



DITEL: [PRODUCTOS:](#) [SERIE DIGITAL:](#) **81200Y0X**

DESCRIPTION

Model 812 panel voltmeters are specific instruments that readout RMS values of sinusoidal signals up to 1000V.

They are simple, low-cost indicators, without output or setpoint option, easy to install and put into operation.

Taking out the frontal lens provides access to the decimal point location and to span adjustment with a margin of 20%. The zero adjust is automatic.

Fully configured at the factory upon request, it is possible to modify later the scale by changing the value of an internal shunt as indicated in the following page.

Power and signal connection is realized by means of a 6-pin MAT-N-LOK AMP connector located at the rear of the unit.

SELECTION GUIDE

81200	Y	0	X
SUPPLY POWER			
115V 50/60Hz	1		
230V 50/60Hz	2		
12V DC ISOLATED	4		
24V 50/60Hz	7		
24V DC ISOLATED	8		
SCALES			
1.999V			1
19.99V			2
199.9V			3
1000V			4
1999mV			6
199.9mV			7
UPON REQUEST			9
SILKSCREENED UNIT			

ORDERING EXAMPLE

8110 0203 E21 : AC voltmeter Series 800 Supply power: 230V AC (50/60Hz) Scale: 199.9V AC - Unit: V AC Format: 96x48mm. - 3½ digits

SPECIFICATIONS

INPUT SIGNAL

- Configuration Differential asymmetrical
- Frequency margin 40 to 500Hz
- Maximum allowable voltage $V_{max.}(IN)$
- Input impedance $Z (IN)$

RANGE	$V_{max.}(IN)$	$Z (IN)$
199.9mV	5V	100Mohm
1.999V	5V	100Mohm
19.99V	50V	1Mohm
199.9V	500V	1Mohm
1000V	1000V	4Mohm

- Common mode max. voltage (signal/power)

AC Voltage	1000V DC or 1500V ACpp
DC Voltage	$\pm 400V$ DC

POWER

- Supply power
- | | |
|---------------|------------------|
| AC (50/60Hz) | 24, 115, 230V AC |
| DC (isolated) | 12, 24V DC |
- Maximum isolation 1000V DC or 1500V ACpp
 - Consumption 3W nominal

ACCURACY

- Resolution 0.05% F.S.
- Maximum error 0.10% F.S. ± 1 digit

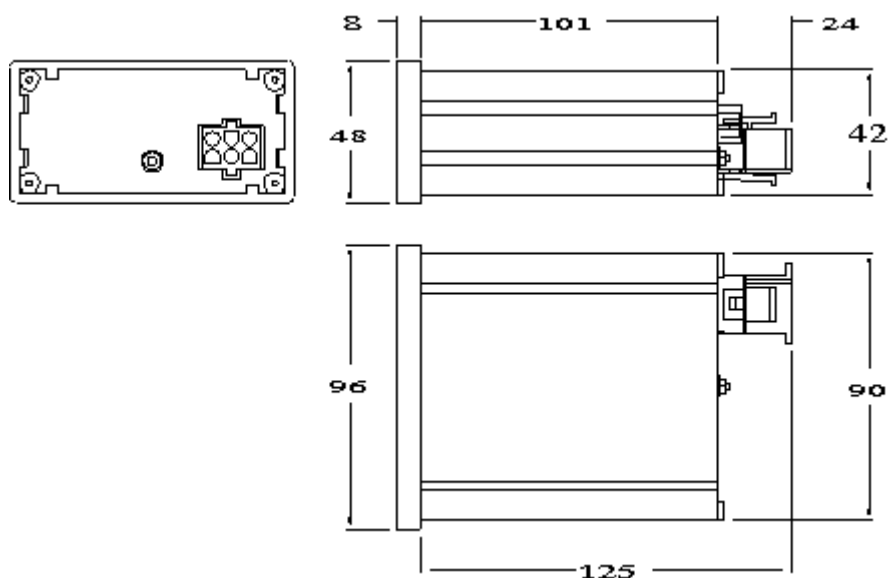
DISPLAY

- Type red LED (0.56") 14mm. high
- Overrange 1999. (3 L.S.D. blanked)
- Zero automatic
- Reading rate 4 per second

