

40VM Series Indoor Fan Coil VRF (Variable Refrigerant Flow) System Outside Air Kit for 4-Way Cassette

Installation and Operating Instructions

Part Number 40VMF003---

CONTENTS

SAFETY CONSIDERATIONS	1
INSTALLATION	3
• INSTALLATION PREPARATION	3
• INSTALLATION PROCESS	3
• INSTALL THE PANEL	5

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. The qualified installer or agency must use factory-authorized kits or accessories when modifying this product.

Follow all safety codes. Wear safety glasses, protective clothing, and work gloves. Use quenching cloth for brazing operations. Have 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 and the current editions of the National Electrical Code (NEC) ANSI/NFPA (American National Standards Institute/National Fire Protection Association) 70. In Canada, refer to the current editions of the Canadian Electrical Code CSA (Canadian Standards Association) C22.1.

Understand the signal words — DANGER, WARNING, and CAUTION. DANGER identifies the most serious hazards which will result in severe personal injury or death. WARNING signifies hazards that could result in personal injury or death. CAUTION is used to identify unsafe practices, which would result in minor personal injury or product and property damage.

Recognize safety information. This is the safety-alert symbol (⚠). When this symbol is displayed on the unit and in instructions or manuals, be alert to the potential for personal injury. Installing, starting up, and servicing equipment can be hazardous due to system pressure, electrical components, and equipment location.


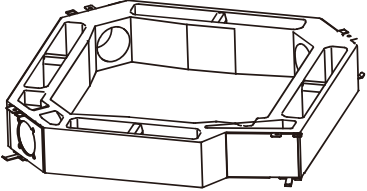
⚠ WARNING

Electrical shock can cause personal injury and death. Shut off all power to this equipment during installation. There may be more than one disconnect switch. Tag all disconnect locations to alert others not to restore power until work is completed.

⚠ WARNING

When installing the equipment in a small space, provide adequate measures to avoid refrigerant concentration exceeding safety limits due to refrigerant leak. In case of refrigerant leak during installation, ventilate the space immediately. Failure to follow this procedure may lead to personal injury.

