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**MCFA and MCFB Ceiling  
or Floor-Mounted  
Convertible**



**MMDA and MMDB Medium Static  
Ducted**



**MWMA, MWMB and 3WMB  
Wall-Mounted**



**M22A, M33A and M33B Cassette**



**MFMA Floor Mount Console**

**THIS MANUAL MUST BE LEFT WITH THE  
OWNER FOR FUTURE REFERENCE**

# USER GUIDE

## **MCFA, MCFB, MFMA, MMDA, MMDB, MWMA, MWMB, 3WMB, M22A, M33A and M33B**

MINI-SPLIT SYSTEM INDOOR UNITS

507550-05

10/2020

Supersedes 507550-04

### **!WARNING**

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life.

Installation and service must be performed by a licensed professional HVAC installer (or equivalent) or a service agency.

### **!WARNING**

**ELECTRICAL SHOCK, FIRE, OR EXPLOSION  
HAZARD.**

DO NOT spray water on the indoor unit for any reason.

Do not touch the unit or the controller if your hands are wet.

Do not insert your hands, tools or any other item into the air intake or air outlet at either the indoor or outdoor unit.

Do not remove the outdoor unit fan guard for any reason.

### **!CAUTION**

If outdoor unit is installed on a raised stand, check condition of stand occasionally to ensure that it remains stable.

Do NOT install sprinklers or soaker hoses where they can expose the outdoor unit to treated water. Prolonged exposure to treated water will corrode the surface of the steel and aluminum parts and will diminish the performance of the unit.

### **IMPORTANT**

System operation is controlled by either a wired or wireless remote control. Refer to the manual provided with the control for system operation.

To ensure comfort, make sure that temperature selection has been properly set at the unit controller or wireless remote control.

To ensure efficient operation, do not block air intake or outlet at either the indoor or outdoor unit.

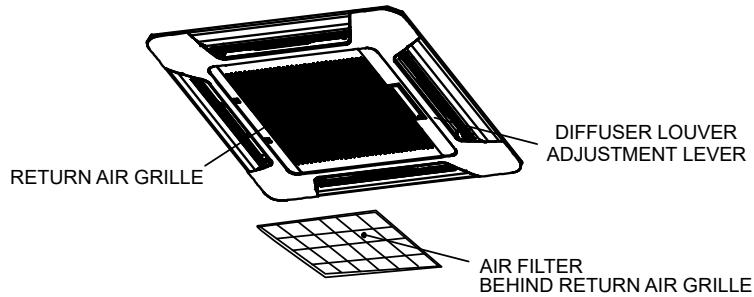
Do not stand on outdoor unit or store items on top of unit.

Make sure that indoor unit directional louvers are properly adjusted.

## Parts Arrangement

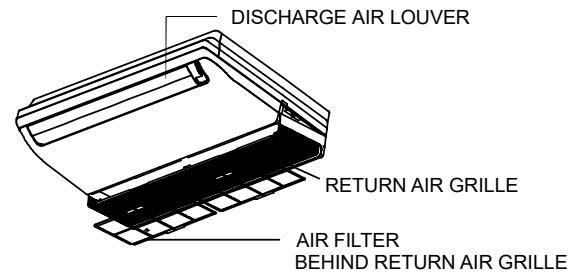
### M22A, M33A or M33B Cassette

Cassette may be adjusted to provide discharge air from one, two, three or four sides.

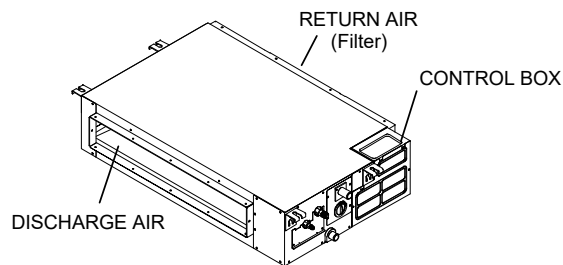


### MCFA or MCFB

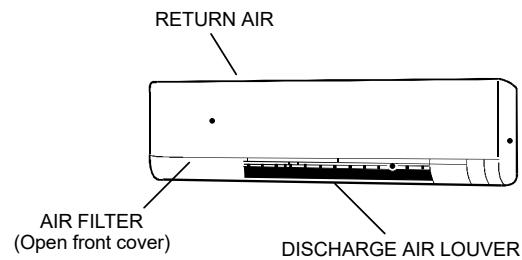
#### Ceiling- or Floor-Mounted Non-Ducted Unit



