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Closed Loop Sensor

Nominal Rating 50A rms — CS50-P

Electrical Data

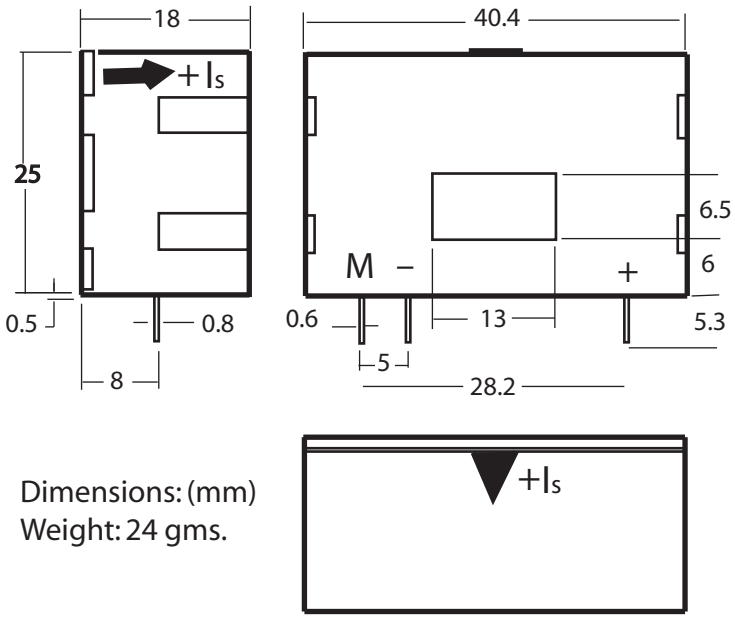
- Nominal current(In) ±50A rms
- Current range 0~ ±400A peak*
- Nominal output current 50mA
- Turns Ratio 1000/1
- Measuring Resistance (Rm) ref. f gure 1
- Overall accuracy at 25°C 0.5%
- Supply voltage ±12V ~ ±18V
- Current consumption 15mA + output current

* at ±18V power supply, Rm ≤ 1Ω, 25°C

Figure1 Maximum value of the measuring resistance

At maximum input amp-turns (peak) / Supply voltage	50 A•T	100 A•T	300# A•T	400# A•T
±12V	70Ω	50Ω	–	–
±15V	200Ω	80Ω	5Ω	–
±18V	250Ω	100Ω	10Ω	1Ω

Derate according to duty cycle



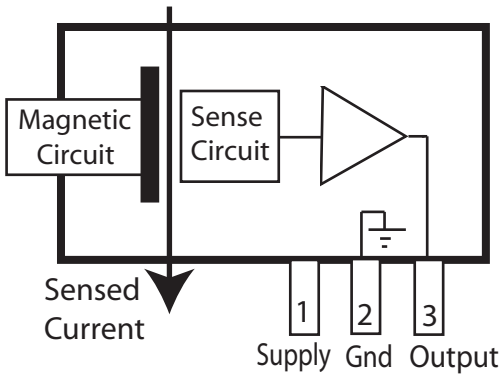
Dimensions: (mm)
Weight: 24 gms.

Dynamic Performance

- Null offset current. Max.0.2mA (25°C)
- Thermal drift offset current Max. 0.25mA (0°C to 70°C)
- Linearity: better than 0.1%
- Response time better than 1μS
- di/dt: better than 50A/μS
- Frequency range: DC to 100KHz

General Data

- Sensor housing: insulated plastic case
- Fire-retardant feature: UL94V-O
- Isolation voltage: 5kV/50Hz/1min.
- Operating temperature: -25°C to +85°C
- Storage temperature: -40°C to +100°C

Note

- Busbar temperature should not exceed 100°C .
- Connect the measuring resistor Rm between terminal M and power supply ground. Output voltage= ImxRm.
- A positive output voltage is obtained on terminal M when the input current f ows in the direction of the arrow.