Table 2 —Components Shipped with Unit

Name	Image	Quantity
Screw		12
4-Way Cassette Outside Air Kit		1

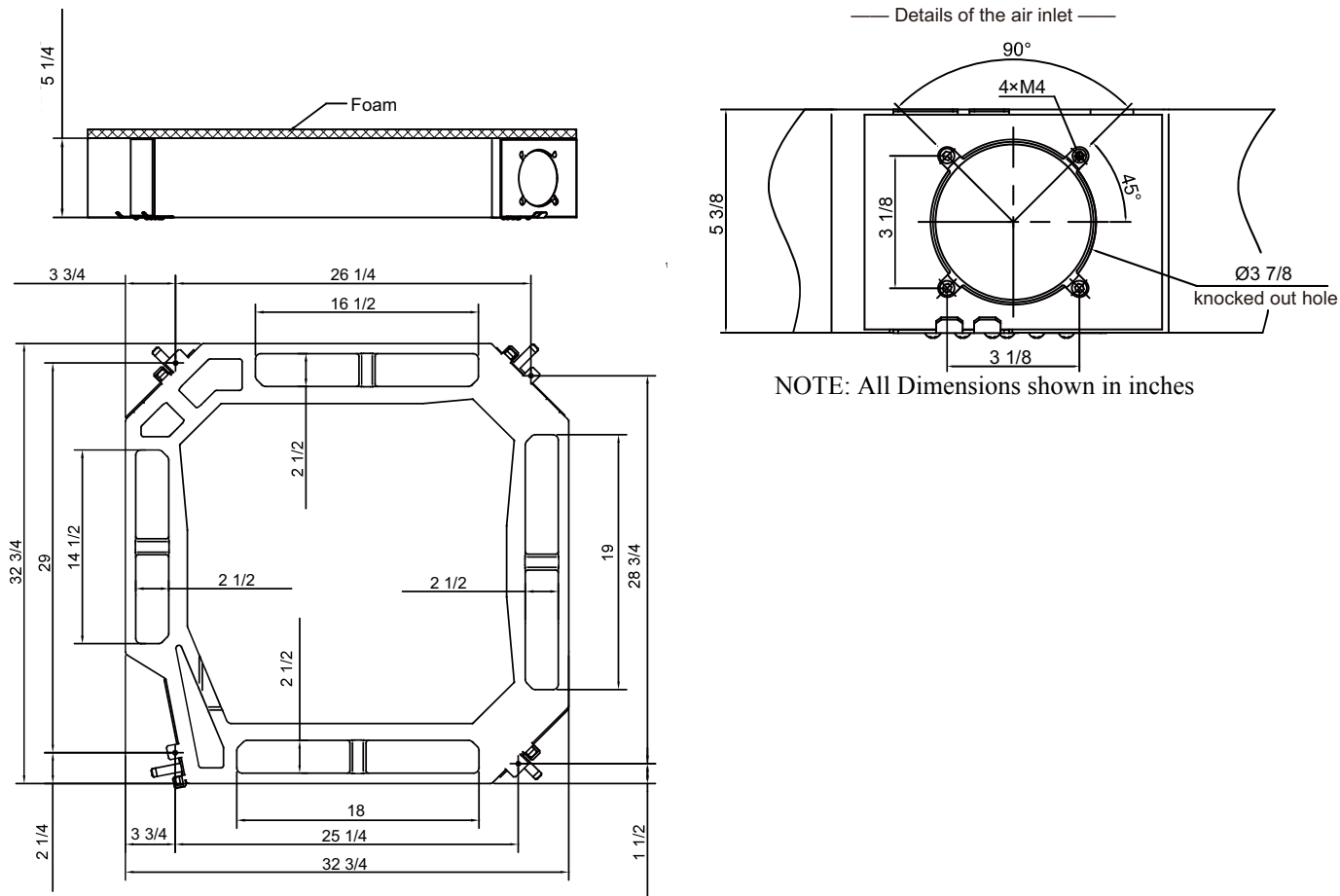
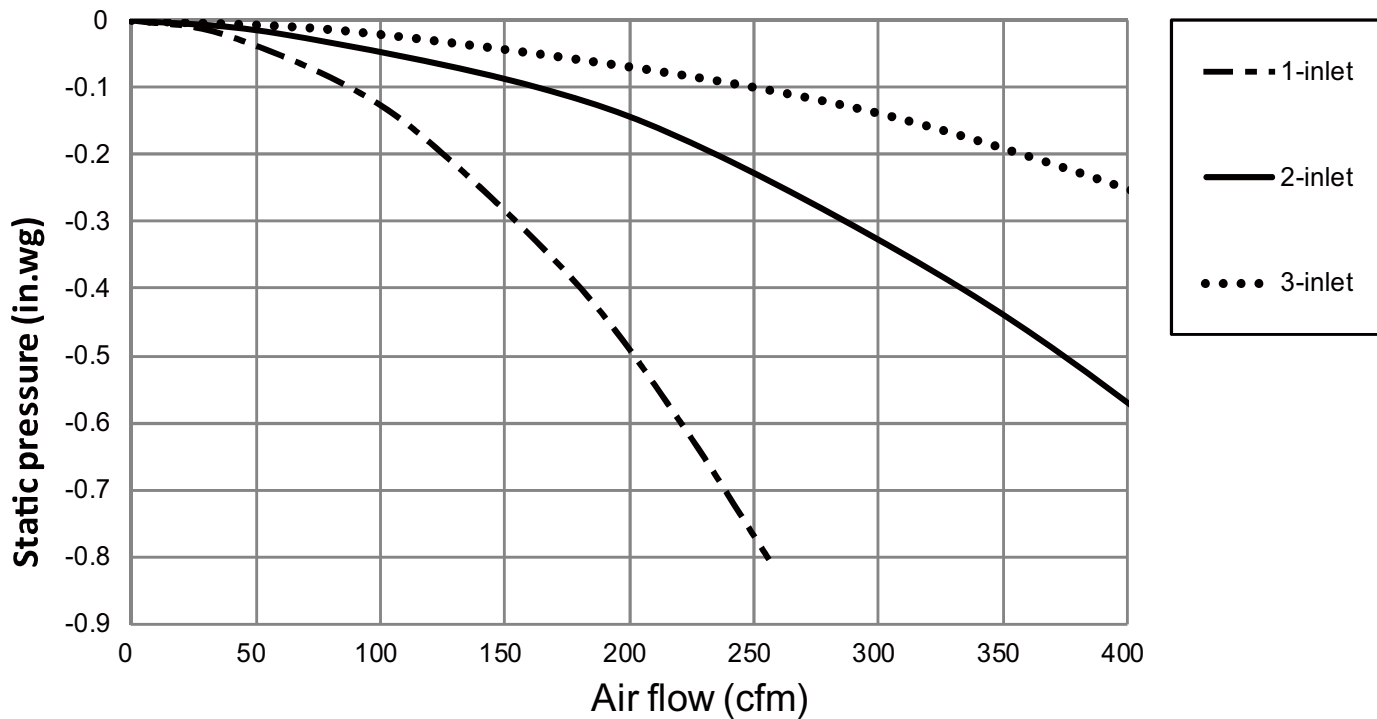


