Model CLSM-100 **Closed Loop Hall Effect**

Description

The Model CLSM-100 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

- Noncontact measurement of high current
- Measures DC, AC and impulse currents
- Very fast response and high accuracy
- High overload capacity

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-100
Nominal current (I_N)	±100 A
Current range	0 to ±150 A
Nominal output current (I_M)	50 mA
Turns Ratio	2000 / 1
Measuring Resistance (R_M)	0 to 80 Ω
Overall accuracy at 25°C	±0.5 % of I_N
Supply voltage (Vdc)	±15 to ±18
Current consumption	15 mA + output current

Accuracy-Dynamic Performance

Zero current offset at 25ºC	< ±0.2mA
Offset current temperature drift (-20ºC to +85ºC)	< ±0.25mA
Linearity	better than ±0.1%
Response time	better than 0.5µs
di / dt	better than 70A/µs
Frequency range	DC to 250KHz (-3dB)

General Information

Operating temperature	-25ºC to +85ºC
Storage temperature	-40ºC to +100ºC
Package	flame retardant plastic case, UL94V-0
Isolation voltage	5kV/50Hz/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	23 grams
Mounting	Designed to mount directly on PCB via through hole connection pins
Aperture size	0.256" x 0.512" (6.5 x 13 mm)

Notes:

1. Busbar temperature should not exceed 100ºC.
2. The dynamic performance is the best when the busbar fills the aperture.

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Mechanical **Dimensions**

All dimensions are in inches (millimeters)

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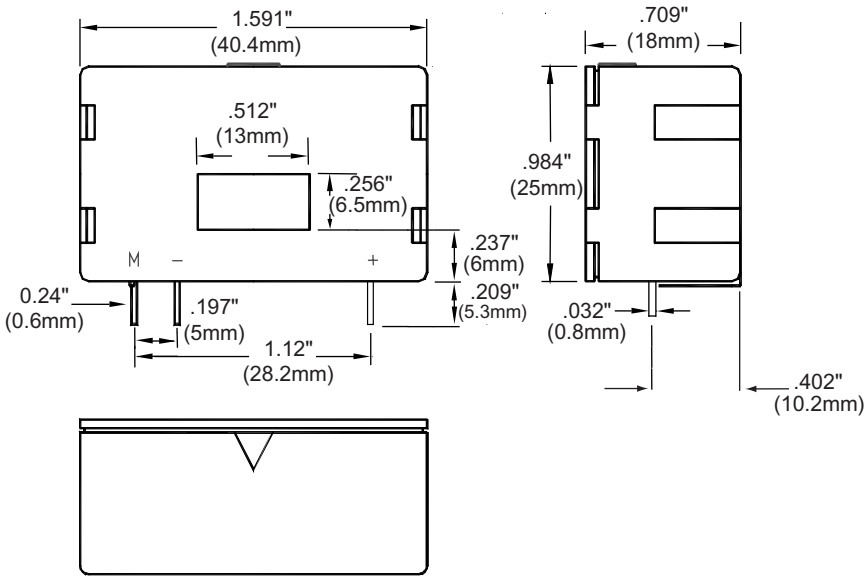
Mechanical Dimensions



Connection Schematic