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DESCRIPTION

Model 831 panel indicators are specific instruments that allow direct connection to a tachometric dynamo for readout linear or rotational rates in m/min or rpm.

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%.

Fully configured at the factory upon request, it is possible to adapt the scale to any V/rpm ratio by only changing the value of an internal resistor. 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

8310	X	Y	0	9
INPUT				
10V/1000rpm	1			
30V/1000rpm	2			
40V/1000rpm	3			
60V/1000rpm	4			
120V/1000rpm	5			
220V/1000rpm	6			
440V/1000rpm	7			
UPON REQUEST	9			
SUPPLY POWER				
115V 50/60Hz		1		
230V 50/60Hz		2		
12V DC ISOLATED		4		
24V 50/60Hz		7		
24V DC ISOLATED		8		
SILKSCREENED UNIT				

ORDERING EXAMPLE

8310 6209 D63: Tachogenerator meter series 800

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

Input: 220V/1000rpm. Unit: rpm

Format: 96x48mm - 3½ digits

SPECIFICATIONS**INPUT SIGNAL**

- Configuration Differential asymmetrical
- Maximum applicable voltage $V_{max. (IN)}$
- Input impedance $Z(IN)$

• INPUT (V/rpm)	10, 30, 40, 60	120, 220, 440
$V_{max. (IN)}$	250V	1000V
$Z (IN)$	1Mohm	3Mohm

- Common mode max. voltage (signal/power):

