

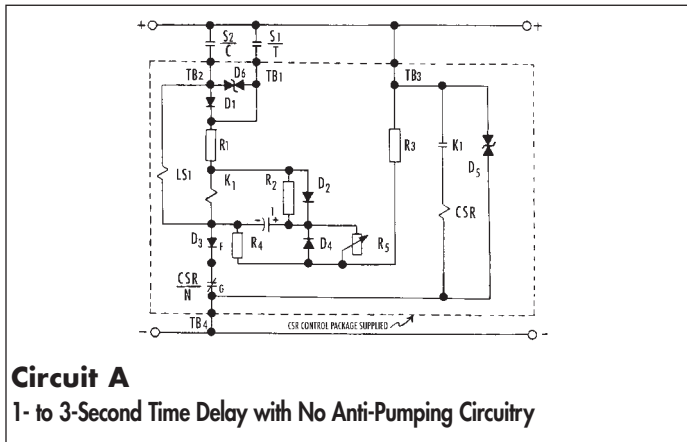


CONTROL SWITCH RELAYS

Circuit A

1- to 3-Second Time Delay With No Anti-Pumping Circuitry - *Not Recommended Where SCADA Timing Sequence is Greater Than 3 Seconds.*

Circuit A has a factory adjustable time delay that holds the CSR in the commanded position for 1 to 3 sec. The command contact closure time should be greater than 100 msec and less than the time delay setting (to avoid pumping). This circuit is not recommended for applications where the SCADA timing sequence is greater than three seconds as it will cause pumping.

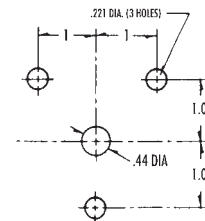
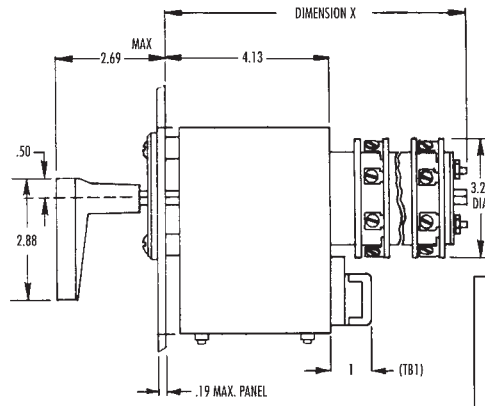
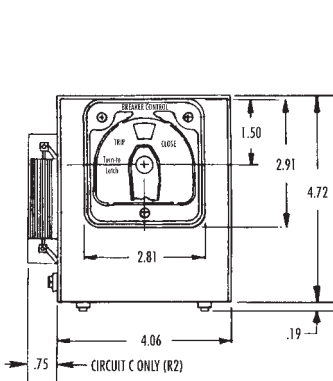
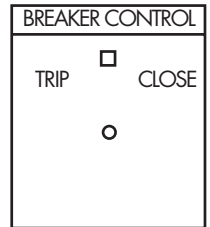


Circuit A
1- to 3-Second Time Delay with No Anti-Pumping Circuitry

Contact Chart

DECKS	CONTACTS	POS.			
		TRIP	NAT	MAC	CLOSE
1	12 —○— — —○ 13				✗
	16 —○— — —○ 17				✗
2	21 —○— — —○ 28	✗			
	24 —○— — —○ 25	✗			
3	31 —○— — —○ 32		✗	✗	
	35 —○— — —○ 36		✗	✗	
4	42 —○— — —○ 43			✗	✗
	46 —○— — —○ 47			✗	✗
5	51 —○— — —○ 52	✗			
	55 —○— — —○ 56	✗			

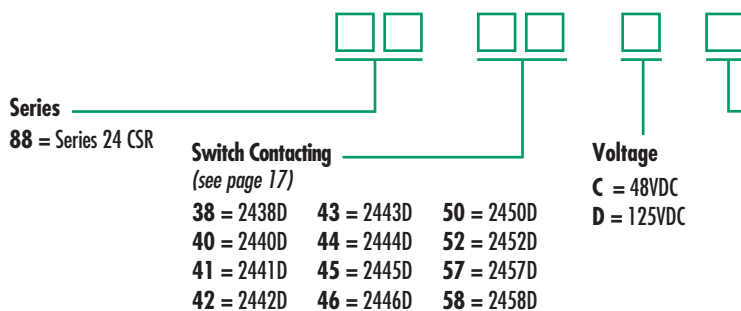
nat = normal after TRIP
nac = normal after CLOSE



DEPTH BEHIND PANEL (DIM X)

No of Decks	Standard Config.	With Slip Contacts
1	6.5	7.9
2	7.1	8.6
3	7.9	9.0
4	8.6	9.7
5	9.0	10.5
6	9.7	11.0

Series 24 CSR Ordering Information



Series
88 = Series 24 CSR

Switch Contacting
(see page 17)

- 38 = 2438D 43 = 2443D 50 = 2450D
- 40 = 2440D 44 = 2444D 52 = 2452D
- 41 = 2441D 45 = 2445D 57 = 2457D
- 42 = 2442D 46 = 2446D 58 = 2458D

Voltage
C = 48VDC
D = 125VDC

CSR Circuit

- A = 1-3 Sec. Time Delay
- B = 1 Sec. Time Delay Seal-in-Relay
- C = Up to 15 Sec. Time Delay Hold-in-Resistor

The circuit breaker control switch relays include an engraved nameplate, mechanical target, and pistol-grip handle. Circuits 50, 52 and 58 also have a Turn-To-Latch position. Also included are the control circuits previously explained.

CSR Control Switch Relays have the same flexibility of design as the Series 24 line of Instrument and Control Switches and are available with all the different contact configurations expected from this type of switch. Refer to switch section for details.