

INSTALLATION INSTRUCTIONS

COMFORT ALERT KIT (RXRX-AZ02)

Non-DDC Controlled

3 Ton thru 12.5 Ton

ROOFTOP UNIT CONTROLLER

Recognize this symbol as an indication of Important Safety Information!



THESE INSTRUCTIONS ARE INTENDED AS AN AID TO QUALIFIED SERVICE PERSONNEL FOR PROPER INSTALLATION, ADJUSTMENT AND OPERATION OF THIS KIT.

⚠ WARNING

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 1/2	63-22338-06	4
Wire Tie 8"	64-17606-01	2
Wire Harness Assembly, Comfort Alert Option	45-42522-134	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

- Open control box door or access panel.
- Remove control box cover and set aside (some models).
- Review unit wiring diagram and attached accessory wiring diagram Fig. 1.
- Install the Comfort Alert Module.

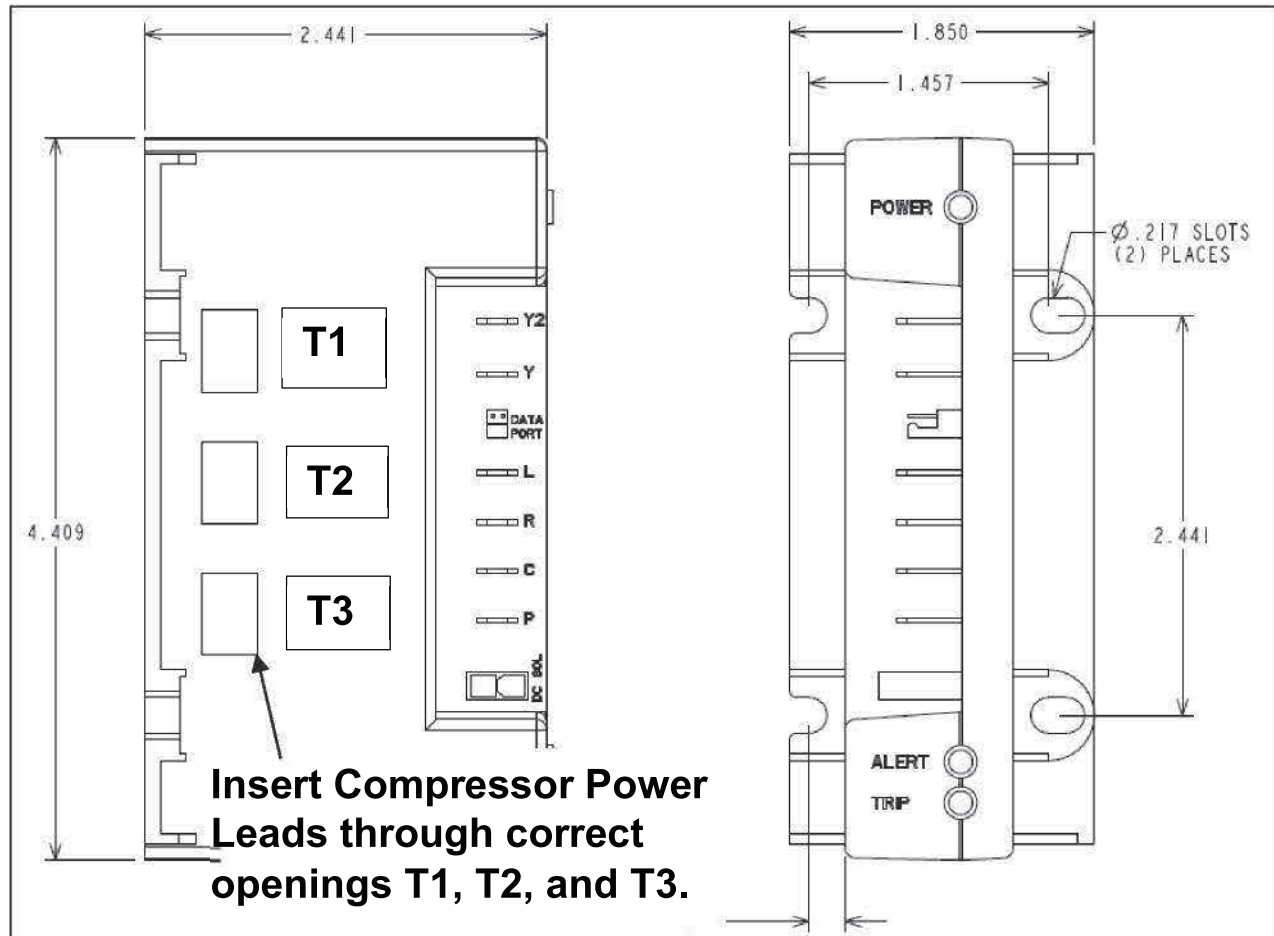
- Disconnect the three LOAD side compressor wires from compressor #1 contactor noting their numbers or labeling their connections for future reference.
- Using two screws included in the Comfort Alert accessory, install above the contactor on the unit control mounting panel using the holes provided. See attached control panel illustrations for control mounting location.
 - On some models, mounting holes are provided above the compressor contactor for direct mounting of the Comfort Alert Module.
 - 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.
- 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".
- 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".

