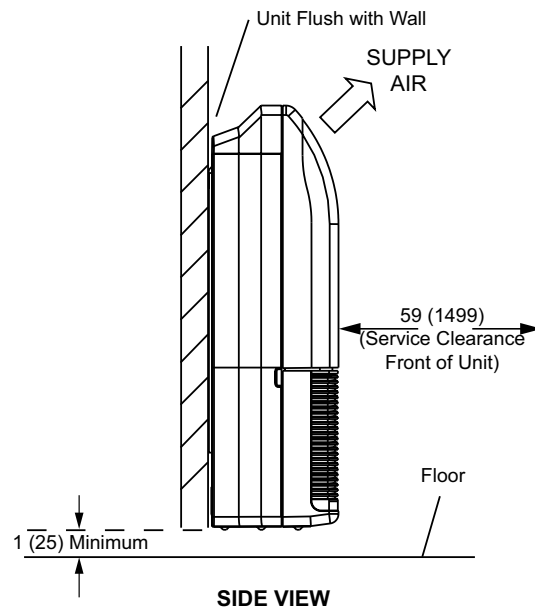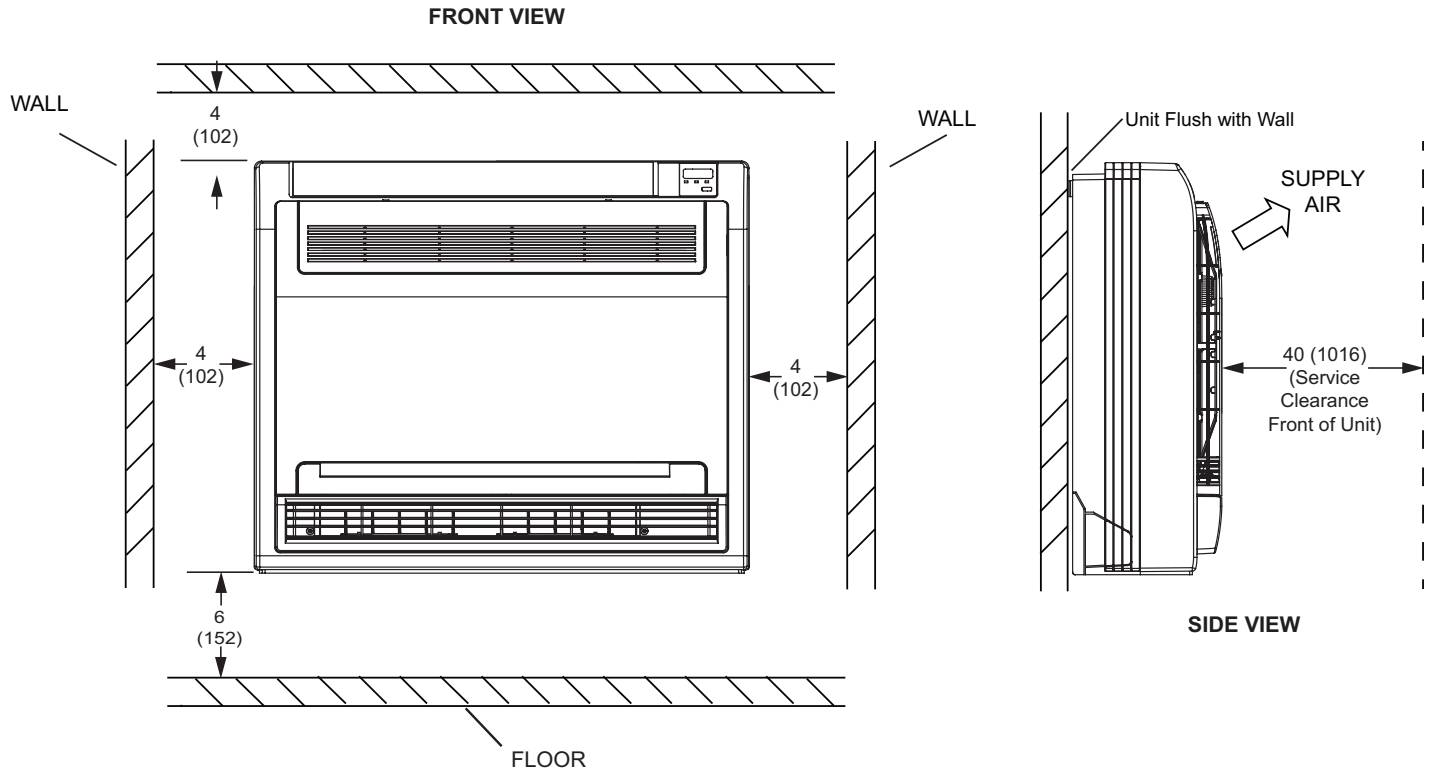