MINI-SPLIT SYSTEMS

MLA
Mini-Split
Low Ambient Single Zone Heat Pump Systems - R-410A
Bulletin No. 210768
August 2017
Supersedes April 2017

PRODUCT SPECIFICATIONS

MLA Heat Pump Outdoor Unit

M22A/M33A Cassette Non-Ducted Indoor Unit

MWMA Wall-Mounted Non-Ducted Indoor Unit

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

MMDA Medium Static Ducted Indoor Unit

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

Wired Remote Control (furnished with Medium Static Ducted Models)

SEER up to 24.00
0.75 to 2 Tons
Cooling Capacity - 9,000 to 24,000 Btuh
Heating Capacity - 10,900 to 24,000 Btuh
**MODEL NUMBER IDENTIFICATION**

**OUTDOOR SINGLE ZONE HEAT PUMP UNITS**

- **Model Number Identification**
  - **Unit Type**
    - L = Low Ambient Heat Pump
  - **Series Type**
    - M = Mini-Split
  - **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 Type**
    - 4 = R-410A
  - **Refrigerant Circuits**
    - S = Single Circuit
  - **Cooling Efficiency**
    - S = Standard Efficiency

**WALL-MOUNTED INDOOR UNITS**

- **Model Number Identification**
  - **Unit Type**
    - WM = Wall-Mounted Non-Ducted Unit
  - **Series Type**
    - M = Mini-Split
  - **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
  - **Refrigerant Circuits**
    - S = Single Circuit
  - **Cooling Efficiency**
    - S = Standard Efficiency

**CASSETTE NON-DUCTED INDOOR UNITS**

- **Model Number Identification**
  - **Unit Type**
    - 22 = 2x2 Cassette Non-Ducted Unit
    - 33 = 3x3 Cassette Non-Ducted Unit
  - **Series Type**
    - M = Mini-Split
  - **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
  - **Refrigerant Circuits**
    - S = Single Circuit
  - **Cooling Efficiency**
    - S = Standard Efficiency
MODEL NUMBER IDENTIFICATION

CEILING/FLOOR NON-DUCTED INDOOR UNITS

Unit Type
CF = Ceiling/Floor Non-Ducted

Series Type
M = Mini-Split

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

MEDIUM STATIC DUCTED INDOOR UNITS

Unit Type
MD = Medium Static Ducted Unit

Series Type
M = Mini-Split

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
FEATURES - OUTDOOR UNITS

EQUIPMENT WARRANTY

Compressor - Limited warranty for seven years.
All other covered components - Five years.
Refer to Lennox Equipment Limited Warranty certificate included with unit for specific details.

APPLICATIONS

NOTE - MLA Outdoor Units Cannot Be Matched With -1 Indoor Units!
SEER up to 24.00.
HSPF up to 11.0.
0.75 through 2 ton.
Single phase power supply (208/230V).
Outdoor unit sound levels as low as 52 dB.
Indoor unit sound levels as low as 26.5 dB.
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.
Installer must set outdoor unit, hang indoor unit, connect refrigerant lines, and make electrical connections to complete job.
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.

APPROVALS

AHRI Certified to AHRI Standard 210/240-2008.
Rated according to U.S. Department of Energy (DOE) test procedures.
Indoor and outdoor units and components within bonded for grounding to meet safety standards for servicing required by UL and CEC.
Units are ETL certified for the U.S. and Canada.
ENERGY STAR® certified units are designed to use less energy, help save money on utility bills, and help protect the environment. Many Lennox home comfort systems meet ENERGY STAR requirements when used with matching components.

REFRIGERATION SYSTEM

R-410A Refrigerant
Non-chlorine, ozone friendly, R-410A.
Unit pre-charged with refrigerant.

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. Shut-off valve can be fully shut off while 3-way service valve (with service port) may be accessed to manage refrigerant charge while servicing 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 or heating 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.

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.

Defrost Control
Defrost cycle is automatically enabled if there is a build-up of frost on the outdoor coil. Outdoor fan and indoor blower operation is terminated during the defrost cycle.
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. 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 predetermined 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 predetermined 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 control (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** - Maximum lift - 27-1/2 in.
- **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.
- **Four Speed Fan** - Fan functions at four speeds: low, medium, high and turbo.
- **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.
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: horizontally against the ceiling or 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 control (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.

