

## Product Page

**The KNX-Sensor SK10-TC-ETF7 is used for measuring and controlling indoor air temperature**

- Air temperature ( sensor on housing ) 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



Sensor:	PT1000 Screw-In / Immersion Sleeve V4A
Immersion Sleeve:	G1/2", Ø 8 mm 50, 100, 250 mm with Extended Shaft V4A very quick response time
Measurement Range:	-30 .. +150°C
Resolution:	± 0,01°C
Accuracy:	± 0,3°C + accuracy of the sensors
Operating Temperature:	-25 .. +80°C
Storage Temperature:	-25 .. +85°C
Protection Class:	IP54/65

The technical drawings show three views of the sensor assembly:  
 - Front view: A rectangular housing with a central circular opening.  
 - Side view: Shows the housing with a width of 72 mm and a height of 37.8 mm. The mounting bracket has a width of 14 mm and a thickness of 1.6 mm. The main body has a diameter of Ø 8 mm and a length of 33 mm. The total length of the assembly is 107 mm.  
 - Top view: Shows the housing with a width of 64 mm and a height of 35 mm. The mounting bracket has a width of 14 mm and a thickness of 1.6 mm. The main body has a diameter of Ø 8 mm and a length of 33 mm. The total length of the assembly is 107 mm.

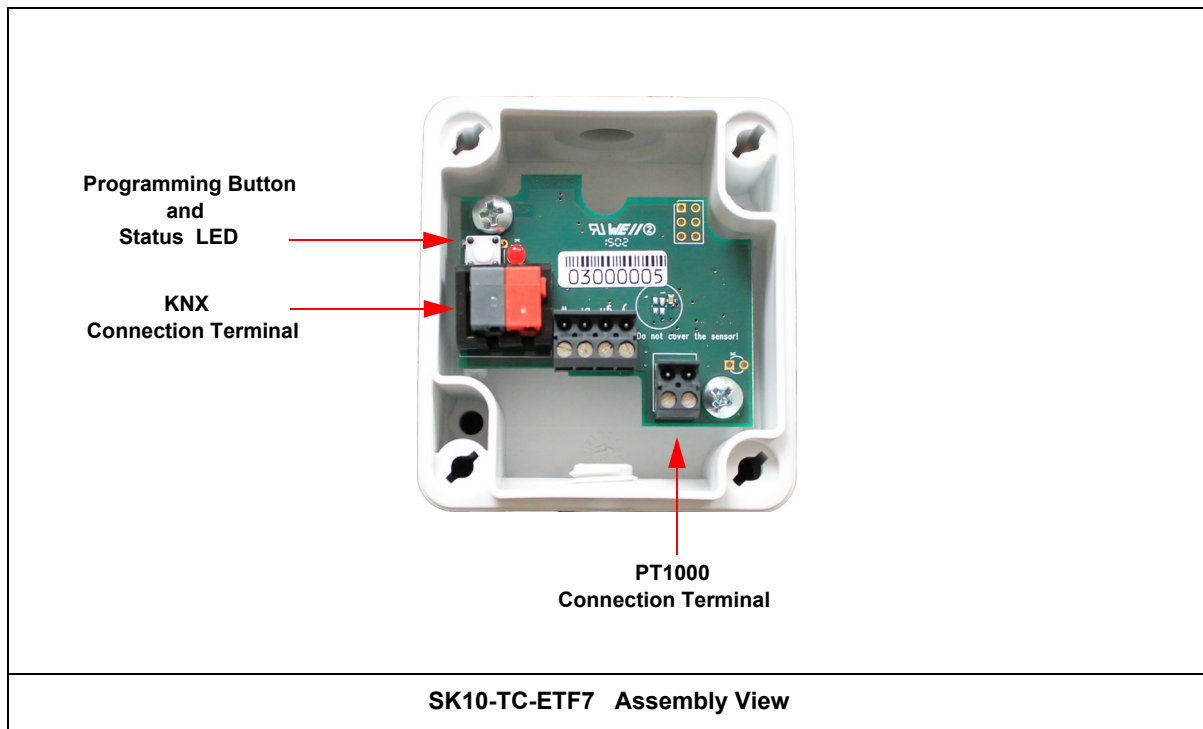
## Startup

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.



## Assembly

The **SK10-TC-ETF7** sensor are for outdoor and ( moist ) indoor areas.

The sensor is located in an IP54/65 plastic housing.

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.

## Technical Data

### Technical Data - SK10-TC-ETF7

Measurement	Temperature
Control	Integrated
Temperature Range	-30 .. +150°C
Resolution	± 0,01°C
Accuracy	± 0,3°C + accuracy of the sensor
Operating Voltage	KNX Bus Voltage 21 .. 32VDC
Power Consumption	approx. 240mW ( at 24VDC )
Environment Temperature KNX-Module	Storage: -20 .. +85°C Operating: -20 .. +80°C
Environment Humidity KNX-Module	0 .. 95% r.H Non Condensing
Bus Coupler	Integrated
Auxiliary Supply	Not Required
Startup with the ETS Version 4 or higher	<b>HLK305</b>
Circuit 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	30511034      100mm 30511035      150mm 30511036      200mm

## Imprint

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