WARREN ELECTRIC

HEATER MODEL WFB SERIES

INSTALLATION INSTRUCTIONS

Date: 08/27/07

FEDDERS

AIR HANDLERS
A24B1, A30B1, A36B1/B2, A42B1,
A48B1/2, A60B1, A24C1, A30C1,
A36C1/C2, A42C1, A48C1/C2, A60C1,
AFPA24A1/B1, AFPB36A1/B1,
AFPC48A1/B1, AFPC060A1/B1

GENERAL

This electric heater series is engineered, designed, and approved to be installed in the FEDDERS (A type 24-60) Air Handler units. Before proceeding, check the heater label for correct voltage and KW requirements.

Installation and servicing of this equipment should only be performed by trained and qualified personnel. Before proceeding with the heater installation, inspect thoroughly for shipping damage. Notify the shipper 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. Make sure that all required barriers are in place. Check conductors run in multiple to insure that they are properly wired. Refer to installation instructions for complete unit installation details.

WARNING /

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

- Refer to the base unit installation instructions as required Affix Warren Installer label to the equipment access panel.
- 2. Remove blower section access panel of air handler.
- 4. Remove the terminal box located on the top panel and discard.
- From the field wiring compartment, remove the yellow and black wires from the transformer. These wires are labeled L1 and L2 (On A24C1-A60C1, and AFP*24-AFP*60 Air Handlers replace these wires with the yellow and black wires from the plug adapter harness provided with the heater).
- 5. Remove cover plate in front of blower asembly.
- 6. Carefully slide the heater assembly (fig. 1) into the blower section through the access opening. Be sure the heater assembly or elements do not rub or scrape against the metal edges or components in the electrical box. Secure the heater assembly into place with screws provided (If access to screw holes is obstructed, make use of the additional heater assembly holes with self tap screws).
- Refer to ELECTRICAL CONNECTIONS SECTION for heater plug connection.
- 8. Remove the supplied wiring diagram backing and place it on the control box for future reference.
- 9. Secure cabinet door and refer to START UP and CHECK-OUT section.

FIG. 1 SLIDE HEATER INTO BLOWER SECTION AND SECURE WITH (3) SCREWS)

HEATERS WITH CIRCUIT BREAKERS:

- 1. Remove circuit breaker knockout(s) in unit access panel as required and cut out the insulation in the opening.
- 2. Mount the **breaker cover** plate and **opening cover** provided with the heater (A24*1-A60*1 only) on the outside of the unit door opening with screws provided (see fig. 2).

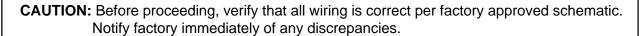
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ELECTRICAL CONNECTIONS

- 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 base unit instructions for recommended wiring procedures.
- 3. <u>A24C1-A60C1, AFP*24-AFP*60 Air Handlers</u>: Remove the yellow and black (labeled L1 and L2) wires from the transformer and replace with the yellow and black wires from the plug adapter harness provided with this heater. Connect the 4-pin and 1-pin plugs to the air handler receptacles.
- 4. <u>A 24B1-A60B1Air Handlers</u>: Disconnect plug adapter harness from the heater 6-pin plug. Connect the 6-pin plug to the 6-pin air handler receptacle.
- 4. Separate all wires from incoming power leads.
- 5. Be sure that all electrical terminal connections, clamps, screws, etc. are tight before proceeding.
- 6. Check wiring diagram supplied with heater for specific connections and information.
- 7. Check operation as described in start-up section.





- 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

Circuit Breaker - Malfunction will interrupt power to unit. *Check for cause of failure, correct, and reset circuit breaker.*

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

ELECTRIC HEATER PACKAGE CONTENTS

- 1. Heater assembly
- 2. Installation Instructions
- 3. Installer label
- 4. Schematic
- 5. Mounting screws
- 6. (1) plug adapter harness (connected to heater)

BREAKER MODELS ONLY-

- 6. Breaker cover (For use on A24*-A60* only)
- 7. Opening cover (For use on A24*-A60* only)

