Shipping and Packing List

Package 1 of 1 contains:
1 – Overflow (float) switch (S149)
1 – Relay (K220)
2 – Brackets
4 – Screws #8-32 x ½"
1 – Wiring harness
3 – Wire nuts
15 – Wire ties
1 – Wiring diagram

WARNING
Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a licensed professional HVAC installer or equivalent, service agency, or the gas supplier.

CAUTION
As with any mechanical equipment, contact with sharp sheet metal edges can result in personal injury. Take care while handling this equipment and wear gloves and protective clothing.

WARNING
Electric Shock Hazard! – Disconnect all power supplies before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.

WARNING
This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

Application

The float switch, catalog number 16B29 (part number 602799-07) prevents overflow from occurring after the drain pan has reached capacity. When excessive condensate begins to accumulate in the drain pan, the float switch energizes the K220 relay, causing the contacts to open, which de-energizes the 24V circuit. This de-energizes the system by shutting off the compressor and blower circuits. When the water level drops below the set point, the switch opens, de-energizing the relay which closes the circuit. This causes the 24V circuit to re-energize and the system becomes operational again.

Float Switch Assembly

1 - Disconnect all power to the unit and remove panel to gain access to the control box.
2 - Two L-shaped brackets are included in the kit. Use only the bracket with the hole pattern that allows installation as illustrated in figure 3. Secure float switch assembly to proper bracket using the two nuts as illustrated in figures 1 and 2.

FIGURE 1. Float Switch Configuration

FIGURE 2. Float Switch Mounting
FIGURE 3. Accessing Mounting Location

Hardware Installation

1 - Remove the drain pan cover panel at the condensate drain connection as shown in figure 3.

2 - Remove the two screws adjacent to the drain pan that fasten the mullion to the inner support as shown in figure 3, detail A.

3 - Install the drain pan switch assembly as illustrated in figure 4. The portion of the bracket with the two holes is positioned between the mullion and the inner support. Be certain that the holes in the bracket align with those of the mullion and inner support.

4 - Reinstall the two screws removed in step 2.

Electrical Installation

1 - Disconnect all power to the unit.
2 - Mount the K220 relay provided on the ELA control box using the screws provided.

FIGURE 4. Float Switch Bracket Installation

FIGURE 5. K220 Relay Location in ELA Control Box
3 - Disconnect the wire from terminal K232-6 and plug it in at terminal K220-2.

4 - Use the wire nuts provided to connect one end of the float switch (S149) to the harness terminals K220-A/S149.

5 - Connect the other end of the harness terminal marked K220A/S149 to terminal A on the K220 relay.

6 - Connect one end of harness terminal marked TB1-C/K220-B to terminal B on the K220 relay and the other end to the TB-1 C line.

7 - Plug in the harness terminal for K232-6 on terminal 6 of the relay. Plug in one wire from the other end to terminal 7 on the K220 relay and connect the remaining wire to the float switch (S149). See figure 6 wiring diagram for reference.

8 - Use wire ties to bundle wiring and keep it away from sharp edges.

9 - Reinstall control box and drain pan panels.

10 - Restore power to the unit.