arcus-eds | KNX

Product Page

The KNX-Sensor SK10-TC-RPTF1 is used for measuring and controlling indoor air temperature

- Air temperature (pendulum room sensor) also weighted with external temperature

- Control functions for heating and cooling applications (can be combined)
- Setpoint temperatures for Comfort, Standby, Economy and Protection, selectable via KNX HVAC objects
- Setpoint change via objects
- Storage of minimum- and maximum-temperature
- Heat- and frost-alarm
- Limits for temperature
- Fan control by external inputs
- Adaptation for setpoint and maximum temperatures
- Controller output 0…100% or programmable PWM for thermal actuators
- Valve rinse function
- Second temperature controller as auxiliary controller

Four logic blocks for the logical link between internal and external signals.

- 10 associated logic inputs / outputs
- Heat- and cooling-request as additionally available signals
- Functions "AND, OR, NOT, XOR" for binary logic
- Functions "+ - *" for 8-bit values
- Function "=" for conditional forwarding of events

SK10-TC-RPTF1
Pendulum Room Sensor
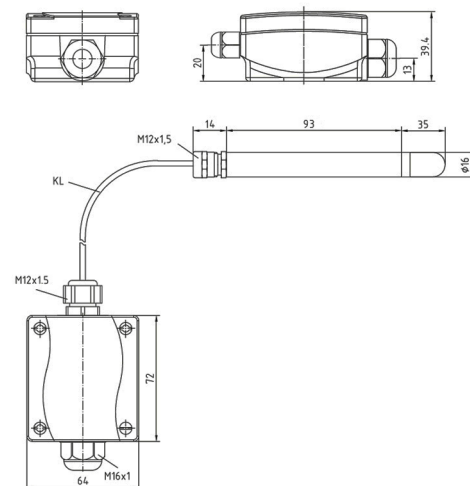**1.5m PVC**

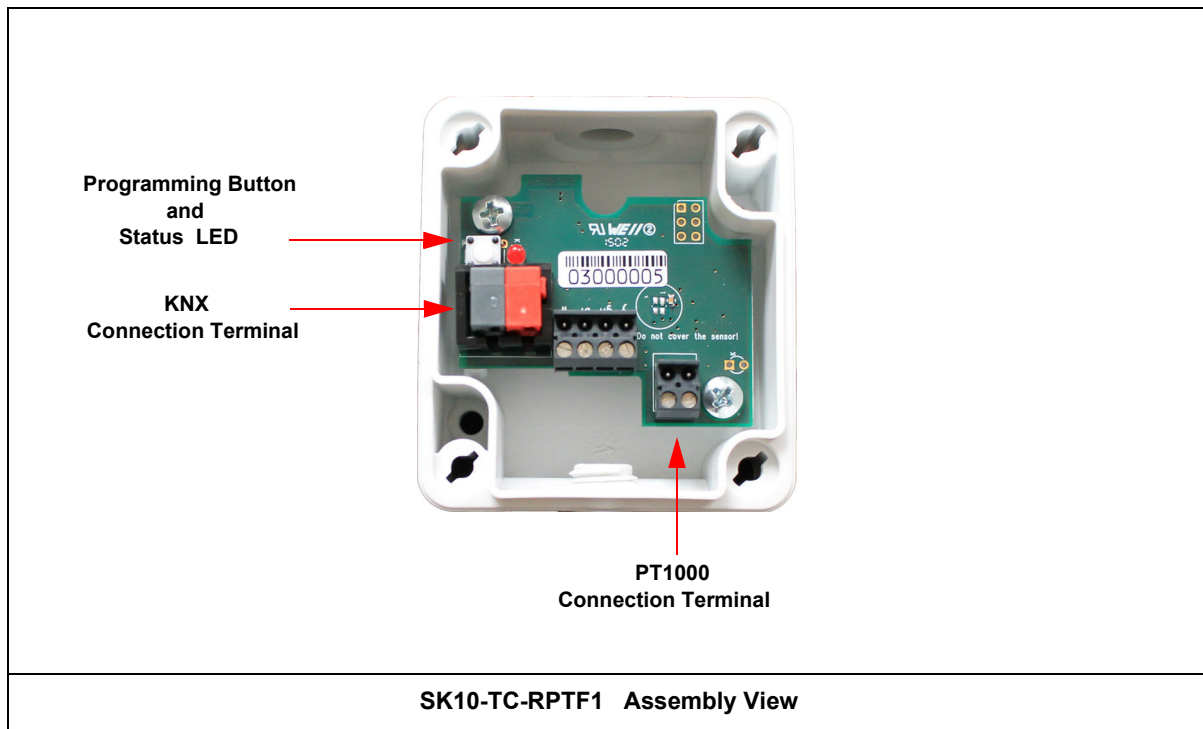|	
Sensor:	PT1000 Pendulum Room Sensor The sensor is protected from dust by a poroplast protective coating
Connecting Cable:	1.5m PVC
Measurement Range: Resolution: Accuracy	-5 .. +60°C 0.02°C Class B, ±(0.3°C+0.005*T)
Operating Temperature: Storage Temperature:	-25 .. +80°C -25 .. +80°C
Protection Class:	IP54/65

