

# **CSMshunt 500A open**



### **Product description**

CSMshunt open devices have been especially designed for compact, space-saving measurement applications. These shunts provide excellent temperature stability and outstanding measurement accuracy. CSMshunt open devices are perfectly suited for measurement applications in combination with AD measurement modules. Keyfeatures

- Universally applicable, shunt-based solution for current measurements under harsh environmental conditions
- Operating temperature under full load: -40 °C to +125 °C
- Outstanding accuracy over the entire temperature range
- External measurement amplifier

## Shipping content

- CSMshunt open
- Calibration certificate

## Technical data

Type designation	CSMshunt 500 A open
Input measurement range	±500A (Shunt 0.05 mΩ)
Threshold frequency	1.4 kHz
Measurement accuracy	
at 25°C	< 0.5 % of measured value, ±50 mA
Temperature drift	typ. 120 ppm/K
Galvanic isolation <sup>1</sup>	no safety isolation in terms of high-voltage applications
Excitation	500V
Measured signal	no <sup>2</sup>
Power supply	
Minimum	12 V DC
Maximum	15V DC
Power consumption	typ. 12.5 mA at 12 V DC
Output voltage	±10V at ±I <sub>rated</sub>
Maximum load	$R_l > 20 k\Omega$
Maximum overcurrent	545 A
Housing	
Protection class	
Shunt	
Amplifier	IP67
Weight	
Shunt	approx. 55 g
Amplifier	approx. 60 g
Dimensions (w × h × d)	
Shunt	83 × 17 × 26 mm
Amplifier	80 × 30 × 30 mm
Cable connection	
Input	8 mm bore
Output	LEMO 0B, 6-pole <sup>3</sup>

Type designation	CSMshunt 500 A open
Operating and storage conditions	
Operating temperature range	-40°C to +125°C
Relative Humidity	5 % to 95 %
Storage temperature	-55 °C to +125 °C
Conformity	CE

<sup>1</sup> CSMshunt devices are designed for measurements in vehicles with 12 V, 24 V and 42 V on-board power supply systems. The maximum operating voltage at the measurement inputs is 60 V. Not suitable to be directly connected to systems with higher operating voltages, e.g. high-voltage batteries of hybrid or electric vehicles.

<sup>2</sup> The galvanic isolation of measurement signals has to be effected by the measurement module.

<sup>3</sup> Optionally available in other variants.



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