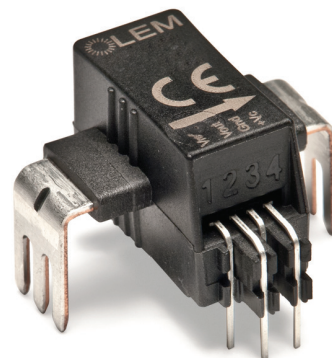


Current Transducer HLSR-P series

$I_{PN} = 10 \dots 50 \text{ A}$

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

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 through-hole PCB mounting
- Factory calibrated
- High bandwidth, very low loss magnetic core.

Advantages

- Extremely low profile: $h = 12 \text{ mm}$
- 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.

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.