

DIGITAL PANEL METERS

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MODEL DU40

AC VOLTAGE



Reads to 700.0 Volts F.S.

AC CURRENT



Reads to 9999 Amps F.S.

DESCRIPTION MODEL DU40-AC

•The DU40 is a low cost AC voltage meter. The DU40-AC is designed to measure power line voltage up to 700.0Vac with 0.1Vac resolution.

DESCRIPTION MODEL DU40-ACI5

•The DU40-ACI5 is a low cost AC current meter. It has a built-in internal shunt that allows direct connection to a 5A CT (current transformer) without adding any other external features.

DU40-AC SPECIFICATIONS

Input Configuration: Inputs resistively isolated to 1400V from internal ground of meter by 1.94 M Ω so that phase to phase measurements can be safely made.
 Input Range..... 700.0Vac, 50-60Hz
 Input Impedance..... 4.0M Ω

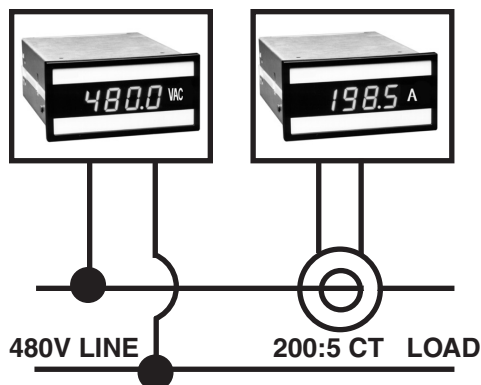
DU40-ACI5 SPECIFICATIONS

Input Configuration..... Single-ended with provision to offset the zero of the reading being displayed.
 Full Scale Range..... To 9999 F.S. 5A CT input
 Input Impedance..... 0.02 Ω for 5A CT

MODEL DU40 COMMON SPECIFICATIONS

Accuracy..... \pm (0.05% of reading + 3 digits)
 Temp. Coefficient..... 100ppm/ $^{\circ}$ C (Typical)
 Conversion Rate..... 3 readings per second
 Display..... 0.56" high efficiency LED display HOLD and TEST function
 Decimals..... User programmable to four positions.
 Overload Indication..... When input exceeds the full scale on any range being used, all digits flash at the A/D conversion rate
 Power Requirements..... 100/120 or 200/240VAC, 50/60Hz, Approx. 2.5 Watts.
 Warm Up Time..... One minute to specified accuracy
 Operating Temp..... -10 $^{\circ}$ C to +50 $^{\circ}$ C

TYPICAL APPLICATION



CALIBRATION PROCEDURE DU-40ACI5 ONLY

1. Apply an input of 0Aac to the meter by shorting the inputs.
2. Adjust the Zero Offset Pot until the meter reads 0000.
3. Connect the secondary of the current transformer (CT) to the meter inputs, and apply the full scale current. (5Amps)
4. Adjust the Span Pot until the meter displays the required reading. (Primary ratio of CT)
5. Place Decimal Point Jumper in proper position for CT Ratio.
6. The DU40-ACI5 is now calibrated and ready for use.

NOTE: Unit comes prescaled when CT Ratio is provided.

ORDERING INFORMATION

DU40-ACI5	4 digit red LED for direct connection to 5A secondary CT
DU40-AC	4 digit red LED factory calibrated for 700.0VAC

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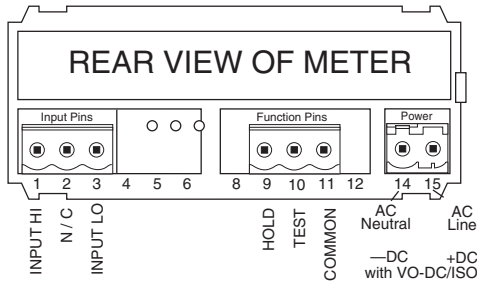
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CONNECTOR PINOUT

The Models DU40-AC and DU40-ACI5 interconnects by means of standard screw terminal connectors.



SETUP INSTRUCTIONS

Opening Back Panel

To open back panel, insert a flat screwdriver or similar instrument in both slots on the top of the case and pry open.

Decimal Point Selection

Decimal selection is made on the front of the display board. To select move header to desired position.

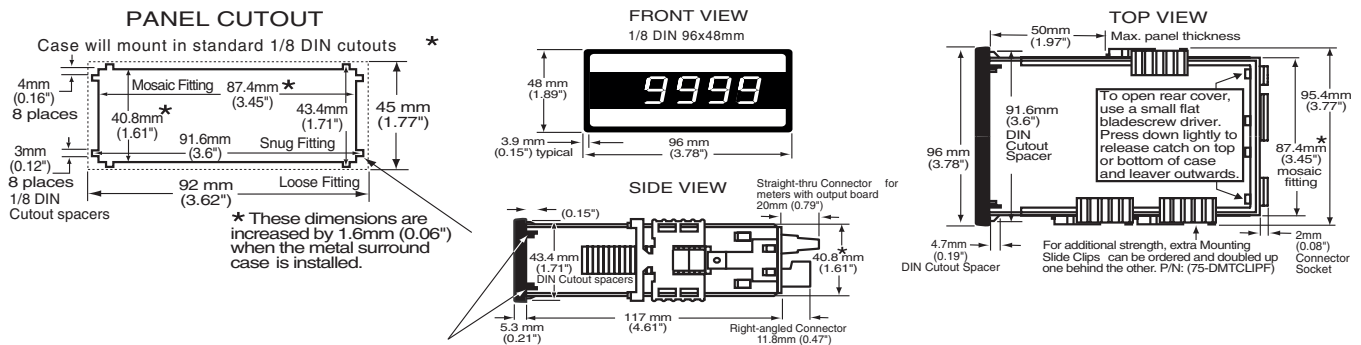
Selecting Power Voltage

See Pins 14 & 15 in Pin Out descriptions. Reverse this for higher or lower power inputs. (110/120Vac or 200/240Vac only)

PIN-OUT DESCRIPTIONS

- Pin 1** **Signal Input High** Signal input high to the meter.
- Pin 3** **Signal Input Low** Signal low input for the meter.
- Pin 9** **Hold Reading** If this pin is left unconnected, the meter will operate in normal running mode. When this pin is connected to the Hold/Test Common Pin 11, the meter will latch up. A/D conversions will continue, but the display will not be updated until Pin 9 is disconnected from Hold/Test Common Pin 11.
- Pin 10** **Display Test** All numeric display segments will light up when this pin is connected to the Hold/Test Common Pin 11
- Pin 11** **Hold/Test Common** The Hold and Display Test Pins have to be connected to this pin to activate their respective functions.
- Pin 14 & 15** **AC Power Input** These pins are the Power Input pins for the meter. All DU-Series meters sold in North America are preconfigured at the factory for 100/120Vac operation. To reconfigure for 200/240Vac operation simply pull out the AC Power Voltage Selector located directly behind the transformer, turn it around and reinsert into the socket so that "200/240Vac" is visible.

CASE DIMENSIONS AND CUTOUTS



All Dimensions In Inches

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