INSTALLATION INSTRUCTIONS FOR AUXILIARY HEATER KITS
RXJJ-CE series

IMPORTANT: To ensure proper installation and operation, please read all instructions prior to assembly, installation, operation, maintenance, or repair of this product.

INTRODUCTION

The information contained in these instructions has been prepared to assist in the proper installation and operation of the auxiliary electric heater kits. Improper installation can result in unsatisfactory operation or dangerous conditions not covered by the unit warranty and may invalidate the Underwriters Laboratories recognition.

CHECKING PRODUCT RECEIVED

Upon receiving the heater kit, inspect it for any shipping damage. Claims for damage should be filed immediately with the shipping company.

Check heater kit model number to determine that it is the correct series for the unit as shown on the unit rating plate and is of the desired voltage and KW size.

APPLICATION

These auxiliary electric resistance heater kits are designed for installation in the supply air compartment under the indoor blower (see Figure 1). Improper usage can result in dangerous operation. Do not use heater kits other than those listed on the unit rating plate.

OPERATION

The heater elements are energized through controllers operated by the 24 volt thermostat circuit. To ensure simultaneous blower operation, a blower interlock relay is provided.

TOOLS NEEDED

The following tools are recommended for heater kit installation:

1. 5/16” hex nut driver
2. Slotted screwdriver.
4. Wire cutters and stripper.
5. Some kits may require Allen wrenches.

INDOOR AIRFLOW

Refer to the blower airflow tables in the unit installation instructions for the correct drive settings to meet your airflow and external static pressure requirements.

WARNING: DISCONNECT ALL POWER BEFORE STARTING HEATER KIT INSTALLATION. FAILURE TO DO SO CAN RESULT IN SEVERE ELECTRIC SHOCK, PERSONAL INJURY, OR DEATH!

ELECTRICAL WIRING

Field wiring must comply with the National Electrical Code (CEC in Canada) and all applicable local codes and ordinances.

Control Wiring

1. All thermostat low voltage wiring must be routed into the low voltage connection area and not into the power wiring or heater control area.
2. For thermostat low voltage connections see unit installation instructions.
POWER WIRING

1. If the unit has been in operation without an electric heater kit installed it may be necessary to change the field-installed power wiring to a larger gauge to handle the additional current required by the heater kit. Refer to the unit rating plate or unit installation instructions for the required supply circuit size and overcurrent protection.

2. It is important that proper electrical power is available at the heater kit terminals. Voltage should not vary by more than 10% from that marked on the unit rating plate. Phase voltages should be balanced within 3%.

3. A properly sized disconnect switch shall be located within sight of the unit or as required by local codes.

4. Power wiring must be run in rain tight conduit.

5. Refer to the unit installation instructions for power entry locations.

HEATER KIT INSTALLATION

Depending on the preference for single circuit wiring (unit and heater kits on one circuit) or dual circuit wiring (unit on one circuit and the heater kit on another circuit) follow the specific installation instructions below. Refer to unit wiring diagram for component references.

Single circuit field wiring

1. Open heater section access panel and remove the adjacent power entry panel.

2. Remove the unit power supply wires (1L1, 1L2, 1L3) from the terminal block (TB5) on the left side of the electric heater kit compartment. Remove and discard the terminal block and the adjacent ground lug.

3. Remove heater kit block-off panel and install the heater kit in its place with the screws previously removed.

4. Connect the unit power supply wires (1L1, 1L2, 1L3) to the unit fuse block on the heater kit.

5. Re-install the power entry panel, install conduit, and run the correct size field wiring through the opening in the panel.

6. Connect the single field power supply wiring to the power terminal block located on the heater kit. Connect the ground wire to the adjacent ground lug.

7. Connect the heater kit control plug to the receptacle in the heater kit area.

8. Check all electrical connections to verify that they are located properly and tight.

9. Close and secure heater section access door.

10. Affix heater kit wiring diagram to the inside of the control/filter access door.

11. Close and secure all access panels.

12. Restore power to the unit and verify proper operation.

Dual circuit field wiring

1. Open heater section access panel and remove the adjacent power entry panel.

2. Disconnect the unit power supply wires (1L1, 1L2, 1L3) from the terminal block (TB5) on the left side of the electric heater kit compartment. Remove and
discard the terminal block and the adjacent ground lug.

3. Disconnect the unit power supply wires (1L1, 1L2, 1L3) from the terminal block (TB3) in the main unit control box.

4. Remove unit indoor top panel and remove and discard the three unit supply wires (1L1, 1L2, 1L3) from the wire chase leading to the electric heat section.

5. Replace unit indoor top panel.

6. Remove heater kit block-off panel and install the heater kit in its place with the screws previously removed.

7. Re-install the power entry panel, install conduit, and run the correct size field wiring through the opening in the panel.

8. Connect one field power supply wiring to the power terminal block located on the heater kit. Connect the ground wire to the adjacent ground lug.

9. Connect the heater kit control plug to the receptacle in the heater kit area.

10. Connect the second field power supply wiring to the unit terminal block in the main unit control box. Connect the ground lead to the ground lug in the main unit control box.

11. Check all electrical connections to verify that they are located properly and tight.

12. Close and secure heater section access door.

13. Affix heater kit wiring diagram to the inside of the control/filter access door.

14. Close and secure all access panels.

15. Restore power to the unit and verify proper operation.