



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

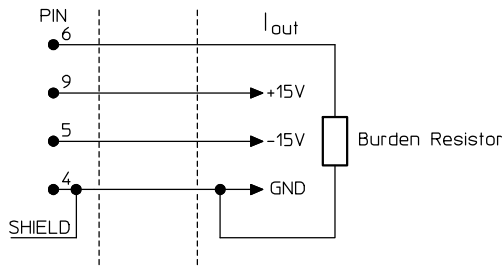
All ppm figures refer to max. output current. Specifications are subject to change without notice.  
We recommend that a shielded output cable and plug are used to ensure the maximum immunity against electrostatic fields.

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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

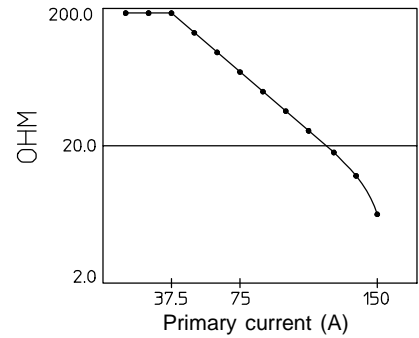


Fig. 1.  
Relationship between the externally connected Burden Resistor and the primary current.

## BURDEN RESISTOR VOLTAGE

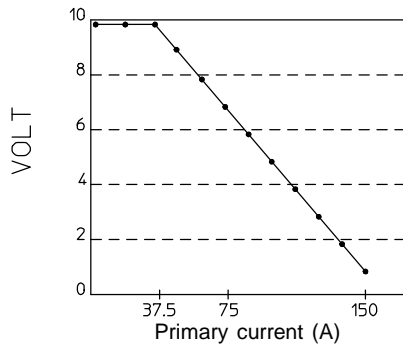
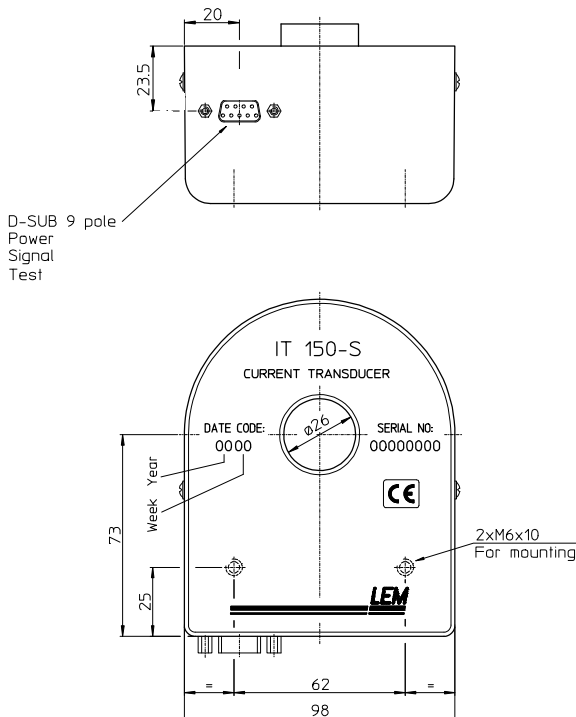


Fig. 2.  
The Voltage that can be achieved across the externally connected Burden Resistor as a function of the primary current.

## 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.

