‘Automation That Keeps A Handle On System Protection And Control’

The Series 24 Serial Control Switch Relay (SCSR) with Certified DNP 3.00 expands the functionality of the field proven remotely operated Series 24 Breaker Control Switch.

An addressable network device, the SCSR provides Remote Trip Coil Monitoring, Sequence of Events (SOE) Reporting, System Battery Monitoring, and Self-Diagnostic Reporting, while maintaining traditional local control operability.

Cost-Saving Benefits

- Free up RTU Points
- Reduce Point to Point Wiring
- Simplify Testing for Easier Commissioning
- Minimize Training
- Eliminate Separate Devices
  - RTU
  - Interposing Relays for Breaker Control
  - Discrete Battery Monitors
  - Breaker Status Lamps
  - Local/Remote Control Switch
- Precise Sequence of Events Log with IRIG-B Input

Additional Features

- Construction and Contacting Based on the Field Proven CSR Device
- Breaker Position via LED, SCADA & Mechanical Target
- Breaker Trip Coil(s) Integrity LED
- Serial Bus Xmit/Rec LED
- Local/Remote Mode Control with LED Status Indication
- Manual Trip/Close Handle
- Programmable Dwell Time
- Monitor Up to Two Trip Coils

Traditional CSR Installation

New Simplified SCSR Installation

The SCSR installation provides cost savings associated with wiring (wiring errors), testing, and commissioning.

Additional Serial Control Devices from Electroswitch

Series 24 SLOR Serial Lock-Out Relay

Series 31 STR Serial Tagging Relay

Series 24 SLSR Serial Latching Switch Relay
**Operational and Burden Voltage Data**

<table>
<thead>
<tr>
<th>Coils</th>
<th>Rated Voltage</th>
<th>Voltage Range</th>
<th>Coil Circuit DC Ohms @ 25°C</th>
<th>Burden (Amps) at Rated Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>48VDC</td>
<td>41-56VDC</td>
<td>4.83</td>
<td>9.9</td>
</tr>
<tr>
<td>D</td>
<td>125VDC</td>
<td>106-140VDC</td>
<td>18.96</td>
<td>6.6</td>
</tr>
</tbody>
</table>

**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
- Overload Current (50 Ops): 3A–125VDC, 1A–250VDC
- UL Interrupt Ratings: 20A–120VAC, 15A–240VAC, 6A–600VAC, 3A–125VDC, 1A–250VDC
- Continuous Ratings: 30A–600V

**Electronic**
- Baud Rate: 9600 Std.
- Signal Hold Time: 1 Sec. Standard, 1-3 Seconds Serially Selectable
- Contact Resistance: 0.01 Ohms Maximum

**Mechanical**
- Sections: 1 to 6
- Poles: 1 to 12
- Contacts: Break-Before-Make (Non-Shorting), Make-Before-Break (Shorting)
- Standard and Slip Contacts Available
- Action: 45° Spring Return to Normal
- Mounting: Panel Mount, 3 Hole Mounting
- Panel Thickness: 3/16” Max. Standard – Others Available
- Rotor Contacts: Silver Inlay, Phosphor-bronze, Double-Wiping
- Stationary Contacts: Silver Plated, with Integral Screw Type Terminals
- Construction: Contacts Enclosed in Molded Phenolic Insulators

**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.

**Use of Inputs**
- Input A controls the L3 (right) LED and sets DNP object 1 point 4. In a typical application, it is used to monitor a 52A contact.
- Input B controls the L1 (left) LED and sets DNP object 1 point 3. In a typical application, it is used to monitor a 52B contact.
- Input TCM controls the L2 (center) LED and sets DNP object 1 point 5. In a typical application, it is used as a trip coil monitor. The inputs are polarity sensitive. Reverse polarity causes no damage, but input will not be sensed.

Consult Technical Bulletin ES-SCSR-1 for further information on DNP usage, including system battery voltage measurement, time stamping of events, and sensing of switch position.

**Nameplate Configuration**

L2, LED (Breaker Trip Coil Status)
L1, LED (Breaker Open)
L3, LED (Breaker Closed)

**Required Ordering Information**

- Protocol: DNP 3.00 Std.
- Baud Rate: 9600 Std.
- 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 – Range 1-3 sec.; Standard Setting 1 Sec.