

**Adjustable**

**DC Current Sensor**

**with isolation**



The DC Current Sensor module is an economical device used to detect a current flow in DC circuits.

Located in series with the negative side of a load, the current is passed through a shunt producing a low voltage signal. This signal turns on a relay that can be used to energize a PLC digital input or similar indicating device.

**Features:**

- input current 0.5A to 6.5A max.
- adjustable input trip current using an internal resistor
- relay output NO or NC (jumper selectable)

**United States**

Weidmüller Inc.  
821 Southlake Blvd.  
Richmond, Virginia 23236  
Telephone: (800) 849-9343  
Facsimile: (804) 379-2593  
Email: [info@weidmuller.com](mailto:info@weidmuller.com)  
Website: [www.weidmuller.com](http://www.weidmuller.com)

**Canada**

Weidmüller Ltd.  
10 Spy Court  
Markham, Ontario L3R 5H6  
Telephone: (800) 268-4080  
Facsimile: (905) 475-2798  
Email: [info1@weidmuller.ca](mailto:info1@weidmuller.ca)  
Website: [www.weidmuller.ca](http://www.weidmuller.ca)

## Adjustable DC Current Sensor with isolation

### Rated data

#### Input

Range

DC current

Impedance

0.5A - 6.5A (max.), **default 1A**

Other input specification

20mΩ (shunt resistor)

Other input specification

#### Output

Load

relay output, jumper selectable NO/NC

Maximum power

1A@24Vdc, 0.3A@60Vdc, 0.5A@120Vac (resistive load)

Minimum voltage

24W/60VA

Minimum current

0.05mV

Minimum power

0.01mA

Protection

0.5mW

#### Supply

Operating voltage

none (dry contact)

Operating current

DC voltage

24Vdc

#### General

Contact arrangement

NO/NC jumper selectable, **default NO**

Switching frequency

40Hz

Contact material

Ag-Pd-Au

Operating life

electrical

0.5A/120Vac resistive 2x10<sup>6</sup> operations

mechanical

20 x 10<sup>6</sup> operations

Isolation

contacts/coil

1000Vac

open contact

500Vac

Status LED

1 green LED (on when relay is activated)

Max. operating temperature

50°C or 122°F

Wire size

26-12AWG (0.10-4.0mm<sup>2</sup>), BLZ connector

Tightening torque/insulation stripping length

0.4-0.8Nm /7mm

Dimensions in mm (LxWxH)

72 x 22.5 x 92.4 perpendicular to mounting rail

### Ordering data

Adjustable DC Current Sensor with Isolation

### Cat.No.

**991645 0000**

## Application Note

In applications where power supplies are paralleled for redundancy the DC current sensor can be used to indicate which supply (or supplies) are delivering current.

