### MINI-SPLIT SYSTEMS



# **MPA**

Mini-Split

# Multi-Zone Heat Pump Systems - R-410A

Bulletin No. 210757 August 2017 Supersedes April 2017



PRODUCT SPECIFICATIONS

MPA018 thru 036 Heat Pump Outdoor Units



**LENNOX** 

MPA048 Heat Pump Outdoor Units



M22A/M33A Cassette Non-Ducted Indoor Unit



**MMDA Medium Static Ducted Indoor Unit** 



**MWMA Wall-Mounted Non-Ducted Indoor Unit** 



MCFA Ceiling/Floor-Mount Non-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**)



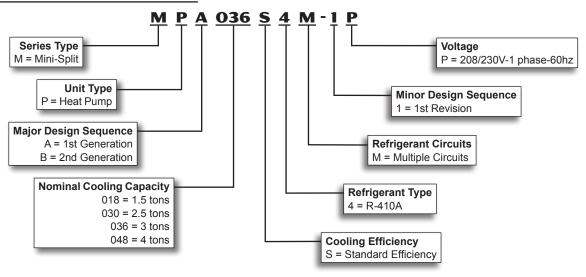
Certain models have earned the Energy Star® mark by meeting strict energy efficiency guidelines set by the US EPA.

> **Up to 5 Zones SEER up to 22.00** 1.5 to 4 Tons

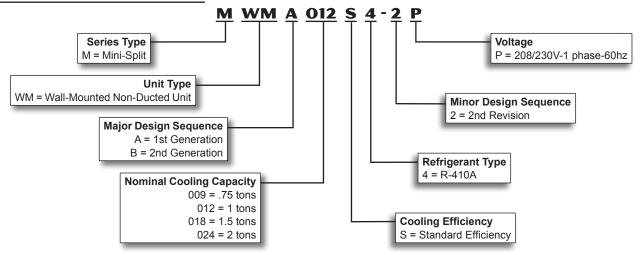
Cooling Capacity - 17,000 to 42,000 Btuh Heating Capacity - 18,000 to 51,000 Btuh

#### **MODEL NUMBER IDENTIFICATION**

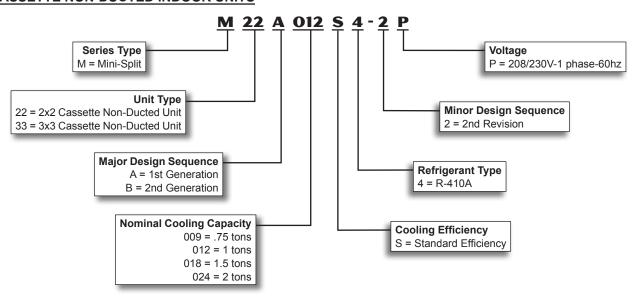
# **OUTDOOR MULTI-ZONE HEAT PUMP UNITS**



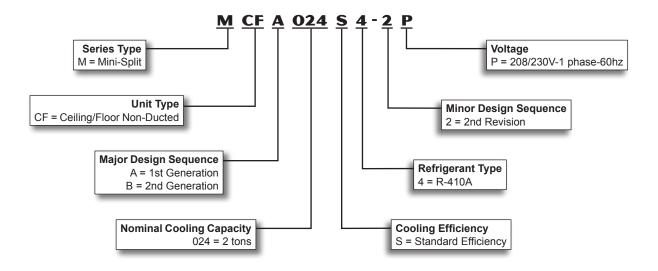
# WALL-MOUNTED INDOOR UNITS



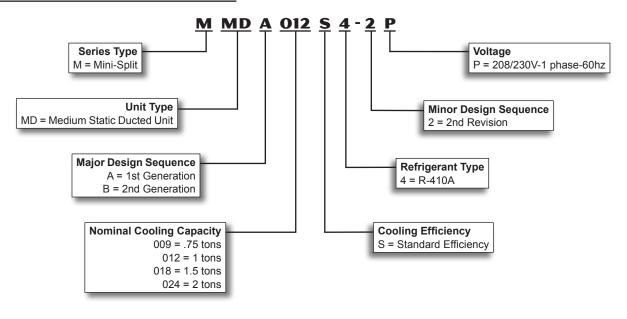
## **CASSETTE NON-DUCTED INDOOR UNITS**



### **CEILING/FLOOR NON-DUCTED INDOOR UNITS**



# **MEDIUM STATIC DUCTED INDOOR UNITS**



### **FEATURES - OUTDOOR UNITS**

#### **CONTENTS**

Air Throw Data - Cassette Units	26
Air Throw Data - Ceiling/Floor Mount Units	27
Air Throw Data - Wall-Mounted Units	25
Blower Data - Medium Static Ducted Units	28
Connections and Line Set Usage	22
Dimensions - Cassette Units	35
Dimensions - Ceiling/Floor Mount Units	37
Dimensions - Medium Static Ducted Units	38
Dimensions - Outdoor Units	30
Dimensions - Wall-Mounted Units	33
Dimensions - Wall-Mounted Units - Wall Plates	34
Features - Indoor Units	6
Features - Outdoor Units	4
Installation Clearances - Cassette Units - Inches	40
Installation Clearances - Ceiling/Floor Mount Units	41
Installation Clearances - Medium Static Ducted Units	42
Installation Clearances - Outdoor Units	39
Installation Clearances - Wall-Mounted Units	40
Line Set and Elevation Guidelines	43
Model Number Identification	2
Multi-Zone System Combinations	19
Optional Accessories	18
Specifications - Cassette Units	16
Specifications - Ceiling/Floor Mount Units	17
Specifications - Medium Static Ducted Units	17
Specifications - MPA Outdoor Units	14
Specifications - Wall-Mounted Units	16

# **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**

SEER up to 22.00.

HSPF up to 10.

1.5 through 4 ton.

Single phase power supply (208/230V).

Outdoor unit sound levels as low as 57 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.

Depending on capacity, multi-zone heat pumps allow up to five indoor units (5 zones) to be connected to one outdoor unit.

Units shipped completely factory assembled, internally piped, and wired.

Installer must set outdoor unit, hang indoor units, 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.

Certain models are ENERGY STAR® certified and 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.

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

#### 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 quard 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 guiet operation.

Brushless DC motor uses powerful Neodymium magnets, which are approximately 15-20 times

### **FEATURES - OUTDOOR UNITS**

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 dffierences 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 deenergized.

#### **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 buildup 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. 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.

#### **FEATURES - INDOOR UNITS**

#### **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.

#### **FEATURES - INDOOR UNITS**

#### **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: 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 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).



NOTE - Readout panel design varies depending on unit

- 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.

### **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 predetermined 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 interchangable 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 an indoor unit in the system is set to "AUTO" mode the unit will operate in cooling, heating or fan mode based on temperature setting. Fan runs in auto mode.

Each indoor unit has a "mode conflict priority" setting set by a DIP switch or from the remote control (default setting is heating mode).

The system "mode conflict priority" is set by the indoor unit connected through the "A" terminal strip. If the "A" terminal strip is not used, the unit at the "B" terminal strip and any subsequent terminal strips is utilized (depending on number of zones/indoor units).

When a mode conflict happens (all units are not set to the same mode), the indoor units with the mode equal to the system "mode conflict priority" will continue to operate, the indoor unit with the different mode will be turned off and the display will show "--" indicating a mode conflict for that particular indoor unit.

Mode conflict will auto-reset once all units return to the same operating mode.

### **ACCESSORIES (FURNISHED)**

### **WIRELESS REMOTE CONTROL**

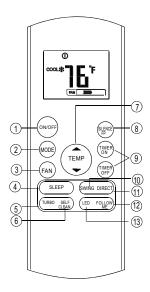
Furnished with Wall-Mounted Indoor Units, Cassette Indoor Units and Ceiling/Floor Indoor Units.

# 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.



### ON/OFF Button

Turns system on and off.

#### MODE Button

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

#### 3 FAN Button

 Select fan speed. Push button to cycle through each setting.

NOTE - Not available in AUTO or DRY modes.

#### 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.

# **1** 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.

# 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.

#### 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 autotimed 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.

#### 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

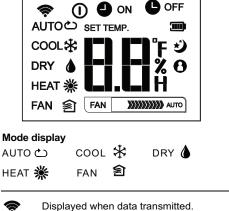
 Allows remote temperature sensing of the room at the remote control location.

#### 13 LED Button

 Turns the LCD display backlight on the indoor unit on or off.

# **ACCESSORIES (FURNISHED)**

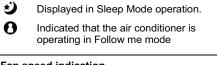
### **WIRELESS REMOTE CONTROL OPERATION**



<b>-</b>	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.

ന

Displayed when remote controller is ON.



Fan s	peed indication	า
FAN	<b>&gt;&gt;&gt;</b>	Low speed
FAN	333333	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.
- 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.
- Press the ON/OFF button to start the air conditioner.

# **Dehumidifying Operation**

- 1. Press the MODE button to select DRY mode.
- 2. Press the  $\mathbf{UP}/\mathbf{DOWN}$  buttons to set the desired temperature.
- 3. Press the ON/OFF button to start the air conditioner.

### **Timer ON/OFF Operation**

- 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.
- 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**

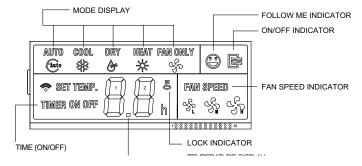
**Furnished with Ducted Indoor Units.** 

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

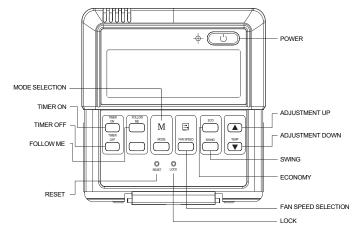
#### **FEATURES**

- 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**

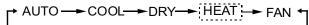


#### **BUTTONS AND FUNCTIONS**



#### **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) 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 autotimed 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. Extands cable to maximum 40 ft. length.

#### **OPTIONAL ACCESSORIES - ORDER SEPARATELY**

#### **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  $\rightarrow$  Low  $\rightarrow$  Med  $\rightarrow$  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 louvers)
- 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

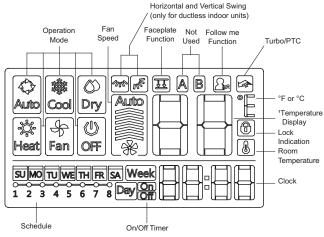
#### **Back/Turbo Button**

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**



<sup>1</sup> 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 cable for easy low voltage connection to the indoor unit. 20 ft. 6 m) cable for connection between indoor and outdoor unit is

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):  $4-7/8 \times 4-3/4 \times 3/4$  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.

#### **OPTIONAL ACCESSORIES - ORDER SEPARATELY**

### **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.

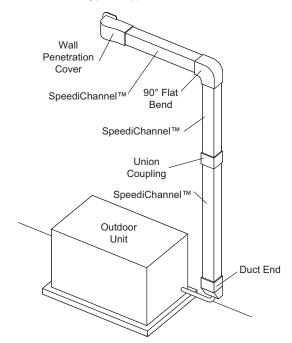
Screw cap on top allows easy access to condensate drain line.

### SPEEDICHANNEL™ 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.

#### **Typical Application**



### **OPTIONAL ACCESSORIES - ORDER SEPARATELY**

# **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

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<sup>™</sup> 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.