### MMDA or MMDB Medium-Static Concealed Duct



### MWMA, MWMB or 3WMB Wall-Mounted Non-Ducted Unit



### MFMA Floor Mount Console

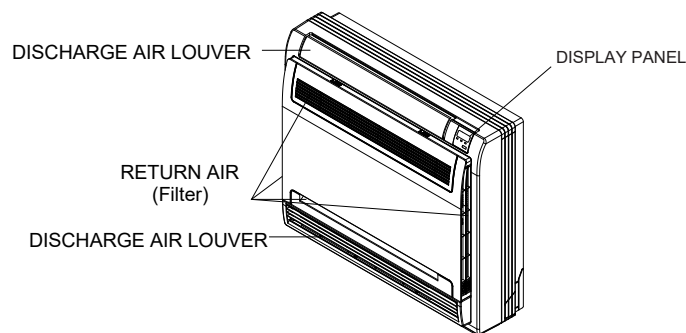


Figure 1. Parts Arrangement

## Louver Adjustment

# IMPORTANT

DO NOT adjust the louvers by hand. Louvers are adjustable only by using the wired controller or wireless remote control.

### M22A, M33A or M33B Ceiling-Mounted Cassettes

Use the wired or wireless remote control to set the position of the discharge air louvers. The louvers may be set to automatically swing. The horizontal louvers will swing outward to downward. You may also set the louvers so that they are stationary in a single position. It is always recommended to direct the horizontal discharge air louvers downward during heating and outward during cooling.

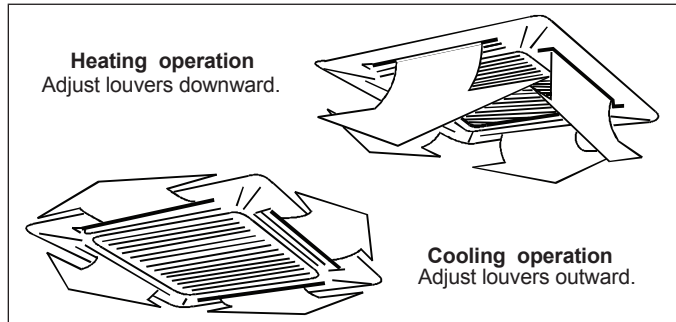


Figure 2. Ceiling Mount Cassettes

### MCFA, MCFB Ceiling- and MFMA Floor-Mounted Units

Use the wired or wireless remote control to set the position of the discharge air louvers. The louvers may be set to automatically swing. In this setting, horizontal louvers will swing outward to downward and vertical louvers can be manually adjusted left to right.

You may also set the louvers so that they are stationary in a single position. It is always recommended to direct the horizontal discharge air louvers downward during heating and outward during cooling.

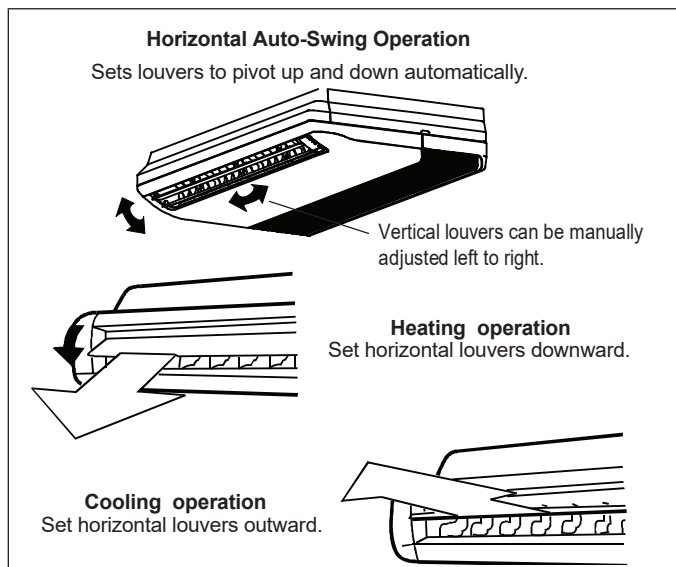


Figure 3. Ceiling or Floor Mounted Units

### MWMA, MWMB or 3WMB Wall-Mounted Units

Use the wired controller or the wireless remote control to set the position of the discharge air louvers. The louvers may be set to automatically swing between the outward and downward positions, OR you may set the louvers so that they are stationary in a single position. It is always recommended to direct the horizontal discharge air louvers downward during heating and outward during cooling.

