Technical data sheet 01RT-5..

Room Sensor Temperature

Passive wall mount temperature sensors with an incorporated manual override button and sleek design. Available with four different outputs to be seamlessly connected to existing third-party controllers.

5-year warranty

Type Overview

Type	Output signal
01RT-5B-0	Pt1000
01RT-5L-0	NTC10k (10k2)
01RT-5M-0	NTC10k3 (Precon)
01RT-5Q-0	NTC20k

Technical Data

Electrical Data	Electrical connection	Spring loaded terminal block 0.5...1.5 mm²
	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 NTC10k (10k2) NTC10k3 (Precon) NTC20k
	Application	air
Measuring Data	Measuring values	Temperature
	Measuring range temperature	30...120°F [0...50°C]
	Accuracy temperature passive	Passive Sensors depending on used type Pt.. = ±0.5°F @ 32°F [±0.3°C @ 0°C] NTC.. = ±0.35°F @ 77°F [±0.2°C @ 25°C]
	Measuring current	Pt1000: <0.3 mA @ 32°F [0°C] NTC10k2: <2 mA @ 77°F [25°C] NTC10k3: <2.7 mA @ 77°F [25°C] NTC20k: <0.5 mA @ 77°F [25°C]
	Time Constant τ (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	30...120°F [0...50°C]
Fluid temperature	30...120°F [0...50°C]
Storage temperature	-4...140°F [-20...60°C]
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
Degree of protection NEMA/UL	NEMA 1
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 it should not exceed 1 mA.

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.

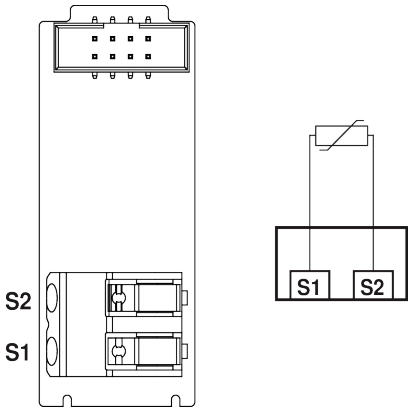
Manual override

Once the Manual Override button is pressed, the thermistor within the room sensor is temporarily shorted out and a signal is sent to the controller. The DDC programmer can utilize the signal to provide an array of HVAC sequence options.

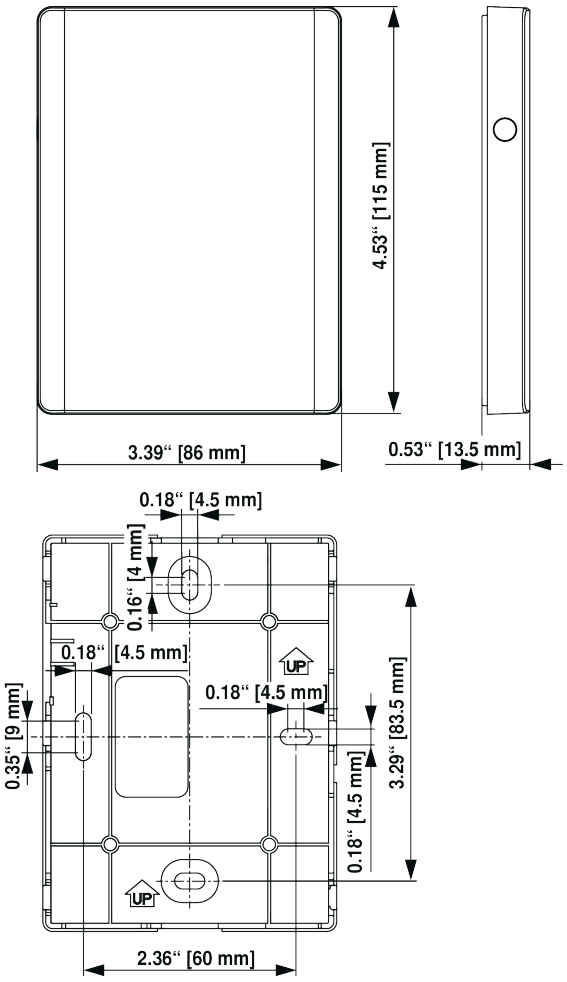
Scope of delivery

Screws

Wiring Diagram



Dimensions



Type	Weight
01RT-5B-0	0.19 lb [0.09 kg]
01RT-5L-0	0.19 lb [0.09 kg]
01RT-5M-0	0.19 lb [0.09 kg]
01RT-5Q-0	0.19 lb [0.09 kg]