MINI-SPLIT SYSTEMS

MPB

Mini-Split Multi-Zone Heat Pump Systems - R-410A - 60 Hz

RESIDENTIAL / COMMERCIAL **PRODUCT SPECIFICATIONS**



MPB018 thru 036 Heat Pump Outdoor Units



MPB048 Heat Pump Outdoor Units

Bulletin No. 210864 August 2019 Supersedes April 2019



M22A/M33A/M33B Cassette Non-Ducted Indoor Unit



MMDB Medium Static Ducted Indoor Unit



MWMA/MWMB Wall-Mounted Non-Ducted Indoor Unit



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



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 23.00 1.5 to 4 Tons Cooling Capacity - 17,500 to 48,000 Btuh Heating Capacity - 18,200 to 49,000 Btuh





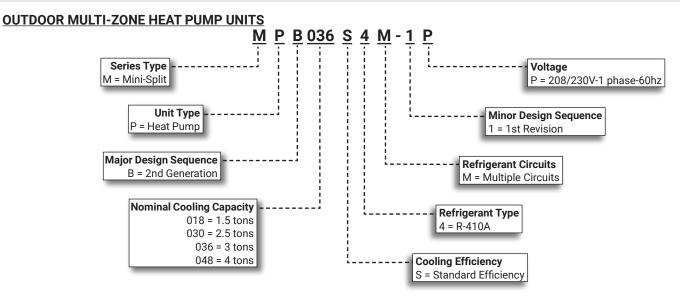
Wired **Remote Controller** (furnished with **Medium Static Ducted Models)**

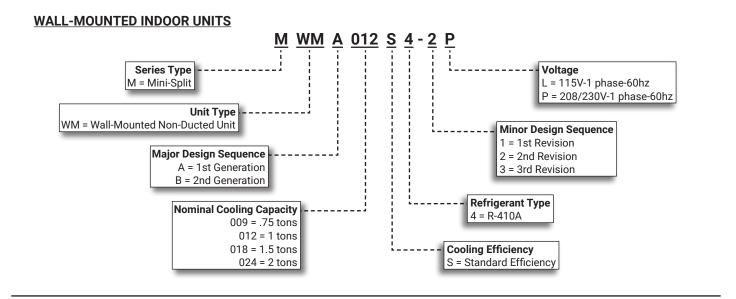


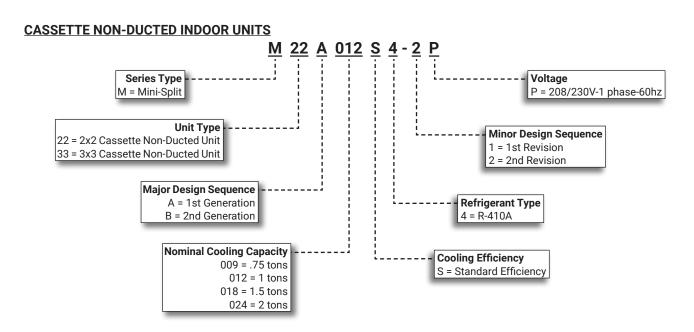




MODEL NUMBER IDENTIFICATION

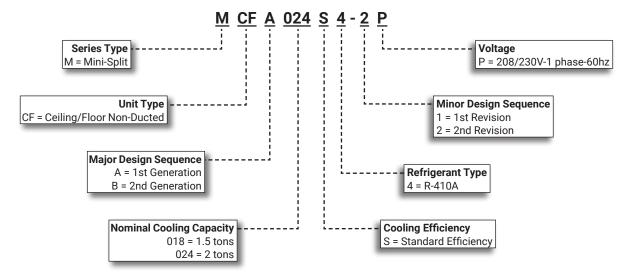




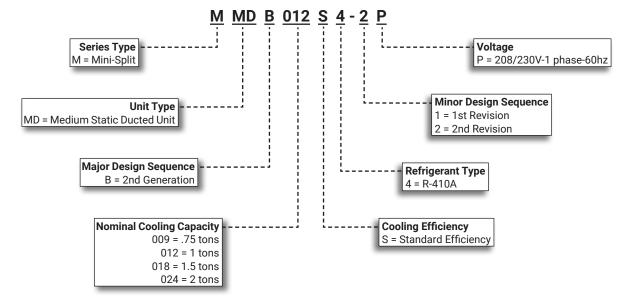


MODEL NUMBER IDENTIFICATION

CEILING/FLOOR NON-DUCTED INDOOR UNITS



MEDIUM STATIC DUCTED INDOOR UNITS



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APPROVALS AND WARRANTY

APPROVALS

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

WARRANTY

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

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

FEATURES - OUTDOOR UNITS

APPLICATIONS

- SEER Up to 23.00
- HSPF Up to 10.6.
- 1.5 through 4 ton
- Single phase power supply (208/230V)
- Outdoor unit sound levels as low as 62 dBA
- Indoor unit sound levels as low as 26.5 dBA
- Ductless mini-split systems provide a wide range of capacities and applications and provide an alternative when a ducted system is impractical or cost prohibitive
- 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
- **NOTE** Outdoor unit is designed for outdoor use.
- **NOTE** it is recommended that Medium Static Ducted Indoor Units not be installed in unconditioned spaces with temperatures above 100°F.

REFRIGERATION SYSTEM

R-410A Refrigerant

- · Non-chlorine, ozone friendly
- · Unit is factory pre-charged

Outdoor Coil

- · Aluminum fins fitted to copper tubes
- Wire grille guard provided

Outdoor Fan

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

Refrigerant Line Connections, Service Valve

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

COMPRESSOR

Variable Frequency Rotary Compressor

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

Compressor Crankcase Heater

• Protects against liquid refrigerant migration that can occur during low ambient operation

CONTROLS

DC Inverter Control

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

Inverter Module Protection

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

FEATURES - OUTDOOR UNITS

CONTROLS (continued)

Outdoor Unit Microprocessor

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

Electronic Expansion Valve

Furnished on all models

Compressor Overcurrent Protection

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

Condenser High Temperature Protection

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

Compressor Discharge Temperature Protection

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

Voltage Protection

Protects unit from low or high voltage fluctuations

Terminal Strip

• Furnished for easy wiring connections

Automatic Piping/Wiring Correction

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

Defrost Control

- Defrost cycle is automatically enabled if there is a 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
- NOTE Drain must be field furnished.
- Pan heater prevents ice build-up in the bottom of the unit during heating operation
- · Access cover for power and control wiring connections
- Access cover for service valves

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 pre-determined temperature which prevents the discharge of cold air while the system is operating in the "heating" mode
- LED Readout Mounted on unit. LED displays unit operation status, and codes for maintenance and servicing
- Auto Restart Automatically restores the previous function setting if power is interrupted
- Cooling Override Button on the indoor unit allows a temporary 30 minute override of the system for forced "AUTO" or "COOLING" operation
- Flare Connections Equipped with liquid and gas flare fittings for quick and secure piping
- Multi-Refrigerant Outlet Allows left, right, or rear access for refrigeration line connection
- Three Speed Fan Fan functions at three speeds: low, medium and high
- · Air Filter Cleanable air filter is furnished as standard

CASSETTE INDOOR UNITS



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

CEILING/FLOOR MOUNT INDOOR UNITS



- Low-sound, three-speed Ceiling and Floor Mount models with LED display has a multi-blade fan that distributes air vertically and horizontally with a wide angle sweeping motion
- Two installation options are available:
- 1. Horizontally against the ceiling
- 2. Vertically against the floor/wall
- **Pre-Heat Function** Delays the operation of the fan until the indoor coil has reached a pre-determined temperature which prevents the discharge of cold air while the system is operating in the "heating" mode
- LED Readout/Infrared Receiver Panel Mounted on unit. LEDs display unit operation status, and codes for maintenance and servicing



- Infrared receiver for use with wireless remote controller (furnished)
- **NOTE** Readout panel design varies depending on unit size.
- Auto Restart Automatically restores the previous function setting if power is interrupted
- Cooling Override Button on the indoor unit allows a temporary 30 minute override of the system for forced "AUTO" or "COOLING" operation
- Flare Connections Equipped with liquid and gas flare fittings for quick and secure piping
- Multi-Refrigerant Outlet Allows left, right, or rear access for refrigeration line connection
- Three Speed Fan Fan functions at three speeds: low, medium and high
- · Air Filter Cleanable air filter is furnished as standard

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

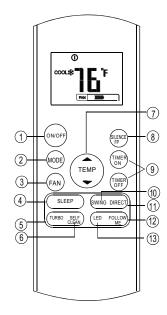
- If an indoor unit in the system is set to "AUTO" mode the unit will operate in cooling, heating or fan mode based on temperature setting
- Fan runs in auto mode
- Each indoor unit has a "mode conflict priority" setting set by a DIP switch or from the remote controller (default setting is heating mode)
- 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 CONTROLLER

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

- Complete remote control of system
- Maximum operating range is 25 ft.
- Operates on two AAA 1.5V batteries (furnished)
- Wireless remote controller holder furnished
- Holder can be mounted on a wall for easy access
- Mounting screws furnished



1 ON/OFF Button

Turns system on and off

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

 \rightarrow AUTO \rightarrow LOW \rightarrow MED \rightarrow HIGH

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 reverts back to previous operation mode after 7 total hours of operation
- NOTE To cancel, push the "MODE", "FAN SPEED" or "ON/ OFF" buttons.
- **NOTE** SLEEP mode is only available when the unit is in COOL, HEAT or AUTO mode.



• 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



UP/DOWN Buttons 📥 🔫

- Increase or decrease the indoor temperature in one degree increments (maximum 86°F, minimum 62°F)
- **NOTE** Temperature cannot be adjusted in FAN mode.
- **NOTE** Press and hold and buttons together for 3 seconds to alternate the temperature display between the °C and °F scale.

8 SILENCE/FP Button

- Silence Operates the compressor at low frequency and low fan speed to reduce operating sound levels to a minimum
- FP Only available during heating operation Unit will operate at a set temperature of 46°F
- NOTE To cancel, push the "ON/OFF", "SLEEP", "FP", "MODE", "FAN SPEED", "UP/DOWN" buttons.

9 TIMER ON / TIMER OFF Buttons

- TIMER ON (initiates an auto-on time sequence)
- TIMER OFF (initiates an auto-off time sequence)
- Can be used separately or together
- Each press of the button increases the time in 30 minute increments up to 10 hours
- Above 10 hours each press of the button will increase the auto-timed setting by 60 minutes up to 24 hours
- NOTE To cancel, set timer to 0.0 or turn remote off and on

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 controller location

13 LED Button

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

WIRELESS REMOTE CONTROLLER OPERATION

_		
C [● ① ● AUTO ② SET ○	E Z Z Z Z Z O H
Mode of AUTO	ප coor	- ** DRY 🌢
? □	Displayed whe	en data transmitted. en remote controller is ON y (low battery detection)
ON	Displayed wh	en TIMER ON time is set.
	Displayed wh	en TIMER OFF time is se
8.8%		perature or room or time under TIMER
Ð	Displayed in S	Sleep Mode operation.
0		the air conditioner is follow me mode
Fan s	peed indicatio	n
FAN	}	Low speed
FAN	}}	Medium speed
FAN	*****	High speed
FAN	AUTO	Auto fan speed

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

Auto Operation

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

Cooling /Heating/Fan Operation

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

Dehumidifying Operation

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

Timer ON/OFF Operation

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

ACCESSORIES (FURNISHED)

WIRED REMOTE CONTROLLER

Furnished with Ducted Indoor Units.

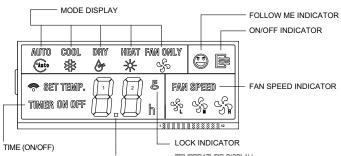
NOTE - Can be ordered separately for non-ducted indoor units.

FEATURES

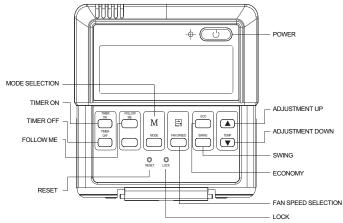
- Permanent Memory Maintains clock, fan speed and mode of operation settings following power outages
- Dimensions (H x W x D) 4-3/4 x 4-3/4 x 7/8 in.
- Additional hardware is furnished for installation
- Wiring Controller uses 5-wire shielded 20 ft. (6 m) cable (furnished) for easy low voltage connection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



DISPLAY



BUTTONS AND FUNCTIONS



MODE Button

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



POWER Button

Turns system on and off

FAN SPEED Button

• Selects fan speed. Each button press cycles through the following settings on display



NOTE - Not available in AUTO mode.

TIMER ON / TIMER OFF Buttons

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

NOTE - To cancel, set timer to 0.0.

UP/DOWN Buttons 📥 🕶

 Increase or decrease the indoor temperature in two degree increments (maximum 88°F, minimum 62°F).

NOTE - Temperature cannot be adjusted in FAN mode.

