

[DITEL](#): [PRODUCTS](#): [DIGITAL STARS](#): **81200Y0X**



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## 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

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

## 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) 1000V DC or 1500V ACpp
- AC voltage  $\pm 400V DC$
- DC voltage

### POWER

- Supply voltages 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.
- Max error 0.10% F.S.  $\pm 1$  digit

### DISPLAY

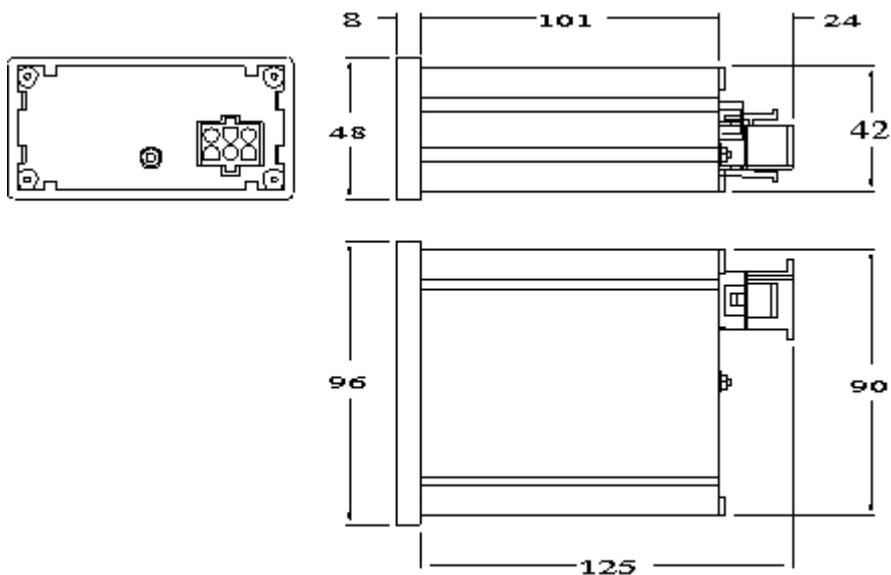
- Type red LED (0.56") 14mm. high
- Overrange 1999. (3 L.S.D. blanked)
- Zero automatic
- Reading rate 4 per second

### GENERALES

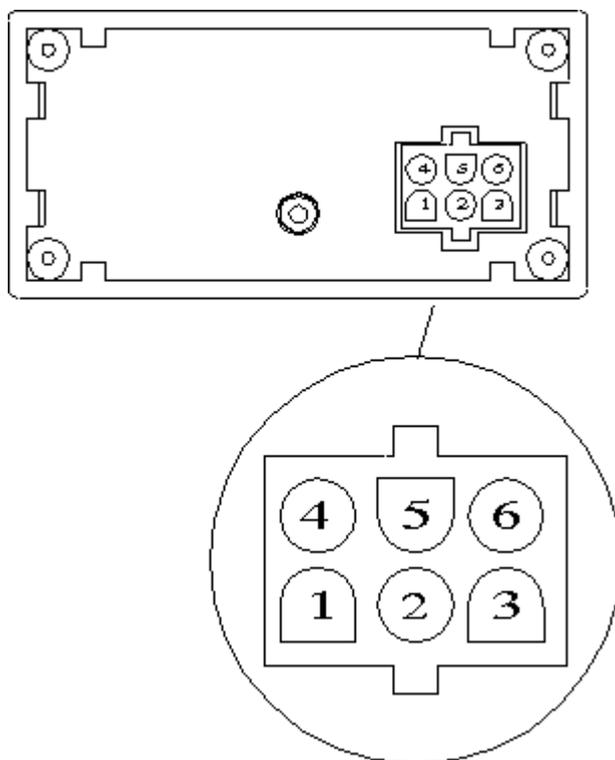
- Operating temperature 0°C to 50°C
- Storage temperature -25°C to +85°C
- Relative humidity max. 95% (non condensing)