	TIONS - MPA OUTDOOR U				1.5 - 2.5 TO		
Nominal Size - To	<u> </u>		1.5	2.5			
Outdoor Unit Mo	del No.	MPA	18S4M	MPA030S4M			
Number of Zones	s		2	Up to 3			
¹ AHRI	System Type	Ducted	Non-Ducted	Ducted	Non-Ducted		
Ratings	Cooling - Btuh	17,000	18,000	27,000	25,000		
	High Temperature Heating - Btuh	18,000	18,500	32,000	32,000		
	Low Temperature Heating - Btuh	10,900	11,000	20,000	20,000		
	SEER	18.00	21.00	16.50	22.00		
	EER	12.50	12.50	9.50	12.50		
_	HSPF (Region IV)	8.5	9.6	8.8	9.6		
_	AHRI Reference Number	8129621	8129607	8129624	8129613		
Energy Star	Ariki Kelerence Number	Yes	Yes	No	Yes		
	rature Range - °F Cooling		122		122		
-molent remper	rature Range - °F Cooling Heating		3 - 76		122 5 - 76		
Sound Data (dBA			57 57	-	59		
Souria Data (ub)	Heating		57 52	<u> </u>	62		
Refrigerant	Charge furnished (R-410A)		. 4 oz.	<u> </u>	. 3 oz.		
	yth with furnished charge (per zone) - ft.		25		25		
•	dditional charge required per ft oz.		161	0.161			
Compressor	No. and Type		Rotary	Twin-Rotary			
	Refrigerant oil type		OIL VG74	ESTER OIL VG74			
	Refrigerant oil charge - oz.		6.9		7.7		
Connections - in			+ (2) 3/8 gas		+ (3) 3/8 gas		
	aximum pipe length for all rooms - ft.		98		48		
	m pipe length for one indoor unit - ft.		66		32		
Maximum heigh			33		33		
difference between							
indoor unit and			49	49			
outdoor unit	indoor unit - ft.		10	40			
Maximum differen	nce in level between indoor units - ft.		33	33			
Outdoor	(No.) Diameter - in.		- 18	(1) - 22			
Fan	Total air volume - cfm	· ,	<u>- 10</u> 470		060		
ı alı	_		50		50		
Outdoor Coil	rpm Number of rows		2		.6		
Outdoor Con	Fins per inch		<u> </u>		.o 15		
	Fin type			aluminium	10		
	Tube outside diameter - in.		3/8		3/8		
	Tube outside diameter - in:			per tubing	110		
	Net face area - ft. <sup>2</sup>		1.9	<del>.                                      </del>	.42		
Design Pressure			0/340		)/340		
Shipping Data	Net/Shipping weight (lbs.)		/ 115	-	/ 155		
ELECTRICAL I			-				
	cteristics - 60 Hz - 1 Phase	208	/230V	208	/230\/		
	imum Overcurrent Protection (amps)		20	<del> </del>	208/230V 25		
Ινιαλί	<sup>3</sup> Minimum circuit ampacity		18		20		
	Compressor Rated load amps		10		12		
	Compressor Nated load amps				-		

NOTE - Per AHRI, the certified ratings for systems are valid for <u>all</u> combinations of indoor units with the specific outdoor units listed above and in the AHRI Directory of Certified Equipment. Please visit <a href="http://www.ahridirectory.org">http://www.ahridirectory.org</a> for further details and latest updates.

0.74

50

0.90

120

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

Rated load amps

Output - W

**Outdoor Fan Motor** 

<sup>&</sup>lt;sup>1</sup> Ratings are AHRI certified to AHRI Standard 210/240-2008;

<sup>•</sup> Cooling Ratings - 80°F dry bulb/67°F wet bulb entering indoor coil air and 95°F dry bulb/75°F wet bulb outdoor air temperature.

<sup>•</sup> 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.

<sup>•</sup> 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.

<sup>&</sup>lt;sup>2</sup> HACR type circuit breaker or fuse.

<sup>&</sup>lt;sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

NOTE - Adaptors are furnished for the gas pipe connections:

<sup>018 - (2) 3/8</sup> x 1/2 in.

<sup>030 - (3) 3/8</sup> x 1/2 in.

Nominal Size - Tons	6	;	3		4		
<b>Outdoor Unit Mode</b>	l No.	MPA0	36S4M	MPA048S4M			
Number of Zones		Up	to 4	Up to 5			
AHRI	System Type	System Type Ducted Non-Ducted					
Ratings	Cooling - Btuh	34,000	36,000	42,000	42,000		
	High Temperature Heating - Btuh	36,000	36,000	51,000	49,000		
	Low Temperature Heating - Btuh	24,400	23,400	31,800	31,200		
	SEER	15.00	18.00	18.00	20.00		
	EER	8.20	8.80	11.00	12.50		
	HSPF (Region IV)	9.3	10.0	9.5	10.0		
	AHRI Reference Number						
	AHRI Reference Number	8129615	8129614	8129617	8129616		
Energy Star		No	No	No	Yes		
Ambient Temperatu	•		122		122		
n	Heating		- 76		- 76		
Sound Data (dBA)	Cooling		2		58		
	Heating		4		62		
Refrigerant	Charge furnished (R-410A)	7 lbs.			. 8 oz.		
•	with furnished charge (per zone) - ft.		5	25			
	tional charge required per ft oz.	0.1		0.161			
Compressor	No. and Type		Rotary	Twin-Rotary FV50S			
	Refrigerant oil type	FV!					
	Refrigerant oil charge - oz.		5.2		7.3		
Connections - in.	Liquid+Gas+Gas pipe (flare)		8 gas + (1) 1/2 gas	(5) 1/4 liq. + (3) 3/			
	mum pipe length for all rooms - ft.		97		46		
	pipe length for one indoor unit - ft.		8		98		
Maximum height	Outdoor unit above than indoor	3	3	33			
difference between	unit - ft.						
indoor unit and outdoor unit	Outdoor unit below than indoor	4	9	49			
	unit - ft.						
Maximum difference	in level between indoor units - ft.	3	3	33			
Outdoor	(No.) Diameter - in.	(1)	- 22	(2)	- 20		
-an	Total air volume - cfm	22	40	(2)	4240		
	rpm		50	(2)	800		
Outdoor Coil	Number of rows	2			2		
	Fins per inch	1	5		15		
	Fin type			aluminium			
	Tube outside diameter - in.	5/			16		
	Tube type		Rifled cop				
	Net face area - ft. <sup>2</sup>		42		.33		
Design Pressure	PSIG		/340		/340		
Shipping Data	Net/Shipping weight (lbs.)	162	/ 174	218	/ 245		
ELECTRICAL DA	TA						
	ristics - 60 Hz - 1 Phase	208/2	230V	208/	230V		
<sup>2</sup> Maximu	ım Overcurrent Protection (amps)	4	5	5	50		
	<sup>3</sup> Minimum circuit ampacity	3	0	3	35		
	Compressor Rated load amps	19	9.5	22			
Outdoor Fan Motor	Rated load amps	1.	30	(2)	0.9		
	Output - W	13	20	(2)	85		

NOTE - Per AHRI, the certified ratings for systems are valid for all combinations of indoor units with the specific outdoor units listed above and in the AHRI Directory of  $\label{eq:continuous_continuous_continuous} \textbf{Certified Equipment. Please visit } \underline{\textbf{http://www.ahridirectory.org}} \ \text{for further details and latest updates.}$ 

 $\ensuremath{\mathsf{NOTE}}$  - Extremes of operating range are plus and minus 10% of line voltage.

NOTE - Adaptors are furnished for the gas pipe connections:

036 - (3) 3/8 x 1/2 in. and (1) 1/2 x 3/8 in.

<sup>&</sup>lt;sup>1</sup> 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 dry bulb/75°F wet 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.

<sup>&</sup>lt;sup>2</sup> HACR type circuit breaker or fuse.

<sup>&</sup>lt;sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

<sup>048 - (3)</sup>  $3/8 \times 1/2$  in., (2)  $1/2 \times 3/8$  in., (2)  $1/4 \times 3/8$  in. and (2)  $1/2 \times 5/8$  in.

SPECIFICATIONS -	SPECIFICATIONS - WALL-MOUNTED INDOOR UNITS													
72	Model No.	MWMA009S4	MWMA012S4	MWMA018S4	MWMA024S4									
uneo V	Nominal Tons	0.75	1	1.5	2									
Power Supp	oly - 60 hz - 1 phase	208/230V	208/230V	208/230V	208/230V									
	Rated load amps	0.06	0.06	0.13	0.3									
	Output (W)	20	20	58	60									
Room Temperature	Cooling	62 - 90	62 - 90	62 - 90	62 - 90									
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/0	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/Sh	ipping weights - lbs.	20 / 26	20 / 27	27 / 35	40 / 54									

SPECIFICATIONS -	CASSETTE IN	DOOR UNITS				
	Model No.	M22A009S4	M22A012S4	M22A018S4	M33A024S4	
	Nominal Tons	0.75	1	1.5	2	
Power Supp	oly - 60 hz - 1 phase	208/230V	208/230V	208/230V	208/230V	
	Rated load amps	0.9	1.0	1.5	2.0	
	Output (W)	46	46	46	42	
Room Temperature	Cooling	62 - 90	62 - 90	62 - 90	62 - 90	
Range (°F)	Heating	32 - 86	32 - 86	32 - 86	32 - 86	
Air Volume - cfm	(High/Medium/Low)	375/300/255	375/300/255 380/310/260 560/485/415			
Sound Data (dBA)	- Low/Medium/High	33/37/41	36/39/43	36/39/44	43/47/51	
Piping Connections - Liquid/G	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 COMPONEN	NTS - ORDERED	SEPARATELY	'			
Cassette Panel		<b>13X04</b> (M0STAT62Q-1)	<b>13X04</b> (M0STAT62Q-1)	<b>13X04</b> (M0STAT62Q-1)	<b>13X05</b> (M0STAT63Q-1)	
Net/Shi	ipping weights - lbs.	6 / 10	6 / 10	6 / 10	12 / 18	

SPECIFICATIONS - CEILING/FLOOR MOUNT INDOOR UNITS												
unico)	Model No.	MCFA024S4										
	Nominal Tons	2										
Power Supply	/ - 60 hz - 1 phase	208/230V										
	Rated load amps	2										
	Output (W)	55										
Room Temperature	Cooling	62 - 90										
Range (°F)	Heating	32 - 86										
Air Volume - cfm (I	High/Medium/Low)	760/710/600										
Sound Data (dBA) -	Low/Medium/High	42/48/53										
Piping Connections - Liquid/Ga	s - o.d flare - in.	3/8 / 5/8										
Drain co	onnection o.d in.	1										
Net/Ship	ping weights - lbs.	59 / 70										

SPECIFICATIONS - N	MEDIUM STA	TIC DUCTED	INDOOR UNIT	rs			
	Model No.	MMDA009S4	MMDA012S4	MMDA018S4	MMDA024S4		
	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	0.9 1 1.5				
	Output (W)	55 55		90	90		
Room Temperature	Cooling	62 - 90	62 - 90	62 - 90	62 - 90		
Range (°F)	Heating	32 - 86	32 - 86	32 - 86	32 - 86		
Air Volume - cfm (H	ligh/Medium/Low)	335/290/240	370/320/260	520/430/360	820/620/520		
External Static	Pressure (in. w.g)	0 - 0.18	0 - 0.18	0 - 0.28	0 - 0.40		
Sound Data (dBA) - I	_ow/Medium/High	31/35/38	31/37/44	37/39/41	43/48/53		
Piping Connections - Liquid/Ga	s - o.d flare - in.	1/4 / 3/8	1/4 / 1/2	1/4 / 1/2	3/8 / 5/8		
Drain co	nnection o.d in.	1	1	1	1		
Net/Shipp	oing weights - lbs.	40 / 51	42 / 52	51 / 61	58 / 69		