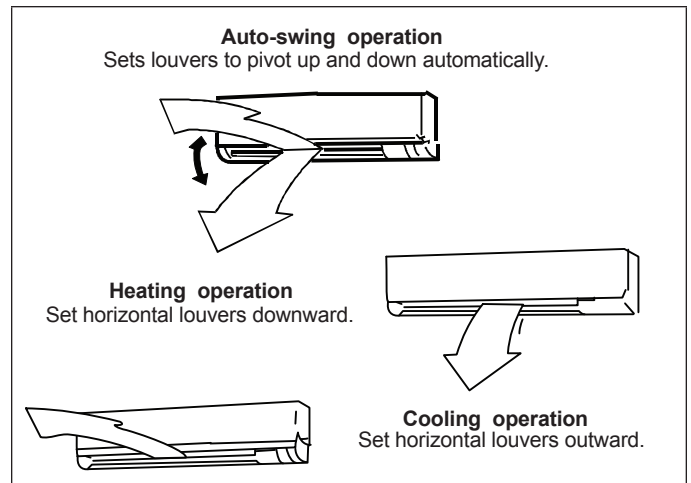


Figure 4. Wall Mounted Units

### MFMA Manual Operation

The floor console's display panel can be used to operate the unit in case the remote control has been misplaced or either the batteries are missing or expedite.

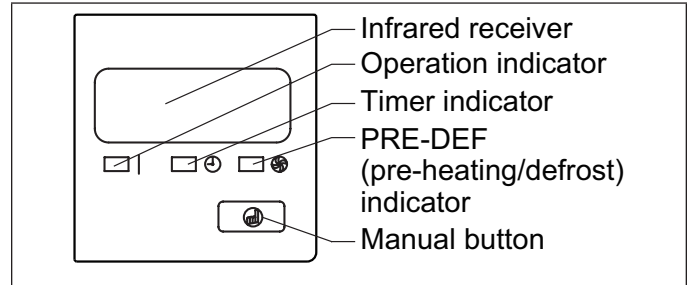


Figure 5. Display Panel

- **MANUAL Button:** This button selects the mode in the following order: AUTO, FORCED COOL, OFF.
- **FORCED COOL Mode:** In FORCED COOL mode, the operation light flashes. The system will then turn to AUTO after it has cooled with a high fan speed for 30 minutes. The remote control is disabled during this operation.
- **OFF Mode:** When the panel is turned OFF, the unit turns off and the remote control is re-enabled.

## Maintenance

### ! WARNING

ELECTRICAL SHOCK, FIRE, OR EXPLOSION HAZARD.

Before performing any maintenance, power to unit must be off at the unit disconnect switch.

### IMPORTANT

Use a clean, dry cloth to wipe the wireless remote control. Never use a damp or wet cloth to clean the wireless remote control.

Use a clean, dry cloth to wipe the indoor unit. If necessary, dampened cloth may be used.

Do not use a chemically treated dust cloth on either the indoor unit or wireless remote control.

Do not use benzene, paint thinner, polishing powder or similar products to clean the indoor unit or control. These substances may cause the plastic surface to crack or become damaged.

