

Installation Instructions

Crankcase Heater

Foundation™ Packaged Rooftop Units

25 Tons

Model Numbers:	Used With:
BAYCCHT306*	E/GCC300A3
BAYCCHT313*	E/GCC300A4
BAYCCHT314*	E/GCC300AW

 **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.


1


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

 **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 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.


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.

2

 **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.**

3

 **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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General Information

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.

Parts List - E/GBC300 Units

Table 1. Parts list

Qty	Description
2	Crankcase Heaters (CCH)
2	Fuse Holders (only for BAYCCHT306*)
2	5A Fuses (only for BAYCCHT306*)
1	Wire Harness
1	Terminal Block
5	Wire Ties
2	10-32 UNC x 1/2 TR Grounds
2	1-inch 8-32 Thread Screws
4	1/2-inch 8-32 Thread Screw

Installation

⚠ WARNING

Hazardous Voltage!

Failure to disconnect power before servicing could result in death or serious injury. Disconnect all electric power, including remote disconnects before servicing. Follow proper lockout/tagout procedures to ensure the power can not be inadvertently energized. Verify that no power is present with a voltmeter.

1. Open and lock unit disconnect to prevent injury or death from electrical shock or contact with moving parts.
2. Remove unit control and compressor access panel.
3. Place the crankcase heater (CCH) band around the bottom of the compressor within 1-inch of the base (see Figure 1). Refer to Table 2 to select proper CCH based on compressor model.
4. Tighten the crankcase heater around the compressor and attach the green ground wire to the base as shown in Figure 1. Torque heater to 20 to 25 inch-pound.
5. Attach green ground wire to compressor mount plate using a supplied 1/2-inch 10-16 thread sheet metal screw.
6. Remove the control panel access door and fix the CCH terminal block with the supplied 1-inch 8-32 sheet metal screws.
7. Refer to Figure 1 for compressor locations, compressor #1 contactor location, CCH fuse and CCH terminal block. Compressor #1 contactor is the contactor located to the left side.

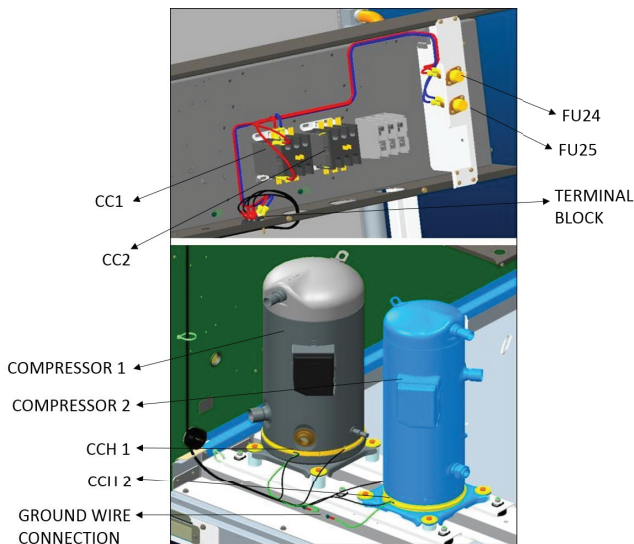
Note: CCH fuse and CCH terminal block are used for BAYCCHT306* only.

8. For BAYCCHT306*, connect the wire leads from the supplied CCH fuse harness to the compressor contactor #1 and to the CCH terminal block. For BAYCCHT313* and BAYCCHT314*, connect wire leads from compressor contactor #1 to the CCH terminal block.
9. Route the black heater leads from the outdoor section in to the control compartment. Connect the wire leads to the CCH terminal block.

Table 2. Crankcase heater required

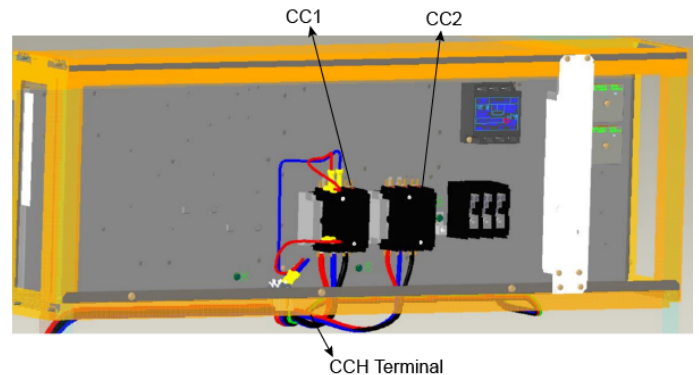
Compressors	Required CCH
ZP137KCE	90W
ZP61KCE, ZP76KCE, ZP91KCE, ZP104KCE, and ZP122KCE	70W

Figure 1. Crankcase heater routing (for BAYCCHT306*) and Crankcase heater and compressor location



Note: Connect leads from compressor CCH #1 and Compressor CCH #2 to compressor contactor #1 NC auxiliary contact.

Figure 2. Crankcase heater harness routing for BAYCCHT313* and BAYCCHT314**



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