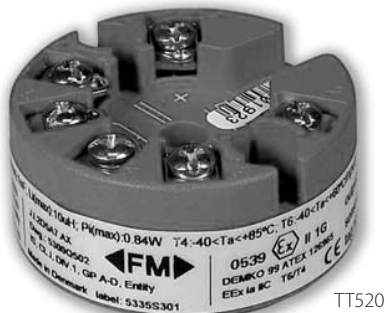


Programmable Transmitters



TT520

Overview

Models TT520 and TT530 are programmable transmitters designed for process control and other applications. Both transmitters use a 4-20mA current loop output and are PC programmable to accept a signal from a thermocouple, a Resistance Temperature Detector (RTD), or a millivolt signal. Model TT520 can be mounted at the field location in a standard DIN form B head or on a DIN rail inside a local box (with an AC807 Minco DIN rail adapter), whereas model TT530 can be mounted vertically or horizontally on a DIN rail.

- T/C, RTD, or mV input
- Accurate, Stable 4-20mA Output
- PC and field-programmable
- Galvanically isolated
- FM Approved Intrinsically Safe
- Single temperature measurement

Specifications

Common Specifications:

Supply voltage: 7.2 - 30 VDC

Temperature coefficient: $\leq \pm 0.01\%$ of span/ °C

Effect of supply voltage change: $\leq 0.005\%$ of span/ VDC

Max. wire size: AWG14 (1.5 mm²)

Air humidity: 0 - 95% RH

Dimensions:

TT520: Ø1.73 x 0.84 in (Ø44 x 20.2mm)

TT530: 4.29 x 0.93 x 4.09 in (109 x 23.5 x 104mm)

Tightness (enclosure/terminal):

TT520: IP 68 / IP00

TT530: IP50 / IP20

Weight:

TT520: 50 g

TT530: 145 g



TT530

TC Input:

Minimum measurement range:

Type E, J, K, T: 50°C

Max. offset: 50% of selected max. value

Basic accuracy:

Type E, J, K, T: $\leq 1^\circ\text{C}$

Cold junction compensation (CJC): $\leq 1.0^\circ\text{C}$

Temperature coefficient:

Type E, J, K, T: $\leq \pm 0.05^\circ\text{C} / ^\circ\text{C}_{\text{amb}}$

Sensor error detection: yes

RTD type	Minimum value	Maximum value	Minimum span.
PD (Pt100)	-200°C	+850°C	25°C
PF (Pt1000)	-200°C	+850°C	25°C

RTD-input:

Basic accuracy PD/PF (Pt100/1000): $\leq \pm 0.2^\circ\text{C}$

Temperature coefficient: $\leq \pm 0.01^\circ\text{C} / ^\circ\text{C}$

Current output:

Signal range: 4 - 20 mA

Load resistance: $< (V_{\text{sup.}} - 7.2) / 0.023 [\Omega]$

Intrinsic Safety data: FM Approved Intrinsically Safe for Class 1, Div. 1, Groups A-D, Entity Approval (pending)

V_{max} : 30.0 VDC

C_i : 1 nF

I_{max} : 120 mADC

L_i : 10 μH

P_{max} : 0.84 W

Europe: ATEX II 1 G

Meets these European requirements:

