

Indoor Temperature Sensor, SK02-T
Object Regulator, Room Temperature Controller

The KNX Sensor Temperature SK02-T is used to measure the air temperature in dry interiors (IP20). The integrated KNX bus coupler does not need additional auxiliary supply.

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.



Areas of Application:

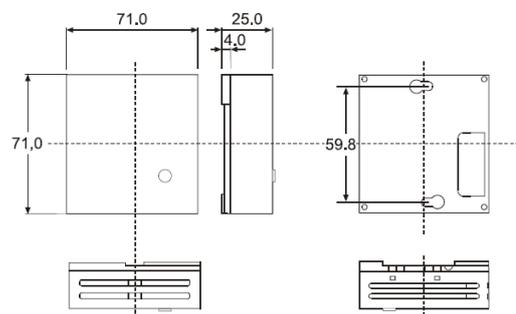
- Recording the temperature of indoor areas
- Decentralized heating regulation for constant KNX-Valves or electro-thermal valves
- Shows saved maximum and minimum values on external displays
- Room temperature controller with options Comfort/Standby/Night/Frost Protection
- Direct set point presetting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

Sensor Description:
Indoor-Temperature-Humidity-Sensor SK02

Probe Application:
The KNX-sensor system for recording and controlling is delivered in a casing for on-wall mounting. The sensor can be used in living quarters and interiors, in hotels, offices, schools and training rooms. On-wall installation in dry interiors (IP20) with 2 screws, or directly into a 68 mm flush-mounted box.

Probe:
Pt1000, wired.

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



Technical Data	SK02-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:	PT1000, wired
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
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:	30102201

Optional Available:			
SK02-T		Sensor Temperature white	30103201

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.

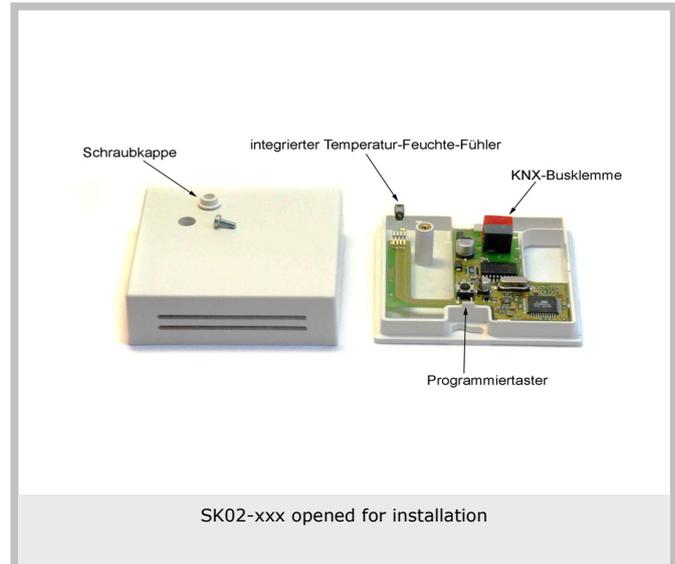
Installation:

SK02-xxx sensors are for installation in dry interiors. They fulfill protection class IP20. They can be fitted directly onto the wall or to a flush-mounted box.

Lead the KNX bus cable through the hole in the casing before mounting it to a wall or ceiling. Remove the bus clamps from the device and connect the cable to it. Place the bus clamps back onto the device. After programming the device, fix the lid back with its respective screw and push in the screw cap.

→ Be careful not to damage the electronics during the installation process.

2 screws are used to mount the SK02-xxx, one at the top and one at the bottom. The temperature-humidity probe must be placed at the lower edge of the casing. For optimal accuracy do not place the sensor in direct sunlight or near other heat sources.



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 KNX bus clamp and wait for the program LED to light up. This takes from 5-10 seconds.

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