- **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.

- **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.

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**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.
**ACCESSORIES (FURNISHED)**

### WIRELESS REMOTE CONTROL

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

**NOTE** - Can be ordered separately for ducted indoor units.

Complete remote control of system. Maximum operating range is 25 ft.

Operates on two AAA 1.5V batteries (furnished). Wireless remote control 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 shuts off 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. **TIME ON / TIME OFF Buttons**
   - TIMER ON (initiates an auto-on time sequence) and 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 control location.

13. **LED Button**
    - Turns the LCD display backlight on the indoor unit on or off.
WIRELESS REMOTE CONTROL OPERATION

Mode display
- AUTO
- COOL
- HEAT
- DRY
- 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.

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
- Low speed
- Medium speed
- High speed
- 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. The temperature can be set within a range of
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 control 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.
ACCESSORIES (FURNISHED)

WIRED REMOTE CONTROL

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

FEATURES

• Backlight - Allows easy operation in a dark room. The controller lights when any button is pressed and remains lit during control access.
• 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

![Display Diagram]

BUTTONS AND FUNCTIONS

![Button Diagram]

MODE Button
• Select system operation modes. Push button to cycle through each setting.

AUTO ➔ COOL ➔ DRY ➔ HEAT ➔ FAN

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) and 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 Control
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.

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 louver auto swing (only used with ductless indoor units with swing louveres)
• 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

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

NOTE - Controller cable length cannot exceed 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).

NOTE – Programmable Controller cannot be used when a centralized controller is used with an MWMA indoor unit.

OPTIONAL ACCESSORIES

Extension Cable for Wired Programmable Controller
20 ft. cable for easy low voltage connection to the indoor unit.
OUTDOOR UNITS

Condenser Pad
Provides permanent foundation for outdoor units. One-piece lightweight structural foam and molded from high-density polyethylene (HDPE), which makes them lightweight and easy to carry and install. The textured finish provides a non-skid surface so that the 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
Provides a condensate drain service port that is flexible and easy to use with nitrogen, water or shop vac. Screw cap on top allows easy access to condensate drain line.

SPEEDICHLANNESTM SYSTEM

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

SPEEDICHLANNESTM SYSTEM
SPEEDICHLAN® SYSTEM (continued)

SpeediChannel™ Starter Kit
The starter kit includes (1) Coupling, (1) Wall Penetration, (1) Inside Elbow, (1) Long Radius Flat Bend, (10) Speediclips™, (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
45° Flat Bends are used to route the SpeediChannel™ around obstacles. Each bend is individually packed and furnished with stainless steel screws.

90° Inside Elbow
90° 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 -4°F to 140°F. Mount blocks fit all mini-split outdoor units with a sliding rail feature.
### SPECIFICATIONS - MLA OUTDOOR UNITS

