INSTALLATION INSTRUCTIONS COMFORT ALERT KIT (RXRX-AZ01) KNL/KPL/KRL/KNN/KPN/KQN/KHL/LNL/LPL/ LRL/LNN/LPN/LQN/LHL/JNL/JPL- “C,” “G,” “H” MODELS WITH RTU-C ROOFTOP UNIT CONTROLLER

⚠ Recognize this symbol as an indication of Important Safety Information!

⚠WARNING

THESE INSTRUCTIONS ARE INTENDED AS AN AID TO QUALIFIED SERVICE PERSONNEL FOR PROPER INSTALLATION, ADJUSTMENT AND OPERATION OF THIS KIT. READ THESE INSTRUCTIONS THOROUGHLY BEFORE ATTEMPTING INSTALLATION, ADJUSTMENT, OR OPERATION. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN IMPROPER INSTALLATION, ADJUSTMENT, SERVICE OR MAINTENANCE, POSSIBLY RESULTING IN FIRE, ELECTRICAL SHOCK, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

PARTS LIST		
Description	**Part Number**	**Quantity**
Comfort Alert Module	42-101504-03	1
Screw (Hex Head) 10-16 x ½	63-22338-06	4
Wire Tie 8”	64-17606-01	2
18 Ga Purple Wire 9”	AS-53394-15-JJ-240	1
18 Ga Brown Wire 32”	AS-50207-33-PD-241	1
18 Ga Red Wire 20”	AS-50202-27-J7-242	1
18 Ga Blue Wire 32”	AS-50204-33-JJ-243	1
Mounting Bracket	AE-103462-01	1

⚠WARNING

BEFORE BEGINNING ANY MODIFICATION, BE SURE MAIN DISCONNECT SWITCH IS IN THE “OFF” POSITION. FAILURE TO DO SO CAN CAUSE ELECTRICAL SHOCK RESULTING IN PROPERTY DAMAGE, PERSONAL INJURY OR DEATH. TAG DISCONNECT WITH A SUITABLE WARNING LABEL.

TOOLS REQUIRED

- 5/16” nut driver.
- Diagonal cutting pliers for clipping wire ties.
- 5/16” flat-blade screwdriver.
- Multimeter for troubleshooting (optional).

PURPOSE

The Comfort Alert Module checks for the presence of current in each leg of the 3-phase power supply similar to a “Clamp Meter.” The Comfort Alert Module has three rectangular openings in its housing where the three compressor power leads are inserted. If a fault is detected during unit operation, the error is sent to the “L” terminal input of the main unit controller.

INSTALLATION PROCEDURE

A. Open control box door or access panel.

B. Remove control box cover and set aside (some models).

C. Review unit wiring diagram and attached accessory wiring diagram Fig. 1.

D. Install the Comfort Alert Module.

1. Disconnect the three LOAD side compressor wires from compressor #1 contactor noting their numbers or labeling their connections for future reference.
2. Using two screws included in the Comfort Alert accessory, install above the contactor on the unit control mounting panel using the holes provided. See attached control panel illustrations for control mounting location.
   i. Some models require the installation of a bracket (included) because of limited clearance in the control box. See Figure 2.
   ii. Using two screws included, install the bracket on the control mounting panel. The bracket should be installed with the line of holes for the Comfort Alert facing downward.
   iii. For these models, use two screws included to install the Comfort Alert Module with the terminals facing upward.
   iv. On some models, one of the outdoor fan capacitors may have to be moved slightly in its mounting bracket for clearance.
3. Insert the compressor load side wire labeled “T1” through the bottom opening in the Comfort Alert Module labeled “T1”. Reconnect wire to the compressor #1 contactor terminal labeled “T1”.
4. Insert the compressor load side wire labeled “T2” through the bottom opening in the Comfort Alert Module labeled “T2”. Reconnect wire to the compressor #1 contactor terminal labeled “T2”.

5. Insert the compressor load side wire labeled “T3” through the bottom opening in the Comfort Alert Module labeled “T3”. Reconnect wire to the compressor #1 contactor terminal labeled “T3”.

