



LP-PF PHASE ANGLE (POWER FACTOR) TRANSDUCERS



The LP-PF1 & LP-PF3 phase angle (power factor) transducers convert ac sinusoidal current and voltage input signals into a load independent dc output signal proportional to the phase angle between the current and voltage waveforms.

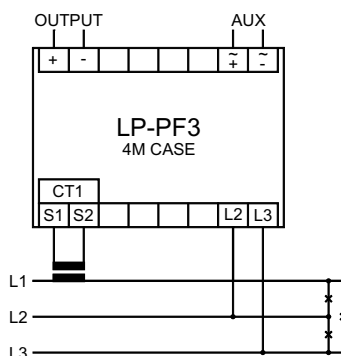
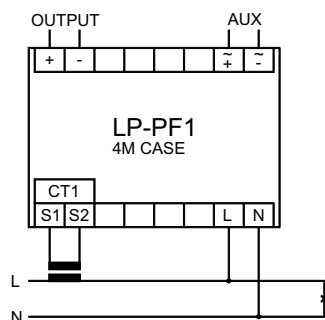
The LP-PF1 is designed for single phase systems and the LP-PF3 is designed for 3 phase systems.

The units conform to IEC 60688. In 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 60255-22-1 Class III test voltage.

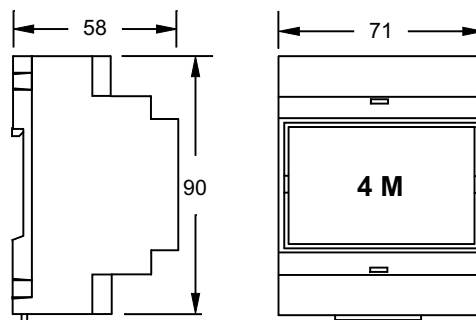
Basic Specifications

Input	Voltage	: 110V, 230V, 240V, 400V, 415V (others on request)
	Current	: 0 - 1A or 0 - 5A (others on request)
	Nominal range, power factor (phase angle) (others on request)	: 0.5 lead (+60°) to 1 (0°) to 0.5 lag (-60°)
		: 1 (0°) to 0.5 lag (-60°)
	Frequency	: LP-PF3 45-50-55 Hz or 55-60-65 Hz
		: LP-PF1 50 Hz or 60 Hz
	Burden	: Voltage <1mA ac
		: Current <0.1VA
	Overload	: Voltage 2 x V_{nom} continuous
		: Current 2 x I_{nom} continuous
Outputs	Linear proportional to phase angle, load independent dc current	
		: 0 - 10mA dc <1500Ω load or
		: 0 - 20mA dc <750Ω load or
		: 4 - 20mA dc <750Ω or
	Ripple	: <1% pk to pk of full span
	Load influence	: <0.25% of full span for specific load range
Aux. Supply		: 24V, 110V, 230V, 240V ac ±20%, 1.5VA
		: 24V dc ±20% or 110V/125V dc (88V-138V), 2W
Accuracy	Class	: 0.5 to IEC 60688, ±0.5% of nominal output span
	Drift	: <±0.5% over the range 0°C to +60°C
Isolation	Galvanic isolation between inputs, outputs and auxiliary supply	
	Test voltage	: 4kV 50Hz ac for 1 minute
	Impulse	: 5kV 1.2/50μsec waveform
Temperature	Operating	: 0°C to +23°C to +60°C
	Storage	: -20°C to +70°C long term
EMC Compliance	: AS/NZS 61000.6.3:2012	

Connections



Dimensions



CARREL ELECTRADE LTD

MANUFACTURERS, IMPORTERS AND DISTRIBUTORS OF ELECTRICAL ENGINEERING PRODUCTS

POSTAL ADDRESS: P O BOX 11078, ELLERSLIE 1542, AUCKLAND NEW ZEALAND

FACTORY AND OFFICE: 661 GREAT SOUTH ROAD, PENROSE 1061

TELEPHONE: +64-9-525 1753 FACSIMILE: +64-9-525 1756

CHRISTCHURCH BRANCH: 73B BRISBANE STREET, SYDENHAM

TELEPHONE: 03-366 1242 FACSIMILE: 03-379 1991

EMAIL: sales@carrel-electrade.co.nz WEB: www.carrel-electrade.co.nz