Installation Instructions

# **Comparative Enthalpy Kit**

Foundation™ Packaged Rooftop Units 15 to 25 Tons

Model Number: Used With:

BAYENTH301\* E/GCC180-300

# 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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2

# **A** 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.

## **A** WARNING

### **Personal Protective Equipment 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 countryspecific 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.

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# 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:

**WARNING** 

A CAUTION

NOTICE

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury. 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. 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 layer 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-including industry replacements for CFCs such as HCFCs and HFCs.

#### 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

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# **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.

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## **Trademarks**

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#### **Revision History**

Model number update in Used With information.

# Inspection

- 1. Unpack all components of the BAYENTH301\* kit.
- Check carefully for shipping damage. If any damage is found, report it immediately, and file a claim against the transportation company.

# **Parts List**

Quantity	Description
2	Sensors, Humidity
1	Harness, Econ - OD Humidity Sensor
1	Harness, Econ - RAT Sensor
1	Thermistor, -40 to 65°C
2	Ties, Wire
1	Grommet
4	Screws, Mounting - #6-32 UNC X 3/4 inch (22.2 mm)
1	Harness, Econ - RA Humidity Sensor
1	Plate
1	Bush

## **Installation Procedure**

#### **A** 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.

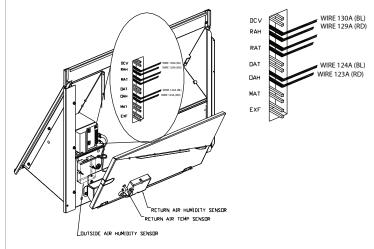
## **Outdoor Humidity Sensor Installation**

- 1. Remove filter access panel.
- Connect wire 123A (RD) to the positive terminal on the humidity sensor. Connect wire 124A (BL) to the remaining terminal on the humidity sensor.
- 3. Insert bush and grommet in the hole on the plate.

5

- 4. Attach OAH sensor to the plate using two screws. See Figure 1.
- 5. Insert OAT sensor in the grommet keeping half an inch out on the other side of the plate. See Figure 1.
- $6. \ \ \text{Attach plate assembly to economizer panel using one screw}. \ \text{See Figure 1}.$
- 7. Route sensor wires through star bushing.
- 8. Attach plug to OAH pin on RTEM-EM as shown in Figure 1.

#### Figure 1. Connections

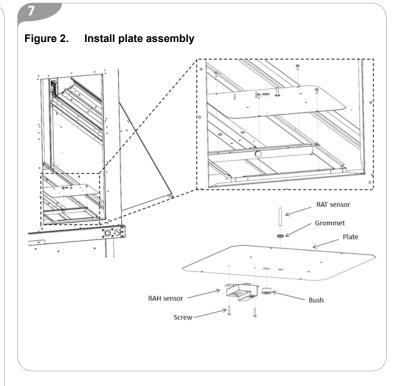


9. Secure wires with wire tie.

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## Return Air Humidity Sensor and Return Air Temperature Sensor Installation

- Connect the wire 129A (RD) to the positive terminal on the humidity sensor. Connect wire 130A (BL) to the remaining terminal on the humidity sensor.
- 2. Install return air humidity sensor and secure with two screws. Refer to Figure 1.
- 3. Route return air humidity sensor through grommet.
- 4. Attach plug to RAH pin on RTEM-EM as shown in Figure 1.
- 5. Insert bush and grommet in the hole on the plate. Refer to Figure 2.
- 6. Attach RAH sensor to plate using two screws. Refer to Figure 2.
- 7. Insert RAT sensor through the grommet keeping half an inch out on the other side of the plate. Refer to Figure 2.
- 8. Attach plate assembly to return air duct flange using four screws. Refer to Figure 2
- 9. Attach plug to RAT pin on RTEM-EM as shown in Figure 1.
- 10. Secure wiring harnesses with wire ties.
- 11.Replace the filter access panel.



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