



## *Installation Instructions*

# Current Switch

Catalog Number(s) 1414-CC20PTWZB



## Important User Information

Solid state equipment has operational characteristics differing from those of electromechanical equipment. *Safety Guidelines for the Application, Installation and Maintenance of Solid State Controls* (Publication SGI-1.1 available from your local Rockwell Automation sales office or online at <http://www.literature.rockwellautomation.com>) describes some important differences between solid state equipment and hard-wired electromechanical devices. Because of this difference, and also because of the wide variety of uses for solid state equipment, all persons responsible for applying this equipment must satisfy themselves that each intended application of this equipment is acceptable.





In no event will Rockwell Automation, Inc. be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, Rockwell Automation, Inc. cannot assume responsibility or liability for actual use based on the examples and diagrams.

No patent liability is assumed by Rockwell Automation, Inc. with respect to use of information, circuits, equipment, or software described in this manual.

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Throughout this manual, when necessary, we use notes to make you aware of safety considerations.

<p><b>WARNING</b></p> 	<p>Identifies information about practices or circumstances that can cause an explosion in a hazardous environment, which may lead to personal injury or death, property damage, or economic loss.</p>
<p><b>IMPORTANT</b></p>	<p>Identifies information that is critical for successful application and understanding of the product.</p>
<p><b>ATTENTION</b></p> 	<p>Identifies information about practices or circumstances that can lead to personal injury or death, property damage, or economic loss. Attentions help you identify a hazard, avoid a hazard and recognize the consequences.</p>
<p><b>SHOCK HAZARD</b></p> 	<p>Labels may be located on or inside the equipment (e.g., drive or motor) to alert people that dangerous voltage may be present.</p>
<p><b>BURN HAZARD</b></p> 	<p>Labels may be located on or inside the equipment (e.g., drive or motor) to alert people that surfaces may be dangerous temperatures.</p>

## Install the Current Switch

Disconnect and lock-out all power sources during installation as severe injury or death can result from electrical shock due to contact with high voltage conductors. Ensure all installations are in compliance with applicable electrical codes and that the installation is completed by qualified installers familiar with the standards and proper safety procedures for high-voltage installation. Never rely on status indicating devices only to determine if power is present in a conductor.

Ensure that the output circuit to be switched is within the device switch ratings as shown in the chart, less than Switch V Max and less than Switch I Max.

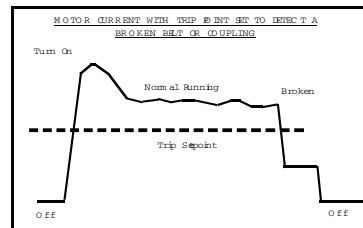
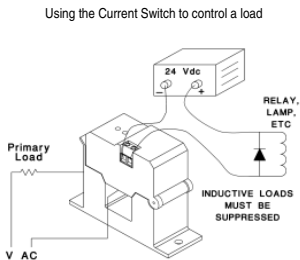
Auto-range devices monitor any current over the entire range of Input I Min to Input I Max Amps as shown in the table.

Install the Split-Core over the conductor to be monitored and close the sensor until it latches, ensuring that the two halves are properly aligned. Operation of the sensor will be impaired if any dirt particles prevents good contact between the core pieces when the device is closed. Keep the sensor clean when it is opened.

Mount the switch in a suitable location using the two mounting holes in the base of the unit.

The conductor may be looped more than once through the sensor to multiply the sensitivity but this also divides the maximum current.

Connect the switch circuit to the two screw terminals; bear wire only. Typical connections are shown in the wiring examples. The switches are not polarity sensitive and operate as a 'dry contact'.



## Operation

The output switch of all devices is normally open. When the monitored current exceeds the trip value of 1.5 Amps, the switch closes.

## Specifications

### Current Switch Specifications

Specification	Value
Output Type	Mosfet
Type	AC/DC
Switch V Max	30Vac/40Vdc
I Max	500 mA
Von @ 24Vdc @ 150 mA	<0.1 V
Leakage Current	<25 $\mu$ A
Auto Range	Yes
Input I Min	1.5A
Input I Max	200A

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