



[DITEL:](#) [PRODUCTS:](#) [DIGITAL STARS:](#) **8540XY04**



[Print this page](#)

DESCRIPTION

Model 854 panel thermocouple meters are simple, low cost indicators, without outputs or setpoint option, easy to install and put into operation. They are available for five thermocouple types and are complete with linearization, sensor-break detection and cold-junction compensation.

Fully calibrated at fabrication, they allow zero and span adjustment via two potentiometers accessible from the front behind lens.

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

854	0	X	Y	0	4
THERMOCOUPLE INPUT					
"J" Fe-CuNi (0-850°C)		1			
"K" NiCr-NiAl (0-12500°C)		2			
"T" Cu-CuNi (0-400°)		3			
"R" Pt-Pt13%Rh (0-1750°)		5			
"S" Pt-Pt10%Rh (0-1750°)		6			
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

8540 1205 E58 : Thermocouple meter series 800
 Supply power: 230VAC (50/60Hz)
 Input: thermocouple J Unit: F
 Format: 96x48mm. - 3½ digits

SPECIFICATIONS

INPUT SIGNAL

- Thermocouple types "J", "K", "T",
"R", "S"
- Configuration differential
asymmetrical
- Cold junction compensation 0 to 50°C
- TC linearization analog by
steps
- Maximum lead resistance 10 ohm

TERMOCOUPLE TYPE	MARGEN TEMP.
"J" (Fe-CuNi)	0-850°C
"K" (NiCr-NiAl)	0-1250°C
"T" (Cu-CuNi)	0-400°
"R" (Pt-Pt13%Rh)	0-1750°
"S" (Pt-Pt10%Rh)	0-1750°

- 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

2.5W nominal

ACCURACY

- Resolution

1°C

- Maximum error

1% ±1°C

DISPLAY

- Type
- TC-break indication
- A/D conversion technique
- Reading rate

red LED (0.56") 14 mm. high
negative overrange
dual slope
4 per second

ENVIROMENTAL

- Operating temperature

0° to 50°C

- Storage temperature

-25° to +85°C

- Relative humidity

max. 95% (non condensing)

- Weight

310g

- Dimensions

96x48x110mm. (s/DIN 43700)

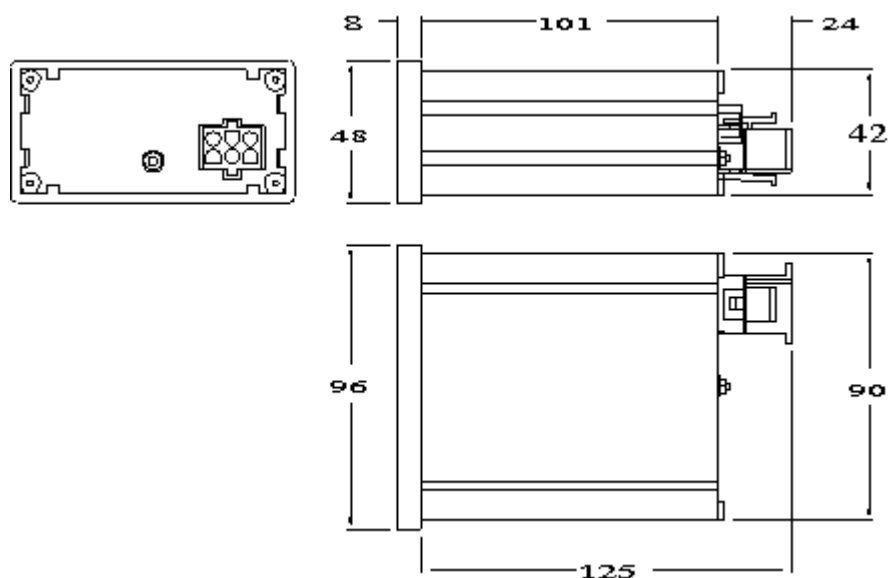
- Panel cutout

92x45mm. (s/DIN 43700)

