FLOAT SWITCH KIT

INSTALLATION INSTRUCTIONS FOR FLOAT SWITCH KIT
(602799-03 & 04; 68W89 & 74W42) USED WITH KGA/KCA/KHA024-300S UNITS

Shipping and Packing List

Package 1 of 1 contains:
1- Overflow (float) switch (S149)
1- Float switch mounting bracket
1- Overflow switch delay (DL46)
1- Overflow switch relay (K220)
1- Wire harness
2- Screws #10-32 X 1/2" 
2- Screws #10-16 X 5/8" SDST
1- Screws #8-32 X 1" TFS
2- Wire nuts
15- Wire ties

Application

The overflow switch is used to interrupt cooling operation when excessive condensate collects in the drain pan. The N.O. overflow switch is controlled by K220 and DL46 relays, provided in this kit. When the overflow switch closes, 24VAC power is interrupted and after a five-second delay unit compressors are de-energized. Once the condensate level drops below the set level, the switch will open. After a five-minute delay the compressor will be energized.

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 qualified installer, service agency or the gas supplier

Installation

1- Disconnect all electrical power to unit and open control access door.
2- Remove panel covering the condensate drain pipe.
3- Secure float switch to bracket and affix to drain pan. See figure 1 for plastic drain pans and figure 2 for stainless steel drain pans.

CAUTION

Danger of sharp metallic edges. Can cause injury. Take care when servicing unit to avoid accidental contact with sharp edges.

FIGURE 1
FLOAT ASSEMBLY - PLASTIC DRAIN PANS

FIGURE 2
FLOAT ASSEMBLY - METAL DRAIN PANS
Installation

1- Install two relays on control panel with screws provided in kit. See figure 4 for 024-090 units, figure 5 for 092-150 units and figure 6 for 156-300S units.

2- Route wiring as shown in figure 7 for 024-090 units, figure 8 for 092-150 units and figure 6 and 9 for 156-300S units. Secure wiring to existing harnesses with wire ties.

3- Route wires marked S149 to float switch on drain pan. Bundle excess wire and secure to insulated suction pipe with provided wire ties.

4- Locate pink wire marked P35-1/96 in control area. Cut wire, strip ends and connect kit harness as shown in figure 10. Wires are stamped with the appropriate marking.

5- **024-090 Unit Only** -
Cut quick connect terminals off of ground wires, strip and secure to ground lug.

6- **092-300S Units Only** -
Connect the ground wires to ground terminal strip or ground lug.

7- Reinstall panels and restore power to unit.
INSTALL RELAYS - 092-150 UNITS

FIGURE 5

DL46 RELAY

PINK WIRE MARKED 96/P35-1

K220 RELAY
**FIGURE 6**

INSTALL RELAYS - 156-300S UNITS

- **P35-1**: Secure kit harness to existing harnesses using wire ties provided in unit. Connect two green wires to the ground lug as shown.
- **DL46**: Install DL46 relay and and secure using #8 screw.
- **K220**: Install K220 relay below DL46 relay and secure with 2 - #10-16 screws.
- **LOCATE AND CUT PINK WIRE MARKED <<P35-1 / 96>>**: Strip both ends, route wires and connect to harness wires with same marking.

KIT HARNESS

FACTORY WIRING
FIGURE 10

CONNECT WIRE HARNESS - ALL UNITS

024-090 UNITS: CUT QUICK CONNECT TERMINAL OFF OF WIRE AND ATTACH TO GROUND LUG

KIT HARNESS
FACTORY WIRING

CUT PINK WIRE

TO S149

S149

S149

024-090 UNITS:
CUT QUICK CONNECT TERMINAL OFF OF WIRE AND ATTACH TO GROUND LUG

DL46-1

DL46-2

DL46-5

GND