

DITEL: PRODUCTS: DIGITAL STARS: 85300Y0X



### **DESCRIPTION**

Model 853 panel thermometers are instruments used to display temperature on the centigrade or fahreinheit scale with an input for direct connection to platinum sensors by two- or three-wire.

Resolutions of one degree or one tenth of degree are available depending on model.

They are simple, low cost indicators, without outputs or setpoint option, easy to install and put into operation.

Fully calibrated at fabrication, they allow later recalibration via a zero and a span potentiometers accessible from the front through the lens of the meter. Power and sensor connection is made by means of a 6-pin MAT-N-LOK AMP connector located at the rear of the unit.

### **SELECTION GUIDE**

853	0	0	Υ	0	X
SUPPLY POWER					
115V 50/60Hz			1		
230V 50/60Hz			2		
12V DC ISOLATED			4		
24V 50/60Hz			7		
24V DC ISOLATED			8		
RANGES					
-99.9 / +199.9°C					3
-100 / +800°C					4
-199.9 / +199.9°F					5
-300 / +1300°F					6
SILKSCREENED UNIT					

### **ORDERING EXAMPLE**

8530 0203 E57: Pt100 thermometer series 800 Supply power: 230V AC (50/60Hz) Range -99.9/+199.9° C Unit: C

#### Format 96x48mm. - 31/2 digits

### **SPECIFICATIONS**

#### INPUT SIGNAL

 Sensor type RTD platinum 100 ohm Wheatstone bridge Configuration 2 or 3 wires Sensor connection

 Maximum sensor current 1mA

Common mode max. voltage (signal/power)

1000V DC or 1500V ACpp AC voltage: ±400V DC DC voltage:

#### **POWER**

Supply power

AC (50/60Hz): 24, 115, 230V AC 12, 24V DC DC (isolated): Maximum isolation 1000V DC or 1500V ACpp 4.5W nominal Consumption

#### **ACCURACY**

0.1° (8530 0Y03/5) Resolution 1° (8530 0Y04/6)  $0.2\% \pm 0.1^{\circ} (8530 \text{ OY} 03/5)$ Maximum error

0.2% ±1° (8530 0Y04/6)

#### **DISPLAY**

red LED (0.56") 14 mm. high Type Resolution ± 1999 counts (3½ digits) 0°C or 1999. (s/model) · Sensor-break ind A/D conversion technique dual slope 4 per second Reading rate

**ENVIROMENTALS** 

Dimensions

0° or 50°C Operating temperature

-25° or +85°C Storage temperature

max. 95% (non condensing) Relative humidity

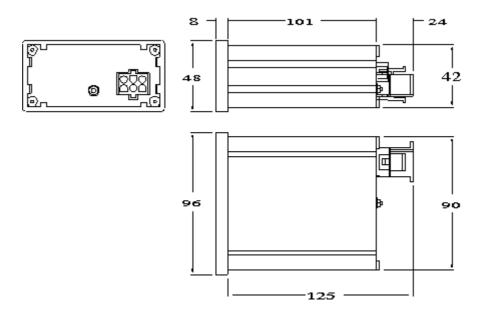
 Weight 310g

96x48x110mm. (s/DIN 43700)

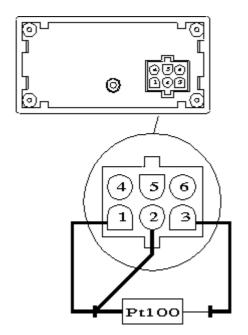
 Panel cutout 92x45mm. (s/DIN 43700)

Case material 94 V-0 UL-rated polycarbonate

# **DIMENSIONS (mm)**



# SIGNAL AND POWER CONNECTIONS



### Input signal

PIN 1 Pt100

PIN 2 Pt100

PIN 3 Common Pt100

### **AC** power supply

PIN 4 AC HI

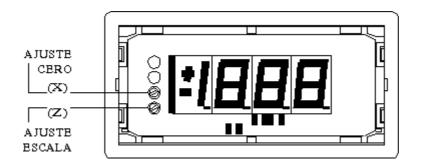
PIN 6 AC LO (neutral)

# DC power supply

PIN 4 DC positive (+)

PIN 6 DC negativo (-)

# **ZERO AND SPAN ADJUSTMENT**

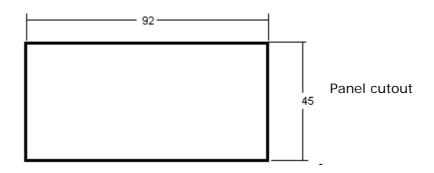


To make the adjustments, calibrated resitances or accuracy thermometer are needed to control  $0^{\circ}$  and the maximum value of the variable.

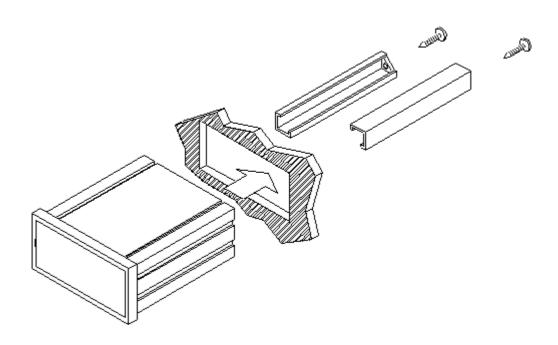
Z = Scale adjustement

X = Zero adjustement

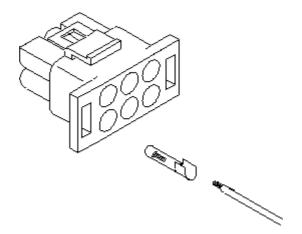
# **MOUNTING**



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



# **CONNECTORS**



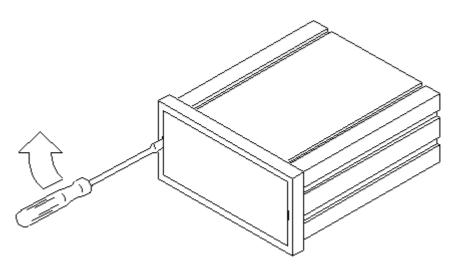
# Signal and power connector:

6-pin MAT-N-LOK AMP

# Contacts assembly:

Hand tool AMP reference 90277-1

# **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.

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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