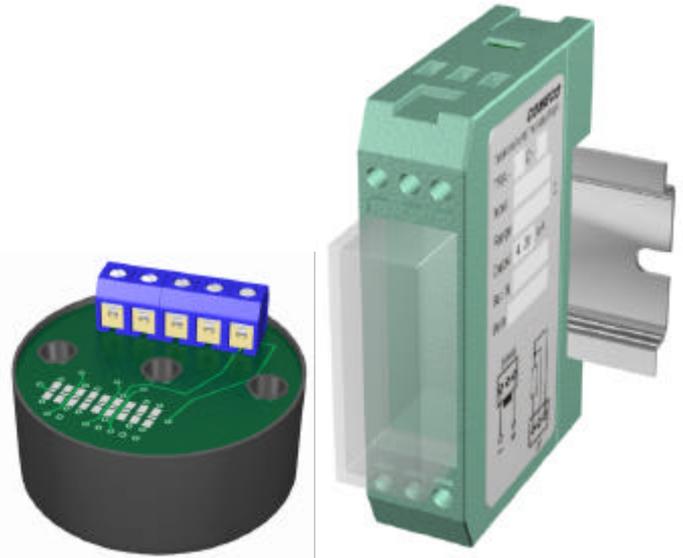


Transmitters with Selectable Input TRA

TR

- ◆ **Low cost**
- ◆ **High resistance to electromagnetic disturbances**
- ◆ **10 selectable ranges for PT100 sensors**
- ◆ **5 selectable thermocouples**
- ◆ **In-head and DIN-rail versions**
- ◆ **IP 65 protection box available**

The COMECO temperature transmitter series **TRA** is a compromising solution between the analog transmitters with fixed range and programmable transmitters. They allow on site **selecting input range and sensor type** (for thermocouples), as well as transmitter reaction to **sensor break** by means of a group of soldering bridges (jumpers). The exact range can be adjusted by 'zero' and 'span' potentiometers. These transmitters have a **special plastic cover to protect solder jumpers from the environment**. Various mounting options are available: in sensor protection head type "B", in a box with high protection class, on a DIN rail. This series of transmitters is also applicable in **Ex-zones** using external Zener barrier. Due to their flexibility, excellent resistance to electromagnetic disturbances and low price, the TRA transmitters are easy to use and very wide applicable.



Technical specifications

Input

Pt100 (w=1.385), 3 wire	-50...+50°C; -50...+100°C; 0...+50°C; 0...+100°C; 0...+150°C; 0...+200°C; 0...+300°C; 0...+400°C; 0...+500°C; 0...+600°C
Thermocouple "J"	0 to +700 °C
Thermocouple "K"	0 to +1200 °C
Thermocouple "L"	0 to +700 °C
Thermocouple "L-GOST"	0 to +600 °C
Thermocouple "T"	0 to +400 °C
Range selection	jumpers
Thermocouple selection	jumpers
Zero adjustment	± 50 °C
Range adjustment	±10%

Output

Signal type	4 to 20 mA
RTD output proportional to	temperature
TC output proportional to	input voltage
Current limit	Low=3 mA, High=28 mA
Current limit selection	Jumpers
Sensor break RTD	Low or High (depends on terminal)
Sensor break TC	High=28 mA

Accuracy

Measurement error	0.3 % from span
Nonlinearity	0.3 % from span
Temperature drift	0.02 % from span for 1 °C
Cold junction compensation	Automatic hardware ± 1 °C

Power supply

For standard type	8 to 30 VDC
Admissible variations	4 Vp-p @ 50Hz
Max line load	Max. 620Ω @ 24V/20mA

Operating conditions

Operating temperature	-30 to 80 °C
Operating humidity	0 to 95 %RH, non-condensing

Design and materials

Case material	Plastic		
Wiring	Screw terminals		
Central opening (in-head)	Ø5 mm		
Mounting	In head ⁽¹⁾	On rail	In box
Dimensions [mm]	Ø43x30	75x17x60	80x80x60
Weight	35 g	90 g	180 g
Protection class case/terminals	IP 56/20	IP 20/20	IP 65

ABBREVIATIONS: RTD - thermoresistance; TC - thermocouple

Ordering code



TRA - G6'.G12 - #1

Code	Feature or option	Code values
G6'	Input signal type	B - thermoresistance Pt100, C - thermocouple ⁽²⁾
G12	Mounting	B - for mounting in head type "B" ⁽¹⁾ , C - for mounting on a DIN rail, D - for mounting in a box IP-65

⁽¹⁾ May be mounted on rail by a special snap on accessory, which is ordered separately.

⁽²⁾ Thermocouple type is user selectable by jumpers.