



Breaker Control Switch Relay with Time-Delay Trip and Close for "Arc Flash Safe" Operation



TD-CSR Lighted Nameplate Showing Delay Trip and Delay Close Push Buttons

The Time Delay Control Switch Relay (TD-CSR) provides an Arc Flash Safe method of Local Breaker Control that does not require SCADA. The TD-CSR expands the functionality of the field proven CSR design to include a new Time Delay Feature.

Two front panel mounted push buttons are integrated into the lighted nameplate package. This provides the ability to manually initiate a time delayed breaker trip or close operation.

Flashing of the appropriate LED alerts the operator of a pending trip or close operation to allow adequate time to evacuate the "Arc Flash" area.

The TD-CSR is available with all of the features and options of the standard CSR. The lighted nameplate includes local LED indication, a remote SCADA contact alarm, and a single or dual trip coil monitoring option.

Additional Features

- Local Trip or Close with 10 Second Delay via Push Button
- Flashing LED to Indicate Pending Operation
- Pending Operation Easily Cancelled
- Visible LED and Trip/Close Flag Indication
- Four Second Hold Requirement Prevents Accidental Push Button Operation
- Optional Factory Programmable Delay Time
- Traditional Manual Trip and Close via Pistol Grip

Safety and Cost-Saving Benefits

- Provides Safe On-Site Breaker Operation While Keeping Personnel Outside The "Arc Flash Zone"
- Fits Into Existing Breaker Control Switch Mounting
- No Special Wiring Required
- Includes Features of the Standard CSR
- Intuitive Push Button Operation Simplifies Training Requirements
- Provides a Reliable, Cost-Effective Method for Arc Flash Hazard Protection

Other Arc Flash Control Devices From Electroswitch

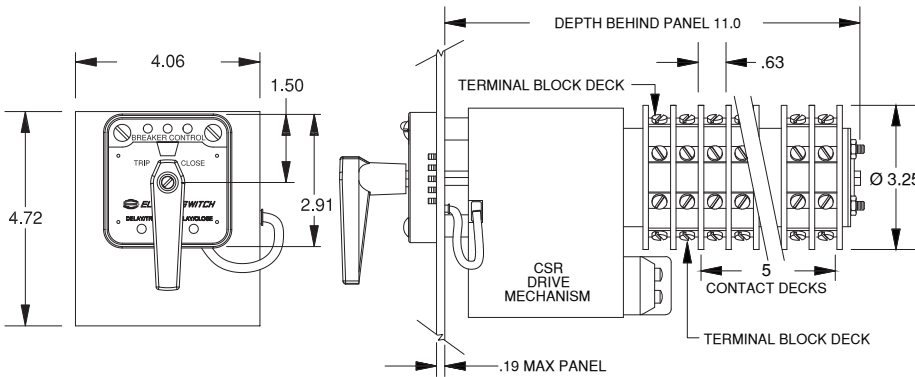


3 Position Tagging Relay

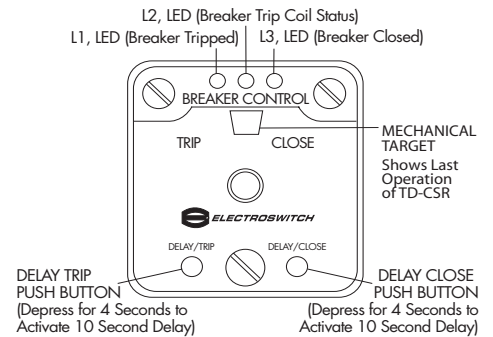
- Position 1**
Reclose Disabled
- Position 2**
Reclose Enabled
- Position 3**
Tagged, Relay Set to Instant Trip, Reclose Disabled — One Shot to Lockout



2 Position Tagging Relay



Nameplate – Typical Configuration



Specifications

Electrical

Continuous Ratings: 30A–600V
 UL Interrupt Ratings: 20A–120VAC, 15A–240VAC, 6A–600VAC, 3A–125VDC, 1A–250VDC
 Overload Current (50 Ops): 95A–120VAC, 65A–240VAC, 35A–600VAC
 Making Ability for CB Coils: 95A–125VDC
 Contact Resistance: .01 Ohms Maximum

Electronic

Transient Protection: Meets ANSI/IEEE C37.90.1
 Operation Hold Time: 1 Sec. Standard

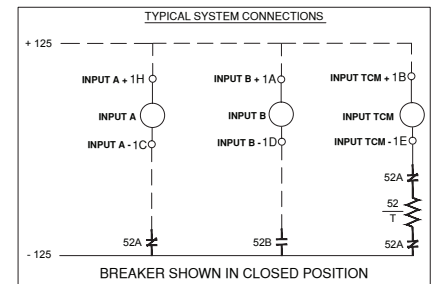
Mechanical

Contacts: Break-Before-Make (Non-Shorting);
 Make-Before-Break (Shorting);
 Standard and Slip Contacts Available
 Action: 45° Spring Return
 Mounting: Panel Mount
 Panel Thickness: 3/16" Max. Standard – Others Available
 Rotor Contacts: Silver Overlay Phosphor-bronze, Double-Wiping
 Stationary Contacts: Silver Inlay Plated, with Integral Screw Type Terminals
 Construction: Contacts Enclosed in Molded Phenolic Insulation

Operational and Burden Voltage Data

Coil	Rated Voltage	Voltage Range	Coil Circuit DC Ohms @ 25°C	Burden (amps) at Rated Voltage
C	48VDC	41-56VDC	4.83	9.9
D	125VDC	106-140VDC	18.96	6.6

Typical Breaker Input Connections



Use of Inputs

Input A controls the L3 (right) LED. In a typical application, it is used to monitor a 52A contact.
 Input B controls the L1 (left) LED. In a typical application, it is used to monitor a 52B contact.
 Input TCM controls the L2 (center) LED. In a typical application, it is used as a trip coil monitor.
 The inputs are polarity sensitive. Reverse polarity causes no damage, but will not be sensed.

Contact Configuration

Flexible deck configuration offers multiple decks with two isolated contacts per deck; a total of twelve contacts each designed to handle full rated current.

NOTE: All features and configurations currently available on the CSR are available on the TD-CSR.

Required Ordering Information

- Handle: Pistol Grip Std.
- Voltage: 125VDC or 48VDC
- Engraving
- Turn to Latch Option
- Single or Dual Trip Coil Monitoring
- Contact Configuration
- L1, L2, L3 (Replaceable LED Colors – Amber, Red, Green, Blue, White)
- Trip/Close Hold Time – Standard Setting 1 Sec.

Consult Factory for Additional Information