



LP-VRMS SEPARATELY POWERED RMS VOLTAGE TRANSDUCER

The LP-VRMS voltage transducer converts an ac voltage input into a load independent output signal. The output signal is based on the a root mean square(rms) measurement of the input signal and hence the transducer can be used with distorted waveforms.

Power for the unit is derived from an external supply, this allows low input burdens and the ability to provide a live zero output (eg 4-20mA).

The unit conforms to IEC 60688. In a 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 for Class III test voltage.

Ordering information: LP-VRMS, input voltage, output, power supply.

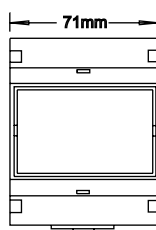
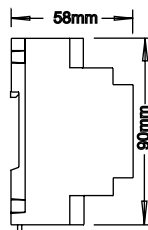
Examples: LP-VRMS, input 0-250Vac, output 0-10mA, supply 110Vdc.

Specifications

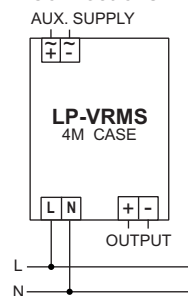
Inputs	Alternating voltage Standard nominal range 0 - V_{nom} : All system voltages to 440V ac Crest factor : <5 Input burden : 1mAac at V_{nom} Frequency range : 50Hz, 60Hz
Output	Standard nominal outputs (others on request) : 0 - 10mA dc <1500 Ω load : 0 - 20mA dc <750 Ω load : 4 - 20mA dc <750 Ω load : 0 - 5V dc >2k Ω load : 0 - 10V dc >2k Ω load Ripple : <1% pk to pk of full span Response time : <250ms 0 - 90% : <500ms 0 - 99% Load influence : <0.25% of full span for specific load range
Accuracy	Class 0.5 to IEC 60688 : $\pm 0.5\%$ of nominal output for specified range Accurate range : 0 - 120% V_{nom} Frequency influence : <0.02% per Hz Drift : $\pm 0.5\%$ over the range 0°C to +60°C
Overload	Input : 1.2 x V_{nom} continuous, 1.5 x V_{nom} for 10 seconds Output S/C : continuous Output O/C : continuous, $V_{o/c}$ <30V Maximum output : <2 x nominal output
Power Supply	: 24V, 110V, 230/240V ac $\pm 20\%$, 1.5VA : 24V dc $\pm 20\%$ or 110V/125V dc (88V-138V) 2W
Isolation	Galvanic isolation between input, output circuits and auxiliary supply Test voltage : 4kV rms 50Hz for 1 minute Impulse : 5kV 1.2/50 μ sec waveform
Temperature	Operating : 0°C to +23°C to +60°C Storage : -25°C to +70°C long term : -55°C to +85°C short term
EMC Compliance	: AS/NZS 61000.6.3:2012



Dimensions



Connections



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