<table>
<thead>
<tr>
<th>Nominal Size - Tons</th>
<th>0.75</th>
<th>1</th>
<th>1.5</th>
<th>2</th>
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<td>Outdoor Unit Model No.</td>
<td>MLA009S4S-1P</td>
<td>MLA012S4S-1P</td>
<td>MLA018S4S-1P</td>
<td>MLA024S4S-1P</td>
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<tr>
<td>Ambient Temperature Operating Range - °F</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heating</td>
<td>–22 - 86</td>
<td>–22 - 86</td>
<td>–22 - 86</td>
<td>–22 - 86</td>
</tr>
<tr>
<td>Sound Data (dBA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooling</td>
<td>52</td>
<td>52</td>
<td>56</td>
<td>57</td>
</tr>
<tr>
<td>Heating</td>
<td>57</td>
<td>57</td>
<td>59</td>
<td>60</td>
</tr>
<tr>
<td>Refrigerant Charge furnished (R-410A)</td>
<td>3 lbs. 3 oz.</td>
<td>3 lbs. 3 oz.</td>
<td>4 lbs. 3 oz.</td>
<td>5 lbs. 7 oz.</td>
</tr>
<tr>
<td>Maximum line length with furnished charge - ft.</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Additional charge required per ft. - oz.</td>
<td>0.16</td>
<td>0.16</td>
<td>0.16</td>
<td>0.32</td>
</tr>
<tr>
<td>Compressor No. and Type</td>
<td>Rotary</td>
<td>Rotary</td>
<td>Rotary</td>
<td>Rotary</td>
</tr>
<tr>
<td>Refrigerant oil type</td>
<td>Ester Oil VG74</td>
<td>Ester Oil VG74</td>
<td>POE VG74</td>
<td>POE VG74</td>
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<tr>
<td>Refrigerant oil charge - oz.</td>
<td>16.9</td>
<td>16.9</td>
<td>22.7</td>
<td>22.7</td>
</tr>
<tr>
<td>Low ambient cut-off</td>
<td>–30</td>
<td>–30</td>
<td>–30</td>
<td>–30</td>
</tr>
<tr>
<td>Connections - in.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquid/Gas pipe (flare)</td>
<td>1/4 / 3/8</td>
<td>1/4 / 1/2</td>
<td>1/4 / 1/2</td>
<td>3/8 / 5/8</td>
</tr>
<tr>
<td>Maximum refrigerant pipe length - ft.</td>
<td>82</td>
<td>82</td>
<td>98</td>
<td>164</td>
</tr>
<tr>
<td>Max. difference in level of indoor unit - ft.</td>
<td>33</td>
<td>33</td>
<td>66</td>
<td>82</td>
</tr>
<tr>
<td>Outdoor Fan (No.) Diameter - in.</td>
<td>(1) 17</td>
<td>(1) 17</td>
<td>(1) 19</td>
<td>(1) 22</td>
</tr>
<tr>
<td>Total air volume - cfm</td>
<td>1120</td>
<td>1180</td>
<td>1355</td>
<td>2355</td>
</tr>
<tr>
<td>rpm</td>
<td>810</td>
<td>810</td>
<td>850</td>
<td>810</td>
</tr>
<tr>
<td>Outdoor Coil Number of rows</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Fins per inch</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>Fin type</td>
<td>Hydrophilic aluminium</td>
<td></td>
<td></td>
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<tr>
<td>Tube outside diameter - in.</td>
<td>3/8</td>
<td>3/8</td>
<td>3/8</td>
<td>3/8</td>
</tr>
<tr>
<td>Tube type</td>
<td>Rifled copper tubing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net face area - ft.²</td>
<td>4.73</td>
<td>4.73</td>
<td>5.19</td>
<td>8.16</td>
</tr>
<tr>
<td>Shipping Data</td>
<td>Net/Shipping weight (lbs.)</td>
<td>88/94</td>
<td>88/94</td>
<td>108/115</td>
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</table>

### ELECTRICAL DATA

<table>
<thead>
<tr>
<th>Electrical Characteristics - 60 Hz - 1 Phase</th>
<th>208/230V</th>
<th>208/230V</th>
<th>208/230V</th>
<th>208/230V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Overcurrent Protection (amps)</td>
<td>15</td>
<td>15</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>Minimum circuit ampacity</td>
<td>9</td>
<td>9</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Compressor Rated load amps</td>
<td>5.25</td>
<td>5.65</td>
<td>12.3</td>
<td>14</td>
</tr>
<tr>
<td>Outdoor Fan Motor Rated load amps</td>
<td>0.38</td>
<td>0.38</td>
<td>0.42</td>
<td>0.5</td>
</tr>
<tr>
<td>Output - W</td>
<td>40</td>
<td>40</td>
<td>44</td>
<td>120</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Model No.</th>
<th>MWMA009S4</th>
<th>MWMA012S4</th>
<th>MWMA018S4</th>
<th>MWMA024S4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Tons</td>
<td>0.75</td>
<td>1</td>
<td>1.5</td>
<td>2</td>
</tr>
<tr>
<td>Power Supply - 60 hz - 1 phase</td>
<td>208/230V</td>
<td>208/230V</td>
<td>208/230V</td>
<td>208/230V</td>
</tr>
<tr>
<td>Rated load amps</td>
<td>0.06</td>
<td>0.06</td>
<td>0.13</td>
<td>0.3</td>
</tr>
<tr>
<td>Output (W)</td>
<td>20</td>
<td>20</td>
<td>58</td>
<td>60</td>
</tr>
<tr>
<td>Room Temperature Range (°F)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heating</td>
<td>32 - 86</td>
<td>32 - 86</td>
<td>32 - 86</td>
<td>32 - 86</td>
</tr>
<tr>
<td>Air Volume - cfm (High/Medium/Low)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>370/270/195</td>
<td>370/275/200</td>
<td>530/410/295</td>
<td>695/625/485</td>
<td></td>
</tr>
<tr>
<td>Sound Data (dBA) - Low/Medium/High</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.5/33.4/41.7</td>
<td>28.6/35.8/45.1</td>
<td>30.9/36.3/46.2</td>
<td>35.1/44.5/51.7</td>
<td></td>
</tr>
<tr>
<td>1/4 / 3/8</td>
<td>1/4 / 1/2</td>
<td>1/4 / 1/2</td>
<td>3/8 / 5/8</td>
<td></td>
</tr>
<tr>
<td>Drain connection o.d. - in.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Net/Shipping weights - lbs.</td>
<td>20 / 26</td>
<td>20 / 27</td>
<td>27 / 35</td>
<td>40 / 54</td>
</tr>
</tbody>
</table>

