

**Features**

- Active transmitters  
0-10 Vdc or 4-20 mA output
- With or without display
- 8 different temperature ranges in same unit,  
selectable via jumpers on pcb  
  
-20°C to +150°C, -50°C to +50°C, -20°C to +80°C,  
-30°C to +60°C, 0 to +40°C, 0 to +50°C, 0 to +100°C  
and 0 to +150°C.  
  
other temperature ranges on request
- IP 30
- ABS plastic enclosure or stainless steel enclosure

**Ordering**

Room temperature transmitter

Type no.	Output	Housing	Display
TRTS 010	0-10 Vdc	ABS plastic	No
TRTS 010D	0-10 Vdc	ABS plastic	Yes
TRTS 010SS	0-10 Vdc	stainless steel	No
TRTS 420	4-20 mA	ABS plastic	No
TRTS 420D	4-20 mA	ABS plastic	Yes
TRTS 420SS	4-20 mA	stainless steel	No

## Technical data

### Measuring ranges

multi-range switching with 8 switchable measuring ranges, see table (other ranges optional)  
operating range -30 to +70 °C  
with manual zero point correction ( $\pm 10K$ ).

### Sensing element

PT1000, DIN EN 60751, class B

### Outputs

0-10 Vdc, 3 –wire (TRTS 010 types)  
4-20 mA, 2-wire (TRTS 420 types)

### Power supply

24 Vac/dc +/- 10% for output 0-10 Vdc (TRTS 010 types)  
15-35 Vdc for output 4-20 mA (TRTS 420 types)

### Deviation temperature

+/-0.2K at +25°C

### Ambient temperature

-30°C to +70°C

### Humidity

< 95% r.H. non-precipitating air

### Protection class

III (according to EN 60730)

### Protection type

IP30 (according to EN 60529)

### Enclosures

ABS plastic 85x85x27 mm  
stainless steel 75x75x24 mm

### Standards

CE conformity,  
electromagnetic compatibility  
according to EN 61326:2006  
according to EMC directive 2004/30/EU

### Display

Two-line display with illumination  
cutout 36x14 mm (W x H),  
for displaying actual temperature  
And intergral dignostics  
(sensor brakage, sensor short circuit)  
only for TRTS 010D and TRTS 420D

## Description

The room temperature transmitter TRTS have been designed for wall mounting and is used to sense temperature in in heating, ventilating and air conditioning systems.

The housing of room temperature transmitter TRTS have ventilated openings with connection terminal PCB and temperature sensing element inside the housing.

The room temperature transmitter TRTS can be mounted on surface or on a conduit box.

Active room temperature transmitter TRTS have 0-10 Vdc or 4-20 mA output with 8 different temperature ranges in same unit, selectable via jumpers on pcb:  
-20C to +150C, -50C to +50C, -20 to +80C, -30C to +60C, 0 to +40C, 0 to +50C, 0 to +100C and 0 to +150C.  
Other temperature ranges on request.

The power supply for room temperature transmitter TRTS with 4-20 mA output is 15-36 Vdc and the power supply for room temperature transmitter TRTS with 0-10 Vdc output is 24 Vac/dc.

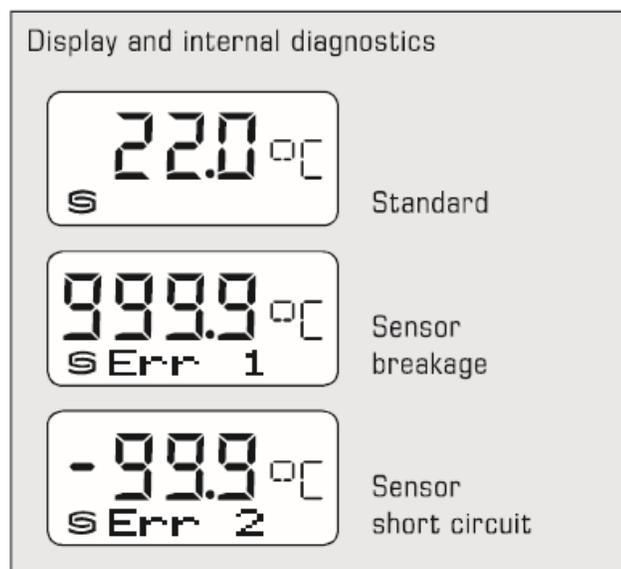
The active room temperature transmitter TRTS with output 0-10 Vdc and 4-20 mA have a PT1000 sensor (DIN EN 60751, class B).