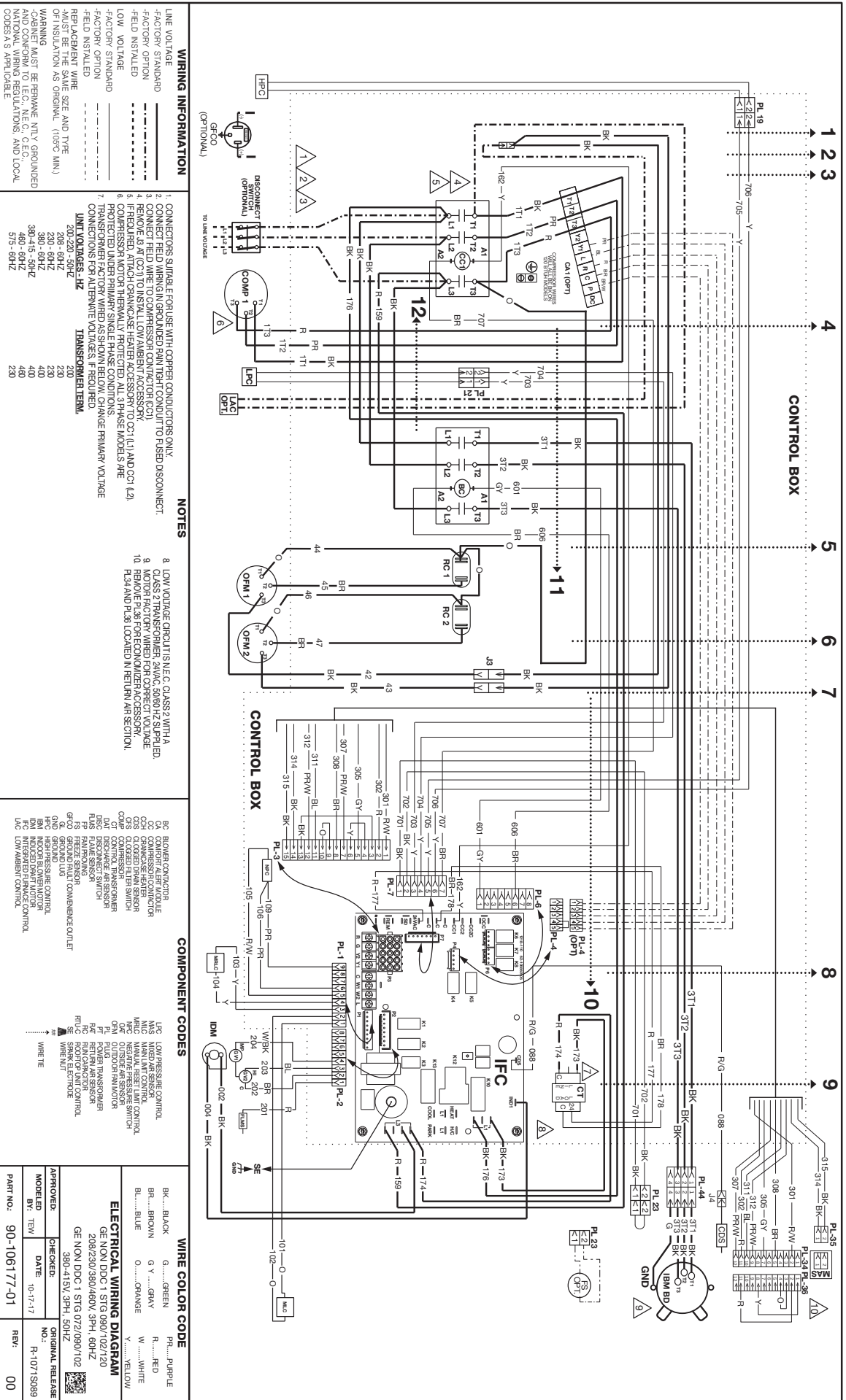


5. Insert the compressor load side wire labeled "T3" through the bottom opening in the Comfort Alert Module labeled "T3". Reconnect wire to the compressor #1 contactor terminal labeled "T3".
- E. Connect Comfort Alert Module to Control Board with Wire Harness 45-42522-134 (Non DDC Controller).
1. Connect 5Pin Connector of the Wire Harness to the Control Board P4
 2. Connect purple wire of wire harness to the "Y" terminal of the Comfort Alert Module. 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.
 3. Connect brown wire of wire harness to the "C" terminal of the Comfort Alert Module.
 4. Connect red wire of wire harness to the "R" terminal of the Comfort Alert Module. This is the 24 volt power supply for the Comfort Alert Module.
 5. Connect blue wire of wire harness to the "L" terminal of the Comfort Alert Module. This is the "Flash Code" output from the Comfort Alert Module.
 6. Connect brown/white wire of wire harness to the "P" terminal of 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 Control Board 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. 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 Control Board with Wire Harness 45-42522-134 (Non-DDC Controller).
1. Connect 5pin Connector of the wire harness to the Control Board at P5.
 2. Connect purple wire of wire harness to the "Y" terminal of the Comfort Alert Module. Do not connect to the common (Brown) terminal on the contactor.
 3. Connect brown wire of wire harness to the "C" terminal of the Comfort Alert Module.
 4. Connect red wire of wire harness to the "R" terminal of the Comfort Alert Module.
 5. Connect blue wire of wire harness to the "L" terminal of the Comfort Alert Module.
 6. Connect brown/white wire of wire harness to the "P" terminal of the Comfort Alert Module.
 7. Return to Section "G".





LINE VOLTAGE	_____
FACTORY STANDARD	_____
FACTORY OPTION	_____
FIELD INSTALLED	_____
LOW VOLTAGE	_____
FACTORY STANDARD	_____
FACTORY OPTION	_____
FIELD INSTALLED	_____
REPLACEMENT WIRE	_____
WIRE MUST BE THE SAME SIZE AND TYPE	_____
