

LP-VPW WINDOW VOLTAGE TRANSDUCER LP-VP-DSW DUAL SLOPE VOLTAGE TRANSDUCER



The LP-VPW window transducer and LP-VP-DSW dual slope transducer convert ac voltage inputs into an output signal which is proportional to the rms calibrated rectified arithmetic mean of the input.

Accurate measurement assumes a sinusoidal input waveform.

To enhance the resolution of the reading the transducer can be set up to operate with a window or a dual slope.

The window option suppresses the lower end of the range so that the transducer reads over a band of voltage centred on the nominal working voltage of the system being measured.

The dual slope option has a lower resolution at the low end of the range with a higher resolution centred on the nominal working voltage of the system being measured. Power for the unit is derived from an external source.

Specifications

Inputs Sinusoidal alternating voltage

Standard nominal range : All system voltages to 550V

Standard window : ±20% of V_{mm}

Dual slope : $\pm 20\%$ of V_{nom} for 80% of output

Input burden : 1mA ac Frequency range : 50Hz, 60Hz

Outputs Standard outputs available : $4 - 20mA dc < 750\Omega$

: 0 - 20mA dc $< 750\Omega$: 0 - 10mA dc $< 1500\Omega$: 0 - 10V dc > 2k Ω : 0 - 5V dc > 2k Ω : <1% pk to pk of full span

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 : ±0.5% of nominal output for specified range

Frequency influence : <0.02% per Hz

Drift : $<\pm 0.5\%$ over the range 0°C to +60°C

Overload Input : $1.5 \times V_{nom}$ continuous

: 2 x V_{nom} for 10 seconds

S/C output : continuous

O/C output : continuous, V_{O/C} <30V Maximum output : <2 x nominal output

Power Supply : 24V, 110V, 230V or 240V ac ±20%, 1.5VA

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

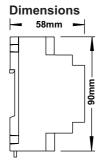
Isolation Galvanic isolation between input, output circuits and auxiliary supply

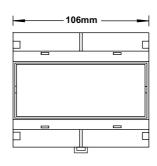
Test voltage : 4kV rms 50Hz for 1 minute Impulse : 5kV 1.2/50µsec waveform

Temperature Operating : 0°C to <u>+23°C</u> to +60°C

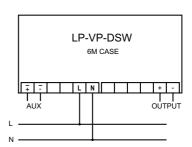
Storage : -25°C to +70°C long term : -55°C to +85°C short term

EMC Compliance : AS/NZS 61000.6.3:2012





Connections



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