#### Return Air Filters

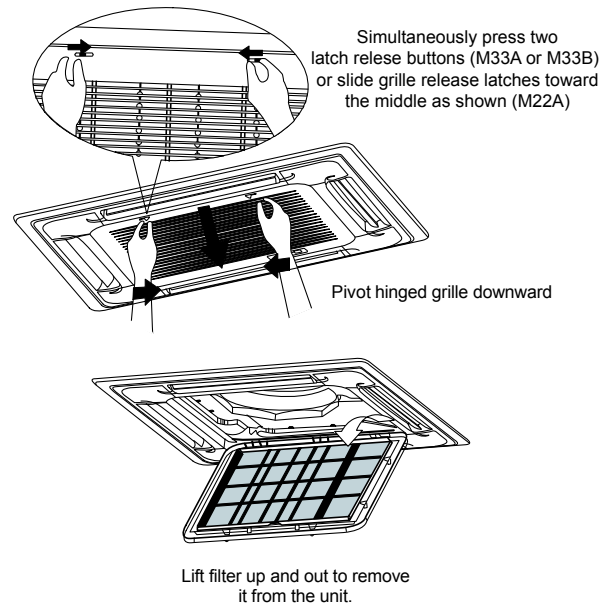
Blocked or dirty return air filters affect system operation and efficiency. Air filters should be checked monthly in order to ensure proper air flow to the indoor unit. It may be necessary to check the filter more frequently if the unit is installed in an area with a large amount of dust.

The filter may be removed and cleaned, or it should be replaced with a filter of like kind and size if it is impossible to clean the filter. See "Figure 1. Parts Arrangement" on page 2 to locate the filter in your indoor unit.

Filters are accessed through the return air grille as shown in the illustration which follows.

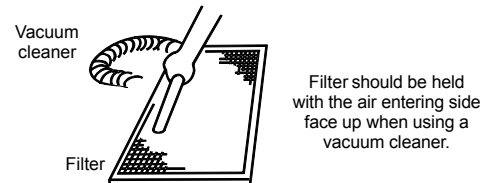
#### Typical Filter Removal

M22A, M33A or M33B Ceiling-Mounted Cassettes



#### Filter Cleaning

The filter may be cleaned using either a vacuum cleaner or with clean water.



The filter should be held with the air entering side face down when using clean water to wash the filter.

Filter should be set aside to air dry after cleaning. **Do not place filter in direct sunlight or use any type of heat to dry the filter.**

**NOTE** - If filter is extremely dirty, it may be necessary to use a soft brush and a mild detergent for cleaning. Filter must be thoroughly rinsed and dried.

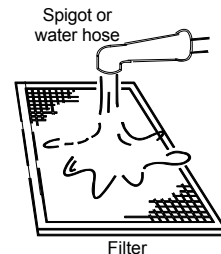
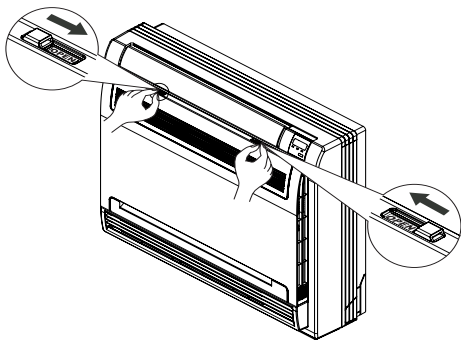


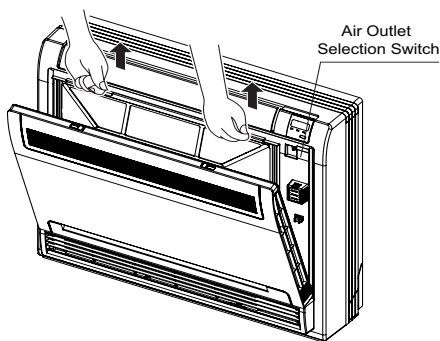
Figure 6. M22A and M33A/B Typical Filter Removal and Cleaning

1. Open the front panel.



2. Remove the air filter.

Press the claws on the right and left sides of the air filter down slightly, then pull upward.



**Figure 7. MFMA Typical Filter Removal**

### Preparing Unit for Prolonged Idle Periods

The unit must be prepared before lengthy periods of inactivity:

- Set the controller so the indoor unit operates in the fan only mode for 8 to 12 hours.
- Thoroughly clean and replace return air filters.
- Use a clean, dry cloth to wipe cabinets.
- Turn the unit OFF at the wired controller or wireless remote control; then, disconnect power to the unit.
- Remove batteries from the wireless remote control.