Fig. 2 —Dimensions



Use of multiple outside air opening is recommended for a given value of outside air CFM to reduce noise and lower static pressure.

Fig. 3 —Static Pressure Curve

INSTALLATION

Installation Preparation —

1. There are three fresh air openings on the different side of the kit as show on the Fig 4.
2. The inlet is a knockout. Select one, two, or three sides in advance and knockout the openings.
3. The installation of the kit and the unit is shown in Fig. 5.
4. Follow the indoor unit installation manual to mount the indoor unit. Connect piping and wiring.

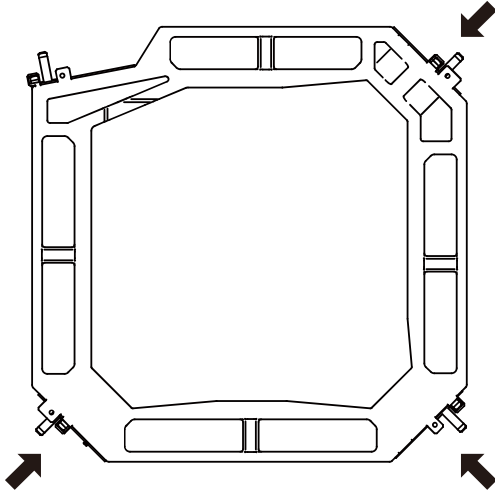
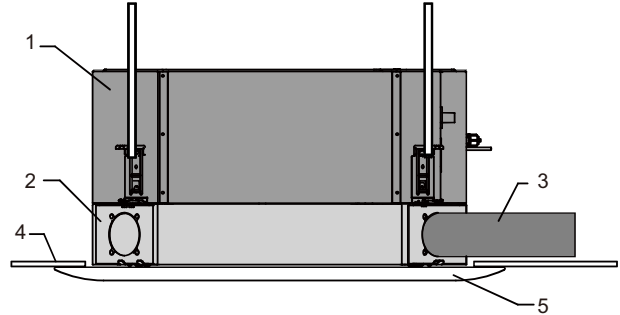