E. Connect Comfort Alert Module to RTU-C (Rooftop Unit Controller).
   1. Connect purple wire attached to the “Y” terminal of the Comfort Alert Module to compressor contactor #1 coil terminal. This signals the Comfort Alert Module that the compressor should be energized. Do not connect to the common (Brown) terminal on the contactor coil terminal.
   2. Connect brown wire attached to the “C” terminal of the Comfort Alert Module to the terminal on the RTU-C unit controller labeled “Comfort Alert GND”.
   3. Connect red wire attached to the “R” terminal of the Comfort Alert Module to the terminal on the RTU-C unit controller labeled “R”. This is the 24 volt power supply for the Comfort Alert Module.
   4. Connect blue wire attached to the “L” terminal of the Comfort Alert Module to the terminal on the RTU-C unit controller labeled “Comfort Alert L1”. This is the “Flash Code” output from the Comfort Alert Module.

F. For units with two compressors, skip to “INSTALLATION OF DUAL COMFORT ALERT MODULES” section of these instructions and return to this section after completion.

G. Use wire ties included to secure wiring from installation of Comfort Alert Module.

H. Reinstall control box cover.

I. Close and latch control box door.

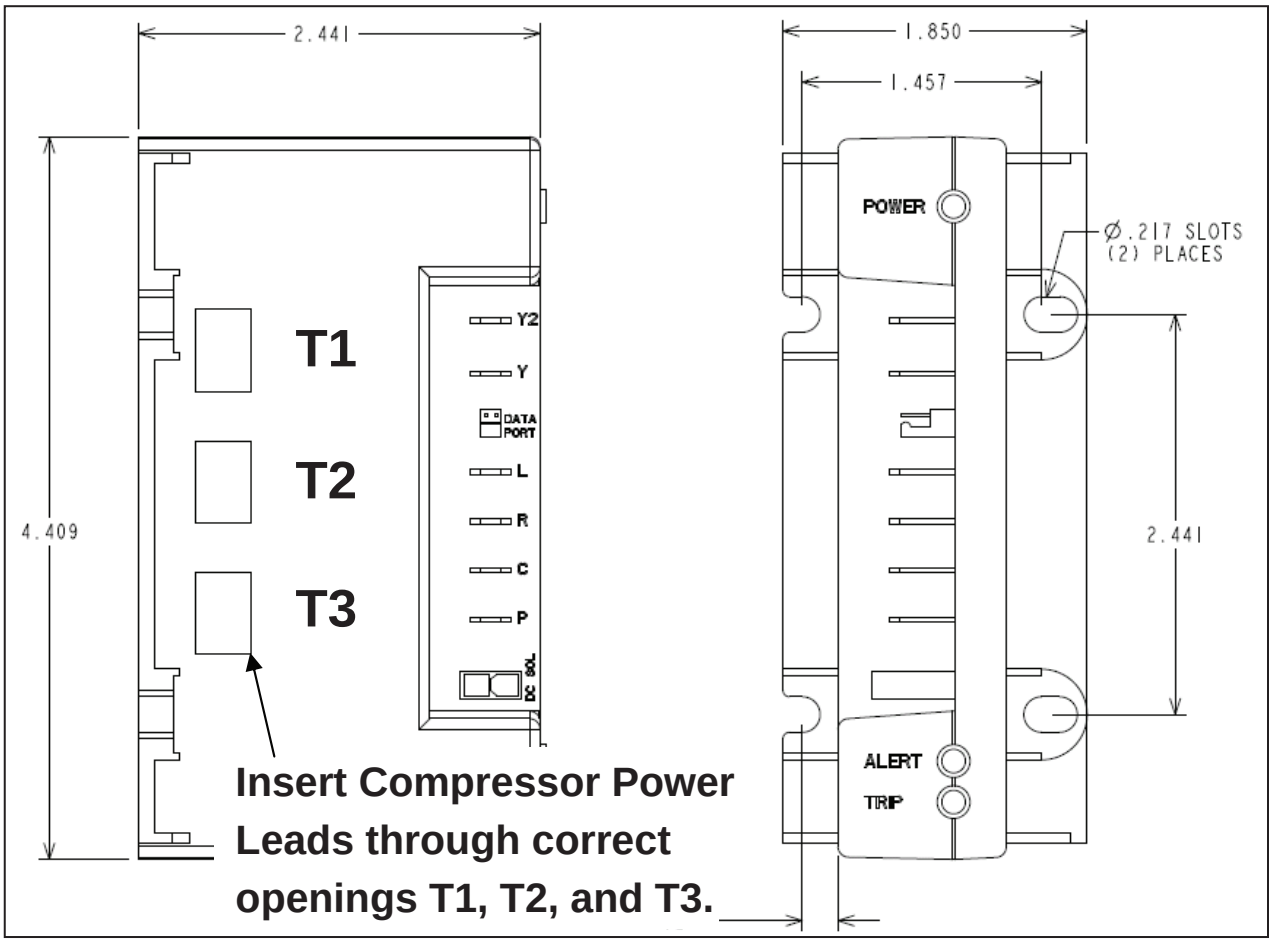
J. Reapply power to the unit and check if any RTU-C alarms are created by the installation of the Comfort Alert Module(s).

