

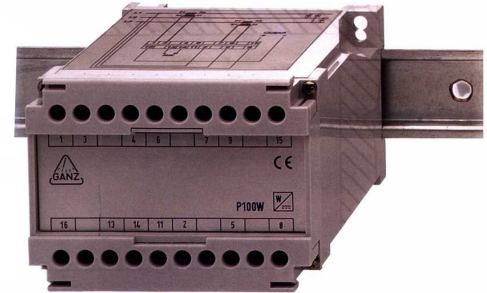


ACTIVE/REACTIVE POWER TRANSDUCERS



Transducer series P100W

These transducers are designed to measure active or reactive power in single-phase or 3-phase networks at balanced or unbalanced load and convert it to a standard DC output signal, which is proportional to the measured value. High grade insulation between case, input, output and auxiliary voltage (if applicable) is provided as well as interference immunity. Input and output circuits are galvanically isolated. The floating output signal is additionally fully protected open or short-circuited conditions and voltage transients. All products are supplied in flame retardant cases featuring such properties as self-extinguishing, non-dripping and free of halogens.



Application	Non-sinusoidal waveform RMS measuring	1-phase	3-phase 3-wire balanced load	3-phase 4-wire balanced load	3-phase 3-wire unbalanced load	3-phase 4-wire unbalanced load
Type	active power (W)	P100Wa	P100Wb	P100Wb1	P100Wc	P100Wd
	reactive power (Var)	P100Wam	P100Wbm	P100Wb1m	P100Wcm	P100Wdm
Weight	approx.	0.6 kg	0.65 kg	0.65 kg	0.65 kg	0.65 kg
Input	rated value U_N	57 ... 500V	3x100/57V, 3x110/63V, 3x230/132V, 3x400/230V, 3x500/290V			
	rated value I_N		1A, 5A			
	power consumption		voltage < 1.5 VA current < 0.5VA			
	working range		80-120 % U_N (self-powered) 0-120% I_N			
	measuring range		apparent power P_{VA} x calibration factor F_{CAL} (0.5 – 1.2)			
	rated frequency		50 / 60Hz			
Overload	continuous		1.2 U_N ($U < 600V$) & 2 I_N ($I < 10A$)			
	for 0,5 sec		2 U_N ($U < 600V$) & 10 I_N			
Output mA	rated value		$\pm 1 / 5 / 10 / 20$ & 4-20mA			
	load resistance		<15 / 3 / 1.5 / 0.75k Ω			
Output V	rated value		$\pm 10V$			
	load resistance		>1k Ω			
	load influence		< 0.2%			
	response time constant		$\tau \leq 0.4$ sec			
Option Auxiliary	Auxiliary U_H		for working range 0 – 120% U_N			
	Voltage AC		115 / 230 / 400 V $\pm 20\%$ (45 – 65 Hz) < 3VA			
Accuracy	Class		0.2 % comply with IEC 60688			
	calibration temperature		20°C $\pm 1^\circ$			
	temperature coefficient		< 100ppm / K $^\circ$			
	warm-up time		≥ 15 min.			
Case	material		light grey polycarbonate comply with UL 94 V0			
	connection		screw terminals for 2x0.5 – 2.5 mm 2			
	terminal marking		numbering comply with DIN 43807			
	fixing		snap-on to rail 35x7.5 mm comply with DIN-EN 50022 / BS 5584			
	mounting		any position			
	enclosure code		case IP 50 / terminals IP 30 comply with IEC 529 / BS 5490 / DIN 40050			
Insulation	test voltage		3.75 kV 50Hz			
	impulse test		5kV / 1.2 / 50 μ s IEC 255-4			
Climatic	working temperature		0 to +50°C			
	storage temperature		-20 to +70°C			
	humidity		=95%RH non condensing			
	class of climate		HSE comply with DIN 40040 – 3 comply with VDE / VDI 3540			
Applied standards	general		IEC 60688			

Subject to change without prior notice

Order specification:

Active power transducer, 3-pase, 4-wire, unbalanced load
3 x 400/230V (or VT), CT: 100/5A, Range: 80 kW, Output: ± 20 mA
Class of accuracy: 0,5

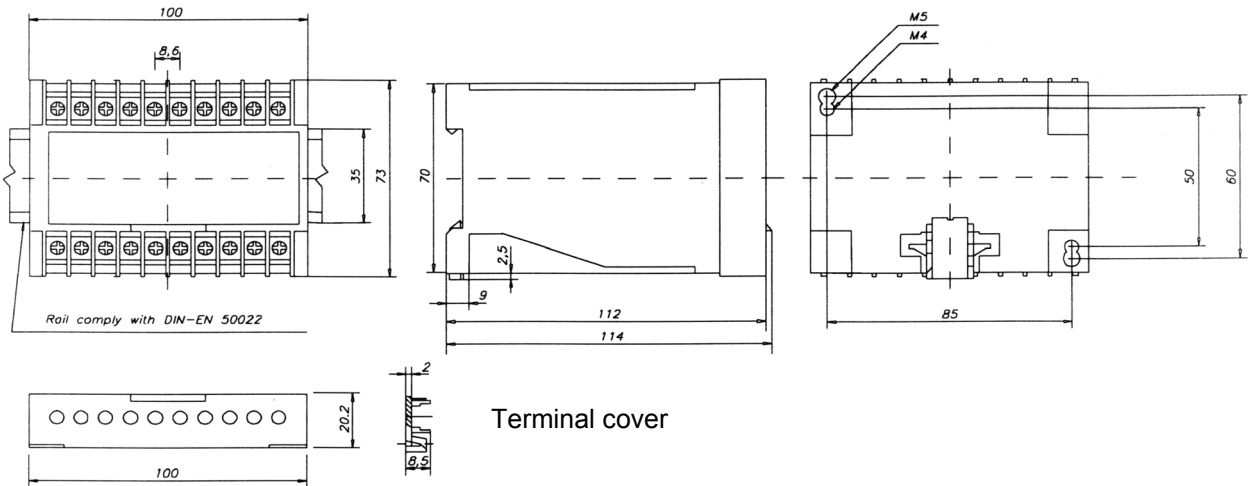
P100Wd	3x400/230V	100/5A	80 kW	± 20 mA	cl. 0,5
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Dimension in mm:



Connection diagrams

