

T-R RESISTANCE TRANSDUCER



The T-R resistance transducer converts a variable resistance into a load independent dc current or voltage signal capable of driving a number of independent instruments. Power for the unit is derived from an auxiliary supply.

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 DC voltage from current injection (2wire method) potentiometer

(3 wire method available on request but without galvanic isolation between input and output)

Excitation current I_e : 5mA to 20mA dc

Resistance $0 - R_{nom}$: 0 - 20 Ohms to 0 - 2k Ohms

Accurate range : 0 - 100% R_{nom}

Output Linear voltage or current proportional to input

Standard nominal outputs
(others on request)

: 0-10mA dc <1500 Ohms load
: 0-20mA dc <750 Ohms load
: 4-20mA dc <750 Ohms load
: 0-5V dc >2k Ohms load

: 0-5V dc >2k Ohms load : 0-10V dc >2k Ohms load

Ripple : <1% pk to pk
Response time : <250ms 0-90%
: <500ms 0-99%

Power Supply : 24V, 110V, 230/240V, 400/415V ac ±20% 2VA

: 24V ±20% or 110V/125V dc (88V-138V) 2W

Accuracy : Class 1 to IEC 60688

: ±1% of nominal output for specified range

Isolation Galvanic isolation between input and output and the auxiliary supply 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 $+70^{\circ}$ C

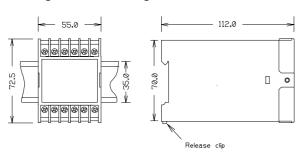
EMC Compliance : AS/NZS 61000.6.3:2012

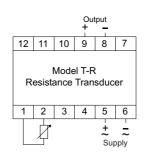
Housing Self extinguishing grey polycarbonate to IP40 snap mounting on top hat rail DIN EN 50022-35

Terminals Tinned steel pozi-drive M3 screws with captive square washers suitable for 2 x 2.5mm² conductors (max).

Optional terminal covers raise rating from IP10 to IP20

Housing & Connection Diagrams





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