Description		Catalog			1	Size			1
Description		No.	09	12	18	24	30	36	48
	OUTDOOR UNIT								
Condenser Pad (18		Y5014			•		•	•	•
Disconnects	30 amp, fused, 1 ph	27P37			•		•	•	•
	60 amp, non-fused, 1 ph	27P39			•		•	•	•
Fuses	30A	83P75			•		•	•	•
	60A	83P77			•		•	•	•
Hail Guards	M9GARD11Q-1	15D22			•			N/A	
	M9GARD12Q-1	15D23			N/A		•	•	N/
	M9GARD13Q-1	15D24			N/A		N	/A	
<sup>1</sup> Line Sets	1/4 in. x 3/8 in. x 25 ft.	90X53	N	I/A	•	N/A	•	•	
	1/4 in. x 3/8 in. x 50 ft.	X0258		.,, .	•		•	•	•
	1/4 in. x 1/2 in. x 25 ft.	90X52			•		•	•	•
	1/4 in. x 1/2 in. x 50 ft.	X0259			•		•	•	•
	3/8 in. x 5/8 in. x 25 ft.	X8406			N/A		N	/A	
	3/8 in. x 5/8 in. x 50 ft.	X8407			N/A		N	/A	•
Wall Brackets	30 inch	Y5020			•			N/A	
	36 inch	Y5021			N/A		•	•	•
Whips	10 Gauge - 1/2 in. x 6 ft.	29P54			•		•	•	•
	8 Gauge - 3/4 in. x 6 ft.	27P44			•		•	•	•
	INDOOR UNIT		,	,	,				
<sup>2</sup> Diversitech	ClearVue Mini™ - 7.9 US gallons per hour, 35 ft. lift - 120/240V	Y5170	•	•	•	•			
Condensate	Mini-Split Pump - 4 US gallons per hour, 20 ft. lift - 115V	Y7946	•	•	N	/A			
Pumps with Reservoir	Mini-Split Pump - 4 US gallons per hour, 20 ft. lift - 230V	Y7949	•	•	•	•			
<sup>2</sup> Blue Diamond®	MicroBlue® - 1.3 US gallons per hour, 6 ft. lift - 110v-230V	14T74	•			N/A		N1/A	
Condensate	MaxiBlue® - 3.7 US gallons per hour, 16.5 ft. lift - 208-230V	14T69		N/A		•		N/A	
Pumps with	MultiTank Kit	14T75		N/A					
Reservoir	Sensor Cable Extension - 16 ft.	14T76		•					
A/C Easy Tee® Cond		Y7947	•	•	•	•			
- 10 <u>- 10 </u>	CONTROLS								
Wireless Remote Co		14A65	•						Τ,
Wired Remote Cont		14A66				•	•		١.
	Wired Remote Control - 20 ft.	Y8008					•		
	are furnished as standard with the indoor units. As an option, a wireless control ca		for a d	ucted in	door ur	it and a	wired	control	can
	, cassette or ceiling/floor mount unit if desired.								
Programmable Cor	troller M0STAT64Q-1	15D30	•	•	•	•	•	•	•
· · · · · · · · · · · · · · · · · · ·	r Programmable Controller - 20 ft. M0CTRL64Q-1	Y8738	•	•	•	•	•	•	•
Indoor/Outdoor Wiri	ng Cable - 14 Gauge, 4 conductor wire, THHN, 250 ft.	Y2067	•	•	•	•	•	•	•
	SPEEDICHANNEL™ SYSTEM	1							
SpeediChannel™ S		Y3387	•	•	•	•	•	•	\
•	n. x 6-1/2 ft. (qty. 6)	Y3388	•	•	•	•	•	•	<u></u>
Union Coupling - 4 i	n.	Y3389	•	•	•	•	•	•	<u> </u>
90° Flat Bend Elbov		Y3390	•	•	•	•	•	•	ļ ·
90° Inside Elbow - 4		Y3391	•	•	•	•	•	•	١.
45° Flat Bend Elbov	v - 4 in.	Y3392	•	•	•	•	•	•	١,
Flex Joint - 4 in.		Y3393	•	•	•	•	•	•	١,
T-Joint - 4 in.		Y3394	•	•	•	•	•	•	
Duct End - 4 in.		Y3395	•	•	•	•	•	•	
Flat Wall Escutcheo	n - 4 in.	Y3396	•	•	•	•	•	•	
Wall Penetration Co	ver - 4 in.	Y3399	•	•	•	•	•	•	
Mount Block (White	) Qty, 2 - 14 in.	Y3397	•	•	•	•	•	•	,
Mount Block (White	\ Oty 2 26 in	Y3398							

 $<sup>^{\</sup>mbox{\tiny 1}}$  See Connections and Line Set Usage tables on page 22.

<sup>&</sup>lt;sup>2</sup> Y7946, Y7949 and 14T74 condensate pumps can be installed inside the indoor units. All other pumps must be installed external to the indoor unit.

# **MULTI-ZONE SYSTEM COMBINATIONS**

NOTE - For multi-zone systems, the total capacity of all indoor units must be 66% to 133% of the outdoor unit capacity.

Outdoor Unit Model No.	Number of	Indoor Unit Capacity								acity at y (Btuh)		Nominal Heating Capacity at Rated System Capacity (Btuh)				
woder No.	Zones	#1	#2	#3	#4	#5	#1	#2	#3	#4	#5	#1	#2	#3	#4	#5
	<sup>1</sup> 1	012					11,977					11,373				
NADA 0400 4NA		009	009				9,000	9,000				9,250	9,250			
MPA018S4M	2	009	012				8,379	10,313				8,538	10,508			
		012	012				9,450	9,450				9,735	9,735			
	<sup>1</sup> 1	018					18,345					19,730				
		009	009				9,258	9,258				10,961	10,961			
		009	012				9,115	11,219				10,564	13,002			
		009	018				8,803	17,944				10,521	21,448			
	2	012	012				11,521	11,521				12,605	12,605			
		012	018				10,327	17,105				12,379	20,503			
MPA030S4M		018	018				15,390	15,390				18,453	18,453			
		009	009	009			8,915	8,915	8,915			10,656	10,656	10,656		
		009	009	012			9,244	9,244	11,512			10,234	10,234	12,596		
	3	009	012	012			8,681	10,684	10,684			9,605	11,821	11,821		
		009	009	018			7,316	7,316	14,632			8,197	8,197	16,394		
		012	012	012			9,755	9,755	9,755			10,929	10,929	10,929		
		009	018				8,788	17,913				9,540	19,447			
		012	012				10,287	10,287				11,864	11,864			
	2	012	018				10,052	16,649				10,913	18,074			
		018	018				17,200	17,200				18,240	18,240			
		009	009	009			8,900	8,900	8,900			9,476	9,476	9,476		
		009	009	012			8,265	8,265	10,172			8,972	8,972	11,043		
		009	009	018			8,518	8,518	17,364			9,033	9,033	18,414		
		009	012	012			9,228	11,357	11,357			10,301	12,679	12,679		
	3	009	012	018			8,202	10,094	16,719			8,347	10,273	17,015		
		009	018	018			7,640	15,575	15,575			7,664	15,624	15,624		
MPA036S4M		012	012	012			10,648	10,648	10,648			11,886	11,886	11,886		
		012	012	018			9,901	9,901	16,399			10,031	10,031	16,614		
		012	018	018			8,995	14,898	14,898			9,175	15,197	15,197		
		009	009	009	009		9,000	9,000	9,000	9,000		9,000	9,000	9,000	9,000	
		009	009	009	012		9,371	9,371	9,371	11,534		9,031	9,031	9,031	11,115	
				009			8,204	8,204	8,204	16,723		7,902	7,902	7,902	16,109	
	4			012			8,887	8,887	10,937	10,937		8,564	8,564	10,540		
		009		012			8,062	8,062	9,923	16,435		7,823	7,823	9,628	15,946	
		009		012			8,809	10,842	10,842			8,485	10,444	10,444		
					012		10,334	10,334				<u> </u>	9,954		· ·	

<sup>1</sup> One outdoor unit may be matched with one indoor unit for single zone applications. A second indoor unit can be added at a later date for multi-zone applications.

# **MULTI-ZONE SYSTEM COMBINATIONS**

NOTE - For multi-zone systems, the total capacity of all indoor units must be 66% to 133% of the outdoor unit capacity.

Outdoor Unit Model No.	Number of	Indoor Unit Capacity							ing Cap Capacit			Nominal Heating Capacity at Rated System Capacity (Btuh)				
wiodei No.	Zones	#1	#2	#3	#4	#5	#1	#2	#3	#4	#5	#1	#2	#3	#4	#5
		009	024				8,854	23,432				9,294	24,601			
		012	018				11,790	17,461				12,650	18,655			
		012	024				11,691	23,322				11,961	24,402			
	2	018	018				16,826	16,826				18,245	18,245			
		018	024				16,748	23,631				18,155	25,210			
		024	024				23,294	23,294				24,855	24,855			
		009	009	009			9,294	9,294	9,294			9,680	9,680	9,680		
		009	009	012			9,063	9,063	11,906			9,565	9,565	12,750		
		009	009	018			8,952	8,952	17,965			9,540	9,540	18,455		
		009	009	024			8,834	8,834	23,332			9,235	9,235	24,505		
		009	012	012			9,027	12,089	12,089			9,425	12,850	12,850		
		009	012	018			9,001	11,636	17,334			9,345	12,585	18,119		
MPA048S4M		009	012	024			8,922	11,621	23,222			9,330	11,950	24,395		
		009	018	018			8,844	17,193	17,193			9,320	17,875	17,875		
	_	009	018	024			8,685	16,321	22,111			9,220	16,675	22,660		
	3	009	024	024			8,421	21,121	21,121			9,021	21,521	21,521		
		012	012	012			11,981	11,981	11,981			12,648	12,648	12,648		
		012	012	018			11,945	11,945	17,021			12,355	12,355	18,105		
		012	018	018			10,756	16,530	16,530			11,550	18,035	18,035		
		012	012	024			11,583	11,583	23,111			11,910	11,910	24,355		
		012	018	024			11,093	16,210	22,035			11,755	16,545	22,580		
		012	024	024			9,900	20,768	20,768			11,440	21,760	21,760		
		018	018	018			16,405	16,405	16,405			17,170	17,170	17,170		
		018	018	024			15,383	15,383	20,270			15,865	15,865	22,155		

<sup>&</sup>lt;sup>1</sup> One outdoor unit may be matched with one indoor unit for single zone applications. A second indoor unit can be added at a later date for multi-zone applications.

# **MULTI-ZONE SYSTEM COMBINATIONS**

NOTE - For multi-zone systems, the total capacity of all indoor units must be 66% to 133% of the outdoor unit capacity.

