

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

## Description

The Model CLSM-100LA 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-100LA

Nominal current (I <sub>N</sub> ) .....	±100 A
Current range .....	0 to ±200 A
Nominal output current (I <sub>M</sub> ) .....	50 mA
Turns Ratio .....	2000 / 1
Measuring Resistance (R <sub>M</sub> ) .....	0 to 100 Ω
Overall accuracy at 25°C .....	±0.5 % of I <sub>N</sub>
Supply voltage (V <sub>dc</sub> ) .....	±15 to ±18
Current consumption .....	15 mA + output current

## Accuracy-Dynamic Performance

Zero current offset at 25°C .....	< ±0.2mA
Offset current temperature drift (0°C to +70°C) (1).....	< ±0.3mA
Linearity .....	better than ±0.1%
Response time .....	better than 0.5μs
di / dt .....	better than 70A/μs
Frequency range .....	DC to 200KHz (-3dB)

## 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 .....	5kV/50Hz/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, 4.5mm dia.
Aperture size (mm).....	10.2 x 26

## Notes:

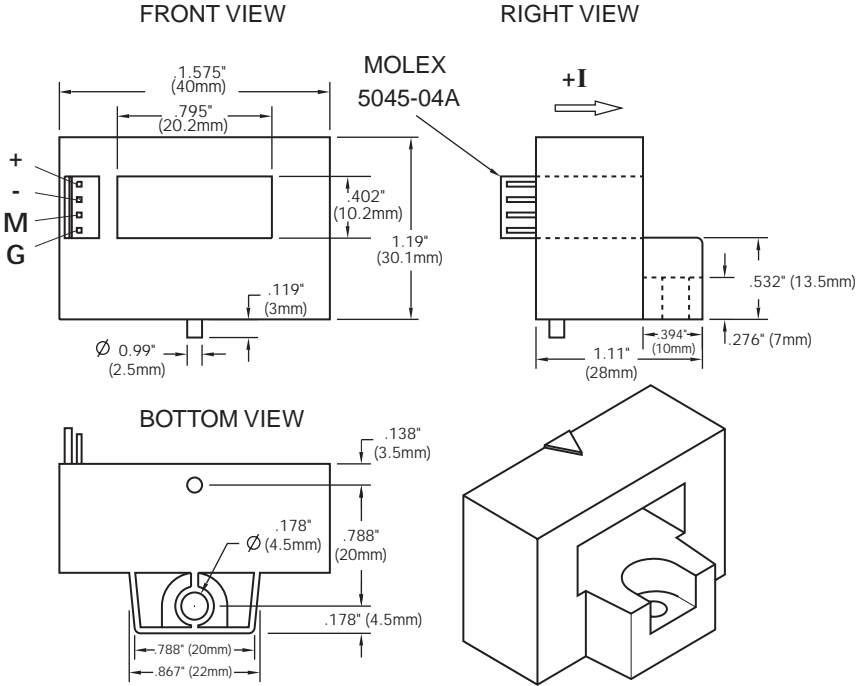
1. Excludes Zero current offset
2. Busbar temperature should not exceed 100°C.
3. The dynamic performance is the best when the busbar fills the aperture.
4. Due to continuous process improvement, all specifications are subject to change without notice.

# Mechanical Dimensions

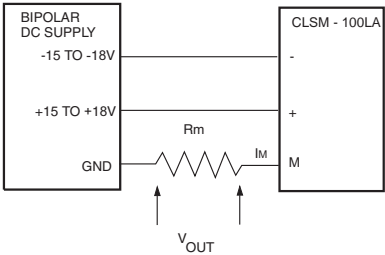
All dimensions are in inches (millimeters)

## Model CLSM-100LA

### Mechanical Dimensions



### Connection Schematic



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