



# LP-1W4 THREE PHASE WATT TRANSDUCER



The LP-1W4 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 4 wire systems with a balanced supply and a balanced load.

Note. The pulse output version LP-1W4H is no longer available.

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 input, CT ratio ( i.e. 1A, 5A, 1000/5A )  
Output, output scale ( i.e. 4-20mA, 0-10mA equals 0 to 1000W )  
Supply ( i.e. 110Vac, 230Vac, 110Vdc )  
Options: Frequency ( 60Hz ), Class ( 0.2 )

## Specifications

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

<b>Input</b>	AC current and voltage, 3 phase 4 wire balanced 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
<b>Outputs</b>	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
<b>Accuracy</b>	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 +23°C to +60°C
<b>Overload</b>	Current input	: 2 x nominal continuous, 20 x nominal for 3 seconds
	Voltage input	: 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
<b>Supply</b>		: 24V, 110V, 230-240V, 400-415V ac ±20%, 1.5VA : 24V dc ±20% or 110V/125V dc (88V-138V) 2W
<b>Isolation</b>	Galvanic isolation between inputs, output circuits and supply	
	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>EMC Compliance</b>		: AS/NZS 61000.6.3:2012

## CARREL ELECTRADE LTD

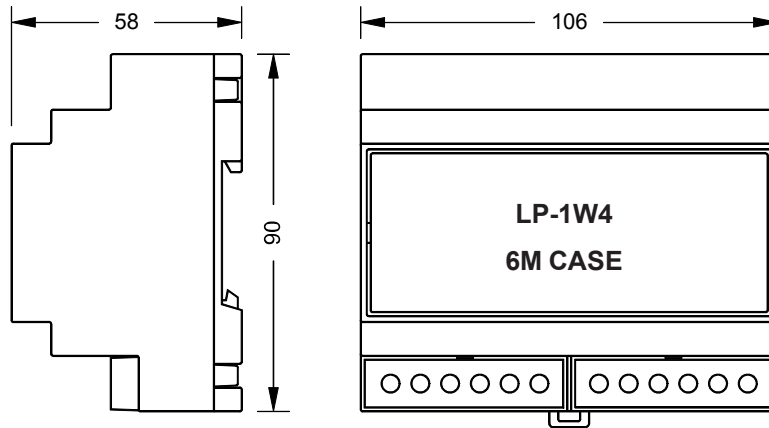
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## Dimensions



## LP-1W4 Connections **Note.** Pulse output no longer available

