CSDSC Current Switch Devices

Description

The Current Switch Devices Self-Calibrating (CSDSC) Series of Current Switch Devices provide reliable verification of electrical equipment operation in a variety of applications, including fans and pumps. CSDSC current switch devices use a single-turn dial to select motor full load amps, eliminating the need for live calibration and significantly reducing installation time compared to traditional current switches.

CSDSC switches use full load amps instead of horsepower, eliminating the need for separate part numbers as a function of line voltage. CSDSC current switches are installed when the panel is de-energized. The ability to preset the sensor eliminates the need for Personal Protective Equipment (PPE) that is required by OSHA when working with a live panel.

Refer to the CSDSC and CSDECM Current Switch Devices Product Bulletin (LIT-12012403) for important product application information.

Features

- Split and Solid Core Models with Mini-Sized Variants—Fit in tight enclosures.
- Monitored Load—Supplies power without a power supply.
- Optional N.O. Relay—Adds 10 A at 125 VAC switching power with a choice of 24 or 12 V coil.
- **Polarity Insensitive Output**—Provides easier wiring.
- Low Turn on Current—Extends use to sub-fractional HP motors.
- LED Indication of Switch Status—Allows you to easily check the switch's on/off status.

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Selection Chart

Code Number	Core Type	Minimum Turn- On Amps	Maximum Amps	LEDs	Relay Option
CSDSC-C45050Lx	Clamp	0.45 A	50 A	High, Low, Power	Yes ¹
CSDSC-C50100Lx		0.50 A	100 A		
CSDSC-C50150Lx			150 A		
CSDSCM-C01050		1.00 A	50 A	Trip	No
CSDSCM-S75050L	Solid	0.75 A	50 A	Trip	No
CSDSCM-S75005L					
CSDSCMM-S75050L					

1. See Relay Options for relay order code information.

Relay Options

Relay Order Code	Contact Rating	Coil	-	Relay Dimensions, in. (mm) (L x H x W)
1	N.O. 10 A at 125 VAC	24 VAC/VDC 15 mA	CRCSDP-NO-24	0.84 x 0.72 x 2.06
2			CRCSDP-NC-24	(21.3 x 18.3 x 52.3)
3		12 VDC 30 mA	CRCSDP-NO-12	
4			CRCSDP-NC-12	
0	No Relay	N/A	N/A	N/A

The performance specifications are nominal and conform to acceptable industry standards.

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CSDSC Current Switch Devices (Continued)

Technical Specifications

		C	SDSC Current Switch	Devices				
		CSDSC-C45050Lx CSDSC-C50100Lx CSDSC-C50150Lx	CSDSCM-C01050	CSDSC-S75050L	CSDSCM-S75005L CSDSCM-S75050L			
Status Output		Switch normally open						
Switch Load Capa	city	1.0 at 30 VAC/VDC						
Switch Setpoint		Adjustable						
Maximum Current		50 A 100 A 150 A	50 A	50 A	5 A 50 A			
Minimum Trip Set	point Value	0.45 A 0.50 A 0.50 A	1.00 A	0.75 A	0.75 A 0.75 A			
Aperture (Sensing Dimensions, in. (n		0.75 x 0.75 (19.1 x 19.1)	0.4 x 0.32 (10.2 x 8.1 mm)	0.51 (13.0)	0.30 (7.6)			
Switch LED Indica	tion	Yes						
Current Switching	Mode	Over/Under						
Sensor Supply Vo	Itage	Induced from power conductor cable						
Status Output Wir	atus Output Wire Size 14 to 24 AWG (1.6 to 0.5 mm)							
Screw Torque		3.5 to 4.4 in-lb (0.4 to 0.5 N·m)						
Isolation Voltage		600 VAC rms (UL), 300 VAC rms (CE)						
Frequency Range		50/60 Hz						
Temperature Range		5 to 140°F (-15 to 60°C)						
Humidity Range 0 to 95% noncondensing								
Dimensions, in. (n	וm)	2.5 x 0.57 x 2.23 (63.5 x 14.5 x 56.6)	2.0 x 0.75 x 1.75 (50.8 x 19.1 x 44.5)	2.26 x 0.97 x 1.6 (57.4 x 24.6 x 40.6)	1.91 x 0.88 x 1.31 (48.5 x 22.4 x 33.3)			
Command Relay Device Actuation Coil		20 to 30 VAC/VDC, 12 to 20 mA or 10 to 14 VAC/VDC, 25 to 35 mA (models except -0L0)	N/A	N/A	N/A			
Relay Contact Rating		N.O. 10A at 125 VAC or N.C. 10A at 125 VAC	N/A	N/A	N/A			
Relay LED Indication		Yes	N/A	N/A	N/A			
Compliance	United States	UL Listed, File E493157, CCN NMTR, Under UL 508, Industrial Control Equipment						
	Canada	UL Listed, File E493157, CCN NMTR7, Under CAN/CSA C22.2 No. 14-M91						
CE	Europe	CE Mark - Johnson Controls declares that this product is in compliance with the essential requirements and other relevant provisions of the EMC Directive and the Low Voltage Directive.						
Shipping Weight		0.15 lb (0.07 kg)						

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