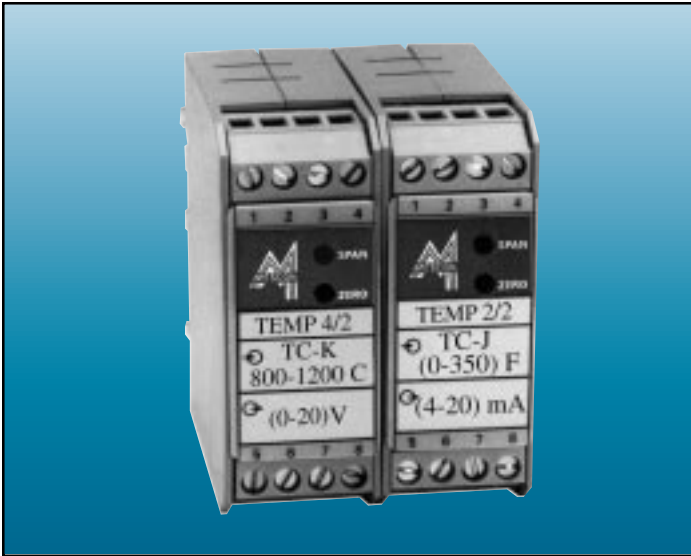


# Thermocouple Wire Input DIN rail 2-Wire & 4-Wire Transmitters TEMP 2/2 & TEMP 4/2



Mescon TEMP2/2 and TEMP4/2 transmitters provide the precision, yet low cost circuitry performing cold junction compensation, amplification and processing of signals from all types of thermocouple sensors. The units provide an output which is linear with respect to the thermocouple sensor's mV input.

The units are powered by standard industrial loop powered supply and provide a 4-20mA current loop output on a 2-wire transmitter system (TEMP2/2) or any standard current or voltage output on a 4-wire system (TEMP4/2).

Mescon TEMP2/U, and TEMP4/U are the universal transmitter versions which can be configured to any type and range of thermocouple (TEMP /2) and Pt-100 RTD sensors (TEMP /1).

## FEATURES:

- User selectable T/C
- User range-able

## SPECIFICATIONS:

Input .....	Any Thermocouple type
Input Span .....	5mV Min. (20mV for rated accuracy)
Linearity .....	0.02% of span (ref. to mV input)
Burnout Detection .....	Upscale, standard
Reference Junction: .....	1.0°C max. error over 0-50°C of operating ambient temp.
Output (TEMP2/2) .....	Current loop: 4-20mA
(TEMP4/2)	0...1...4...20mA, 0...1...4...5...10V
Stability (20mV input): .....	Zero: 1mV/°C or 0,01% of span/°C
Power Supply Range .....	24 VDC ± 20%, polarity protected
Adjustments .....	± 25% on both ZERO and SPAN
Operating Temperature ...	-20°C to 70°C (0°F to 160°F)
Mounting .....	DIN rail, 35 mm

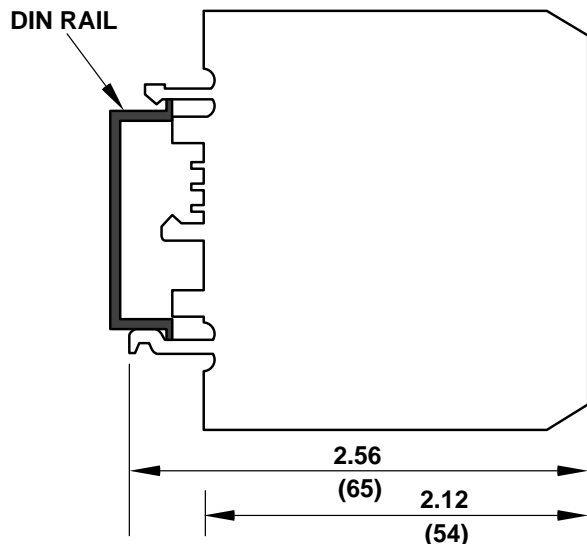
*All specifications are subject to change without notice.*



9318 Gulfstream Road • Suite A • Frankfort, IL. 60423 • Telephone: 815-464-5004 • Fax: 815-464-5003  
E-Mail Address: mescon@mescontec.com • Web Site: www.mescontec.com

# Thermocouple Wire Input DIN rail 2-Wire & 4-Wire Transmitters TEMP 2/2 & TEMP 4/2

Dimensions are in inches (mm)



### Wiring Instructions:

1. Connect the sensor input leads according to the wiring information drawing. Observe for the proper thermocouple lead type.
2. Connect the output terminals and the power supply according to the wiring information drawing. Observe for proper polarity.

### Calibrating and Adjustments:

It is assumed that the unit undergoing calibration has been properly ranged at the factory workshop.

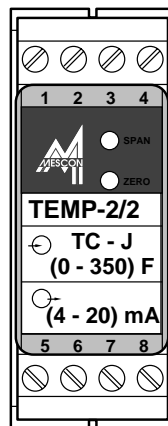
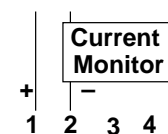
1. Connect a thermocouple simulator to the TEMP X/2 input terminals according to wiring diagram.
2. Connect the power supply terminals [1 (+) and 2 (-)] and the output terminals to the proper 2-wire (TEMP 2/2) or 4-wire (TEMP 4/2) transmitter connection. Observe for proper polarity. **For optimum performance, allow 15 minutes for temperature gradients to equalize.**
3. Set the input to the desired minimum signal and adjust the Zero pot until the output minimum signal is set.
4. Set the input maximum to the desired maximum signal and adjust the Span pot until the output maximum signal is set.
5. Repeat steps 3 and 4 until no further adjustment is needed.

### Mounting:

Series TEMP signal conditioners are designed for mounting on a standard 35 mm DIN rail. Simply place the lower rear rail groove onto the rail and push the unit into the rail until it snaps in its place. To dismount, pull the unit in a downward tilt movement away from the rail.

### Wiring Information

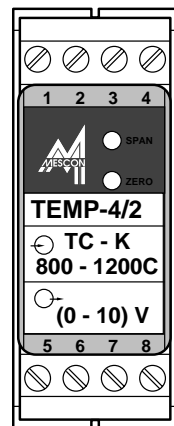
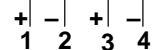
#### Loop powered



THERMOCOUPLE INPUT

TEMP 2/2

#### Power Output Signal

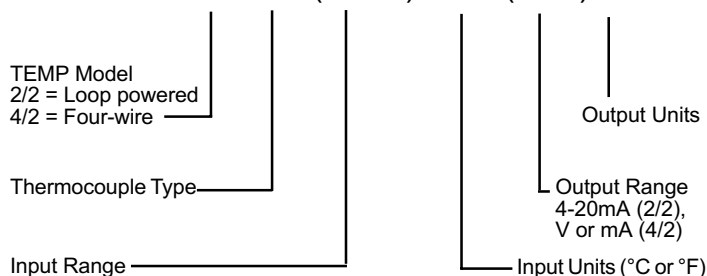


2.34 (60)  
0.94 (24)

TEMP 4/2

### ORDERING INFORMATION

TEMP 4/2 - E - (0-200) - °F - (0-10) V



**Please request our ordering and calibration diskette describing the rest of Mescon's products.**



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