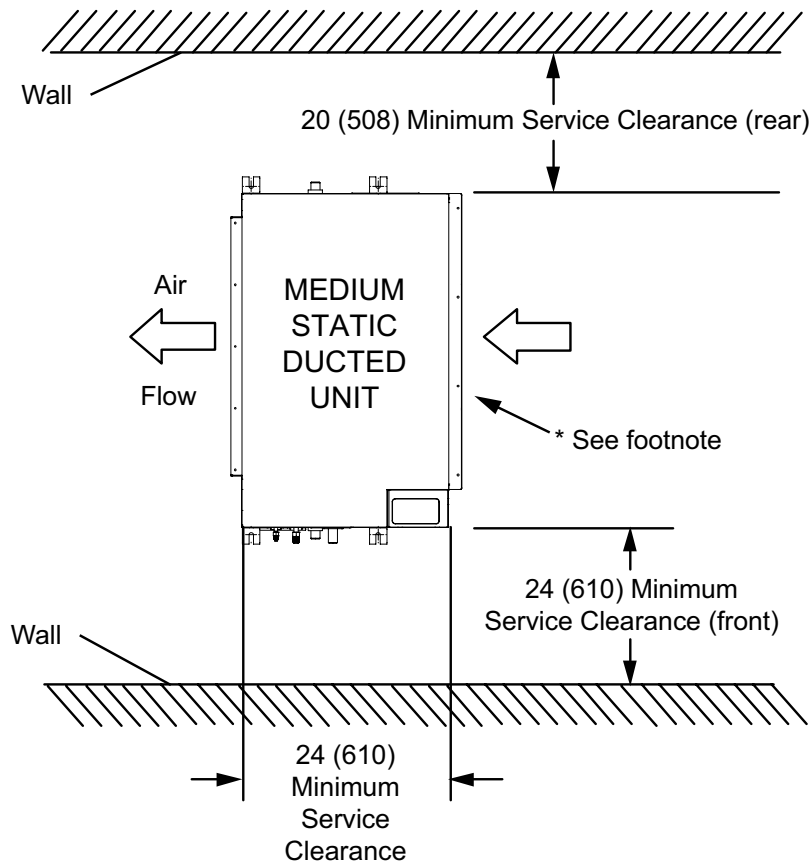Minimum Clearance to Floor - 98-1/2 inches (2500 mm)

