DITEL: PRODUCTS: DIGITAL STARS: **857SXYCX**

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DESCRIPTION

Model 857S panel thermometers are specific instruments that measure and control temperature or F.

They are available for five thermocouple inputs and are complete with linearization, sensor-brea detection and cold-junction compensation.

Available options include analog or digital outputs, and setpoint control which is programmable I either hidden or visible presets.

One selector provides adjustable time delay or hysteresis to limit relay action.

Fully configured at the factory, the following items remain accessible of reconfiguration:

- Cold-junction compensation and span adjustment.
- Preset values and alarm operating modes. Time delay (0 to 15 seconds) or hysteresis leve to 10 counts of L.S.D.).
- The output option for the type of signal and its range.

SELECTION GUIDE

857	S	X	Y	C	X
PRESET/RELAY					
NO PRESET	0				
1 VISIBLE PRESET	1				
2 VISIBLE PRESETS	2				
1 HIDDEN PRESET	5				
2 HIDDEN PRESETS	6				
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			
OUTPUTS						
NONE				0		
RS 232C				1		
BCD (OE)				2		
0-10V/0-1V				3		
0-20mA/4-20mA				4		
RS232/20mA				5		
BCD (OC)				6		
1mV/count				8		
SCALE						
Readout in °C					4	
Readout in °F (J and T types only)						5
SILKSCREENED UNIT						

ORDERING EXAMPLE

8572 1254 E57 : Thermocouple meter series 8000
Supply power: 230V AC (50/60Hz)
Input type "J" (0-850 C) 2 presets
Output RS 232/20mA Unit: ° C

SPECIFICATIONS

INPUT SIGNAL

- Thermocouple types   "J", "K", "T", "I
- Configuration   differential asymm
- Cold junction compensation   0 t
- TC linearization   analog by
- Maximum lead resistance   1

TC TYPE	TEMP MARGIN.
"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
DC Voltage: ±40

POWER

- Supply voltages

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/1°F
- Maximum error   1% ±1°C/°F

DISPLAY

- Type   red LED (0.56") 14 mm. high
- Polarity   Automatic (-) sign
- Sensor-break indication   < -273°C
- Reading rate   4 per second