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

SWING Button

Used to stop or start horizontal louver auto swing feature

ECONOMY Button

 Maintains the most comfortable temperature and saves energy

RESET Button (Recessed)

 Resets Controller to factory settings. Recessed to prevent tampering

LOCK Button (Recessed)

Locks Controller buttons to prevent tampering with settings

OPTIONAL ACCESSORIES

Extension Cable for Wired Remote Controller

- 20 ft. cable for easy low voltage connection to the indoor unit
- Extends cable to maximum 40 ft. length

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

BUTTONS AND FUNCTIONS

POWER Button

Turn system on and off

FAN SPEED Button

· Scroll through fan speeds (Auto - Low - Med - High)

MODE Button

 Use + and – buttons to scroll through available operation modes (Auto / Cool / Dry / Fan / Heat)

PLUS (+) and MINUS (-) Buttons

- Setpoint adjustment (62-86°F)
- · Select days of the week when setting a schedule
- Select mode of operation

SWING Button

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

TIMER Button

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

DAY OFF / DEL Button

- Disable specific days/schedules of the week
- Delete a specific event

CONFIRM Button

· Confirms each step when managing schedules

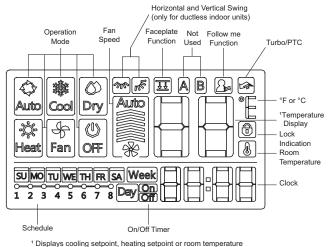
BACK/TURBO Button

• Turbo sets indoor unit fan speed to high for a factory-set time period

COPY/FOLLOW ME Button

• Toggles between room temperature sensing from the indoor unit or the controller

DISPLAY



- Audible tone when a button is pressed (can be disabled)
- Lock function disables buttons to prevents tampering
- Controller uses 4-wire shielded 20 ft. (6 m) cable (furnished) for easy low voltage connection to the indoor unit
- Adaptor cables are furnished for various indoor unit connections
- **NOTE** Cable for longer lengths must be ordered separately.
- NOTE Maximum cable length is 164 ft. (50 m).
- Hardware for mounting furnished
- Mounts to standard electrical junction box (not furnished)
- Lithium battery furnished
- Power Supply: 5 VDC
- Dimensions (H x W x D): 4-7/8 x 4-3/4 x 3/4 in. (124 x 121 x 19 mm)

OPTIONAL ACCESSORIES

Extension Cable for Wired Programmable Controller

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

OPTIONAL ACCESORIES - ORDER SEPARATELY

OUTDOOR UNITS

Condenser Pad

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

Disconnects

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

Fuses

• 30 and 60 amp fuses available

Hail Guards

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

Indoor/Outdoor Wiring Cable

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

Refrigerant Line Sets

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

Wall Brackets

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

Whips

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

INDOOR UNITS

Condensate Pumps

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

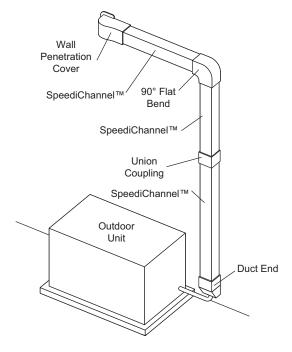
A/C Easy Tee® Condensate Cleanout

- Condensate drain service port
- · Flexible and easy to use with nitrogen, water or shop vac
- Screw cap on top allows easy access to condensate drain line

SPEEDICHANNEL[™] SYSTEM



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



SPEEDICHANNEL[™] SYSTEM (continued)

SpeediChannel[™] Starter Kit

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

Duct End

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



Flat Wall Escutcheon

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



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

Flex Joint

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

T-Joint

 T-Joints are used for creating a tee connection between three pieces of SpeediChannel[™]



 Each tee is individually packed and furnished with stainless steel screws

Union Coupling

- Union Couplings are used for joining two pieces of SpeediChannel[™]
- Each coupling is individually packed and furnished with stainless steel screws





 Wall penetration 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

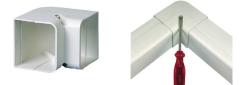
- 45° Flat Bends are used to route the SpeediChannel[™] around obstacles
- Each bend is individually packed and furnished with stainless steel screws





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
- nstallation temperatures range from -4°F to 140°F
- Mount blocks fit all mini-split outdoor units with a sliding rail feature

Nominal Size - Tor	าร	1.5	2.5				
Outdoor Unit Mode	el No.	MPB018S4M	MPB030S4M				
Number of Zones		2	Up to 3				
Ambient Temperat	ture Range - °F Cooling	-13 - 122	-13 - 122				
	Heating	-13 - 86	-13 - 86				
Sound Data (dBA)	Cooling	62	63				
	Heating	62	63				
Refrigerant	Charge furnished (R-410A)	4 lbs. 7 oz.	6 lbs. 3 oz.				
Maximum line length	with furnished charge (per zone) - ft.	25	25				
Ado	ditional charge required per ft oz.	0.16	0.16				
Compressor	No. and Type	(1) Rotary	(1) Rotary				
	Refrigerant oil type	VG74	VG74				
	Refrigerant oil charge - oz.	16.9	22.7				
Connections	Liquid+Gas pipe (in.) flare	(2) 1/4 + (2) 3/8	(3) 1/4 + (3) 3/8				
	Max pipe. length for all rooms - ft.	131	197				
Max.	pipe length for one indoor unit - ft.	ngth for one indoor unit - ft. 82					
Max. height difference	e between indoor and outdoor units - ft.	49	49				
Max. height d	lifference between indoor units - ft.	33	33				
Outdoor Fan	(No.) Diameter - in.	(1) 19	(1) 20				
	Total air volume - cfm	1390	2130				
	Motor rpm	150/200/250/300/350/450/550/650/ 800/850	150/200/250/300/400/500/600/750/ 900/1000				
Outdoor Coil	Number of rows	2	2				
	Fins per inch	18	17				
	Fin type	Hydrophilio	Aluminum				
	Tube outside diameter - in.	3/8	3/8				
	Tube type	Rifled Cop	per Tubing				
	Net face area - ft. ²	5.19	8.24				
Application area -	sq. ft.	260 - 375	430 - 630				
Design Pressure	PSIG	550/340	550/340				
Shipping Data	Net/Shipping weight (lbs.)	106 / 115	150 / 161				
ELECTRICAL DAT	A						
Electrical Characte	eristics - 60 Hz - 1 Phase	208/230V	208/230V				
¹ Maxim	um Overcurrent Protection (amps)	25	35				
	² Minimum circuit ampacity	18	25				
	Compressor Rated load amps	10	20				
Outdoor Fan Moto	r Rated load amps	0.74	0.9				
	Output - W	50	120				

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

¹ HACR type circuit breaker or fuse.

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

NOTE - Adaptors are furnished for the gas pipe connections:

018 - (2) 3/8 x 1/2 in. 030 - (3) 3/8 x 1/2 in.

SPECIFICATI	ONS - MPB OUTDOOR U	NITS	3 TON 4 TON				
Nominal Size - Ton	s	3	4				
Outdoor Unit Mode	el No.	MPB036S4M	MPB048S4M				
Number of Zones	,	Up to 4	Up to 5				
Ambient Temperate	ure Range - °F Cooling	-13 - 122	-13 - 122				
	Heating	-13 - 86	-13 - 86				
Sound Data (dBA)	Cooling	62	64				
	Heating	62	64				
Refrigerant	Charge furnished (R-410A)	6 lbs. 10 oz.	10 lbs. 2 oz.				
Maximum line length	with furnished charge (per zone) - ft.	25	25				
Add	itional charge required per ft oz.	0.16	0.32				
Compressor	No. and Type	(1) Rotary	(1) Twin Rotary				
	Refrigerant oil type	VG74	VG74				
	Refrigerant oil charge - oz.	33.8	47.3				
Connections	Liquid+Gas+Gas pipe (in.) flare	(4) 1/4 + (3) 3/8 + (1) 1/2	(5) 1/4 + (3) 3/8 + (2) 1/2				
	Max pipe. length for all rooms - ft.	262	262				
Max.	pipe length for one indoor unit - ft.	115	115				
Max. height difference	between indoor and outdoor units - ft.	49	115 49 33				
Max. height d	ifference between indoor units - ft.	33	33				
Outdoor Fan	(No.) Diameter - in.	(1) 20	(2) 22				
	Total air volume - cfm	2130	4500				
	Motor rpm	150/200/250/300/400/500/600/750/ 900/1000	150/200/250/300/400/500/600/700/ 800/870				
Outdoor Coil	Number of rows	2	2				
	Fins per inch	19	18				
	Fin type	Hydrophilio	c Aluminum				
	Tube outside diameter - in.	3/8	3/8				
	Tube type	Rifled Cop	oper Tubing				
	Net face area - ft. ²	8.16	6.43 (inner coil) / 6.97 (outer coil)				
Application area -	sq. ft.	515 - 755	690 - 1010				
Design Pressure	PSIG	550/340	550/340				
Shipping Data	Net/Shipping weight (lbs.)	157 / 168	224 / 255				
ELECTRICAL DAT	Α						
Electrical Characte	eristics - 60 Hz - 1 Phase	208/230V	208/230V				
¹ Maxim	um Overcurrent Protection (amps)	45	50				
	² Minimum circuit ampacity	30	35				
	Compressor Rated load amps	19	21				
Outdoor Fan Motor	r Rated load amps	1.3	(2) 0.39				
	Output - W	120	(2) 85				

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.

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.

048 - (3) 3/8 x 1/2 in., (2) 1/2 x 3/8 in., (2) 1/4 x 3/8 in. and (2) 1/2 x 5/8 in.

AHRI RA	TINGS									
Outdoor Unit Model No.	Number of Zones	System Type	Cooling Btuh	High Temperature Heating Btuh	Low Temperature Heating Btuh	SEER	EER	HSPF (Region IV)	AHRI Reference Number	Energy Star
MPB018S4M	2	Ducted	18,000	18,500	11,500	18.5	11.8	10	203343590	No
		Non-Ducted	18,000	19,000	12,000	22.5	12.5	10.3	203343586	Yes
		Mixed Ducted and Non-Ducted	17,500	18,200	11,550	19.8	12.15	9.85	203343591	Yes
MPB030S4M	Up to 3	Ducted	28,000	28,000	16,200	21	11	10	203343592	No
	Non-Ducted	28,000	28,000	17,600	23	12.5	10.3	203343587	Yes	
		Mixed Ducted and Non-Ducted	27,400	27,400	17,700	20.7	11.25	10.4	203343593	Yes
MPB036S4M	Up to 4	Ducted	36,000	37,000	23,000	21	10	10	204330672	No
		Non-Ducted	36,000	36,000	24,600	22.5	11.5	10.2	10062014	No
		Mixed Ducted and Non-Ducted	36,000	36,200	24,600	20.47	10.5	9.97	202119244	Yes
MPB048S4M	Up to 5	Ducted	49,000	50,000	34,000	20.5	10.1	11.5	204330669	No
		Non-Ducted	48,000	48,000	29,600	22.4	12.5	10.2	201771986	Yes
		Mixed Ducted and Non-Ducted	48,000	49,000	32,200	20.17	10.9	10.6	202119245	Yes

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 <u>http://www.ahridirectory.org</u> for further details and latest updates.

¹ Ratings are AHRI certified to AHRI Standard 210/240 with Addenda 1 and 2;

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.