INSTALLATION OF DUAL COMFORT ALERT MODULES (two compressor units follow the additional steps below)

K. Install the Comfort Alert Module.
   1. Remove the three LOAD side compressor wires from compressor 2 contactor noting their numbers or labeling their connections for future reference.
   2. Using two screws included in Comfort Alert accessory, install above the contactor on the unit control mounting panel using the holes provided. On models that use the mounting bracket, the second bracket is not used and is discarded. The second Comfort Alert Module is installed beside the first with two screws.
   3. Insert the compressor load side wire labeled “T1” through the bottom opening in the Comfort Alert Module labeled “T1”. Reconnect wire to the compressor #2 contactor terminal labeled “T1”.
   4. Insert the compressor load side wire labeled “T2” through the bottom opening in the Comfort Alert Module labeled “T2”. Reconnect wire to the compressor #2 contactor terminal labeled “T2”.
   5. Insert the compressor load side wire labeled “T3” through the bottom opening in the Comfort Alert Module labeled “T3”. Reconnect wire to the compressor #2 contactor terminal labeled “T3”.

L. Connect Comfort Alert Module to RTU-C (Rooftop Unit Controller).
   1. Connect purple wire attached to the “Y” terminal of the Comfort Alert Module to compressor contactor #2 coil terminal. Do not connect to the common (Brown) terminal on the contactor.
   2. Connect brown wire attached to the “C” terminal of the Comfort Alert Module to the terminal on the RTU-C unit controller labeled “Comfort Alert Gnd”.
   3. Connect red wire attached to the “R” terminal of the Comfort Alert Module to the terminal on the RTU-C unit controller labeled “R”.
   4. Connect blue wire attached to the “L” terminal of the Comfort Alert Module to the terminal on the RTU-C unit controller labeled “Comfort Alert L2”.
   5. Return to Section “G”.

