

TECHNICAL SERVICE DEPARTMENT Technical Service Bulletin 1-800-432-8373



Conversion of Commercial Electric Heavy Duty Models to Single Phase

Effective May 2005, all E, ES, & ME (heavy duty electric, 10 gallon electric boosters, small volume ASME, and Eclipse) models produced beginning May 2005 will be able to be converted from three phase to single phase in the field. This includes 10, 12, 20, 30, 40, 50, 85, 105, & 120 gallon models listed above. An authorized Rheem U.L. Conversion Center is not required to make this phase only conversion. Voltage or input kW changes are not allowed.

The Use and Care Manual for these products provide the following instructions. Make sure the unit is turned off; the service breaker is OFF and the wiring connections to the water heater are not connected to the field wiring block.

A chart in the Use and Care Manual has the recommended breaker size and the branch circuit wiring size. Otherwise conform to local code and the National Electric Code.

Proper voltage, proper phase and proper over current protection in accordance with the water heaters rating label are essential for the water heater to operate correctly.

6. ELECTRICAL CONNECTIONS & WIRING — Check rating plate of water heater against supply for correct voltage. The water heater is completely internally wired from the factory to the field connection terminal block for a three phase connection. For single phase connections refer to the wiring diagrams in this manual and:

- A. Disconnect the red and black wires from the field terminal block legs 1, 2, and 3.
- B. Reconnect all black wires to leg 1 of the field terminal block.
- C. Reconnect all red wires to leg 2 of the field terminal block.
- D. Connect incoming power to field terminal block legs 1 and 2. Nothing will be connected to leg 3.



- \checkmark Make sure the water heater is filled with water and purged.
- \checkmark Connect the wiring from the circuit breaker to the water heater.
- ✓ Turn breakers on.
- \checkmark Check for proper operation of the water heater.
- ✓ Verify thermostat is at a safe temperature setting appropriate for the application.

Technical Competence, Product Confidence