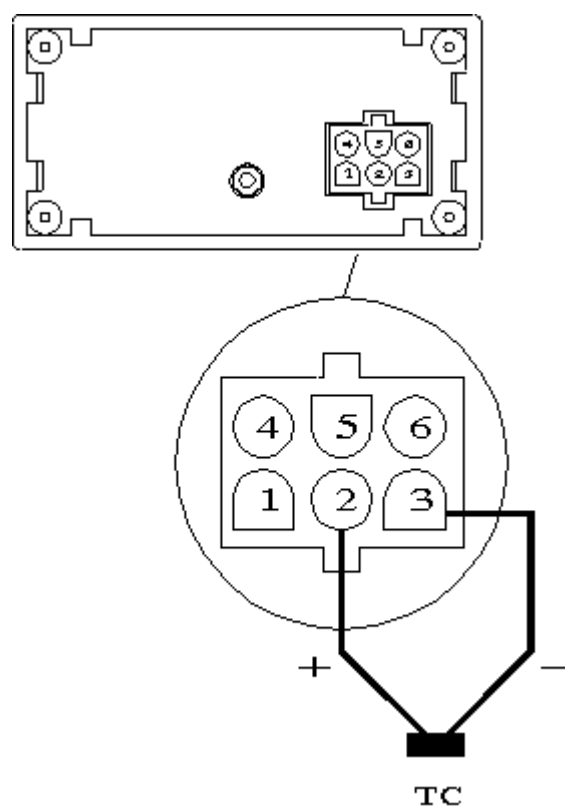
- Case material

94 V-0 UL-rated polycarbonate

DIMENSIONS (mm)



SIGNAL AND POWER CONNECTIONS



Input signal

- PIN 1 Spare
- PIN 2 Thermocouple (+)
- PIN 3 Thermocouple (-)

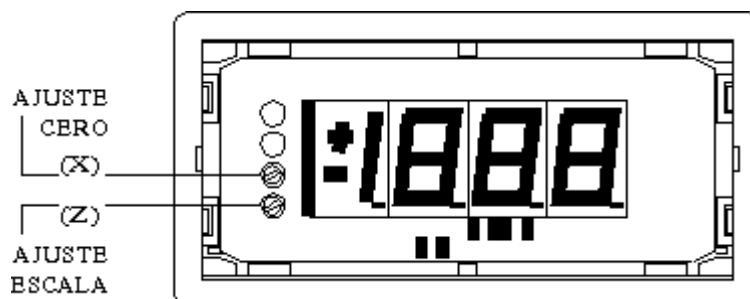
AC power supply

- PIN 4 AC HI
- PIN 6 AC LO (neutral)

DC power supply

- PIN 4 DC positive (+)
- PIN 6 DC negative (-)

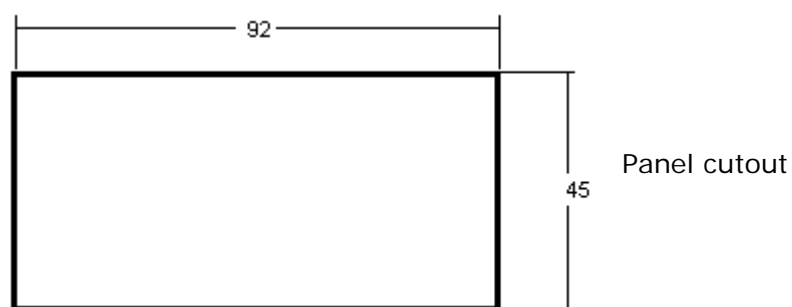
ZERO AND SPAN ADJUSTMENT



Cold-junction compensation : Shortcircuit pins 2 and 3 at the connector and adjust the zero potentiometer until the display reads the ambient temperature.

