PAM360E

Phase Angle Meter

Programma®

A Megger Group Company

PAM360E

Phase angle meter

The PAM360E™ phase angle meter is designed to test for example directional protection relays and to conduct directional tests on instrument transformers.

Since precise accuracy and versatility were given top priority by designers of the compact and handy PAM360E, its capabilities are equal to those of its heavier and more expensive competitors.

Thanks to fine resolution and high accuracy, the PAM360E is also ideal for testing sensitive distance protection. It has a broad range and can sense either current or voltage. Moreover, the PAM360E's inputs are galvanically separated from each other and from the mains.

Its many outstanding features make the PAM360E a highly versatile instrument, and it is priced competitively.

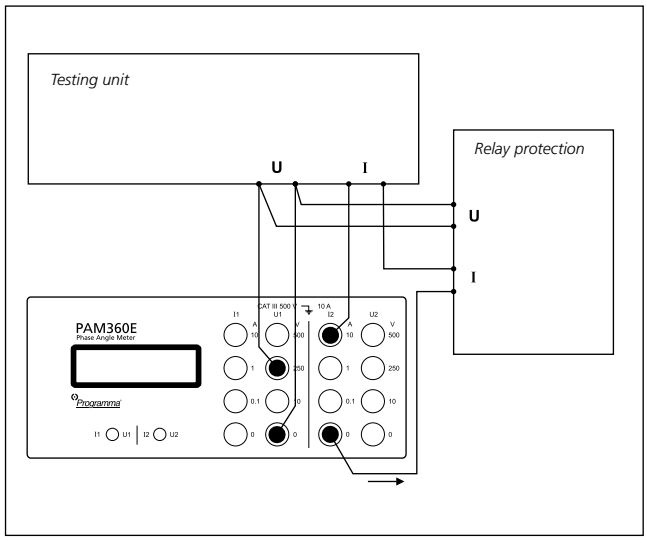
The PAM360E is delivered complete with test lead set in a handy transport case.

Application example

IMPORTANT
Read the User's manual before using the instrument.

Directional test of relay protection

1. Connect PAM360E inputs U1 and I2 to the testing unit (SVERKER for example) and the relay protection.
2. Select U1 and I2 on the toggle switches.
3. Use the testing unit to trip the protective relay equipment.
4. Check that the relay trips within the specified angle range by reading the angle shown on the PAM360E's display.



Specifications PAM360E

Specifications are valid at nominal input voltage and an ambient temperature of +25°C, (77°F). Specifications are subject to change without notice.

Environment	
Application field	The instrument is intended for use in high-voltage substations and industrial environments.
Temperature	
Operating	0°C to +50°C (32°F to +122°F)
Storage & transport	-40°C to 70°C (-40°F to +158°F)
Humidity	5% – 95% RH, non-condensing
CE-marking	
LVD	Low Voltage Directive 73/23/ EEC am. by 93/68/EEC
EMC	EMC Directive 89/336/EEC am. by 91/263/EEC, 92/31/EEC and 93/68/EEC
General	
Mains voltage	115/230 V AC, 50/60 Hz (Selectable)
Power consumption	3 W (max)
Dimensions	
Instrument	205 x 98 x 225 mm (excl. handle) (8.1" x 3.8" x 8.8")
Transport case	320 x 150 x 465 mm (12.6" x 5.9" x 18.3")
Weight	2.3 kg (5.1 lbs) 4.6 kg (10.1 lbs) with accessories and transport case.
Test lead set, with 4 mm stackable safety plugs	4 x 2 m (6.6 ft), 2.5 mm^2
Display	LCD, dot matrix
Measurement section	
Range	0 – 359.9°
Type of phase angle measurement	Current-current, voltage-voltage and current-voltage
Wave form	Sinusoidal
Frequency range	15 – 75 Hz
Resolution	0.1°
Inaccuracy (sinusoidal voltage)	±0.5° (if 20% or more of range is used) ±1° (if less than 20% of range is used)
Inputs	
Current inputs	
Range	0.002 – 10 A. Range can be increased by means of a clamp-on current transformer.
Voltage inputs	
Range	0.2 – 500 V

Ordering information

	Art.No.
PAM360E	
Complete with: Test lead set GA-00082 Transport case 50-00100	**BP-29092**

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Subject to change without notice. Art. No. ZP-BP01E Doc. BP0099AE

2008