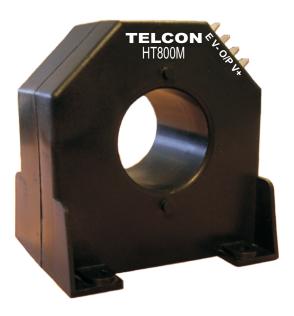


Speciality Magnetic Components

Qualified to ISO 9001:2008

Hall Effect Current Transformer Panel Mounting Type HT800M



The HT800M is a closed loop current transformer. Rated for 800A continuous operation. It has a 43mm diameter hole to accommodate large cables or bus bars. The standard model has 6.3mm spade terminals. There is an electrostatic shield around the central hole

Features

- Robust Package
- 9.5kV Proof Stress
- ±15 to ±24V supplies
- Fast Response
- D.C Coupled Design

Applications

- Variable Speed Drives
- UPS Systems
- Welding Equipment

Benefits

- No insertion loss
- Useable with Bare Primary Conductors
- · No Shunt Resistor Required
- No Switching Noise
- Built In Semiconductor Protection
- High Reliability
- Power System Monitoring
- Overcurrent Protection
- Traction Systems

TECHNICAL DATA

Nominal Primary Current 800A (D.C. or r.m.s. A.C)

Turns Ratio 4000:1

Nominal Power Supply ±15V -5% to ±24V +5% Supply Current 25mA per rail + output current

Burden Resistance (see Note 1) To meet linearity limit:

0 to 15Ω at $\pm 15V \pm 5\%$, 20 to 100Ω at $\pm 24V \pm 5\%$

To measure nominal current:

0 to 40Ω at ±15V ±5%, 20 to 90Ω at ±24V ±5%

Operating Temperature Range -10 to +85°C Storage Temperature Range -40°C to +90°C

SPECIFICATION

Linearity 0.1% of nominal primary current

Limit of linearity (see Note 2) 1300A peak

Overall accuracy 0.5% of output at nominal primary current

Zero Offset /Temperature $< 3\mu$ A/°C Zero Offset/Supply Variation $< 5\mu$ A/V Coil Resistance 21Ω at 25°C

Bandwidth DC to 150kHz at -1dB

di/dt following $>50A/\mu s$ Delay time $<1.0\mu S$

Proof Stress Voltage 9.5kV a.c., r.m.s. for 1minute

Creepage Distance 19 mm Clearance Distance 19 mm

GENERAL DATA

Weight 525g

Housing Modified PPO Flammability Rating UL94 V0

Connectors 6.3 x 0.8mm Faston spades

Signal Sense Positive output obtained across the burden when current flows in

the direction of the arrow.

Note 1: The maximum burden resistance limit is set by the onset of clipping at the peak of the waveform. The lower limit is set by the thermal limits on the electronics. Higher burden resistances can be used with lower maximum currents and lower burden resistances can be used at lower maximum ambient temperatures.

Note 2 : At maximum ambient temperature and supply voltage, the duration of overload currents should not exceed 2 minutes in any 15 minute period

DIMENSIONS in millimetres

