

⚡ WARNING ⚡

- **Electric Shock Hazard, Use Caution**
- Disconnect and lock out power before installation
- Follow national and local electrical codes
- Read and understand these instructions before installing
- Installation only by qualified electrical personnel
- Do not rely on this device to indicate line power
- Only install this device with CS current switch or sensor
- Do not use this device for life-safety applications
- Do not install in hazardous or classified locations
- Install this product in a suitable electrical enclosure
- **Failure to follow these instructions will result in death or serious injury.**

Specifications

Coil Voltage	CSR-112 --- 12 Vdc ± 10%
	CSR-124 --- 24 Vac/dc ± 10%
Coil Current	CSR-112 --- 25 mA maximum
	CSR-124 --- 13 mA maximum
Relay Contacts	SPDT Form C (NO + NC)
Contact Rating	5A @ 250Vac/30Vdc Resistive
	2A @ 250Vac/30Vdc Inductive
Contact Resistance	30 mΩ maximum
Operating Temperature	-15 to 60 °C (5 to 140 °F)
Operating Humidity	5 to 90 %RH, non-condensing
Terminal Block	14 to 22 AWG
Dimensions	2 x 1.4 x 0.83 in
	(50.8 x 35.6 x 21.1 mm)
Enclosure Material	ABS/PC, UL94 V-0
Manufacturing	ISO 9001 Certified
Agency Approvals	cULus Listed

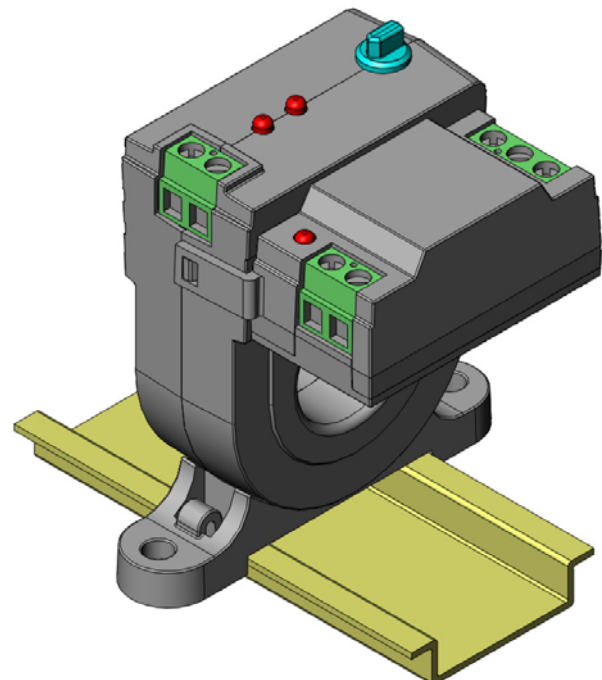
Operation

The CSR command relay attaches to the side of any full-size CS type sensor or switch and adds a form C relay function. It provides line voltage switching with control either from an automation system digital output or from a CS-610-200 or CS-GnG-200 current switch. A status LED indicates the relay state and the relay output features both a normally-open and a normally-closed contact.

The CSR/CS combination provides a convenient solution when status indication and motor control are needed at a single location. The CSR can accept a digital control signal from the controller to activate the relay contacts which can be used to provide power to the motor contactor to start the motor. The CS switch will then provide a digital proof-of-flow signal to the controller to indicate motor status.

Installation

- Read all warnings before beginning
- Ensure the selected device has the correct ratings
- Disconnect and lock out power
- Snap the CSR device onto the side of a CS product
- Mount the CS switch with two screws through the base or snap onto a standard DIN mounting rail
- Place the monitored conductor through the sensor hole
- Wire the status output to the controller as shown in the wiring diagrams (not polarity sensitive)
- Wire the coil input to the controller or status switch as required
- Wire the relay contacts to the load as required
- Reconnect the power

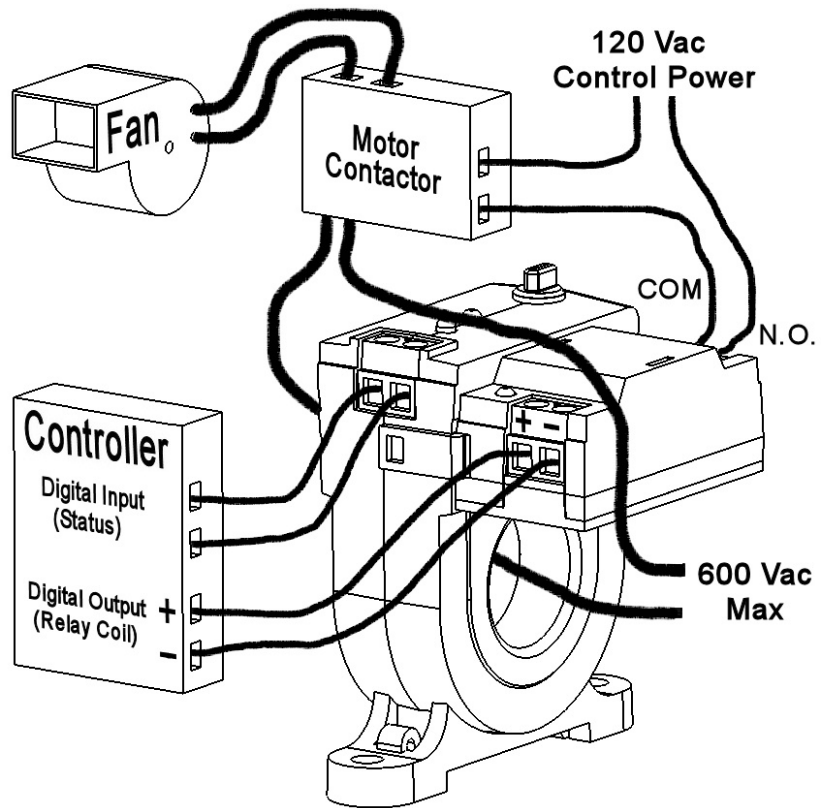


Wiring

The controller digital output (either 12 Vdc for CSR-112 or 24 Vdc for CSR-124) controls the CSR command relay coil input. When the coil signal is received, the CSR relay contacts close to supply 120 Vac power to the motor contactor.

The motor contactor then switches the 600 Vac power to the fan and the fan starts.

The CS-610 current switch monitors the current flow to the fan and when it's trip level is exceeded, it supplies a digital input signal to the controller to indicate the fan status.



The CS-610 monitors the current to the heater. When the heater current exceeds the CS-610 trip point, the CS output contacts close to complete the low voltage circuit and 24 Vdc is applied to the CSR-124 coil input.

The energized coil input closes the CSR relay contacts and applies 120 Vac to the fan.

