



'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.

Additional Features

- Construction and Contacting Based on the Field Proven CSR Device Reduce Point to Points
- Breaker Position via LED & Mechanical Target
- Breaker <u>Trip</u> Coil(s) Integrity LED
- Serial Bus X-mit/Rec LED
- Local/Remote Mode Control with LED Status Indication
- Manual Trip/Close Handle

VS

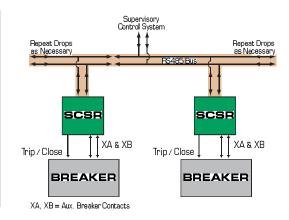
Cost-Saving Benefits

- Reduce Point to Point Wiring
- Simplify Testing for Easier Commissioning
- Minimize Training
- Eliminate Separate Devices
- RTU
- Interposing Relays for Breaker ControlDiscrete Battery Monitors
- Breaker Status Lamps
- Local/Remote Control Switch

Traditional CSR Installation

Supervisory Control System Repeat Drops as Necessary Repeat Drops as Necessary RTU Trip & Close Discrete I/O Trip & Lines to RTU Close XΑ Coil Monitor Coil Monitor BREAKER **BREAKER** CSR CSR XA. XB = Aux. Breaker Contacts

New Simplified SCSR Installation

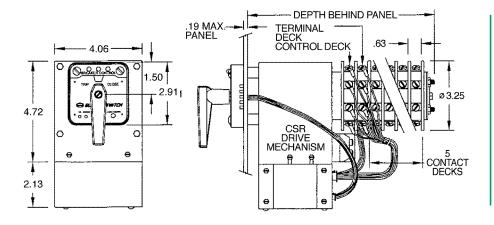


The SCSR installation provides cost savings associated with wiring (wiring errors), testing, and commissioning.

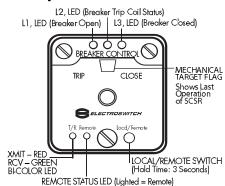








Nameplate - Typical Configuration



Specifications

Electrical

Continuous Ratings: 30A-600V

UL Interrupt Ratings: 20A-120VAC, 15A-240VAC, 6A-600VAC,

3A-125VDC, 1A-250VDC

95A-120VAC, 65A-240VAC, 35A-600VAC Overload Current (50 Ops):

Making Ability for CB Coils: 95A-125VDC Contact Resistance: .01 Ohms Maximum

Electronic

9600 Std. 1200, 4800, 19200 Selectable Baud Rate: Meets IEEE C37.90.1 and IEC 61000-4-4 Transient Protection: Signal Hold Time: 1 Sec. Standard, 1-3 Seconds Serially Selectable

Mechanical

Sections 1 to 6 1 to 12 Poles

Break-Before-Make (Non-Shorting); **Contacts**

Make-Before-Break (Shorting) Standard and Slip Contacts Available

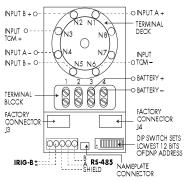
45° Spring Return to Normal Action Panel Mount, 3 Hole Mounting, Mounting Panel Thickness 3/16" Max. Standard – Others Available

Silver Inlay Phosphor-bronze, Double-Wiping Rotor Contacts Stationary Contacts Silver Plated, with Integral Screw Type Terminals Contacts Enclosed in Molded Phenolic Insulators Construction

Operational and Burden Voltage Data

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

Installation **Connections** (Rear View)





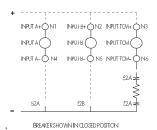
Contact Configuration

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 ČSR are available on the Serial Control SCSR.

Typical Breaker **Input Connections**

System Connections



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 5'2'A 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.

Required Ordering Information

- Protocol: DNP 3.00 Std. • Baud Rate: 9600 Std.
- Handle: Pistol Grip Std. • Voltage: 125VDC or 48VDC
- 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.