SPECIFICATIONS -	WALL-MOUNT	ED INDOOR UI	NITS		
72	Model No.	MWMA009S4	MWMA012S4	MWMA018S4	MWMA024S4
Canu	Nominal Tons	0.75	1	1.5	2
Power Sup	oly - 60 hz - 1 phase	208/230V	208/230V	208/230V	208/230V
	Rated load amps	0.2	0.2	0.4	0.5
	Output (W)	20	20	58	60
Room Temperature	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/	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 INDOOR UNITS

Madel No.	N0000000	1000000000	1000000000	1100400404
Model No.	M22A009S4	M22A012S4	M22A018S4	M33A024S4
Nominal Tons	0.75	1	1.5	2
Power Supply - 60 hz - 1 phase	208/230V	208/230V	208/230V	208/230V
Rated load amps	0.9	1.0	1.5	1.5
Output (W)	46	46	46	42
Room Temperature 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	380/310/260	560/485/415	700/635/575
Sound Data (dBA) - Low/Medium/High	33/37/41	36/39/43	36/39/44	43/47/51
Piping Connections - Liquid/Gas - o.d flare - in.	1/4 / 3/8	1/4 / 1/2	1/4 / 1/2	3/8 / 5/8
Drain connection o.d in.	1	1	1	1-1/4
Net/Shipping weights - lbs. Body	32 / 38	36 / 41	36 / 42	47 / 55
REQUIRED COMPONENTS - ORDERED SEPA	RATELY	·	·	·
Cassette Panel	13X04 (M0STAT62Q-1)	13X04 (M0STAT62Q-1)	13X04 (M0STAT62Q-1)	13X05 (M0STAT63Q-1)
Net/Shipping weights - lbs.	6 / 10	6 / 10	6 / 10	12 / 18

SPECIFICATIONS - 0	EILING/FLOO	R MOUNT INDOOR UNITS	
	Model No.	MCFB018S4	MCFA024S4
	Nominal Tons	1.5	2
Power Suppl	y - 60 hz - 1 phase	208/230V	208/230V
	Rated load amps	1.5	1.5
	Output (W)	55	55
Room Temperature	Cooling	62 - 90	62 - 90
Range (°F)	Heating	32 - 86	32 - 86
Air Volume - cfm (High/Medium/Low)	580/520/465	760/710/600
Sound Data (dBA) -	Low/Medium/High	39/44/47	42/48/53
Piping Connections - Liquid/G	as - o.d flare - in.	1/4 / 1/2	3/8 / 5/8
Drain c	onnection o.d in.	1	1
Net/Ship	oping weights - lbs.	55 / 66	59 / 70

SPECIFICATIONS - MEDIUM STATIC DUCTED INDOOR UNITS

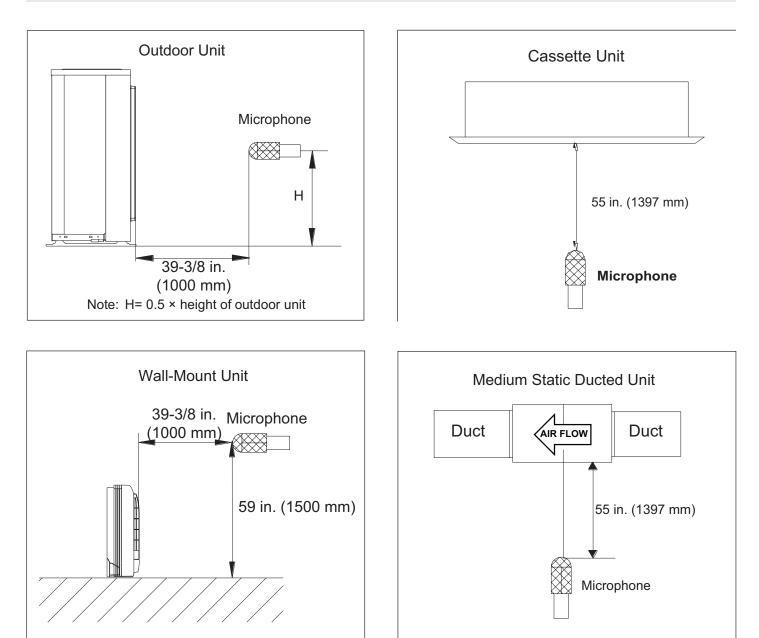
Model No.	MMDB009S4	MMDB012S4	MMDB018S4	MMDB024S4
Nominal Tons	0.75	1	1.5	2
Power Supply - 60 hz - 1 phase	208/230V	208/230V	208/230V	208/230V
Rated load amps	0.9	1.0	1.2	1.5
Output (W)	55	55	160	160
Room Temperature Cooling	62 - 90	62 - 90	62 - 90	62 - 90
Range (°F) Heating	32 - 86	32 - 86	32 - 86	32 - 86
Air Volume - cfm (High/Medium/Low)	340/270/165	340/270/165	505/430/350	735/660/415
External Static Pressure (in. w.g)	0 - 0.16	0 - 0.16	0 - 0.40	0 - 0.64
Sound Data (dBA) - Low/Medium/High	25/32/38	26/33.5/38	35/37/39	36/41/44
Piping Connections - Liquid/Gas - o.d flare - in.	1/4 / 3/8	1/4 / 1/2	1/4 / 1/2	3/8 / 5/8
Drain connection o.d in.	1	1	1	1
Net/Shipping weights - Ibs.	38 / 49	38 / 49	54 / 66	87 / 103

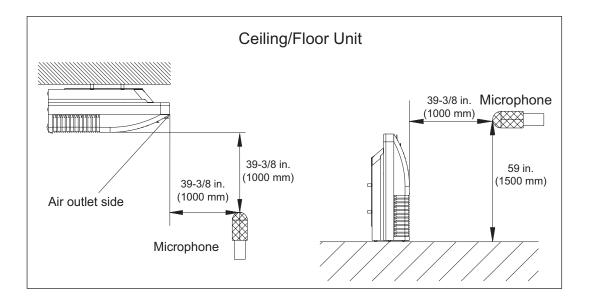
OPTIONAL A	CCESSORIES - ORDER SEPARATELY										
Description		Catalog		I	I	Size	I	I	I		
Description		No.	09	12	18	24	30	• • • • • /A • • • • • •	48		
	OUTDOOR UNIT										
Condenser Pad (18	,	Y5014			•		•	•	•		
Disconnects		27P37			•		•	•	•		
	60 amp, non-fused, 1 ph	27P39			•		•	•	•		
Fuses	30A				•		•	•	•		
	60A				•		•	•	•		
Hail Guards					•			N/A			
					<u> </u>		•		N/A		
					N/A		N	/A	•		
¹ Line Sets			N	/A	•	N/A	•	•	•		
					•		•	•	•		
					•		•	•	•		
		-			•		•	•	•		
		Catalog No. Size OUTDOOR UNIT Y5014 I I 2.4 30 31 30 amp, fused, 1 ph 27P37 60 amp, non-fused, 1 ph 27P37 60 amp, non-fused, 1 ph 27P37 -			•						
					N/A		N	• • • • • •	•		
Wall Brackets	30 inch				•						
		X1728			N/A		•	•	•		
Whips				•	•						
		27P44			•		•	•	•		
				1	1						
² Diversitech			•	•	•	•					
Condensate Pumps with	Mini-Split Pump - 4 US gallons per hour, 20 ft. lift - 115V	Y7946	•	•	N	/A					
Reservoir	Mini-Split Pump - 4 US gallons per hour, 20 ft. lift - 230V	Y7949	•	•	•	•					
² Blue Diamond [®]	MicroBlue® - 1.3 US gallons per hour, 6 ft. lift - 110v-230V	14T74	•	•	•	N/A					
Condensate		14T69		N/A		•		N/A			
Pumps with											
Reservoir					r						
				•							
A/C Easy Tee® Con		Y7947	•	•	•	•					
				1							
Wired Remote Con	troller (Furnished With All Ducted Models) M0STAT61Q-1		•	•	•	•	•	•	•		
	r Wired Remote Controller - 20 ft.	Y8008	•	•	•	•	•	•	•		
	ote Controller above is furnished as standard with the indoor ducted models. e Wired Remote Controller can be ordered for a wall-mount cassette or ceiling/fl/	or mount unit	if desir	ed							
Wired Programmal	· · · · · · · · · · · · · · · · · · ·	1		1	•	•	•	•	•		
0				•		•	•	•	•		
				•	•	•	•	•	•		
	<u> </u>	12001									
SpeediChannel™ S		Y3387	•	•	•	•	•	•	•		
	in. x 6-1/2 ft. (qty. 6)		•	•	•	•	•	•	•		
Union Coupling - 4			•	•	•	•	•	•	•		
90° Flat Bend Elboy			•	•	•	•	•	•	•		
90° Inside Elbow - 4			•	•	•	•	•	•	•		
45° Flat Bend Elboy			•	•	•	•	•	•	•		
Flex Joint - 4 in.			•	•	•	•	•	•	•		
T-Joint - 4 in.			•	•	•	•	•	•	•		
Duct End - 4 in.			•	•	•	•	•	•	•		
Flat Wall Escutched	on - 4 in.		•	•	•	•	•	•	•		
Wall Penetration Co			•	•	•	•	•	•	•		
Mount Block (White		Y3397	•	•	•	•	•	•	•		
Mount Block (White		Y3398	•	•	•	•	•	•	•		

¹ See Connections and Line Set Usage tables on page 25. ² Y7946, Y7949 and 14T74 condensate pumps can be installed inside the indoor units. All other pumps must be installed external to the indoor unit.

MPB Multi-Zone Mini-Split Systems / Page 20

SOUND LEVELS - TEST CONDITIONS





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			oor l apaci				Nominal Cooling Capacity at Rated System Capacity (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	
	¹ 1	012					9,000					9,500					
		009	009				9,000	9,000				9,500	9,500				
MPB018S4M	2	009	012				8,500	10,500				9,000	11,000				
		012	012				9,500	9,500				10,000	10,000				
	¹ 1	018					16,600					18,000					
		009	009				9,500	9,500				10,000	10,000				
		009	012				9,500	12,000				10,000	13,000				
MPB030S4M		009	018				8,400	16,600				9,000	18,000				
	2	012	012				12,000	12,000				13,000	13,000				
		012	018				10,000	15,000				11,200	16,800				
		018	018				14,000	14,000				15,000	15,000				
		009	009	009			9,000	9,000	9,000			9,500	9,500	9,500			
		009	009	012			8,667	8,667	11,667			9,500	9,500	12,000			
	3	009	012	012			8,500	10,500	10,500			8,500	11,000	11,000			
		009	009	018			8,300	8,300	13,500			8,500	8,500	14,500			
		012	012	012			10,000	10,000	10,000			10,667	10,667	10,667			
		009	009				10,000	10,000				10,500	10,500				
		009	012				9,500	12,000				10,000	13,000				
		009					9,500	17,500				10,000	18,000				
		009	024				9,000	24,000				10,000	25,000				
	2	L	012				12,000	12,000				13,000	13,000				
			018				12,000	18,000				13,000	18,000				
		012					11,000	23,000				12,000	24,000				
		018	018				16,500	16,500				17,000	17,000				
		009		009			9,333	9,333	9,333			9,667	9,667	9,667			
		009	009	012			9,000	9,000	12,000			9,500	9,500	12,500			
		009		018			8,000	8,000	16,000			8,500	8,500	17,000			
			012				8,500	11,500	11,500			9,000	12,000	12,000			
MPB036S4M			012				8,000	11,000	15,000			8,500	11,500	16,000			
	3		018				8,000	14,000	14,000			8,500	14,500	14,500			
		<u> </u>	012				11,333	11,333	11,333			12,000	12,000	12,000			
			012				11,000	11,000	14,000			12,000	12,000	15,000			
			018				9,333	13,333	13,333			10,000	14,500	14,500			
			012				8,000	8,000	20,000			9,000	9,000	21,000			
			009				9,000	9,000	9,000	9,000		9,500	9,500	9,500	9,500		
			009				8,500	8,500	8,500	11,500		9,000	9,000	9,000	12,000		
			009		012		8,000	8,000	8,000	14,000		8,500	9,000 8,500	8,500	14,000		
	4	009		009			8,000	8,000	10,500			8,500	8,500	11,000	14,000		
	+	-	009				7,500		9,000				8,000				
			009					7,500		14,000		8,000	8,000	9,500 10,500	14,500		
							7,000	10,000	10,000			8,000			10,500		
		012	012	012	012		9,500	9,500	9,500	9,500		10,000	10,000	10,000	10,000		

¹ 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)				
WOUEI NO.	Zones	#1	#2	#3	#4	#5	#1	#2	#3	#4	#5	#1	#2	#3	#4	#5	
		009	018				9,500	18,000				10,000	18,000				
		009	024				9,500	24,000				10,000	25,000				
		012	012				12,500	12,500				13,000	13,000				
	2	012	018				12,000	18,000				13,000	19,000				
	2	012	024				12,000	24,000				10,000	25,000				
		018	018				18,500	18,500				19,000	19,000				
		018	024				17,500	22,500				18,000	23,000				
		024	024				21,000	21,000				22,000	22,000				
		009	009	009			9,500	9,500	9,500			11,000	11,000	11,000			
		009	009	012			9,500	9,500	12,000			10,000	10,000	13,000			
		009	009	018			9,500	9,500	18,000			10,000	10,000	19,000			
		009	009	024			9,000	9,000	22,500			9,500	9,500	23,500			
		009	012	012			9,500	12,500	12,500			10,000	10,000	13,000			
MPB048S4M		009	012	018			9,000	12,000	18,000			9,500	9,500	19,000			
		009	012	024			9,000	12,000	21,500			9,500	12,500	22,000			
		009	018	018			9,000	18,000	18,000			9,500	18,500	18,500			
		009	018	024			8,500	15,500	21,000			9,000	16,000	21,500			
	3	009	024	024			8,000	20,000	20,000			8,500	21,000	21,000			
		012	012	012			12,000	12,000	12,000			13,000	13,000	13,000			
		012	012	018			12,000	12,000	17,000			12,500	12,500	18,000			
		012	018	018			11,000	16,500	16,500			11,500	17,000	17,000			
		012	012	024			11,000	11,000	22,000			11,500	11,500	23,000			
		012	018	024			10,500	15,500	21,500			11,000	16,000	22,000			
		012	024	024			10,000	20,000	20,000			11,000	20,500	20,500			
		018	018	018			16,000	16,000	16,000			16,500	16,500	16,500			
		018	018	024			15,000	15,000	20,000			15,500	15,500	21,000			

