Installation Instructions

# 0 to 25% Manual Fresh Air Damper

Foundation™ Packaged Rooftop Units 15 to 25 Tons

Model Number: Used with:

E/GCC\*180-300 and E/GDK\*180-300 BAYDMPR301\*

### A SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

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### **WARNING**

**Proper Field Wiring and Grounding Required!** 

Failure to follow code could result in death or serious injury. All field wiring MUST be performed by qualified personnel. Improperly installed and grounded field wiring poses FIRE and ELECTROCUTION hazards. To avoid these hazards, you MUST follow requirements for field wiring installation and grounding as described in NEC and your local/state/national electrical codes.

## **WARNING**

Personal Protective Equipment (PPE) Required!

Failure to wear proper PPE for the job being undertaken could result in death or serious injury. Technicians, in order to protect themselves from potential electrical, mechanical, and chemical hazards, MUST follow precautions in this manual and on the tags, stickers, and labels, as well as the instructions below

- Before installing/servicing this unit, technicians MUST put on all PPE required for the work being undertaken (Examples; cut resistant gloves/ sleeves, butyl gloves, safety glasses, hard hat/bump cap, fall protection, electrical PPE and arc flash clothing). ALWAYS refer to appropriate Safety Data Sheets (SDS) and OSHA guidelines for proper PPE.
- When working with or around hazardous chemicals, ALWAYS refer to the appropriate SDS and OSHA/GHS (Global Harmonized System of Classification and Labeling of Chemicals) guidelines for information on allowable personal exposure levels, proper respiratory protection and handling instructions.
- If there is a risk of energized electrical contact, arc, or flash, technicians MUST put on all PPE in accordance with OSHA, NFPA 70E, or other country-specific requirements for arc flash protection, PRIOR to servicing the unit. NEVER PERFORM ANY SWITCHING, DISCONNECTING, OR VOLTAGE TESTING WITHOUT PROPER ELECTRICAL PPE AND ARC FLASH CLOTHING. ENSURE ELECTRICAL METERS AND EQUIPMENT ARE PROPERLY RATED FOR INTENDED VOLTAGE.

### Warnings, Cautions, and Notices

Read this manual thoroughly before operating or servicing this unit. Safety advisories appear throughout this manual as required. Your personal safety and the proper operation of this machine depend upon the strict observance of these precautions.

The three types of advisories are defined as follows:

A WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

A CAUTION

Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It could also be used to alert against unsafe practices.

**NOTICE** 

Indicates a situation that could result in equipment or property-damage only accidents.

#### Important Environmental Concerns

Scientific research has shown that certain man-made chemicals can affect the earth's naturally occurring stratospheric ozone laver when released to the atmosphere. In particular, several of the identified chemicals that may affect the ozone layer are refrigerants that contain Chlorine, Fluorine and Carbon (CFCs) and those containing Hydrogen, Chlorine, Fluorine and Carbon (HCFCs). Not all refrigerants containing these compounds have the same potential impact to the environment. Trane advocates the responsible handling of all refrigerants.

#### Important Responsible Refrigerant Practices

Trane believes that responsible refrigerant practices are important to the environment, our customers, and the air conditioning industry. All technicians who handle refrigerants must be certified according to local rules. For the USA, the Federal Clean Air Act (Section 608) sets forth the requirements for handling, reclaiming, recovering and recycling of certain refrigerants and the equipment that is used in these service procedures. In addition, some states or municipalities may have additional requirements that must also be adhered to for responsible management of refrigerants. Know the applicable laws and follow them.

### **A** WARNING

#### **Follow EHS Policies!**

Failure to follow instructions below could result in death or serious injury.

- All Trane personnel must follow the company's Environmental, Health and Safety (EHS) policies when performing work such as hot work, electrical, fall protection, lockout/tagout, refrigerant handling, etc. Where local regulations are more stringent than these policies, those regulations supersede these policies.
- Non-Trane personnel should always follow local regulations.

### **WARNING**

#### R-454B Flammable A2L Refrigerant!

Failure to use proper equipment or components as described below could result in equipment failure, and possibly fire, which could result in death, serious injury, or equipment damage.