### SPECIFICATIONS - CASSETTE INDOOR UNITS

<table>
<thead>
<tr>
<th>Model No.</th>
<th>M22A009S4</th>
<th>M22A012S4</th>
<th>M22A018S4</th>
<th>M33A024S4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Tons</td>
<td>0.75</td>
<td>1</td>
<td>1.5</td>
<td>2</td>
</tr>
<tr>
<td>Power Supply - 60 hz - 1 phase</td>
<td>208/230V</td>
<td>208/230V</td>
<td>208/230V</td>
<td>208/230V</td>
</tr>
<tr>
<td>Rated load amps</td>
<td>0.9</td>
<td>1.0</td>
<td>1.5</td>
<td>2.0</td>
</tr>
<tr>
<td>Output (W)</td>
<td>46</td>
<td>46</td>
<td>46</td>
<td>42</td>
</tr>
<tr>
<td>Room Temperature Range (°F)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heating</td>
<td>32 - 86</td>
<td>32 - 86</td>
<td>32 - 86</td>
<td>32 - 86</td>
</tr>
<tr>
<td>Air Volume - cfm (High/Medium/Low)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>375/300/255</td>
<td>380/310/260</td>
<td>560/485/415</td>
<td>700/635/575</td>
<td></td>
</tr>
<tr>
<td>Sound Data (dBA) - Low/Medium/High</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33/37/41</td>
<td>36/39/43</td>
<td>36/39/44</td>
<td>43/47/51</td>
<td></td>
</tr>
<tr>
<td>1/4 / 3/8</td>
<td>1/4 / 1/2</td>
<td>1/4 / 1/2</td>
<td>3/8 / 5/8</td>
<td></td>
</tr>
<tr>
<td>Drain connection o.d. - in.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1-1/4</td>
</tr>
<tr>
<td>Net/Shipping weights - lbs.</td>
<td>32 / 38</td>
<td>36 / 41</td>
<td>36 / 42</td>
<td>47 / 55</td>
</tr>
</tbody>
</table>

### REQUIRED COMPONENTS - ORDERED SEPARATELY

<table>
<thead>
<tr>
<th>Cassette Panel</th>
<th>13X04 (M0STAT62Q-1)</th>
<th>13X04 (M0STAT62Q-1)</th>
<th>13X04 (M0STAT62Q-1)</th>
<th>13X05 (M0STAT63Q-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net/Shipping weights - lbs.</td>
<td>6 / 10</td>
<td>6 / 10</td>
<td>6 / 10</td>
<td>12 / 18</td>
</tr>
</tbody>
</table>
### SPECIFICATIONS - MEDIUM STATIC DUCTED INDOOR UNITS

