

Room Sensor Temperature

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


Type Overview

Type	Output signal
01RT-1B-0	Pt1000
01RT-1C-0	Ni1000
01RT-1D-0	Ni1000TK5000
01RT-1F-0	NTC1k8
01RT-1L-0	NTC10k (10k2)
01RT-1M-0	NTC10k Pre (10k3)
01RT-1Q-0	NTC20k

Technical Data

Electrical data	Electrical connection	Spring loaded terminal block 0.5...1.5 mm ²	
	Cable entry	Wire openings at the backside (for In-wall wiring) and top-/bottom side (for On-wall wiring)	
Functional data	Output signal passive temperature	Pt1000 Ni1000 Ni1000TK5000 NTC1k8 NTC10k (10k2) NTC10k Pre (10k3) NTC20k	
	Application	Air	
	Measuring data	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] Ni.. : ±0.4°C @ 0°C [±0.7°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]
	Measuring current	Pt1000: <0.3 mA @ 0°C [32°F] Ni1000 (JCI): <5 mA @ 21°C [70°F] Ni1000TK5000: <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] NTC20k: <0.5 mA @ 25°C [77°F]	
	Time constant t (63%) in the room	typical 360 s	
	Wall coupling factor	35 %	

Materials	Housing	white, RAL 9003
Safety data	Ambient humidity	Max. 95% r.H., non-condensing
	Ambient temperature	0...50°C [30...120°F]
	Fluid 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.

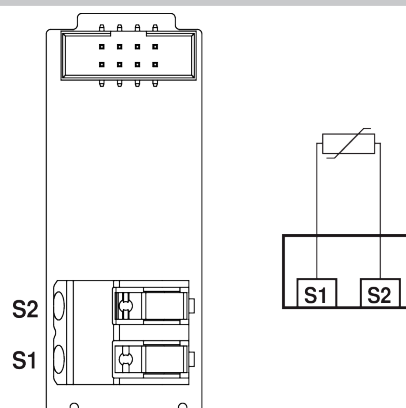
Remarks

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.

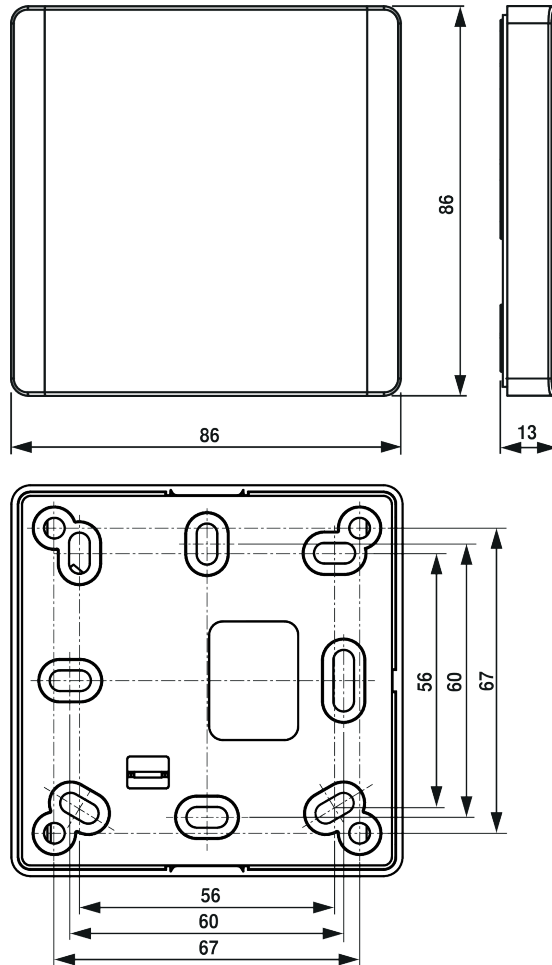
Scope of delivery

Screws

Wiring diagram


Dimensions

Dimensions



Type	Weight
01RT-1B-0	0.048 kg
01RT-1C-0	0.048 kg
01RT-1D-0	0.048 kg
01RT-1F-0	0.048 kg
01RT-1L-0	0.048 kg
01RT-1M-0	0.048 kg
01RT-1Q-0	0.048 kg