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DESCRIPTION

Model 823 panel ammeters are specific instruments that allow direct connection to an external shunt for readout constant currents up to 2000A.

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 decimal point location and to zero and span adjustment with a margin of 20%.

Configuring the input for a specific shunt and scaling the display are available by opening the case and changing an internal resistor as shown next 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

8230	Z	Y	0	X
INPUT				
SHUNT/60mV	5			
SHUNT/100mV	6			
ON REQUEST SHUNT	9			
SUPPLY POWER				
115V 50/60Hz		1		
230V 50/60Hz		2		
12V DC ISOLATED		4		
24V 50/60Hz		7		
24V DC ISOLATED		8		
SCALE				
20A (19.99)				1
50A (50.0)				2
100A (100.0)				3

200A (199.9)				4
500A (500)				5
1000A (1000)				6
2000A (1999)				7
UPON REQUEST				9
SILKSCREENED UNIT				

ORDERING EXAMPLE

8230 5204 E11: DC ammeter for 60mV shunt

Supply power: 230V AC (50/60Hz)

Scale: 199.9A - Unit: A DC

Format 96x48mm - 3½ digits

SPECIFICATIONS

INPUT SIGNAL

- Configuration differential asymmetrical
- Max allowable voltage $\pm 5\text{VDC}$
- Input impedance 1Mohm
- Input sensitivity 60mVDC or 100mVDC
- Common mode max. voltage (signal/power)
- AC Voltage: 1000V DC or 1500V ACpp
- DC Voltage: $\pm 400\text{V DC}$

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

DISPLAY

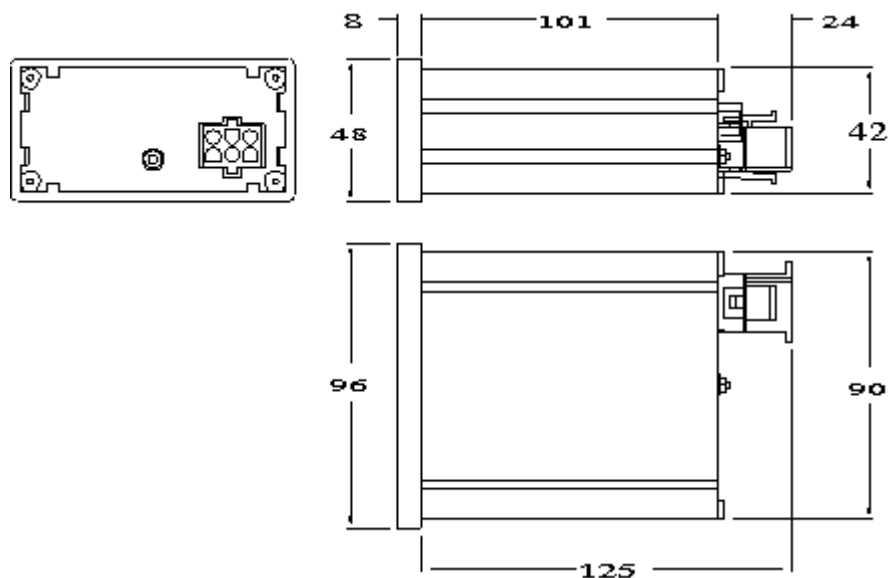
- Type red LED (0.56") 14mm. high
- Polarity automatic (\pm) sign
- Decimal point by soldering jumper
- Overrange ± 1999 . (3 L.S.D. blanked)
- Reading rate 4 per second

