

SECTION 678-8

TRANSFER RELAY (MODEL 430)

678-8.1 General Requirements:

A Transfer Relay, also referred to as a Flash Transfer Relay, shall be used for transferring control of the intersection signal indications from the Signal Load Switches to the Flasher and vice versa.

678-8.2 Design Requirements:

678-8.2.1 Physical Characteristics:

- (a) The Transfer Relay shall be of electro-mechanical type for continuous duty.
- (b) The Transfer Relay shall be designed to plug into BEAU S- 5408 sockets or approved equivalent.
- (c) The Transfer Relay shall be enclosed in a removable, clear plastic cover which shall afford maximum protection from foreign materials. The manufacturer's name, electrical rating and part number shall be placed on the cover. They shall be permanent, durable, and readily visible.
- (d) Each Relay shall be provided with DPDT contacts. Contact points shall be of fine silver, silver alloy or superior alternative material. Contact points and arms shall be capable of switching a 20 ampere at 120 VAC tungsten load per contact once every two (2) seconds with a 50 percent duty cycle for at least two hundred and fifty thousand (250,000) operations without contact welding or excessive burning, pitting, or cavitation.

678-8.2.2 Electrical Characteristics:

- (a) The Transfer Relay contacts shall have a minimum current rating of 20 amperes at 120 volts AC RMS.
- (b) The Relay coil shall have a power consumption of 10 volt-amperes maximum.
- (c) Each Relay shall withstand a potential of 1500 VAC at 60 Hz between insulated parts and between current carrying or non-carrying parts. Each Relay shall have a one (1) cycle surge rating of 175 amperes RMS.
- (d) The electrical configuration of the Model 430 Flash Transfer Relay is provided in Figure 678-23.

678-8.3 Pin

Pin assignments for the Transfer Relay are shown in Figure 678-24.

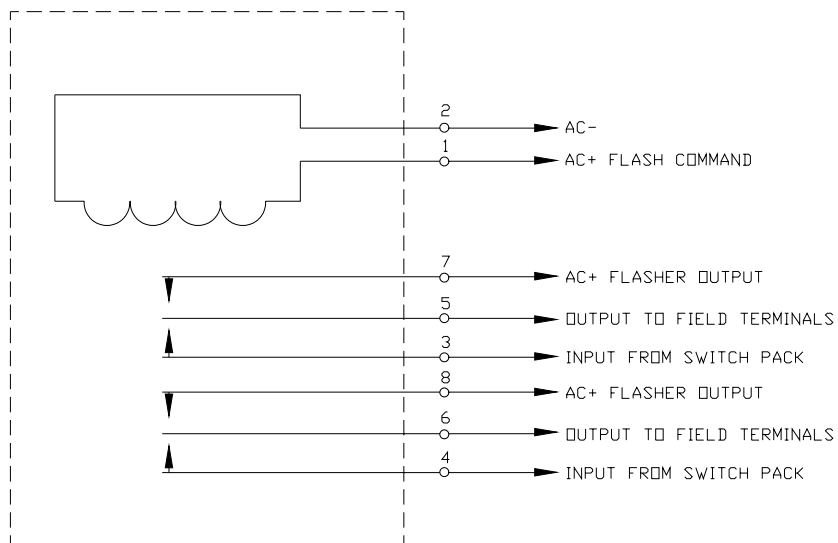


Figure 678-23: MODEL 430 FLASH TRANSFER RELAY CONFIGURATION

PIN NUMBER	FUNCTION
1	Coil
2	Coil
3	N.C. Circuit #1
4	N.C. Circuit #2
5	Common Circuit
6	Common Circuit
7	N.O. Circuit # 1
8	N.O. Circuit #2

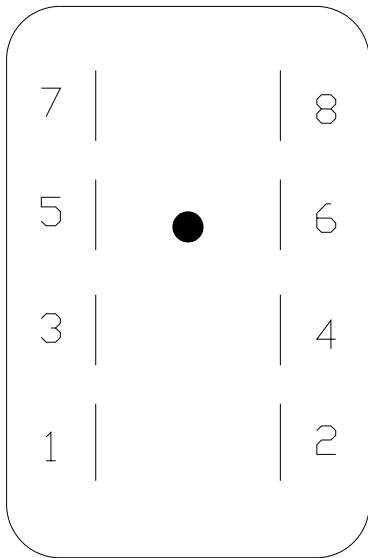


Figure 678-24: TRANSFER RELAY PIN ASSIGNMENTS