Model CLSM-1000 **Closed Loop Hall Effect**

Description

The Model CLSM-1000 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-1000

Nominal current (I_N)	±1000 A
Current range	0 to ±1500 A
Nominal output current (I_M)	200 mA
Turns Ratio	5000 / 1
Measuring Resistance (R_M)	0 to 5Ω
Overall accuracy at 25°C	±0.5 % of I_N
Supply voltage (Vdc)	±15 to ±18
Current consumption	20 mA + output current

Accuracy-Dynamic Performance

Zero current offset at 25°C	< ±0.2mA
Offset current temperature drift (-25°C to +85°C)	< ±0.3mA
Linearity	better than ±0.1%
Response time	better than 1µs
di / dt	better than 50A/µs
Frequency range	DC to 100KHz (-3dB)

General Information

Operating temperature	-25°C to +85°C
Storage temperature	-40°C to +100°C
Package	flame retardant plastic case, UL94V-0
Isolation voltage	10kV/50Hz/1min.
Output reference	To obtain a positive output on terminal M, input current must flow in the direction of the arrow (conventional flow)
Weight	892 grams
Mounting	Panel mount via 4 holes, 6mm dia.
Aperture size	1.57" (40 mm) diameter
Output connection	3 Faston Terminals

Notes:

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

F.W. BELL®

Mechanical **Dimensions**

All dimensions are in inches (millimeters)

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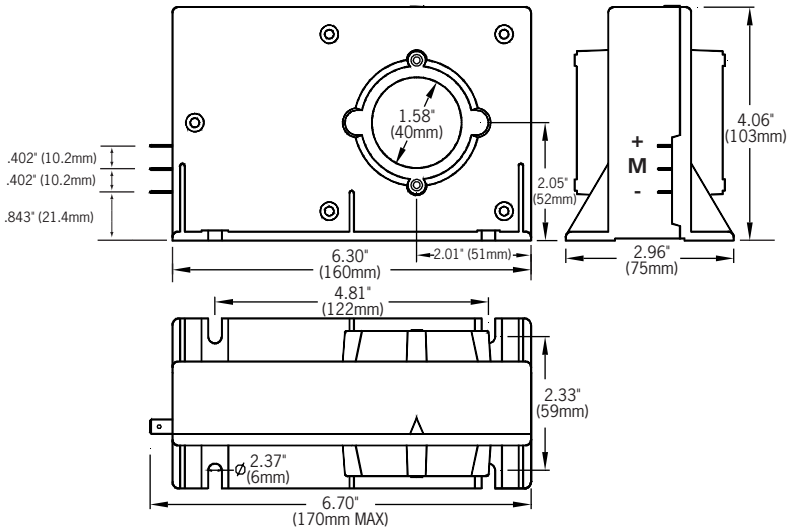
Mechanical Dimensions



Connection Schematic