ENVIRONMENTAL

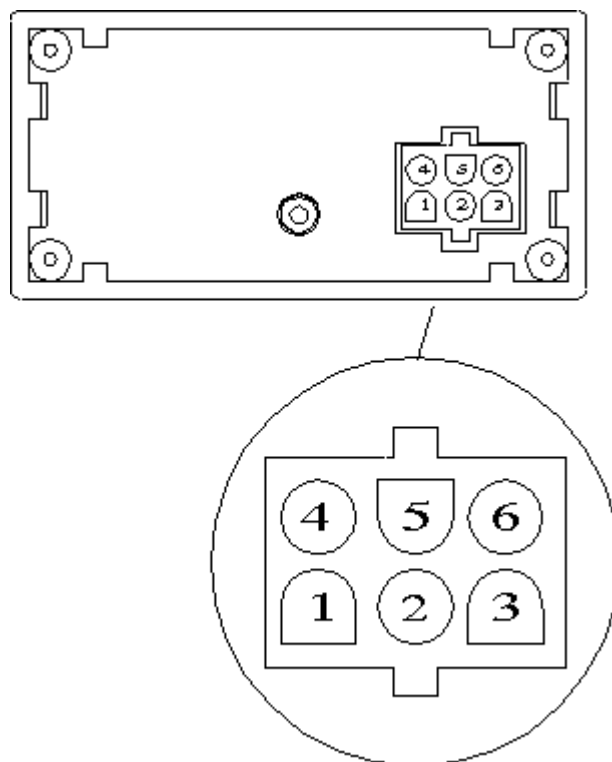
- Operating temperature 0° to 50°C
- Storage temperature -25° to +85°C
- Relative humidity max. 95% (non condensing)
- Weight 300g

- 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 Input signal (+)
 PIN 3 Input signal (-)

PIN 5 Spare

AC supply power

PIN 4 AC HI

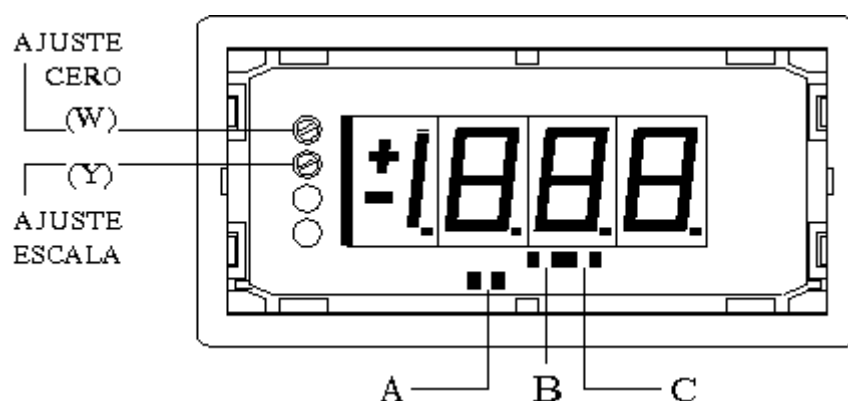
PIN 6 AC LO (neutral)

DC supply power

PIN 4 DC positive (+)

PIN 6 DC negative (-)

SETUP AND CALIBRATION



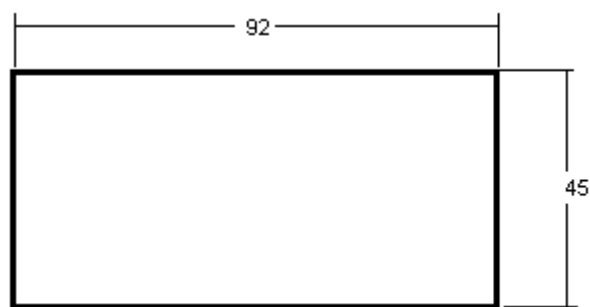
Jumper	Display
A	1.999
B	19.99
C	199.9
None	1999

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.

