Indoor Temperature - Sensor, SK03-T

Object Regulator, Room Temperature Controller

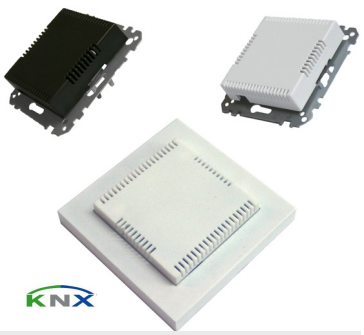
The KNX Sensor Temperature SK03-T is used to measure the air temperature in dry interiors (IP20). The integrated KNX bus coupler does not need additional auxiliary supply.

The SK03-T can be fitted in all switch ranges with 55 mm profile currently available from the equipment manufacturers, and comes in the colours white or anthracite. Its flat construction and small size make it possible to integrate the device unobtrusively in a previously installed system as well as a new one.

Several controllers are available in the application software (HVAC, Continuous, PWM) for the temperature. Additional functions include frost alarm, temperature limits, minimum/maximum value and update.

The sensor is configured with ETS (KNX Tool Software) and the application program. Controlling functions such as HVAC, switching threshold and various adjustment parameters are parameterized with ETS.

Article-Nr.: 30103201 white,
30103202 anthracite



SK03-T
Indoor Temperature-Sensor

Areas of Application:

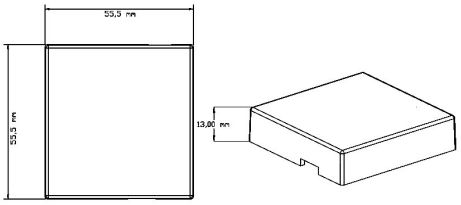
- Recording the temperature of indoor areas
- Decentralized heating regulation for constant KNX-Valves or electro-thermal valves
- Shows saved maximum and minimum values on external displays
- Room temperature controller with options Comfort/Standby/Night/Frost Protection
- Direct set point presetting and display of current set point via KNX-Bus
- Various disable options for the controller

Sensor Description:
Indoor Temperature- Sensor

Probe Application:
The KNX-sensor system for recording and controlling is delivered in a casing for flush-mounting installation. The sensor can be used in living quarters and interior areas, in hotels, offices, schools and training rooms. The casing is flush-mounted with 2 springs and a supporting frame. The casing is fitted to the appropriate frame and inserted into a flush-mounted box.

Probe:
PT1000, wired.

Storage Temperature:	-30...+60°C
Operating Temperature:	-25...+55°C



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Technical Data	**SK03-T**
Measurement	Temperature
Temperature Controller HVAC Modes:	HVAC with increase/decrease options
	HVAC with relative set point adjustment
	HVAC with absolute set point adjustment
Temperature Controller Options:	Comfort Temperature, Stand-by Temperature
	Night Temperature, Frost Protection Temperature
Temperature Controller Controller Output:	Continuous/ Switching PI-Controller / Two-Position Controller with hysteresis
Temperature Controller HVAC-Display:	HVAC-Status Byte, HVAC-Status-Bits
Limit Alarm (Upper/Lower):	Temperature
Minimum/Maximum Temperature:	Saved minimum/maximum actual temperature
Frost Protection Alarm:	Falling below frost protection temperature
Update:	Temperature
Adjustment Parameters:	Offset adjustment, Output Inversion
Lock and Reset Objects:	Minimum/Maximum Temperature
Send Options:	Do Not Send, Periodic Sending by Adjustments
Temperature Probe:	Sensirion, SHT71/11 embedded in lid
Environment Temperature:	Storage -30...+55°C, Operating -25...+45°C
Environment Humidity:	0…99% rH, not condensating
Temperature Range:	-25…+45 °C
Accuracy of Temperature:	+/- 0,5 °C
Temperature Resolution:	+/- 0,01 °C
Operating Voltage:	EIB/KNX Bus voltage 24 V DC
Power Consumption ca.:	10 mA at 24V DC
Auxiliary Supply:	Not necessary
Bus Coupler:	Integrated
Start-up with ETS:	ARC_TFK.VD2 Product: Sensor Temperature SK03
Circuit Points:	KNX-2-pol clamp (red/black)
Protection:	IP20
Fittings:	Flush-mounting, component fitted with 2 spring clips in a support ring, the ring inserted in a 68 mm flush-mounted box
Casing:	White, or anthracite plastic
Measurements:	55 mm x 55 mm x 13 mm (W x H x D)
Article Number:	30103201, 30103202

Optional Available:			
SK03-T		Sensor Temperature white	**30103201**
SK03-T		Sensor Temperature anthracite	**30103202**

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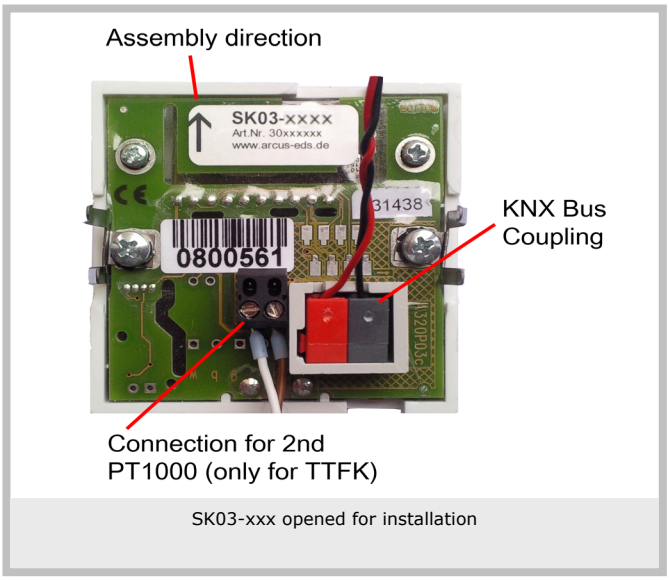
Start-up:
The KNX Sensor is set up using the ETS (KNX Tool Software) and the applicable application program. The sensor is delivered unprogrammed. All functions are programmed and parameterized with ETS. Please read the ETS instructions.

Installation:
SK03-xxx sensors are for installation in dry interiors. They fulfill protection class IP20. They can be fitted directly to a 68mm flush-mounted box with the attached supporting frame.
The SK03-xxx can be combined with all switch ranges with 55 mm profile (e.g. Gira, Merten). The design frame is not included, so test the combination of the frame model with the SK03-xxx-I before installing it.

→ Be careful not to scratch the protective film, and do not touch the square edges.

For installation the SK03-xxx casing is fitted to the design frame and then inserted into the mounted supporting frame. The switch-key for programming and the integrated temperature-humidity probe must be placed at the lower edge of the casing. The mounting direction is marked on the back of the component. For optimal accuracy do not place the sensor in direct sunlight or near other heat sources.



SK03-xxx opened for installation

In case of bus line voltage restoration (voltage outage):
All temperature defaults on the KNX/EIB bus are restored. After a line voltage restoration the temperature data is rounded up or down to 0.5°C of the actual value. The controller and outputs start with their current values. The HVAC mode byte is set to 0. ETS Parameter adjustments are restored.

Program de-activate and reset sensor:
If there is an error in programming and the sensor no longer reacts, you can delete the project by pressing the program button. Press the program button down while connecting the EIB bus clamp and wait for the program LED to light up. This takes from 5-10 seconds.

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