## 38GXM / 40GXM Multi-Split High-Wall Duct Free Split System 38GXM – Size 18k, 24k, and 30k 40GXM – Size 9k, 12k, and 18k



# **Installation Instructions**

NOTE: Read the entire instruction manual before starting the installation.



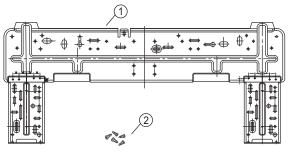
### TABLE OF CONTENTS

PAGE

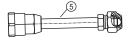
PARTS LIST 2
SAFETY CONSIDERATIONS 3
SYSTEM REQUIREMENTS 3
DIMENSIONS 4
CLEARANCES 5
INSTALLATION GUIDE 6
INDOOR UNIT INSTALLATION 6
OUTDOOR UNIT INSTALLATION
SYSTEM VACUUM AND CHARGE 9
START-UP 10
TROUBLESHOOTING 11 - 13

#### PARTS LIST

Part No.	Part Name	Qty
1	Mounting Plate	1
2	Mounting Screws	5
3	Remote Control	1
4	Remote Control Holder	1
5	Conversion Joint	Varies. See CJ Table







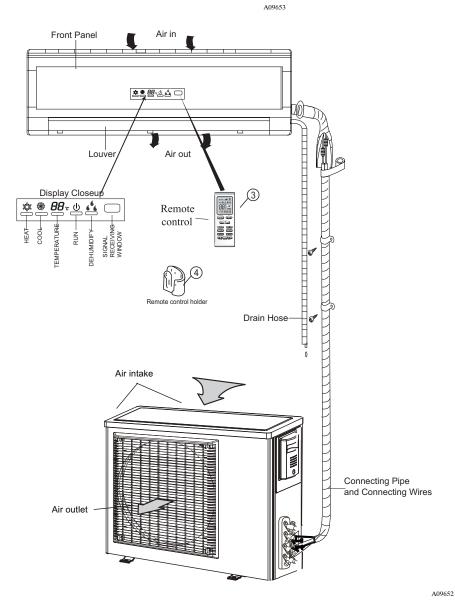


Fig. 1 - 38GXC(M) / 40GXC(M) 018, 024 & 030 Parts List

### SAFETY CONSIDERATIONS

Installing, starting up, and servicing air-conditioning equipment can be hazardous due to system pressures, electrical components, and equipment location (roofs, elevated structures, etc.).

Only trained, qualified installers and service mechanics should install, start-up, and service this equipment.

Untrained personnel can perform basic maintenance functions such as cleaning coils. All other operations should be performed by trained service personnel.

When working on the equipment, observe precautions in the literature and on tags, stickers, and labels attached to the equipment.

Follow all safety codes. Wear safety glasses and work gloves. Keep quenching cloth and fire extinguisher nearby when brazing. Use care in handling, rigging, and setting bulky equipment.

Read these instructions thoroughly and follow all warnings or cautions included in literature and attached to the unit. Consult local building codes and current editions of the National Electrical Code (NEC) NFPA 70. In Canada, refer to current editions of the Canadian electrical code CSA 22.1.

Recognize safety information. This is the safety-alert symbol  $\Delta$ . When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury.Understand these signal words: DANGER, WARNING, and CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies hazards which **could** result in personal injury or death. CAUTION is used to identify unsafe practices which **may** result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

## WARNING

#### ELECTRICAL SHOCK HAZARD

Ż

Â

Failure to follow this warning could result in personal injury or death.

Before installing, modifying, or servicing system, main electrical disconnect switch must be in the OFF position. There may be more than 1 disconnect switch. Lock out and tag switch with a suitable warning label.

## CAUTION

#### EQUIPMENT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

Do not bury more than 36 in. (914 mm) of refrigerant pipe in the ground. If any section of pipe is buried, there must be a 6 in. (152 mm) vertical rise to the valve connections on the outdoor units. If more than the recommended length is buried, refrigerant may migrate to the cooler buried section during extended periods of system shutdown. This causes refrigerant slugging and could possibly damage the compressor at start-up.

### GENERAL

These instructions cover the installation, start-up and servicing of the 38GXM outdoor unit connected to up to four 40GXM indoor high wall units. For approved combinations, please refer to the Product Data.

### SYSTEM REQUIREMENTS

Allow sufficient space for airflow and servicing unit. See Fig. 2 and 3 for minimum required clearances.

#### **Piping**

## IMPORTANT: Both refrigerant lines must be insulated separately.

- Minimum refrigerant line length between the indoor and outdoor units is 10 ft. (3 m).
- The following maximum lengths are allowed:

REFRIGERANT LINE LENGTHS ft (m)				
Unit Size	18 K	24 K	30 K	
Total Piping	124 (38)	124 (38)	230 (70)	
Max Pipe Length to Any One FCU	82 (25)	82 (25)	82 (25)	
Max Elevation (ID over OD)	49 (15)			
Max Elevation (OD over ID)	33 (10)			

• The following are the piping sizes.

UNIT SERVICE VALVE SIZE*				
Unit Size Mix Phase Vapor				
18 & 30 K 1/4" 3/8"				
24 K 1/4" 1/2"				

	* Unit can have 2 or 4 service valves with the same pipe sizes				
ſ	CONVERSION JOINTS				
ſ	Oty and				

Model	Type	When Used
38GXM2183	1 x (3/8 to 1/2)	Connecting Size 12 K FCU
38GXM2243	2 x (1/2 to 3/8)	Connecting Size 9 K FCU
38GXM4303	3 x (3/8 to 1/2)	Connecting Size 12 or 18 K FCU

#### **Refrigerant Charge**

REFRIGERANT CHARGE			
Unit Size Charge Weight Ib. (kg)			
18 K	3.5 (1.6)		
24 K	5.5 (2.5)		
30 K	7.3 (3.3)		

- Above charge is for piping runs up to 50 ft. (15 m) per system for sizes 18 and 24 and 100 ft (30 m) per system for size 30.
- For piping runs greater than those listed above, add 0.23 oz for size 18, 0.17 oz for size 24, and 0.54 oz for size 30 of refrigerant per foot of extra piping up to the allowable length.
- Electronic expansion valves in the outdoor unit are used as metering devices.

#### **Connecting (Power and Control Cable)**

• The main power is supplied to the outdoor unit. The field supplied connecting cable from the outdoor unit to indoor unit consists of four wires and provides the power for the indoor unit as well as the communication signal and ground between the outdoor and indoor unit.

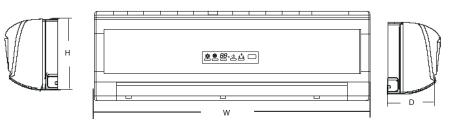
Two wires are high voltage AC power, one is high voltage controls and one is a ground wire.

• Consult local building codes, NEC (National Electrical Code) or CEC (Canadian Electrical Code) for special requirements.

UNIT SIZE	POWER SOURCE	MIN. CKT AMP MAX FUSE/CB AMP
18k	208/230-1-60	14/20
24k	208/230-1-60	20/30
30k	208/230-1-60	24/40

• **Connecting Cable:** Voltage drop on the connecting cable should be kept to a minimum. **Do not use thermostat wire**. Use minimum 14AWG 4 conductor cable (solid or stranded).

