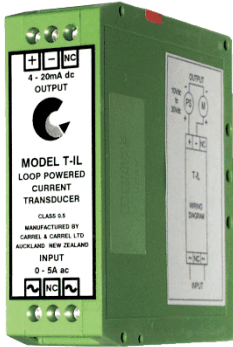




T-IL LOOP POWERED CURRENT TRANSDUCER



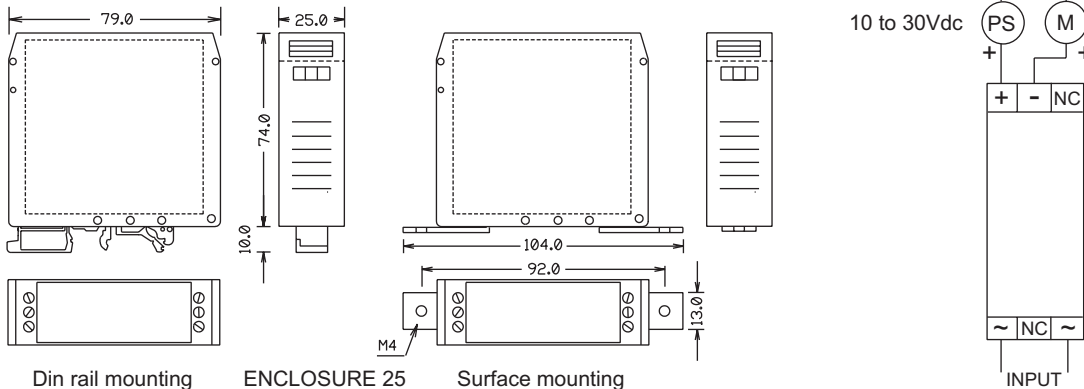
The C&C T-IL current transducer converts a sinusoidal ac current into a load independent dc current signal capable of driving a number of independent instruments. Low voltage dc power for the unit is fed from the remote measuring instrument via the two wire signal line. The output signal is calibrated 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). The power supply for the unit, which is derived from the loop circuit, permits high linearity.

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

Input	Sinusoidal alternating current Standard nominal range $0 - I_{nom}$ (others on request)	: 0 - 1A, 0 - 5A
	Accurate range	: 0 - 120% I_{nom}
	Frequency range	: 45 - 50 - 55 - 60 - 65Hz
	Overload capacity	: $2 \times I_{nom}$ continuous : $20 \times I_{nom}$ for 3 seconds
Output	Standard nominal output (others on request)	: 4 - 20mA dc <750Ω load
	Maximum load(voltage drop)	: <Supply voltage - 10V dc
	Specified accurate range	: 0 - 120%
	Ripple	: <1% pk to pk of full span
	Response time	: <250ms 0 - 90% : <500ms 0 - 99%
Aux. Supply		: 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 dc is recommended.
Accuracy		: Class 0.5 to IEC 60688 ±0.5% of nominal output for specified range
Isolation	Galvanic isolation between input and output circuits	
	Test voltage	: 4kV rms 50Hz for 1 minute
	Impulse	: 5kV 1.2/50µsec waveform
Temperature	Operating	: -10°C to +20°C to +50°C
	Storage	: -20°C to +70°C
EMC Compliance		: AS/NZS 61000.6.3:2012
Housing	Fire retardant module to IP40 in green polyamide, suitable for surface mounting or DIN EN 50022-35 top hat and EN 50035-G32 G-profile mounting rail.	
Terminals	Tinned steel insertion type with screw and clamp spring suitable for 2.5mm ² conductor.	

Housing & Connection Diagrams



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