



LP-2W3 THREE PHASE WATT TRANSDUCER



The LP-2W3 three phase Watt transducer converts ac current and voltage signals into a load independent bidirectional dc signal proportional to the active power flowing in the system. The transducer is designed for 3 phase 3 wire systems with a balanced supply and an unbalanced load.

Optional output for scalable kW-hour pulses. (LP-2W3H)

Whilst it is possible to calibrate the output to any reasonable power level, users are recommended to adhere to the standard values. The rated power inputs relate to the actual input to the transducer. Any CT or VT employed will have the effect of multiplying the rated power by the ratio of the transformers used.

Ordering information: Voltage inputs, VT ratio (i.e. 110V, 400V, 11kV/110V)
Current inputs, CT ratio (i.e. 1A, 5A, 1000/5A)
Output, output scale (i.e. 4-20mA, 0-10mA equals 0 to 1000W)
Aux. supply (i.e. 110Vac, 230Vac, 110Vdc)
Options: Frequency (60Hz), Class (0.2), pulse rate, opto or relay output

Specifications

Standard Transducer Inputs/Outputs		
Inputs	110V	400/415V
1A	200 Watt	700 Watt
5A	1000 Watt	3500 Watt

Input	AC current and voltage, 3 phase 3 wire unbalanced load	
	Current	: 0 -1A or 0 - 5A (others on request)
	Current burden	: < 0.1VA
	Voltage	: All ac system voltages to 440V
	Voltage burden	: 1mA
	Frequency	: 50Hz, 60Hz
Outputs	Analogue	: Load independent dc current or voltage : -10 to 0 to +10mA dc <1500 Ohms load : -20 to 0 to +20mA dc < 750 Ohms load : 4 to 20mA dc < 750 Ohms load : -5V to 0 to +5V dc > 2k Ohms load : -10V to 0 to +10V dc > 2k Ohms load
	Response time	: <250ms 0 - 90% at full output : <500ms 0 - 99%
	Ripple	: <1% pk to pk (of full output span)
	Load influence	: <0.25% of full span for specific load range
Options	Pulse	: NPN open collector optocoupler or dry contact relay, both with 250msec pulses : 1 pulse per kW-hour, scalable by factors of 2 : Relay 2A, 110V, <10W dc (non-inductive) : Optocoupler maximum ratings 50V, 50mA, 100mW
Accuracy	Class 0.5 to IEC 60688	: ±0.5% of full output span
	Accurate range	: 0 - 120%
	Drift	: <±0.5% over the range 0°C to <u>+23°C</u> to +60°C
Overload	Current inputs	: 2 x nominal continuous, 20 x nominal for 3 seconds
	Voltage inputs	: 1.2 x nominal continuous, 1.5 x nominal for 10 seconds
	S/C output	: continuous
	O/C output	: continuous, Vo/c <30V
	Maximum output	: <2 x nominal output
Supply		: 24V, 110V, 230-240V, 400-415V ac ±20%, 1.5VA : 24V dc ±20% or 110V/125V dc (88V-138V) 2W
Isolation	Galvanic isolation between inputs, output circuits and 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

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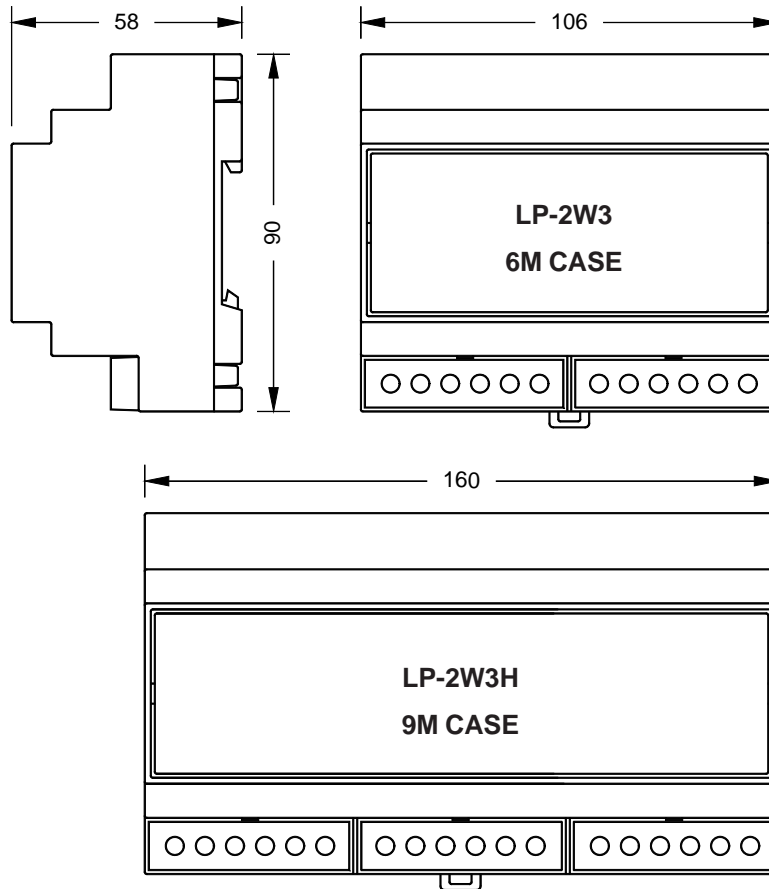
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Dimensions



LP-2W3 Connections