CEILING APPLICATIONS

3/4
(19)

DROP CEILING

1 (25)
Minimum

59 (1499)
(Service Clearance

SUPPLY
AIR

SIDE VIEW

CEILING AND FLOOR APPLICATIONS

WALL

WALL

24
(610)

24
(610)

1 (25) Minimum

FRONT VIEW

FLOOR APPLICATIONS

Unit Flush with Wall

SUPPLY
AIR

59 (1499)
(Service Clearance
Front of Unit)

Floor

1 (25) Minimum

SIDE VIEW

FRONT VIEW

WALL

4
(102)

WALL

4
(102)

4
(102)

6
(152)

FLOOR

Unit Flush with Wall

SUPPLY
AIR

40 (1016)
(Service
Clearance
Front of Unit)

SIDE VIEW

Wall

20 (508) Minimum Service Clearance (rear)

Air

MEDIUM
STATIC
DUCTED
UNIT

Flow

* See footnote

24 (610) Minimum
Service Clearance (front)

Wall

24 (610)
Minimum
Service
Clearance

TOP VIEW

Ceiling

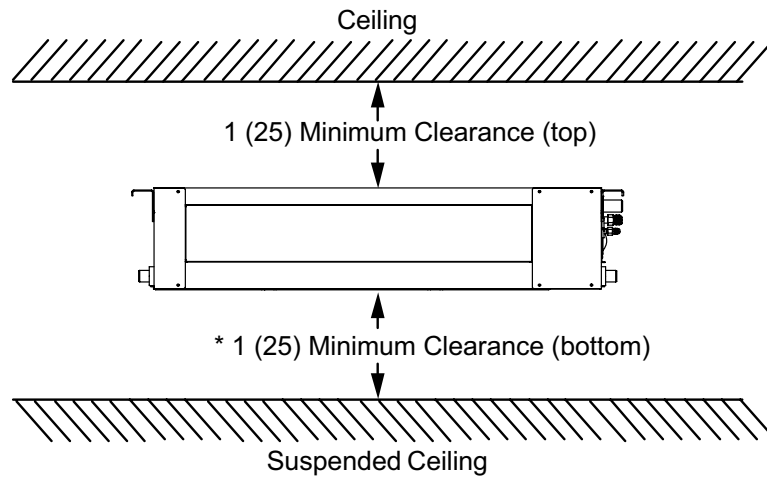1 (25) Minimum Clearance (top)

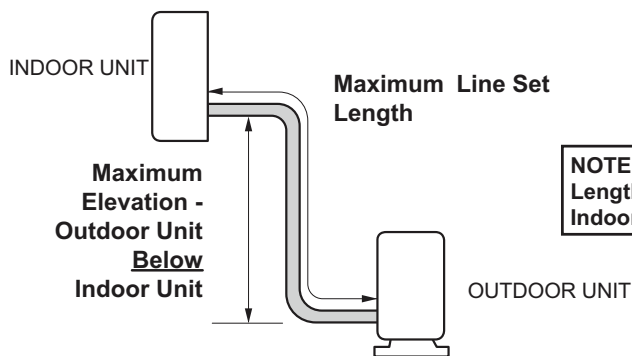* 1 (25) Minimum Clearance (bottom)

Suspended Ceiling

*** NOTE - Bottom unit clearance can be 1 inch (25 mm),
but allow 12 inches for filter removal on end
return air applications**

FRONT VIEW
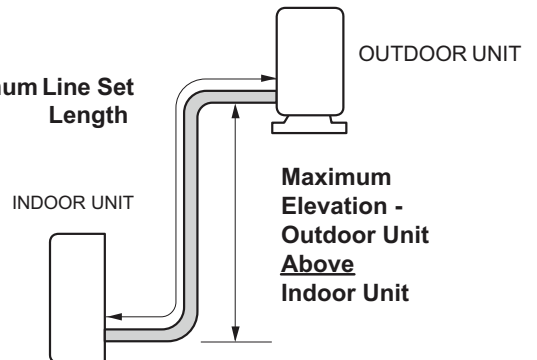
LINE SET AND ELEVATION GUIDELINES

Outdoor Unit <u>BELOW</u> Indoor Unit

INDOOR UNIT

Maximum Line Set Length

Maximum Elevation - Outdoor Unit <u>Below</u> Indoor Unit

OUTDOOR UNIT

NOTE - Minimum Line Set Length - 10 ft. (3 m) per Indoor Unit

Outdoor Unit <u>ABOVE</u> Indoor Unit

OUTDOOR UNIT

Maximum Line Set Length

INDOOR UNIT

Maximum Elevation - Outdoor Unit <u>Above</u> Indoor Unit

Size	Line Set Diameters (in.)		Maximum Elevation - Outdoor Unit <u>Below</u> Indoor Unit ft. (m)	Maximum Elevation - Outdoor Unit <u>Above</u> Indoor Unit ft. (m)	Maximum Line Set Length ft. (m)
	Liquid	Gas			
009	1/4	3/8	33 ft. (10 m)	33 ft. (10 m)	82 ft. (25 m)
012	1/4	1/2	33 ft. (10 m)	33 ft. (10 m)	82 ft. (25 m)
018	1/4	1/2	66 ft. (20 m)	66 ft. (20 m)	98 ft. (30 m)
024	3/8	5/8	82 ft. (25 m)	82 ft. (25 m)	164 ft. (50 m)

AHRI CERTIFIED™
www.ahridirectory.org
C
Unitary Small HP
AHRI Standard 210/240
Certification applies only when the complete system
is listed with AHRI.

HRAI
✓MEMBER COMPANY

ᴄᴹ
C ETL US
LISTED
Intertek

Visit us at www.Lennox.com

For the latest technical information, www.LennoxPros.com

Contact us at 1-800-4-LENNOX