### Returning the Unit to Operation after Prolonged Idle Periods

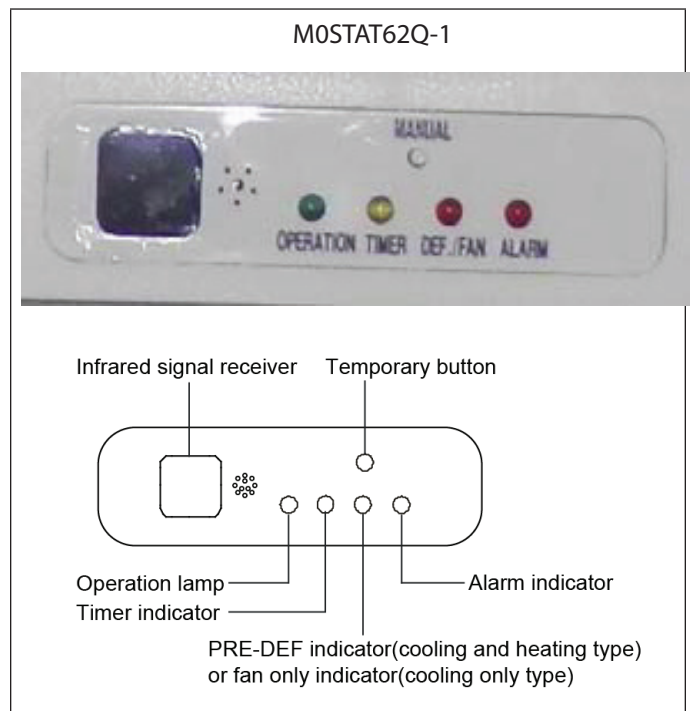
If the unit has been inactive for an extended period of time, it must be prepared for operation:

- Properly clean and replace return air filters.

- Use a clean, dry cloth to wipe unit front panels.
- Insert batteries into the wireless remote control.
- If power was disconnected, reconnect power to the unit for at least 12 hours before returning the unit to operation.
- 

### Console LEDs Display

- DEF/ Fan light comes on during defrost or when the fan is in manual mode or the indoor coil is warming up and is in anti-cold mode.
- Operation lamp is on any time the unit is on
- Alarm light is on if there is an issue. Call your installing dealer / Contractor to resolve issue.



**Figure 8. Console LED Display**

## Troubleshooting

### IMPORTANT

If any of the following conditions exist, immediately turn the system (indoor and outdoor units) off at the unit disconnect switch and call a licensed professional HVAC technician (or equivalent) for repairs:

The system does not receive a signal from the wireless remote control or wired controller.

The wireless remote control or wired controller indicate a system malfunction.

Water is leaking into the room from the indoor unit.

The circuit breaker trips or the fuse blows frequently.

Water or some other liquid has been spilled on or splashed into the indoor unit.

### NORMAL OPERATION

If none of the above conditions exist, check the following items before calling for repairs. This can save you both time and money. The following are signs of normal system operation.

#### System does not operate on command

The indoor fan does not start immediately after the ON/OFF button on the wireless remote control is pressed.

- On an initial call for cooling, the operation/run light is lit to signal normal operation. There will be a delay after a cooling demand is introduced before unit operation begins. This delay protects the unit compressor and is normal.
- When a heating demand is initiated, the operation light is lit to signal normal operation. The PRE-DEF indicator may be lit as well. The indoor unit fan will not operate until the indoor coil reaches a pre-set temperature. This prevents the delivery of cold air into the space and is normal.

#### Indoor fan is on; compressor is off

In certain normal operating modes, the indoor fan is on when the compressor is not operating.

- The system turns the compressor off and leaves the indoor fan on when the indoor coil falls to a preset temperature. This is normal operation and will prevent the indoor coil from freezing.
- When the indoor fan is set for continuous operation, the fan continues to run when the temperature setting is reached and the compressor is de-energized.

#### White mist comes out of the indoor unit

- **During cooling operation**, if the indoor relative humidity is very high and the indoor unit discharge air louvers are very dirty, the indoor coil may freeze and a white mist (frozen vapor) may appear to come from the indoor unit. **In this case, though the unit is not in need of repair, it does need to be cleaned by a licensed professional HVAC technician (or equivalent).**
- **During heating operation when the operation mode switches from defrost to heating**, moisture generat-

ed by the defrost process becomes steam and may be seen as it is blown out of the indoor unit.