Outdoor Unit Model No.	Number of	Indoor Unit Capacity					Nominal Cooling Capacity at Rated System Capacity (Btuh)					Nominal Heating Capacity at Rated System Capacity (Btuh)				
wiodei No.	Zones	#1	#2	#3	#4	#5	#1	#2	#3	#4	#5	#1	#2	#3	#4	#5
		009	009	009	009		9,049	9,049	9,049	9,049		9,595	9,595	9,595	9,595	
		009	009	009	012		8,971	8,971	8,971	11,857		9,470	9,470	9,470	12,725	
		009	009	009	018		8,883	8,883	8,883	16,875		9,385	9,385	9,355	17,760	
		009	009	009	024		8,521	8,521	8,521	21,673		9,155	9,155	9,055	22,755	
		009	009	012	012		8,922	8,922	11,678	11,678		9,360	9,360	12,280	12,280	
		009	009	012	018		8,865	8,865	11,566	16,469		9,340	9,340	12,123	17,435	
		009	009	012	024		8,447	8,447	10,888	21,554		9,140	9,140	11,550	21,675	
		009	009	018	018		8,491	8,491	16,484	16,484		9,175	9,175	16,535	16,535	
	4	009	009	018	024		8,252	8,252	15,295	20,113		9,050	9,050	15,765	21,520	
		009	012	012	012		8,813	11,584	11,584	11,584		9,330	12,141	12,141	12,141	
		009	012	012	018		8,534	11,256	11,256	16,381		9,185	12,010	12,010	17,442	
		009	012	012	024		8,354	10,502	10,502	21,165		9,150	9,150	12,165	21,545	
		009	012	018	018		8,398	10,643	16,371	16,371		9,155	11,650	16,465	16,465	
MPA048S4M		012	012	012	012		11,381	11,381	11,381	11,381		12,035	12,035	12,035	12,035	
		012	012	012	018		10,697	10,697	10,697	16,611		11,755	11,755	11,755	16,550	
		012	012	012	024		10,130	10,130	10,130	20,666		11,210	11,210	11,210	20,155	
		012	012	018	018		10,115	10,115	15,774	15,774		11,240	11,240	16,235	16,235	
		009	009	009	009	009	9,000	9,000	9,000	9,000	9,000	9,800	9,800	9,800	9,800	9,800
		009	009	009	009	012	8,814	8,814	8,814	8,814	11,729	9,534	9,534	9,534	9,534	12,862
		009	009	009	009	018	8,672	8,672	8,672	8,672	16,753	9,355	9,355	9,355	9,355	16,825
		009	009	009	009	024	8,295	8,295	8,295	8,295	19,032	9,095	9,095	9,095	9,095	19,535
	5	009	009	009	012	012	8,687	8,687	8,687	11,079	11,079	9,305	9,305	9,335	12,325	12,325
		009	009	009	012	018	8,486	8,486	8,486	10,849	15,598	9,105	9,105	9,105	12,025	16,325
		009	009	012	012	012	8,501	8,501	11,387	11,387	11,387	9,213	9,213	11,870	11,870	11,870
		009	009	012	012	018	8,457	8,457	10,815	10,815	14,253	8,933	8,933	10,967	10,967	15,870
		009	012	012	012	012	8,550	10,414	10,414	10,414	10,414	8,525	11,525	11,525	11,525	11,525
		012	012	012	012	012	10,306	10,306	10,306	10,306	10,306	11,055	11,055	11,055	11,055	11,055

<sup>1</sup> One outdoor unit may be matched with one indoor unit for single zone applications. A second indoor unit can be added at a later date for multi-zone applications.

CONNECTI	CONNECTIONS AND LINE SET USAGE							
Outdoor Model	No. of Zones	Indoor Unit Capacity (Unit No.)	Line Set Required (Liquid x Gas)					
	1	012 (A)	<sup>1</sup> 1/4 in. x 1/2 in.					
MPA018S4M	2	009 (A)	1/4 in. x 3/8 in.					
Indoor Unit A	2	009 (B)	1/4 in. x 3/8 in.					
1/4" liq + 3/8" gas	2	009 (B)	1/4 in. x 3/8 in.					
Indoor Unit B	2	012 (A)	<sup>1</sup> 1/4 in. x 1/2 in.					
1/4" liq + 3/8" gas	2	012 (A)	<sup>1</sup> 1/4 in. x 1/2 in.					
	2	012 (B)	<sup>1</sup> 1/4 in. x 1/2 in.					
	1	018 (A)	<sup>1</sup> 1/4 in. x 1/2 in.					
	0	009 (A)	1/4 in. x 3/8 in.					
	2	009 (B)	1/4 in. x 3/8 in.					
	0	009 (B)	1/4 in. x 3/8 in.					
	2	012 (A)	<sup>1</sup> 1/4 in. x 1/2 in.					
	_	009 (B)	1/4 in. x 3/8 in.					
	2	018 (A)	<sup>1</sup> 1/4 in. x 1/2 in.					
	_	012 (A)	<sup>1</sup> 1/4 in. x 1/2 in.					
	2	012 (B)	<sup>1</sup> 1/4 in. x 1/2 in.					
		012 (B)	<sup>1</sup> 1/4 in. x 1/2 in.					
	2	018 (A)	<sup>1</sup> 1/4 in. x 1/2 in.					
MPA030S4M	•	018 (A)	<sup>1</sup> 1/4 in. x 1/2 in.					
Indoor Unit A	2	018 (B)	<sup>1</sup> 1/4 in. x 1/2 in.					
1/4" liq + 3/8" gas		009 (A)	1/4 in. x 3/8 in.					
Indoor Unit B 1/4" liq + 3/8" gas	3	009 (B)	1/4 in. x 3/8 in.					
Indoor Unit C		009 (C)	1/4 in. x 3/8 in.					
1/4" liq + 3/8" gas		009 (B)	1/4 in. x 3/8 in.					
	3	009 (C)	1/4 in. x 3/8 in.					
		012 (A)	<sup>1</sup> 1/4 in. x 1/2 in.					
		009 (C)	1/4 in. x 3/8 in.					
	3	012 (A)	<sup>1</sup> 1/4 in. x 1/2 in.					
		012 (B)	<sup>1</sup> 1/4 in. x 1/2 in.					
		009 (B)	1/4 in. x 3/8 in.					
	3	009 (C)	1/4 in. x 3/8 in.					
		018 (A)	<sup>1</sup> 1/4 in. x 1/2 in.					
		012 (A)	<sup>1</sup> 1/4 in. x 1/2 in.					
	3	012 (B)	<sup>1</sup> 1/4 in. x 1/2 in.					
		012 (C)	<sup>1</sup> 1/4 in. x 1/2 in.					
MPA036S4M	0	009 (B)	1/4 in. x 3/8 in.					
Indoor Unit A	2	018 (A)	1/4 in. x 1/2 in.					
1/4" liq + 1/2" gas	_	012 (A)	1/4 in. x 1/2 in.					
Indoor Unit B	2	012 (B)	<sup>1</sup> 1/4 in. x 1/2 in.					
1/4" liq + 3/8" gas		012 (B)	<sup>1</sup> 1/4 in. x 1/2 in.					
Indoor Unit C 1/4" liq + 3/8" gas	2	018 (A)	1/4 in. x 1/2 in.					
Indoor Unit D	_	018 (A)	1/4 in. x 1/2 in.					
1/4" liq + 3/8" gas	2	018 (B)	<sup>1</sup> 1/4 in. x 1/2 in.					
1 3/8 x 1/2 in gas nine	adantor is re		connection to outdoor unit					

 $<sup>^{\</sup>rm 1}$  3/8 x 1/2 in. gas pipe adaptor is required for line set connection to outdoor unit (furnished with outdoor unit).

CONNECTION	ONS A	ND LINE S	SET USAGE
Outdoor	No. of	Indoor Unit	Line Set
Model	Zones	Capacity (Unit No.)	Required (Liquid x Gas)
		009 (B)	1/4 in. x 3/8 in.
	3	009 (C)	1/4 in. x 3/8 in.
	Ü	000 (D)	1/4 in. x 3/8 in.
		000 (B)	1/4 in. x 3/8 in.
	3	009 (C)	1/4 in. x 3/8 in.
	-	012 (A)	1/4 in. x 1/2 in.
		009 (B)	1/4 in. x 3/8 in.
	3	009 (C)	1/4 in. x 3/8 in.
		018 (A)	1/4 in. x 1/2 in.
		009 (C)	1/4 in. x 3/8 in.
	3	012 (A)	1/4 in. x 1/2 in.
		012 (B)	1 1/4 in. x 1/2 in.
		009 (C)	1/4 in. x 3/8 in.
	3	012 (B)	<sup>1</sup> 1/4 in. x 1/2 in.
	, i	018 (A)	1/4 in. x 1/2 in.
		009 (C)	1/4 in. x 3/8 in.
	3	018 (A)	1/4 in. x 1/2 in.
	-	018 (B)	<sup>1</sup> 1/4 in. x 1/2 in.
MPA036S4M	3	012 (A)	1/4 in. x 1/2 in.
Indoor Unit A		012 (B)	<sup>1</sup> 1/4 in. x 1/2 in.
1/4" liq + 1/2" gas Indoor Unit B		012 (C)	1 1/4 in. x 1/2 in.
1/4" liq + 3/8" gas		012 (C)	<sup>1</sup> 1/4 in. x 1/2 in.
Indoor Unit C	3	012 (B)	1 1/4 in. x 1/2 in.
1/4" liq + 3/8" gas		018 (A)	1/4 in. x 1/2 in.
Indoor Unit D		012 (C)	¹ 1/4 in. x 1/2 in.
1/4" liq + 3/8" gas	3	018 (A)	1/4 in. x 1/2 in.
		018 (B)	1 1/4 in. x 1/2 in.
		009 (B)	1/4 in. x 3/8 in.
		009 (C)	1/4 in. x 3/8 in.
	4	009 (D)	1/4 in. x 3/8 in.
		009 (A)	<sup>1</sup> 1/4 in. x 3/8 in.
		009 (B)	1/4 in. x 3/8 in.
		009 (C)	1/4 in. x 3/8 in.
	4	009 (D)	1/4 in. x 3/8 in.
		012 (A)	1/4 in. x 1/2 in.
		009 (B)	1/4 in. x 3/8 in.
		009 (C)	1/4 in. x 3/8 in.
	4	009 (D)	1/4 in. x 3/8 in.
		018 (A)	1/4 in. x 1/2 in.
		009 (C)	1/4 in. x 3/8 in.
		000 (D)	1/4 in. x 3/8 in.
	4	012 (A)	1/4 in. x 1/2 in.
		012 (A) 012 (B)	<sup>1</sup> 1/4 in. x 1/2 in.
1 3/8 x 1/2 in. gas pipe	adaptor is re		connection to outdoor unit

 $<sup>^{\</sup>rm 1}$  3/8 x 1/2 in. gas pipe adaptor is required for line set connection to outdoor unit (furnished with outdoor unit).

 $<sup>^2</sup>$  1/4 x 3/8 in. liquid pipe adaptor is required for line set connection to the 048 outdoor unit (furnished with outdoor unit).

 $<sup>^3</sup>$  1/2 x 5/8 in. gas pipe adaptor is required for line set connection to the 048 outdoor unit (furnished with outdoor unit).

 $<sup>^2</sup>$  1/4 x 3/8 in. liquid pipe adaptor is required for line set connection to the 048 outdoor unit (furnished with outdoor unit).

