

KNX-Sensor Temperature with Sleeve/Cable Probe, SK01-T-HTF

The KNX-Sensor Temperature SK01-T-xx with the PT1000 Probe HTF records the temperature of liquid and gaseous media using an in-built immersion sleeve. The sensor can also be used to measure Teflon and silicon and is ideal for monitoring the temperature of sun collectors and solar panels. The integrated KNX bus coupler does not need additional auxiliary supply. The sensor is enclosed in a V4A stainless steel sheath tube. The durable, reinforced glass-bead synthetic casing with quick-fastening screws contains the electronics and the KNX bus components.

Several controllers are available in the application software (HVAC, Continuous, PWM) for the temperature, and a two-position controller is available for humidity. Additional functions include frost alarm, temperature limits, minimum/maximum value and updates.

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

Areas of Application:

- Heating Ducts
- Recording temperature of liquid and gaseous media
- Expanded temperature range with sun collectors and solar panels
- Recording temperature of inner and outer areas and damp room areas
- Decentralized regulation for continuous KNX or electro-thermal valves
- Shows saved maximum and minimum values
- 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:
Sleeve/ Cable Probe

Description:
Temperature Probe PT1000, high long-term stability

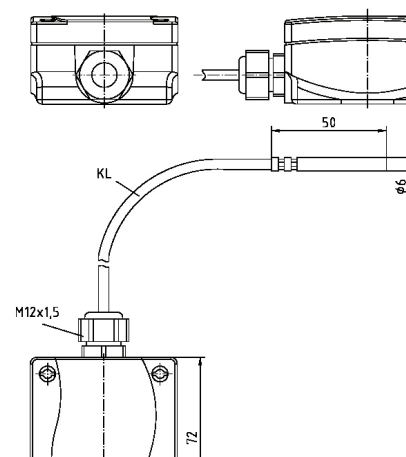
The PT1000 Probe is enclosed in a V4A steel sheath tube ($\varnothing=6\text{mm}$), on which a cable is flanged. Materials which can be measured in this temperature range are PVC, silicon and Teflon. The length KL (see picture) comes in a standard 1.5m. Customized cable lengths are also available. The probe is hermetically sealed and roller-burnished

Sensor application:
Assembled in pipes and containers using an appropriate immersion sleeve (not included in delivery) and for replacement/repairing of existing systems.


Temperature Measuring Range: -35...+105°C PVC
 -50...+180°C Silicon
 -50...+250°C Teflon

Ambient Temperature Measuring Range:-20...+80°C

Protective Casing: IP65



Technical Data	SK01-T-HTF
Measurement:	Temperature
Temperature Controller HVAC Modi:	HVAC with increase/decrease options HVAC with relative set point adjustment HVAC with absolute set point adjustment
Temperature Controller Options:	Comfort Temperature, Stand-by 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
Limit Alarm (Upper/Lower):	Temperature, Humidity
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 (Transducer)
Environment Humidity:	0...95% rH not condensed
Temperature Range:	-35...+105 °C (PVC) / -50...+180 °C (Silicon) / -50...+250°C (Teflon)
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 bei 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 clamps (red/black)
Protection:	IP65
Fittings :	Finery, 2 screws
Casing :	White plastic
Measurements :	72 mm x 64mm x 39,4 mm (W x H x D)
Cable:	PVC, Silicon, Teflon depending on type, Standard 1,5m
Sleeve:	Ø=6mm, Length 50mm, IP65 hermetically sealed and roller-burnished/compressed
Article Number:	30101002, 30101003, 30101055, 30101056

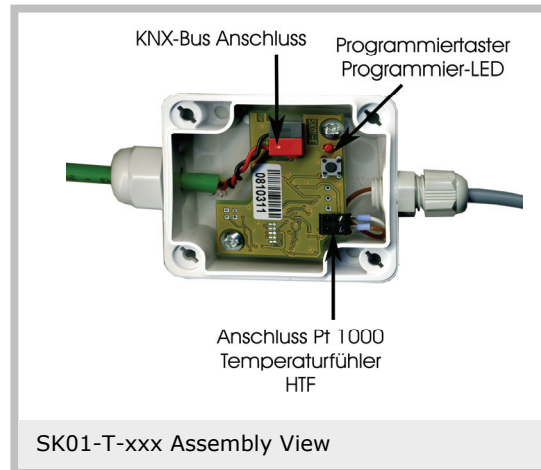
Options Available:				
HTF Pt1000		KNX-Sensor Temperature with Sleeve/Cable Probe		
SK01-T-HTF Pt1000		PVC 1,5m	-35...+105°C	30101002
SK01-T-HTF Pt1000		Silicon 1,5m	-50...+180°C	30101003
SK01-T-HTF Pt1000		Teflon 1,5m	-50...+250°C	30101055

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.

Assembly:

The SK01-T-xxx sensors are for outdoor and (moist) indoor areas. They fulfill protection class IP65. The sensor is attached to the wall with two screws.



The lid can be opened to a 90° angle by loosening the screws.

The cable for the external temperature sensor (PT 1000) 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.

Imprint:

Publisher: Arcus-EDS GmbH, Kreuziger Straße 14-15, 10247 Berlin

Responsible for Content: Hjalmar Hevers, Reinhard Pegelow

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