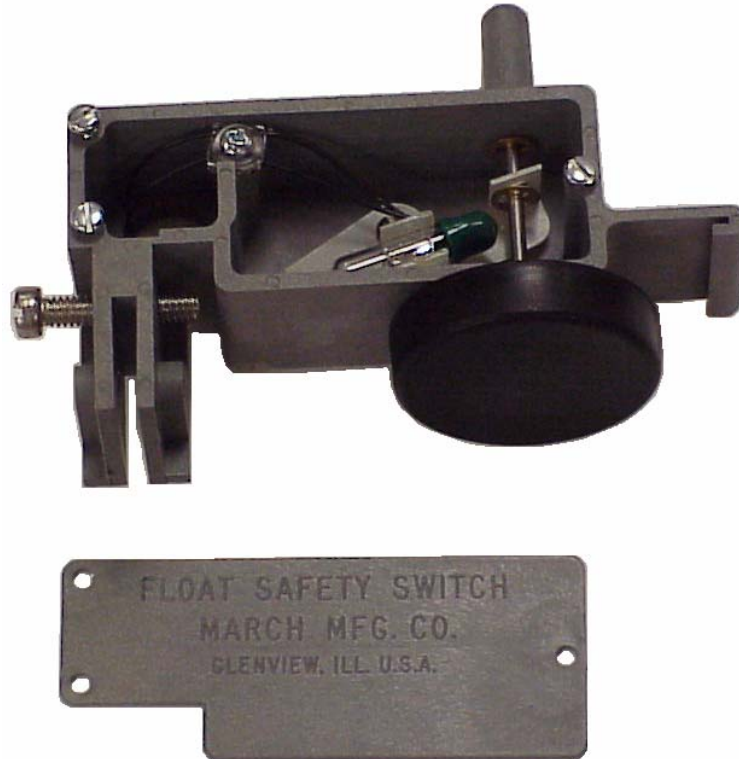




# MARCH PUMPS

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## INSTRUCTIONS & REPAIR PARTS FOR MODELS "PFS" AND "SFS" FLOAT SWITCHES



### APPLICATION

The float switch is available as a Model P-FS and as a Model S-FS switch. The Model P-FS makes contact with the electrical current as the float rises  $\frac{1}{2}$  inch due to the water accumulation. This enables the pumps, such as Model C, 2U, 2C, etc. to have automatic "on"- "off" operation as the water collects in the pan. As the pumps pump out the water the float lowers and shuts the pump off.

The Model S-FS breaks contact as the float rises and hence can be used as a safety control to shut off the air conditioner to prevent water overflowing the pan.

This safety is required in all pump hook-ups where if the pump fails due to dirt accumulation or malfunction of the pump, the unit generating the water will be turned off to prevent overflow and water damage to the surrounding area.

The Models P-FS and S-FS are the same construction except for the position of the mercury tube. You can reverse the position of the mercury tube to make either a P-FS or an S-FS switch.

### ELECTRICAL

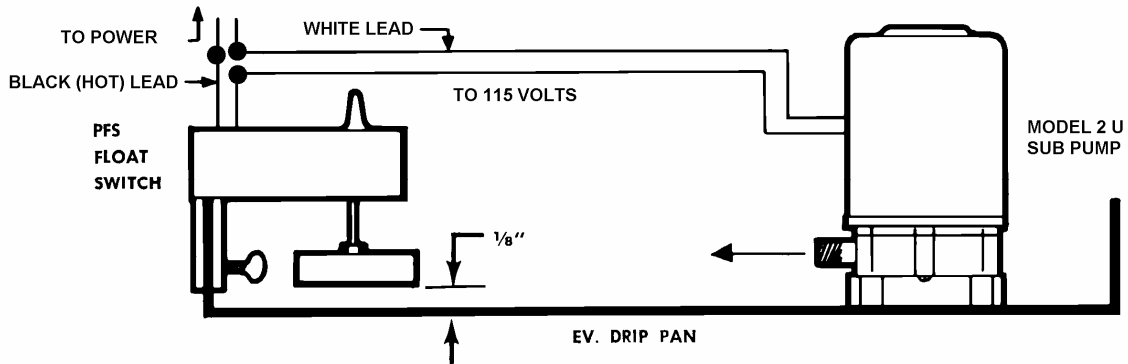
The mercury tubes in the switches are rated at 1.8 amps at 115 volt, and .9 amps at 230 volt. A typical wiring diagram is shown on the back of this sheet. Connect the black lead to the hot power lead. Tape all the wire connections with waterproof tape and insert them into the conduit area of the switch. The mercury tubes are moisture-proof and can even stand short periods of complete immersion in water.

### INSTALLATION

The P-FS or S-FS switches are designed to clamp over the edge of the condensate pan or any other container used to collect the water. The height of the switch when mounted on the pan will control the amount of water left in the pan. The float should be positioned  $\frac{1}{8}$ " from the bottom of the pan. This means that the P-FS switch will make contact with  $\frac{3}{4}$  inches of water, and break contact when the pump has pumped the water down to  $\frac{1}{4}$  inch from the bottom of the pan.

The S-FS switch should be positioned so that the switch breaks contact before the water can overflow the pan. Enough of a safety margin should be allowed to hold the water that might continue to drop into the pan even after the unit has been turned off.

## TYPICAL WIRING HOOK-UP DIAGRAM



### MODEL AB-FK WITH HI-SAFETY SWITCH

Illustrated above is a Model S-FS Safety Float Switch mounted on the pan of an AB-FK Kit. In the event that condensate water rises beyond the high level of the control float, the second (Hi-Safety) float rises and breaks the circuit to the thermostat of refrigerated equipment. The Hi-Safety float protects against water damage due to overflow and the thermal overload (in an AB-F pump) protects against motor burn-out. Now you have all the safety features of higher priced condensate removal pumps.

#### REPAIR PARTS LIST

ITEM	DESCRIPTION	MATERIAL	QTY.	PART NO.
1	Cover Screws	Steel-Plated	3	0620-0021-1000
2	Switch Housing	Plastic	1	0620-0028-1000
3	Switch Cover	Plastic	1	0620-0029-1000
4	Mercury Tube	Glass	1	0620-0024-0100
5	Tube Tilt Lever	Plastic	1	0410-0022-1000
6	Floats & Rod Ass'y.	Plastic & Stainless	1	0410-0017-0100
7	Pivot Washer	Stainless	1	0410-0009-1000
8	Retaining Rod Rings	Stainless	2	0410-0007-1000
9	Pivot Screw	Stainless	1	0135-0040-1000

### WARRANTY

March float switches are guaranteed only against defects in workmanship or material for a period of one year from date of manufacture. See March Pump Warranty Card F-4109 for full warranty information.



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