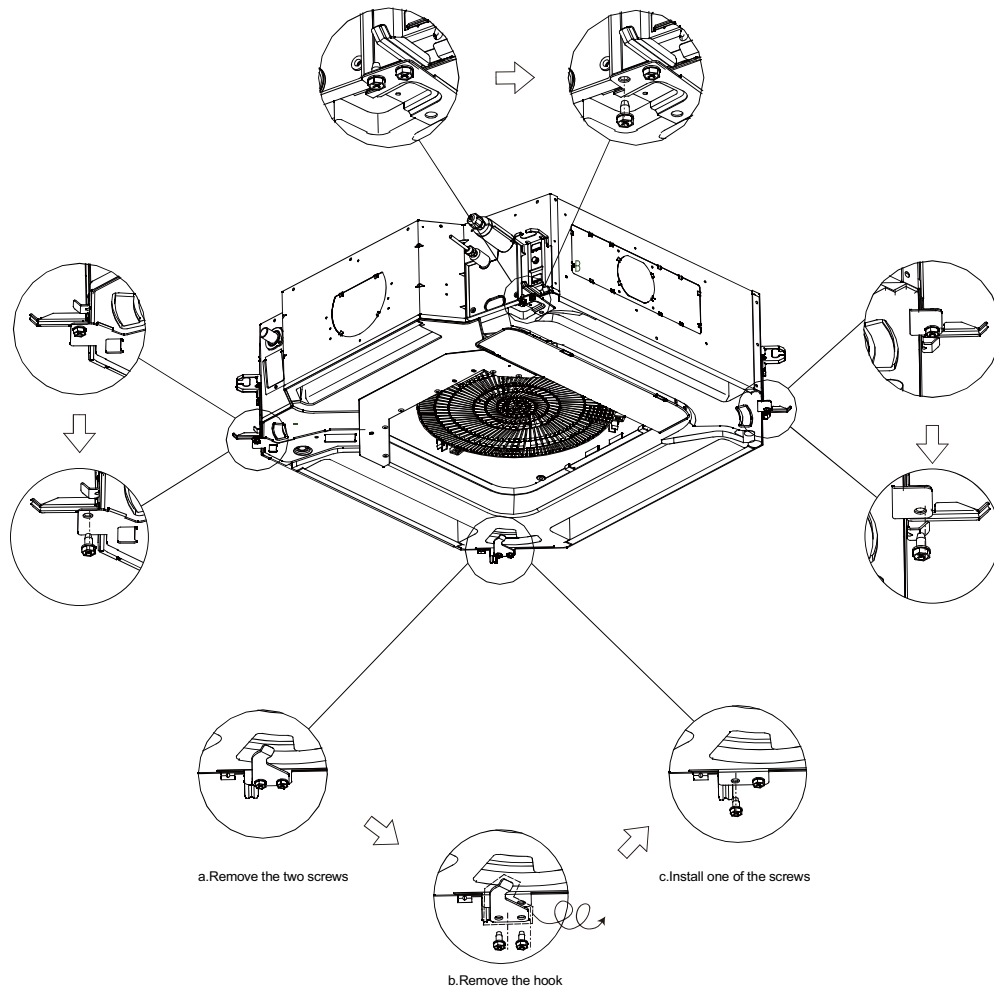
Fig. 4 — 3 Fresh Air Openings



1. 4-way cassette
2. 4-way cassette outside air kit
3. Duct of the outside air
4. Ceiling
5. Panel/Grille

Fig. 5 — Installation of Kit and Unit

Installation Process — Remove the screws as shown below:



NOTE: Remove screws and hook according to the diagram, and retain the screws for outside air kit installation.

Fig. 6 — Remove Screws

INSTALL 4-WAY CASSETTE OUTSIDE AIR KIT

1. Indoor unit wiring

Before installing the outside air kit, complete the wiring to the control box according to the indoor unit manual.

2. Attach the outside air kit

Before installing the outside air kit, align all of the openings before clipping on the kit as shown in Fig. 7, Section a.

