

Installation Instructions

20214303S Ranco Defrost Board Kit

Description

The 20214303S Ranco Defrost Board Kit is to be used as a replacement on PHB and PHD units equipped with the Heatcraft Defrost Board. This kit applies to units equipped with either a standard PSC Air Circulation Blower Motor or an ECM Air Circulation Blower Motor.



WARNING

To avoid property damage, personal injury or death due to electrical shock, disconnect the electrical power supply before servicing this unit.

Kit Contents:

- 1 - 22319801 Installation Instructions
- 1 - 20214303 Ranco Board
- 1 - 20244002 Terminal Board/Fuse
- 1 - 20214501 Control Wire Harness
- 1 - 22319501 Wiring Diagram
- 1 - 22319601 Wiring Diagram
- 1 - M0320515 Terminal Adapter
- 2 - M0216519 Screws for Defrost Board
- 1 - M0211017 Screw for Terminal Board
- 2 - 20015815 Jumper Wire YL5 (Yellow 5)

Installation Procedures with PSC motor:

1. Disconnect the wires from the existing Heatcraft defrost board in the unit. Remove Heatcraft board.
2. Install the Ranco defrost board (see figure on page 2) securing unit using supplied screws M0216519.
3. Plug in new control wire harness onto defrost board.
4. Install new terminal board (see figure on page 2). Secure using supplied screw M0211017.
5. Connect wires to board as follows.

Connect RD33 (Red-33) to "R" on terminal board before fuse.

Connect RD24 (Red-24) and RD13 (Red-13) to "R" on terminal board after fuse.

Connect OR28 (Orange-28) to "G" on terminal board.

Connect GY55 (Gray-55) to "C" on terminal board.

Connect BU6 (Blue-6) and BR21 (Brown-21) to "W" on terminal board.

Connect OR19 (Orange-19) and OR49 (Orange-49) to "O" on terminal board.

Connect YL1 (Yellow-1) and YL27 (Yellow-27) to "Y" on terminal board.

Connect BK1 (Black 1) and BU34 (Blue-34) to "C" on terminal board.

6. Connect wires on defrost board as follows:

Connect DT BK24 (Black-24) and BK13 (Black-13) wires to DFS terminals.



RECOGNIZE THIS SYMBOL AS A SAFETY PRECAUTION

ATTENTION INSTALLING PERSONNEL

As a professional installer you have an obligation to know the product better than the customer. This includes all safety precautions and related items.

Prior to actual installation, thoroughly familiarize yourself with this Instruction Manual. Pay special attention to all safety warnings. Often during installation or repair it is possible to place yourself in a position which is more hazardous than when the unit is in operation.

Remember, it is **your** responsibility to install the product safely and to know it well enough to be able to instruct a customer in its safe use.

Safety is a matter of common sense...a matter of thinking before acting. Most dealers have a list of specific good safety practices...follow them.

The precautions listed in this Installation Manual are intended as supplemental to existing practices. However, if there is a direct conflict between existing practices and the content of this manual, the precautions listed here take precedence.

Connect RV BK19 (Black-19) and BK20 (Black-20) wires to RV terminals.

Connect VT62 (Violet-62) and VT16 (Violet-16) wires to fan.

If there is a low pressure switch in the unit, connect YL/BLK (Yellow/Black) to CC; otherwise, connect BU1 (Blue-1) to CC.

Connect GY8 (Gray-8) to CC.

Jumper HI-P terminals and LO-P terminals with jumper wires YL5 (Yellow-5).

7. Install wiring diagram 22319501 over existing diagram.

Installation Procedures with ECM motor:

1. Disconnect the wires from the existing Heatcraft defrost board in the unit. Remove Heatcraft board.
2. Install the Ranco defrost board (see figure below) securing unit using supplied screws M0216519.
3. Plug in new control wire harness onto defrost board.
4. Install new terminal board (see figure below). Secure using supplied screw M0211017.
5. Connect wires to board as follows.

Connect RD33 (Red-33) to "R" on terminal board before fuse.

Connect RD24 (Red-24) and RD13 (Red-13) to "R" on terminal board after fuse.

Connect GY9 (Gray-9) to "C" on terminal board.

Connect BK1 (Black 1) and BU34 (Blue-34) to "C" on terminal board.

Connect YL1 (Yellow-1) and YL27 (Yellow-27) to "Y" on terminal board.

Connect OR19 (Orange-19) and OR49 (Orange-49) to "O" on terminal board.

Connect BU6 (Blue-6) and BR21 (Brown-21) to "W" on terminal board.

Connect GY70 (Gray-70) to "G" on terminal board.

6. Connect wires on defrost board (see figure below) as follows:

Connect DT BK24 (Black-24) and BK13 (Black-13) wires to DFS terminals.

Connect RV BK19 (Black-19) and BK20 (Black-20) wires to RV terminals.

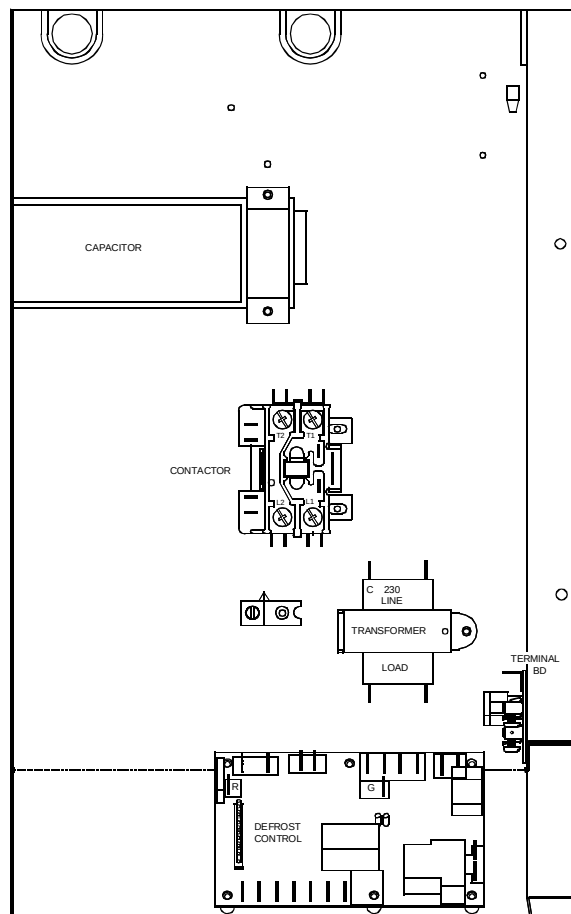
Connect VT62 (Violet-62) and VT16 (Violet-16) wires to fan.

If there is a low pressure switch in the unit, connect YL/BLK (Yellow/Black) to CC; otherwise, connect BU1 (Blue-1) to CC.

Connect GY8 (Gray-8) to CC.

Jumper HI-P terminals and LO-P terminals with jumper wires YL5 (Yellow-5).

7. Install wiring diagram 22319601 over existing diagram.



Defrost and Terminal Board Locations

