ASTF Wall temperature sensor

Summary

The ASTF temperature sensor is an analogue outdoor air and radiating temperature sensor

Application

- **HVAC systems – temperature measuring and control outdoor or indoor (large rooms, stores, halls etc.)**
- **monitoring and recording of room temperature in large interiors**

Function

The sensor uses a sensing element, the signal of which is available at the screw terminals. Typical sensor provided is Pt1000 for **domat** I/O modules, other sensor types see table below. Temperature range is -30 to +75 °C.

The sensors are intended for operating in an outdoor or industry environment. They do not need any servicing or maintenance and can be mounted in any position.

The sensors are mounted with screws on a flat surface.

Technical data

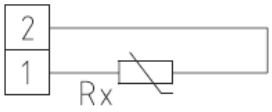
Recommended measuring circuit	appr. 1 mA
Measuring range	max. -30 ÷ +75 °C
Protection class	IP65 according to EN 60529
Cable gland	M16x 1,5; inner diameter 10,4 mm; strain relief
Terminals	screw terminals for wires 0,14 – 1,5 mm^2
Cover	polyamide, 30% glass-globe-reinforced enclosure colour pure white (similar RAL 9010) semi-globe black
Insulation resistance	> 100 MOhm at 20°C, 500 VDC
Humidity	< 95 % r.H.
Dimensions	see below

Sensor types

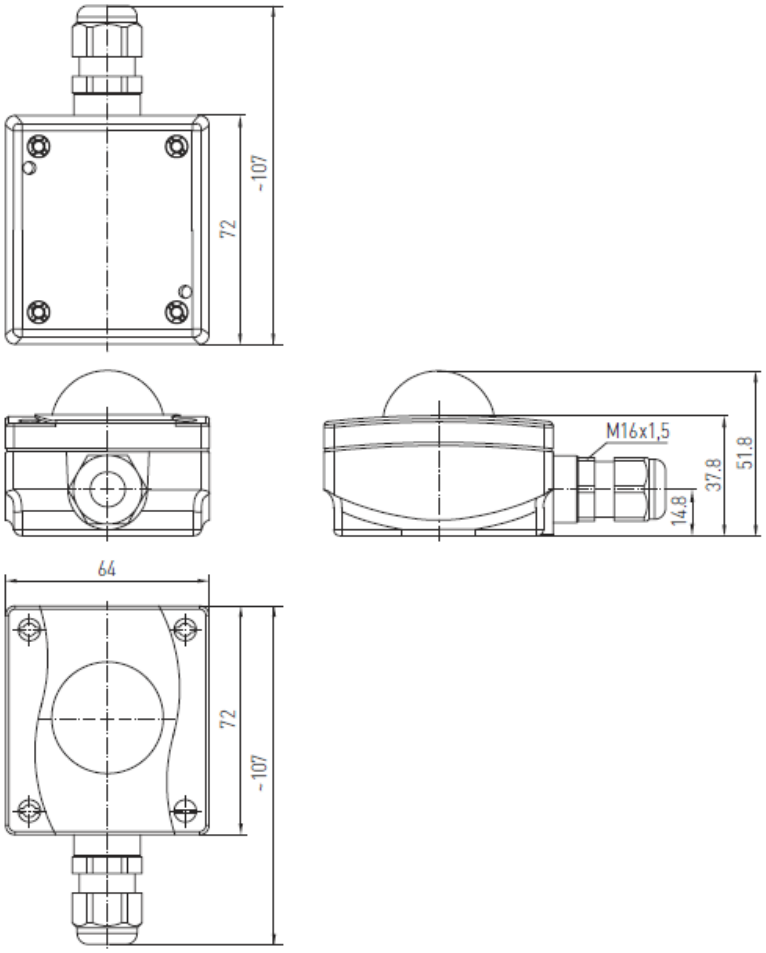
Type	Ordering	Accuracy
Pt100	on request	DIN EN 60751 class B
Pt1000	**default sensor type**	**DIN EN 60751 class B**
Ni1000-6180 (Sauter)	on request	DIN EN 43760 class B
Ni1000-5000 (L&G)	on request	
NTC 1,8 kOhm	on request	DIN EN 44070

When designing sensor cabling, please note that the cable resistance will cause measuring error. For a 50 m cable and a Pt1000 sensor the error is as follows:
wires 0.50 mm2 ... measuring error 0.90 K
wires 0.75 mm2 ... measuring error 0.60 K
wires 1.00 mm2 ... measuring error 0.44 K.
For other cable lengths, the errors are more or less linear.

Terminals



Dimensions



Changes in versions	03/2015 — Modifying of sensor accuracy table, change in accuracy class and measuring error