FIGURE 1
COMFORT ALERT MODULE



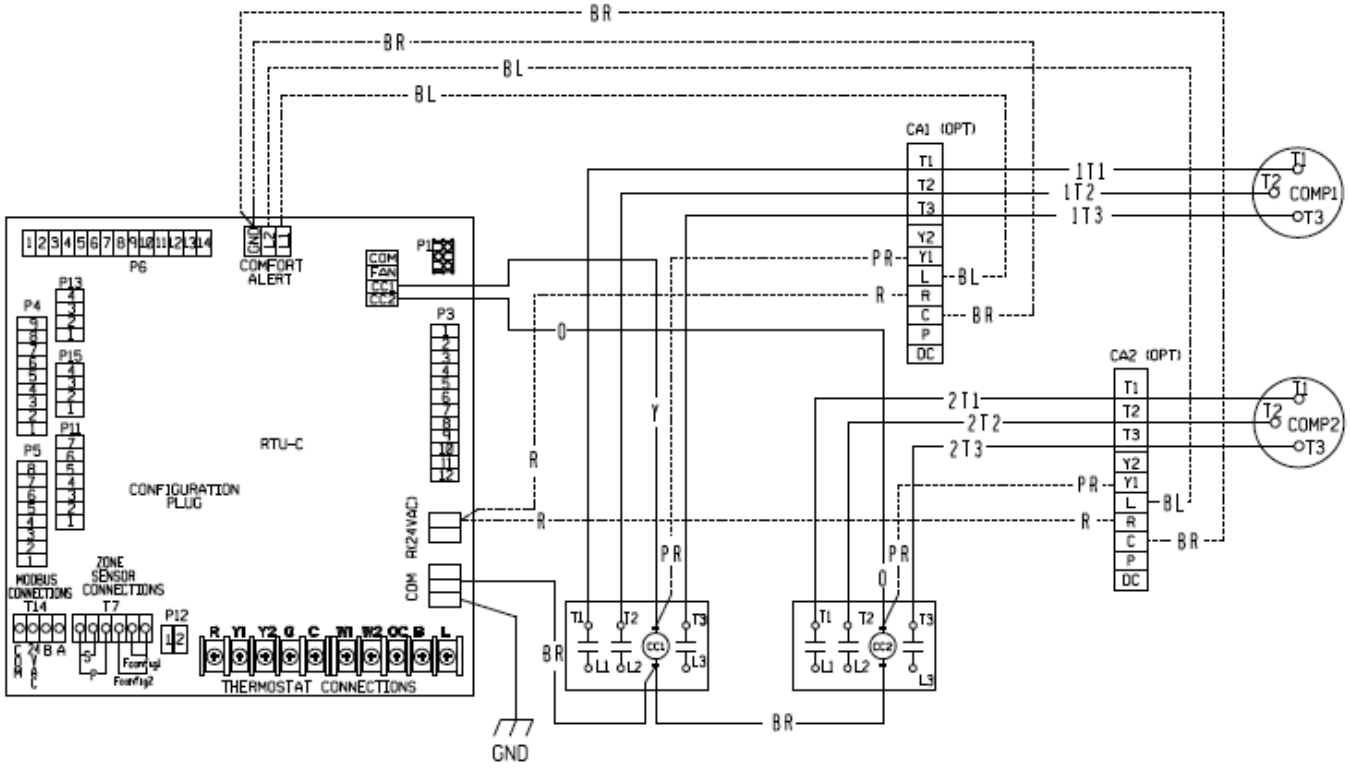


FIGURE 2
COMFORT ALERT INSTALLATION