<table>
<thead>
<tr>
<th>Model No.</th>
<th>MMDA009S4</th>
<th>MMDA012S4</th>
<th>MMDA018S4</th>
<th>MMDA024S4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Tons</td>
<td>0.75</td>
<td>1</td>
<td>1.5</td>
<td>2</td>
</tr>
<tr>
<td>Power Supply - 60 hz - 1 phase</td>
<td>208/230V</td>
<td>208/230V</td>
<td>208/230V</td>
<td>208/230V</td>
</tr>
<tr>
<td>Rated load amps</td>
<td>0.9</td>
<td>1</td>
<td>1.5</td>
<td>2</td>
</tr>
<tr>
<td>Output (W)</td>
<td>55</td>
<td>55</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Room Temperature Range (°F)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heating</td>
<td>32 - 86</td>
<td>32 - 86</td>
<td>32 - 86</td>
<td>32 - 86</td>
</tr>
<tr>
<td>Air Volume - cfm (High/Medium/Low)</td>
<td>335/290/240</td>
<td>370/320/260</td>
<td>520/430/360</td>
<td>820/620/520</td>
</tr>
<tr>
<td>External Static Pressure (in. w.g)</td>
<td>0 - 0.18</td>
<td>0 - 0.18</td>
<td>0 - 0.28</td>
<td>0 - 0.40</td>
</tr>
<tr>
<td>Sound Data (dBA) - Low/Medium/High</td>
<td>31/35/38</td>
<td>31/37/44</td>
<td>37/39/41</td>
<td>43/48/53</td>
</tr>
<tr>
<td>Drain connection o.d. - in.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Net/Shipping weights - lbs.</td>
<td>40 / 51</td>
<td>42 / 52</td>
<td>51 / 61</td>
<td>58 / 69</td>
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</table>
# OPTIONAL ACCESSORIES - ORDER SEPARATELY

<table>
<thead>
<tr>
<th>Description</th>
<th>Catalog No.</th>
<th>09</th>
<th>12</th>
<th>18</th>
<th>24</th>
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</thead>
<tbody>
<tr>
<td><strong>OUTDOOR UNIT</strong></td>
<td></td>
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<tr>
<td>Condenser Pad (18 x 38 x 3)</td>
<td>Y5014</td>
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<tr>
<td>Disconnects</td>
<td>27P37</td>
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<tr>
<td>30 amp, fused, 1 ph</td>
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</tr>
<tr>
<td>60 amp, non-fused, 1 ph</td>
<td>27P39</td>
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<tr>
<td>Fuses</td>
<td>83P75</td>
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<td>30A</td>
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<td>60A</td>
<td>83P77</td>
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<tr>
<td>Hail Guards</td>
<td>15D25</td>
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<tr>
<td>M9GARD14Q-1</td>
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<tr>
<td>M9GARD15Q-1</td>
<td>15D26</td>
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<td>M9GARD17Q-1</td>
<td>15D28</td>
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<td>N/A</td>
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<tr>
<td>Line Sets</td>
<td>90X53</td>
<td></td>
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<td>N/A</td>
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</tr>
<tr>
<td>1/4 in. x 3/8 in. x 25 ft.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1/4 in. x 3/8 in. x 50 ft.</td>
<td>X0258</td>
<td></td>
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<tr>
<td>1/4 in. x 1/2 in. x 25 ft.</td>
<td>90X52</td>
<td>N/A</td>
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<tr>
<td>1/4 in. x 1/2 in. x 50 ft.</td>
<td>X0259</td>
<td></td>
<td></td>
<td>N/A</td>
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<tr>
<td>3/8 in. x 5/8 in. x 25 ft.</td>
<td>X8406</td>
<td>N/A</td>
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<tr>
<td>3/8 in. x 5/8 in. x 50 ft.</td>
<td>X8407</td>
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<td>N/A</td>
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<tr>
<td>Wall Brackets</td>
<td>Y5020</td>
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<td>A</td>
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<tr>
<td>Whips</td>
<td>29P54</td>
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<tr>
<td>10 Gauge - 1/2 in. x 6 ft.</td>
<td></td>
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<tr>
<td>8 Gauge - 3/4 in. x 6 ft.</td>
<td>27P44</td>
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<tr>
<td><strong>INDOOR UNIT</strong></td>
<td></td>
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</tr>
<tr>
<td>Diversitech Condensate Pumps</td>
<td>Y5170</td>
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<tr>
<td>ClearVue Mini™ - 7.9 US gallons per hour, 35 ft.</td>
<td></td>
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</tr>
<tr>
<td>lift - 120/240V</td>
<td>Y7946</td>
<td></td>
<td>N/A</td>
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</tr>
<tr>
<td>Mini-Split Pump - 4 US gallons per hour, 20 ft.</td>
<td></td>
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<tr>
<td>lift - 115V</td>
<td>Y7949</td>
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<tr>
<td>Mini-Split Pump - 4 US gallons per hour, 20 ft.</td>
<td></td>
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<tr>
<td>lift - 230V</td>
<td>Y7949</td>
<td></td>
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</tr>
<tr>
<td>Blue Diamond® Condensate Pumps</td>
<td>14T74</td>
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<td>N/A</td>
</tr>
<tr>
<td>MicroBlue® - 1.3 US gallons per hour, 6 ft.</td>
<td></td>
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<tr>
<td>lift - 110V-230V</td>
<td>14T76</td>
<td></td>
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<td>N/A</td>
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<tr>
<td>MaxiBlue® - 3.7 US gallons per hour, 16.5 ft.</td>
<td></td>
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</tr>
<tr>
<td>lift - 208-230V</td>
<td>14T77</td>
<td></td>
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<td>N/A</td>
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<tr>
<td>Sensor Cable Extension - 16 ft.</td>
<td>14T76</td>
<td></td>
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<tr>
<td><strong>A/C Easy Tee® Condensate Cleanout</strong></td>
<td>Y7947</td>
<td></td>
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<tr>
<td><strong>CONTROLS</strong></td>
<td></td>
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<tr>
<td>Wireless Remote Control</td>
<td>M0STAT60Q-1</td>
<td>14A65</td>
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<tr>
<td>Wired Remote Control</td>
<td>M0STAT61Q-1</td>
<td>14A66</td>
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<tr>
<td>Extension Cable for Wired Remote Control - 20 ft.</td>
<td>Y8008</td>
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<tr>
<td>Programmable Controller</td>
<td>M0STAT64Q-1</td>
<td>15D30</td>
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<tr>
<td>Extension Cable for Programmable Controller - 20 ft.</td>
<td>M0CTRL64Q-1</td>
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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