ENVIROMENTALS

- Operating temperature   0° to 50°C
- Storage temperature   -25° to +85°C
- Relative humidity   max. 95% (non condensing)
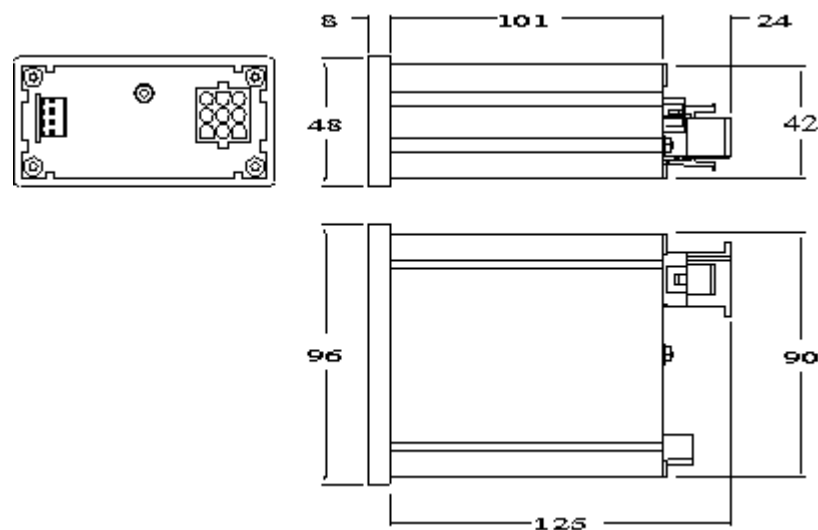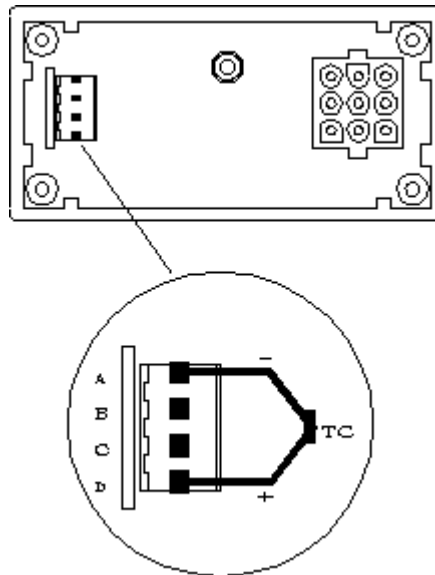- Weight   380g
- Dimensions   96x48x110mm. (s/DIN 43700)
- Panel cutout   92x45mm. (s/DIN 43700)
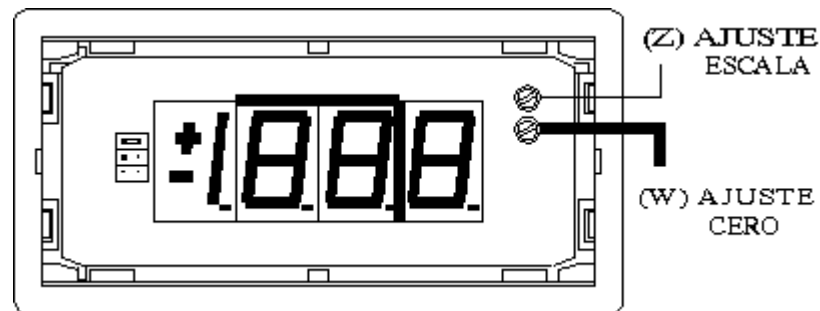- Case material   94 V-0 UL-rated polycarbonate

DIMENSIONS (mm)

INPUT SIGNAL CONNECTION

PIN A Thermocouple (-)
PIN B Spare
PIN C Spare
PIN D Thermocouple (+)

ZERO AND SPAN ADJUSTMENT

The **span adjust** corresponds to the potentiometer (Z) located to the upper, right side of the di
The adjustment must be made in the middle point of the thermocouple range by applying an ac
millivolt signal corresponding to the difference between the adjust temperature and the ambient
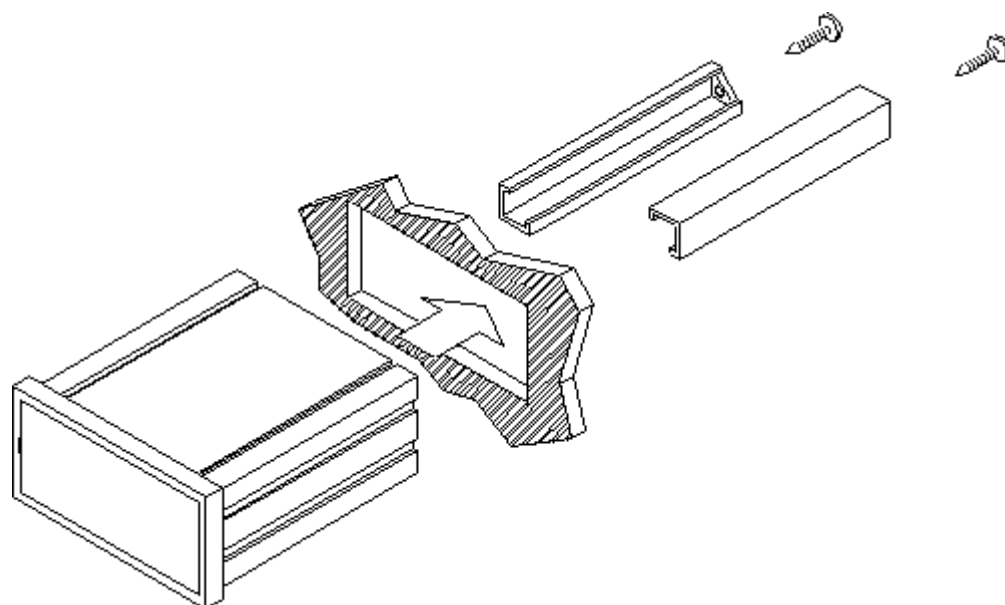temperature.

