Phase-angle-measuring

AD-PW 100 GC

Description:

With the phase-angle-measuring AD-PW 100 GC, the phase angle between a current path and a voltage path is registered and made available at the ouput as analogue magnitude. A capacitive or inductive load is recognised immediately through the bipolar output. For sinusoidal currents and voltages in on phase for equally loaded three-phase-current networks, the cosine of the phase angle is according to the ouput factor. The measuring range is adjusted according to demand. The ouput signal is gavanically separated and, up to a limit value, independent from the connected load.

Application:

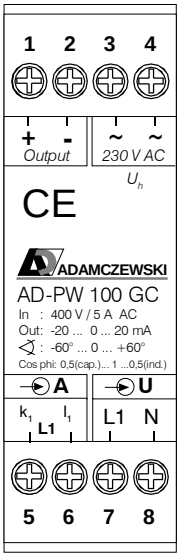
All inputs and ouputs are protected against interference peaks and transients. Measuring of the phase angle between a current path and a voltage path.

Technical data:

Construction type:	1 channel switchboard housing
Power supply:	230V AC +/-10% 50-60Hz (*) alternative 20-30V DC (*)
Power consumption:	approx. 1,5 W resp. 2,5 VA
Max. measurand:	-60° (kap.)...0...+60 (ind.) (*)
Frequenz of measurand:	40...**50**...60 Hz
Input voltage circuit:	U_{en} = 230 V Sinus (*) L1-N
Value of nominal conditions:	0,5...**1**...1,2 x U_{en}
Max. overload:	1,2 x U_{en} continual, 2 x U_{en} for 1 sec.
power dissipation:	< 0,23 W
Input current circuit:	1 A or 5 A (*)
Value of nominal conditions:	0,2...**1**...1,2 I_{en}
Max. overload:	2 x I_{en} continual, 20 x I_{en} for 1 sec.
power dissipation:	< 0,15 W
Output:	impressed voltage or load-independent current e.g. 0-20mA; 4-20mA; 0-10V DC also bipolar possible
Output load:	max. 800 Ohm with current-output min. 500 Ohm with voltage-output
Accuracy:	class 0,5 according to DIN IEC 688 class 0,2 under reference conditions
Influence of temperature:	0,01%/K
of frequenz:	0,05%/Hz within range 40...60 Hz
of input-current:	0,5% within range 0,2...1,2 I_{en}
of input-voltage:	0,2% within range 0,5...1,2 U_{en}
Insulation test voltage:	input/output: 5 kV RMS, 1 min. input/power supply 4 kV RMS, 1 min. output/power supply 4 kV RMS, 1 min.
Protective system:	power supply against over-voltage, over-current, over-temperature input/output against over-voltage
CE-conformity:	EN 50081-2, EN 50082-2
Ambient temperature:	0 to 50°C

(*) others on request

Connection and dimension: AD-PW 100 GC

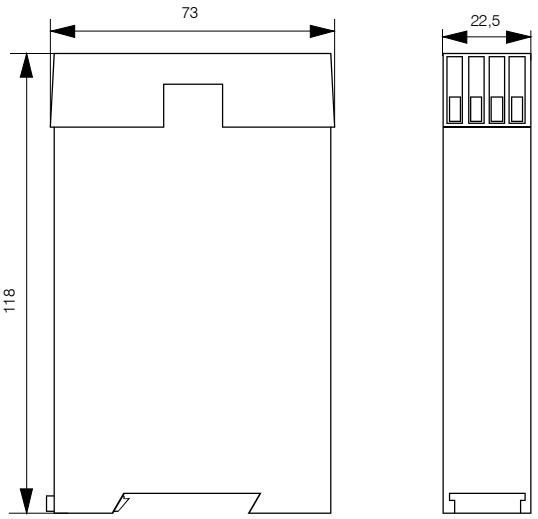


Connection data:

fine-wire: 2,5 mm²
single-wire: 4,0 mm²
max. voltage: 250 V AC

Manner of fastening:

attachment rail: NS 35 / 7,5
type of protection: IP 30
weight: ca. 200 g



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