



LEM CURRENT TRANSDUCERS Module LTA 100-P/SP1

(Instantaneous Outputs)

Definition - Principle

The LEM type LTA 100-P/SP1 is a transducer employing the Hall effect to measure DC and complex waveform AC currents in a non invasive manner. Galvanic isolation is provided between the primary (measured) and the analogue output (control) signal. A feature of the LTA 100-P/SP1 is the direct provision of either a current or voltage output.

Electrical Data

Nominal current I_N : 100Amps rms 1. Current Output : 1mA/Amp Measuring range : 0 to \pm 160 Amps

(Supply at ± 15 V, $R_{meas} = 50 \Omega$)

Overall accuracy (at + 25°C) : $\pm 0.5 \%$ of I_N 2. Voltage Output : 50 mV/AmpMeasuring range : $0 \text{ to } \pm 100 \text{ Amps}$ Overall accuracy (at + 25°C) : $\pm 1.0 \%$ of I_N Turns ratio : 1:1000Supply voltage : $\pm 15 \text{ V} \pm 5\%$

Isolation : 3kVrms /50Hz /1 min.

Accuracy - Dynamic Performance

Zero drift (0°C to 70°C) ± 0.6 mA maximum Linearity $\pm 0.1\%$ of I_N

di/dt followed accurately : > 50 Amps per microsecond

Response time : <1 microsecond
Frequency range : DC to 100kHz (-1dB)

General Data

Operating temperature : 0°C to 70°C Storage temperature : -25°C to +85°C

Current consumption : $15mA + I_m$ output current

Internal Resistance : 25ohms

Case material : Nylon Zytel FR7200

Weight 15g

Connections Primary Circuit : Through hole 10mm. diameter Secondary circuit : Via 6 pins 0.63 x 0.56mm

Polarity markings : A positive output current is

obtained when the primary current flows in the direction of

the arrow on the LEM module.

Output Provisions

Current Output : On Pin 1 Voltage Output : On Pin 4

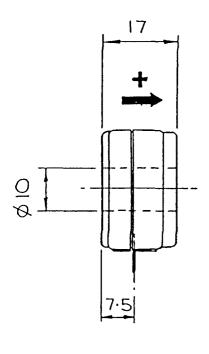
(Pins 1 and 4 must be linked)

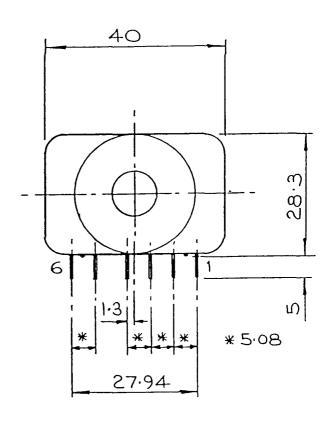
Issue 2 25/03/97 DB LTA101P



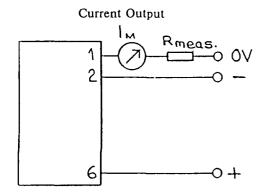


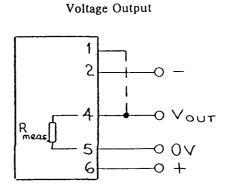
DIMENSIONS: LTA 100-P/SP1





Electrical Connections





The Company policy is one of continual product improvement and the company reserves the right to revise the above specification without notice.