



# T-ILA LOOP POWERED CURRENT TRANSDUCER

## WITH INTEGRAL CT

The C&C T-ILA 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 is achieved by passing the current carrying conductor through the CT. Low voltage dc power for the unit is fed from the remote measuring instrument via the two wire 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).

Two CT bore size options available, 18mm for current ranges up to 400A or 12mm for current ranges up to 200A.

The unit conforms to IEC 60688. In addition it meets the insulation requirements of IEC 255-5, clauses 5, 6 and 8 as well as the high frequency disturbance test of IEC 255-22-1 for Class III test voltage.

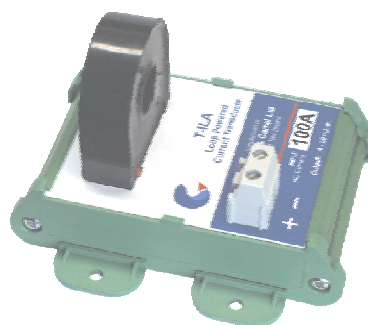
### Specifications

<b>Input</b>	Sinusoidal alternating current	
	Standard nominal ranges $0 - I_{nom}$ (others on request)	
	12mm CT bore	: 5A, 10A, 15A, 25A, 50A, 100A
	18mm CT bore	: 50A, 100A, 200A, 250A, 400A
	Through-hole conductor size	: <12mm dia. or <18mm dia.
	Accurate range	: 0 - 120% $I_{nom}$
<b>Output</b>	Frequency range	: 45 - 50 - 55 - 60 - 65Hz
	Overload capacity	: $2 \times I_{nom}$ continuous
	Standard nominal output	: 4 - 20mA dc
	Maximum load (voltage drop)	: <supply voltage - 10V dc
<b>Aux. Supply</b>	Specified accurate range	: 0 - 120%
	Ripple	: <1% pk to pk
	Response time	: <250ms 0 - 90%
		: <500ms 0 - 99%
<b>Accuracy</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 25V is recommended	
<b>Isolation</b>	: Class 0.5 to IEC 60688	
	$\pm 0.5\%$ of nominal output for specified range	
	Galvanic isolation between input and output circuits	
<b>Temperature</b>	Test voltage	: 4kV rms 50Hz for 1 minute
	Impulse	: 5kV 1.2/50µsec waveform
<b>EMC Compliance</b>	Operating	: -10°C to +20°C to +50°C
	Storage	: -20°C to +70°C
<b>EMC Compliance</b>	: AS/NZS 61000.6.3:2012	

**T-ILA DIN rail mount  
with 18.5mm CT**



**T-ILA surface mount  
with 12.5mm CT**



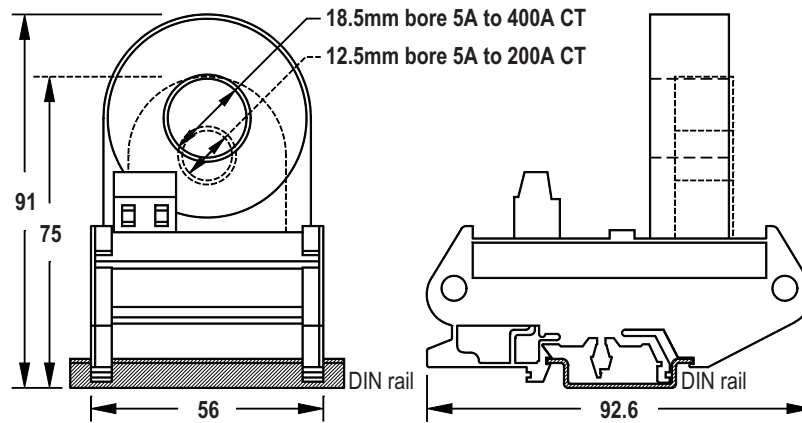
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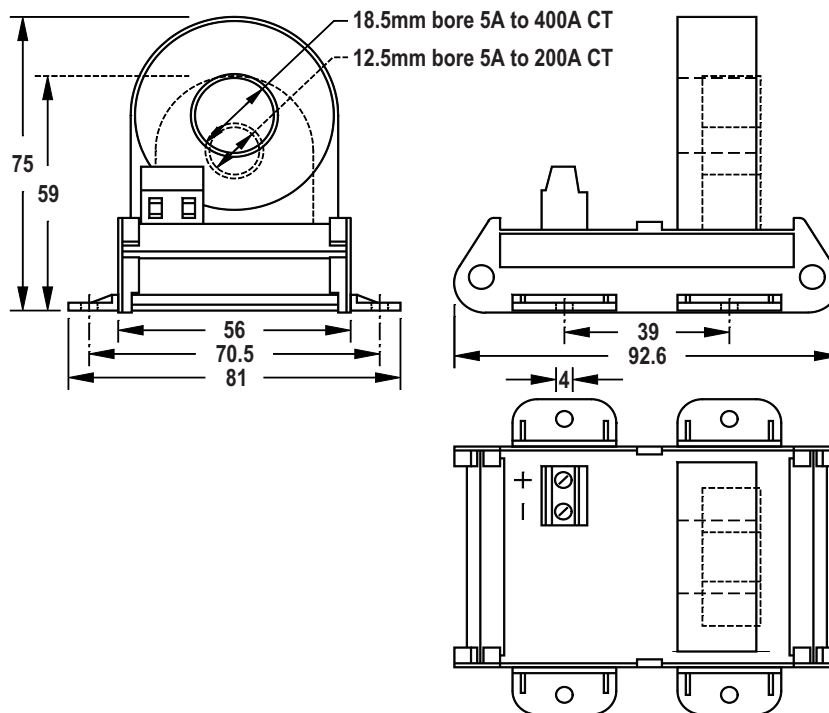


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T-ILA DIN rail mount



T-ILA surface mount



Connection

