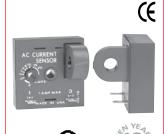


## AC Current Sensor, PLC Interface Module TCS / TSCA Series

AC Current Sensor / Current Transducer





- Direct Connection to a PLC Digital Input Module 3 ... 50 V DC, 24 ... 240 V AC in 2 Ranges
- 1 A Steady 10 A Inrush
- Adjustable Set Points 2 ... 20 A Normally Open or Closed
- Solid State Output
- Complete Isolation Between Sensed Current & Control Circuit





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- Monitors 0 ...50 A in 4 Ranges Loop Powered from 10 ... 30 V DC
- Linear Output from 4 ... 20 mA
- Zero and Span Adjustments
- Complete Isolation Between Sensed Current and Control Circuit



The TCS Series is a low cost method of GO/NO GO current detection. It includes a solid state output to sink or source current when connected directly to a standard PLC digital input module.

Normally Open: When a current equal to or greater than the actuate current is passed through the toroidal sensor, the output closes. When the current is reduced to 95% the output opens.

Normally Closed: When the current through the toroid is equal to or greater than the actuate current, the output opens. When the current is reduced below 95% the output closes.

#### **Technical Data** S

Sensor		Ć	
Current to Actuate	2 20 A, Guaranteed Range	L.	
Reset Current	$\cong$ 95% of the actuate current		
Mechanical			
Package	2 x 2 x 1.75 in. (50.8 x 50.8 x 44.5 mm)		
Termination	0.25 in. (6.35 mm) male quick connect terminals (2)	Eurotion	
Sensor Hole	0.36 in. (9.14 mm) for up to #4 AWG (21.1 mm2) THHN wire	Functior	
		A 1	

#### **Ordering Table**

**Technical Data** 

Factory Calibration

Repeat Accuracy

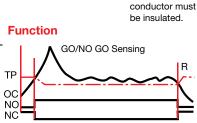
Package

Termination

Sensor

Mechanical

Part Number	Output Volts	Adjustable Set Point	Output Form
TCSGAA	350 VDC 350 VDC		Normally Open
TCSGAB		220 A AC	Normally Closed
TCSHAA	24240 VAC	220 A AC	Normally Open
TCSHAB	24240 VAC		Normally Closed



Positive

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+

Switching Shown.

Compatible

Switching;

Sinking and

Monitored AC

Sourcing.

with Negative

L = Load V = Voltage PS = Power Supply PLC = PLC Digital Input Module R = Reset TP = Trip Point OC = Monitored Current NO = Normally Open Output NC = Normally Closed Output

### **TCSA Series, AC Current Transducer**

The TCSA Series is a loop powered, linear output current transducer that provides an output that is directly proportional to the RMS AC current passing through the onboard toroid. The TCSA provides a 4 to 20 mA output. The 0 to 5 A range allows the use of external current transformers so loads up to 1200 AC amps can be monitored.

Connection

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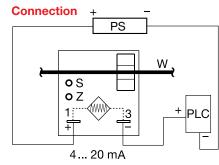
Span and Zero adjustments are provided for minor calibration adjustments in the field (if required).

+/-0.5% of full scale

+/-0.25% of full scale under fixed conditions

2 x 2 x 1.75 in. (50.8 x 50.8 x 44.5 mm)

0.25 in. (6.35 mm) male quick connect terminals



PS = Power Supply Z = Zero Adjust S = Span Adjust W = Insulated Wire Carrying Monitored Current PLC = PLC Analog Input or Meter Input

# 01.07.08 dd TCS1

See accessory pages

Ordering Table							
Part Number	Current Range	Loop Voltage Range					
TCSA5	0 5A	10 30 V DC					
TCSA10	0 10 A						
TCSA20	0 20 A						
TCSA50	0 50 A						

Low Voltage Products & Systems

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