- AC Voltage: 1000V DC or 1500V ACpp

- DC Voltage: $\pm 400V$ 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

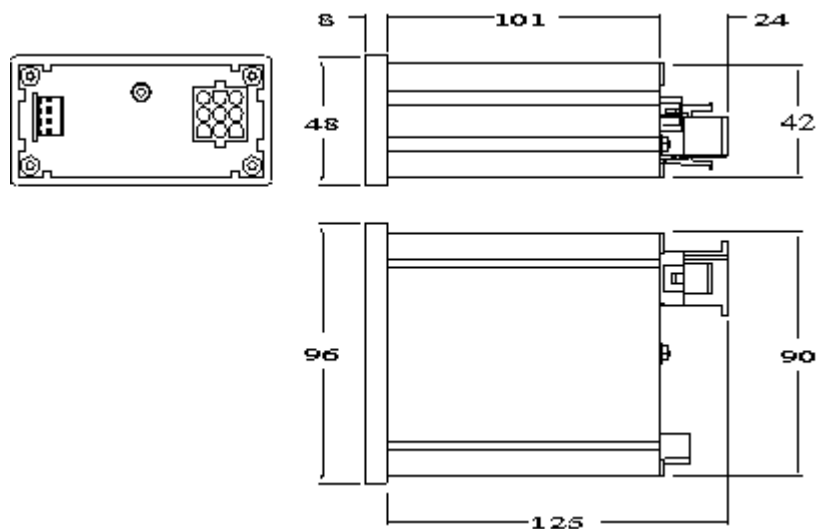
DISPLAY

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

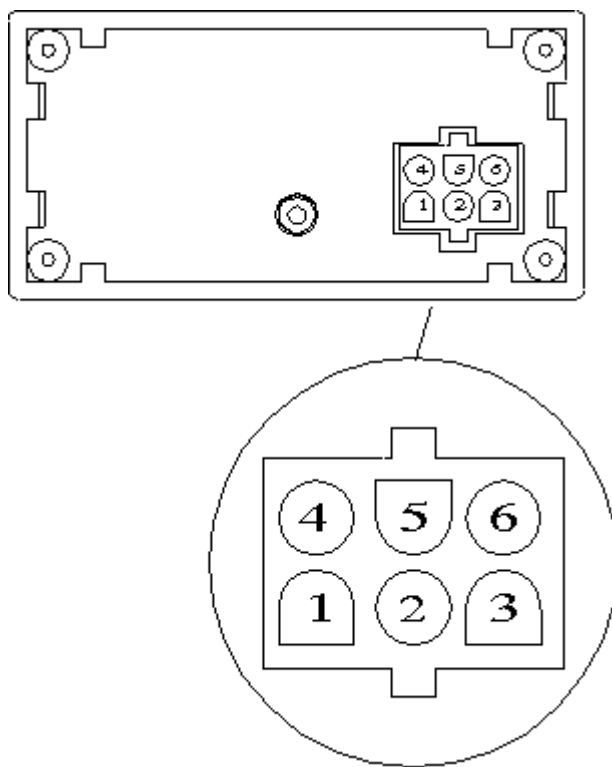
ENVIROMENTALS

- Operating temperature 0° to $50^{\circ}C$
- Storage temperature -25° to $+85^{\circ}C$
- 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)



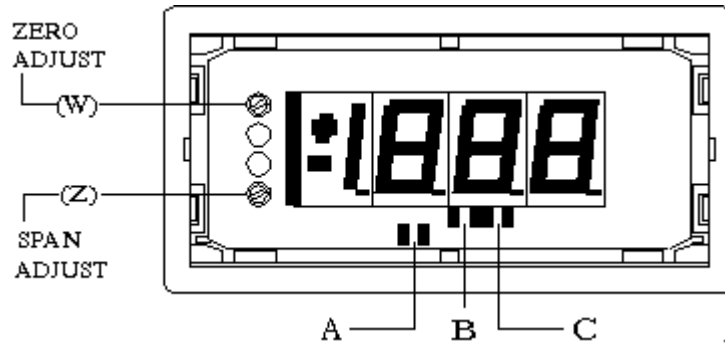
SIGNAL AND POWER CONNECTIONS



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

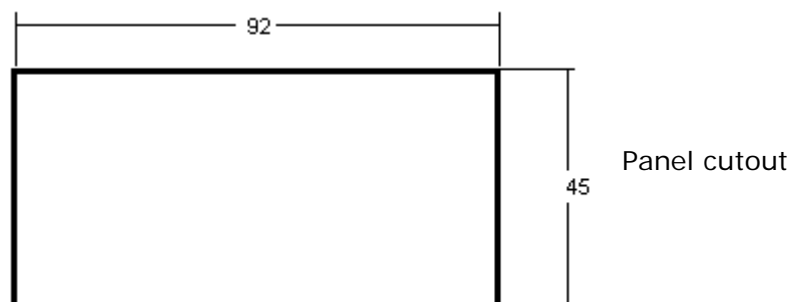


Jumper	Display
A	1.999
B	19.99
C	199.9
None	1999

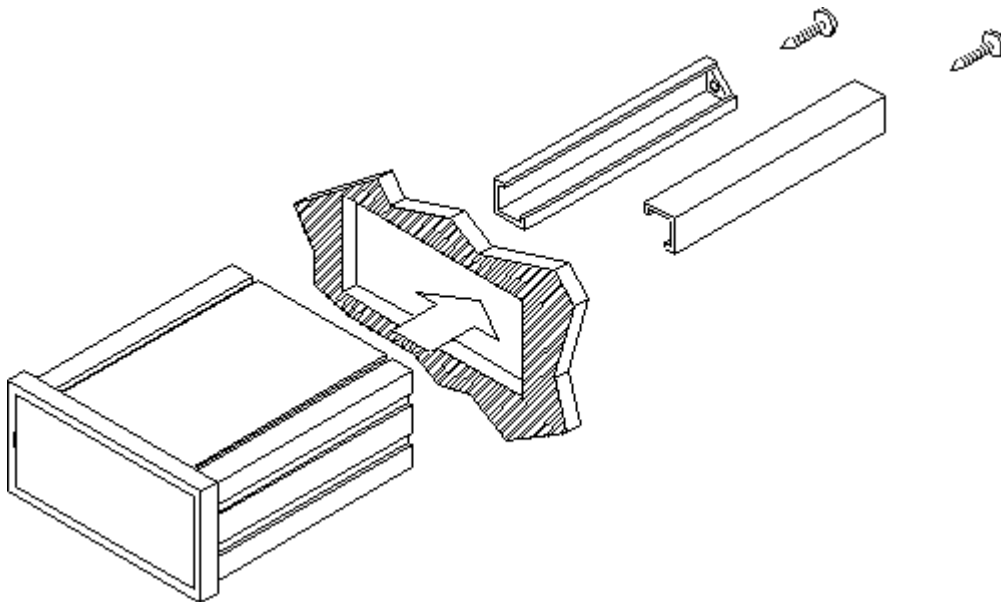
The zero adjustment is made via the potentiometer (W) located to the upper, left side of the display. Turning clockwise decreases the display reading. The adjust margin is ± 200 counts.

