BD SPEED CONTROL AND THERMOSTAT (with AEO function)
(For XP & XPX Compressors)

Installation

The thermostat on this panel uses a capillary type sensor. This can’t be lengthened or shortened, as it is hollow and filled with vapor under pressure. You must mount the panel close enough to allow the pigtail bulb to be fastened to the evaporator plate at one of the mounting points. When mounting to a two-plate system the bulb is typically mounted to the second plate. This is the one without the valve.

Mount the BD Speed Control Thermostat panel in a dry area. It can be panel mounted or can be installed into a surface mount box.

The speed control has red LEDs indicating the compressor is running and at what speed. Be sure it is easy to view. Mount with the 4 #6 flat head screws provided.

The BD Speed Control Thermostat panel has a 15 foot 4 wire harness. These wires may be cut or spliced as needed. If you are splicing be sure to maintain the color code. The harness wires connect to the BD compressor module.

Wiring

Disconnect one of the power cables, pull the fuse, or turn off power while making the wiring changes. Refer to the wiring drawing in the BD manual.

[ ] Crimp a female connector (provided) to the red wire from the speed control cable and plug it into + (3rd row from top) terminal. This is the row with the fan red wire connected and is the last open connector. (An additional + terminal is located just above this row to right of Seafrost logo.)
[ ] Crimp a female connector to the black wire from the speed control cable plug this connector into F terminal row on the module. Connect to either open connector.
[ ] Connect the white speed control wire to either open row C terminal using a female crimp terminal.
[ ] Connect the green speed control wire to the open row T terminal using a female crimp terminal.

Operation

There are four positions AEO, high, medium and low. Refer to your XP manual for AEO operating features.
BD SPEED CONTROL AND THERMOSTAT WIRING DIAGRAM (with AEO function)  
(For XP & XPX Compressors)

1. Electronic unit  
2. Battery  
3. Fuse (see electrical connections)  
4. Main switch (optional)  
5. LED for operational errors  
6. Fan  
7. Pump (For water cooled units)  
8. Fuse (For water cooled units)  
9. Pump Switch (For water cooled units)  
10. Relay (For water cooled units)  
11. Thermostat  
12. Jumper  
13. RJ45 jack for optional Electronic Thermostat.  
14. BDSC - Speed Control & Thermostat

Note: Numbers 7, 8, 9 & 10 are for Compressor Units with the water-cooling options.