 $<sup>^3</sup>$  1/2 x 5/8 in. gas pipe adaptor is required for line set connection to the 048 outdoor unit (furnished with outdoor unit).

CONNECTI	CONNECTIONS AND LINE SET USAGE						
Outdoor Model	No. of Zones	Indoor Unit Capacity (Unit No.)	Line Set Required (Liquid x Gas)				
		009 (C)	1/4 in. x 3/8 in.				
	4	009 (D)	1/4 in. x 3/8 in.				
MPA036S4M	4	012 (B)	<sup>1</sup> 1/4 in. x 1/2 in.				
Indoor Unit A		018 (A)	1/4 in. x 1/2 in.				
1/4" liq + 1/2" gas		009 (D)	1/4 in. x 3/8 in.				
Indoor Unit B 1/4" liq + 3/8" gas	4	012 (A)	1/4 in. x 1/2 in.				
Indoor Unit C	4	012 (B)	<sup>1</sup> 1/4 in. x 1/2 in.				
1/4" liq + 3/8" gas		012 (C)	<sup>1</sup> 1/4 in. x 1/2 in.				
Indoor Unit D		012 (A)	1/4 in. x 1/2 in.				
1/4" liq + 3/8" gas	4	012 (B)	<sup>1</sup> 1/4 in. x 1/2 in.				
	4	012 (C)	<sup>1</sup> 1/4 in. x 1/2 in.				
		012 (D)	<sup>1</sup> 1/4 in. x 1/2 in.				
	0	009 (B)	<sup>1</sup> 1/4 in. x 3/8 in.				
	2	024 (A)	<sup>2, 3</sup> 3/8 in. x 5/8 in.				
		012 (B)	1/4 in. x 1/2 in.				
	2	018 (A)	1/4 in. x 1/2 in.				
		012 (B)	1/4 in. x 1/2 in.				
	2	024 (A)	<sup>2, 3</sup> 3/8 in. x 5/8 in.				
	2	018 (A)	1/4 in. x 1/2 in.				
		018 (B)	1/4 in. x 1/2 in.				
		018 (B)	1/4 in. x 1/2 in.				
	2	024 (A)	<sup>2, 3</sup> 3/8 in. x 5/8 in.				
MPA048S4M	2	024 (A)	<sup>2, 3</sup> 3/8 in. x 5/8 in.				
Indoor Unit A	2	024 (B)	<sup>2, 3</sup> 3/8 in. x 5/8 in.				
1/4" liq + 1/2" gas		009 (A)	<sup>1</sup> 1/4 in. x 3/8 in.				
Indoor Unit B	3	009 (B)	<sup>1</sup> 1/4 in. x 3/8 in.				
1/4" liq + 1/2" gas		009 (C)	1/4 in. x 3/8 in.				
Indoor Unit C 1/4" liq + 3/8" gas		009 (B)	<sup>1</sup> 1/4 in. x 3/8 in.				
Indoor Unit D	3	009 (C)	1/4 in. x 3/8 in.				
1/4" liq + 3/8" gas		012 (A)	1/4 in. x 1/2 in.				
Indoor Unit E		009 (B)	<sup>1</sup> 1/4 in. x 3/8 in.				
1/4" liq + 3/8" gas	3	009 (C)	1/4 in. x 3/8 in.				
		018 (A)	1/4 in. x 1/2 in.				
		009 (B)	<sup>1</sup> 1/4 in. x 3/8 in.				
	3	009 (C)	1/4 in. x 3/8 in.				
		024 (A)	<sup>2, 3</sup> 3/8 in. x 5/8 in.				
		009 (C)	1/4 in. x 3/8 in.				
	3	012 (A)	1/4 in. x 1/2 in.				
		012 (B)	1/4 in. x 1/2 in.				
		009 (C)	1/4 in. x 3/8 in.				
	3	012 (B)	1/4 in. x 1/2 in.				
		018 (A)	1/4 in. x 1/2 in.				
1 3/8 x 1/2 in gas nine	adantor is re	equired for line set	connection to outdoor unit				

 $<sup>^{1}</sup>$  3/8 x 1/2 in. gas pipe adaptor is required for line set connection to outdoor unit (furnished with outdoor unit).

CONNECTIONS AND LINE SET USAGE							
Outdoor Model	No. of Zones	Indoor Unit Capacity (Unit No.)	Line Set Required (Liquid x Gas)				
		009 (C)	1/4 in. x 3/8 in.				
	3	012 (B)	1/4 in. x 1/2 in.				
		024 (A)	<sup>2, 3</sup> 3/8 in. x 5/8 in.				
		009 (C)	1/4 in. x 3/8 in.				
	3	018 (A)	1/4 in. x 1/2 in.				
		018 (B)	1/4 in. x 1/2 in.				
		009 (C)	1/4 in. x 3/8 in.				
	3	018 (B)	1/4 in. x 1/2 in.				
		024 (A)	<sup>2, 3</sup> 3/8 in. x 5/8 in.				
		009 (C)	1/4 in. x 3/8 in.				
	3	024 (A)	<sup>2, 3</sup> 3/8 in. x 5/8 in.				
		024 (B)	<sup>2, 3</sup> 3/8 in. x 5/8 in.				
		012 (A)	1/4 in. x 1/2 in.				
	3	012 (B)	1/4 in. x 1/2 in.				
		012 (C)	<sup>1</sup> 1/4 in. x 1/2 in.				
		012 (B)	1/4 in. x 1/2 in.				
	3	012 (C)	<sup>1</sup> 1/4 in. x 1/2 in.				
MPA048S4M		018 (A)	1/4 in. x 1/2 in.				
Indoor Unit A		012 (C)	1/4 in. x 1/2 in.				
1/4" liq + 1/2" gas	3	018 (A)	1/4 in. x 1/2 in.				
Indoor Unit B 1/4" liq + 1/2" gas		018 (B)	<sup>1</sup> 1/4 in. x 1/2 in.				
Indoor Unit C	0	012 (B)	1/4 in. x 1/2 in.				
1/4" liq + 3/8" gas	3	012 (C)	1 1/4 in. x 1/2 in.				
Indoor Unit D		024 (A)	<sup>2, 3</sup> 3/8 in. x 5/8 in.				
1/4" liq + 3/8" gas	0	012 (B)	1/4 in. x 1/2 in.				
Indoor Unit E 1/4" liq + 3/8" gas	3	018 (C)	<sup>1</sup> 1/4 in. x 1/2 in.				
1/4 114 + 5/6 yas		024 (A)	<sup>2, 3</sup> 3/8 in. x 5/8 in. <sup>1</sup> 1/4 in. x 1/2 in.				
	2	012 (C)					
	3	024 (A)	<sup>2,3</sup> 3/8 in. x 5/8 in.				
		024 (B)	2,3 3/8 in. x 5/8 in. 1/4 in. x 1/2 in.				
	3	018 (A)	1/4 in. x 1/2 in.				
	3	018 (B) 018 (C)	1 1/4 in. x 1/2 in.				
		018 (C)	1/4 in. x 1/2 in.				
	3	018 (B)	1/4 in. x 1/2 in.				
	3	018 (C) 024 (A)	<sup>2, 3</sup> 3/8 in. x 5/8 in.				
		009 (A)	1 1/4 in. x 3/8 in.				
		009 (A)	1/4 in. x 3/8 in.				
	4	009 (C)	1/4 in. x 3/8 in.				
		000 (D)	1/4 in. x 3/8 in.				
		009 (B)	1 1/4 in. x 3/8 in.				
		009 (C)	1/4 in. x 3/8 in.				
	4	000 (D)	1/4 in. x 3/8 in.				
		012 (A)	1/4 in. x 1/2 in.				
10/0 4/0 :		0.2 (7.)					

<sup>&</sup>lt;sup>1</sup> 3/8 x 1/2 in. gas pipe adaptor is required for line set connection to outdoor unit (furnished with outdoor unit).

 $<sup>^2</sup>$  1/4 x 3/8 in. liquid pipe adaptor is required for line set connection to the 048 outdoor unit (furnished with outdoor unit).

 $<sup>^{\</sup>rm 3}$  1/2 x 5/8 in. gas pipe adaptor is required for line set connection to the 048 outdoor unit (furnished with outdoor unit).

 $<sup>^2</sup>$  1/4 x 3/8 in. liquid pipe adaptor is required for line set connection to the 048 outdoor unit (furnished with outdoor unit).

 $<sup>^3</sup>$  1/2 x 5/8 in. gas pipe adaptor is required for line set connection to the 048 outdoor unit (furnished with outdoor unit).

CONNECTI	ONS A	ND LINE S	ET USAGE
Outdoor Model	No. of Zones	Indoor Unit Capacity (Unit No.)	Line Set Required (Liquid x Gas)
		009 (B)	1 1/4 in. x 3/8 in.
		009 (C)	1/4 in. x 3/8 in.
	4	009 (D)	1/4 in. x 3/8 in.
		018 (A)	1/4 in. x 1/2 in.
		009 (B)	<sup>1</sup> 1/4 in. x 3/8 in.
		009 (C)	1/4 in. x 3/8 in.
	4	009 (D)	1/4 in. x 3/8 in.
		024 (A)	<sup>2, 3</sup> 3/8 in. x 5/8 in.
		009 (C)	1/4 in. x 3/8 in.
	4	009 (D)	1/4 in. x 3/8 in.
	•	012 (A)	1/4 in. x 1/2 in.
		012 (B)	1/4 in. x 1/2 in.
		009 (C)	1/4 in. x 3/8 in.
	4	009 (D)	1/4 in. x 3/8 in.
		012 (B)	1/4 in. x 1/2 in.
		018 (A)	1/4 in. x 1/2 in.
		009 (C)	1/4 in. x 3/8 in.
MPA048S4M	4	009 (D)	1/4 in. x 3/8 in.
Indoor Unit A 1/4" liq + 1/2" gas		018 (A)	1/4 in. x 1/2 in.
Indoor Unit B		018 (B) 009 (C)	1/4 in. x 1/2 in.
1/4" liq + 1/2" gas	4	009 (C) 009 (D)	1/4 in. x 3/8 in.
Indoor Unit C		003 (B) 018 (B)	1/4 in. x 1/2 in.
1/4" liq + 3/8" gas		010 (B) 024 (A)	<sup>2, 3</sup> 3/8 in. x 5/8 in.
Indoor Unit D 1/4" liq + 3/8" gas		009 (D)	1/4 in. x 3/8 in.
Indoor Unit E		012 (A)	<sup>1</sup> 1/4 in. x 1/2 in.
1/4" liq + 3/8" gas	4	012 (B)	<sup>1</sup> 1/4 in. x 1/2 in.
		012 (C)	1/4 in. x 1/2 in.
		009 (D)	1/4 in. x 3/8 in.
	,	012 (B)	1/4 in. x 1/2 in.
	4	012 (C)	<sup>1</sup> 1/4 in. x 1/2 in.
		018 (A)	1/4 in. x 1/2 in.
		009 (D)	1/4 in. x 3/8 in.
	4	012 (C)	<sup>1</sup> 1/4 in. x 1/2 in.
	7	018 (A)	1/4 in. x 1/2 in.
		018 (B)	1/4 in. x 1/2 in.
		012 (A)	1/4 in. x 1/2 in.
	4	012 (B)	1/4 in. x 1/2 in.
		012 (C)	<sup>1</sup> 1/4 in. x 1/2 in.
		012 (D)	<sup>1</sup> 1/4 in. x 1/2 in.
		012 (B)	1/4 in. x 1/2 in.
	4	012 (C)	<sup>1</sup> 1/4 in. x 1/2 in.
		012 (D)	1 1/4 in. x 1/2 in.
12/0 v 4/0 in	adanta- !-	018 (A)	1/4 in. x 1/2 in.

