



T-IS SELF POWERED CURRENT TRANSDUCER



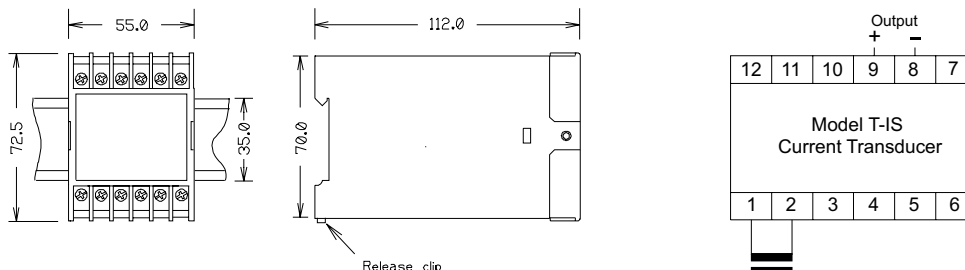
The Carrel Electrade T-IS current transducer converts a sinusoidal ac current into a load independent dc current or voltage signal capable of driving a number of independent instruments. Power for this unit is derived from the input signal. The output signal is calibrated to rms, based on an arithmetic mean measurement of the rectified input signal, and hence the transducer should be used with undistorted sine waveforms (<1% distortion).

The 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 $0 - I_{nom}$: 0 - 1A, 0 - 5A (others on request) Accurate range : 5 - 120% I_{nom} for current outputs : 20 - 120% I_{nom} for voltage outputs Frequency range : 45 - 50 - 55 - 60 - 65Hz Burden of input at I_{nom} : <1.2VA, <2VA for 20mA output Overload capacity : 2 x I_{nom} continuous : 20 x I_{nom} for 3 seconds
Output	Linear voltage or current proportional to input Standard nominal outputs : 0-10mA dc <1500Ω load (others on request) : 0-20mA dc <750Ω load : 0-5V dc >2kΩ load : 0-10V dc >2kΩ load Ripple : <1% pk to pk of full span Response time : <250ms 0-90% : <500ms 0-99%
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	Self extinguishing grey polycarbonate to IP40 snap mounting on top hat rail DIN EN 50022-35
Terminals	Tinned steel pozi-drive M3 screws with captive square washers suitable for 2 x 2.5mm ² conductors (max). Optional terminal covers raise rating from IP10 to IP20

Housing & Connection Diagrams



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