¹ 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	Number of			oor l apac						acity at y (Btuh)			nal Heat System			
Model No.	Zones	#1	#2	#3	#4	#5	#1	#2	#3	#4	#5	#1	#2	#3	#4	#5
		009	009	009	009		9,250	9,250	9,250	9,250		9,500	9,500	9,500	9,500	
		009	009	009	012		9,000	9,000	9,000	12,000		9,500	9,500	9,500	12,500	
		009	009	009	018		9,000	9,000	9,000	17,000		9,500	9,500	9,500	17,500	
		009	009	009	024		8,500	8,500	8,500	20,500		9,000	9,000	9,000	21,000	
		009	009	012	012		9,000	9,000	12,000	12,000		9,500	9,500	13,000	13,000	
		009	009	012	018		9,000	9,000	11,000	17,000		9,500	9,500	11,500	17,500	
		009	009	012	024		8,500	8,500	10,500	20,500		9,000	9,000	11,100	21,000	
		009	009	018	018		8,500	8,500	15,500	15,500		9,000	9,000	16,000	16,000	
	4	009	009	018	024		8,000	8,000	14,500	20,000		8,500	8,500	15,000	20,000	
	4	009	012	012	012		9,000	12,000	12,000	12,000		9,500	12,500	12,500	12,500	
		009	012	012	018		9,000	11,000	11,000	16,000		9,500	11,500	11,500	16,500	
		009	012	012	024		8,500	10,000	10,000	20,000		9,000	10,500	10,500	20,500	
		009	012	018	018		8,500	10,000	15,000	15,000		9,000	10,500	15,500	15,500	
		009	018	018	018		8,000	14,000	14,000	14,000		8,500	14,500	14,500	14,500	
MPB048S4M		012	012	012	012		12,000	12,000	12,000	12,000		12,500	12,500	12,500	12,500	
IVIF D04034IVI		012	012	012	018		11,000	11,000	11,000	16,000		11,500	11,500	11,500	16,500	
		012	012	012	024		10,000	10,000	10,000	20,000		10,500	10,500	10,500	20,500	
		012	012	018	018		10,000	10,000	15,000	15,000		10,500	10,500	15,500	15,500	
		009	009	009	009	009	9,000	9,000	9,000	9,000	9,000	9,500	9,500	9,500	9,500	9,500
		009	009	009	009	012	9,000	9,000	9,000	9,000	12,000	9,500	9,500	9,500	9,500	13,000
		009	009	009	009	018	8,500	8,500	8,500	8,500	16,000	9,000	9,000	9,000	9,000	16,500
		009	009	009	009	024	7,750	7,750	7,750	7,750	19,500	8,000	8,000	8,000	8,000	20,000
		009	009	009	012	012	9,000	9,000	9,000	11,500	11,500	9,500	9,500	9,500	12,000	12,000
5	009	009	009	012	018	8,000	8,000	8,000	11,000	16,000	8,500	8,500	8,500	11,500	16,500	
	009	009	009	018	018	8,000	8,000	8,000	11,000	16,000	8,500	8,500	8,500	16,500	16,500	
		009	009	012	012	012	8,500	8,500	11,000	11,000	11,000	9,000	9,000	12,000	12,000	12,000
		009	009	012	012	018	8,500	8,500	10,000	10,000	15,000	8,500	8,500	10,500	10,500	15,500
		009	012	012	012	012	8,000	11,000	11,000	11,000	11,000	8,500	11,500	11,500	11,500	11,500
		009	012	012	012	018	7,500	10,000	10,000	10,000	14,500	8,000	10,500	10,500	10,500	15,000
		012	012	012	012	012	10,500	10,500	10,500	10,500	10,500	11,000	11,000	11,000	11,000	11,000

¹ 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.

CONNECTIONS AND LINE SET USAGE

CONNECTIO	IN S AN	D LINE SE	IUSAGE
Outdoor Model	No. of Zones	Indoor Unit Capacity (Unit No.)	Line Set Required (Liquid x Gas)
	1	012 (A)	¹ 1/4 in. x 1/2 in.
MPB018S4M	0	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	0	009 (B)	1/4 in. x 3/8 in.
Indoor Unit B	2	012 (A)	¹ 1/4 in. x 1/2 in.
1/4" liq + 3/8" gas	2	012 (A)	¹ 1/4 in. x 1/2 in.
	Z	012 (B)	¹ 1/4 in. x 1/2 in.
	1	018 (A)	¹ 1/4 in. x 1/2 in.
	2	009 (A)	1/4 in. x 3/8 in.
	2	009 (B)	1/4 in. x 3/8 in.
	2	009 (B)	1/4 in. x 3/8 in.
	2	012 (A)	¹ 1/4 in. x 1/2 in.
	2	009 (B)	1/4 in. x 3/8 in.
	2	018 (A)	¹ 1/4 in. x 1/2 in.
	2	012 (A)	¹ 1/4 in. x 1/2 in.
	~	012 (B)	¹ 1/4 in. x 1/2 in.
	2	012 (B)	¹ 1/4 in. x 1/2 in.
MPB030S4M	2	018 (A)	¹ 1/4 in. x 1/2 in.
Indoor Unit A	2	018 (A)	¹ 1/4 in. x 1/2 in.
1/4" liq + 3/8" gas		018 (B)	¹ 1/4 in. x 1/2 in.
Indoor Unit B	3	009 (A)	1/4 in. x 3/8 in.
1/4" liq + 3/8" gas		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)	¹ 1/4 in. x 1/2 in.
		009 (C)	1/4 in. x 3/8 in.
	3	012 (A)	¹ 1/4 in. x 1/2 in.
		012 (B)	¹ 1/4 in. x 1/2 in.
	0	009 (B)	1/4 in. x 3/8 in.
	3	009 (C)	1/4 in. x 3/8 in.
		018 (A)	¹ 1/4 in. x 1/2 in.
	2	012 (A)	¹ 1/4 in. x 1/2 in. ¹ 1/4 in. x 1/2 in.
	3	012 (B)	¹ 1/4 in. x 1/2 in.
		012 (C) 009 (B)	1/4 in. x 3/8 in.
	2	009 (B) 018 (A)	1/4 in. x 1/2 in.
		009 (B)	1/4 in. x 3/8 in.
MPB036S4M	2	003 (B) 024 (A)	^{2, 3} 3/8 in. x 5/8 in.
		012 (A)	1/4 in. x 1/2 in.
Indoor Unit A 1/4" liq + 1/2" gas	2	012 (A) 012 (B)	¹ 1/4 in. x 1/2 in.
		012 (B)	1 1/4 in. x 1/2 in.
Indoor Unit B 1/4" liq + 3/8" gas	2	012 (D) 018 (A)	1/4 in. x 1/2 in.
Indoor Unit C		010 (A) 012 (B)	1 1/4 in. x 1/2 in.
1/4" liq + 3/8" gas	2	012 (B) 024 (A)	^{2, 3} 3/8 in. x 5/8 in.
Indoor Unit D		018 (A)	1/4 in. x 1/2 in.
1/4" liq + 3/8" gas	2	018 (B)	¹ 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.
	5	009 (D)	1/4 in. x 3/8 in.

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

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

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

CONNECTIONS AND LINE SET USAGE

CONNECTIO	NS AN	D LINE SET USAGE			
Outdoor Model	No. of Zones	Indoor Unit Capacity (Unit No.)	Line Set Required (Liquid x Gas)		
	3	009 (B) 009 (C) 012 (A)	1/4 in. x 3/8 in. 1/4 in. x 3/8 in. 1/4 in. x 1/2 in.		
	3	009 (B) 009 (C) 018 (A)	1/4 in. x 3/8 in. 1/4 in. x 3/8 in. 1/4 in. x 1/2 in.		
	3	009 (C) 012 (A) 012 (B)	1/4 in. x 3/8 in. 1/4 in. x 1/2 in. ¹ 1/4 in. x 1/2 in.		
	3	009 (C) 012 (B) 018 (A)	1/4 in. x 3/8 in. ¹ 1/4 in. x 1/2 in. 1/4 in. x 1/2 in.		
	3	009 (C) 018 (A) 018 (B)	1/4 in. x 3/8 in. 1/4 in. x 1/2 in. ¹ 1/4 in. x 1/2 in.		
	3	012 (A) 012 (B) 012 (C)	1/4 in. x 1/2 in. ¹ 1/4 in. x 1/2 in. ¹ 1/4 in. x 1/2 in.		
	3	012 (C) 012 (B) 018 (A)	¹ 1/4 in. x 1/2 in. ¹ 1/4 in. x 1/2 in. 1/4 in. x 1/2 in.		
MPB036S4M	3	012 (C) 018 (A) 018 (B)	¹ 1/4 in. x 1/2 in. 1/4 in. x 1/2 in. ¹ 1/4 in. x 1/2 in.		
Indoor Unit A 1/4" liq + 1/2" gas Indoor Unit B	3	012 (B) 012 (C) 024 (A)	¹ 1/4 in. x 1/2 in. ¹ 1/4 in. x 1/2 in. ^{2, 3} 3/8 in. x 5/8 in.		
1/4" liq + 3/8" gas Indoor Unit C 1/4" liq + 3/8" gas	4	009 (B) 009 (C) 009 (D) 009 (A)	1/4 in. x 3/8 in. 1/4 in. x 3/8 in. 1/4 in. x 3/8 in. 1 1/4 in. x 3/8 in.		
Indoor Unit D 1/4" liq + 3/8" gas	4	009 (B) 009 (C) 009 (D) 012 (A)	1/4 in. x 3/8 in. 1/4 in. x 3/8 in. 1/4 in. x 3/8 in. 1/4 in. x 3/8 in. 1/4 in. x 1/2 in.		
	4	009 (B) 009 (C) 009 (D) 018 (A)	1/4 in. x 3/8 in. 1/4 in. x 3/8 in. 1/4 in. x 3/8 in. 1/4 in. x 3/8 in. 1/4 in. x 1/2 in.		
	4	009 (C) 009 (D) 012 (A) 012 (B)	1/4 in. x 3/8 in. 1/4 in. x 3/8 in. 1/4 in. x 1/2 in. 1 1/4 in. x 1/2 in.		
	4	009 (C) 009 (D) 012 (B) 018 (A)	1/4 in. x 3/8 in. 1/4 in. x 3/8 in. ¹ 1/4 in. x 1/2 in. 1/4 in. x 1/2 in.		
	4	009 (D) 012 (A) 012 (B) 012 (C)	1/4 in. x 3/8 in. 1/4 in. x 1/2 in. 1/4 in. x 1/2 in. 1/4 in. x 1/2 in.		
	4	012 (A) 012 (B) 012 (C) 012 (D)	1/4 in. x 1/2 in. ¹ 1/4 in. x 1/2 in. ¹ 1/4 in. x 1/2 in. ¹ 1/4 in. x 1/2 in.		

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

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

 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).

CONNECTIONS AND LINE SET USAGE

CONNECTIO	INS AN	D LINE SE	TUSAGE
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.
	2	024 (A)	^{2, 3} 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)	^{2, 3} 3/8 in. x 5/8 in.
	_	018 (A)	1/4 in. x 1/2 in.
	2	018 (B)	1/4 in. x 1/2 in.
		018 (B)	1/4 in. x 1/2 in.
	2	024 (A)	^{2, 3} 3/8 in. x 5/8 in.
	•	024 (A)	^{2, 3} 3/8 in. x 5/8 in.
	2	024 (B)	^{2, 3} 3/8 in. x 5/8 in.
		009 (A)	¹ 1/4 in. x 3/8 in.
	3	009 (B)	¹ 1/4 in. x 3/8 in.
		009 (C)	1/4 in. x 3/8 in.
		009 (B)	¹ 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 1/4 in. x 3/8 in.
MPB048S4M	3	009 (C)	1/4 in. x 3/8 in.
Indoor Unit A		018 (A)	1/4 in. x 1/2 in.
1/4" liq + 1/2" gas		009 (B)	¹ 1/4 in. x 3/8 in.
Indoor Unit B	3	009 (C)	1/4 in. x 3/8 in.
1/4" liq + 1/2" gas		024 (A)	^{2, 3} 3/8 in. x 5/8 in.
Indoor Unit C		009 (C)	1/4 in. x 3/8 in.
1/4" liq + 3/8" gas	3	012 (A)	1/4 in. x 1/2 in.
Indoor Unit D 1/4" liq + 3/8" gas		012 (B)	1/4 in. x 1/2 in.
Indoor Unit E		009 (C)	1/4 in. x 3/8 in.
1/4" liq + 3/8" gas	3	012 (B)	1/4 in. x 1/2 in.
1, 1 iiq 1 0, 0 guo		018 (A)	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.
		024 (A)	^{2, 3} 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)	^{2, 3} 3/8 in. x 5/8 in.
		009 (C)	1/4 in. x 3/8 in.
	3	024 (A)	^{2, 3} 3/8 in. x 5/8 in.
		024 (B)	^{2, 3} 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)	¹ 1/4 in. x 1/2 in.
		012 (B)	1/4 in. x 1/2 in.
	3	012 (C)	¹ 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	adaptor is re	auired for line set	connection to outdoor unit

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

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

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).