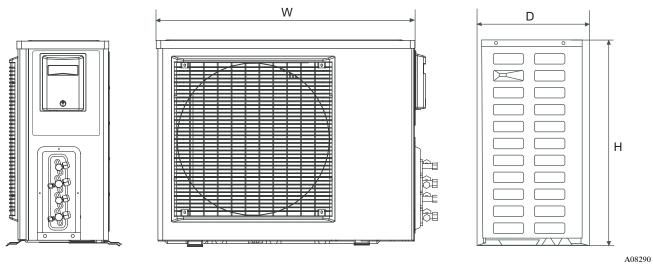
## **DIMENSIONS - INDOOR**



A08289

Unit Size	W In. (mm)	H In. (mm)	D In. (mm)	Net Operating Weight Lbs. (Kg)
9k	30.3 (770)	9.8 (249)	7.84 (199)	18.7 (8.5)
12k	32.7 (831)	11.2 (284)	8.9 (226)	24.2 (11)
18k	40.2 (1021)	12.2 (310)	9.0 (229)	28.6 (13)

## **DIMENSIONS - OUTDOOR**



Unit Size	W In. (mm)	D In. (mm)	H In. (mm)	Net Operating Weight Lbs. (Kg)
18k	33.3 (846)	11.8 (300)	27.0 (685)	114.4 (52)
24k	37.4 (950)	16.5 (420)	33.1 (840)	150.0 (68)
30k	37.4 (950)	16.5 (420)	33.1 (840)	165.0 (75)

## **CLEARANCES - INDOOR**

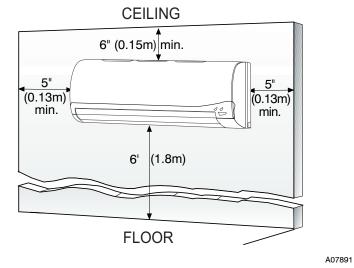
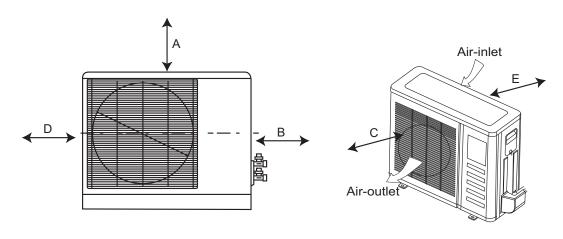


Fig. 2 – Indoor unit clearance

### **CLEARANCES - OUTDOOR**



A	0	7	8	9	4
	A	A0	A07	A078	A0789

UNIT	12k in. (mm)
А	20 (508)
В	20 (508)
C	24 (610)
D	12 (305)
E	24 (610)

Fig. 3 – Outdoor Unit Clearance

#### **INSTALLATION GUIDE**

Up to four fan coil units can be connected to one outdoor unit. Refer to the Product Data for approved combinations.

#### Ideal installation locations include:

#### Each Indoor Unit

- A location where there are no obstacles near inlet and outlet area.
- A location which can bear the weight of indoor unit.
- Do not install indoor units near a direct source of heat such as direct sunlight or a heating appliance.
- A location which provides appropriate clearances as outlined in Fig. 2.

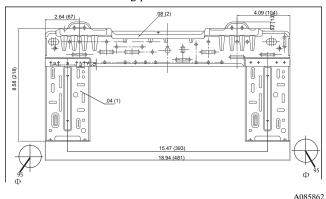
#### Outdoor Unit

- A location which is convenient to installation and not exposed to strong wind. If unit is exposed to strong winds it is recommended that a wind baffle be used. Contact your Carrier Representative for drawings. (See Fig. 10)
- A location which can bear the weight of outdoor unit and where the outdoor unit can be mounted in a level position.
- A location which provides appropriate clearances as outlined in Fig. 3.
- Do not install the indoor or outdoor units in a location with special environmental conditions. For those applications, contact your Carrier Representative.

## INDOOR UNIT INSTALLATION INSTALL MOUNTING PLATE

For each fan coil:

- 1. Carefully remove the mounting plate, which is attached to the back of the indoor unit.
- 2. The mounting plate should be located horizontally and level on the wall.
- If the wall is block, brick, concrete or similar material, drill .2" (5 mm) diameter holes and insert anchors for the appropriate mounting screws.
- 4. Attach the mounting plate to the wall.





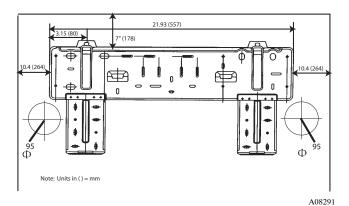


Fig. 5 – 12k Mounting Plate Spacing

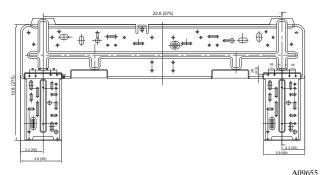


Fig. 6 – 18k Mounting Plate Spacing

#### FOR EACH FAN COIL, DRILL HOLE IN WALL FOR INTERCONNECTING PIPING, DRAIN AND WIRING

#### **Refrigerant Line Routing**

The refrigerant lines may be routed in any of the four directions shown in Fig. 7 (a) and (b).

For maximum serviceability, it is recommended to have refrigerant line flare connections and the drain connection on the outside of the wall that the fan coil is mounted on.

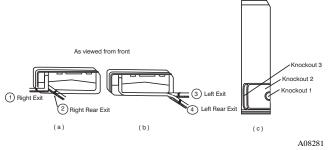


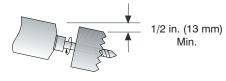
Fig. 7 - Refrigerant Line Routing

#### If piping is going through the back:

 Determine pipe hole position using the mounting plate as a template. Drill pipe hole diameter per chart below. The outside pipe hole is 1/2-in. (13 mm) min. lower than inside pipe hole, so it slants slightly downward (see Fig. 8). If piping is going to exit from the left rear, it is recommen-

ded to field-fabricate piping extensions to get the flare connections to the outside of the wall.

OUTDOOR



INDOOR

A07371

Fig. 8 –	Drill Holes
----------	-------------

Unit Size	Hole Diameter in. (mm)
9k, 12k, and 18k	3.75 (95)

#### If piping is going through the right or left side:

- 1. Use a small saw blade to carefully remove the corresponding plastic covering on side panel and drill the appropriate size hole where the pipe is going through the wall. See Fig. 7(c).
- 2. Remove knockout 1 if you are running only the wiring. Remove knockout 1 and 2 or knockout 1, 2 and 3 if you are running both piping and wiring through the side of the unit.

#### OUTDOOR UNIT INSTALLATION

- 1. Use a rigid base to support unit in a level position.
- 2. Locate outdoor unit and connect piping and wiring.

# CAUTION

#### EQUIPMENT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

Excessive torque can break flare nut depending on installation conditions.

#### **<u>Piping Connections to Outdoor Unit</u>**

**IMPORTANT:** Use refrigeration grade tubing ONLY. No other type of tubing may be used. Use of other types of tubing will void manufacturer's warranty.

Make sure there is enough piping to cover the required length between the outdoor and indoor unit.

