

## DITEL: PRODUCTS: DIGITAL STARS: 82100Y0X

## DESCRI PTI ON

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 GUI DE

| 82100 | $\mathbf{Y}$ | 0 | X |
| :---: | :---: | :---: | :---: |
| SUPPLY POWER |  |  |  |
| 115V 50/60Hz | 1 |  |  |
| $230 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | 2 |  |  |
| 12V DC ISOLATED | 4 |  |  |
| $24 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | 7 |  |  |
| 24V DC ISOLATED | 8 |  |  |
| SCALE |  |  |  |
| $\pm 1.999 \mathrm{~A} \mathrm{DC}$ |  |  | 1 |
| $\pm 5.00 \mathrm{~A} \mathrm{DC}$ |  |  | 2 |
| $\pm 1.999 \mathrm{~mA} \mathrm{DC}$ |  |  | 5 |
| $\pm 1999 \mathrm{~mA} \mathrm{DC}$ |  |  | 6 |
| $\pm 199.9 \mathrm{~mA} \mathrm{DC}$ |  |  | 7 |
| $\pm 19.99 \mathrm{~mA} \mathrm{DC}$ |  |  | 8 |
| SI LKSCREENED UNI T |  |  |  |

## ORDERING EXAMPLE

82100208 E12: DC ammeter Series 800
Supply power: 230 V AC (50/60Hz)
Scale: 19.99mA - Unit: mA DC
Format: $96 x 48 \mathrm{~mm}$. - $31 / 2$ digits

## SPECI FICATI ONS

I NPUT SI GNAL

- Configuration
differential asymmetrical
- Max allowable current

Imax. (IN)

- Input impedance

| SCALE | Imax. (IN) | Z (IN) |
| :---: | :---: | :---: |
| 1.999 mA | 50 mA | 100 ohm |
| 19.99 mA | 100 mA | 10 ohm |
| 199.9 mA | 500 mA | 10 hm |
| 1999 mA | 4 A | 0.10 hm |
| 1.999 A | 4 A | 0.1 hm |
| 5.00 A | 7.5 A | 0.01 hm |

- Common mode max. voltage (signal/power)

AC Voltage: 1000 V DC or 1500 V ACpp
DC Voltage: $\pm 400 \mathrm{~V}$ DC

## POWER

- Supply power
- AC (50/60Hz) : 24, 115, 230V AC
- DC (isolated) :
- Maximum isolation
- Consumption

1000 V DC or 1500 V ACpp

ACCURACY

- Resolution 0.05\% F.S.
- Maximum error
$0.1 \%$ F.S. $\pm 1$ digit


## DI SPLAY

- Type
- Overrange
- Polarity
- Reading rate
red LED (0.56") 14mm. high


## ENVI RONMENTALS

- Operating temperature
- Storage temperature 1999. (3 L.S.D. blanked) automatic ( $\pm$ ) sign 4 per second
- Relative humidity 95\% max. (non condensing)
- Weight
- Dimensions


## DIMENSI ONS (mm)



SI GNAL 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 CALI BRATI ON



| Puente | 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 $\pm 200$ counts.

## MOUNTI NG



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


## SCALI NG



ADJUSTMENT POTENTIOMETER

| SCALE | R13 |
| :--- | :--- |
| 1.999 mA | 100 ohm |
| 19.99 mA | 10 ohm |


| 199.9 mA | 1 ohm |
| :---: | :---: |
| 1999 mA | 0.1 ohm |
| 1.999 mA | 0.1 ohm |
| 5.00 mA | 001 ohm |

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

## ACCESS TO CALI BRATI ON



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.


