

Speciality Magnetic Components

QUALIFIED to ISO 9001:2008

Open Loop Hall Effect Current Transformer Type HOL



The HOL series are Open Loop Hall Effect Current Transformers covering the range of 100A to 1000A. The product provides a voltage output which is galvanically isolated from the primary conductor. Designed to be panel mounted, the HOL series is controlled via an industry standard connector.

Features

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

Applications

- Automotive
- Variable Speed Drives
- D.C. Power Supplies
- UPS Systems

Benefits

- Reduced Power Supply Costs
- Useable with Bare Primary Conductors
- Horizontal or Vertical Mounting
- High Reliability
- Power System Monitoring
- Welding Equipment
- Traction
- Switch Mode Power Supplies

TECHNICAL DATA

| Product Type | HOL | 100 | 200 | 300 | 400 | 500 | 600 | 1000 |
|---------------------------------|------|------|------|------|-------|-------|-------|-------|
| Nominal Primary Current (IPN) | | 100 | 200 | 300 | 400 | 500 | 600 | 1000 |
| Primary Current measuring range | 0 to | ±300 | ±600 | ±900 | ±1100 | ±1200 | ±1300 | ±1500 |

| SPECIFICATION | |
|--|--------------------------------|
| Nominal Power Supply | ±15V +5% to ±12 - 5% |
| Supply Current (max) | 20 mA |
| Load Resistance | 1 k Ω min. |
| Output Voltage @ ± IPN | ± 4 V |
| RMS Rated Voltage ¹ | 500 V |
| Isolation Resistance @ 500 Volts | >500 MΩ |
| AC Accuracy ² @ 25°C, ±15V @ IPN rms 50Hz | ±1% of nominal primary current |
| Linearity ² | ±0.5% |
| Output Offset @ 25°C | ± 10 mV at primary=0 |
| Output Offset Drift -25 to +85 ₀ C | ± 1 mV/°C |
| Thermal Drift of Gain -25 to +85₀C | ± 0.05 %/°C |
| Response Time | < 3 μs |
| di/dt following | > 50 A/μs |
| Bandwidth (- 3 dB) | DC to 50 kHz |
| Creepage Distance | >15 mm |
| Clearance Distance | >15 mm |
| RMS Voltage Isolation Test, 50 Hz 1min | 5 kV |

| \sim | FI | | _ | D | | |
|--------|----|---|---|---|---|--|
| (- | _ | N | _ | ĸ | Δ | |
| | | | | Г | | |

| Operating & Storage Temperature Range | -25 to +85°C |
|---------------------------------------|--|
| Weight | 200g |
| Housing | PA66 15% Glass Filled |
| - | Flammability Rating V0, CTI Rating >140 |
| Connector | Molex 5046-04/A |
| Mounting | Panel Mounting |
| Signal Sense | Positive output obtained when current flows as shown by direction of arrow |

¹Overvoltage category III, Pollution Degree 2

| ² Excludes the zero offset | Secondary Terminals | | | | |
|---------------------------------------|---------------------|-----|------------|------|--|
| | Terminal 1 | +Vs | Terminal 2 | - Vs | |

Terminal 3 Output Terminal 4 0V

Dimensions