#### **Piping Guide:**

- Do not open service valves or remove protective caps from tubing ends until all the connections are made.
- · Bend tubing with bending tools to avoid kinks and flat spots.
- Keep the tubing free of dirt, sand, moisture, and other contaminants to avoid damaging the refrigerant system.
- Avoid sags in the suction line to prevent the formation of oil traps. Insulate each tube with minimum 3/8-in. (10 mm) wall thermal pipe insulation. Inserting the tubing into the insulation before making the connections will save time and improve installation quality.
  - The unit is equipped with multiple pairs of service valves. Each pair is clearly marked (color and letter) to identify the indoor unit circuits. In the outdoor unit wiring area, each indoor unit interconnecting terminal block is marked (letter) the same as the corresponding pair of service valves. The indoor units must be piped and wired in matched sets (A to A; B to B, etc)
  - 2. It is not required to use all of the available fan coil connections if the application does not require them at the current time. The system can be expanded at any time.
  - 3. Conversion joints are supplied with the outdoor unit. They are required for certain fan coil combinations. Refer to chart on page 3 of this document for proper combination.
  - 4. Cut tubing with tubing cutter.
  - 5. Install correct size flare nut onto tubing and make flare connection.
  - 6. Apply a small amount of refrigerant oil to the flare connection on the tubing.
  - 7. Properly align tubing in with service valve (conversion joint).
  - 8. Tighten flare nut and finish installation using two wrenches as shown in Fig. 9.

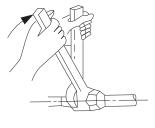


Fig. 9 – Tighten Flare Nut

A07354

# INSTALL ALL POWER AND INTERCONNECTING WIRING TO OUTDOOR UNIT

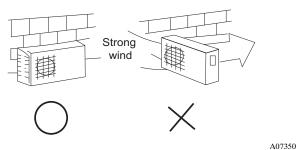


Fig. 10 – High Wind Installation

#### **Outdoor Unit Wiring Connections**

- 1. Mount outdoor power disconnect.
- Run power wiring from main box to disconnect per NEC and local codes.
- 3. Remove field wiring cover (if available) from unit by loosening screws.
- 4. Remove knockouts..

Ą

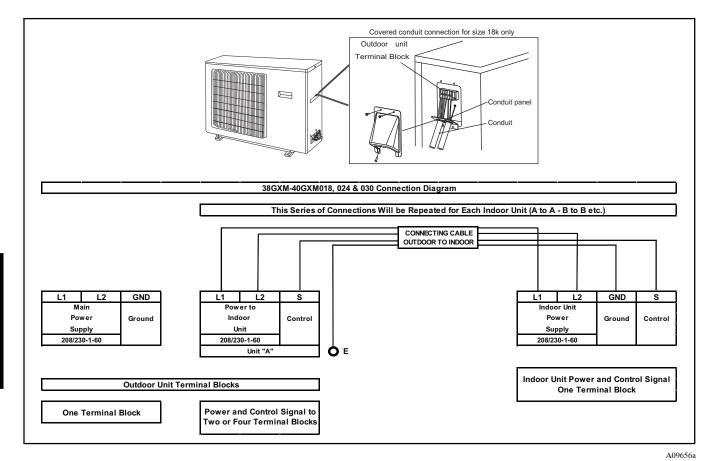
- 5. Connect conduit to conduit panel. (See Fig. 11)
- 6. Properly connect both power supply and control lines to terminal block per the connection diagram.
- 7. Ground unit in accordance with NEC and local electrical codes.
- 8. Use lock nuts to secure conduit.
- 9. Reinstall field wiring cover (size 18k only).

# CAUTION

#### EQUIPMENT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

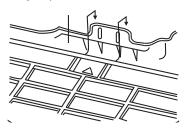
- Be sure to comply with local codes while running wire from indoor unit to outdoor unit.
- Every wire must be connected firmly. Loose wiring may cause terminal to overheat or result in unit malfunction. A fire hazard may also exist. Therefore, be sure all wiring is tightly connected.
- No wire should be allowed to touch refrigerant tubing, compressor or any moving parts.
- Disconnecting means must be provided and shall be located within sight and readily accessible from the air conditioner.
- Connecting cable with conduit shall be routed through hole in the conduit panel.





## INSTALL ALL POWER, INTERCONNECTING WIRING, AND PIPING TO INDOOR UNIT.

- 1. Run interconnecting piping and wiring from outdoor unit to each indoor unit (in matched pairs).
- 2. Pass interconnecting cable through hole in wall (outside to inside).
- 3. Lift indoor unit into position and route piping and drain through hole in wall (inside to outside). Fit interconnecting wiring into back side of indoor unit.
- 4. Hang indoor unit on upper hooks of wall mounting plate (as shown in Fig. 12)



A08283

- Fig. 12 Hanging Indoor Unit
- 5. Open front cover of indoor unit and remove field wiring terminal block cover (see Fig. 13)

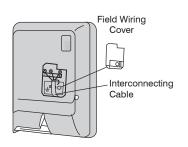


Fig. 13 – Field Wiring Cover

A08279

- 6. Pull interconnecting wire up from back of indoor unit and position in close to the terminal block on indoor unit.
- 7. Push bottom of indoor unit onto mounting plate to complete wall mount.
- 8. Connect wiring from outdoor unit per connection diagram (see Fig. 11).

## NOTE: Polarity of power wires must match original connection on outdoor unit.

- Replace field wiring cover and close front cover of indoor unit.
- 10. Connect refrigerant piping and drain line outside of indoor unit. Refer to Fig. 8 for proper installation of flare connections. Complete pipe insulation at flare connection then fasten piping and wiring to the wall as required. Completely seal the hole in the wall.
- 11. Repeat steps 1 through 10 for each indoor unit.

# 

#### UNIT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

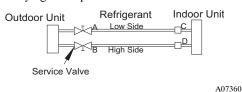
Never use the system compressor as a vacuum pump.

Refrigerant tubes and indoor coil should be evacuated using the recommended deep vacuum method of 500 microns. The alternate triple evacuation method may be used if the procedure outlined below is followed. Always break a vacuum with dry nitrogen.

#### SYSTEM VACUUM AND CHARGE

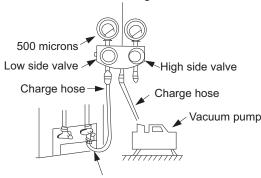
#### Using Vacuum Pump

- 1. Completely tighten flare nuts A, B, C, D, (for all fan coils). Connect gage charge hose to one circuit or all circuits (if using a multiple connection manifold) at the low side service valve charge port(s). (See Fig. 14.)
- 2. Connect charge hose to vacuum pump.
- 3. Fully open the low side of manifold gage. (See Fig. 15)
- 4. Start vacuum pump
- 5. Evacuate using either deep vacuum or triple evacuation method.
- 6. After evacuation is complete, fully close the low side of manifold gage and stop operation of vacuum pump.
- 7. If multiple connection manifold is not used, repeat the procedure (1 through 6) until all indoor units and piping are completely vacuumed.
- 8. The factory charge contained in the outdoor unit is suitable for max pipe length as shown on page 3 of this document. If additional charge is required, it should be added to the system as liquid at this time.
- 9. Disconnect charge hose from charge connection of the low side service valve.
- 10. Fully open all service valves.
- 11. Securely tighten caps of service valves.