CONNECTIONS AND LINE SET USAGE

CONNECTIO	NS AN	D LINE SE	TUSAGE
Outdoor Model	No. of Zones	Indoor Unit Capacity (Unit No.)	Line Set Required (Liquid x Gas)
		012 (C)	1/4 in. x 1/2 in.
	3	018 (A)	1/4 in. x 1/2 in.
		018 (B)	¹ 1/4 in. x 1/2 in.
		012 (B)	1/4 in. x 1/2 in.
	3	012 (C)	¹ 1/4 in. x 1/2 in.
		024 (A)	^{2, 3} 3/8 in. x 5/8 in.
	3	012 (B)	1/4 in. x 1/2 in.
		018 (C)	¹ 1/4 in. x 1/2 in.
		024 (A)	^{2, 3} 3/8 in. x 5/8 in.
		012 (C)	¹ 1/4 in. x 1/2 in.
	3	024 (A)	^{2, 3} 3/8 in. x 5/8 in.
		024 (B)	^{2, 3} 3/8 in. x 5/8 in.
		018 (A)	1/4 in. x 1/2 in.
	3	018 (B)	1/4 in. x 1/2 in.
		018 (C)	¹ 1/4 in. x 1/2 in.
		018 (B)	1/4 in. x 1/2 in.
	3	018 (C)	¹ 1/4 in. x 1/2 in.
		024 (A)	^{2, 3} 3/8 in. x 5/8 in.
		009 (A)	¹ 1/4 in. x 3/8 in.
MPB048S4M	4	009 (B)	¹ 1/4 in. x 3/8 in.
Indoor Unit A		009 (C)	1/4 in. x 3/8 in.
1/4" liq + 1/2" gas		009 (D)	1/4 in. x 3/8 in.
Indoor Unit B	4	009 (B)	¹ 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		009 (D)	1/4 in. x 3/8 in. 1/4 in. x 1/2 in.
1/4" liq + 3/8" gas		012 (A)	¹ 1/4 in. x 3/8 in.
Indoor Unit D		009 (B) 009 (C)	1/4 in. x 3/8 in.
1/4" liq + 3/8" gas	4	009 (C) 009 (D)	1/4 in. x 3/8 in.
Indoor Unit E		009 (D) 018 (A)	1/4 in. x 1/2 in.
1/4" liq + 3/8" gas		009 (B)	¹ 1/4 in. x 3/8 in.
		009 (D) 009 (C)	1/4 in. x 3/8 in.
	4	009 (D)	1/4 in. x 3/8 in.
		003 (B) 024 (A)	^{2, 3} 3/8 in. x 5/8 in.
		009 (C)	1/4 in. x 3/8 in.
		009 (D)	1/4 in. x 3/8 in.
	4	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.
		009 (D)	1/4 in. x 3/8 in.
	4	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.
		009 (D)	1/4 in. x 3/8 in.
	4	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.
	<u>,</u>	009 (D)	1/4 in. x 3/8 in.
	4	018 (B)	1/4 in. x 1/2 in.
		024 (A)	^{2, 3} 3/8 in. x 5/8 in.
¹ 3/8 x 1/2 in. gas pipe	adaptor is re		connection to outdoor unit

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

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

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

CONNECTIONS AND LINE SET USAGE

CONNECTIO	NS AN	D LINE SE	TUSAGE
Outdoor Model	No. of Zones	Indoor Unit Capacity (Unit No.)	Line Set Required (Liquid x Gas)
		009 (D)	1/4 in. x 3/8 in.
		012 (A)	¹ 1/4 in. x 1/2 in.
	4	012 (B)	¹ 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.
	4	012 (B)	1/4 in. x 1/2 in.
	4	012 (C)	¹ 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)	¹ 1/4 in. x 1/2 in.
	4	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.
	4	012 (C)	¹ 1/4 in. x 1/2 in.
		012 (D)	¹ 1/4 in. x 1/2 in.
		012 (B)	1/4 in. x 1/2 in.
	4	012 (C)	¹ 1/4 in. x 1/2 in.
	т	012 (D)	¹ 1/4 in. x 1/2 in.
MPB048S4M		018 (A)	1/4 in. x 1/2 in.
Indoor Unit A		009 (A)	¹ 1/4 in. x 3/8 in.
1/4" liq + 1/2" gas		009 (B)	¹ 1/4 in. x 3/8 in.
Indoor Unit B	5	009 (C)	1/4 in. x 3/8 in.
1/4" liq + 1/2" gas		009 (D)	1/4 in. x 3/8 in.
Indoor Unit C		009 (E)	1/4 in. x 3/8 in.
1/4" liq + 3/8" gas		009 (B)	¹ 1/4 in. x 3/8 in.
Indoor Unit D	_	009 (C)	1/4 in. x 3/8 in.
1/4" liq + 3/8" gas	5	009 (D)	1/4 in. x 3/8 in.
Indoor Unit E		009 (E)	1/4 in. x 3/8 in.
1/4" liq + 3/8" gas		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.
	F	009 (C)	
	5	009 (D)	1/4 in. x 3/8 in. 1/4 in. x 3/8 in.
		009 (E) 018 (A)	1/4 in. x 1/2 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.
		024 (A)	^{2, 3} 3/8 in. x 5/8 in.
		009 (C)	1/4 in. x 3/8 in.
		009 (D)	1/4 in. x 3/8 in.
	5	009 (E)	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.
		009 (D)	1/4 in. x 3/8 in.
	5	009 (E)	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.
1 2/2 x 1/2 in and nine			

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

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

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).

CONNECTIONS AND LINE SET USAGE

Outdoor Model	No. of Zones	Indoor Unit Capacity (Unit No.)	Line Set Required (Liquid x Gas)
	5	009 (D) 009 (E) 012 (A) 012 (B) 012 (C)	1/4 in. x 3/8 in. 1/4 in. x 3/8 in. 1/4 in. x 1/2 in. 1/4 in. x 1/2 in. 1 1/4 in. x 1/2 in.
MPB048S4M Indoor Unit A 1/4" liq + 1/2" gas Indoor Unit B 1/4" liq + 1/2" gas Indoor Unit C 1/4" liq + 3/8" gas Indoor Unit D 1/4" liq + 3/8" gas Indoor Unit E 1/4" liq + 3/8" gas	5	009 (D) 009 (E) 012 (B) 012 (C) 018 (A)	1/4 in. x 3/8 in. 1/4 in. x 3/8 in. 1/4 in. x 1/2 in. ¹ 1/4 in. x 1/2 in. 1/4 in. x 1/2 in.
	5	009 (E) 012 (A) 012 (B) 012 (C) 012 (D)	1/4 in. x 3/8 in. 1/4 in. x 1/2 in. 1/4 in. x 1/2 in. ¹ 1/4 in. x 1/2 in. ¹ 1/4 in. x 1/2 in.
	5	012 (A) 012 (B) 012 (C) 012 (D) 012 (E)	1/4 in. x 1/2 in. 1/4 in. x 1/2 in. ¹ 1/4 in. x 1/2 in. ¹ 1/4 in. x 1/2 in. ¹ 1/4 in. x 1/2 in.

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

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

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).

Outdoor	Indoor Temperature - °F (Dry Bulb / Wet Bulb)									
Temperature - °F	65°F	/ 54°F	70°F	/ 59°F	75°F	/ 63°F	80°F / 67°F			
(Dry Bulb)	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh		
-13	17.27	13.47	18.77	14.64	20.28	14.19	21.23	15.93		
-5	18.18	14.18	19.76	15.41	21.34	14.93	22.35	16.77		
-4	18.27	14.25	19.86	15.49	21.45	15.01	22.46	16.85		
0	18.09	14.11	19.66	15.34	21.23	15.29	22.18	16.64		
5	17.72	13.83	19.26	15.03	20.81	15.40	22.53	18.05		
15	17.36	13.54	18.87	14.72	20.38	15.28	22.85	17.14		
25	17.92	13.98	19.48	15.19	21.04	15.85	23.28	17.46		
35	18.48	14.41	20.08	15.67	21.69	16.41	23.72	17.79		
45	19.03	14.85	20.69	16.14	22.35	16.98	24.15	18.11		
55	19.37	15.11	21.05	16.43	22.74	17.44	24.47	18.18		
65	19.70	15.38	21.42	16.71	23.13	17.89	24.79	18.26		
75	20.04	15.64	21.78	17.00	23.52	18.35	25.11	18.33		
85	18.34	14.67	19.94	15.95	21.54	17.01	23.85	17.89		
95	16.49	14.01	17.92	15.23	19.35	15.87	21.54	16.16		
105	11.04	11.04	12.00	12.00	12.96	11.53	14.82	14.52		
115	10.65	10.65	11.58	11.58	12.51	11.88	14.22	14.08		
122	9.10	9.10	9.89	9.89	10.13	9.93	10.40	10.40		

Outdoor		Indoor Temperatu	ure - °F (Dry Bulb)	
Temperature - °F	60°F	65°F	70°F	75°F
(Dry Bulb)	Total mBtuh	Total mBtuh	Total mBtuh	Total mBtuh
-13	9.54	9.40	6.54	6.44
-5	11.60	11.43	7.69	7.57
0	12.54	12.35	8.14	8.02
5	13.98	13.77	9.66	9.52
17	19.21	18.92	13.02	12.79
19.4	19.46	19.17	15.94	15.70
24.8	20.59	20.28	17.13	16.87
32	20.74	20.43	18.93	18.65
35	21.67	21.34	19.66	19.37
39.2	23.23	22.88	21.33	21.01
44.6	24.79	24.41	23.00	22.66
47	25.82	25.43	23.96	23.60
53.6	26.94	26.54	26.27	25.88
57	27.35	26.94	26.67	26.27

Outdoor	Indoor Temperature - °F (Dry Bulb / Wet Bulb)									
Temperature - °F (Dry Bulb)	65°F	/ 54°F	70°F	/ 59°F	75°F	/ 63°F	80°F / 67°F			
	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh		
-13	28.49	19.95	30.97	21.68	33.45	23.41	35.12	24.59		
-5	29.99	21.00	32.60	22.83	35.21	24.65	36.96	25.88		
-4	30.14	21.10	32.76	22.94	35.39	24.77	37.15	26.01		
0	29.97	20.99	32.58	22.81	35.19	24.63	37.24	26.07		
5	29.99	20.99	32.60	22.82	35.21	24.65	37.08	25.96		
15	29.58	20.71	32.15	22.51	34.72	24.31	37.51	26.26		
25	29.76	20.84	32.35	22.65	34.94	24.46	37.57	26.30		
35	29.95	20.97	32.55	22.79	35.15	24.61	37.62	26.34		
45	30.13	21.10	32.75	22.93	35.37	24.76	37.68	26.38		
55	30.03	21.87	32.65	23.78	35.26	25.27	37.63	26.57		
65	29.94	22.65	32.54	24.62	35.15	25.77	37.58	26.76		
75	29.84	23.43	32.44	25.47	35.04	26.28	37.53	26.95		
85	24.78	20.99	26.94	22.82	29.10	23.86	35.39	26.08		
95	22.50	19.96	24.46	21.70	26.42	22.72	32.75	25.06		
105	18.38	17.87	19.98	19.42	21.58	19.42	24.71	22.09		
115	16.16	15.83	17.56	17.21	18.96	18.02	23.96	23.84		
122	14.21	14.21	15.45	15.45	16.69	16.52	20.15	20.05		

Outdoor		Indoor Temperatu	ure - °F (Dry Bulb)	
Temperature - °F	60°F	65°F	70°F	75°F
(Dry Bulb)	Total mBtuh	Total mBtuh	Total mBtuh	Total mBtuh
-13	14.95	14.73	10.94	10.78
-5	17.25	16.99	12.26	12.08
0	18.73	18.45	14.52	14.30
5	20.15	19.85	16.82	16.57
17	20.66	20.35	20.94	20.63
19.4	21.04	20.72	21.08	20.76
24.8	22.31	21.98	21.09	20.77
32	20.43	20.12	20.13	19.83
35	22.22	21.89	22.11	21.78
39.2	29.57	29.13	29.17	28.73
44.6	36.92	36.37	36.22	35.68
47	38.03	37.46	37.23	36.75
53.6	40.27	39.67	40.10	39.50
57	40.88	40.27	40.71	40.10

