Current Sensor CT508-S/SP6

The CT508-S/SP6 current sensor uses a high-performance imported Hall element and operates on the principle of magnetic compensation to perform electrically isolated measurements of DC, AC, or pulse currents. The output current is proportional to the measured primary current, offering excellent accuracy, linearity, and stability.

Parameters

Electrical Specifications

- Rated primary current：500 Arms
- Overload capacity：±800A 3min/h
- Turns ratio：1：5000
- Secondary current：100 mA @ 500 A primary current
- Insulation voltage： 6KVrms/50Hz/1min between primary and secondary
- Power supply：±12～±18 VDC(±10%)
- Power consumption：20mA (no-load current) +I_M (measurement current)
- Secondary coil resistance（@70℃）：60Ω

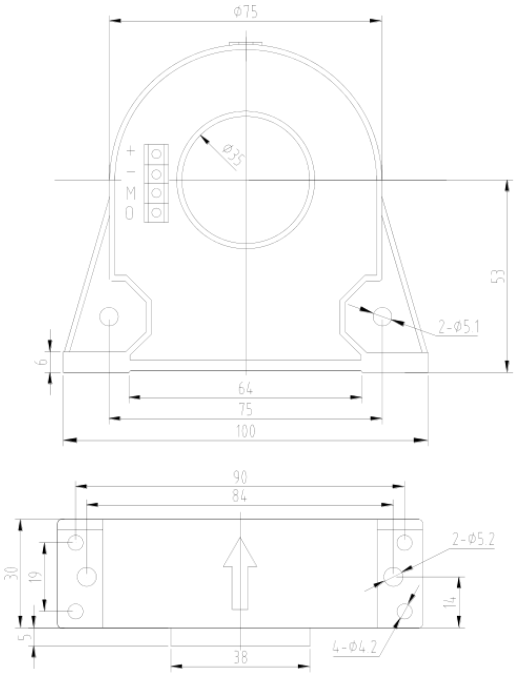
Accuracy & Dynamic Performance

- Accuracy（@25℃）：±0.4% of I_N , including:
  Max offset current at zero primary current: ±0.2 mA
  Temperature drift: < 0.5×10^{-4} × I_N / °C
  Linearity: < 0.1% of I_N
- Response time：≤1μs
- dI/dt：≥100A/μs

General Data

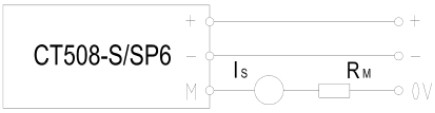
- Operating Temperature：-25℃~+70℃
- Storage Temperature：-40℃~+85℃
- Enclosure: Insulated flame-retardant self-extinguishing plastic
- Weight：≤320g

Outline & Interface



Secondary Terminal

1:+15～18V
2:-15～18V
3:M
4:NC



Notes

- The conductor under test should fill the aperture as much as possible.
- Output is positive when measured current flows in the direction of the arrow marked on the sensor; otherwise, output is negative.