#### Sounds can be heard near the indoor unit

During certain parts of the heating or cooling process, low swishing or groaning sounds may be heard near the unit as the system pressures equalize. This is a normal occurrence.

The table below lists possible causes and solutions to some of the most common problems. Please review this information before calling for service.



Table 1. Troubleshooting		
Symptom	Possible Cause	Possible Solution
Unit does not start.	<ul style="list-style-type: none"> <li>Power failure</li> <li>Power to unit is OFF or disconnected</li> <li>Circuit breaker may be tripped or fuse may be blown</li> <li>Wireless remote control batteries may have lost their charge or unit controller may have malfunctioned</li> </ul>	<ul style="list-style-type: none"> <li>Wait for power to be restored</li> <li>Turn on or reconnect power to the unit</li> <li>Reset circuit breaker or replace fuse</li> <li>Replace AAA size batteries in wireless remote control. Check controller for proper function</li> </ul>
Indoor fan is operating; however, air is not cool.	<ul style="list-style-type: none"> <li>Temperature not properly set at control</li> <li>Compressor may be kept off by delay</li> </ul>	<ul style="list-style-type: none"> <li>Check temperature setting at control</li> <li>Wait for delay to expire</li> </ul>
Unit cycles on and off frequently.	<ul style="list-style-type: none"> <li>Refrigerant charge is incorrect</li> <li>Air in refrigerant circuit</li> <li>Compressor malfunction</li> <li>Improper voltage</li> <li>System refrigerant circuit is blocked</li> </ul>	<ul style="list-style-type: none"> <li>Check for refrigerant leaks and properly charge system</li> <li>Evacuate and properly charge system</li> <li>Check compressor and replace, if necessary</li> <li>Check with utility company to provide proper voltage</li> <li>Clear blockage</li> </ul>
Unit not cooling properly.	<ul style="list-style-type: none"> <li>Indoor and/or outdoor coil are dirty</li> <li>Air filter is dirty</li> <li>Air flow around indoor and/or outdoor unit is obstructed</li> <li>Doors and/or windows are open</li> <li>Direct sunlight is affecting indoor temperature</li> <li>Heat source inside is placing a large burden on the system</li> <li>Suction pressure is low due to possible refrigerant leak</li> </ul>	<ul style="list-style-type: none"> <li>Clean indoor and/or outdoor coil</li> <li>Clean or replace air filter</li> <li>Remove obstructions</li> <li>Close doors and windows</li> <li>Use curtains or blinds to block direct sunlight.</li> <li>Reduce burden of heat source</li> <li>Check for refrigerant leaks and properly charge system</li> </ul>
Unit not heating properly.	<ul style="list-style-type: none"> <li>Doors and/or windows are open</li> <li>Suction pressure is low due to possible refrigerant leak</li> </ul>	<ul style="list-style-type: none"> <li>Close doors and windows</li> <li>Check for refrigerant leaks and properly charge system</li> </ul>
Fan speed cannot be changed.	Check the mode listed on the unit display. Fan speed cannot be changed in the AUTO or DRY mode	Fan speed cannot be changed in AUTO or DRY mode. Change mode to COOL, FAN ONLY or HEAT.
Wireless remote control signal is not being transmitted, even when ON/OFF button is pressed.	Batteries may have lost their charge	Replace AAA size batteries (2)
The TEMP adjustment indicator is not available.	Check the mode listed on the unit display. Temperature cannot be adjusted in the FAN ONLY mode	Change the mode to COOL, HEAT or DRY
Operation indicator disappears from the display after a period of time.	Check to see if display reads TIMER OFF	Timed operation is terminated at the end of the TIMER period
TIMER ON disappears from the display after a period of time.	Check to see if display reads TIMER OFF	Timed operation is terminated when time period has expired.
No tones being sounded by indoor unit, even when ON/OFF button is pressed.	<ul style="list-style-type: none"> <li>Infra-red receiver must be able to see signal from wireless remote control</li> <li>Batteries may have lost their charge</li> </ul>	<ul style="list-style-type: none"> <li>Aim wireless remote control infra-red transmitter directly at receiver</li> <li>Replace AAA size batteries (2)</li> </ul>