 $<sup>^{\</sup>rm 1}$  3/8 x 1/2 in. gas pipe adaptor is required for line set connection to outdoor unit (furnished with outdoor unit).

CONNECTI	ONS A	ND LINE S	SET USAGE
Outdoor	No. of	Indoor Unit	Line Set
Model	Zones	Capacity	Required
		(Unit No.)	(Liquid x Gas)
		009 (A)	<sup>1</sup> 1/4 in. x 3/8 in.
		009 (B)	<sup>1</sup> 1/4 in. x 3/8 in.
	5	009 (C)	1/4 in. x 3/8 in.
		009 (D)	1/4 in. x 3/8 in.
		009 (E)	1/4 in. x 3/8 in.
		009 (B)	1 1/4 in. x 3/8 in.
	_	009 (C)	1/4 in. x 3/8 in.
	5	009 (D)	1/4 in. x 3/8 in.
		009 (E)	1/4 in. x 3/8 in.
		012 (A)	1/4 in. x 1/2 in.
		009 (B)	1 1/4 in. x 3/8 in. 1/4 in. x 3/8 in.
	5	009 (C)	1/4 in. x 3/8 in.
	5	009 (D)	1/4 iii. x 3/6 iii.
		009 (E) 018 (A)	1/4 in. x 3/8 in. 1/4 in. x 1/2 in.
		` ′	1/4 in. x 1/2 in.
		009 (B) 009 (C)	1/4 in. x 3/8 in.
	5	009 (C) 009 (D)	1/4 in. x 3/8 in.
	3	009 (B) 009 (E)	1/4 in. x 3/8 in.
		003 (L) 024 (A)	<sup>2, 3</sup> 3/8 in. x 5/8 in.
MPA048S4M		009 (C)	1/4 in. x 3/8 in.
Indoor Unit A		000 (D)	1/4 in. x 3/8 in.
1/4" liq + 1/2" gas	5	009 (E)	1/4 in. x 3/8 in.
Indoor Unit B	· ·	012 (A)	1/4 in. x 1/2 in.
1/4" liq + 1/2" gas		012 (B)	1/4 in. x 1/2 in.
Indoor Unit C		009 (C)	1/4 in. x 3/8 in.
1/4" liq + 3/8" gas		009 (D)	1/4 in. x 3/8 in.
Indoor Unit D	5	009 (E)	1/4 in. x 3/8 in.
1/4" liq + 3/8" gas		012 (B)	1/4 in. x 1/2 in.
Indoor Unit E 1/4" liq + 3/8" gas		018 (A)	1/4 in. x 1/2 in.
1/4 114 + 3/6 yas		009 (D)	1/4 in. x 3/8 in.
		009 (E)	1/4 in. x 3/8 in.
	5	012 (A)	1/4 in. x 1/2 in.
		012 (B)	1/4 in. x 1/2 in.
		012 (C)	<sup>1</sup> 1/4 in. x 1/2 in.
		009 (D)	1/4 in. x 3/8 in.
		009 (E)	1/4 in. x 3/8 in.
	5	012 (B)	1/4 in. x 1/2 in.
		012 (C)	<sup>1</sup> 1/4 in. x 1/2 in.
		018 (A)	1/4 in. x 1/2 in.
		009 (E)	1/4 in. x 3/8 in.
		012 (A)	1/4 in. x 1/2 in.
	5	012 (B)	1/4 in. x 1/2 in.
		012 (C)	<sup>1</sup> 1/4 in. x 1/2 in.
		012 (D)	<sup>1</sup> 1/4 in. x 1/2 in.
		012 (A)	1/4 in. x 1/2 in.
		012 (B)	1/4 in. x 1/2 in.
	5	012 (C)	<sup>1</sup> 1/4 in. x 1/2 in.
		012 (D)	<sup>1</sup> 1/4 in. x 1/2 in.
		012 (E)	<sup>1</sup> 1/4 in. x 1/2 in.
1.0/0 4/0 in		autrad for line+	

 $<sup>^{\</sup>rm 1}$  3/8 x 1/2 in. gas pipe adaptor is required for line set connection to outdoor unit (furnished with outdoor unit).

 $<sup>^2</sup>$  1/4 x 3/8 in. liquid pipe adaptor is required for line set connection to the 048 outdoor unit (furnished with outdoor unit).

 $<sup>^3</sup>$  1/2 x 5/8 in. gas pipe adaptor is required for line set connection to the 048 outdoor unit (furnished with outdoor unit).

 $<sup>^2</sup>$  1/4 x 3/8 in. liquid pipe adaptor is required for line set connection to the 048 outdoor unit (furnished with outdoor unit).

 $<sup>^3</sup>$  1/2 x 5/8 in. gas pipe adaptor is required for line set connection to the 048 outdoor unit (furnished with outdoor unit).

#### **AIR THROW DATA - WALL-MOUNTED INDOOR UNITS**

ft./sec.

6.6 ft./sec

9 ft. 8 in.

6 ft. 6 in.

4.3 ft./sec.

19 ft. 7 in.

23 ft. 0 in.

16 ft. 4 in.

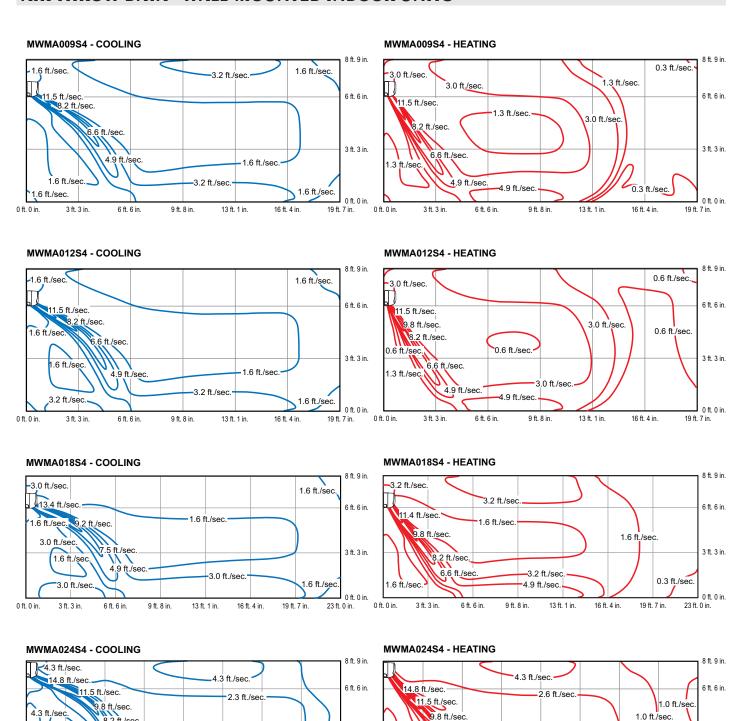
13 ft. 1 in.

2.3 ft./sec.

4.3 ft./sec

3 ft. 3 in.

0 ft. 0 in.



3 ft. 3 in.

0 ft. 0 in.

26 ft. 2 in.

8.2 ft./sec

6 ft. 6 in.

9 ft. 8 in.

2.6 ft./sec.

3 ft. 3 in.

0 ft. 0 in.

1.0 ft./sec.

4.3 ft./sec

16 ft. 4 in.

19 ft. 7 in.

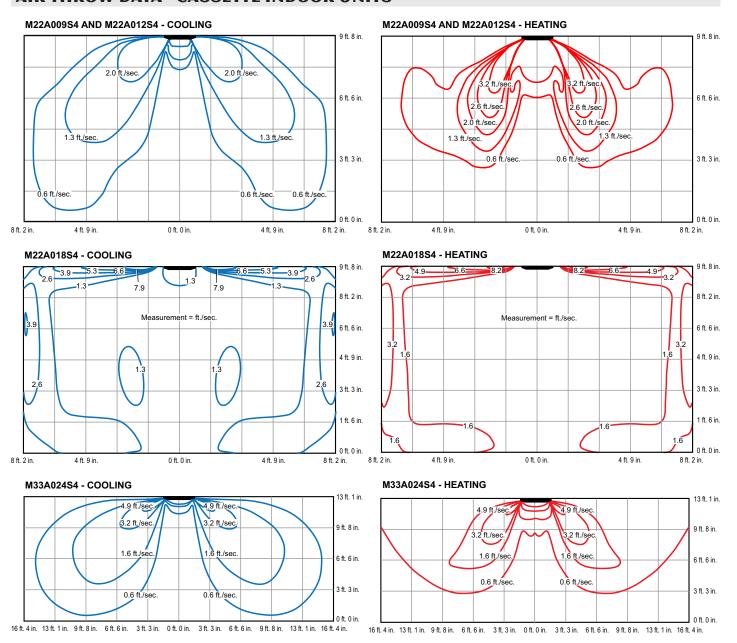
13 ft. 1 in.

3 ft. 3 in.

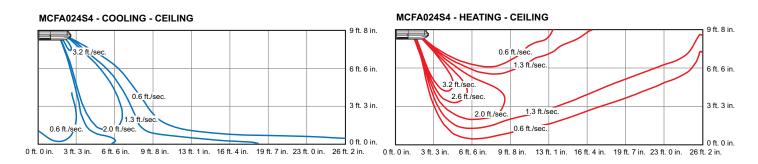
0 ft. 0 in.

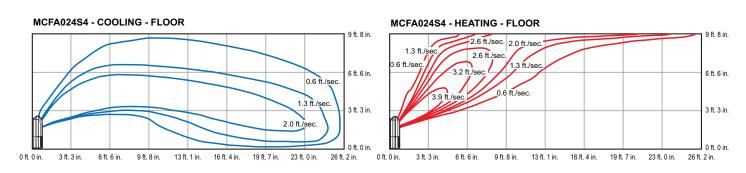
26 ft. 2 in.