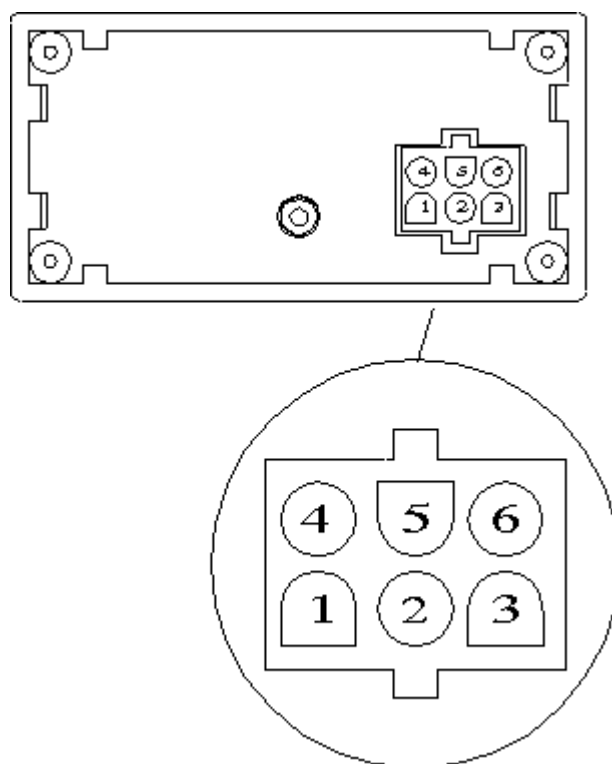
ENVIRONMENTALS

- Operating temperature 0°C to 50°C
- Storage temperature -25°C to +85°C
- Relative humidity max. 95% (non condensing)
- Weight 300g
- Dimensions 96x48x110mm. (s/DIN 43700)
- Panel cutout 92x45mm. (s/DIN 43700)
- Case material 94 V-0 UL-rated polycarbonate

DIMENSIONS (mm)



SIGNAL AND POWER CONNECTION



Input signal

PIN 1 Spare

PIN 2 AC input signal

PIN 3 AC input signal

PIN 5 Spare

AC supply power

PIN 4 AC HI

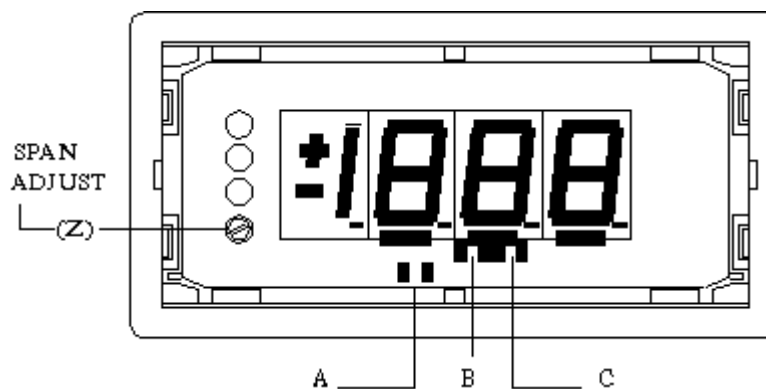
PIN 6 AC LO (neutral)

DC supply power

PIN 4 DC positive (+)

PIN 6 DC negative (-)