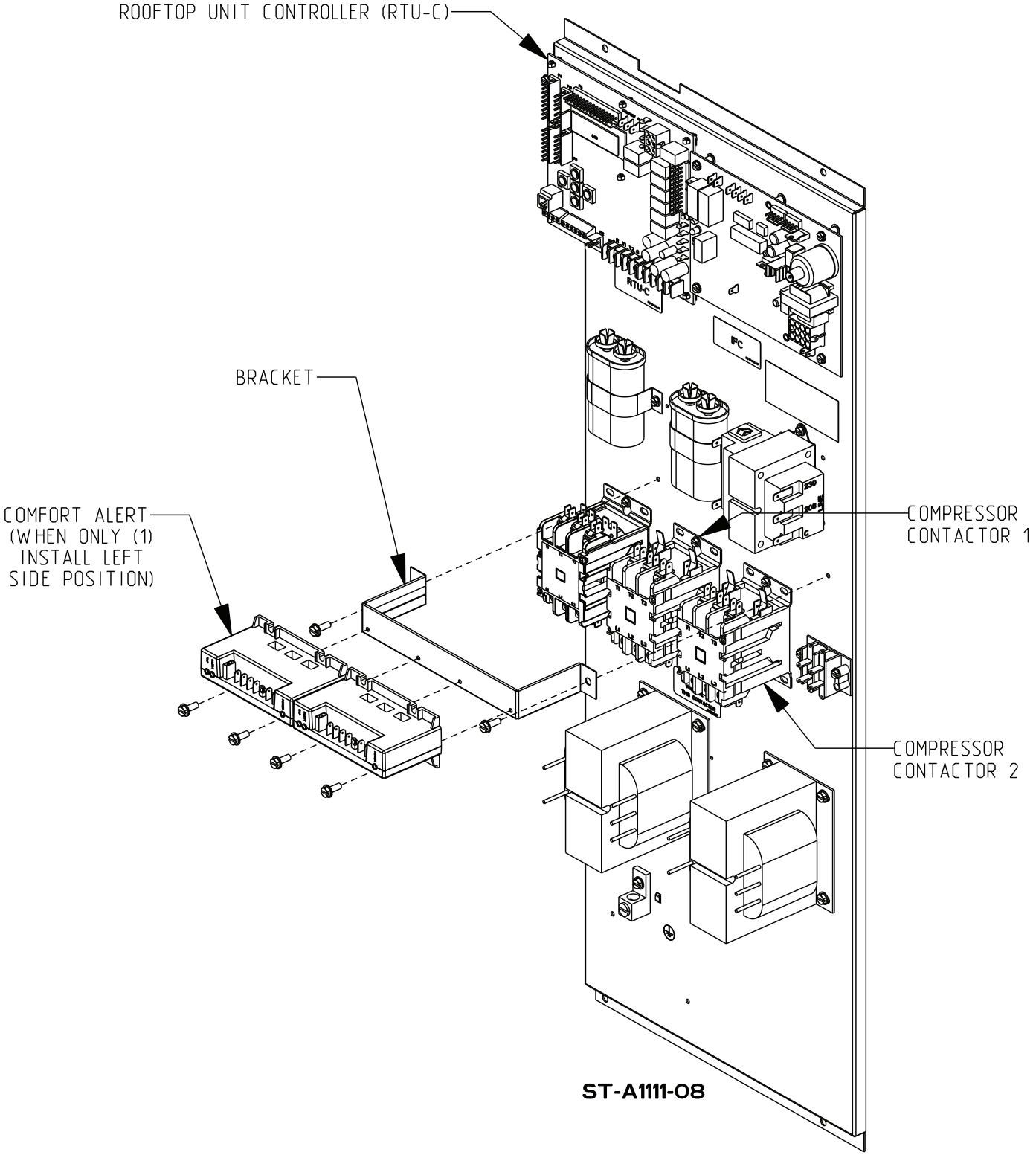


FIGURE 3
COMFORT ALERT INSTALLATION

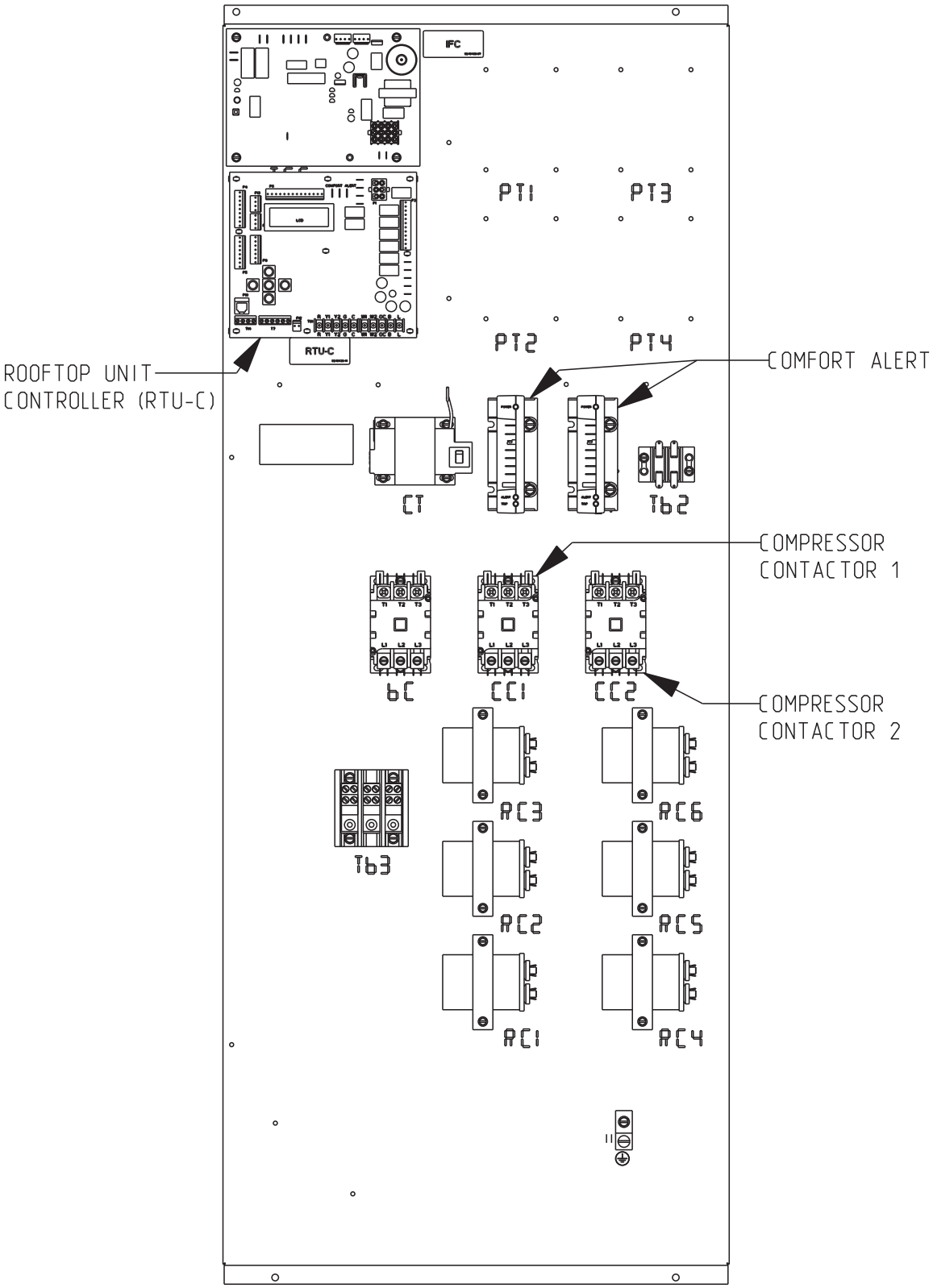