# **AIR THROW DATA - CASSETTE INDOOR UNITS**



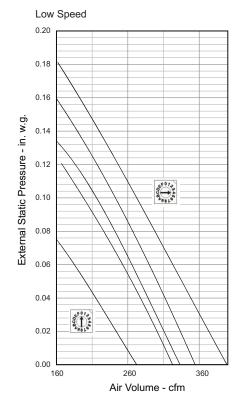
# **AIR THROW DATA - CEILING/FLOOR MOUNT INDOOR UNITS**

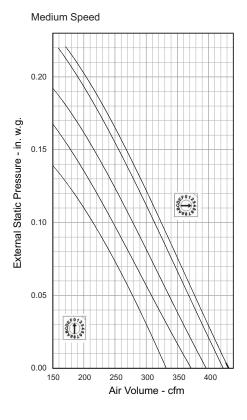


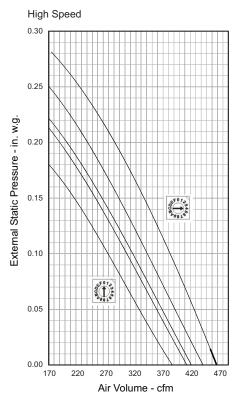


# **BLOWER DATA - MEDIUM STATIC DUCTED INDOOR UNITS**

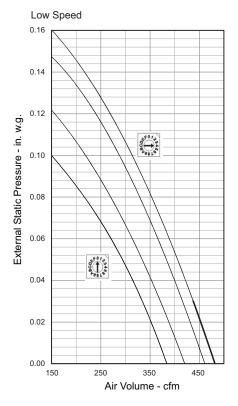
# MMDA009S4, MMDA012S4

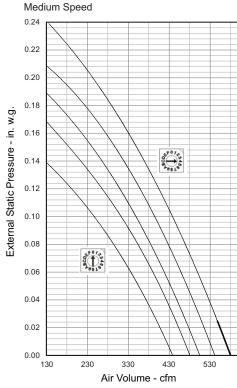


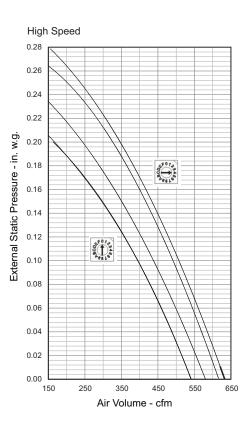




#### MMDA018S4-1P

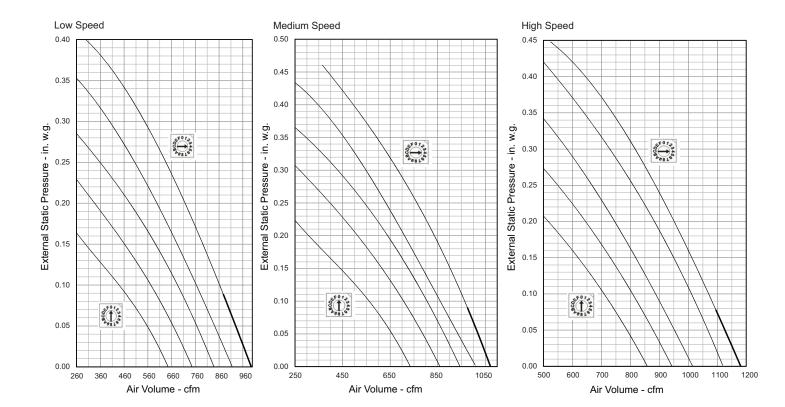




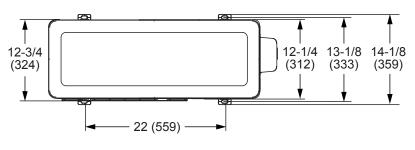


# **BLOWER DATA - MEDIUM STATIC DUCTED INDOOR UNITS**

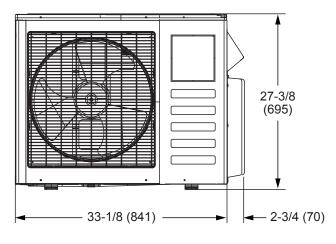
### MMDA024S4

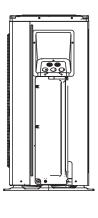


# **MPA018S4M**



**TOP VIEW** 

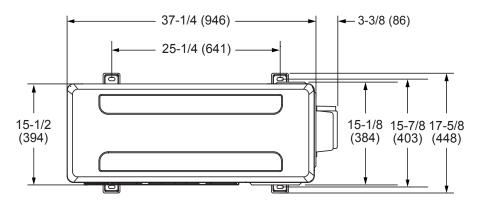




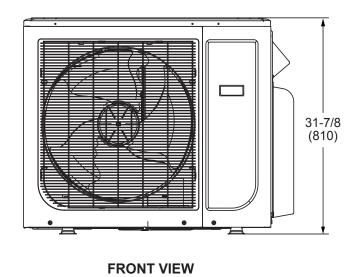
**FRONT VIEW** 

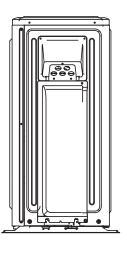
**SIDE VIEW** 

# MPA030S4M, MPA036S4M

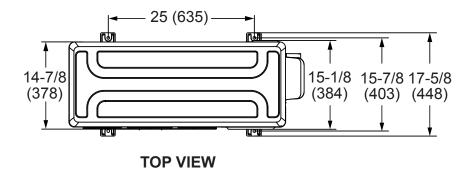


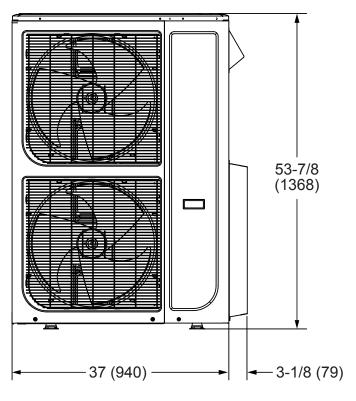
**TOP VIEW** 

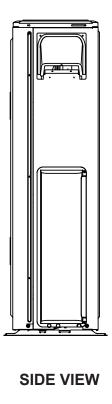




# **MPA048S4M**



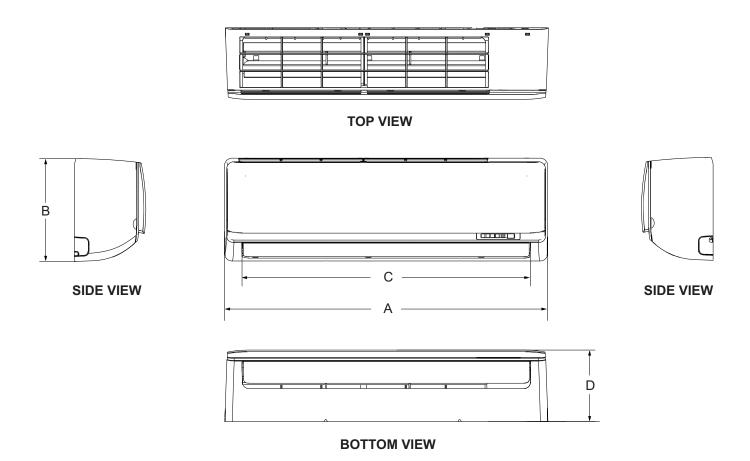




**FRONT VIEW** 

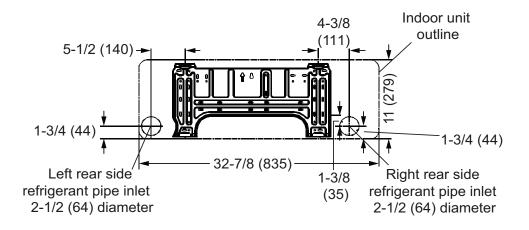
# **DIMENSIONS - WALL-MOUNTED INDOOR UNITS - INCHES (MM)**

# MWMA009S4, MWMA012S4, MWMA018S4, MWMA024S4

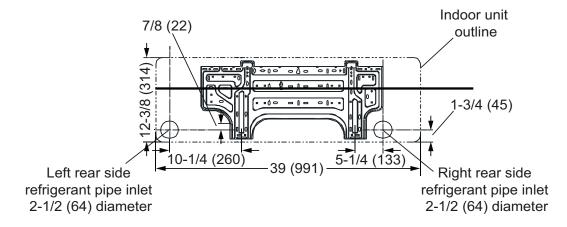


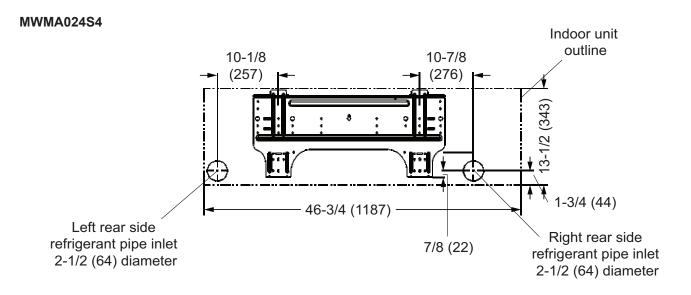
Size	Α		E	3	(		D		
Size	in.	mm	in.	mm	in.	mm	in.	mm	
009, 012	32-7/8	835	11	279	29-1/4	743	7-7/8	200	
018	39	991	12-3/8	314	34-3/4	883	8-5/8	219	
024	46-3/4	1187	13-1/2	343	42-1/2	1080	10-1/4	260	

#### MWMA009S4 and MWMA012S4



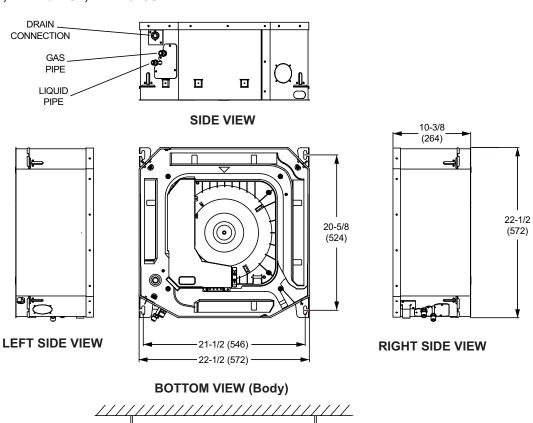
#### **MWMA018S4**

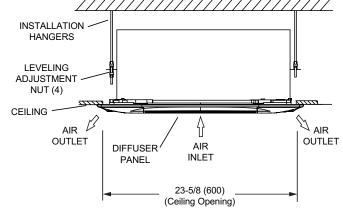




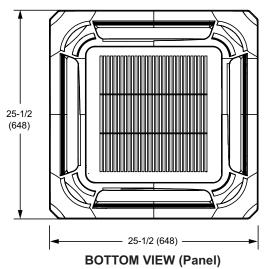
# **DIMENSIONS - CASSETTE INDOOR UNITS - INCHES (MM)**