SETUP AND CALIBRATION

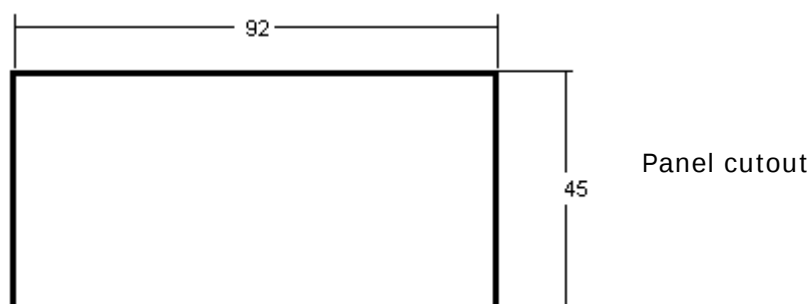


Jumper	Display
A	1.999
B	19.99
C	199.9
ninguno	1999

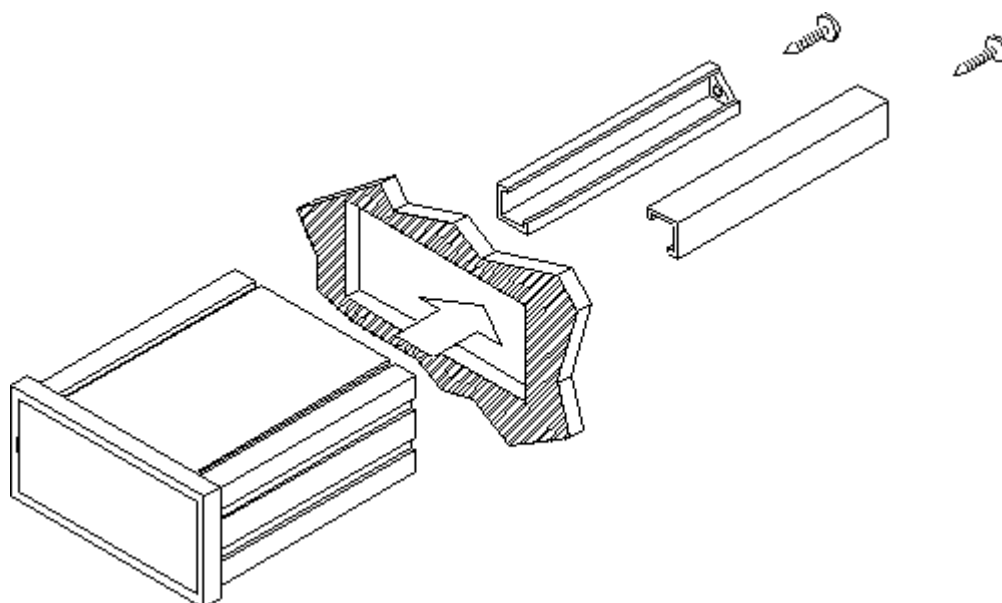
The **span adjustment** is made by the potentiometer (Z) located to the left, lower side of the display. Turning clockwise increases the display reading. The adjust margin is $\pm 20\%$ of F.S.

The **zero adjustment** is automatic.

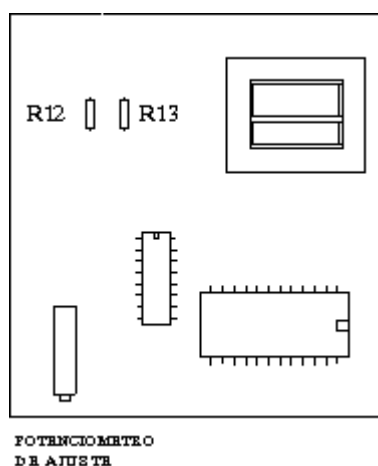
MOUNTING



Min. thickness: 0.8mm
Max. thickness: 10mm



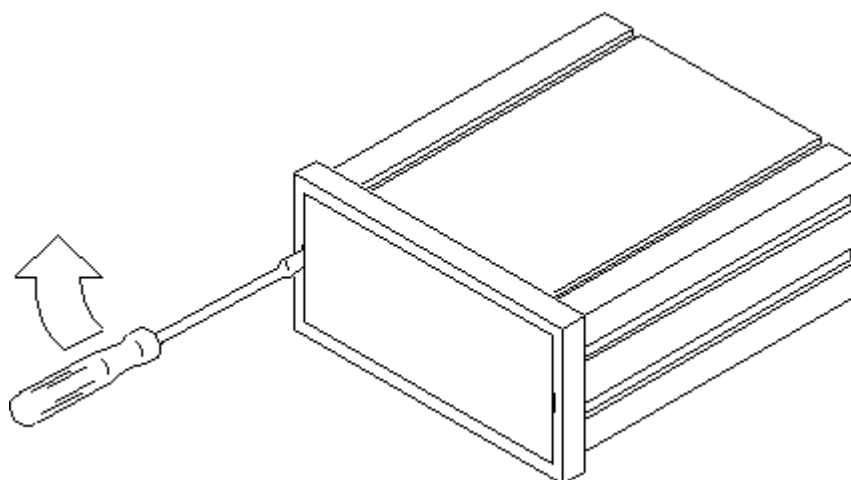
SCALING



To change the scale, modify the values of R12 and R13 as listed in the table:

Scale	R12	R13
1000V	4x1Mohm	4kohm
199.9V	1Mohm	10kohm
19.99V	1Mohm	110kohm
1.999V	-	-
199.9mV	-	-

ACCESS TO CALIBRATION



Remove lens by placing an appropriate sized screwdriver in the slot and pushing laterally as it is shown in the figure until the lips disengage. For further configuration unscrew the rear nut to take the circuits out from the front of the case.

To reinstall lens, insert it completely from one side and press from the other until it is fitted.