## Electric Heater Model WEB Series

# INSTALLATION INSTRUCTIONS

Date: 8-6-99

Intercity Products Models PAMB, PAMC, PAMD, PYMC, PYMD PAA, PAB, PHAD, PHB Series

#### **GENERAL**

This Warren Technology electric heater is engineered and designed to be installed in the Intercity Products PAMB, PAMC, PAMD, PYMC, PYMD, PAA, PAB, PHAD, PHB series. Before proceeding, check the heater label for correct voltage and KW requirements.

Before installing the heater, inspect thoroughly for shipping damage. Notify carrier immediately if any damage is found. Check all porcelain insulators for breakage and inspect heater element wire to see that none have been deformed. Clean all dirt, dust, and moisture from equipment. Check for proper clearances of live parts, between phases, and to ground and make sure that all required barriers are in place. Check conductors run in multiple to insure that they are properly phased.

# WARNING **A**

Before performing service or maintenance operations on system, turn off all main power switches. There may be more than one disconnect. Turn off accessory heater power switch if applicable. Electrical shock can cause personal injury. *TAG DISCONNECT SWITCH(ES) WITH A SUITABLE WARNING LABEL.* 

#### **HEATER INSTALLATION**

- 1. Refer to base unit installation instructions as required. Affix Warren installer label to equipment access door.
- 2. Remove the access panel of package unit.
- 3. Remove internal cover plate. Save sheet metal screws. Discard cover plate.
- 4. Install heater assembly into blower access opening of unit so that the mounting plate of the heater is flush with base unit and heating elements are not in contact with any object.
- 5. Secure with sheet metal screws from cover plate.

NOTE: Heat resistant duct connector (or sheet metal sleeves) must extend 24" from heater element.

## **ELECTRICAL CONNECTIONS**

1. All electrical connections, wire sizes and type and conduit sizes shall meet the National Electric Code, State and Local Codes. Main power supply, minimum wire sizes, circuits, fusing, etc. is shown on schematic wiring diagrams.

NOTE: Use copper wire only.

- 2. Refer to air handler unit instructions for recommended wiring procedures.
- 3. Connect low voltage wires as shown in schematic diagram.
- 4. Connect power wiring as shown in schematic diagram. All connections should be made inside the air handler and comply with National Electric Codes, State and Local Codes. Heaters with factory installed fuses or circuit breakers may be installed on a branch circuit protected by either a fuse or a circuit breaker. For all other heaters, the branch circuit must be protected by a fuse or a circuit breaker supplied by others.
- 5. Make all wire spliced connections inside air handler unit. Separate all wires from incoming power leads.
- 6. Be sure that all electrical terminal connections, clamps, screws, etc. are tight before proceeding.
- 7. Check wiring diagram supplied with heater for specific connections and information.
- 8. Check operation as described in start-up section.

#### START-UP AND CHECK-OUT

**CAUTION:** Before proceeding, verify that all wiring is correct per factory approved schematic. Notify factory immediately of any discrepancies.

- 1. Refer to base unit installation instructions as required.
- 2. Check for loose terminal connections.
- 3. Check that all fuse and circuit breaker short circuit interrupting ratings are adequate.
- 4. Turn on unit and heater power.
- 5. Set thermostat to call for heat.
- 6. Check operation of heater.
- 7. Check that air flow across heater is at or above minimum recommended fan speed.
- 8. Any modification or repairs to this equipment without written permission from the factory will be done at the installer's own risk and expense.

#### SERVICE

Fuses/Circuit Breaker - Malfunction will interrupt power to unit. Check for cause of failure, correct, and replace fuses or reset circuit breaker.

Limit Switch/Fusible Link - Malfunction prevents heating element(s) from being energized. Replace switch if malfunction occurs.

**Contactor** - Malfunction will cause heater to not come on or not shut off. Replace faulty contactor. Do not attempt to replace coil or dress contacts.

**Fan Relay** - Malfunction will cause fan to not come on or not shut off. Replace faulty relay. Do not attempt to replace coil or dress contacts.