WARREN ELECTRIC HEATERS WDJM(S) SERIES	INSTALLATION INSTRUCTIONS Date: 06/13/2014	CARRIER / BRYANT / PAYNE / ICP 50TF,TFQ,,HJ,HJQ,DJ,LJ,QJ, TJ,TJQ,HJ,HJQ,TC,TCQ,HC,HCQ 004-014 548C/D, 558C/D 036-072 RAS , RHS 036-072

GENERAL

This electric heater series is engineered and designed, to be installed in the Carrier 50TF,TFQ,HJ,HJQ,DJ,LJ,QJ,TJ,TJQ,HJ,HJQ,TC,TCQ,HC,HCQ 004-014, BRYANT 548C/D, 558C/D 036-072, and ICP PAYNE RAS / RHS 036-072 package 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. **Verify that all elements are properly secure in their ceramic holders. Follow all safety codes, wear safety glasses and gloves**

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

1. Refer to base unit installation instruction as required.
2. Remove indoor and outdoor access panel.
3. Remove control box cover. Select and secure single point connection box with (2) screws to the underside of the control box. Whenever required, remove all bushings in the area of the control box (see fig. 1).
4. Remove the heater control box cover to obtain access to additional heater mounting holes and for electrical connections.
5. Remove heater module access panel in Bay 1 (see fig. 2).
6. Carefully insert heater into the equipment mounting location(s). Use screws provided (see fig. 2).
7. Size the supply duct according to the discharge opening in the top of the heater and connect the ductwork with field supplied screws. The air duct system should be designed and installed in accordance with the standards of the national protection association (Pamphlet 90A or 90B). A flexible duct connector is recommended to prevent transmission of vibration. Use suitable gaskets to ensure weather tight and air tight seal. If flexible duct is used, insert a sheet metal sleeve inside the duct. Heat resistant duct connector (or sheetmetal sleeve) must extend 24-in. from the unit connection flanges into the duct work.

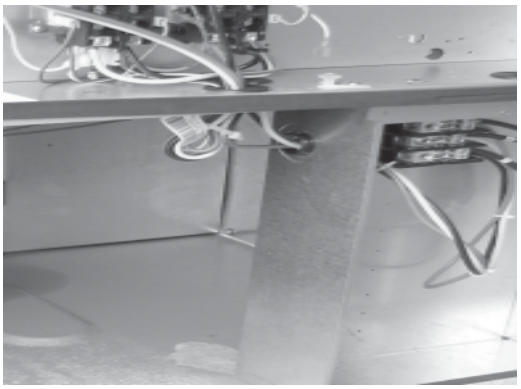

Fig. 1. Installed single point connection box.

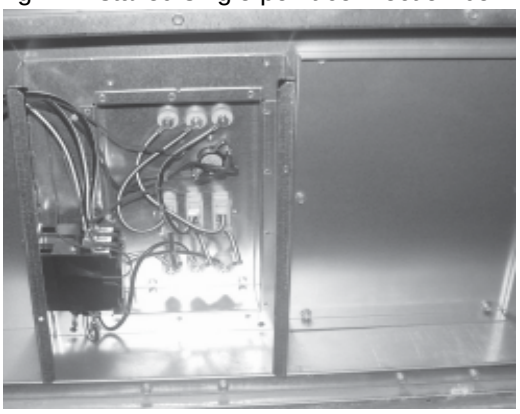

Fig. 2. Bay 1 heater installation .

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. are shown on schematic wiring diagrams. **NOTE:** Use copper wire only.
2. Refer to base unit instructions for recommended wiring procedures.
3. Heater models WDJS0444,0654,0874, and 1054 are factory wired for 3-phase applications and can be converted to single phase by following the instructions listed on the wiring diagram.
4. Route power wires from the heater control box through the center partition of the equipment to the terminal block or fuse block(s) located in the single point connection box (refer to single point box wiring diagram for connections). If no single point box is required for the unit and heater combination, run the power supply wiring to the main unit control box field power connection.
5. **Low voltage control connections.** Connect low voltage control wires from heater control box to the 4-position terminal block located next to heater bay # 1 (see fig. 3).Refer to equipment base unit instructions for 1step or 2 step wiring.
6. Check wiring diagram supplied with heater for specific connections and information .
7. Be sure that all electrical terminal connectors, clamps, screws, etc. are tight before proceeding.
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. The minimum air velocity as shown on the wiring diagram is required and must be even across the face of the heater.
8. Verify package unit) evaporator fan motor amperage against rated amperage, both in cooling and heating modes to check sequence of control operation.

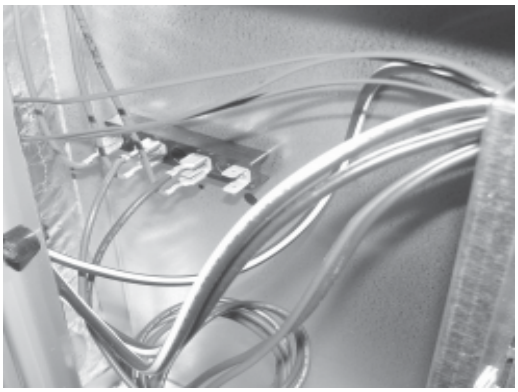

Fig. 3. Control terminal block.

Important: Use flexible connectors between ductwork and unit to prevent transmission of vibration. Use suitable gaskets to ensure weather tight and airtight seal. If flexible duct is used, insert a sheet metal sleeve inside the duct. Heat resistant duct connector (or sheet metal sleeve) must extend 24-in. from the unit connection flanges into the duct work.

9. Any modification or repairs to this equipment without written permission from the factory will be done at the installer's own risk and expense.

ELECTRIC HEATER PACKAGE CONTENTS

1. Heater assembly
2. Installation Instructions
3. Installer label
4. Wiring diagram