3. Once the kit is in place, use the screws to create a tight seal as shown in Fig. 7, Section b.

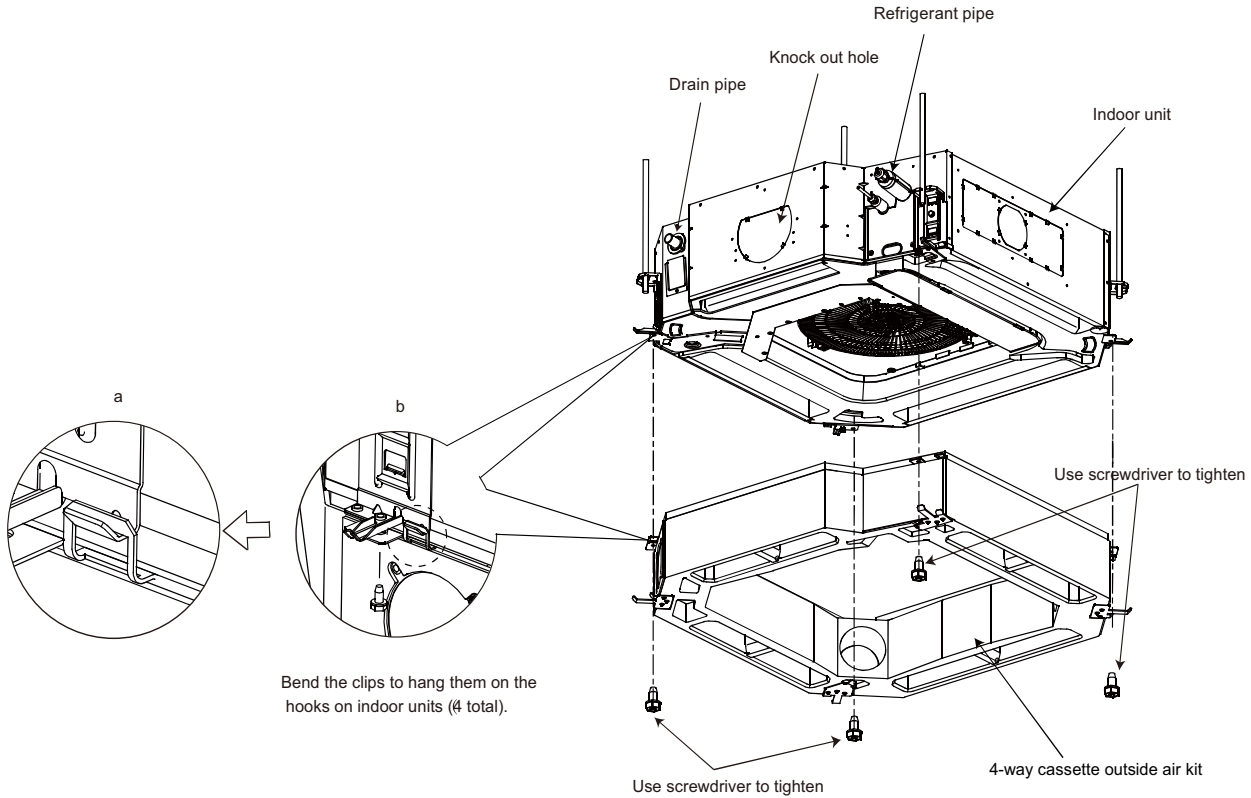


Fig. 7 —Align Openings and Clip the Kit

INSTALL OUTSIDE AIR DUCT —

1. Cut the outside air opening in designated the location. The number of outside air openings depend on the total outside air CFM requirements.

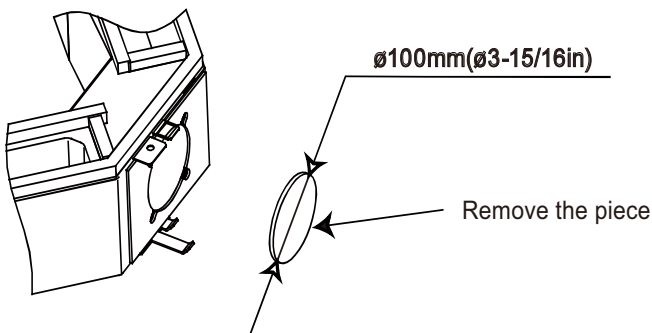


Fig. 8 —Cut Outside Air Openings

3. Install the air pipe

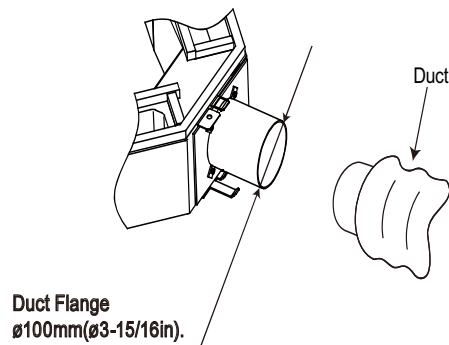


Fig. 9 —Install Air Pipe

2. Install the flange

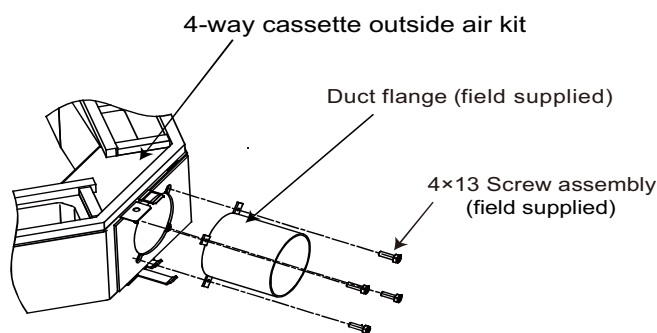


Fig. 10 —Install Air Pipe

Install the Panel —

⚠ CAUTION

- Never put the panel face down on the floor, against the wall, or on top of bulgy objects.

