

Model CLSM-200LA Closed Loop Hall Effect

Description

The Model CLSM-200LA is a closed loop Hall effect current sensor that accurately measures DC and AC currents and provides electrical isolation between the current carrying conductor and the output of the sensor.

Features

- Low Cost
- Fast response
- High overload capacity
- Moistureproof, Shockproof
- Noncontact measurement of high current
- Measures DC, AC and impulse currents

Applications

- Variable speed drives for motors
- Welding Equipment
- Power Supply Equipment
- Measure and control system
- Over current protection
- Protection of power semiconductors



Electrical Specifications

CLSM-200LA

Nominal current (I_N)	 ± 200 A
Current range	 0 to ± 250 A
Nominal output current (I_m)	 100 mA
Turns Ratio	 2000 / 1
Measuring Resistance (R_m)	 0 to 20 Ω
Overall accuracy at 25°C	 ± 0.5 % of I_N
Supply voltage (V_{dc})	 ± 15 to ± 18
Current consumption	 15 mA + output current

Accuracy-Dynamic Performance

Zero current offset at 25°C	 $< \pm 0.2$ mA
Offset current temperature drift (0°C to +70°C) (1)	 $< \pm 0.3$ mA
Linearity	 better than ± 0.1 %
Response time	 less than 1 μ s
di / dt	 better than 70 A/ μ s
Frequency range	 DC to 150 KHz (-3 dB)

General Information

Operating temperature	 -40°C to +85°C
Storage temperature	 -40°C to +90°C
Package	 flame retardant plastic case, UL94V-0
Isolation voltage	 5 kV/50 Hz/1 min.
Output reference	 To obtain a positive output on terminal M, input current must flow in the direction of the arrow (conventional flow)
Weight	 38 grams
Mounting	 Panel mount via 1 hole, 4.5 mm dia.
Aperture size (mm)	 10.2 x 20.2

Notes:

1. Excludes zero current offset
2. Busbar temperature should not exceed 100°C.
3. The dynamic performance is the best when the busbar fills the aperture.
4. Due to continuous process improvement, all specifications are subject to change without notice.