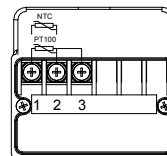# Usual temperature sensors for applications with electronic temperature controls and control boxes

Wall mounting, for ambient measurement

Measurement type	Mounting	Housing colors	Sensors	Housing material	Type
Convention and infrared	Wall	Black or grey	PT100 NTC	PC-ABS	**T1**

Internal connections:
built in terminal block, 3 screw terminals, 2.5mm². (6 terminals on the dual sensors model)

Room temperature sensors with housing

The correct measurement of ambient temperature requires to install the sensor at a location representative of the average temperature of the room where it is located. We have developed a series of boxes incorporating temperature sensors, and allowing an effective measure of this temperature.

Inside these boxes, the sensor is thermally insulated from the wall on which it is installed, and mechanically protected by a black painted copper or nickel plated probe in order to eliminate measurement errors due to thermal conduction, while ensuring good durability. The housing is provided with retractable lateral mounting legs.

Variants:

2 types of housing

1: Black PC-ABS, IP65, side output by one M20 cable glands for industrial applications or outdoor installation.
2: Cream-colored PC-ABS rear output, IP20, for domestic applications or indoor installation.

3 temperature measuring systems

1: Measurement of the temperature of the ambient air flowing around the sensor and transmitted by conduction through the probe wall to the temperature sensor (This heat component called "convection")
2: Measurement of the temperature radiated mainly in the infrared, and transmitted to the temperature sensor by means of a "black body" that absorbs these radiations (This heat component called "radiation")
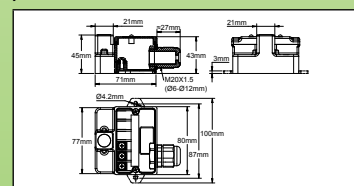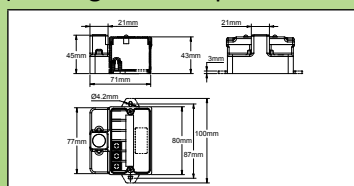3: Dual sensors, for measuring convention and radiation (MOQ apply).

2 temperature measurement sensing elements

1: NTC (R25 10Kohms, B25/50 = 3380)
2: Pt100
Other sensing elements such as Pt1000, Thermocouple J or E, Cu50 RTD, can be installed. Contact us.
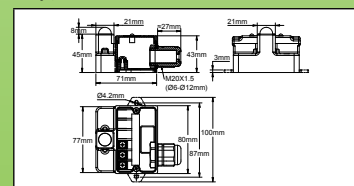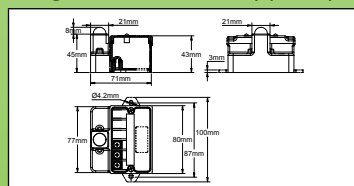
« Convection » sensor
(Sensing element protected by nickel plated copper bracket)

References	Temperature sensor	Connection	Color
T1CSUCRR32B	Pt100	Backside	Cream, RAL1010
T1BSUC1232B	Pt100	1 M20 cable gland	Black
T1CNUCRR322	NTC	Backside	Cream, RAL1010
T1BNUC12322	NTC	1 M20 cable gland	Black

« Radiation » sensor
(Sensing element in a copper sphere with special paint black body)

References	Temperature sensor	Connection	Color
T1CSDARR32B	Pt100	Backside	Cream, RAL1010
T1BSDA1232B	Pt100	1 M20 cable gland	Black
T1CNDARR322	NTC	Backside	Cream, RAL1010
T1BNDA12322	NTC	1 M20 cable gland	Black