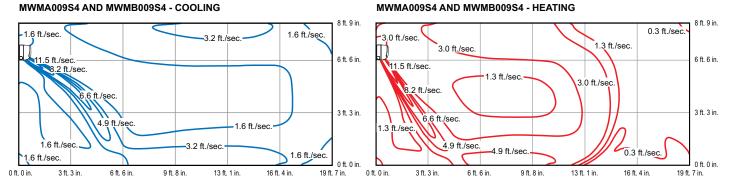
Outdoor	Indoor Temperature - °F (Dry Bulb / Wet Bulb)									
Temperature - °F (Dry Bulb)	65°F	/ 54°F	70°F	/ 59°F	75°F	/ 63°F	80°F / 67°F			
	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh		
-13	33.15	24.42	36.03	26.54	37.17	27.35	37.95	27.89		
-5	34.90	25.70	37.93	27.94	39.12	28.79	39.95	29.36		
-4	35.07	25.83	38.12	28.08	39.32	28.93	40.15	29.51		
0	35.22	25.94	38.28	28.20	39.49	29.04	40.51	29.76		
5	35.46	25.47	38.54	27.68	39.73	28.51	40.98	29.83		
15	35.13	25.24	38.18	27.43	40.36	28.25	41.10	29.47		
25	35.93	26.21	39.06	28.49	40.92	29.34	41.60	30.30		
35	36.74	27.19	39.93	29.55	41.47	30.44	42.11	31.13		
45	37.55	28.16	40.81	30.61	42.03	31.53	42.61	31.96		
55	37.23	28.46	40.47	30.93	41.81	32.33	42.54	32.07		
65	36.92	28.75	40.13	31.25	41.60	33.13	42.48	32.19		
75	36.61	29.04	39.79	31.57	41.38	33.93	42.41	32.30		
85	34.94	28.27	37.98	30.73	41.02	36.10	40.63	31.45		
95	33.27	27.47	36.16	29.86	39.05	35.15	38.82	30.57		
105	25.95	24.29	28.21	26.40	30.47	28.03	32.17	28.30		
115	24.44	24.09	26.56	26.18	28.68	27.25	30.47	30.18		
122	21.58	21.27	23.46	23.12	25.34	24.83	27.53	27.25		

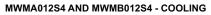
Outdoor Temperature - °F	Indoor Temperature - °F (Dry Bulb)					
	60°F	65°F	70°F	75°F		
(Dry Bulb)	Total mBtuh	Total mBtuh	Total mBtuh	Total mBtuh		
-13	20.54	20.23	15.65	15.42		
-5	22.52	22.18	17.05	16.79		
0	24.84	24.47	19.02	18.73		
5	26.33	25.94	21.31	20.99		
17	30.77	30.31	26.67	26.27		
19.4	31.06	30.59	27.13	26.72		
24.8	32.46	31.97	31.86	31.38		
32	34.15	33.64	33.96	33.45		
35	36.09	35.55	36.08	35.54		
39.2	37.28	36.72	36.65	36.10		
44.6	38.47	37.89	37.21	36.65		
47	39.24	38.65	37.95	37.38		
53.6	41.26	40.64	39.67	39.07		
57	41.89	41.26	40.27	39.67		

Outdoor Temperature - °F (Dry Bulb)	Indoor Temperature - °F (Dry Bulb / Wet Bulb)							
	65°F / 54°F		70°F / 59°F		75°F / 63°F		80°F / 67°F	
	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh	Total mBtuh	Sensible mBtuh
-13	36.74	25.72	39.94	27.96	43.13	31.49	51.18	39.10
-5	38.68	27.08	42.04	29.43	45.40	33.14	53.87	41.15
-4	38.87	27.21	42.25	29.58	45.63	33.31	54.14	41.36
0	39.11	27.38	42.51	29.76	45.91	33.51	54.68	41.01
5	38.52	26.97	41.87	29.31	45.22	33.01	54.58	42.12
15	37.94	26.56	41.24	28.87	44.54	32.51	55.15	42.11
25	38.16	27.10	41.48	29.46	44.80	33.31	55.67	42.25
35	38.39	27.65	41.73	30.05	45.07	34.10	56.20	42.40
45	38.61	28.19	41.97	30.64	45.33	34.90	56.72	42.54
55	38.46	30.21	41.80	32.84	45.15	35.66	57.90	43.71
65	38.31	32.24	41.64	35.04	44.97	36.41	59.08	44.87
75	38.15	34.26	41.47	37.24	44.79	37.17	60.26	46.04
85	36.17	33.91	39.32	36.86	42.47	36.10	56.82	44.49
95	33.36	32.69	36.26	35.53	39.16	34.07	53.16	42.79
105	30.33	30.33	32.97	32.97	35.61	32.05	40.95	37.95
115	27.47	27.47	29.86	29.86	32.25	32.25	38.57	38.57
122	24.42	24.42	26.54	26.54	28.66	28.66	35.24	35.24

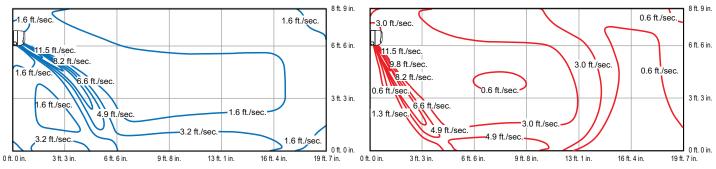
Outdoor Temperature - °F	Indoor Temperature - °F (Dry Bulb)					
	60°F	65°F	70°F	75°F		
(Dry Bulb)	Total mBtuh	Total mBtuh	Total mBtuh	Total mBtuh		
-13	23.94	23.58	15.64	15.33		
-5	25.31	24.93	17.45	17.10		
0	27.13	26.72	24.88	24.38		
5	29.48	29.04	24123	25.60		
17	33.67	33.16	30.07	29.47		
19.4	34.15	33.64	30.42	29.81		
24.8	36.61	36.06	35.94	35.22		
32	40.56	39.95	38.56	37.79		
35	44.08	43.42	42.09	41.25		
39.2	50.41	49.66	48.96	47.98		
44.6	56.74	55.89	55.83	54.71		
47	57.87	57.01	56.95	55.80		
53.6	66.65	65.65	64.75	63.46		
57	67.67	66.65	65.74	64.43		

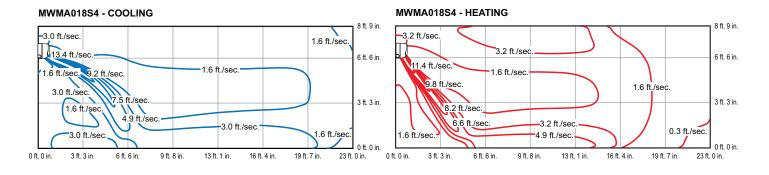
AIR THROW DATA - WALL-MOUNTED INDOOR UNITS

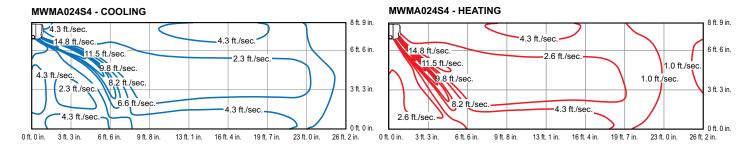




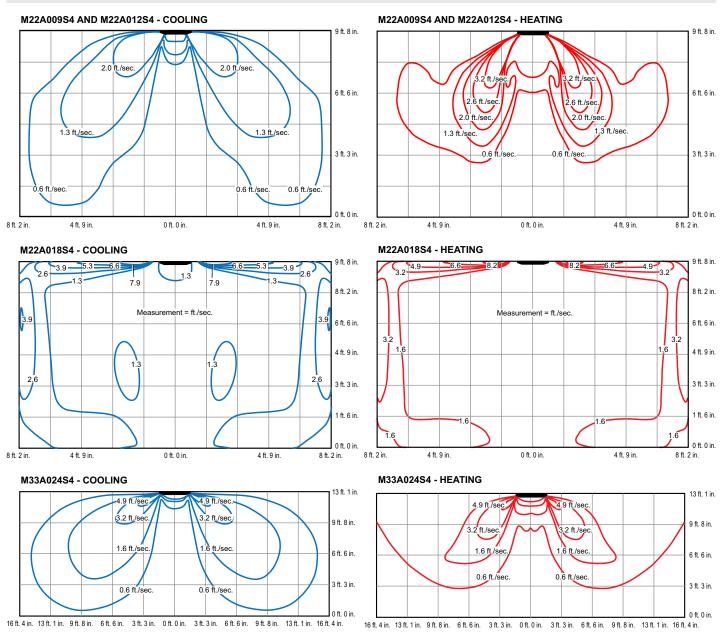
MWMA012S4 AND MWMB012S4 - HEATING



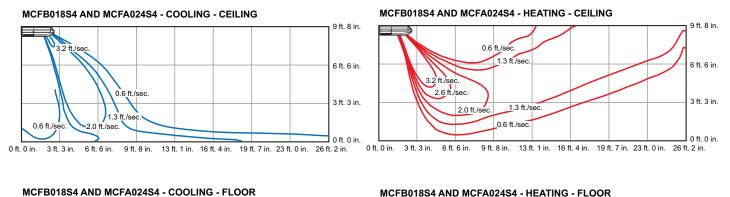


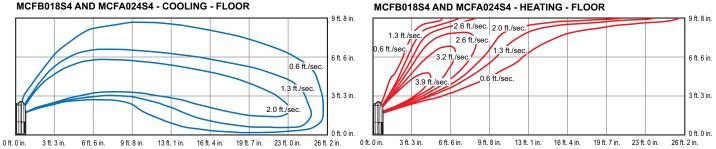


AIR THROW DATA - CASSETTE INDOOR UNITS



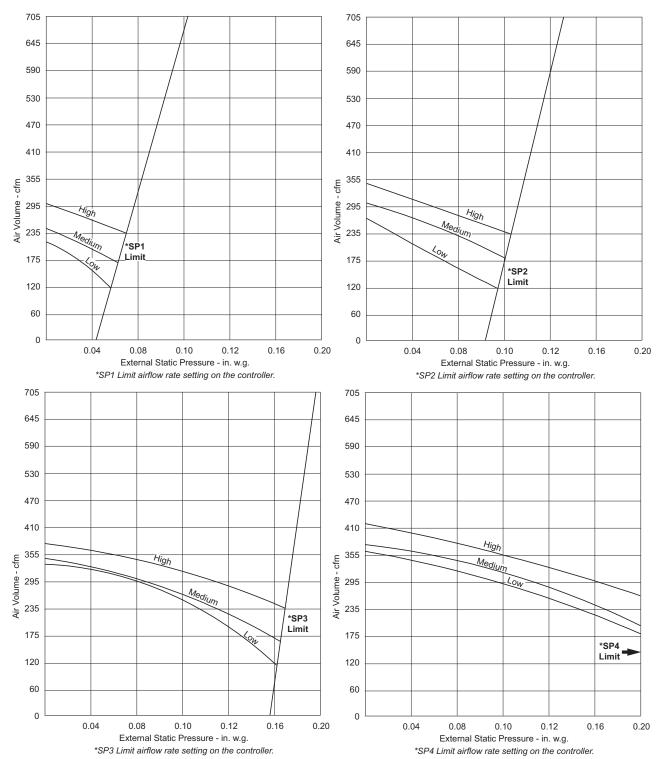
AIR THROW DATA - CEILING/FLOOR MOUNT INDOOR UNITS





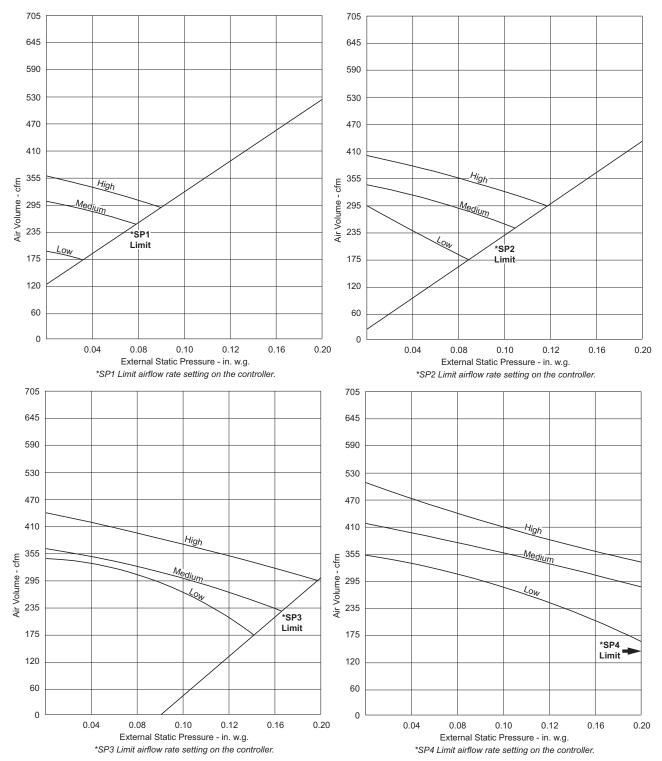
BLOWER DATA - MEDIUM STATIC DUCTED INDOOR UNITS