## Error Codes

Indoor units are equipped with either a small panel with four LEDs that flash to indicate system errors or a digital display that provides an error code. Refer to the appropriate table below to view the error codes. If the unit has a digital display, the error code will replace the temperature setting displayed on the front cover of the indoor unit. If more than one error has occurred, the codes will alternate so that all codes are shown. Make note of the code (E1, EE, etc.), then reset the display by pressing the ON/OFF button on the wireless remote controller. Press the ON/OFF button a second time to reapply power to system. If code is still displayed, disconnect and restore power at the unit disconnect switch or circuit breaker. If the problem was temporary, the code will not reappear. If the error code reappears after power has been broken and restored at the disconnect switch or circuit breaker, call a licensed professional HVAC service technician.

**Table 2. MWMA, MWMB and 3WMB Troubleshooting Codes**

Code	Description
E0	Indoor unit EEPROM error
E1	Communication error between indoor unit and outdoor unit
E3	Indoor fan speed error
E4	Indoor return air temperature sensor error
E5	Indoor coil temperature sensor error
EC	Low refrigerant
EE	High water level alarm
F0	Outdoor current overload sensed
F1	Outdoor ambient temperature sensor error
F2	Outdoor coil temperature sensor error
F3	Compressor discharge temperature sensor error
F4	Outdoor unit EEPROM error
F5	Outdoor unit fan speed error
P0	Inverter module IPM error
P1	High or low voltage protection
P3	Outdoor unit low temperature lockout
P4	Compressor drive error
--	Mode conflict
P6	Compressor high-pressure or low-pressure switch open
SC	Indoor unit is running a self clean operations. See wireless remote control user guide for sequence of operations.

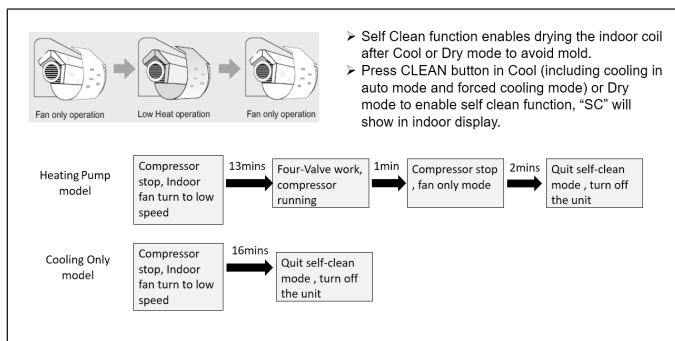
**Table 3. MCFA, MCFB, MFMA, MMDA, MMDB, M22A M33A and M33B Troubleshooting Codes**

Display	Description
E0	Indoor unit EEPROM error
E1	Communication error between indoor and outdoor units (E2 for outdoor code)
E3	Indoor fan speed error
E4	Indoor return air temperature sensor error
E5	Indoor coil temperature sensor error
EC	Low refrigerant
EE	High water level alarm (for ducted units only)
F0	Outdoor current overload sensed Note: (outdoor unit display --) two dashes
F1	Outdoor ambient temperature sensor error (T4 malfunction) outdoor unit display E4
F2	Outdoor coil temperature sensor error (T3) Malfunction outdoor unit display E4
F3	Compressor discharge temperature sensor error (T5) Malfunction outdoor unit display E4
F4	Outdoor unit EEPROM error - outdoor display E0
F5	Outdoor unit fan speed error - outdoor Error display E8
P0	Inverter module IPM error - outdoor display P6
P1	High or low voltage protection - outdoor display E5
P3	Outdoor unit low temperature lockout - outdoor unit display LP
P4	Compressor drive error
P6	Mode conflict
P7	Compressor high- or low-pressure switch open - outdoor unit display P2
SC	Indoor unit is running a self clean operations.

## Self Clean Feature

For units that use the provided wireless remote control, there is a button labeled "self clean". Press to activate self cleaning mode. In cooling or dry mode only, the indoor unit will temporarily change operation to allow condensate on the indoor unit coil to evaporate, and then will turn off. During this operation, code **SC** will display on the indoor unit.

The sequence of operation for the self-clean function is illustrated below.



**Figure 9. Self Clean**