#### Fig. 14 – Service Valve

Manifold Gage



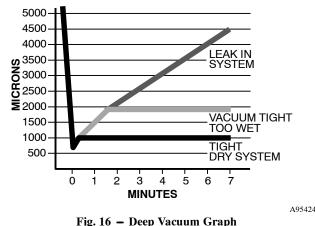
Low side valve



A07361

#### Deep Vacuum Method

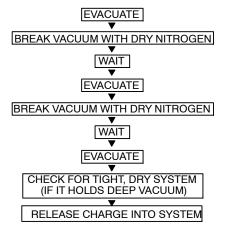
The deep vacuum method requires a vacuum pump capable of pulling a vacuum of 500 microns and a vacuum gage capable of accurately measuring this vacuum depth. The deep vacuum method is the most positive way of assuring a system is free of air and liquid water. (See Fig. 16)



#### Triple Evacuation Method

The triple evacuation method should only be used when vacuum pump is only capable of pumping down to 28 in. of mercury vacuum and system does not contain any liquid water. Refer to Fig. 17 and proceed as follows:

- 1. Pump system down to 28 in. of mercury and allow pump to continue operating for an additional 15 minutes.
- 2. Close service valves and shut off vacuum pump.
- 3. Connect a nitrogen cylinder and regulator to system and open until system pressure is 2 psig.
- 4. Close service valve and allow system to stand for 1 hr. During this time, dry nitrogen will be able to diffuse throughout the system absorbing moisture.
- 5. Repeat this procedure as indicated in Fig. 17. System will then be free of any contaminants and water vapor.



A95425

#### Fig. 17 - Triple Evacuation Method

#### Final Tubing Check

**IMPORTANT**: Check to be certain factory tubing on both indoor and outdoor unit has not shifted during shipment. Ensure tubes are not rubbing against each other or any sheet metal. Pay close attention to feeder tubes, making sure wire ties on feeder tubes are secure and tight.

#### **Test Operation**

Perform test operation after completing gas leak and electrical safety check.

1. Push the "ON/OFF" button on Remote Control to begin testing.

**NOTE:** A protection feature prevents the air conditioner from being activated for approximately 3 minutes.

2. Push MODE button, select COOLING, HEATING, FAN mode to check if all functions work correctly.

#### SYSTEM CHECKS

- 1. Conceal the tubing where possible.
- 2. Make sure that the drain tube slopes downward along its entire length.
- 3. Ensure all tubing and connections are properly insulated.
- 4. Fasten tubes to the outside wall, when possible.
- 5. Seal the hole through which the cables and tubing pass.

#### INDOOR UNIT

- 1. Do all Remote Control buttons function properly?
- 2. Do the display panel lights work properly?
- 3. Does the air deflection louver function properly?
- 4. Does the drain work?

#### **OUTDOOR UNIT**

1. Are there unusual noises or vibrations during operation?

## Explain Following Items To Customer With The Aid Of The Owner's Manual:

- 1. How to turn air conditioner on and off; selecting COOLING, HEATING and other operating modes; setting a desired temperature; setting the timer to automatically start and stop air conditioner operation; and all other features of the Remote Control and display panel.
- 2. How to remove and clean the air filter.
- 3. How to set air deflection louver.
- 4. Explain care and maintenance.
- 5. Present the Owner's Manual and installation instructions to customer.

## TROUBLESHOOTING

This unit has onboard diagnostics. Error codes are displayed on the outdoor unit microprocessor board with colored LED lights. The table below lists the error codes.

