Installation Instructions

NOTE: Read the entire instruction manual before starting installation.

TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAFETY CONSIDERATIONS</td>
<td>1</td>
</tr>
<tr>
<td>INSTALLATION</td>
<td>2</td>
</tr>
<tr>
<td>Initial Check</td>
<td>2</td>
</tr>
<tr>
<td>Location &amp; Mounting</td>
<td>2</td>
</tr>
<tr>
<td>Refrigerant Piping</td>
<td>2</td>
</tr>
<tr>
<td>Condensate Drain</td>
<td>3</td>
</tr>
<tr>
<td>Wiring</td>
<td>3</td>
</tr>
<tr>
<td>WIRING DIAGRAMS</td>
<td>4</td>
</tr>
<tr>
<td>TROUBLESHOOTING</td>
<td>4</td>
</tr>
</tbody>
</table>

SAFETY CONSIDERATIONS

Improper installation, adjustment, alteration, service, maintenance, or use can cause explosion, fire, electrical shock, or other conditions which may cause death, personal injury or property damage. Consult a qualified installer, service agency, or your distributor or branch for information or assistance. The qualified installer or agency must use factory-authorized kits or accessories when modifying this product. Refer to individual instructions packaged with kits or accessories when installing.

Follow all safety codes. Wear safety glasses, protective clothing, and work gloves. Use quenching cloth for brazing operations. Have a fire extinguisher available. Read these instructions thoroughly and follow all warnings or cautions included in literature and attached to the unit. Consult local building codes.

Recognize safety information. This is the safety alert symbol △. When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury. Understand the 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 OPERATION HAZARD
Failure to follow this warning could result in personal injury or death.

Before installing or servicing unit, always turn off all power to unit. There may be more than one disconnect switch. Turn off accessory heater power if applicable. Lock out and tag switch with a suitable warning label.

⚠️ WARNING

EXPLOSION HAZARD
Failure to follow this warning could result in death, serious personal injury, and/or property damage.

Never use air or gases containing oxygen for leak testing or operating refrigerant compressors. Pressurized mixtures of air or gases containing oxygen can lead to an explosion.

⚠️ CAUTION

CUT HAZARD
Failure to follow this caution may result in personal injury.

Sheet metal parts may have sharp edges or burrs. Use care and wear appropriate protective clothing and gloves when handling parts.
INSTALLATION

INITIAL CHECK

1. To avoid damage, the unit should not be removed from its carton until final location is reached.
2. Inspect unit for shipping damage and file a claim with the transport agency if necessary.
3. Check the following fields of electrical work:
   a. Proper size of fuses and wire.
   b. Correct wiring connections and grounding as specified by local electrical codes.
   c. Check supply voltage, which must be within the limits shown on the nameplate.
4. Check for proper condensate flow.
5. Be sure piping insulation is adequate.
6. Confirm there is no obstruction to the air flow for indoor and outdoor units.
7. Check for sufficient clearances for servicing of the units.

LOCATION & MOUNTING

1. The units should be installed horizontally.
2. Prepare the unit mounting such that the unit is sufficiently supported.
3. When mounting the indoor unit on the ceiling, select a location that allows the air current to circulate evenly throughout the room.
Table 1 – PERMISSIBLE PIPING FOR RECOMMENDED COMBINATIONS

<table>
<thead>
<tr>
<th>BTU/HR</th>
<th>Piping Between Indoor and Outdoor Units</th>
<th>Pipe Limitation and Recommendation for Charging with R-22</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Height Difference</td>
<td>Pipe Size O.D. (Inch)</td>
</tr>
<tr>
<td></td>
<td>Height (Condenser Above Fan Coil)</td>
<td>Height (Condenser Under Fan Coil)</td>
</tr>
<tr>
<td>10,000-12,000</td>
<td>15 m</td>
<td>10 m</td>
</tr>
<tr>
<td>16,000-33,000</td>
<td>20 m</td>
<td>15 m</td>
</tr>
<tr>
<td>36,000-48,000</td>
<td>25 m</td>
<td>20 m</td>
</tr>
<tr>
<td>56,000-62,000</td>
<td>25 m</td>
<td>20 m</td>
</tr>
</tbody>
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NOTE: REFER TO THE CARRIER LONG LINE LENGTH APPLICATION GUIDELINE FOR PIPE LIMITATION AND RECOMMENDATIONS FOR CHARGING R-410A.

CONDENSATE DRAIN
1. The unit should be reasonably levelled and pitched toward the drain to ensure proper drainage.
2. Piping Material
   a. Soft vinyl chloride pipe, 22 mm nominal pipe size
   b. Hard vinyl chloride (PVC) coupling, 22 mm nominal pipe size
3. Connect the soft / hard vinyl chloride pipe to the coupling. (See Fig. 6.)
4. The indoor unit uses gravity to help draining; therefore, the piping outside of the unit should slope downward.

WIRING
1. Power must be supplied from a dedicated power outlet.
2. Wiring should be made in accordance with applicable local codes.
3. Ground both indoor and outdoor units.
4. Check for correct terminal correspondence between indoor unit and outdoor unit.
Fig. 7 - Without Control Connection Diagram

Fig. 8 - Wired and Wireless Remote Control Connection Diagram

TROUBLESHOOTING
Check the following before contacting the service personnel.
If the problem with the unit persists after troubleshooting, please contact your local dealer.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
</tr>
</thead>
</table>
| No operation | • Damage in electrical wire  
• Switch is off  
• Breaker is off  
• Power Supply |
| Air Conditioner runs, but air is not cool | • Pre-set temperature  
• Sunlight is directly entering the room  
• Doors and windows are open  
• Obstructions to the air-discharge louver  
• Blower wheel for debris  
• Air filter is dirty |
| Vapor or mist coming out of the unit while it is running | • The hot air in the room mixes with the cool air, which causes vapor |

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