

Digital Current Switch



CSS Series

Solid Core Current Switches

The CSS models are ideal for new installations and provide the greatest savings opportunity. Ideal for direct drive units, small exhaust fans, and other fixed loads, these solid state switches have accurate, very low fixed or user adjustable setpoints, which are activated when the desired amperage is reached. The adjustable CSSGA2100NN and CSSGA2100R1 units have LED's which indicate switch status. (User can also adjust the setpoint for over or under loads.)

Excitation is magnetically induced from current carrying conductor (wire or cable), making these units completely self-powered.



The CSS Series, solid core, current switch's convenient wide orifice allows easy pass through of the conductor, and is bundled with a mounting bracket and hardware, making installation easy.

Model CSSGA2100R1 is equipped with a snap-on power relay for remote motor startup.

CSS Series (Current Switch Solid) Specifications

MODEL	CSSGFN025NN	CSSGA2100NN	CSSGA2100R1
Amperage Range	0.25 to 200 A	1.00 to 135 A	1.00 to 135 A
Continuous Operating Current	200 A, 600 V AC	125 A, 600 V AC	135 A, 600 V AC
Switch Setpoint	Fixed	Adjustable	Adjustable
Output Relay	No	No	SPST, NO. 10 A @ 260 V AC, 5 A @ 30 V DC
Actuation Coil	No	No	24 V AC/DC
Switch LED Indication	No	Yes	Yes
Relay LED Indication	No	No	Yes
Trip Setpoint Value	0.25 A	1.00 to 135 A	1.00 to 135 A
Current Switching Mode	Under Current Sensing	Over/Under Current Sensing	Over/Under current Sensing
Dimensions	2.54 x 1.85 x 0.98 in. (65 x 47 x 25 mm)	2.54 x 1.85 x 0.98 in. (65 x 47 x 25 mm)	2.54 x 2.56 x 1.56 in. (65 x 65 x 40 mm)
Aperture (Sensing Hole Size)	0.71 in. Dia. (18 mm Dia.)		
Sensor Supply Voltage	Induced from power conductor cable		
Status Output	Switch normally open		
Switch Load Capacity	1 A @ 30 V AC/DC max.		
Isolation Voltage	600 V AC ms		
Temperature Range	5 to 140°F (-15 to 60°C)		
Frequency Range	50/60 Hz		
Humidity Range	0 to 95% non-condensing		
Agency Approvals	CE Compliant, RoHS Compliant, c-UL Listed: 3KGH, IND.Cont.EQ.; E31719		



CSC Series

Split Core Current Switches

A significant increase or decrease in operating current may result in motor, belt loss, slippage, or mechanical failure, which could jeopardize the user's process. The split core design of the Model CSC is an ideal solution, as it can easily be clamped onto existing power cables or wires.

These units are offered with industry standard 135 Amp or 200 Amp output and very low fixed or adjustable setpoints, which are activated when the desired amperage is reached. Model CSCGA2125NN and CSCGA2125R1 include LEDs for indication of switch status. (Setpoint can be

adjusted for over or under loads.)

Model CSCGFN150R1 and CSCGA2125R1 are equipped with a snap-on power relay for remote motor startup.

CSC Series (Current Switch Clamped) Specifications

MODEL	CSCGFN015NN CSCGFN150NN	CSCGA2125NN	CSCGFN150R1	CSCGA2125R1
Amperage Range	0.15 to 200 A/ 1.5 to 200 A	1.25 to 135 A	1.5 to 200 A	1.25 to 135 A
Continuous Operating Current	200 A, 600 V AC/ 200 A, 600 V AC	135 A, 600 V AC	200 A, 600 V AC	135 A, 600 V AC
Switch Setpoint	Fixed	Adjustable	Fixed	Adjustable
Output Relay	No	No	SPST.NO 10 A @ 260 V AC, 5 A @ 30 VDC	SPST. NO 10 A @ 260 V AC, 5 A @ 30 V DC
Actuation Coil	No	No	24 V AC/DC	24 V AC/DC
Switch LED Indication	No	Yes	No	Yes
Relay LED Indication	No	No	Yes	Yes
Trip Setpoint Value	0.15 A/1.5 A	1.25 to 135 A	1.5 A	1.25 to 135 A
Current Switching Mode	Under current sensing	Over/Under current sensing	Under current sensing	Over/Under current sensing
Dimensions	2.7 x 2.56 x 1.08 in. (69 x 65 x 27 mm)	2.7 x 2.56 x 1.08 in. (69 x 65 x 27 mm)	2.7 x 2.56 x 1.73 in. (69 x 65 x 44 mm)	2.7 x 2.56 x 1.73 in. (69 x 65 x 44 mm)
Aperture Size	0.72 x 0.78 in. (18 x 20 mm)			
Sensor Supply Voltage	Induced from power conductor cable			
Status Output	Switch normally open			
Switch Load Capacity	1 A @ 30 V AC/DC max.			
Isolation Voltage	600 V AC rms.			
Temperature Range	5 to 140 °F (-15 to 60 °C)			
Frequency Range	50/60 Hz			
Humidity Range	0 to 95% non-condensing			
Agency Approvals	CE Compliant. RoHS Compliant, c-UL Listed:3KGH. IND.Cont.EQ: E317719			