The **cold-junction compensation** is made via the potentiometer (W) located below the span
potentiometer. Shortcircuit pins A and D at the input connector and adjust (W) until the display
indicates the ambient temperature.
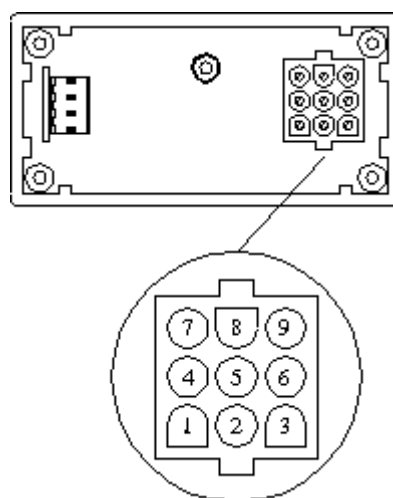
MOUNTING

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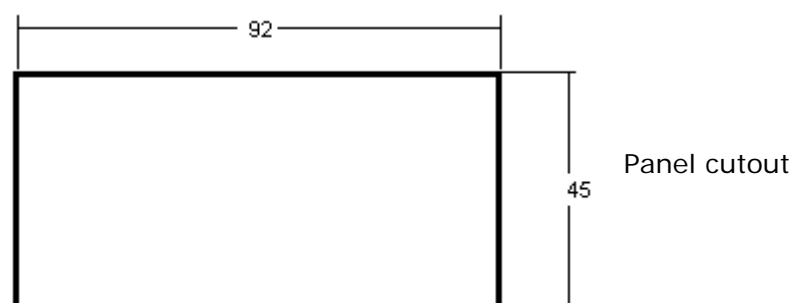
Min. thickness: 0.8mm
Max. thickness: 10mm

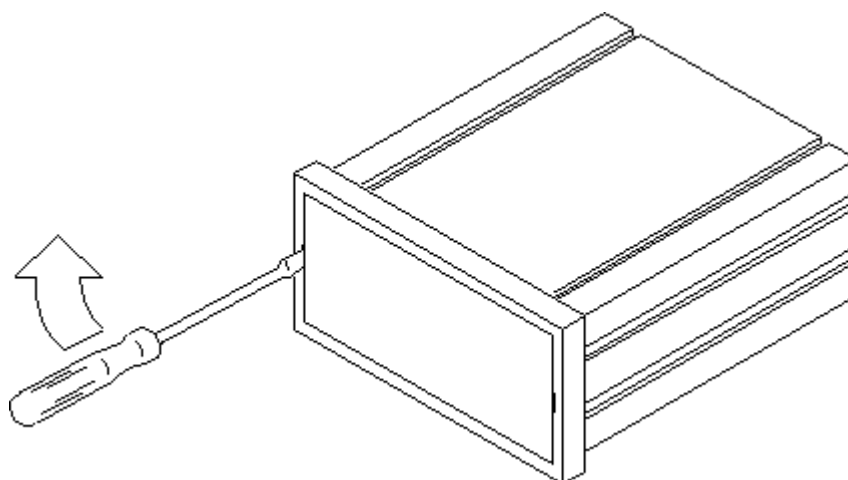## SUPPLY POWER CONNECTION

AC power supply
PIN 7 AC HI
PIN 9 AC LO (neutral)

DC power supply
PIN 7 DC positive (+)
PIN 9 DC negative (-)

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 perfectly t

Warranty:
Press the icon to see it.

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