Current Sensor CTC500-SF

The CTC500-SF utilizes imported high-performance Hall elements and operates based on the principle of magnetic compensation to provide electrically isolated measurements of DC, AC, or pulsed current. The output signal is proportional to the measured current, ensuring excellent accuracy, linearity, and stability.

Parameters

Electrical Specifications

- Rated Measurement Current：500Arms
- Measurement Range@±24V：0～±1200A
- Turns Ratio：1:4000
- Rated Output Current：125mA
- Supply Voltage：±15×(1±5%)V～±24×(1±5%)V
- Secondary Current Consumption：35mA(@±24V)+output measurement current
- Dielectric Strength：Between primary and secondary circuits: 12kVrms/50Hz/1min
  Between secondary terminals (+, M, −) & E: 1.5kV/50Hz/1min
- Internal Resistance (secondary, @85°C)：47Ω

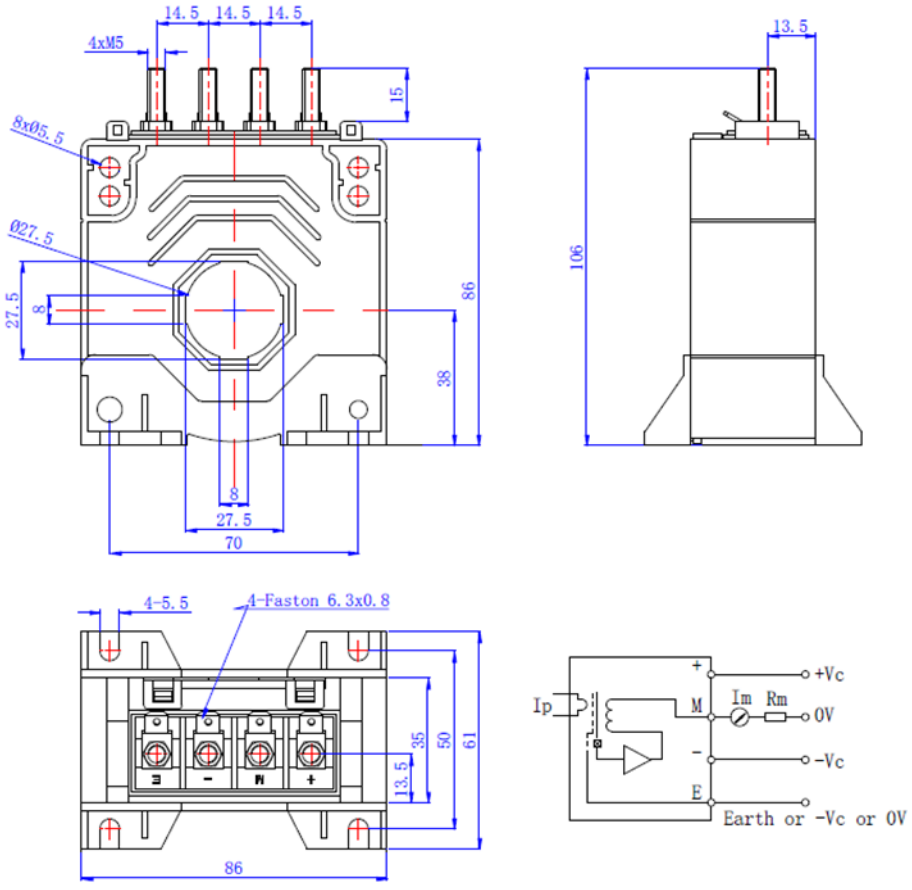
Accuracy & Dynamic Performance

- Accuracy：±0.6%
- Non-Linearity：±0.1%
- Zero Offset@25°C：≤±0.5mA
- Response Time：≤1μs
- di/dt：＞100A/1μs

General Data

- Operating Temperature：-40℃ ~ +85℃
- Storage Temperature：-45℃ ~ +90℃
- Weight：≤400g

Outline & Interface



Notes

- The output current is positive when the direction of the measured current matches the arrow mark on the product housing; Otherwise, the output is negative.