

## Current Transducer HO-NSM series

$I_{PN} = 8, 15, 25 A$

Ref: HO 8-NSM, HO 15-NSM, HO 25-NSM

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



### Features

- Hall effect measuring principle
- Multirange current transducer through PCB pattern lay-out
- Galvanic separation between primary and secondary circuit
- Insulated test voltage 4300 V
- Low power consumption
- Extremely low profile 12 mm
- Single power supply +5 V
- Fixed offset & sensitivity
- Over-current detect  $2.63 \times I_{PN}$  (peak value)
- Memory check.

### Advantages

- Small size and space saving
- Only one design for wide primary current range
- High immunity to external interference
- 8 mm creepage /clearance
- High insulation capability
- Fast response.

### Applications

- AC variable speed drives
- Static converters for DC motor drives
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Power supplies for welding applications
- The solar inverter on DC side of the inverter (MPPT)
- Combiner box.

### 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 operating)	$U_C$	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 currents
Secondary supply voltage	$U_C$	V DC	5
Output voltage	$V_{out}$	V	0 to 5

#### Conditions of acceptability

When installed in the end-use equipment, consideration shall be given to the following:

- 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 have been evaluated for use in 105 °C maximum surrounding air temperature.
- 5 - The secondary (Sensing) circuit is intended to be supplied by a Isolated Secondary Circuit - Limited voltage circuit defined by UL 508 paragraph 32.5. The maximum open circuit voltage potential available to the circuit and overcurrent protection shall be evaluated in the end use application.
- 6 - 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.
- 7 - Primary terminals shall not be straightened since assembly of housing case depends upon bending of the terminals.
- 8 - Any surface of polymeric housing have not been evaluated as insulating barrier.
- 9 - Low voltage circuits are intended to be powered by a circuit derived from an isolating source (such as a transformer, optical isolator, limiting impedance or electro-mechanical relay) and having no direct connection back to the primary circuit (other than through the grounding means).

#### Marking

Only those products bearing the UL or 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.