- 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**



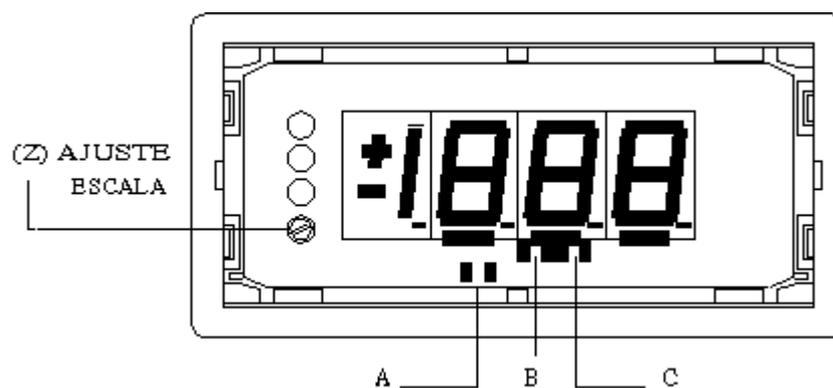
Input signal  
PIN 1 Spare

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

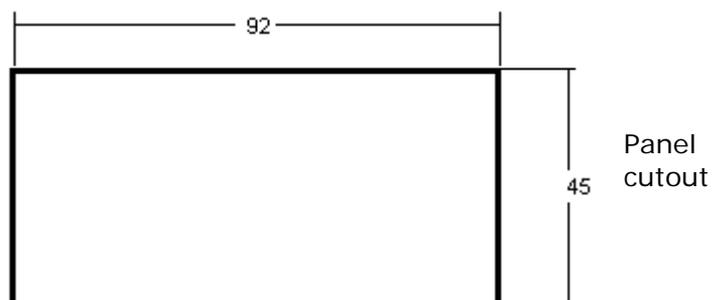


Jumper	Display
A	1.999
B	19.99
C	199.9
none	1999

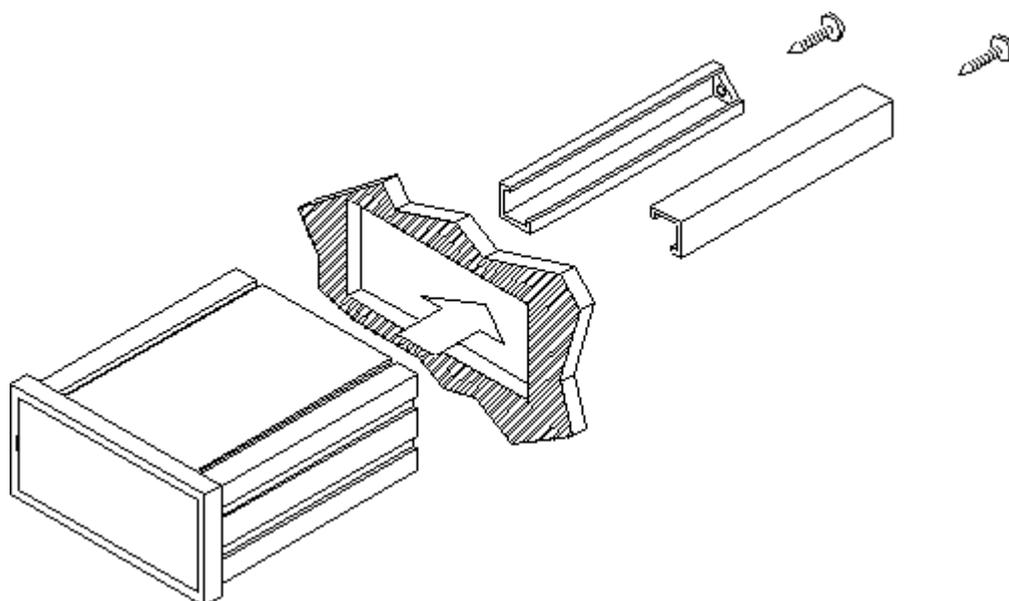
The **span adjustment** is made by the potentiometer (Z) located to the left, lower side of the display. Turning clockwise increases the display reading. The adjust margin is  $\pm 20\%$  of F.S.

The **zero adjustment** is automatic.

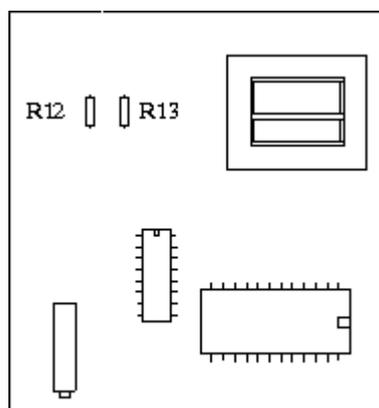
## MOUNTING



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



### SCALING

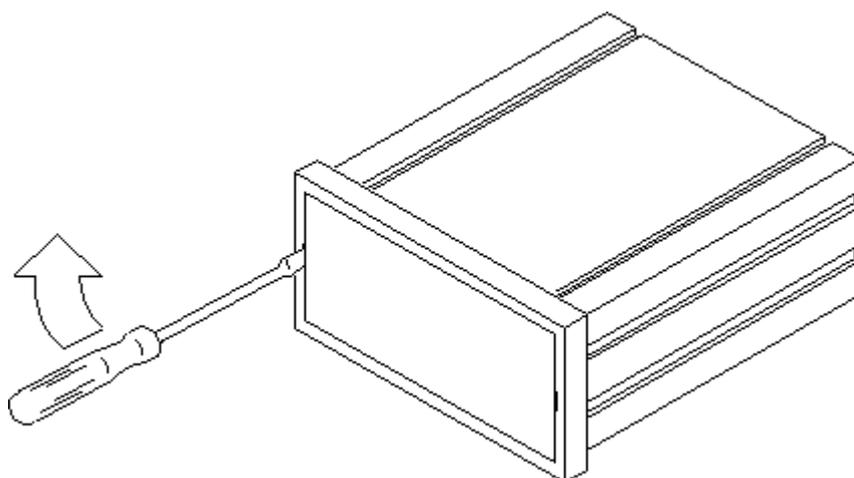


POTENCIOMETRO DE AJUSTE

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.

**Warranty:**

Press the icon to see it.



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