

DESCRIPTION

The A210 Power Meter measures and displays voltage, current, power, and energy quantities in single-phase or three-phase power systems. The meter's multifunction capability replaces a large number of analog measurement and display devices.

A high-contrast LED display in a compact, panel-mount package provides low-cost, high-visibility control panel monitoring. The basic instrument provides up to 63 measurements that can be displayed on three 4-digit LED displays.

Two solid-state relay/pulse outputs can be used as high/low limit alarms on selected measurements or as energy pulse outputs. Scaling of inputs for direct reading in primary values is provided.

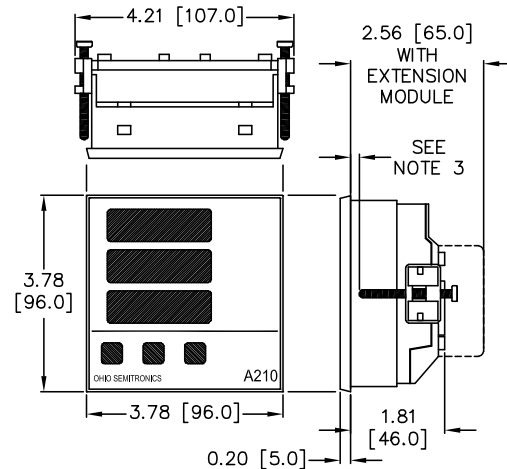
An extension module is available to extend the A210's function and flexibility. The MM/COM module provides RS-232/485 with MODBUS RTU communication protocol. The module also provides for load profile recording of active and/or reactive power quantities for up to 83 days at 15-minute intervals. Available software provides programming of the instrument, reading and retrieval of the recorded data. A pulse input can be used for synchronizing profile data timing or switching between high/low tariff energy metering with this option.

FEATURES

- Measurement of current, voltage, active, reactive and apparent power, active and reactive energy, power factor and line frequency
- Single-Phase Three-Wire or Three-Phase Four-Wire Sinusoidal Measurements.
- Simultaneous display of up to three measurements with 4-digit red high-contrast LED displays
- Installation size of 96mm x 96mm panel, 46mm depth behind panel (65mm with MM/COM module)
- Two pulse/relay outputs can be used for limit alarms or energy pulse outputs
- MM/COM optional extension module can be added for communications and load profile memory



OUTLINE AND DIMENSIONS



NOTES:

1. ALL DIMENSIONS IN INCHES [MM]
2. PANEL CUTOUT -
INCHES - 3.62 (+0.03/-0.00) X 3.62 (+0.03/-0.00)
MM - 92 (+0.8/-0.0) X 92 (+0.8/-0.0)
3. PANEL DIMENSIONS (THICKNESS, MIN-MAX) -
INCHES 0.08-1.00
MM 2-25.4

Dwg# 0902-00594-B

SPECIFICATIONS

DISPLAY 7-segment red LED
Character Height..... 0.55in/14mm
Display Range..... Max. 9999
Energy..... Max 99999999

INPUT
Voltage..... Nominal 500 V_{LL} 290 V_{LN}
Over-range Nominal +20%
Current..... (A210-001/002) Nominal 5A
(A210-003/004) Nominal 1A
Over-range Nominal +20%
Overload..... 2X Nominal Continuous
Frequency..... 45-65Hz

ACCURACY (% of Nominal)
Current..... ±0.5%
Voltage..... ±0.5%
Power..... ±1.0%
Power Factor..... ±1.0%
Frequency..... ±0.02 Hz
Energy..... ±1.0%
Response Time..... 400ms

INSTRUMENT POWER
A210-001/003 85-253V, dc or 45-400Hz
A210-002/004 20-70V, dc or 45-400Hz
(3VA without MM/COM module, 4VA with MM/COM module)

OUTPUT

Pulse/Limit Alarm Outputs..... (2ea)
Outputs: passive, opto-isolated common-collector transistors
V_{ce} 40Vdc maximum
V_{sat} 1.2Vdc maximum
I_{max}..... 150mA
Pulse Duration..... 100ms

MM/COM MODULE (OPTION)

Interface RS-232/485
Protocol MODBUS RTU
Baud..... 1200, 2400, 4800, 9600, 19200
Memory 15936 values
(records 2 quantities for 83 days at 15-min intervals)
Digital Input Contact Closure Synchronizing Input
or HI/LO rate (tariff) select.

ENVIRONMENTAL

Operating Temperature -10°C to +55°C
Storage Temperature..... -25°C to +70°C

MECHANICAL

Dimensions..... 3.8" x 3.8" x 1.8"
(2.6" depth behind panel with MM/COM module)
Panel Cutout..... 3.6" x 3.6"
Net Weight..... 8.8oz