

\$39.00

LEM current transducers offer electronic measurement of currents (DC, AC and pulsed) with galvanic isolation between the primary (measured) and the analog output (control) signal.

Electrical Data

Nominal Current I_N	50 A rms
Measuring Range	0 to ± 70 A
Measuring Resistance	R_M min
with ± 15 V	50 ohms
at ± 50 A max	50 ohms
at ± 70 A max	70 ohms
Nominal Analog Output Current	50 mA
Turns Ratio	1 : 1000
Overall Accuracy at +25°C	$\pm 0.5\%$ of I_N
Supply Voltage	+ and - 15 V ($\pm 5\%$)
Isolation Between Primary and Secondary	3 kV rms/50 Hz/1 min

— This is the range that a load resistor must be in for normal operation. A load resistor being a resistor on the output to convert the current to a voltage.

Accuracy - Dynamic Performance

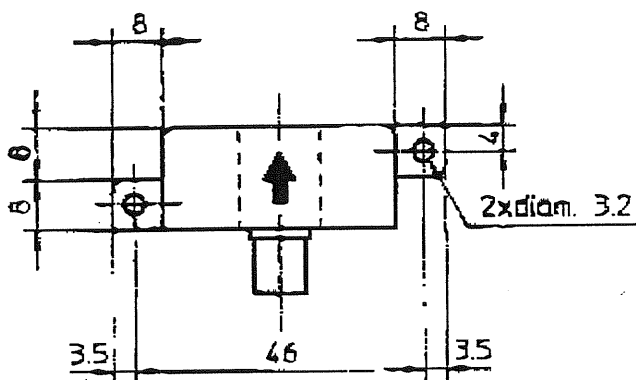
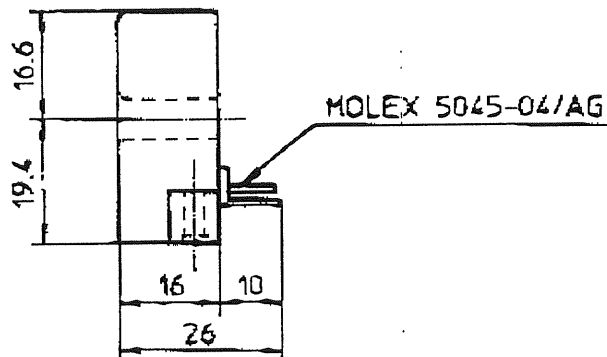
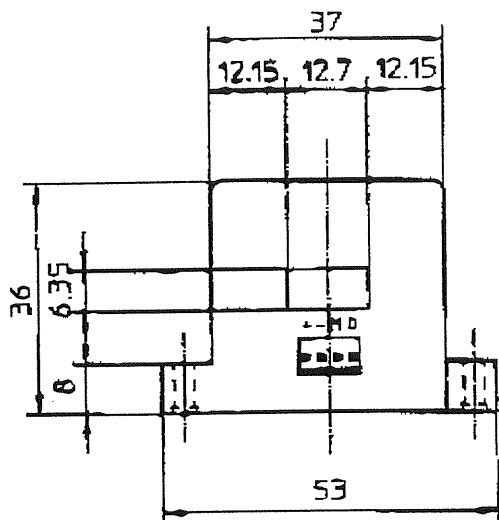
Zero Offset Current at +25°C	± 0.2 mA max
Thermal Drift of Offset Current (between -10°C and +70°C)	typical max
	± 0.3 mA ± 0.6 mA
Linearity	better than 0.1%
Response Time	better than 1 μ s
di/dt Accurately Followed	better than 50 A/ μ s
Frequency Range	DC to 150 kHz (-1dB)

General Data

Operating Temperature	-10°C to +70°C
Storage Temperature	-25°C to +85°C
Current Consumption	10 mA + output current
Secondary Internal Resistance	90 ohms (at +70°C)
Package	potted into an insulated self-extinguishing plastic case
Weight	45 grams
Fastening	by 2 holes 3.2 mm dia 46 x 8 mm between centers
Connection to Primary Circuit	through-hole 12.7 x 6.35 mm
Secondary Circuit	on Molex 5045-04 AG straight pin friction lock header
Polarity	a positive measuring current is obtained on the output when the primary current flows in the direction of the arrow

- Notes:
- The temperature of the primary conductor should not exceed 100°C
 - This is a standard model: for different versions (supply voltage, turns ratio, unidirectional measurement, etc.) please contact us
 - Dynamic performance (di/dt and response time) is best with a single bar completely filling the primary hole
 - In order to achieve the best magnetic coupling, primary windings must pass over the top of the device

Dimensions LA 50-S

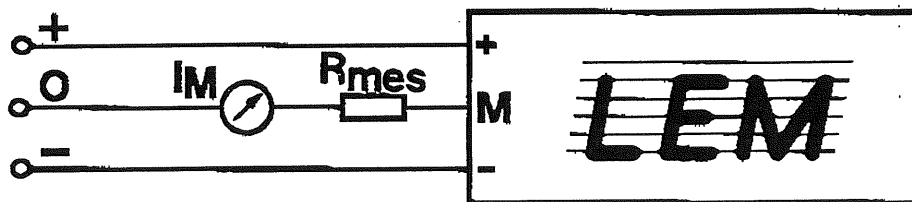


Secondary Terminals

- Terminal + : supply voltage +15V
- Terminal M : measure
- Terminal - : supply voltage -15V
- Terminal 0 : NC

Mates with Molex 5051 series housing 22-01-1043
4809C or 40445 series crimp terminals

Connection



This data sheet is a translation of the French version which is deemed authentic. We reserve the right to carry out modifications on our transducers, in order to improve them, without previous notice.