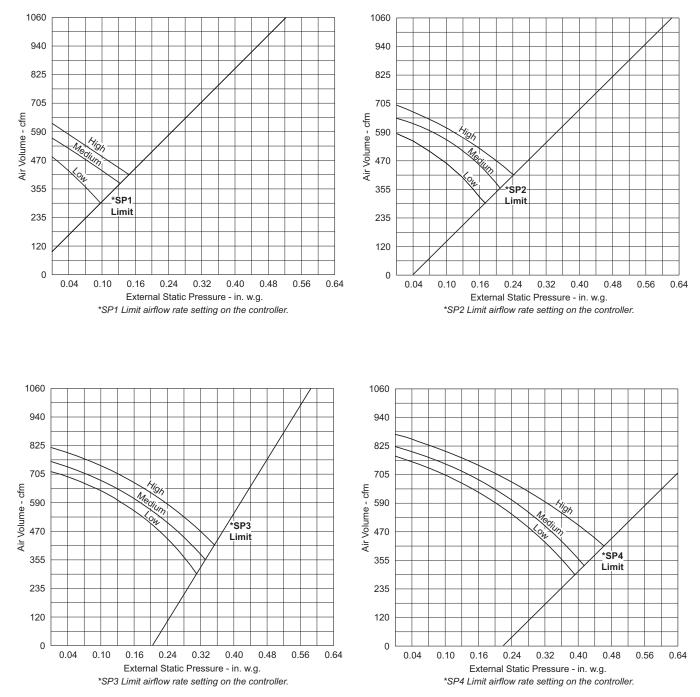
BLOWER DATA - MEDIUM STATIC DUCTED INDOOR UNITS

MMDB012S4

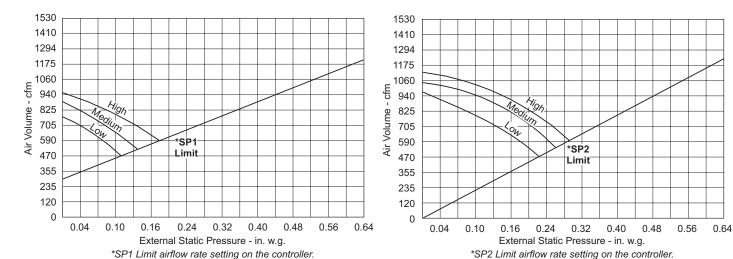


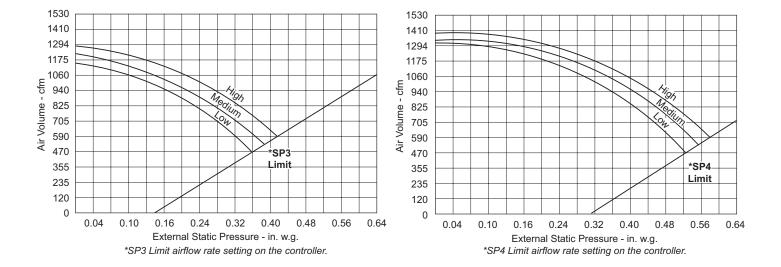
BLOWER DATA - MEDIUM STATIC DUCTED INDOOR UNITS

MMDB018S4



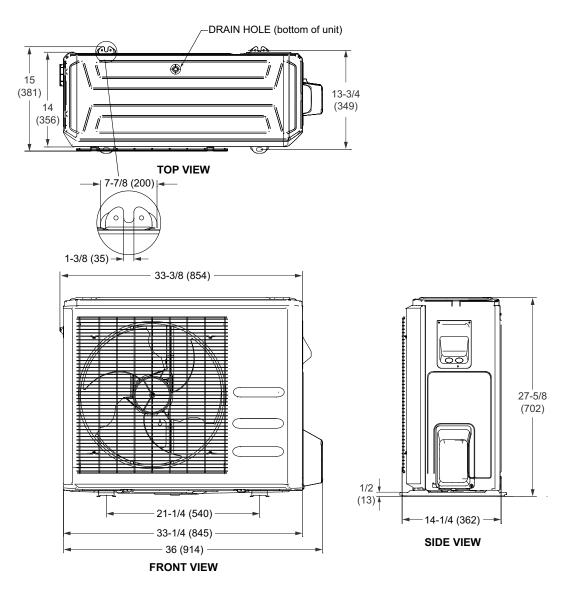
BLOWER DATA - MEDIUM STATIC DUCTED INDOOR UNITS

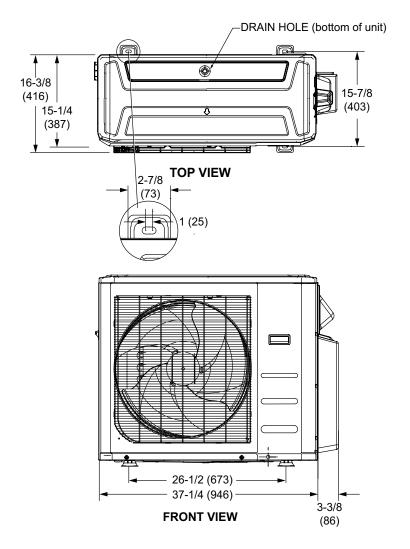




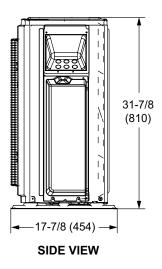
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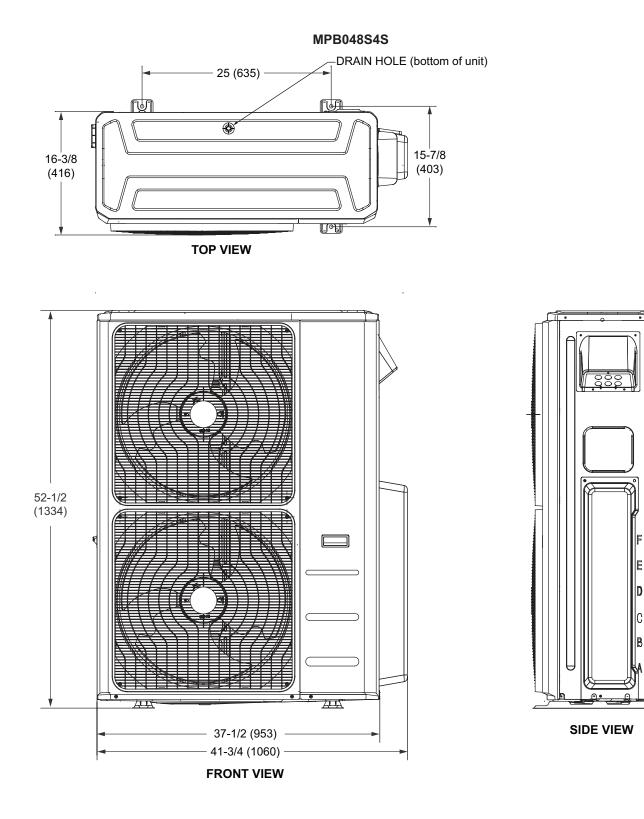
MPB018S4M





MPB030S4M, MPB036S4M

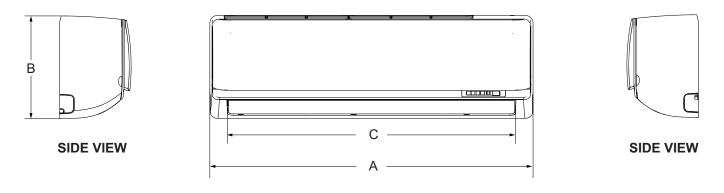




MWMA009S4, MWMA012S4, MWMA018S4, MWMA024S4





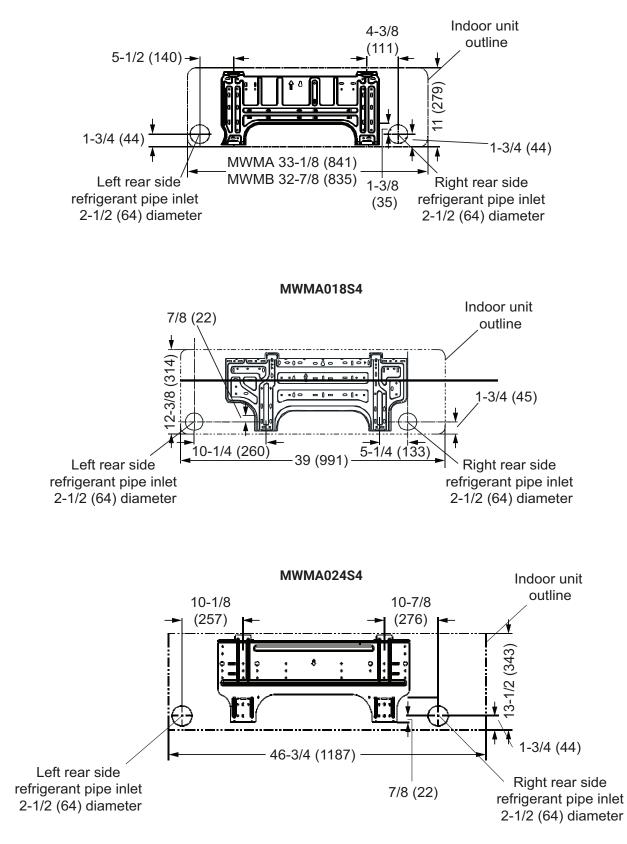




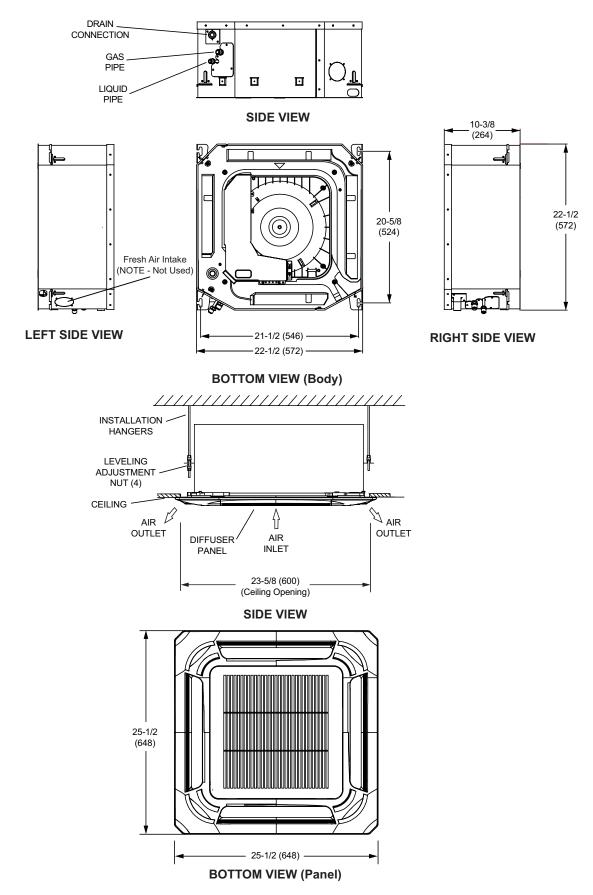
BOTTOM VIEW

Size	ŀ	4	E	3	()	D		
5120	in.	mm	in.	mm	in.	mm	in.	mm	
MWMA009, 012	33-1/8	841	11	279	29-1/4	743	8-1/4	210	
MWMB009, 012	32-7/8	835	11	279	29-1/4	743	7-7/8	200	
MWMA018	39	991	12-3/8	314	34-3/4	883	8-5/8	219	
MWMA024	46-3/4	1187	13-1/2	343	42-1/2	1080	10-1/4	260	