Applications

- HVAC
- Refrigeration
- Pumps
- Small Industrial Motors
- Fans
- Lighting

CSS Series

Features

- Solid Core Design
- Adjustable Switch Setpoints
- Switch Led Indication
- Relay Led Indication
- Over/Under Current Sensing
- Snap on Power Relay

CSC Series

Features

- Clamped/Split Core Design
- Adjustable Switch Setpoints
- Switch LED Indication
- Relay LED Indication
- Over/Under Current Sensing
- Snap on Power Relay

Benefits

- Low Cost Solution
- Self Powered
- Simple Installation
- Relay starts and stops motor
- Accurate Fixed Setpoint Models, No Guessing at Switchover Current



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<http://www.setra.com>

800-257-3872

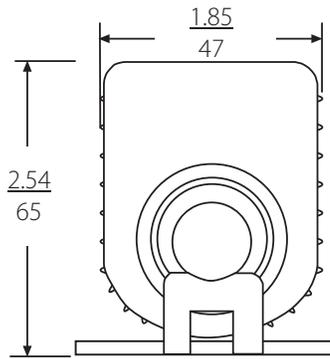
Outline Drawings



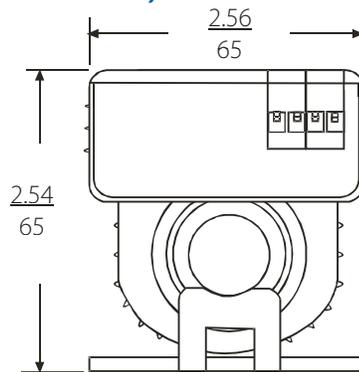
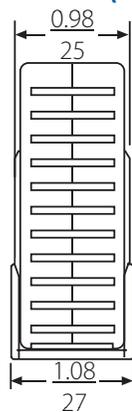
CAUTION, RISK of ELECTRIC SHOCK

Disconnect power supply before making electrical connections. Contact with components carrying hazardous voltage can cause electrical shock and may result in severe personal injury or death.

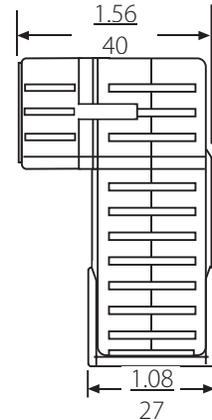
CSS Series (Current Switch Solid)



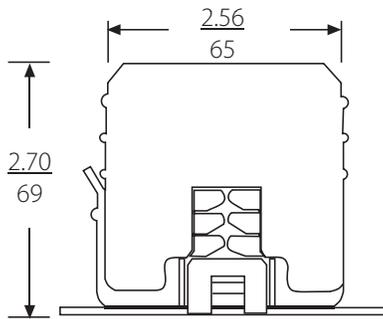
Models
CSSGFN025NN
CSSGA2100NN



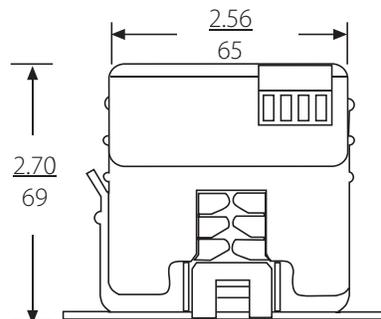
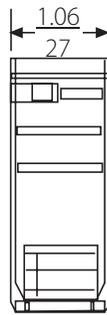
Models
CSSGA2100R1



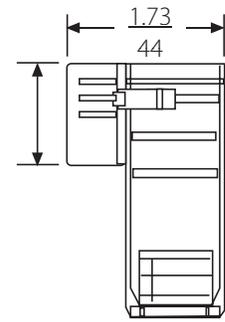
CSC Series (Current Switch Clamped)



Models
CSCGFN015NN
CSCGFN150NN
CSCGA2125NN



Models
CSCGFN150R1
CSCGA2125R1



in.
mm

ORDERING INFORMATION

Model CSS Series (Current Switch Solid)

Model No.

CSSGFN025NN
CSSGA2100NN
CSSGA2100R1

Description

Model CSS, Fixed Setpoint, No LED, 0.25 A Setpoint, No Snap-on Power Relay
Model CSS, Adjustable Setpoint, with LED, 1.00 A Setpoint, No Snap-on Power Relay
Model CSS, Adjustable Setpoint, with LED, 1.00 A Setpoint, with Snap-on Power Relay

Model CSC Series (Current Switch Clamped)

Model No.

CSCGFN015NN
CSCGFN150NN
CSCGA2125NN
CSCGFN150R1
CSCGA2125R1

Description

Model CSC, Fixed Setpoint, No LED, 0.15 A Setpoint, No Snap-on Power Relay
Model CSC, Fixed Setpoint, No LED, 1.50 A Setpoint, No Snap-on Power Relay
Model CSC, Adjustable Setpoint, with LED, 1.25 A Setpoint, No Snap on Power Relay
Model CSC, Fixed Setpoint, No LED, 1.50 A Setpoint, with Snap-on Power Relay
Model CSC, Adjustable Setpoint, with LED, 1.25 A Setpoint, with Snap-on Power Relay

† Contact factory to order power relay separately.