Startup

The KNX Sensor is set up using the ETS (Version 4 or higher) and the applicable application program.
The sensor is delivered unprogrammed.
All functions are programmed and parameterized with ETS.
Please read the ETS instructions.

Programming Button and Status LED

KNX Connection Terminal

PT1000 Connection Terminal

SK10-TC-RPTF1   Assembly View

Assembly

The **SK10-TC-RPTF1** sensor is for outdoor and (moist) indoor areas.
The sensor is located in an IP54/65 plastic housing.
The sensor is mounted on the wall with two screws.
When connecting the PT1000 sensor does not have to be polarity independent.

In Case of Bus Voltage Recurrence

All changes made using the help key for the KNX bus are saved if the device has been correctly parameterized.
The measuring and control values start with their current values (integral component=0 by PI-Controller).
By using the weighted mixture temperature, the external temperature scaling is set to 0% until an external temperature value is received.
The ETS parameter settings are retained.

Discharge Program and Reset Sensor

In order to delete the programming (projecting) and to reset the module back to delivery status, it must be switched off
(disconnect the KNX bus).
Press and hold the programming button while reconnecting the KNX bus and wait until the programming LED
lights up (approx. 5-10 seconds).
Now you can release the programming button.
The module is ready for renewed projecting.
If you release the programming button too early, repeat the aforementioned procedure.

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Technical Data

Technical Data   -   SK10-TC-RPTF1

Measurement	Temperature
Control	Integrated
Temperature Range	-5 .. +60°C
Resolution	0.02°C
Accuracy	Class B, ±(0.3°C+0.005*T)
Operating Voltage	KNX Bus Voltage 21 .. 32VDC
Power Consumption	approx. 240mW (at 24VDC)
Environment Temperature KNX-Module	Operating: -25 .. +80°C Storage: -25 .. +80°C
Environment Humidity KNX-Module	0 .. 100% r.H Non Condensing
Bus Coupler	Integrated
Auxiliary Supply	Not Required
Startup with the ETS Version 4 or higher	**HLK305**
Curcuit Points	KNX 2-Pole Clamps (red / black)
Protection Class	IP54/65
Housing KNX-Module	Plastic
Dimensions Housing KNX-Module	(72 x 64 x 40) mm
Article Number	30511050

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Imprint

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Safety Regulations

Attention! Installation and mounting must be carried out by a qualified electrician.
The buyer/operator of the facility has to make sure that all relevant safety regulations, issued by VDE, TÜV and the responsible energy suppliers are respected. There is no warranty for defects and damages caused by improper use of the devices or by non-compliance with the operating manuals.

Warranty

We take over guarantees as required by law.
Please contact us if malfunctions occur. In this case, please send the device including a description of the error to the company's address named below.

Manufacturer

Registered Trademarks

The CE trademark is a curb market sign that exclusively directs to autorities and does not include any assurance of product properties.

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