Equipment FaultLED- D101 (Green)High Compressor Discharge Pressure Protection2High Leaving Outdoor Coil Air Temperature Protection3Communication Error4IPM Module Protection5Compressor Over Current Protection6High Outdoor Coil Temperature Protection7Indoor Coil High Temperature Protection9Failed Sensor10Compressor Overload Protection11Low Compressor Discharge Pressure Protection12Compressor Motor Phase Imbalance Protection13EEPROM Error14Power Factor Correction Board Capacitor Charge Failure15Communication Error With Unit A10Unit A Entering Indoor Coil Temperature Thermistor10Unit A Entering Indoor Coil Temperature Thermistor10Unit A Leaving Indoor Coil Temperature Thermistor10Unit A Indoor Coil Temperature Thermistor10Unit B Indoor Coil Temperature Thermistor10Unit B Indoor Coil Temperature Thermistor10Unit B Indoor Coil Temperature Thermistor11Unit B Indoor Coil Temperature Thermistor11Unit B Indoor Coil Temperature Thermistor11Unit B Indoor Coil Temperature Thermistor11Uni	LED- D102 (Red)	LED- D103 (Yellow)	LED- D104 (Yellow)	LED- D105 (Red)	LED- D106 (Green)	LED- D108 (Green)	LED1 (Red)	LED2 (Green)
High Leaving Outdoor Coil Air Temperature       3         Protection       4         IPM Module Protection       5         Compressor Over Current Protection       6         High Outdoor Coil Temperature Protection       7         Indoor Coil High Temperature Protection       8         Indoor Coil Freeze Protection       9         Failed Sensor       10         Compressor Overload Protection       11         Low Compressor Discharge Pressure Protection       12         Compressor Motor Phase Imbalance Protection       13         (Compressor Motor Phase Imbalance Protection       13         (Compressor Stops)       13         EEPROM Error       14         Power Factor Correction Board Capacitor Charge       15         Failure       15         Communication Error With Unit A       11         Unit A Mid Indoor Coil Temperature Thermistor       14         Power Factor Correction Board Capacitor Charge       15         Failure       15         Communication Error With Unit A       14         Unit A Leaving Indoor Coil Temperature Thermistor       14         Unit A Indoor Coil Freeze Protection       16         Unit A Indoor Coil Temperature Protection       17	2 3 4 5 6 7							
Protection3Communication Error4IPM Module Protection5Compressor Over Current Protection6High Outdoor Coil Temperature Protection7Indoor Coil High Temperature Protection8Indoor Coil Freeze Protection9Failed Sensor10Compressor Overload Protection11Low Compressor Discharge Pressure Protection12Compressor Motor Phase Imbalance Protection13(Compressor Stops)13EEPROM Error14Power Factor Correction Board Capacitor Charge Failure15Communication Error With Unit A14Unit A Mid Indoor Coil Temperature Thermistor10Unit A Leaving Indoor Coil Temperature Thermistor10Unit A Indoor Air Temperature Thermistor10Unit A Indoor Coil Freeze Protection10Unit A Indoor Coil Temperature Thermistor10Unit B Leaving Indoor Coil Temperature Thermistor10Unit B Leaving Indoor Coil Temperature Thermistor10Unit B Indoor Coil Temperature Thermistor11Unit B Indoor Coil	2 3 4 5 6 7							
IPM Module Protection       5         Compressor Over Current Protection       6         High Outdoor Coil Temperature Protection       7         Indoor Coil High Temperature Protection       8         Indoor Coil Freeze Protection       9         Failed Sensor       10         Compressor Overload Protection       11         Low Compressor Discharge Pressure Protection       12         Compressor Motor Phase Imbalance Protection       13         (Compressor Stops)       13         EEPROM Error       14         Power Factor Correction Board Capacitor Charge Failure       15         Communication Error With Unit A       15         Unit A Mid Indoor Coil Temperature Thermistor       10         Unit A Leaving Indoor Coil Temperature Thermistor       10         Unit A Indoor Air Temperature Thermistor       10         Unit A Indoor Coil Freeze Protection       10         Unit A Indoor Coil Temperature Thermistor       10         Unit B Leaving Indoor Coil Temperature Thermistor       10         Unit B Indoor Coil Temperature Thermistor       10 <td>2 3 4 5 6 7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	2 3 4 5 6 7							
Compressor Over Current Protection6High Outdoor Coil Temperature Protection7Indoor Coil High Temperature Protection8Indoor Coil Freeze Protection9Failed Sensor10Compressor Overload Protection11Low Compressor Discharge Pressure Protection12Compressor Motor Phase Imbalance Protection13EEPROM Error14Power Factor Correction Board Capacitor Charge Failure15Communication Error With Unit A15Unit A Mid Indoor Coil Temperature Thermistor10Unit A Leaving Indoor Coil Temperature Thermistor10Unit A Indoor Air Temperature Thermistor10Unit A Indoor Coil Temperature Protection10Unit A Indoor Coil Temperature Thermistor10Unit B Entering Indoor Coil Temperature Thermistor11Unit B Indoor Coil Temperature Thermistor11Unit B Indoor Coil Temperature Thermistor11Unit B Entering Indoor Coil Temperature Thermistor11Unit B Indoor Coil Freeze Protection11Unit B Indoor Coil Freeze Protection11Unit B Indoor Coil Freeze Protection11 <t< td=""><td>2 3 4 5 6 7</br></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	2 3 4 							
High Outdoor Coil Temperature Protection       7         Indoor Coil High Temperature Protection       8         Indoor Coil Freeze Protection       9         Failed Sensor       10         Compressor Overload Protection       11         Low Compressor Discharge Pressure Protection       12         Compressor Motor Phase Imbalance Protection       13         (Compressor Stops)       13         EEPROM Error       14         Power Factor Correction Board Capacitor Charge Failure       15         Communication Error With Unit A       11         Unit A Mid Indoor Coil Temperature Thermistor       14         Unit A Leaving Indoor Coil Temperature Thermistor       10         Unit A Indoor Air Temperature Thermistor       11         Unit A Indoor Coil Temperature Protection       11         Unit A Indoor Coil Temperature Protection       11         Unit A Indoor Coil Temperature Protection       11         Unit A Indoor Coil Temperature Thermistor       11         Unit B Budi Indoor Coil Temperature Thermistor       11         Unit B Indoor Coil Freeze Protec	2 3 4 5 6 7							
Indoor Coil High Temperature Protection       8         Indoor Coil Freeze Protection       9         Failed Sensor       10         Compressor Overload Protection       11         Low Compressor Discharge Pressure Protection       12         Compressor Motor Phase Imbalance Protection       13         (Compressor Stops)       13         EEPROM Error       14         Power Factor Correction Board Capacitor Charge Failure       15         Communication Error With Unit A       10         Unit A Leaving Indoor Coil Temperature Thermistor       10         Unit A Entering Indoor Coil Temperature Thermistor       10         Unit A Indoor Coil Temperature Thermistor       10         Unit A Indoor Coil Temperature Protection       10         Unit A Indoor Coil Freeze Protection       10         Unit A Indoor Coil Temperature Thermistor       10         Unit A Indoor Coil Temperature Thermistor       11         Unit B Leaving Indoor Coil Temperature Thermistor       11         Unit B Mid Indoor Coil Temperature Thermistor       11         Unit B Leaving Indoor Coil Temperature Thermistor       11         Unit B Leaving Indoor Coil Temperature Thermistor       11         Unit B Indoor Coil Temperature Thermistor       11         Unit B	2 3 4 5 6 7							
Indoor Coil Freeze Protection       9         Failed Sensor       10         Compressor Overload Protection       11         Low Compressor Discharge Pressure Protection       12         Compressor Motor Phase Imbalance Protection       13         EEPROM Error       14         Power Factor Correction Board Capacitor Charge Failure       15         Communication Error With Unit A       10         Unit A Mid Indoor Coil Temperature Thermistor       10         Unit A Leaving Indoor Coil Temperature Thermistor       11         Unit A Indoor Ari Temperature Thermistor       11         Unit A Indoor Coil Temperature Protection       10         Unit A Indoor Coil Temperature Protection       10         Unit A Indoor Coil Temperature Protection       10         Unit A Indoor Coil Temperature Thermistor       10         Unit A Indoor Coil Temperature Protection       10         Unit A Indoor Coil Temperature Protection       10         Unit B Leaving Indoor Coil Temperature Thermistor       10         Unit B Leaving Indoor Coil Temperature Thermistor       10         Unit B Leaving Indoor Coil Temperature Thermistor       10         Unit B Indoor Coil Temperature Thermistor       10         Unit B Indoor Coil Temperature Thermistor       10	2 3 4 5 6 7							
