



# T-ILE4x MULTI-RANGE LOOP POWERED CURRENT TRANSDUCER WITH INTEGRAL CT



The **T-ILE4x** current transducer converts a sinusoidal ac current into a load independent dc current signal capable of driving a number of independent instruments. The transducer has a built in ring type current transformer (CT), the input being achieved by passing the current carrying conductor through the central hole in the housing. Low voltage dc power for the unit is fed via the two wire current signal line.

The output signal is calibrated to rms, based on an arithmetic mean measurement of the rectified input signal, and hence the transducer should be used with undistorted sine waveforms (<1% distortion).

The current range is selectable using a jumper which is accessible from the bottom of the transducer. Two different models are available.

T-ILE4L with current ranges 5A, 10A, 15A, 20A.

T-ILE4H with current ranges 25A, 50A, 75A and 100A.

The unit conforms to IEC 60688. In addition it meets the insulation requirements of IEC 60255-5, clauses 5, 6 and 8 as well as the high frequency disturbance test of IEC 60255-22-1 for Class III test voltage.

## Specifications

<b>Input</b>	Sinusoidal alternating current	
	Standard nominal range 0 - $I_{nom}$	: T-ILE4L 0 - 5A, 0 - 10A, 0 - 15A, 0 - 20A : T-ILE4H 0 - 25A, 0 - 50A, 0 - 75A, 0 - 100A
	Maximum through-hole conductor size	: <12.5mm dia.
	Accurate range	: 0 - 120% $I_{nom}$
	Frequency range	: 45 - <u>50</u> - 55 - <u>60</u> - 65Hz
	Overload capacity	: 2 x $I_{nom}$ continuous
<b>Output</b>	Standard nominal output	: 4 - 20mA dc <750 Ohms load
	Maximum load(voltage drop)	: < supply voltage - 10V dc
	Specified accurate range	: 0 - 120%
	Ripple	: <1% pk to pk
	Response time	: <250ms 0 - 90% : <500ms 0 - 99%
<b>Supply</b>		: 10V to 30V dc injected at any point in the loop. Supply voltage must include provision for voltage drop across loads. A supply voltage of 24V is recommended
<b>Accuracy</b>		: Class 0.5 to IEC 60688 ±0.5% of nominal output for specified range
<b>Isolation</b>	Galvanic isolation between input and output circuits	
	Test voltage	: 4kV rms 50Hz for 1 minute
	Impulse	: 5kV 1.2/50µsec waveform
<b>Temperature</b>	Operating	: -10°C to +20°C to +50°C
	Storage	: -20°C to +70°C
<b>Housing</b>	Fire retardant module to IP40 in grey polyamide, suitable for surface mounting or DIN EN 50022-35 top hat and EN 50035-G32 G-profile mounting rail.	
<b>Terminals</b>	Tinned steel insertion type with screw and clamp spring suitable for 2.5mm <sup>2</sup> conductor.	
<b>EMC Compliance</b>	: AS/NZS 61000.6.3:2012	

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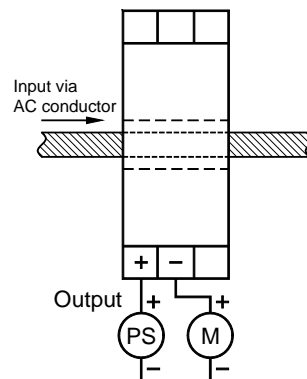
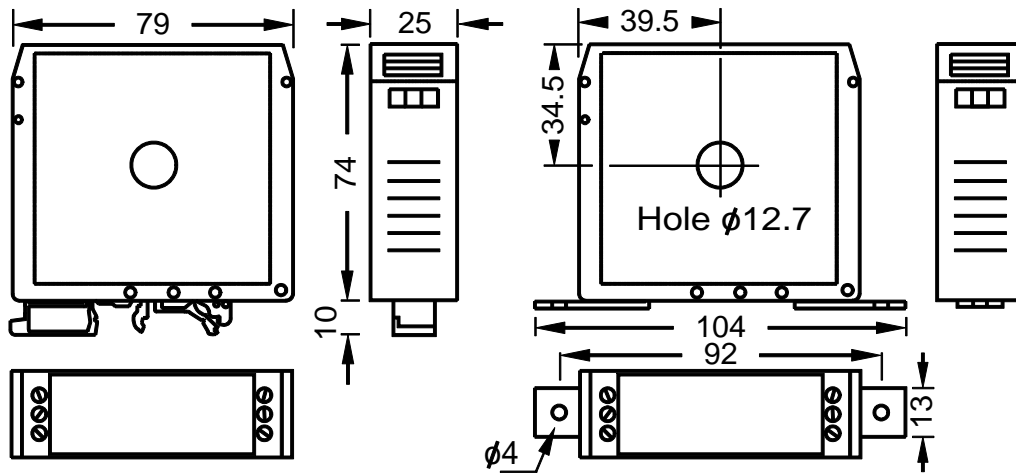
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 FACTORY AND OFFICE: 661 GREAT SOUTH ROAD, PENROSE 1061  
 TELEPHONE: +64-9-525 1753 FACSIMILE: +64-9-525 1756  
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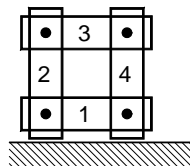


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Housing & Connection Diagram



Jumper Settings: T-ILE4L T-ILE4H



1 = 20A	1 = 100A
2 = 15A	2 = 75A
3 = 5A	3 = 25A
4 = 10A	4 = 50A