

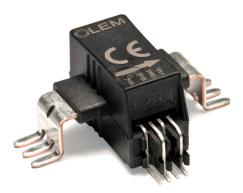
Current Transducer HLSR-SM series

I_{PN} = 10 ... 50 A

Ref: HLSR 10-SM, HLSR 16-SM, HLSR 20-SM, HLSR 32-SM, HLSR 40-SM, HLSR 50-SM

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
- Single supply +5 V
- Galvanic separation between primary and secondary
- Low power consumption
- Compact design for surface mount PCB mounting
- Factory calibrated
- High bandwidth, very low loss magnetic core.

Advantages

- Extremely low profile: h = 12 mm
- Low foot-print
- Low offset drift
- Over-drivable V_{ref}.

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.

 $N^{\circ}97.J4.13.000.0, N^{\circ}97.J4.J5.000.0, N^{\circ}97.J4.17.000.0, N^{\circ}97.J4.J3.000.0, N^{\circ}97.J4.23.000.0, N^{\circ}97.J4.25.000.0$



Absolute maximum ratings

Parameter	Symbol	Unit	Value
Supply voltage (not destructive)	U _c	V	8
Supply voltage (not entering non standard modes)	U _c	V	6.5
Primary conductor temperature	T _B	°C	120
ESD rating, Human Body Model (HBM)	U _{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 _A	°C	105
Primary current	$I_{_{P}}$	A	According to series primary current
Secondary supply voltage	U _c	V DC	5
Output voltage	V _{out}	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.