KNX-Sensor Temperature with Duct/Air Duct Probe, SK01-T-KTF1

The KNX-sensor temperature SK01-T-xx with the PT1000-probe KTF1 is used for temperature detection especially in airflows in ventilation and air conditioning ducts. The integrated KNX-Bus Coupler does not need additional auxiliary voltage. A straight sheath tube encloses the temperature sensor and is mounted onto the casing. The sheath tube is available in lengths of 50-400mm. The glass-globe-reinforced impact-resistant plastic casing contains the KNX-Bus components and the electronic measuring equipment. It comes with two quick-locking screws. A plastic sleeve is used to hermetically seal and attach it to the air duct.

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.: 30101040

SK01-T-KTF 1
KNX-Sensor with Duct/Air Duct
Temperature Probe PT1000
V4A 200mm

Application:

- in ventilation/air conditioning ducts in heating technology

Areas of Application:

- Temperature detection in ventilation/air conditioning ducts
- 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

Probe:
Duct/Air Duct Probe Temperature

Probe Description:
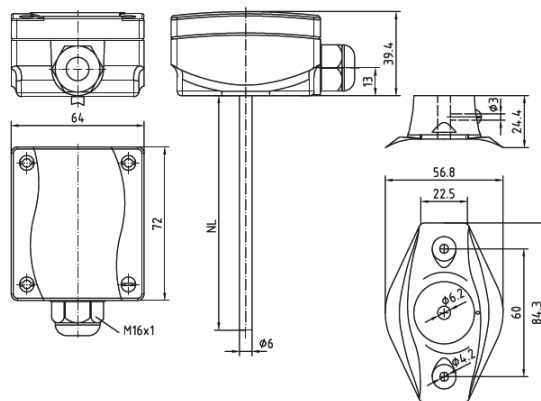Temperature sensor PT1000, high long term stability

A stainless steel V4A sheath tube (Ø=6mm) encloses the PT1000 temperature sensor.

Sensor Application:
The sensor is used in ventilation/air conditioning ducts in heating and air conditioning technology. It is attached to the air duct with a plastic sleeve and 2 screws.

Temperature Range: -30...+150°C

Environment Temperature Transducer: -20...+80°C

Protection: IP65

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| Technical Data	SK01-T-KTF1
Measurements:	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, embedded in sheath tube IP65
Environment Temperature:	Storage -20...+100°C, Operating -20...+80°C
Environment Humidity:	0…95% rH not condensating
Temperature Range:	-30…+150 °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 IP65
Circuit Points:	EIB-2-pol clamp (red/black)
Protection:	IP65
Fittings:	Installation with plastic packing and 2 screws
Casing:	White plastic
Measurements Casing:	72 mm x 64 mm x 39,4 mm (W x H x D)
Sleeve:	Ø=6mm, IP65
Article number:	**30101037, 30101038, 30101039, 30101040, 30101041, 30101042, 30101043**

Optional Available:		
KTF 1 PT1000-xx		**KNX-Sensor Temp. with (Air) Duct Probe incl. mounting flange, V4A -30...+150°C**
KTF 1 PT1000-50		Length 50mm V4A stainless steel	**30101037**
KTF 1 PT1000-100		Length 100mm V4A stainless steel	**30101038**
KTF 1 PT1000-150		Length 150mm V4A stainless steel	**30101039**
KTF 1 PT1000-200		Length 200mm V4A stainless steel	**30101040**
KTF 1 PT1000-250		Length 250mm V4A stainless steel	**30101041**
KTF 1 PT1000-300		Length 300mm V4A stainless steel	**30101042**
KTF 1 PT1000-400		Length 400mm V4A stainless steel	**30101043**

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:

SK01-T-xx sensors are for outdoor use and for (moist) indoor areas. They fulfil protection class IP65. The sensor is installed with a plastic packing and two screws.

SK01-T-xxx opened for installation
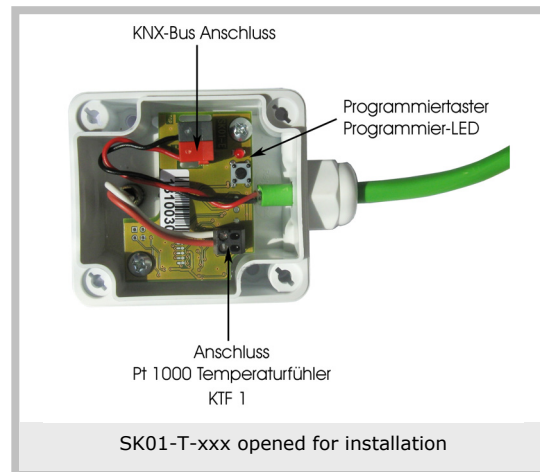
The lid can be opened to a 90° angle by loosening the screws.

The cable for the external temperature sensor (PT1000) can be detached from the terminal block. When reattaching, it is not necessary to pay attention to the polarity of clamps 1 and 2. After the sensor has been mounted onto the wall or ceiling, lead the KNX bus cable through the hole in the casing (PK screw connection). 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, place the lid back on by twisting the screws 90°.

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

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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