REMOVE THE AIR INLET GRID —

NOTE: Panel is ordered separately.

1. Remove the grille from the panel by sliding the grille latches toward the center of the panel.
2. Lift the grille up at a 45° angle and pull to detach it from the panel.
3. Unscrew the bolts on the four corners of the cover panel. Remove the cover by loosening the cord. See Fig. 11.

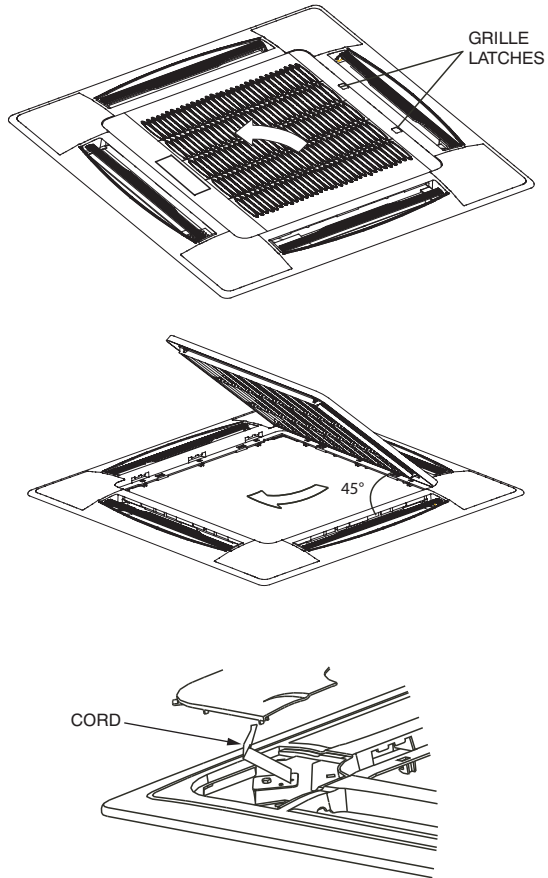


Fig. 11 — Removing Grille from Panel

4. Secure the panel (without the grille) onto the Outside Air Kit using M5 x 16 screws and washers. Before tightening the screws, be sure the panel is flush with the false ceiling. See Fig. 12.

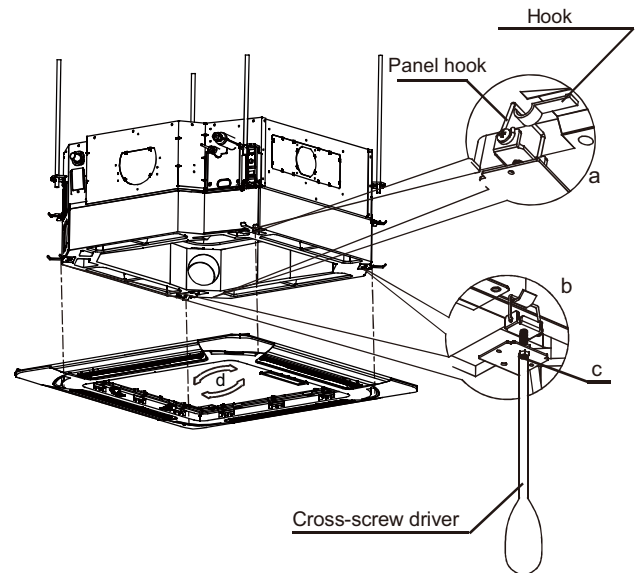


Fig. 12 — Mounting Panel

5. When the panel is secure, insert the grille at a 45° angle and latch it in place.