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<th>Indoor Unit Type</th>
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<th>Indoor Unit</th>
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<th>EER</th>
<th>Heat Capacity High</th>
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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.
### COOLING CAPACITY - 009

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### HEATING CAPACITY - 009

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## HEATING CAPACITY - 018

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### Cooling Capacity - 024

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### Heating Capacity - 024

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AIR THROW DATA - CASSETTE INDOOR UNITS

M22A009S4 AND M22A012S4 - COOLING

M22A009S4 AND M22A012S4 - HEATING

M22A018S4 - COOLING

M22A018S4 - HEATING

M33A024S4 - COOLING

M33A024S4 - HEATING
BLOWER DATA - MEDIUM STATIC DUCTED INDOOR UNITS

MMDA024S4

Low Speed

Medium Speed

High Speed

Air Volume - cfm

External Static Pressure - in. w.g.

Air Volume - cfm

External Static Pressure - in. w.g.

Air Volume - cfm

External Static Pressure - in. w.g.
DIMENSIONS - OUTDOOR UNITS - INCHES (MM)

MLA009S4S, MLA012S4S

**TOP VIEW**

**FRONT VIEW**

**SIDE VIEW**
DIMENSIONS - OUTDOOR UNITS - INCHES (MM)

MLA018S4S

TOP VIEW

FRONT VIEW

SIDE VIEW
## DIMENSIONS - WALL-MOUNTED INDOOR UNITS - INCHES (MM)

MWMA009S4, MWMA012S4, MWMA018S4, MWMA024S4

### Table of Dimensions

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DIMENSIONS - WALL-MOUNTED INDOOR UNITS - WALL PLATES - INCHES (MM)

MWMA009S4 and MWMA012S4

MWMA018S4

MWMA024S4

Low Ambient Single Zone Mini-Split Systems / Page 32
DIMENSIONS - CASSETTE INDOOR UNITS - INCHES (MM)

M22A009S4, M22A012S4, M22A018S4

SIDE VIEW

LEFT SIDE VIEW

RIGHT SIDE VIEW

BOTTOM VIEW (Body)

SIDE VIEW

BOTTOM VIEW (Panel)
MCFB018S4, MCFA024S4

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### Dimensions - Medium Static Ducted Indoor Units - Inches (mm)

#### MMMDA009S4, MMMDA012S4, MMMDA018S4, MMMDA024S4

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1. **NOTE** - Outdoor air enters unit AFTER air filter.

