INSTALLATION INSTRUCTIONS

Freezestat

IMPORTANT SAFETY INFORMATION

INSTALLER: Please read all instructions before servicing this equipment. Pay attention to all safety warnings and any other special notes highlighted in the manual. Safety markings are used frequently throughout this manual to designate a degree or level of seriousness and should not be ignored. **WARNING** indicates a potentially hazardous situation that if not avoided, could result in personal injury or death.

A WARNING:

ELECTRICAL SHOCK, FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in serious injury or property damage.

Improper servicing could result in dangerous operation, serious injury, death or property damage.

- Before servicing, disconnect all electrical power to the unit.
- When servicing controls, label all wires prior to disconnecting. Reconnect wires correctly.
- This unit may have more than one power supply.
- Verify proper operation after servicing.

WARNING:

The safety information listed below must be followed during the installation, service, and operation of this it. Unqualified individuals should not attempt to interpret these instructions or install this equipment. Failure to follow safety recommendations could result in possible damage to the equipment, serious personal injury or death.

- Follow all precautions in the literature, on tags and labels provided with the equipment. Read and thoroughly understand the instructions provided with the equipment prior to performing the installation and operational checkout of the equipment.
- Unless noted otherwise in these instructions, only factory authorized parts or accessory kits may be used with this product. Improper installation, service, adjustment, or maintenance may cause fire, electrical shock or other hazardous conditions which may result in personal injury or property damage.
- Use caution when handling this equipment or removing components. Personal injury can occur from sharp metal edges present in all sheet metal constructed equipmen

ABOUT THE FREEZESTAT

The Freezestat (FS) included in this kit is a non-adjustable, sealed, bi-metal switch, set to open at 32° F (+ or-5° F) and close at 44° F (+ or – 6° F). When installed in a unit, it will prevent evaporator coil from freezing and limiting the damage to compressor, due to the following conditions:.

- Lack of airflow.
- Blocked TXV, restrictor or Block liquid line.
 Below normal return air temperatures.
 - FREEZESTAT INSTALLATION
- 1. Remove access panels to the evaporator and control panel as shown in Figure 1 (page 2).
- Mount the freezestat to liquid line between expansion device (TXV, Restrictor, EXV) and evaporator coil. See Figure 1 (page 2).
- 3. Fasten the freezestat to the line using the strap supplied with this kit. **NOTE**: Make sure the freezestat has good solid contact with the liquid line for best performance.
- 4. Route the wires of the freezestat through the knock out hole (of the control panel) into control panel compartment.

Electrical Connections

Heat Pump Unit with Defrost Board

Wire the Freezestat in series with High Pressure Switch (HPS) and then connect to terminal HP2 on Defrost Board. See Figure 2 (page 3).

- a. Unplug the high pressure switch wire terminal from terminal HP2 on defrost board.
- b.Connect this terminal to one terminal of the extension wire supplied with this Kit.
- c.Connect other terminal of extension wire to one of the Freezestat wire terminals.
- d.Connect other wire terminal of Freezestat to HP2 terminal on Defrost Board.

Heat Pump Unit with Demand Defrost Board

Wire the freezestat in series with high pressure switch (HPS) and then connect to terminal SW on the demand defrost board. See Figure 3 (page 3).

- a.Unplug HPS wire terminal from terminal SW on Defrost Board
- b Connect this terminal to one terminal of the extension wire supplied with this kit.
- c. Connect other terminal of extension wire to one of the freezestat wire terminals.
- d.Connect other wire terminal of Freezestat to SW terminal on Demand Defrost Board.

Air Conditioner Unit without Defrost Board:

Wire the freezestat in series with the high pressure switch (HPS) and compressor contactor coil. See Figure 4 (page 3).

- a. Unplug HPS wire terminal from one terminal of compressor contactor coil.
- b.Connect it to one terminal of extension wire supplied with this kit.
- c.Connect other terminal of extension wire to one of the Freezestat wire terminal.
- d. Connect another terminal of Freezestat back to compressor contactor Coil.
- 5. Check the connections before restoring the power to the unit.
- 6. Start the unit and make sure it operates normally.
- 7. Reinstall the evaporator or access corner and the control panel covers.



Figure 1. Freezestat Installation Location



Figure 2. Freezestat Hookup for HP unit with Defrost Board



Figure 3. Freezestat Hookup for HP unit with Demand Defrost Board



Figure 4. Freezestat Hookup for AC without Defrost Board





 $\label{eq:specifications} Specifications\,\&\,illustrations\,subject\,to\,change\,without\,notice\,or\,incurring\,obligations\,(01/19).$ O'Fallon, MO, © Nortek Global HVAC LLC 2019. All Rights Reserved.