

# CSR1 Current Sensing Relay

## 110 VAC INSTALLATION INSTRUCTIONS

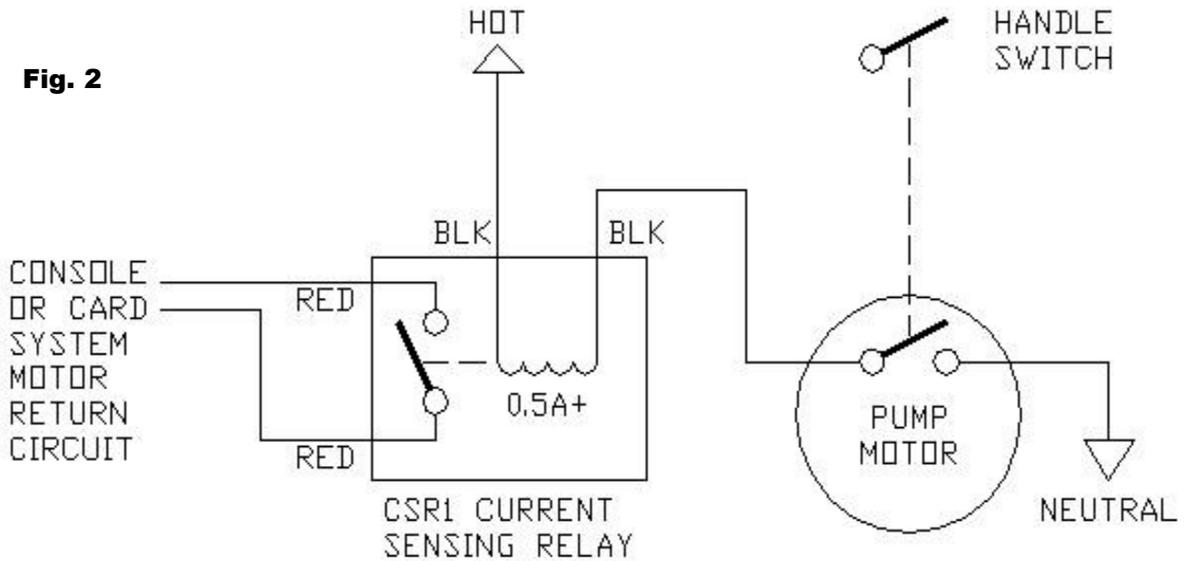
The CSR1 Current Sensing Relay is typically installed in locations where a sealed switch motor is used, and it is not possible to tap into the handle switch contacts for an "in use" or "motor return" wire. The CSR1 can also be used however to eliminate the need for an extra wire to the pump, by providing an in use signal inside a console or card system.

1. To install the CSR1, Connect the black wires in series with the motor power as shown in Fig. 2. When 0.5 Amps or more flows through the black wires, the red wires will be switched together.
2. If the console or card system requires a 110VAC in use signal, connect one of the red wires to 110VAC Hot, and the other to the in use terminal. Although the diagram depicts the CSR1 as a relay, the output switch is in fact solid state with an on resistance of 23-35 ohms.

Fig. 1



Fig. 2



### SPECIFICATIONS

Input (Black Wires)		Output (Red Wires)	
Voltage:	110VAC or 220VAC	Switching Voltage:	5 to 350 Volts AC or DC
Minimum trigger current:	0.5A	Maximum Current	300mA
Maximum Current:	10A	ON Resistance	23-35 Ohms
Switching Time:	1mS		
Case Size:	3" x 1.5" x 1"		

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