

## PRELIMINARY DATA SHEET

# Open Loop Hall Effect Current Transformer Type HOS



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The HOS series are Open Loop Hall Effect Current Transformers covering the range of 100A to 600A. The product provides a voltage output which is galvanically isolated from the primary conductor. Designed to be panel mounted, or strapped to a bus bar the HOS series is controlled via an industry standard connector.

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### Features

- Low Supply Current Consumption
- 5kV Proof Stress
- Panel Mounting
- Designed in Quality

### Benefits

- Reduced Power Supply Costs
- Useable with Bare Primary Conductors
- Horizontal or Vertical Mounting
- High Reliability

### Applications

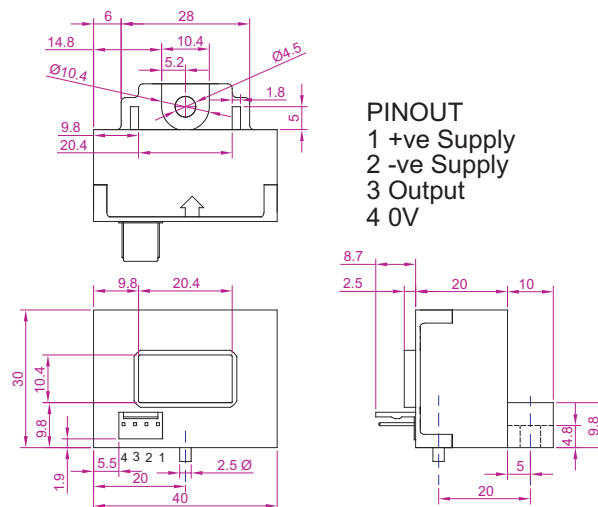
- Automotive
- Variable Speed Drives
- D.C. Power Supplies
- UPS Systems
- Power System Monitoring
- Welding Equipment
- Traction
- Switch Mode Power Supplies

# TECHNICAL DATA

Product Type	HOS	100	200	300	400	500	600
Nominal Primary Current (I <sub>PN</sub> )		100	200	300	400	500	600
Primary Current measuring range 0 to		±300	±600	±900	±900	±900	±900

Specification	
Nominal Power Supply	±15V +5% to ±12 -5%
Supply Current	20 mA max.
Load Resistance	1 kΩ min..
Output Resistance	100Ω ± 5%
Output Voltage @ ± I <sub>PN</sub> R <sub>L</sub> =10kΩ	± 4 V nominal
RMS Rated Voltage <sup>1</sup>	500 V
Isolation Resistance @ 500 Volts	1000 MΩ min.
AC Error <sup>2</sup> @ 25°C, ±15V @ I <sub>PN rms</sub> 50Hz	±1% of I <sub>pn</sub> max.
Linearity Error <sup>2</sup>	±1% of I <sub>pn</sub> max.
Output Offset @ 25°C, I <sub>p</sub> = 0	± 20 mV max.
Hysteresis of offset at ± nominal primary current	±20mV max.
Output Offset Drift -25 to +85°C	± 1 mV/°C max.
Thermal Drift of Gain -25 to +85°C	± 0.1 %/°C max.
Response Time	3 μs max.
di/dt following	50 A/μs min.
Bandwidth (- 3 dB)	DC to 50 kHz min.
Creepage Distance	6.5 mm max.
Clearance Distance	5 mm max.
RMS Voltage Isolation Test, 50 Hz 1min	3 kV
General	
Operating & Storage Temperature Range	-25 to +85°C
Weight	60g
Housing	PA66 15% Glass Filled Flammability Rating V0 , CTI Rating >140
Connector	Compatible with Molex 5046-04/A
Mounting	Panel Mounting or strapped to conductor
Signal Sense	Positive output obtained when current flows as shown by direction of arrow

## Dimensions



<sup>1</sup> Overvoltage category III, Pollution Degree 2

<sup>2</sup> Excludes the zero offset