

For measuring the temperature in the room and setting room temperature setpoint. The room units can be seamlessly connected to existing third-party controllers.


**Type Overview**

Type	Output signal	Potentiometer
P-01RT-1B-0	Pt1000	0.7...1.3 kOhm
P-01RT-1F-0	NTC1k8	0.7...1.3 kOhm
P-01RT-1L-0	NTC10k (10k2)	2.5...8.5 kOhm
P-01RT-1M-0	NTC10k Pre (10k3)	2.5...8.5 kOhm

**Technical Data**

<b>Electrical data</b>	Electrical connection	Spring loaded terminal block 0.5...1.5 mm <sup>2</sup>
	Cable entry	Wire openings at the backside (for In-wall wiring) and top-/bottom side (for On-wall wiring)
<b>Functional data</b>	Output signal passive temperature	Pt1000 NTC1k8 NTC10k (10k2) NTC10k Pre (10k3)
	Application	Air
<b>Measuring data</b>	Measuring values	Temperature
	Measuring range temperature	0...50°C [30...120°F]
	Accuracy temperature passive	Passive Sensors depending on used type Pt.. : Class B, ±0.3°C @ 0°C [±0.5°F @ 32°F] NTC1k8 : ±0.5°C @ 25°C [±0.9°F @ 77°F] NTC.. : ±0.2°C @ 25°C [±0.35°F @ 77°F]
	Accuracy potentiometer	typical ±15%
	Measuring current	Pt1000: <0.3 mA @ 0°C [32°F] NTC1k8: <0.1 mA @ 25°C [77°F] NTC10k (10k2): <2 mA @ 25°C [77°F] NTC10k Pre (10k3): <2.7 mA @ 25°C [77°F]
	Time constant τ (63%) in the room	Typical 360 s
	Wall coupling factor	35 %
<b>Materials</b>	Housing	White, RAL 9003
<b>Safety data</b>	Ambient humidity	Max. 95% r.H., non-condensing
	Ambient temperature	0...50°C [30...120°F]
	Storage temperature	-20...60°C [-5...140°F]
	Protection class IEC/EN	III Protective extra-low voltage (PELV)
	EU Conformity	CE Marking
	Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-9
	Degree of protection IEC/EN	IP30
Quality Standard	ISO 9001	

Safety notes



This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application. Unauthorised modifications are prohibited. The product must not be used in relation with any equipment that in case of a failure may threaten humans, animals or assets.

Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.

The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Remarks

**General remarks concerning sensors**

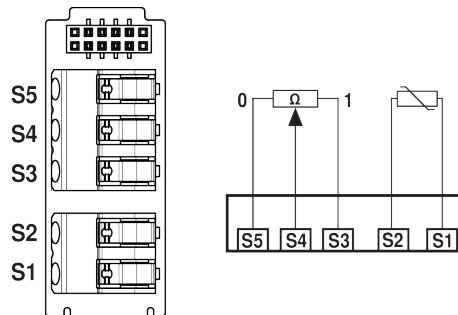
Due to self-heating with 2 wire passive sensors, the supply wire current affects the measurement accuracy. So the supply current should not be higher than the measuring current values specified in this data sheet.

When using lengthy connecting cables (depending on the cross section used), the cable resistance must be taken into account. The lower the impedance of the sensor used, the greater the effect of the line resistance on the measurement, because it generates an offset.

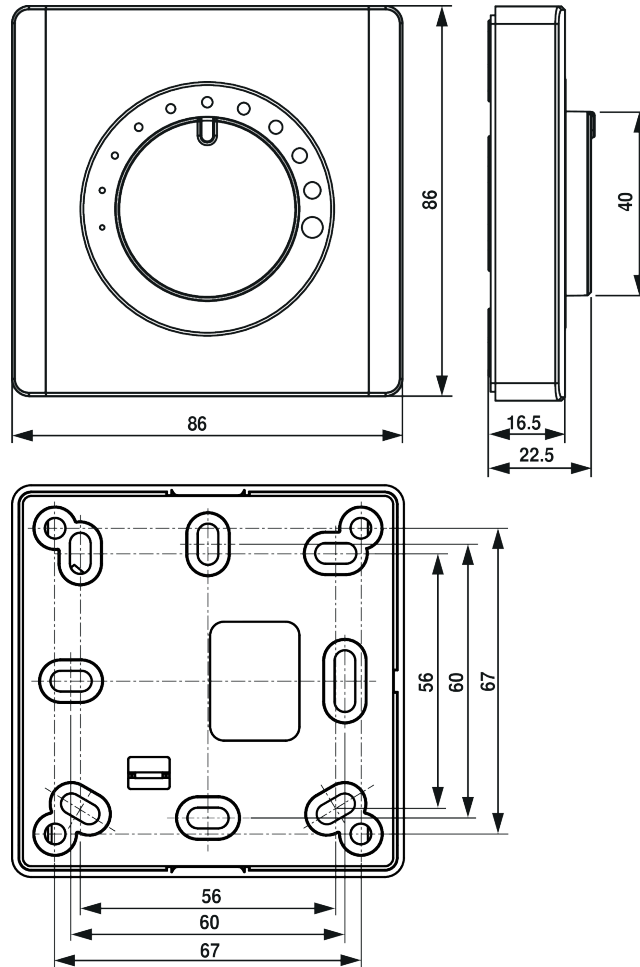
Scope of delivery

Screws

Wiring diagram



Dimensions



Type	Weight
P-01RT-1B-0	0.06 kg
P-01RT-1F-0	0.06 kg
P-01RT-1L-0	0.06 kg
P-01RT-1M-0	0.06 kg