AS THE ORIGINAL (100% MIN.)	_____
WARNING	_____
DO NOT MIX PERMANENT GROUNDED	_____
AND GROUND TO I.E.C., N.E.C., C.E.C.,	_____
NATIONAL WIRING REGULATIONS, AND LOCAL	_____
CODES, AS APPLICABLE	_____

- [illegible]

8. LOW VOLTAGE CIRCUIT IS IN E CLASS 2 WITH A CLASS 2 TRANSFORMER, 20MVA 5000 HZ SUPPLIED.
9. MOTOR FACTORY WIRED FOR CORRECT VOLTAGE.
10. REMOVE P13 JUMPER FOR OPTIONAL P1 LOCATION IN BLOWER COMPARTMENT.
11. REMOVE P13 FOR ECONOMIZER ACCESSORY, P13 AND P136 LOCATED IN RETURN AIR SECTION.
12. M5 ACCESSORY PROVIDED WITH ECONOMIZER P136 LOCATED IN BLOWER COMPARTMENT.

- | | |
|-------|--------------------------------|
| BC | BLOWER CONTACTOR |
| CA | COMFORT ALERT MODULE |
| CC | COMPRESSOR CONTACTOR |
| COH | CHAMACKS HEATER |
| CDS | CLOUSED DRAIN SENSOR |
| CLS | CLOUSED FILTER SWITCH |
| COMP | COMPRESSOR |
| CT | CONTROL TRANSFORMER |
| DAT | DISCHARGE AIR SENSOR |
| DISC | DISCONNECT SWITCH |
| FLMS | FLAME SENSOR |
| FP | FLAM PROVING |
| F5 | FREEZE SENSOR |
| FS | GROUND FLAM CONVENIENCE OUT |
| GF-CO | GROUND LUG |
| GL | GROUND |
| GND | GROUND |
| HPC | HIGH PRESSURE CONTROL |
| HM | NO/OVERBLOWER MOTOR |
| HM BD | NO/OVERBLOWER MOTOR BELT DRIVE |
| IDM | INTEGRATED DRYAIR MOTOR |
| IFC | INTEGRATED PURVANCE CONTROL |

LAC	LOW AMBIENT CONTROL
LPC	LOW PRESSURE CONTROL
MRC	MANUAL RESET LIMIT CONTROL
NPC	NEGATIVE PRESSURE SWITCH
OAT	OUTSIDE AIR SENSOR
ODM	OUTDOOR FAN MOTOR
PL	PLUG
PT	POWER TRANSFORMER
RAT	RETURN AIR SENSOR
RC	RUN CAPACITOR
RUTC	ROOM TOP UNIT CONTROL
SE	SPARK ELECTRODE
	WIRE NUT
	WIRE TIES

BR.....BLACK	PR.....PURPLE
BK.....BLACK	GY.....GREEN
BL.....BLACK	GR.....GRAY
BL.....BLACK	OR.....ORANGE
BL.....BLACK	W.....WHITE
BL.....BLACK	Y.....YELLOW

ELECTRICAL WIRING DIAGRAM

AC NON DDC 1-STG. 090.102 & 120
 208/250/380/460/575V 3PH 60 HZ
 AC NON DDC 1-STG 0720290/102
 380-415V 3PH 50HZ

ELECTRICAL WIRING DIAGRAM

AC NON DDC 1-STG, 090,102 & 12
208/230/380/460/575V, 3PH 60 HZ
AC NON DDC 1-STG 072/090/102
380-415V 3PH 50HZ.

APPROVED:	CHECKED:	ORIGINAL RELEASED:
MODELED BY: JHB	DATE: 8/21/17	NO.: R-10715089
PART NO.: 90-106177-21	REV: 00	