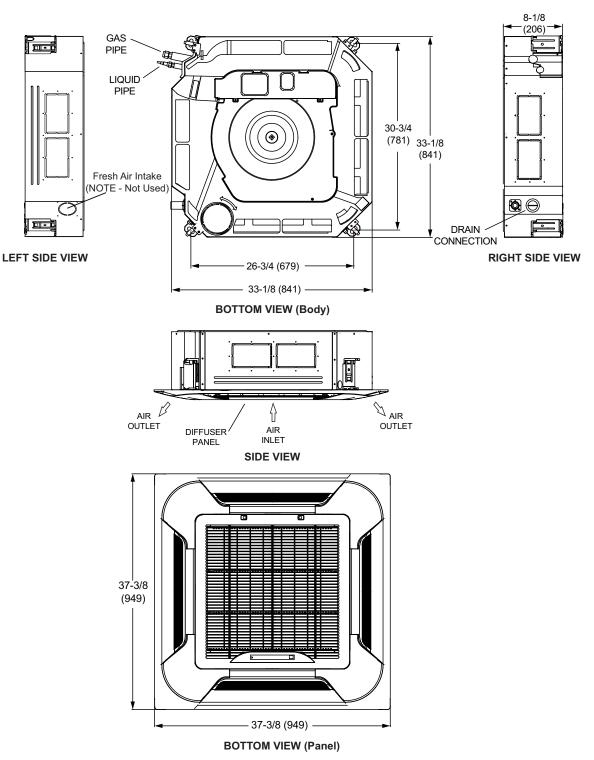




M22A009S4, M22A012S4, M22A018S4



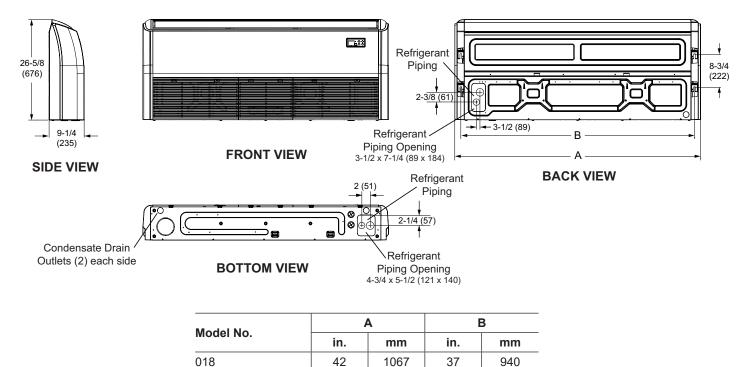
DIMENSIONS - CASSETTE INDOOR UNITS



M33024S4

DIMENSIONS - CEILING/FLOOR MOUNT INDOOR UNITS

024



42-1/8

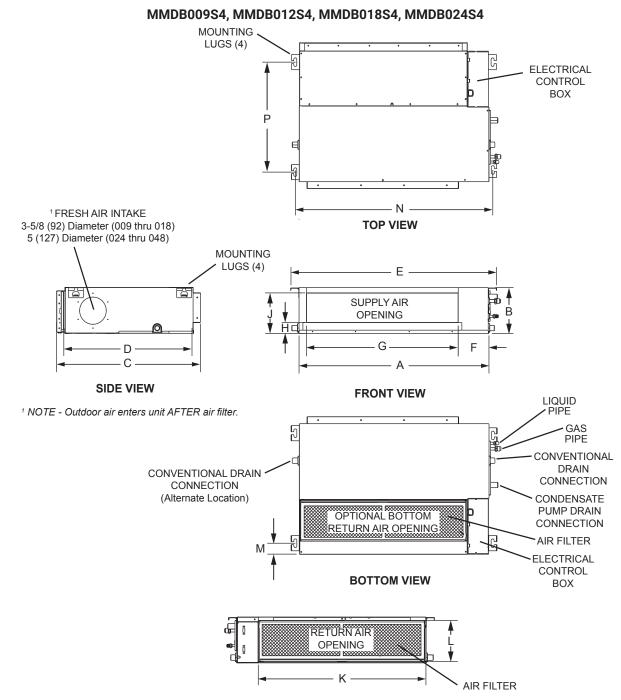
1070

39

991

MCFB018S4, MCFA024S4

DIMENSIONS - MEDIUM STATIC DUCTED INDOOR UNITS

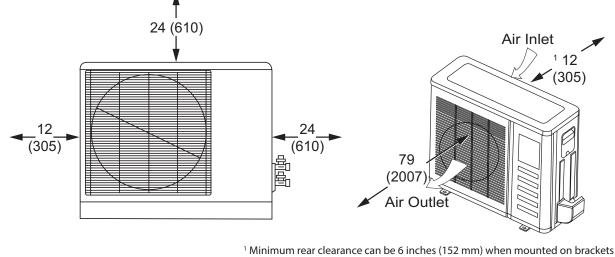


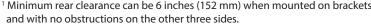
REAR VIEW

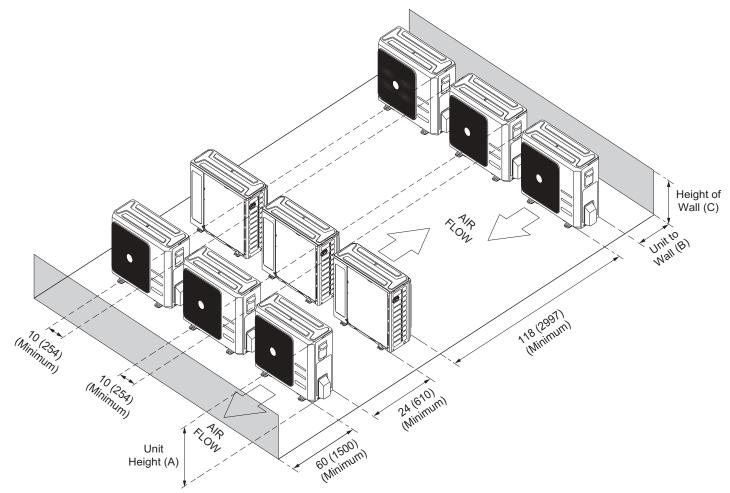
Size	A		E	В		С [) E				F	G		Н	
5120	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
009 thru 012	27-5/8	702	7-7/8	200	19-7/8	505	17-3/4	451	30-3/4	781	5-3/8	137	21-1/8	537	1-1/8	29
018	34-5/8	879	8-1/4	210	26-1/2	673	23-5/8	600	37-7/8	962	5-1/2	140	27-3/4	705	2	51
024	43-1/4	1099	9-3/4	248	30-1/2	775	27-1/2	699	46-1/2	1181	5-1/2	140	36-1/2	927	2	51

Size	J		К		L		М		N		Р	
3120	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
009 thru 012	6	152	23-5/8	600	7-3/8	187	2	51	29-1/8	740	14-1/8	359
018	5-3/8	137	30-3/4	781	7-1/2	191	1-5/8	41	36-1/4	921	20	508
024	6-7/8	175	39-3/8	1000	9	229	1/4	6	44-7/8	1140	23-1/2	597

INSTALLATION CLEARANCES - OUTDOOR UNITS







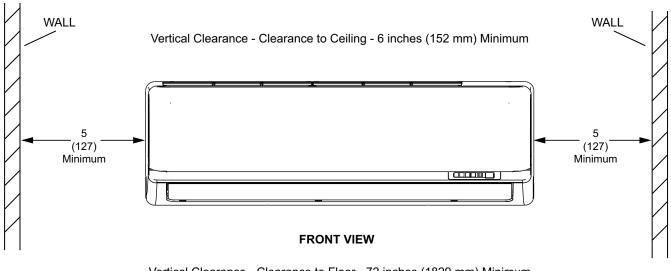
CLEARANCE NOTES FOR MULTIPLE UNITS:

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

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

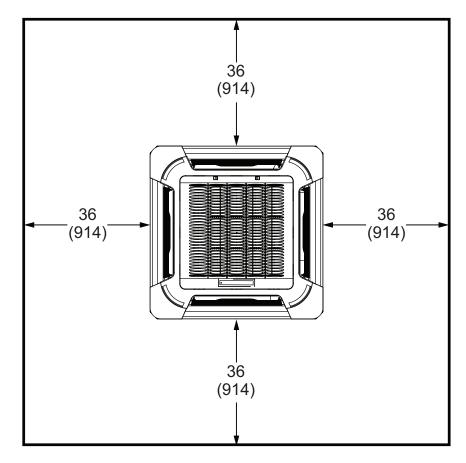
If the height of the wall (C) is greater than the height of the unit (A), the distance from the unit to the wall (B) must be a minimum of 20 inches (508 mm).

INSTALLATION CLEARANCES - WALL-MOUNTED INDOOR UNITS



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

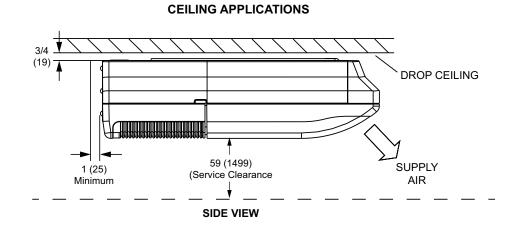
INSTALLATION CLEARANCES - CASSETTE INDOOR UNITS

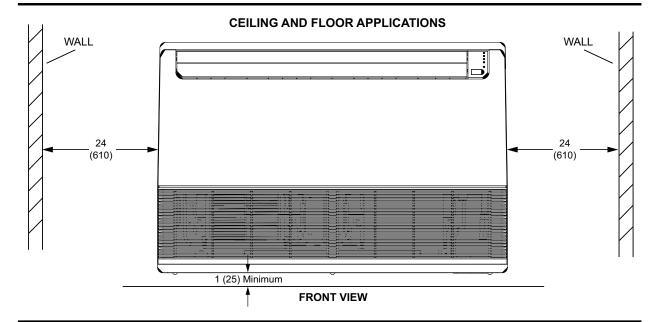


Minimum Vertical Clearances:

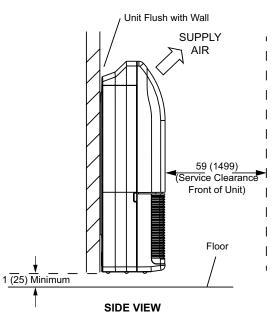
Minimum Clearance from Structural Ceiling to Drop Ceiling - 10-1/4 inches (260 mm) Minimum Clearance to Floor - 98-1/2 inches (2500 mm)

INSTALLATION CLEARANCES - CEILING/FLOOR MOUNT INDOOR UNITS

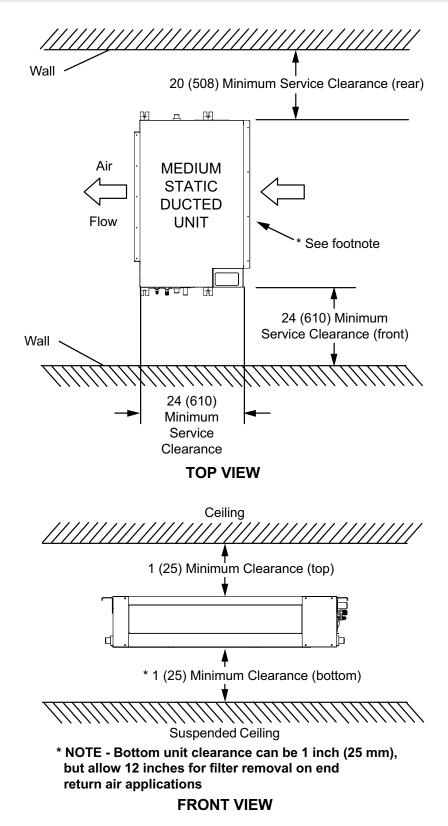




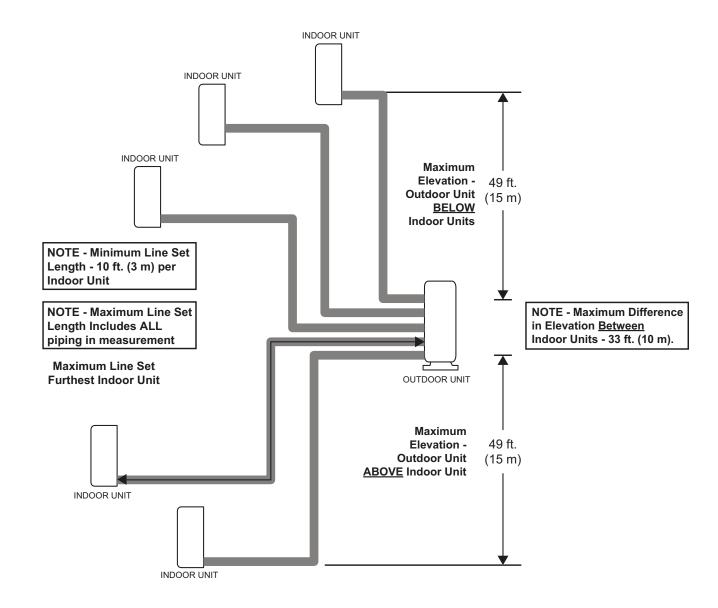
FLOOR APPLICATIONS



INSTALLATION CLEARANCES - MEDIUM STATIC DUCTED INDOOR UNITS



LINE SET AND ELEVATION GUIDELINES



Outdoor Unit Model No.	MPB018S4M	MPB030S4M	MPB036S4M	MPB048S4M	
Maximum Number of Indoor Units/Zones	Two	Three	Four	Five	
Indoor Unit Connections	(2) 1/4 liq. (2) 3/8 gas	(3) 1/4 liq. (3) 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	131 ft. (40 m)	197 ft. (60 m)	262 ft. (80 m)	262 ft. (80 m)	
Maximum Line Set Length - Furthest Indoor Unit	82 ft. (25 m)	98 ft. (30 m)	115 ft. (35 m)	115 ft. (35 m)	

NOTE - Refer to "Connections And Line Set Usage" tables starting on page 25 for correct line set usage and correct refrigerant line adaptors furnished with outdoor units.

REVISIONS					
Sections	Description of Change				
AHRI Ratings	Updated.				





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