Failed Sensor       10         Compressor Overload Protection       11         Low Compressor Discharge Pressure Protection       12         Compressor Motor Phase Imbalance Protection       13         (Compressor Stops)       13         EEPROM Error       14         Power Factor Correction Board Capacitor Charge Failure       15         Communication Error With Unit A       10         Unit A Mid Indoor Coil Temperature Thermistor       10         Unit A Leaving Indoor Coil Temperature Thermistor       10         Unit A Indoor Air Temperature Thermistor       10         Unit A Indoor Coil Temperature Protection       10         Unit A Indoor Coil Temperature Protection       10         Unit A Indoor Coil Temperature Protection       10         Unit A Indoor Coil Temperature Thermistor       10         Unit A Indoor Coil Temperature Thermistor       10         Unit A Indoor Coil Temperature Thermistor       10         Unit B Leaving Indoor Coil Temperature Thermistor       10         Unit B Leaving Indoor Coil Temperature Thermistor       10         Unit B Leaving Indoor Coil Temperature Thermistor       10         Unit B Indoor Coil Temperature Thermistor       10         Unit B Indoor Coil Freeze Protection       10	2 3 4 5 6 7							
Compressor Overload Protection11Low Compressor Discharge Pressure Protection12Compressor Motor Phase Imbalance Protection13EEPROM Error14Power Factor Correction Board Capacitor Charge Failure15Communication Error With Unit A15Unit A Mid Indoor Coil Temperature Thermistor11Unit A Entering Indoor Coil Temperature Thermistor11Unit A Indoor Air Temperature Thermistor11Unit A Heating/Cooling Mode Conflict with Unit B11Unit A Indoor Coil Temperature Thermistor11Unit B Leaving Indoor Coil Temperature Thermistor11Unit B Beatring Indoor Coil Temperature Thermistor11Unit B Entering Indoor Coil Temperature Thermistor11Unit B Indoor Coil Freeze Protection11Unit B Indoor Coil Freeze Protection11Unit B Indoor Coil Freeze Protection11Unit B Indoor Coil Temperature Thermistor11Unit B Indoor Coil Temperature Thermistor11Unit B Indoor Coil High Temperature Protection11Unit B Indoor Coil High Temperature Protection11<	2 3 4 5 6 7							
Low Compressor Discharge Pressure Protection         12           Compressor Motor Phase Imbalance Protection (Compressor Stops)         13           EEPROM Error         14           Power Factor Correction Board Capacitor Charge Failure         15           Communication Error With Unit A         15           Unit A Mid Indoor Coil Temperature Thermistor         14           Unit A Leaving Indoor Coil Temperature Thermistor         14           Unit A Leaving Indoor Coil Temperature Thermistor         16           Unit A Indoor Air Temperature Thermistor         17           Unit A Heating/Cooling Mode Conflict with Unit B         17           Unit A Indoor Coil Temperature Protection         18           Unit A Indoor Coil Temperature Thermistor         18           Unit A Indoor Coil Temperature Protection         18           Unit B Indoor Coil Temperature Thermistor         19           Unit B Indoor Coil Temperature Thermistor         10           Unit B Indoor Coil Temperature Thermistor         10           Unit B Indoor Coil Temperature Thermistor         10           Unit B Indoor Coil Freeze Protection	2 3 4 5 6 7							
Compressor Motor Phase Imbalance Protection (Compressor Stops)       13         EEPROM Error       14         Power Factor Correction Board Capacitor Charge Failure       15         Communication Error With Unit A       15         Unit A Mid Indoor Coil Temperature Thermistor       10         Unit A Leaving Indoor Coil Temperature Thermistor       10         Unit A Indoor Air Temperature Thermistor       10         Unit A Heating/Cooling Mode Conflict with Unit B       10         Unit A Indoor Coil Temperature Protection       10         Unit A Indoor Coil Temperature Thermistor       10         Unit A Indoor Coil Temperature Protection       10         Unit A Indoor Coil Temperature Thermistor       10         Unit B Indoor Coil Temperature Thermistor       11         Unit B Bid Indoor Coil Temperature Thermistor       11         Unit B Entering Indoor Coil Temperature Thermistor       11         Unit B Indoor Coil Temperature Thermistor       11         Unit B Indoor Coil Freeze Protection       11         Unit B Indoor Coil High Temperature Prot	2 3 4 5 6 7							
Compressor Motor Phase Imbalance Protection (Compressor Stops)       13         EEPROM Error       14         Power Factor Correction Board Capacitor Charge Failure       15         Communication Error With Unit A       15         Unit A Mid Indoor Coil Temperature Thermistor       10         Unit A Leaving Indoor Coil Temperature Thermistor       10         Unit A Indoor Air Temperature Thermistor       10         Unit A Heating/Cooling Mode Conflict with Unit B       10         Unit A Indoor Coil Temperature Protection       10         Unit A Indoor Coil Temperature Thermistor       10         Unit A Indoor Coil Temperature Protection       10         Unit A Indoor Coil Temperature Thermistor       10         Unit B Indoor Coil Temperature Thermistor       11         Unit B Bid Indoor Coil Temperature Thermistor       11         Unit B Entering Indoor Coil Temperature Thermistor       11         Unit B Indoor Coil Temperature Thermistor       11         Unit B Indoor Coil Freeze Protection       11         Unit B Indoor Coil High Temperature Prot	2 3 4 5 6 7							
EEPROM Error14Power Factor Correction Board Capacitor Charge Failure15Communication Error With Unit A15Unit A Mid Indoor Coil Temperature Thermistor10Unit A Leaving Indoor Coil Temperature Thermistor14Unit A Entering Indoor Coil Temperature Thermistor16Unit A Indoor Air Temperature Thermistor17Unit A Heating/Cooling Mode Conflict with Unit B18Unit A Indoor Coil Freeze Protection17Unit A Indoor Coil Temperature Thermistor17Unit A Indoor Coil Temperature Protection17Communication Error With Unit B18Unit B Mid Indoor Coil Temperature Thermistor17Unit B Leaving Indoor Coil Temperature Thermistor17Unit B Leaving Indoor Coil Temperature Thermistor17Unit B Indoor Coil Temperature Thermistor18Unit B Indoor Coil Temperature Thermistor17Unit B Indoor Coil Temperature Thermistor18Unit B Indoor Coil Freeze Protection18Unit B Indoor Coil Freeze Protection19Unit B Indoor Coil Freeze Protection10Unit B Indoor Coil High Temperature Protection10Defrost Mode10Outdoor Air Temperature Thermistor10Outdoor Air Temperature Thermistor10Dutdoor Air Temperature Thermistor10Unit B Leaving Outdoor Coil Air Temperature Thermistor10Outdoor Coil Air Temperature Thermistor10Unit B Leaving Outdoor Coil Air Temperature Thermistor10Outdoor Coil Air Temperatu	2 3 4 5 6 7							
Power Factor Correction Board Capacitor Charge Failure15Communication Error With Unit AUnit A Mid Indoor Coil Temperature ThermistorUnit A Leaving Indoor Coil Temperature ThermistorUnit A Entering Indoor Coil Temperature ThermistorUnit A Indoor Air Temperature ThermistorUnit A Indoor Coil Temperature ThermistorUnit A Indoor Air Temperature ThermistorUnit A Indoor Coil Freeze ProtectionUnit A Indoor Coil Temperature ProtectionCommunication Error With Unit BUnit B Mid Indoor Coil Temperature ThermistorUnit B Leaving Indoor Coil Temperature ThermistorUnit B Leaving Indoor Coil Temperature ThermistorUnit B Indoor Coil Freeze ProtectionUnit B Indoor Coil Freeze ProtectionDefrost ModeOutdoor Air Temperature ThermistorOutdoor Air Temperature ThermistorLeaving Outdoor Coil Air Temperature ThermistorLeaving Outdoor Coil Air Temperature Thermistor	2 3 4 5 6 7							
Failure       15         Communication Error With Unit A       115         Unit A Mid Indoor Coil Temperature Thermistor       115         Unit A Leaving Indoor Coil Temperature Thermistor       115         Unit A Entering Indoor Coil Temperature Thermistor       115         Unit A Indoor Air Temperature Thermistor       115         Unit A Indoor Coil Temperature Thermistor       115         Unit A Indoor Coil Temperature Thermistor       115         Unit A Indoor Coil Freeze Protection       115         Unit A Indoor Coil High Temperature Protection       115         Unit A Indoor Coil Temperature Thermistor       115         Unit B Leaving Indoor Coil Temperature Thermistor       115         Unit B Leaving Indoor Coil Temperature Thermistor       115         Unit B Indoor Air Temperature Thermistor       116         Unit B Indoor Coil Freeze Protection       117         Unit B Indoor Coil Temperature Thermistor       118         Unit B Indoor Coil Freeze Protection       118	2 3 4 5 6 7							
Unit A Mid Indoor Coil Temperature Thermistor         Unit A Leaving Indoor Coil Temperature Thermistor         Unit A Entering Indoor Coil Temperature Thermistor         Unit A Indoor Air Temperature Thermistor         Unit A Heating/Cooling Mode Conflict with Unit B         Unit A Indoor Coil Freeze Protection         Unit A Indoor Coil Freeze Protection         Unit B Mid Indoor Coil Temperature Thermistor         Unit B B Mid Indoor Coil Temperature Thermistor         Unit B Entering Indoor Coil Temperature Thermistor         Unit B Endoor Coil Temperature Thermistor         Unit B Leaving Indoor Coil Temperature Thermistor         Unit B Entering Indoor Coil Temperature Thermistor         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil Temperature Thermistor         Unit B Indoor Coil Temperature Thermistor         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil High Temperature Protection         Defrost Mode         Oil Return Mode         Outdoor Air Temperature Thermistor         Outdoor Coil Temperature Thermistor         Leaving Outdoor Coil Air Temperature Thermistor	2 3 4 5 6 7							