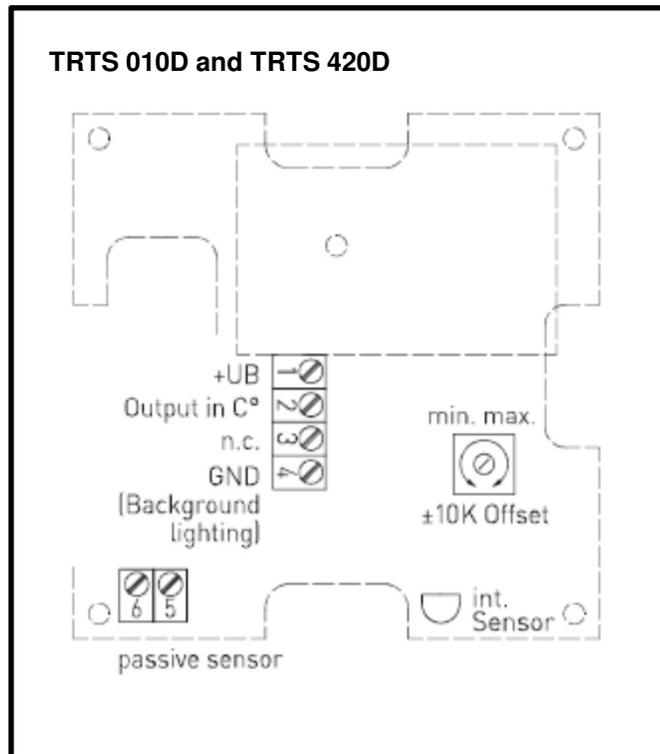
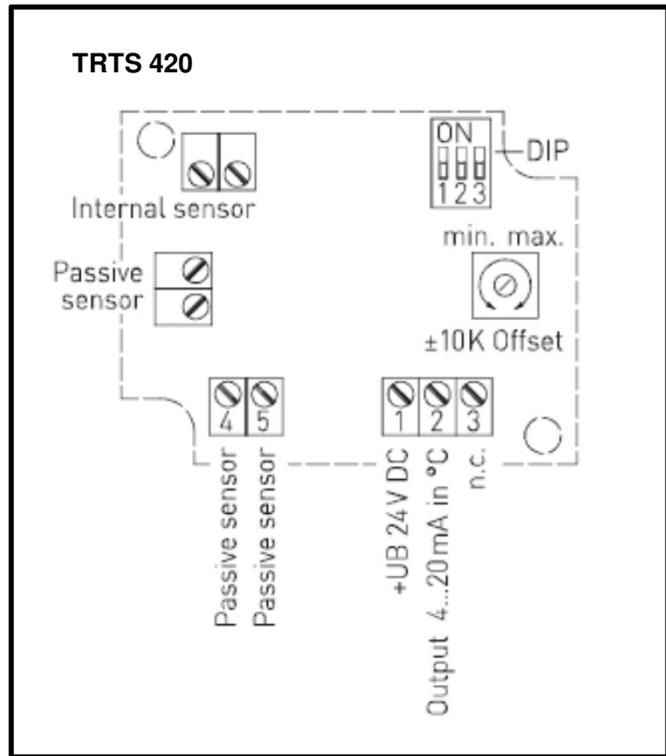
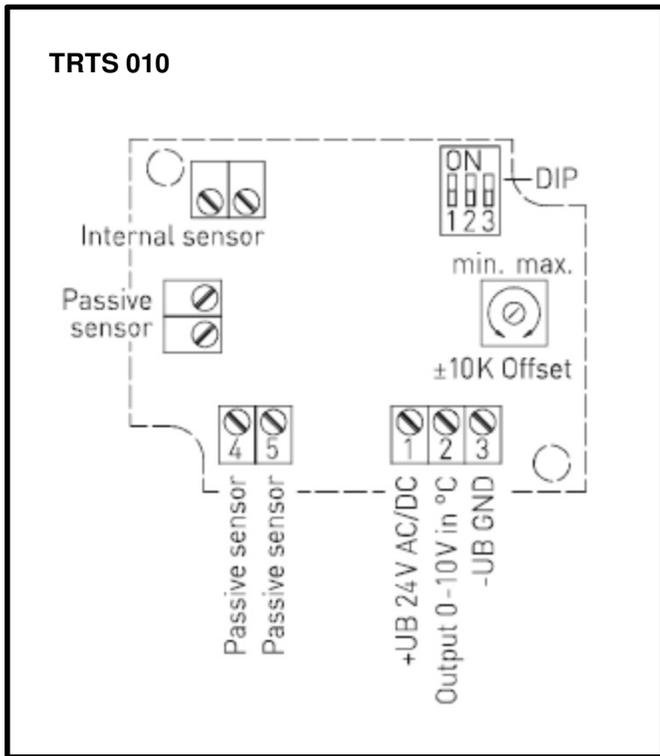
TRTS room temperature transmitter can be supplied with or without LCD display (ABS plastic enclosure). The built-in LCD display for room temperature transmitter TRTS show the actual value in degree Celcius.

Stainless steel enclosure available for TRTS room temperature transmitter, stainless steel enclosure is a vandalism secure version for schools, military barracks and public buildings.