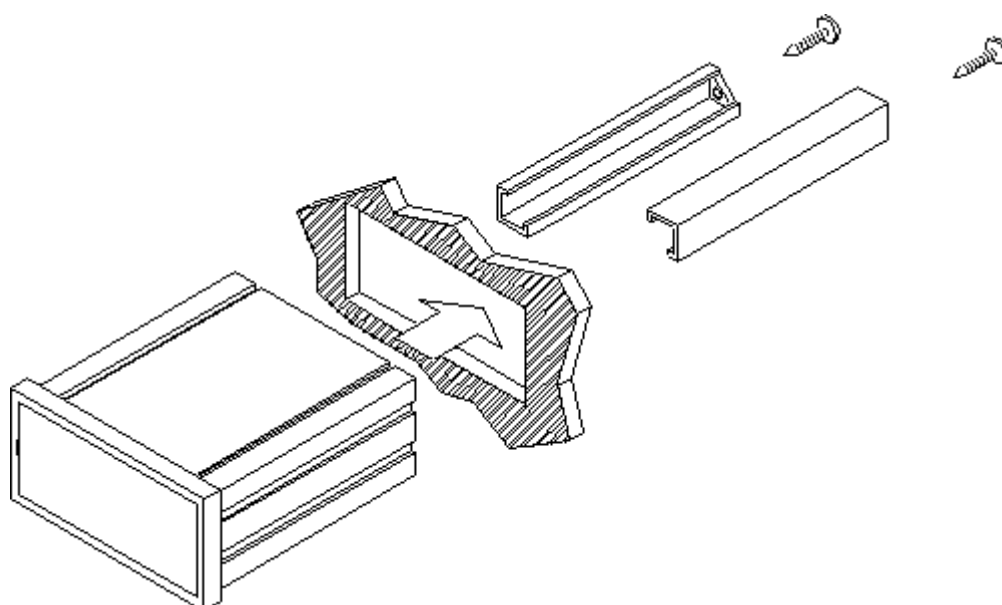
Span adjustment : The adjust must be made in the middle point of the thermocouple range by applying an accurate millivolt signal corresponding to the difference between the adjust temperature and the ambient temperature.

MOUNTING

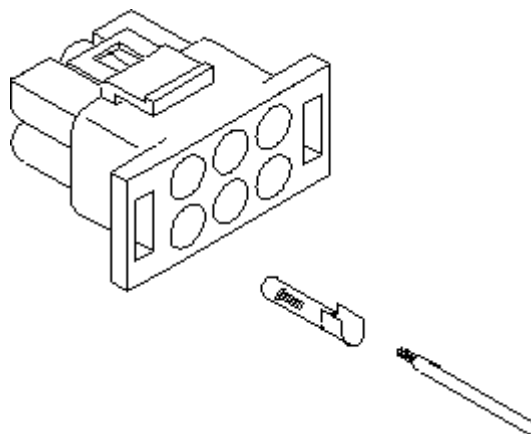


Min. thickness: 0.8mm

Max. thickness: 10mm



CONNECTORS



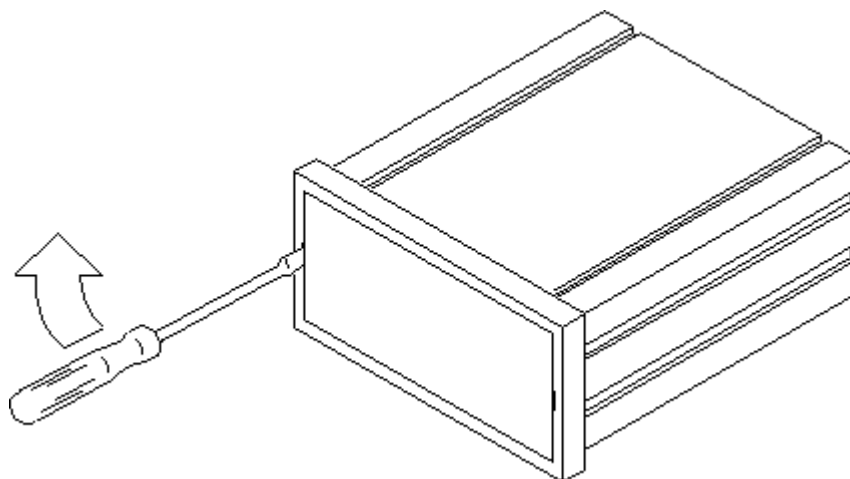
Signal and power connector :

MAT-N-LOK AMP 6 pins

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 disengage.

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.



[Change language](#) | [Back to the menu](#)