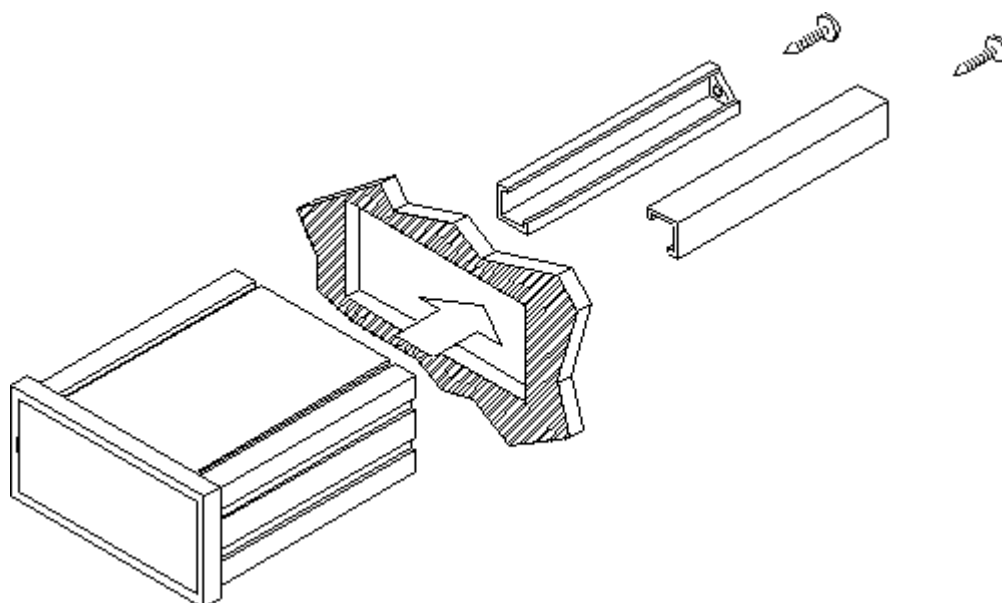
The **zero adjustment** corresponds to the potentiometer (W) located to the upper, left side of the display. Turning clockwise increases the display reading. The adjust margin is ± 200 counts.

MOUNTING

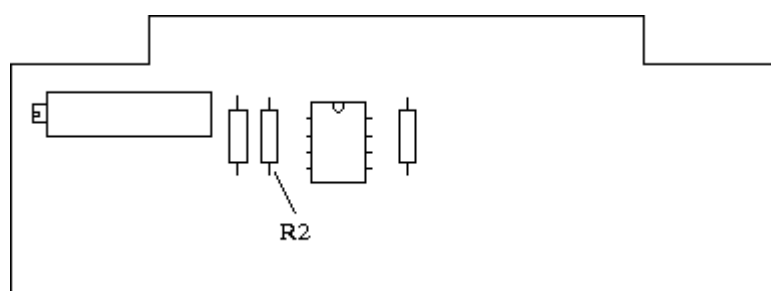
Panel cutout



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



SCALING



To change the scale, calculate the value of the resistor R2 by applying the formula:

$$R2 \text{ (ohm)} = (100000 / ((VD/mV) - 1))$$

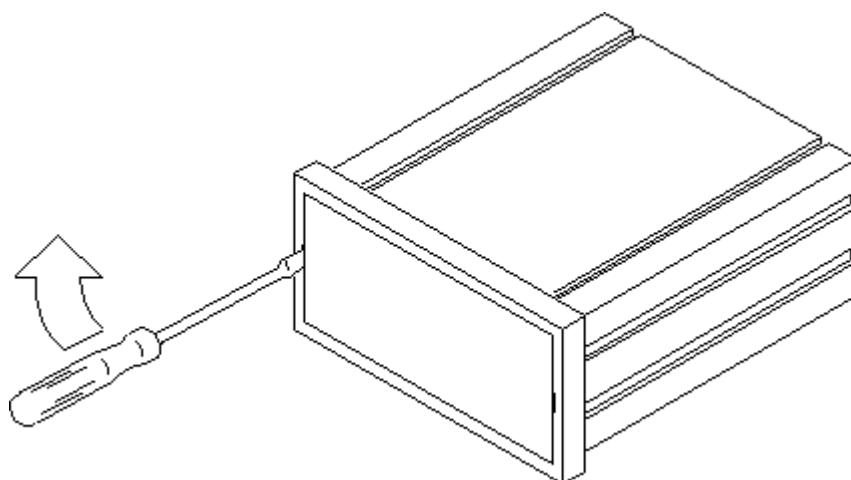
where:

VD = display value disregarding decimal point.

Example; for the 200A range (199.9), VD = 1999

mV = millivolts of the shunt.

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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