

The Allen-Bradley MiniPowermonitor M610 is a 3-phase A.C. monitor. The M610 measures and displays line-neutral and line-line voltages. The instantaneous, 15 minute averaged and peak values of the measured phase currents are displayed sequentially. Typically in 3-phase A.C. power systems four analog measuring instruments are used; three for phase currents and one for voltage through a phase selector switch. The M610 combines these measurement functions into a single compact instrument, which cyclically displays currents and voltages of all 3 phases simultaneously.



## Benefits

- Three-line digital display simultaneously shows measurements of all 3 phases
- Displays 15-minute averaged measurements
- Peak value storage and display
- Automatic sequencing of displayed parameters
- Non volatile memory

## Description

The M610 measures and displays line-neutral and line-line voltages. The instantaneous, 15 minute averaged and peak values of the measured phase currents are displayed sequentially. The sequencing of displayed parameters is done either automatically or manually on demand.

Standard current transformers can be connected directly to the M610. The required shunts are already installed. The M610 is preprogrammed with 35 standard current transformer ratios. Voltage terminals may be connected directly (up to 480V) or through potential transformers.

Operating power is supplied through a separate 120 or 240V connection.

## Additional Valuable Features

- Measurement of line-neutral and line-line voltages
- Measurement of individual phase currents through standard current transformers with a 1A or 5A outputs
- Current transformer ratio user selectable from 35 pre-programmed standard ratios
- Phase voltages and currents sequentially displayed: automatically at 10 second intervals or manually
- Large 3-line, 4-digit, 7-segment red LED digital display
- Measurement mode indicated by LED annunciator lamps
- Easy to install and operate
- Plug-in spring clamp connectors
- Compact Size, 77mm depth
- Peak value storage and display
- 15-minute averaged measurements (bimetallic function)
- Reduced installation and wiring costs
- DIN 43700 standard panel mounting enclosure
- UL, CE certified

## General Parameters

Parameters	Value
AC Input Voltage, Control Power Nominal	120 VAC...400 VAC*
Current Range	0.1 A...8 A
Temperature Coefficient	< 0.01% / K
Input Impedance, Nom.	2 M $\Omega$ (Lx to N) 0.01 $\Omega$ at 5 A 0.05 $\Omega$ at 1 A
Overload Rating	Voltage x 1.1 (continuous) Current x 2 (continuous)
Frequency	50...60 Hz
Power Consumption	Approximately 3 W
Operating Temperature	+5...+50 +41...+122
Storage Temperature	-20...+70 -4...+158
Protections Class	Enclosure IP 20 (IP 65 with optional protective hood) Terminals IP 00
Weight	0.3
Dimensions (HxWxD), Metric 3.78 in x 3.78 in x 2.56 in	96 mm x 96 mm x 65 mm
Breakdown Rating	Per DIN 41700
Panel Mounting	Spring Clamps
Agency Certification	—

\*Per model number

## Measured Parameters

Measuring Voltage Range	0...600 VAC
Instantaneous Current	I <sub>L1</sub> / I <sub>L2</sub> / I <sub>L3</sub>
Measuring Rate	Approximately 2 measurements per second
Update Time	1.5 seconds

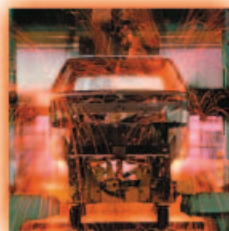
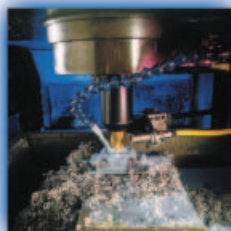
## Digital Displays

Display Description	7 Segment LED, Red
Lines x Characters	3 x 4
Character Size	14 mm (0.55 in)

## Measurement Accuracy and Range

Parameters	Accuracy	Nominal	Range	Maximum Limit
Volts	±1%	240V rms	10V rms...347V rms <sub>L-N</sub> or 17V rms...600V rms <sub>L-L</sub>	400 V rms <sub>L-N</sub> or 690 V rms <sub>L-L</sub>
Current	±1%	5 A	0.1 A...8 A	10 A

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[www.rockwellautomation.com](http://www.rockwellautomation.com)

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