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

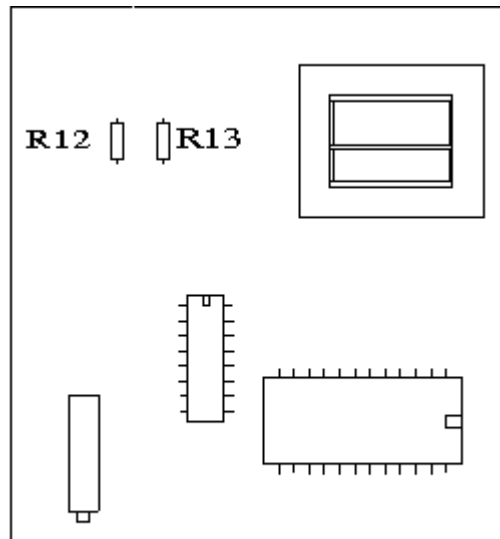
MOUNTING



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



SCALING



ADJUSTMENT
POTENTIOMETER

Substitute the values of VE and VD in the given formulas, where:

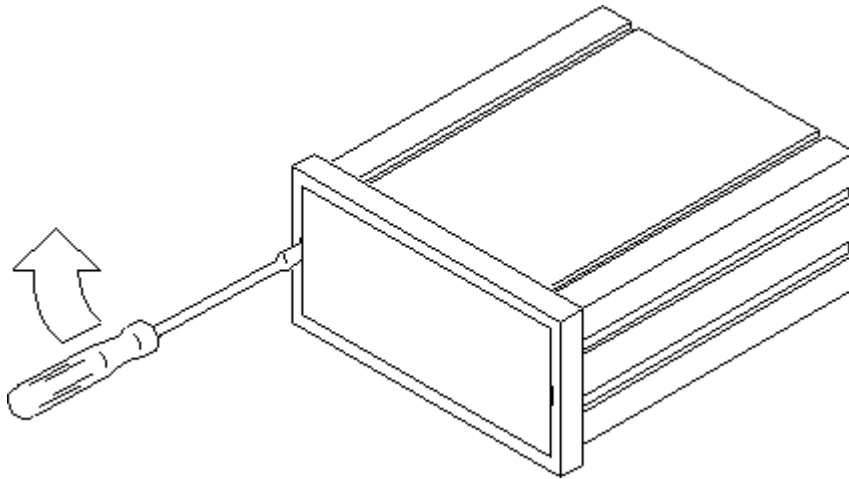
VE = Input voltage supplied from the dynamo in volts.

VD = Display reading in m/min or rpm disregarding decimal point.

For $VE < 200V$; $R12 = 1\text{Mohm}$ Calculate $R13(\text{kohm}) = (1000 \cdot VD) / (1000 \cdot VE - VD)$

For $VE > 200V$; $R12 = 4 \cdot 1\text{Mohm}$ Calculate $R13(\text{kohm}) = (4000 \cdot VD) / (1000 \cdot VE - VD)$

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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