---

1. **FRESH AIR INTAKE**
   - 3-5/8 (92) Diameter (012 thru 018)
   - 5 (127) Diameter (024)

2. **SIDE VIEW**

3. **FRONT VIEW**

4. **BOTTOM VIEW**

5. **REAR VIEW**

---

Low Ambient Single Zone Mini-Split Systems / Page 36
INSTALLATION CLEARANCES - OUTDOOR UNITS - INCHES (MM)

1 Minimum rear clearance can be 6 inches (152 mm) when mounted on brackets and with no obstructions on the other three sides.
INSTALLATION CLEARANCES - WALL-MOUNTED INDOOR UNITS - INCHES (MM)

**FRONT VIEW**

Vertical Clearance - Clearance to Ceiling - 6 inches (152 mm) Minimum

NOTE - Provide 96 inches (2438) clearance to floor for best performance

INSTALLATION CLEARANCES - CASSETTE INDOOR UNITS - INCHES (MM)

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)
INSTALLATION CLEARANCES - CEILING/FLOOR MOUNT INDOOR UNITS - INCHES (MM)

CEILING APPLICATIONS

SIDE VIEW

WALL

DROP CEILING

UNIT FLUSH WITH WALL

UNIT FLUSH WITH WALL

WALL

FLOOR APPLICATIONS

FRONT VIEW

SIDE VIEW

WALL

Unit Flush with Wall

SUPPLY AIR

Supplementary Air

Floor

24 (610)

1 (25) Minimum

59 (1499) (Service Clearance Front of Unit)

59 (1499) (Service Clearance Front of Unit)

3/4 (19)

1 (25) Minimum

Service Clearance Front of Unit

WALL

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INSTALLATION CLEARANCES - MEDIUM STATIC DUCTED INDOOR UNITS - INCHES (MM)

**TOP VIEW**
- 20 (508) Minimum Service Clearance
- 24 (610) Minimum Service Clearance
- 24 (610) Minimum Service Clearance

**FRONT VIEW**
- 1 (25) Minimum Clearance
- 1 (25) Minimum Clearance
- 1 (25) Minimum Clearance

Suspended Ceiling

Air Flow

Ceiling
### LINE SET AND ELEVATION GUIDELINES

#### Maximum Line Set Length

<table>
<thead>
<tr>
<th>Size</th>
<th>Line Set Diameters (in.)</th>
<th>Maximum Elevation - Outdoor Unit Below Indoor Unit ft. (m)</th>
<th>Maximum Elevation - Outdoor Unit Above Indoor Unit ft. (m)</th>
<th>Maximum Line Set Length ft. (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>009</td>
<td>1/4 3/8</td>
<td>40 ft. (12 m)</td>
<td>40 ft. (12 m)</td>
<td>82 ft. (25 m)</td>
</tr>
<tr>
<td>012</td>
<td>1/4 1/2</td>
<td>40 ft. (12 m)</td>
<td>40 ft. (12 m)</td>
<td>82 ft. (25 m)</td>
</tr>
<tr>
<td>018</td>
<td>1/4 1/2</td>
<td>66 ft. (20 m)</td>
<td>66 ft. (20 m)</td>
<td>98 ft. (30 m)</td>
</tr>
<tr>
<td>024</td>
<td>3/8 5/8</td>
<td>82 ft. (25 m)</td>
<td>82 ft. (25 m)</td>
<td>164 ft. (50 m)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Sections</th>
<th>Description of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Section</td>
<td>Added Air Throw Curves for indoor non-ducted units.</td>
</tr>
<tr>
<td>Optional Accessories</td>
<td>Updated Hail Guard usage.</td>
</tr>
<tr>
<td></td>
<td>Removed Universal Mini-Split Installation Kit (discontinued).</td>
</tr>
</tbody>
</table>

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