# M22A009S4, M22A012S4, M22A018S4

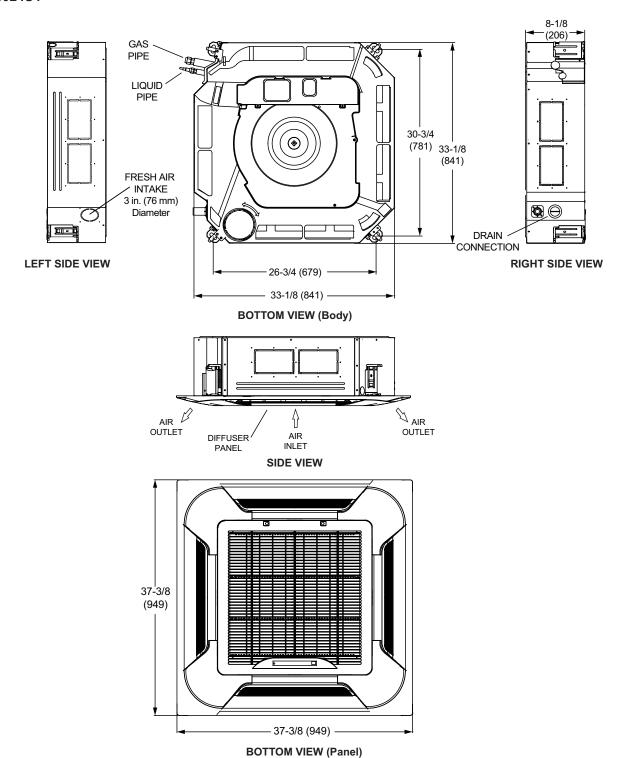




# **SIDE VIEW**

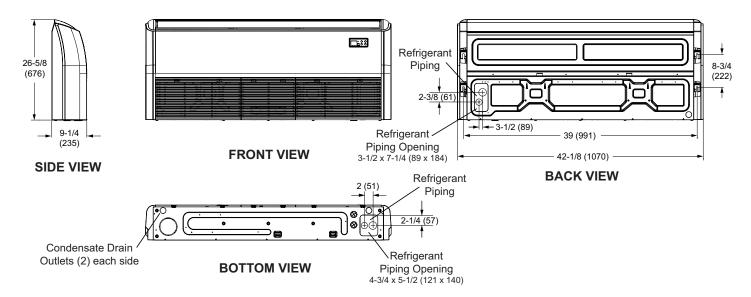


### M33024S4



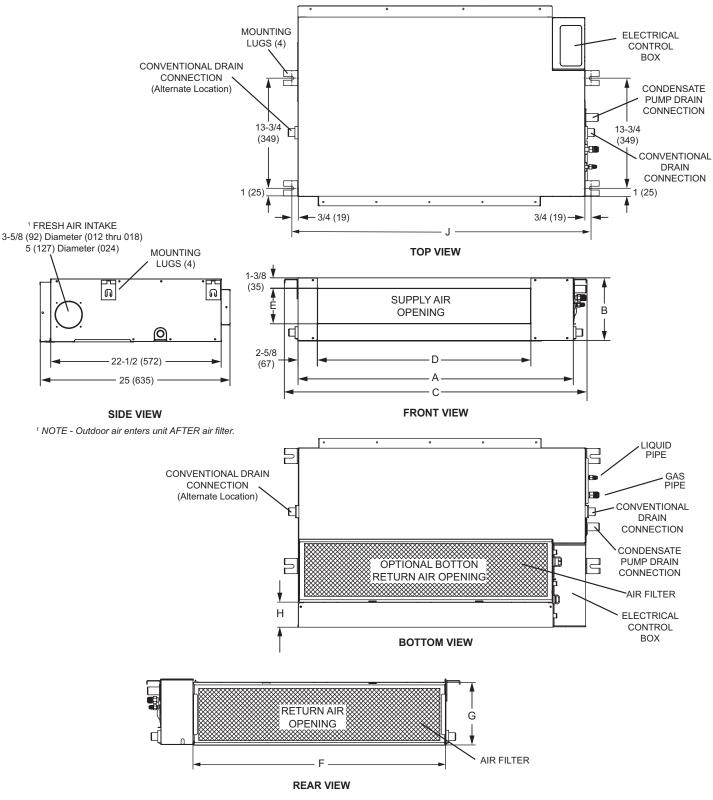
# **DIMENSIONS - CEILING/FLOOR MOUNT INDOOR UNITS - INCHES (MM)**

### MCFA024S4



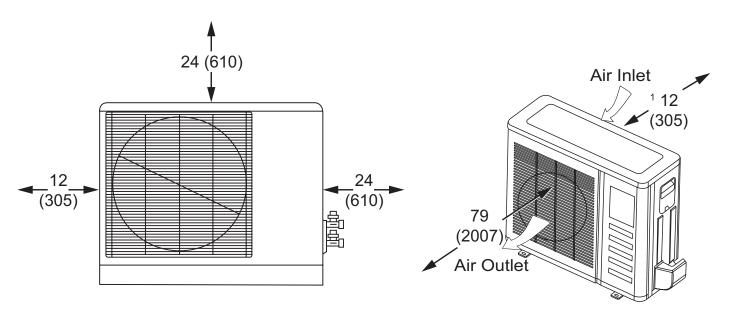
### **DIMENSIONS - MEDIUM STATIC DUCTED INDOOR UNITS - INCHES (MM)**

# MMDA009S4, MMDA012S4, MMDA018S4, MMDA024S4



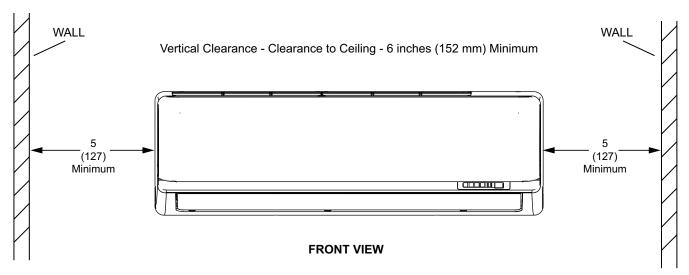
Size	А		В		С		D		E		F		G		Н		J	
Size	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
009 thru 012	27-5/8	702	8-1/4	210	31-1/8	791	19-1/2	495	4-5/8	117	23-1/2	597	7-7/8	200	3-1/8	79	29-1/8	740
018	36-1/4	921	8-1/4	210	39-3/4	1010	28	711	4-5/8	117	32	813	7-7/8	200	3-1/8	79	37-3/4	959
024	36-1/4	921	10-5/8	270	39-3/4	1010	28	711	7	178	32	813	10-1/4	260	3/4	19	37-3/4	959

# **INSTALLATION CLEARANCES - OUTDOOR UNITS - INCHES (MM)**



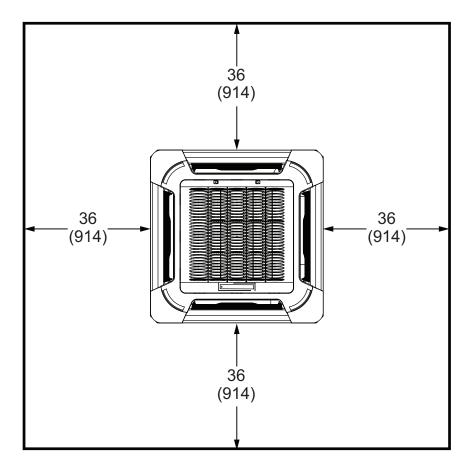
<sup>1</sup> Minimum rear clearance can be 6 inches (152 mm) when mounted on brackets and with no obstructions on the other three sides.

# **INSTALLATION CLEARANCES - WALL-MOUNTED INDOOR UNITS - INCHES (MM)**



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 - INCHES (MM)**

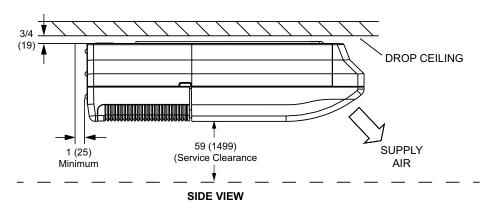


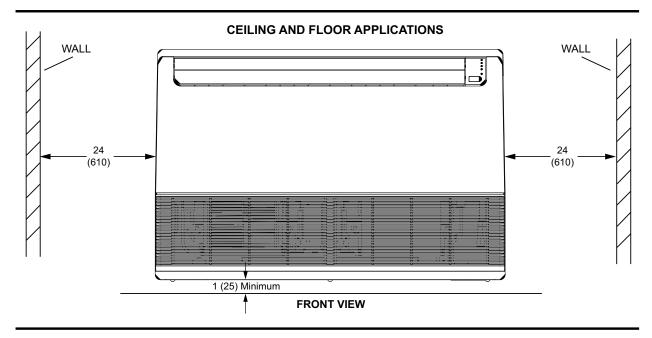
Minimum Vertical Clearances:

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

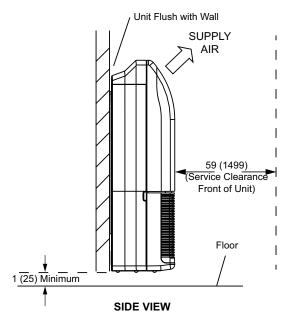
# **INSTALLATION CLEARANCES - CEILING/FLOOR MOUNT INDOOR UNITS - INCHES (MM)**

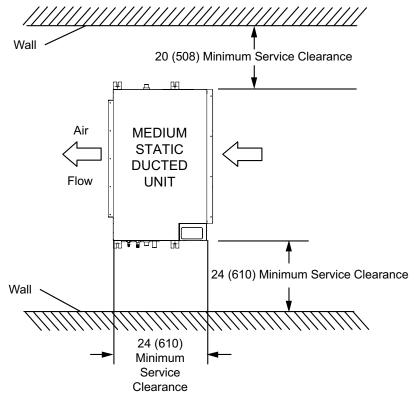
#### **CEILING APPLICATIONS**



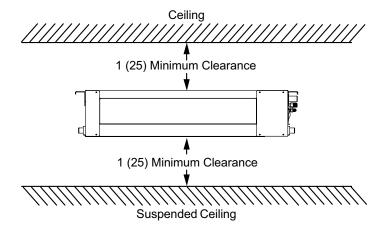


# **FLOOR APPLICATIONS**



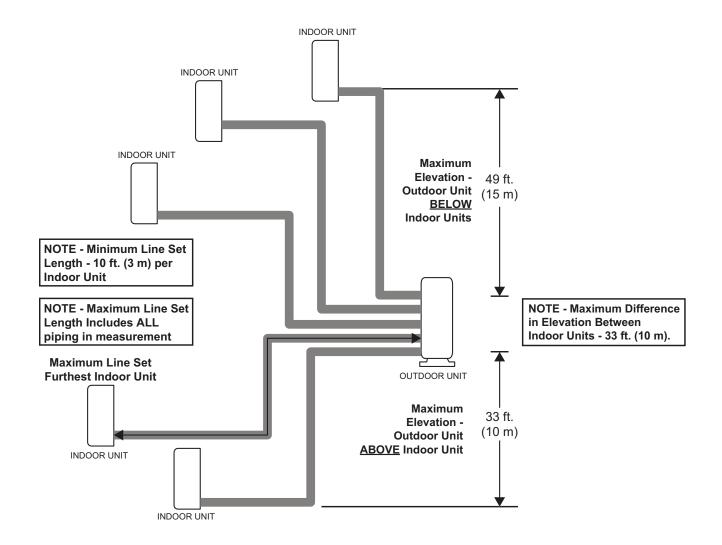


**TOP VIEW** 



**FRONT VIEW** 

# **LINE SET AND ELEVATION GUIDELINES**



Outdoor Unit Model No.	MPA018S4M	MPA030S4M	MPA036S4M	MPA048S4M
Maximum Number of Indoor Units/Zones	Two	Three	Four	Five
Indoor Unit Connections	(2) 1/4 liq. / 3/8 gas	(3) 1/4 liq. / 3/8 gas	(4) 1/4 liq. (3) 3/8 gas (1) 1/2 gas	(5) 1/4 liq. (3) 3/8 gas (2) 1/2 gas
Maximum Pipe Length for all Rooms	98 ft. (30 m)	148 ft. (45 m)	197 ft. (60 m)	246 (75 m)
Maximum Line Set Length - Furthest Indoor Unit	66 ft. (20 m)	82 ft. (25 m)	98 ft. (30 m)	98 ft. (30 m)

NOTE - Refer to "Connections And Line Set Usage" tables starting on page 22 for correct line set usage and correct refrigerant line adaptors furnished with outdoor units.

REVISIONS					
Sections	Description of Change				
New Section	Added Air Throw Curves for indoor non-ducted units.				
Optional Accessories	Removed Universal Mini-Split Installation Kit (discontinued).				









Visit us at www.lennox.com

For the latest technical information, www.LennoxPROs.com

Contact us at 1-800-4-LENNOX