The equipment described in this manual uses R-454B refrigerant which is flammable (A2L). Use ONLY R-454B rated service equipment and components. For specific handling concerns with R-454B, contact your local representative.

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### General Information

Carefully review installation instructions.

- The manual fresh air adjustment panel with the hood is designed to provide up to 25 percent outside air.
- Once the adjustable panel is set and the hood is installed, a fixed quantity of outside air can be introduced into the conditioned space.

### Inspection

- 1. Unpack all components of the kit.
- 2. Check carefully for shipping damage. If any damage is found, report it immediately, and file a claim against the transportation company.

#### Installation

#### **WARNING**

#### Hazardous Voltage w/Capacitors!

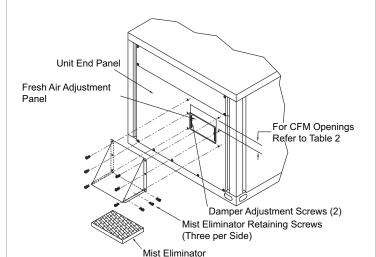
Failure to disconnect power and discharge capacitors before servicing could result in death or serious injury.

Disconnect all electric power, including remote disconnects and discharge all motor start/run capacitors before servicing. Follow proper lockout/ tagout procedures to ensure the power cannot be inadvertently energized. Verify with a CAT III or IV voltmeter rated per NFPA 70E that all capacitors have discharged.

- 1. Open the unit disconnect switch.
- 2. Remove screws securing the fresh air adjustment panel to the unit end panel. Do not discard screws; they will be used in Step 8.
- Adjust the amount of fresh air by changing the position of the fresh air adjustment panel. Based on the operating return static pressure. See Table 1 to determine the correct opening for the specified amount of fresh air
- 4. Secure the fresh air adjustment panel to the unit end panel with two screws. Remaining screws will be used in Step 8.
- 5. Using the provided screws, assemble the fresh air hood. See Figure 1.
- 6. Install the filter/mist eliminator into the fresh air hood and secure it in place using three screws in each side. See Figure 1.

Figure 1.

Damper assembly



**Note:** Install the filter/mist eliminator with the arrow pointing in the direction of the airflow. The filter/mist eliminator can be taken out for cleaning by removing the screws installed in <u>Step 6</u>.

- 7. Install the provided gasket onto the hood mounting flange.
- 8. Install the fresh air hood onto the end panel of the unit using the six screws removed in Step 2. See Figure 1.
- 9. Close the unit disconnect switch.

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### **A** WARNING

#### **Live Electrical Components!**

Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury. When it is necessary to work with live electrical components, have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks.

Important: Measure the full load amps of the supply fan motor. If the amperage exceeds the motor nameplate value, system CFM may be too high.

10.In order to lower the motor amperage to the nameplate value, adjust the fresh air damper or fan RPM.

Table 1. E/GCC and E/GDK 180-300 manual fresh air accessory airflow

Return Static — in. W. G.										
Inches Open	-0.1	-0.2	-0.3	-0.4	-0.5	-0.6	-0.7	-0.8	-0.9	-1.0
1	80	159	195	221	277	292	352	383	378	438
2	197	296	361	415	498	511	586	636	656	717
3	318	432	528	610	720	731	819	890	933	997
4	431	569	694	804	941	950	1053	1143	1211	1276
5	471	680	830	959	1086	1174	1289	1401	1458	1573
6	511	791	965	1113	1231	1398	1525	1659	1705	1870
7	598	910	1095	1268	1422	1592	1731	1886	1958	2115
W/Open	707	1058	1258	1462	1661	1835	1989	2170	2275	2422
		* Before utilizing CFM's listed in this area, refer to Table 2 for maximum allowable fresh air for the unit.								

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#### Table 2. Maximum fresh air CFM

Unit	Max CFM			
E/GCC*180, E/GDK*180	1500			
E/GCC*210, E/GDK*210	1750			
E/GCC*240, E/GDK*240	2000			
E/GCC*300, E/GDK*300	2500			

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