Room temperature transmitter TRTS with stainless steel enclosure only available without LCD display.

The room temperature transmitter TRTS have IP 30 protection

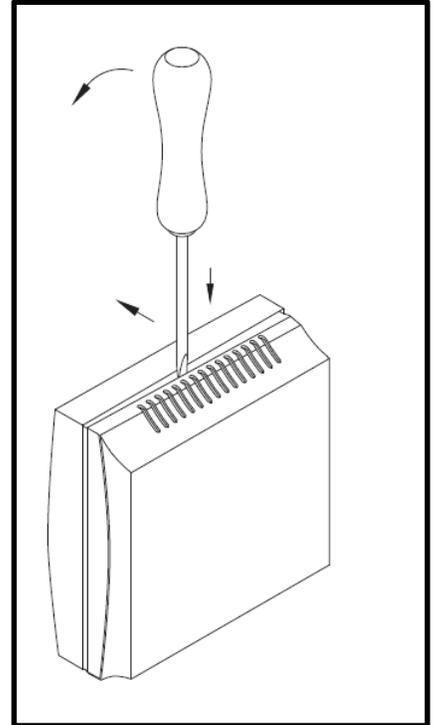
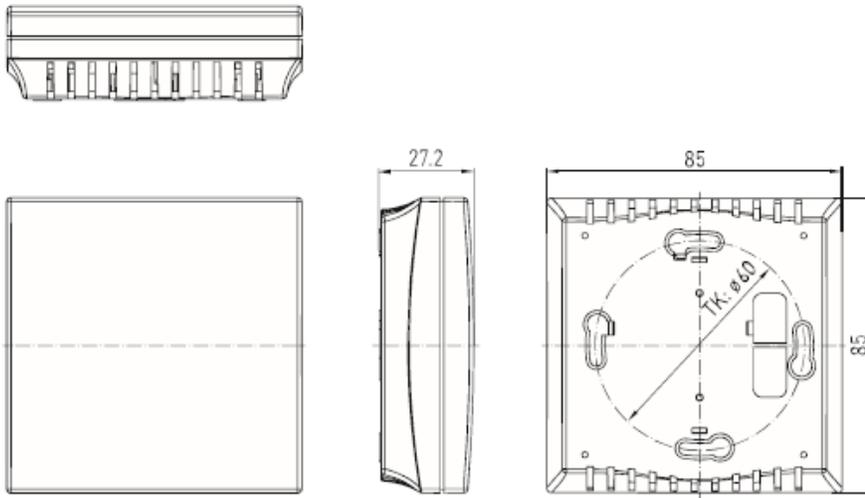




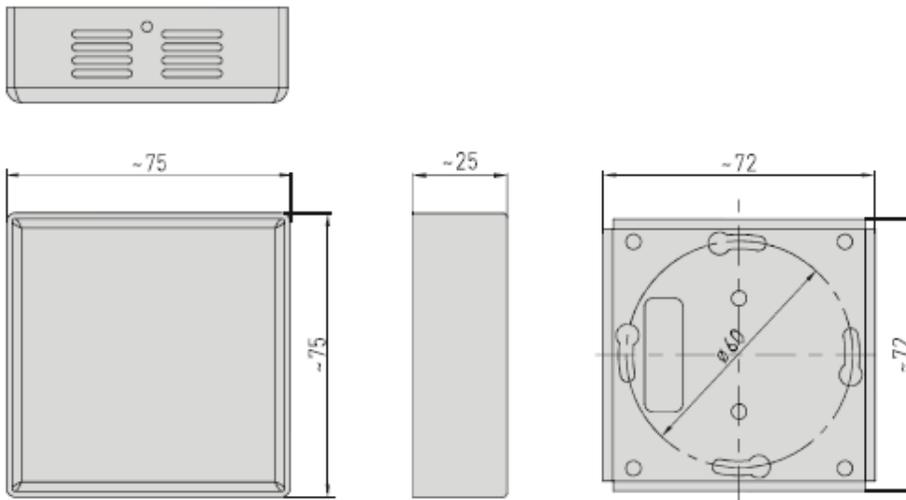
**8 different temperature ranges in same unit, selectable via jumpers on pcb**

Measuring ranges (adjustable)	DIP 1	DIP 2	DIP 3
-20°C ... +150°C	ON	ON	ON
-50°C ... +50°C	OFF	ON	ON
-20°C ... +80°C	ON	OFF	ON
-30°C ... +60°C	OFF	OFF	ON
0°C ... +40°C	ON	ON	OFF
0°C ... +50°C	OFF	ON	OFF
0°C ... +100°C	ON	OFF	OFF
0°C ... +150°C	OFF	OFF	OFF

**Dimensions of TRTS with ABS plastic enclosure**



**Dimensions of TRTS with stainless steel enclosure**



We reserve the right to make changes in our products without any notice which may affect the accuracy of the information contained in this leaflet.