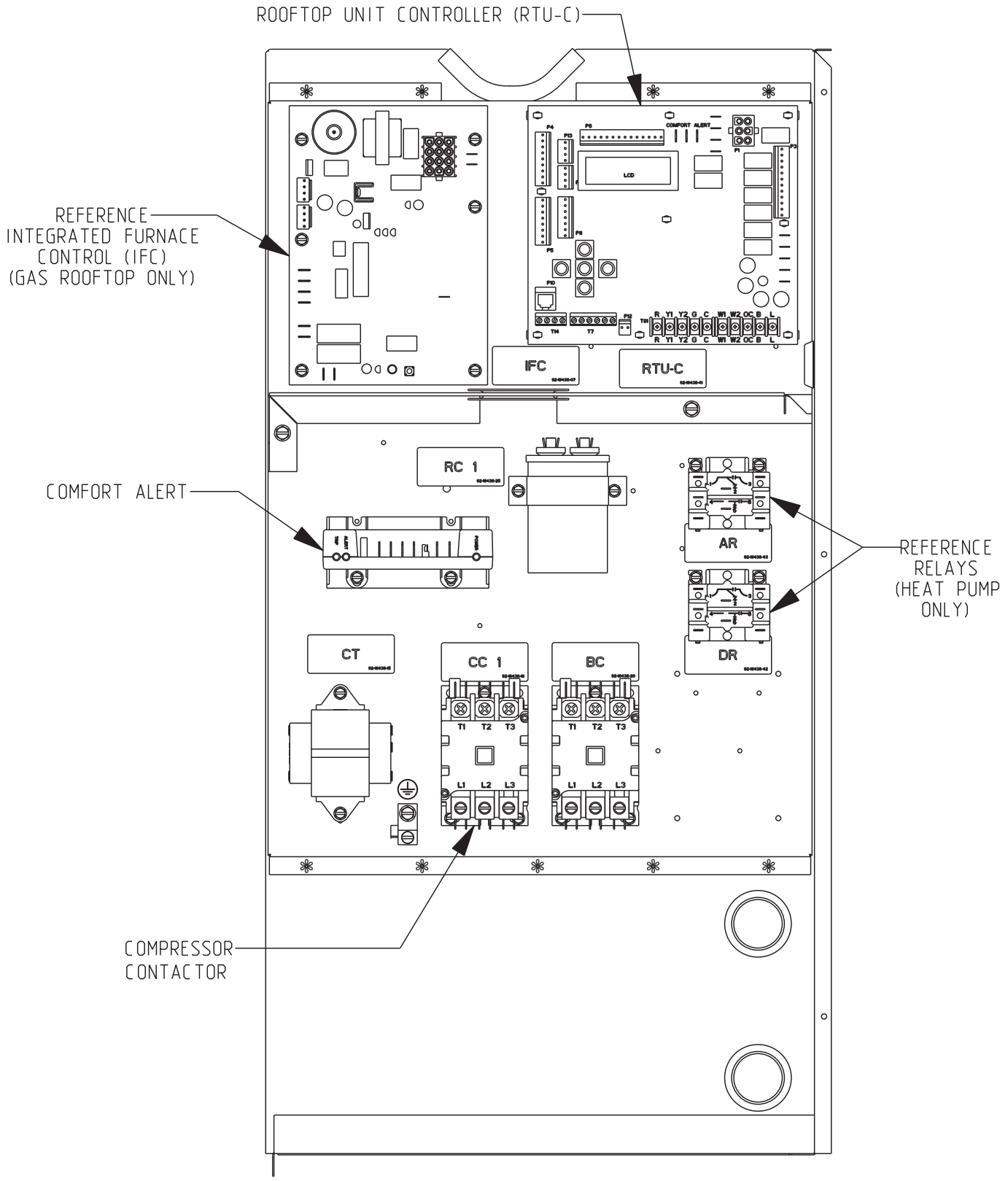


FIGURE 4
COMFORT ALERT INSTALLATION



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