

DITEL: PRODUCTS: DIGITAL STARS: 82100Y0X



DESCRIPTION

Model 821 panel ammeters are instruments that readout direct currents with a built-in shunt for up to 5A.

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 zero and span adjustment with a margin of 20%.

Fully configured at the factory upon request, it is possible to modifie 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 MAT-N-LOK AMP 6 pins connector located at the rear of the unit.

SELECTION GUIDE

82100	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		
SCALE			
± 1.999A DC			1
± 5.00A DC			2
± 1.999mA DC			5
± 1999mA DC			6
± 199.9mA DC			7
± 19.99mA DC			8
SILKSCREENED UNIT			

ORDERING EXAMPLE

8210 0208 E12: DC ammeter Series 800 Supply power: 230V AC (50/60Hz)

Scale: 19.99mA - Unit: mA DC Format: 96x48mm. - 3½ digits

SPECIFICATIONS

INPUT SIGNAL

Configuration differential asymmetrical

Max allowable current
Imax. (IN)

• Input impedance Z (IN)

SCALE	Imax. (IN)	Z (IN)
1.999mA	50mA	100ohm
19.99mA	100mA	10ohm
199.9mA	500mA	1ohm
1999mA	4A	0.1ohm
1.999A	4A	0.1ohm
5.00A	7.5A	0.01ohm

• Common mode max. voltage (signal/power)

AC Voltage: 1000V DC or 1500V ACpp

DC Voltage: ± 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 0.1% F.S. ± 1 digit

DISPLAY

• Type red LED (0.56") 14mm. high

• Overrange 1999. (3 L.S.D. blanked)

Polarity automatic (±) sign

Reading rate
4 per second

ENVIRONMENTALS

• Operating temperature 0° to 50°C

• Storage temperature -25° to +85°C

• Relative humidity 95% max. (non condensing)

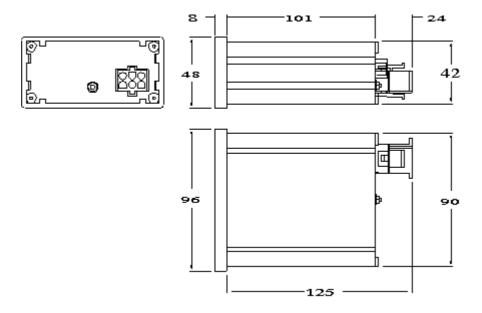
• Weight 300g

• Dimensions 96x48x110mm. (s/DIN 43700)

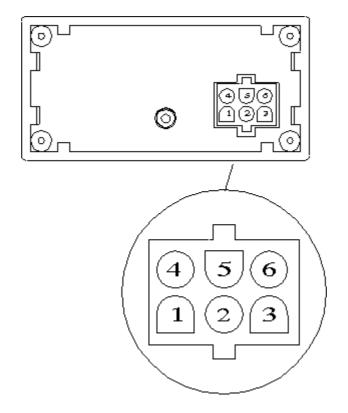
Case material

94 V-0 UL-rated polycarbonate

DIMENSIONS (mm)



SIGNAL AND POWER CONNECTION



Input signal

PIN 1 Spare

PIN 2 Input signal (+)

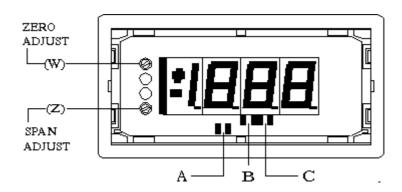
PIN 3 Input signal (-)

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



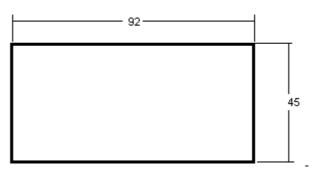
Puente	Display	
А	1.999	
В	19.99	
С	199.9	
None	1999	

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.

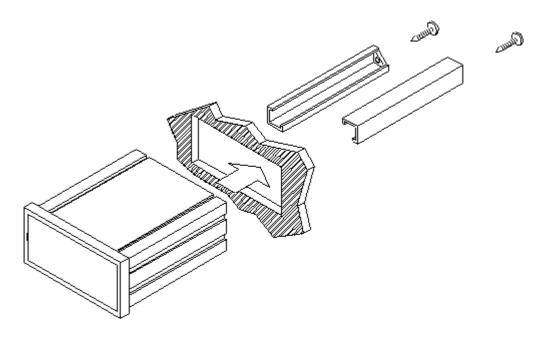
The **zero adjustment** corresponds to the potentiometer (W) located to the upper, left side of the display. Turning clockwise increases the display reading. The adjust margin is ± 200 counts.

MOUNTING

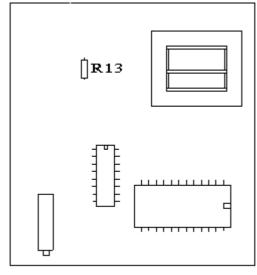
Panel cutout



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



SCALING



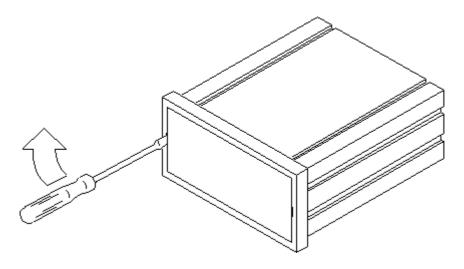
AD JUSTMENT POTENTIOMETER

SCALE	R13	
1.999mA	100 ohm	
19.99mA	10 ohm	

199.9mA	99.9mA 1 ohm	
1999mA	0.1 ohm	
1.999mA	0.1 ohm	
5.00mA	001 ohm	

To change the scale, replace the resistor R13 (main board REF. 209) according to the table.

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 disengange. 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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