IT 150-S

HIGH ACCURACY CURRENT TRANSDUCER

Basic specifications	
Primary current I (max.)	0-150 A
Polarity	Bipolar
Output current (max.)	0-200 mA
Overload capacity : Normal operation Basic function maintained Fault	 100 % 110 % 500 % (0.1 s)
External Burden resistor - see fig. 1 : Max. Min.	 200 Ω 5 Ω
Current transfer ratio	750 : 1
Linearity	< 1 ppm
Measuring/ratio stability : Initial v.s. temperature v.s. time	 < 2 ppm < 0.3 ppm/°C < 1 ppm/month
Offset : Initial v.s. temperature	 8 µA 0.1 µA/°C
Output noise (RMS) : DC .. 10 Hz DC .. 10 kHz DC .. 50 kHz	 < 0.04 µA < 2.4 µA < 8 µA
Feedback noise (RMS), DC .. 50 kHz (measured on the primary current cable - one turn)	 < 10 µV (typical 5 µV)
Busbar free zone (from center)	r > 70 mm
di/dt accurately followed	> 100 A/µs
Bandwidth (3 dB, small signal 0.5 %)	DC to 100 kHz
Test voltage (pin 4 - ground to a ∅ 25 busbar)	5 kV AC (RMS)
Operating temperature	10-50°C
Input power requirement	max. power consumption 5 VA ± 15 V < ± 5 % + 15 V : 200 mA, - 15 V : 50 mA + compensation current
Mechanical dimensions	122 x 98 x 57 mm hole for busbar or cable : ∅ 26 mm
Weight	approx. 1 kg

All ppm figures refer to max. output current. Specifications are subject to change without notice.
We recommend that a shielded output cable and plug are used to ensure the maximum immunity against electrostatic fields.

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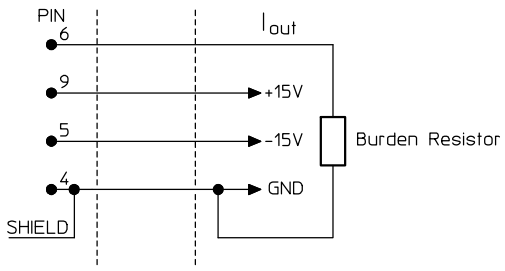
IT 150-S INSTALLATION

IT 150 USER SIDE



Connection of Burden Resistor.
Burden Resistor value : see fig. 1

MAX BURDEN RESISTOR

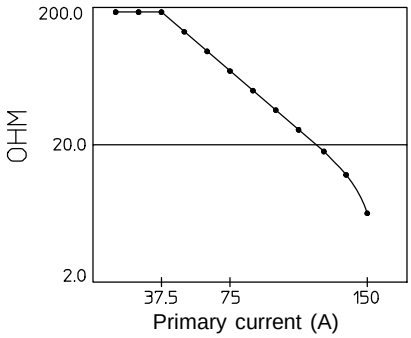


Fig. 1.
Relationship between the externally connected Burden Resistor and the primary current.

BURDEN RESISTOR VOLTAGE

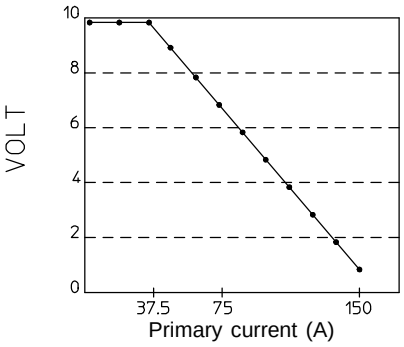
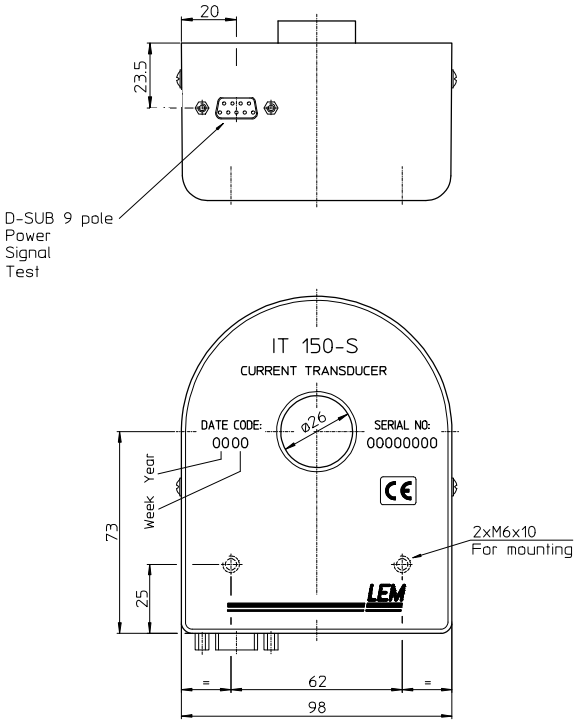
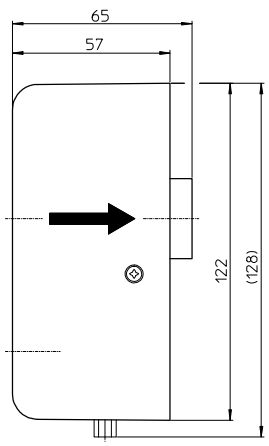


Fig. 2.
The Voltage that can be achieved across the externally connected Burden Resistor as a function of the primary current.

Dimensions IT 150-S





9-POLE D-SUB

Pin 1 : (For factory use only)
Pin 2 : (Test pin for zero detector for factory use only)
Pin 4 : 0 V and electrostatic shield
Pin 5 : - 15 V/50 mA + compensation current
Pin 6 : Current output
Pin 7 : (For factory use only)
Pin 9 : + 15 V/200 mA + compensation current.