Unit A Leaving Indoor Coil Temperature Thermistor         Unit A Entering Indoor Coil Temperature Thermistor         Unit A Indoor Air Temperature Thermistor         Unit A Indoor Air Temperature Thermistor         Unit A Indoor Coil Temperature Thermistor         Unit A Indoor Coil Freeze Protection         Unit A Indoor Coil Freeze Protection         Unit A Indoor Coil Temperature Protection         Communication Error With Unit B         Unit B Mid Indoor Coil Temperature Thermistor         Unit B Leaving Indoor Coil Temperature Thermistor         Unit B Entering Indoor Coil Temperature Thermistor         Unit B Indoor Air Temperature Thermistor         Unit B Indoor Coil Freeze Protection         Defrost Mode         Oil Return Mode         Outdoor Air Temperature Thermistor         Outdoor Coil Temperature Thermistor         Leaving Outdoor Coil Air Temperature Thermistor	3 4 5 6 7							
Unit A Entering Indoor Coil Temperature Thermistor         Unit A Indoor Air Temperature Thermistor         Unit A Indoor Air Temperature Thermistor         Unit A Indoor Coil Freeze Protection         Unit A Indoor Coil Freeze Protection         Unit A Indoor Coil Freeze Protection         Unit A Indoor Coil Temperature Protection         Communication Error With Unit B         Unit B Mid Indoor Coil Temperature Thermistor         Unit B Leaving Indoor Coil Temperature Thermistor         Unit B Entering Indoor Coil Temperature Thermistor         Unit B Indoor Air Temperature Thermistor         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil High Temperature Protection         Defrost Mode         Oil Return Mode         Outdoor Air Temperature Thermistor         Outdoor Coil Temperature Thermistor         Outdoor Coil Temperature Thermistor         Leaving Outdoor Coil Air Temperature Thermistor	4 5 6 7							
Unit A Indoor Air Temperature Thermistor         Unit A Heating/Cooling Mode Conflict with Unit B         Unit A Indoor Coil Freeze Protection         Unit A Indoor Coil Freeze Protection         Communication Error With Unit B         Unit B Mid Indoor Coil Temperature Protection         Unit B Leaving Indoor Coil Temperature Thermistor         Unit B Leaving Indoor Coil Temperature Thermistor         Unit B Leaving Indoor Coil Temperature Thermistor         Unit B Indoor Air Temperature Thermistor         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil High Temperature Protection         Defrost Mode         Oil Return Mode         Outdoor Air Temperature Thermistor         Unit B Indoor Coil High Temperature Protection         Defrost Mode         Outdoor Air Temperature Thermistor         Dutdoor Air Temperature Thermistor         Dutdoor Coil Temperature Thermistor         Dutdoor Coil Temperature Thermistor         Dutdoor Coil Air Temperature Thermistor	5 6 7							
Unit A Heating/Cooling Mode Conflict with Unit B         Unit A Indoor Coil Freeze Protection         Unit A Indoor Coil Freeze Protection         Communication Error With Unit B         Unit B Mid Indoor Coil Temperature Protection         Unit B Leaving Indoor Coil Temperature Thermistor         Unit B Leaving Indoor Coil Temperature Thermistor         Unit B Leaving Indoor Coil Temperature Thermistor         Unit B Leaving Mode Conflict with Unit B         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil High Temperature Protection         Defrost Mode         Ouldoor Air Temperature Thermistor         Unit B Leating/Cooling Mode Conflict with Unit B         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil High Temperature Protection         Defrost Mode         Ouldoor Air Temperature Thermistor         Outdoor Air Temperature Thermistor         Outdoor Coil Temperature Thermistor         Leaving Outdoor Coil Air Temperature Thermistor	6 7							
Unit A Indoor Coil Freeze Protection         Unit A Indoor Coil High Temperature Protection         Communication Error With Unit B         Unit B Mid Indoor Coil Temperature Thermistor         Unit B Leaving Indoor Coil Temperature Thermistor         Unit B Entering Indoor Coil Temperature Thermistor         Unit B Indoor Air Temperature Thermistor         Unit B Heating/Cooling Mode Conflict with Unit B         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil High Temperature Protection         Defrost Mode         Ouldoor Air Temperature Thermistor         Unit B catire Coll High Temperature Protection         Defrost Mode         Outdoor Air Temperature Thermistor         Leaving Outdoor Coil Air Temperature Thermistor	7							
Unit A Indoor Coil High Temperature Protection         Communication Error With Unit B         Unit B Mid Indoor Coil Temperature Thermistor         Unit B Leaving Indoor Coil Temperature Thermistor         Unit B Entering Indoor Coil Temperature Thermistor         Unit B Indoor Air Temperature Thermistor         Unit B Heating/Cooling Mode Conflict with Unit B         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil High Temperature Protection         Defrost Mode         Outdoor Air Temperature Thermistor         Outdoor Coil Temperature Thermistor         Leaving Outdoor Coil Air Temperature Thermistor						1		
Communication Error With Unit B         Unit B Mid Indoor Coil Temperature Thermistor         Unit B Leaving Indoor Coil Temperature Thermistor         Unit B Entering Indoor Coil Temperature Thermistor         Unit B Indoor Air Temperature Thermistor         Unit B Indoor Air Temperature Thermistor         Unit B Indoor Coil Temperature Thermistor         Unit B Indoor Coil Temperature Thermistor         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil High Temperature Protection         Defrost Mode         Oil Return Mode         Outdoor Air Temperature Thermistor         Outdoor Coil Temperature Thermistor         Leaving Outdoor Coil Air Temperature Thermistor	8	_					1	
Unit B Mid Indoor Coil Temperature Thermistor         Unit B Leaving Indoor Coil Temperature Thermistor         Unit B Entering Indoor Coil Temperature Thermistor         Unit B Indoor Air Temperature Thermistor         Unit B Indoor Air Temperature Thermistor         Unit B Indoor Coil Temperature Thermistor         Unit B Indoor Coil Temperature Thermistor         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil High Temperature Protection         Defrost Mode         Oil Return Mode         Outdoor Air Temperature Thermistor         Outdoor Coil Temperature Thermistor         Leaving Outdoor Coil Air Temperature Thermistor		-						
Unit B Leaving Indoor Coil Temperature Thermistor         Unit B Entering Indoor Coil Temperature Thermistor         Unit B Indoor Air Temperature Thermistor         Unit B Indoor Coil Temperature Thermistor         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil High Temperature Protection         Defrost Mode         Oil Return Mode         Outdoor Air Temperature Thermistor         Outdoor Coil Temperature Thermistor         Leaving Outdoor Coil Air Temperature Thermistor		1						
Unit B Entering Indoor Coil Temperature Thermistor         Unit B Indoor Air Temperature Thermistor         Unit B Indoor Coil Temperature Thermistor         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil High Temperature Protection         Defrost Mode         Oil Return Mode         Outdoor Air Temperature Thermistor         Outdoor Coil Temperature Thermistor         Leaving Outdoor Coil Air Temperature Thermistor		2						
Unit B Indoor Air Temperature Thermistor         Unit B Heating/Cooling Mode Conflict with Unit B         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil High Temperature Protection         Defrost Mode         Oil Return Mode         Outdoor Air Temperature Thermistor         Outdoor Coil Temperature Thermistor         Leaving Outdoor Coil Air Temperature Thermistor		3						
Unit B Heating/Cooling Mode Conflict with Unit B         Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil High Temperature Protection         Defrost Mode         Oil Return Mode         Outdoor Air Temperature Thermistor         Outdoor Coil Temperature Thermistor         Leaving Outdoor Coil Air Temperature Thermistor		4						
Unit B Indoor Coil Freeze Protection         Unit B Indoor Coil High Temperature Protection         Defrost Mode         Oil Return Mode         Outdoor Air Temperature Thermistor         Outdoor Coil Temperature Thermistor         Leaving Outdoor Coil Air Temperature Thermistor		5						
Unit B Indoor Coil High Temperature Protection       Defrost Mode         Oil Return Mode       Outdoor Air Temperature Thermistor         Outdoor Coil Temperature Thermistor       Deaving Outdoor Coil Air Temperature Thermistor		6						
Defrost Mode       Oil Return Mode         Oil Return Mode       Outdoor Air Temperature Thermistor         Outdoor Coil Temperature Thermistor       Outdoor Coil Air Temperature Thermistor		7						
Oil Return Mode     Outdoor Air Temperature Thermistor       Outdoor Coil Temperature Thermistor     Outdoor Coil Air Temperature Thermistor		8						
Outdoor Air Temperature Thermistor         Outdoor Coil Temperature Thermistor         Leaving Outdoor Coil Air Temperature Thermistor			9					
Outdoor Coil Temperature Thermistor           Leaving Outdoor Coil Air Temperature Thermistor				6				
Leaving Outdoor Coil Air Temperature Thermistor					1			
Leaving Outdoor Coil Air Temperature Thermistor					2			
° .					3			
Driver Board Communications Error					5			
Normal Communication Between Ind. and OD Units						1		
Compressor Speed Sensor Failure (Compressor Stops)							2	
IPM Module Protection							3	
Inverter Failure					-	-	3	
PFC Module Protection							4	
Lock-Out Mode							6	
Start-Up Failure						-	6	
•								
Low Voltage Protection							8	
High Voltage Protection			1				9 10	
IPM Module High Temperature Protection Failed Communication Between ID and OD Units							1 10	

