Speciality Magnetic Components
Qualified to ISO 9001:2000

Hall Effect Current Transformer Panel Mounting Type HT500M

The HT500M is a closed loop Hall Effect Current Transformer in the same family as the HT200M and HT300M.

Rated for 500A continuous operation, it offers high accuracy and bandwidth and high electrical isolation.

Features
- Robust Package
- 7kV Proof Stress
- ±12 to ±15V supplies
- Fast Response
- D.C. Coupled Design

Benefits
- No Insertion Loss
- Useable with Bare Primary Conductors
- No Shunt Resistor Required
- No Switching Noise
- Built in Semiconductor Protection
- High Reliability

Applications

- Variable Speed Drives
- UPS Systems
- Welding Equipment
- Power System Monitoring
- Overcurrent Protection
- Traction Systems

TECHNICAL DATA

Nominal Primary Current	500A (D.C. or r.m.s. A.C)
Turns Ratio	2000:1
Nominal Power Supply	±12V -5% to ±15V +5%
Supply Current	25mA per rail + output current
Burden Resistance (see Note 1)	To meet linearity limit: 0 to 3Ω at ±12V ±5%, 1.2 to 7Ω at ±15V ±5% To measure nominal current: 0 to 6Ω at ±12V ±5%, 1.2 to 12Ω at ±15V ±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)	± 800A peak value
Overall Accuracy	0.65% of nominal primary current
Output Offset Current	<±200µA at primary current =0A
Output Offset Current After Overload	<±300µA at primary current =0A
Zero Offset/Temperature	< 3µA/°C
Zero Offset/Supply Variation	< 2µA/V
Coil resistance	20Ω at 25°C
Bandwidth	DC to 75kHz at -1dB, DC to 125kHz at -3dB
di/dt following	>100A/µs
Delay Time	< 0.5µS
Proof Stress Voltage	7kV a.c., rms for 1 minute
Creepage Distance	14 mm min
Clearance Distance	14 mm min

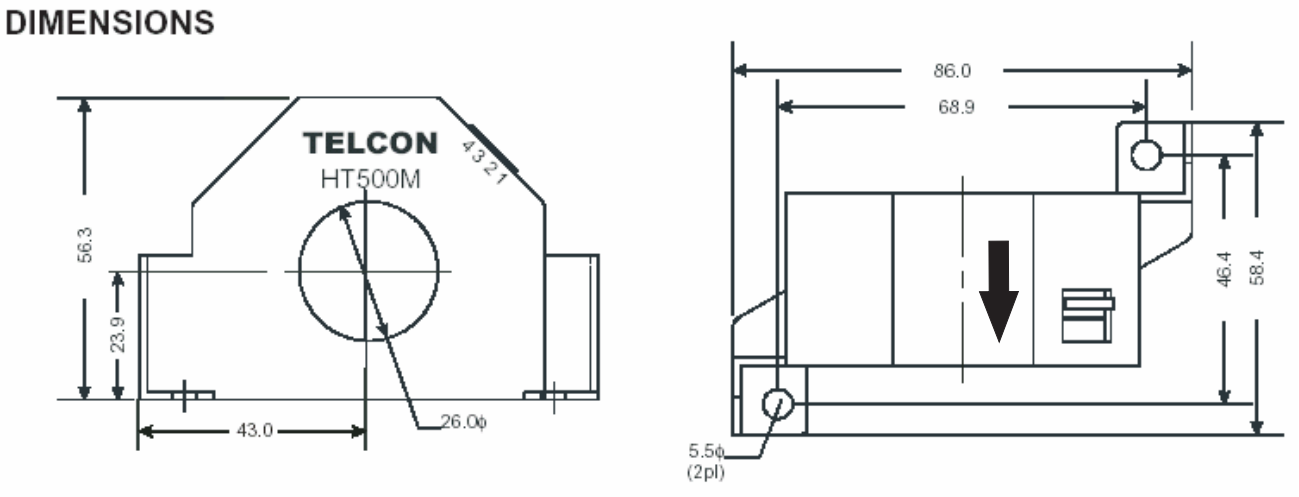
GENERAL DATA

Weight	112g
Housing Material	Modified PPO Flammability Rating UL94 V0
Connector	Molex 5046-04/AG
Signal Sense	A positive output is 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



Pin-out 1: +15V 2: 0/P 3: -15V 4: N/C