



# LP-VP SEPARATELY POWERED VOLTAGE TRANSDUCER

## LP-VL LOOP POWERED VOLTAGE TRANSDUCER



The LP-VP and LP-VL voltage transducers convert an ac voltage input into an output signal which is proportional to the rms calibrated rectified arithmetic mean of the input.

Accurate measurement assumes a sinusoidal input waveform.

The LP-VP is powered from an external supply and the LP-VL is powered from the 4-20mA loop.

**Ordering information:** Input voltage  
LP-VP output current/voltage range ( i.e. 4-20mA, 0-10mA, 0-10V )  
LP-VP supply ( i.e. 110Vac, 230Vac, 24Vdc, 110Vdc )  
Examples: LP-VP, input 0-150V, output 0-10mA, supply 230Vac.  
LP-VL, input 0-500V.

### Specifications

<b>Input</b>	Sinusoidal alternating voltage	
	Standard nominal range $0-V_{nom}$	: all system voltages to 500Vac
	Input burden	: 1mA @ $V_{nom}$
	Frequency range	: 50Hz, 60Hz
<b>Output</b>	Load independent dc current or voltage LP-VP, load independent dc current LP-VL	
	LP-VP standard outputs	: 0-10 mA dc <1500 Ohms
	(others on request)	: 0-20mA dc <750 Ohms
		: 4-20mA dc <750 Ohms
		: 0-5V dc > 2k Ohms
		: 0-10V dc >2k Ohms
	LP-VL standard output	: 4-20mA dc <750 Ohms
	Response time	: 250ms 0-90%
		: <500ms 0-99%
	Load influence	: <0.25% of full span for specific load range
<b>Accuracy</b>	Ripple	: <1% peak to peak of full output span
	Class 0.5 to IEC 60688	: $\pm 0.5\%$ of nominal output for specified range
	Class 0.2 on request	
	Accurate range	: 0-120% $V_{nom}$
<b>Overload</b>	Drift	: $\pm 0.5\%$ over the range 0°C to +60°C
	Input	: $1.2 \times V_{nom}$ continuous
		: $1.5 \times V_{nom}$ for 10 seconds
<b>Power Supply</b>	LP-VP	: 24V, 110V, 230V or 240V ac $\pm 20\%$ , 1.5VA
		: 24V dc $\pm 20\%$ or 110V/125V dc (88V-138V) 2W
	LP-VL	: 10-30V dc from the output loop
<b>Isolation</b>	Galvanic isolation between input, output and supply (LP-VP)	
	Galvanic isolation between input and output (LP-VL)	
	Test voltage	: 4kV rms 50Hz for 1 minute
	Impulse	: 5kV 1.2/50µsec waveform
<b>Temperature</b>	Operating	: 0°C to +23°C to +60°C
	Storage	: -25°C to +70°C long term
		: -55°C to +85°C short term
<b>Housing</b>	DIN rail mounting (EN 60715) according to DIN 43880	
	Material self extinguishing PPO (Noryl), colour grey RAL 7035	
<b>Terminals</b>	Rising clamp, suitable for stranded cable up to 2.5mm <sup>2</sup> (14 AWG)	
<b>EMC Compliance</b>		: AS/NZS 61000.6.3:2012

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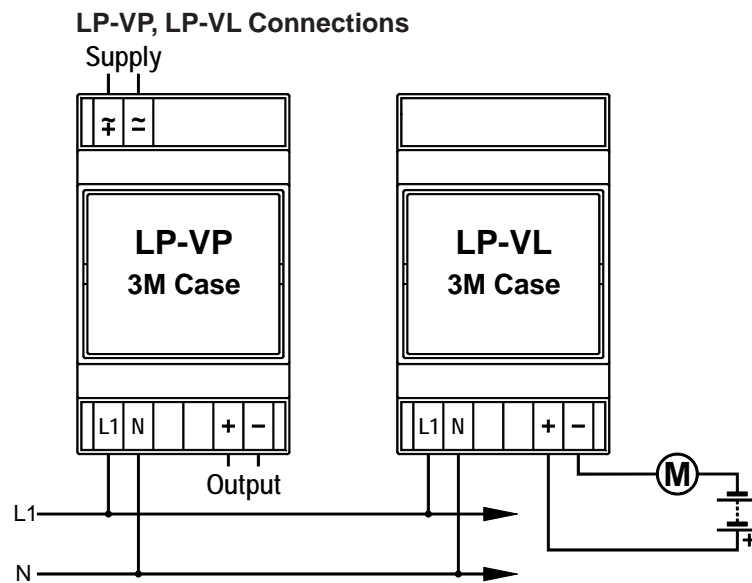
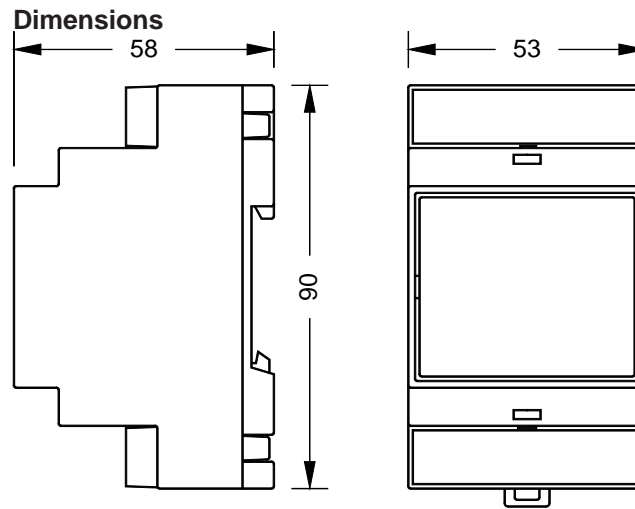
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**\* NOTE** The LP-VL connections have changed from earlier supplied units. Always refer to the connection label on the LP-VL.