

Programma

PAM360E Phase Angle Meter



- Designed for power system applications
- Current and voltage inputs
- Compact and lightweight
- Easy to use

DESCRIPTION

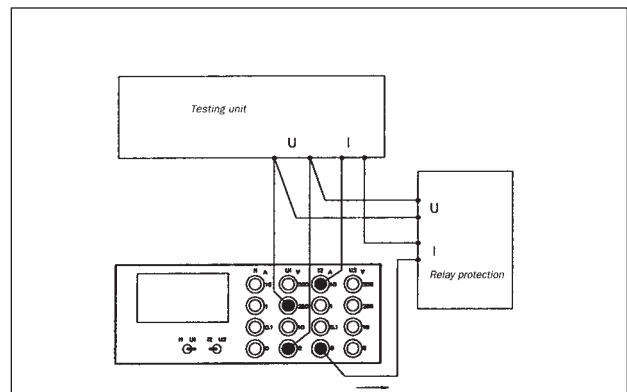
The Programma Model PAM360E Digital Phase Angle Meter is specifically designed for measurements on electrical power systems. It is capable of displaying the phase angle relationship between two power signals, either two currents or two voltages, or any combination. Current signals up to 10 amps and voltage signals up to 500 volts can be applied directly to the instrument. The current input range can be extended with the use of external current transformers.

APPLICATION

Model PAM360E is commonly used for phasing out circuits, checking poly-phase metering installations, testing and calibrating protective relays, checking differential relay schemes, and verifying the polarity of current and potential transformers.

FEATURES AND BENEFITS

- Direct digital reading down to tenths of a degree (0.1°) — does not require calculation or interpretation.
- Designed for use in substation or industrial environments — transport case provided for rugged protection.
- Switchable inputs between current and voltage — allows phase angle of any combination of two power signals to be measured giving broad application capability.



Application example of the PAM360E

SPECIFICATIONS

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

| | |
|-----|---|
| EMC | EMC Directive 89/336/EEC am. by 91/263/EEC, 92/31/EEC and 93/68/EEC |
| LVD | Low Voltage Directive 73/23/ EEC am. by 93/68/EEC |

General

| | |
|-------------------|------------------------|
| Voltage | 115/230 V AC, 50/60 Hz |
| Power consumption | 3 W (max) |

Dimensions

| | |
|---|--|
| Instrument | 205 x 98 x 225 mm (except 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 |

Measurement section

| | |
|---------------------------------|--|
| Range | 0 – 359.9° |
| Type of phase angle measurement | Current-current, voltage-voltage and current-voltage |
| Waveform | Sinusoidal |
| Frequency range | 15-75 Hz |
| Resolution | 0.1° |
| Accuracy (sinusoidal voltage) | ±0.5° (if 20% or more of range is used) ±1° (if less than 20% of range is used) |

Current Input Range

0.002 - 10 A. Range can be increased by means of a clamp-on current transformer

Voltage Input Range

0.2 - 500 V

ORDERING INFORMATION

| Item (Qty) | Cat. No. |
|--|----------|
| PAM360E Phase Angle Meter complete with test lead GA-00082 and transport case 50-00100 | BP-29092 |

UK
Archcliffe Road, Dover
CT17 9EN England
T +44 (0) 1 304 502101
F +44 (0) 1 304 207342
UKsales@megger.com

UNITED STATES
4271 Bronze Way
Dallas, TX 75237-1019 USA
T 1 800 723 2861 (USA only)
T +1 214 333 3201
F +1 214 331 7399
USsales@megger.com

OTHER TECHNICAL SALES OFFICES
Täby SWEDEN, Norristown USA,
Sydney AUSTRALIA, Toronto CANADA,
Trappes FRANCE, Kingdom of BAHRAIN,
Mumbai INDIA, Johannesburg SOUTH
AFRICA, and Chonburi THAILAND

Registered to ISO 9001:2000 and
ISO 14001:2004
Cert. no. GBG0005937
PAM360E_DS_en_V01
www.megger.com
Megger is a registered trademark