EMC 2004/108/EC: Standard EN 61326

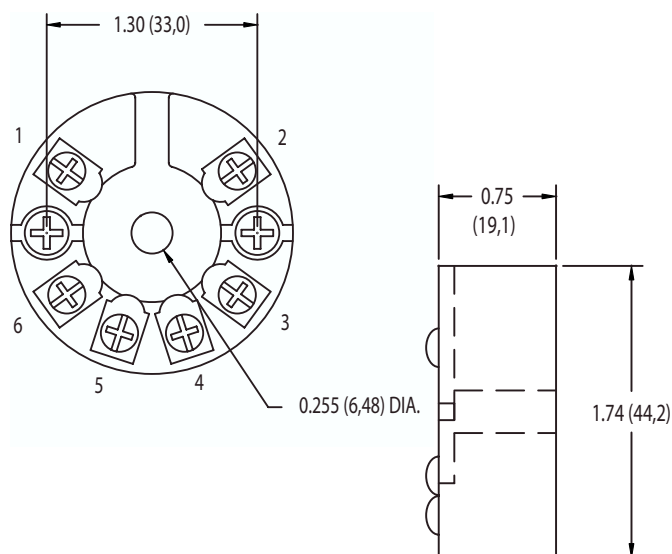
Specifications subject to change

Specifications and order options

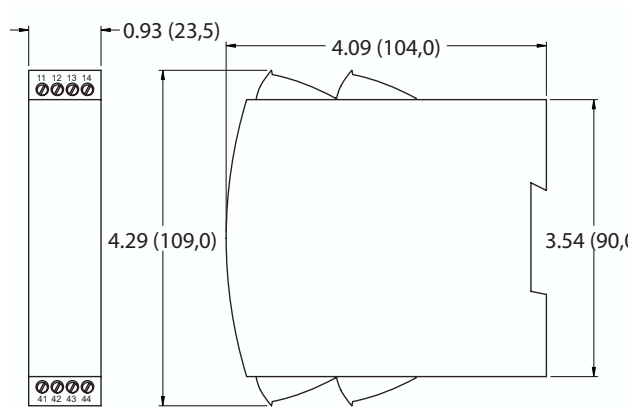
TT520	Model Number: TT520 Temperature Transmitter TT530 DIN Rail Temperature Transmitter
PD	Sensor Type: PD = 100 Ω Platinum RTD (0.00385) PF = 1000 Ω Platinum RTD (0.00385) E = Type E Thermocouple J = Type J Thermocouple K = Type K Thermocouple T = Type T Thermocouple
(-25/200)	Temperature Range: Specify temperature range in either °C or °F. For example, -25° to +200°C = 4 to 20 mA.
C	Temperature Units: C = Celsius F = Fahrenheit
1	Calibration: 1 = Nominal 2 = Matched to sensor $\pm 0.75\%$ span For other calibration options, contact Minco
Y	Sensor Leads: Y = 2-lead RTD (or thermocouple) Z = 3-lead RTD X = 4-lead RTD
TT520PD(-25/200)C1Y = Sample part number	

Specify and order products at:
www.minco.com/sensors_config

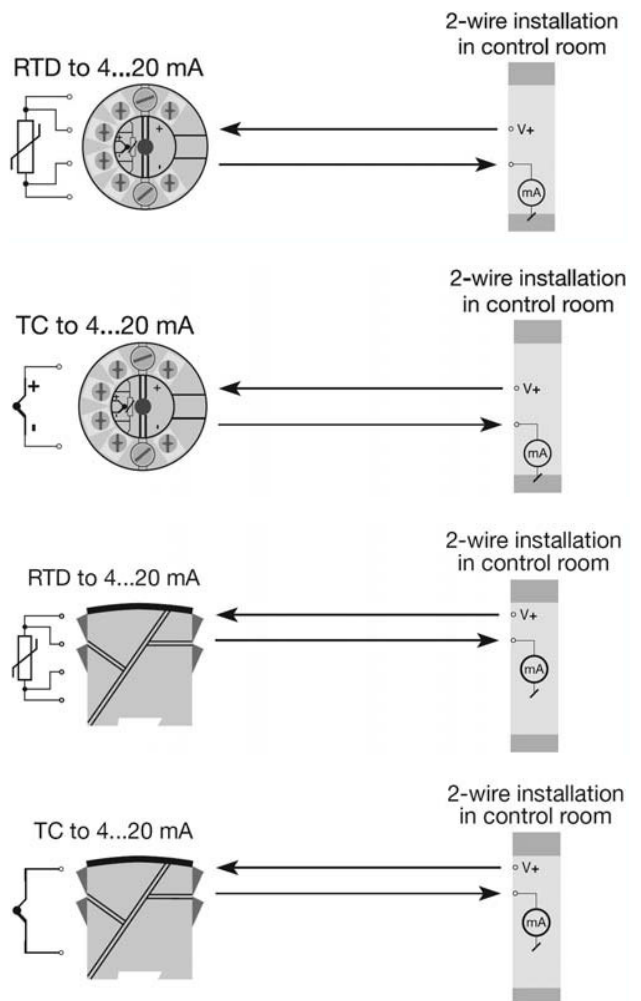
Dimensions in inches (mm)



Dimensions in inches (mm)



Wiring Diagrams



Specifications subject to change

