

LT 500-S

Definition

The «LT 500-S» is a current transducer for the electronic measurement of currents : DC, AC, IMPL., etc., with galvanic isolation between the primary (high power) and the secondary (electronic) circuits.

Electrical data

Nominal current I_N	: 500 A rms
Measuring range	: 0 to ± 1000 A
Measuring resistance	: R_M min. R_M max.
with ± 15 V at ± 500 A max.	: 0 ohm 50 ohm
at ± 800 A max.	: 0 ohm 5 ohm
with ± 24 V at ± 500 A max.	: 10 ohm 130 ohm
at ± 1000 A max.	: 10 ohm 25 ohm
Nominal analog output current	: 100 mA
Turns ratio	: 1 : 5000
Overall accuracy at +25°C	: ± 0.3 % of I_N
Supply voltage	: + and - 15 to 24 V (± 5 %)
Isolation	: between primary and secondary : 6 kV rms/50 Hz/1 min.

Accuracy - Dynamic performance

Zero offset current at +25°C	: max. ± 0.2 mA
Thermal drift of offset current (between 0°C and +70°C)	: typical ± 0.2 mA max. ± 0.3 mA
Linearity	: better than 0.1 %
Response time	: better than 1 μ s
di/dt accurately followed	: better than 50 A/ μ s
Bandwidth	: 0 to 150 kHz (-1dB)

General data

Operating temperature	: 0°C to +70°C
Storage temperature	: -25°C to +85°C
Current consumption	: 28 mA (at ± 24 V) + output current
Secondary internal resistance	: 80 ohm (at +70°C)
Package	: - insulated self-extinguishing plastic case - accessible electronic circuit
Weight	: 500 g.
Fastening	: by base plate with 4 slots 6.5 mm dia., 70 x 70 mm between centers
Connection to primary circuit	: through-hole 25 mm dia.
secondary circuit	: on 3 M5 threaded studs
Polarity markings	: a positive measuring current is obtained on terminal M, 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 (e.g. supply voltages, turns ratios, mechanical dimensions, unidirectional measurements, etc.), please contact us.
 - Dynamic performance (di/dt and response time) is best with a single bar completely filling the primary hole.

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LEM SA

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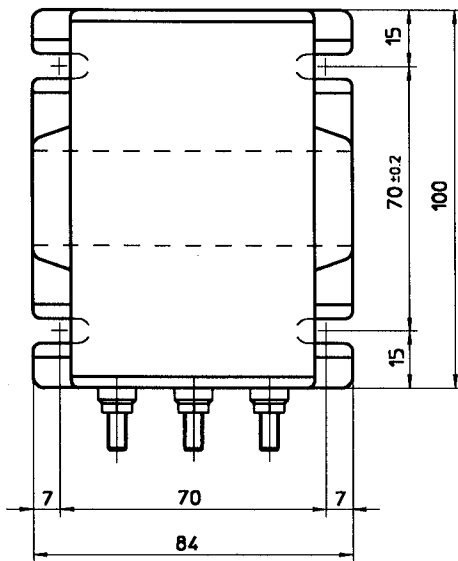
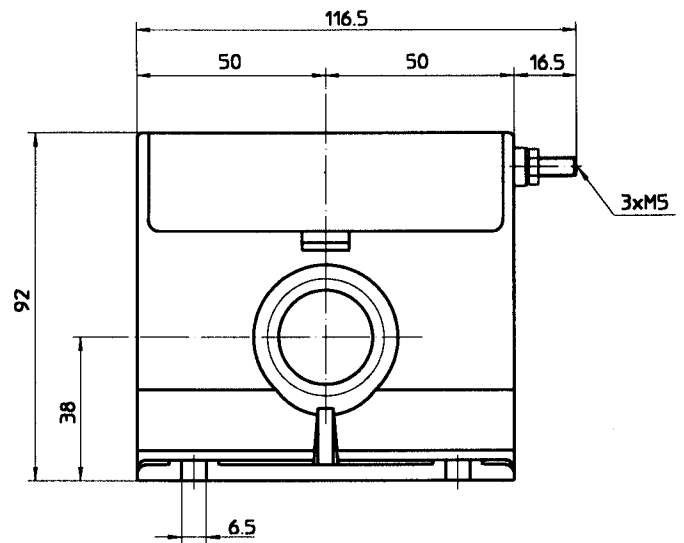
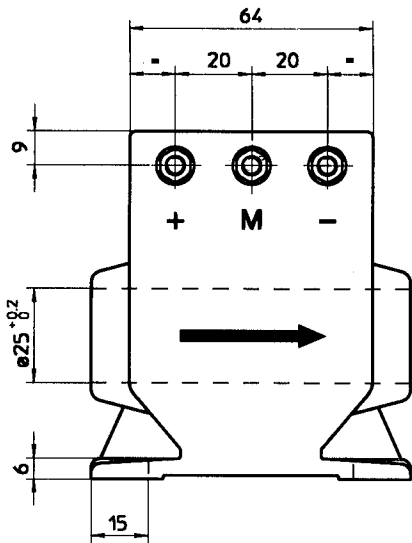
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Dimensions LT 500-S

General tolerance ± 0.5 mm

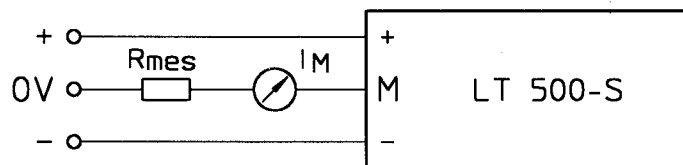


Secondary terminals :

- Terminal + : supply voltage + 15 to 24 V
- Terminal M : measure
- Terminal - : supply voltage - 15 to 24 V

Note : fastening torque of secondary connections : 2.2 Nm

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.