

### $I_{\rm PN}$ = 10 ... 50 A **Current Transducer HLSR-P/SP33 series**

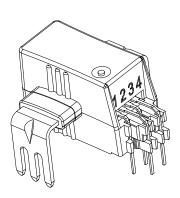
Ref: HLSR 10-P/SP33, HLSR 20-P/SP33, HLSR 32-P/SP33, HLSR 40-P/SP33, **HLSR 50-P/SP33** 

For the electronic measurement of current: DC, AC, pulsed..., with galvanic separation between the primary and the secondary circuit.









# **Features**

- Open loop multi-range current transducer
- Voltage output
- Galvanic separation between primary and secondary
- Low power consumption
- Compact design for through-hole PCB mounting
- Factory calibrated
- High bandwidth, very low loss magnetic core.

# **Special feature**

• Single supply +3.3 V.

#### **Advantages**

- Extremely low profile: h = 12 mm
- Low foot-print
- Low offset drift
- Over-drivable V<sub>ref</sub>.

# **Applications**

- AC variable speed and servo motor drives
- · Static converters for DC motor drives
- · Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Power supplies for welding applications
- Combiner box
- MPPT.

#### **Standards**

• EN 50178: 1997

• IEC 61010-1: 2010

• IEC 61326-1: 2012

• UL 508: 2010.

# **Application Domain**

Industrial.



## **Absolute maximum ratings**

Parameter	Symbol	Unit	Value
Supply voltage (not destructive)	$U_{\rm c}$	V	8
Supply voltage (not entering non standard modes)	$U_{\rm c}$	V	6.5
Primary conductor temperature	$T_{_{\mathrm{B}}}$	°C	120
ESD rating, Human Body Model (HBM)	$U_{\scriptscriptstyle{ESD}}$	kV	2

Stresses above these ratings may cause permanent damage. Exposure to absolute maximum ratings for extended periods may degrade reliability.

# UL 508: Ratings and assumptions of certification

File # E189713 Volume: 2 Section: 5

#### **Standards**

- CSA C22.2 NO. 14-10 INDUSTRIAL CONTROL EQUIPMENT Edition 11 Revision Date 2011/08/01
- UL 508 STANDARD FOR INDUSTRIAL CONTROL EQUIPMENT Edition 17 Revision Date 2010/04/15

# **Ratings**

Parameter	Symbol	Unit	Value
Primary involved potential		V AC/DC	600
Max surrounding air temperature	T <sub>A</sub>	°C	105
Primary current	$I_{P}$	А	According to series primary current
Secondary supply voltage	$U_{\rm c}$	V DC	5
Output voltage	V <sub>out</sub>	V	0 to 5

#### Conditions of acceptability

- 1 These devices have been evaluated for overvoltage category III and for use in pollution degree 2 environment.
- 2 A suitable enclosure shall be provided in the end-use application.
- 3 The terminals have not been evaluated for field wiring.
- 4 These devices are intended to be mounted on a printed wiring board of end use equipment. The suitability of the connections (including spacings) shall be determined in the end-use application.
- 5 Primary terminals shall not be straightened since assembly of housing case depends upon bending of the terminals.
- 6 Any surface of polymeric housing have not been evaluated as insulating barrier.
- 7 Low voltage control circuit shall be supplied by an isolating source (such as a transformer, optical isolator, limiting impedance or electro-mechanical relay).

#### **Marking**

Only those products bearing the UR Mark should be considered to be Listed or Recognized and covered under UL's Follow-Up Service. Always look for the Mark on the product.