### 38GM018-024 Diagnostic Codes

#### 38GXM030 Diagnostic Codes

	1	38GXM030 Diagnostic Codes Number of Flashes On Outdoor Unit Board LED's									
Equipment Fault	LED- D101 (Red)	LED- D102 (Yellow)	LED- D103 (Green)	LED- D104 (Red)	LED- D105 (Yellow)	LED- D106 (Green)	LED- D107 (Red)	LED- D108 (Yellow)	LED- D109 (Green)	LED1 (Red)	LED2 (Green)
Compressor Operating Normally	1	(11111)	(	()	(1111)	(	()	(	(		
High Compressor Discharge Pressure Protection	2										
High leaving Outdoor Coil Air Temperature Protection	3										
Communication Error	4										
IPM Module Protection	5										
Compressor Overcurrent Protection High Outdoor Coil Temperature Protection	6 7										
Indoor Coil High Temperature Protection	8										
Indoor Coll Freeze Protection	9										
Failed Sensor	10										
Compressor Overload Protection	11										
Low Compressor Discharge Pressure Protection	12										
Compressor Motor Phase Imbalance Protection (Compressor Stops)	13										
EEProm Error	14										
Power Factor Correction Board Capacitor Charge Failure	15										
Compressor Ramping Down Due to High Leaving Outdoor Coil Air Temperature		1									
Compressor Ramping Down Due to High Outdoor Coil Temperature		2									
Compressor Ramping Down Due to High Current		3									
Compressor Ramping Down Due to Compressor Motor Phase Imbalance		4									
Compressor Ramping Down Due to Unit A High ID Coil Temperature		5									
Compressor Ramping Down Due to Unit B High ID Coil Temperature		6									
Compressor Ramping Down Due to Unit C High ID Coil Temperature		7									
Compressor Ramping Down Due to Unit D High ID Coil Temperature		8									
Defrost Mode		9									
Max Comp. Speed Reached Due to High Leaving OD Coil Air Temperature			1								
Max Comp. Speed Reached Due to High OD Coil Temperature			2								
Max Comp. Speed Reached Due to High Current			3								
Max Comp. Speed Reached Due to Compressor Motor Phase Imbalance			4								
Max Comp. Speed Reached Due To Unit A High Indoor Coil Temperature			5								
Max Comp. Speed Reached Due To Unit B High Indoor Coil Temperature			6								
Max Comp. Speed Reached Due To Unit C High Indoor Coil Temperature			7								
Max Comp. Speed Reached Due To Unit D High Indoor Coil Temperature			8								
Oil Return Mode Outdoor Air Temperature Thermistor	+	ł	9	4							
Outdoor Air Temperature Thermistor Outdoor Coil Temperature Thermistor				1 2	-						
Leaving Outdoor Coil Air temperature Thermistor				3							
Driver Board Communications Error		1		4	1						
Communication Error With Unit A	1				1						
Unit A Mid Indoor Coil Temperature Thermistor					2						
Unit A Leaving Indoor Coil Temperature Thermistor					3						
Unit A Entering Indoor Coil Temperature Thermistor					4						
Unit A Indoor Air Temperature Thermistor					5						
Unit A Heating/Cooling Mode Conflict With Other Indoor Units					6						
Unit A Indoor Coil Freeze Protection Unit A Indoor Coil High Temperature					7						
Protection Communication Error With Unit B						1					
Unit B Mid Indoor Coil Temperature Thermistor						2					
Unit B Leaving Indoor Coil Temperature Thermistor						3					
Unit B Entering Indoor Coil Temperature Thermistor						4					

## 38GXM030 Diagnostic Codes (Continued)

	Number of Flashes On Outdoor Unit Board LED's										
Equipment Fault	LED- LED- LED- LED- LED- LED- LED- LED-									LED2	
Equipment i duit	D101 (Red)	D102 (Yellow)	D103 (Green)	D104 (Red)	D105 (Yellow)	D106 (Green)	D107 (Red)	D108 (Yellow)	D109 (Green)	(Red)	(Green)
Unit B Indoor Air Temperature Thermistor	(	()	(directily	(	()	5	(	(1011011)	(0.0001)		
Unit B Heating/Cooling Mode Conflict With						-					
Other Indoor Units						6					
Unit B Indoor Coil Freeze Protection						7					
Unit B Indoor Coil High Temperature						8					
Protection						0					
Communication Error With Unit C							1				
Unit C Mid Indoor Coil Temperature							2				
Thermistor							_				
Unit C Leaving Indoor Coil Temperature Thermistor							3				
	-										
Unit C Entering Indoor Coil Temperature Thermistor							4				
Unit C Indoor Air Temperature Thermistor							5				
Unit C Heating/Cooling Mode Conflict With											
Other Indoor Units							6				
Unit C Indoor Coil Freeze Protection							7				
Unit C Indoor Coil High Temperature											
Protection							8				
Communication Error With Unit D								1			
Unit D Mid Indoor Coil Temperature											
Thermistor								2			
Unit D Leaving Indoor Coil Temperature								•			
Thermistor								3			
Unit D Entering Indoor Coil Temperature								4			
Thermistor								4			
Unit D Indoor Air Temperature Thermistor								5			
Unit D Heating/Cooling Mode Conflict With								6			
Other Indoor Units											
Unit D Indoor Coil Freeze Protection								7			
Unit D Indoor Coil High Temperature								8			
Protection											
Correct Communication Data									1		
Normal Compressor Operation										1	
Compressor Speed Sensor Failure (Compressor Stops)										2	
IPM Module Protection										3	
Inverter Failure	+									4	
PFC Module Protection	+	-			+					4 5	
Lock-Out Mode	+				-					6	
Start-Up Failure	+									7	
Low Voltage During Start-Up	+									8	
High Voltage Protection	1	1			1			1		9	
IPM Module High Temperature Protection	1	1								10	
Low Voltage Protection										11	
IPM Module Detects Short Or Open Circuit	1									12	
Failed Communication Between ID and OD	1										_
Units											1
Normal Communication											2

Copyright 2011 CAC / BDP • 7310 W. Morris St. • Indianapolis, IN 46231

Printed in U.S.A.

Edition Date: 03/11