

**Product Page**SK10-THC-ALKF1 / ALKF2  
Condensation Monitor

## Product Page

The KNX-Sensor SK10-THC-ALKFx can be used on cooling ceilings, pipes or other objects centrally to avoid condensation.

SK10-THC-ALKF1	SK10-THC-ALKF2
	
Item No 30531161	Item No 30531162

With this sensor, the dew point control is implemented using the relative humidity (humidity controller). The sensor is mounted directly on the component on which condensation is to be prevented. At the contact point to the component there is a microclimate in which the relative humidity must not reach 100%. The setpoints and the hysteresis must be set in such a way that this is prevented.

- Air temperature (microclimate)
- Relative humidity (microclimate)
- calculated dew point temperature
- Absolute humidity
- Control functions for heating and cooling applications ( can be combined )
- Limits for temperature

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

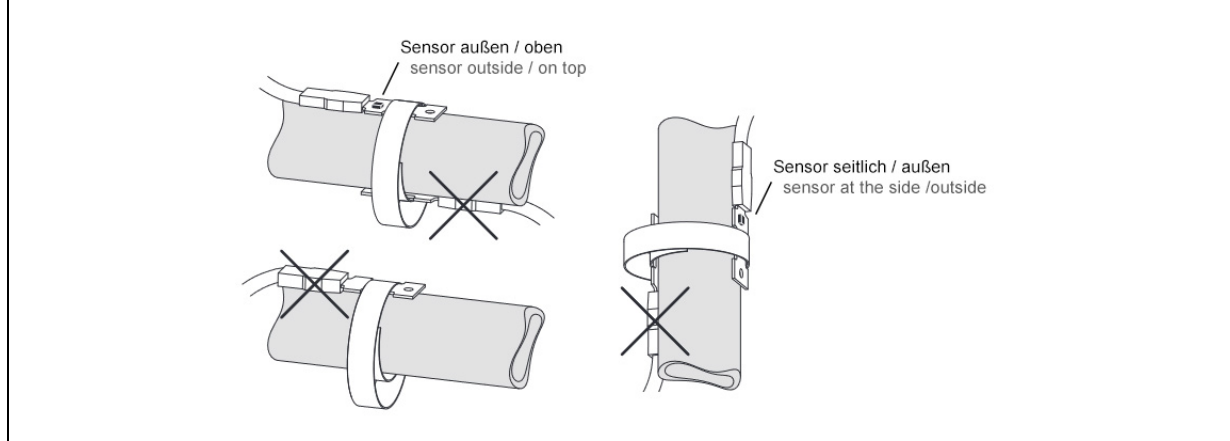


## Assembly

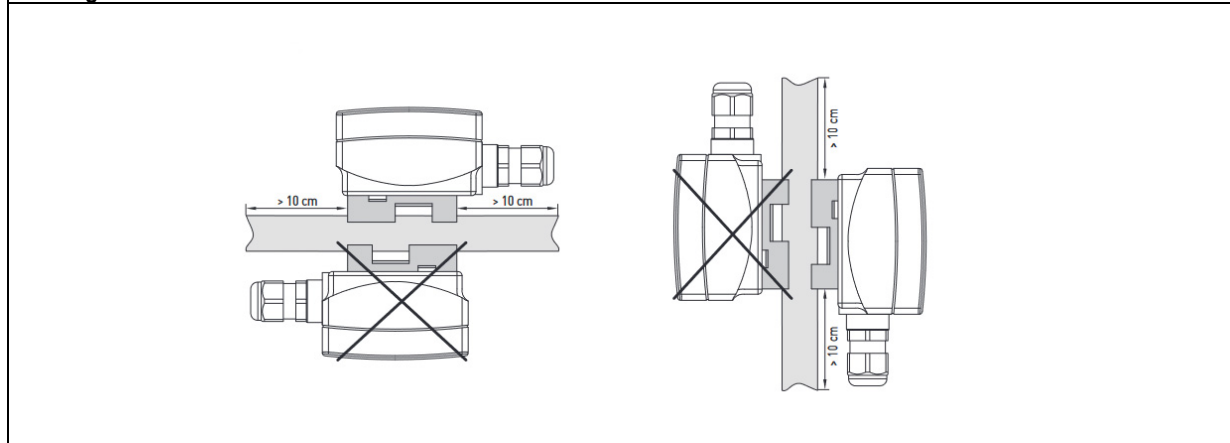
The **SK10-THC-ALKFx** sensor is intended for mounting on cooling ceilings, pipes and other objects. The installation position should be chosen so that condensate cannot enter the sensor in case of condensation. The sensor is mounted directly on the object with a tightening strap.

Note when mounting: Sensor must remain unobstructed (min. distance 10 cm), ambient air may not be shielded off.

### Montageschema Gehäuse SK10-THC-ALKF1



### Montageschema Gehäuse SK10-THC-ALKF2



## In Case of Bus Voltage Recurrence

All changes made using the KNX bus are saved if the device has been correctly parameterized. By using the weighted mixture temperature, the external temperature scaling is set to 0% until an external temperature value is received. The measuring and control values start with their current values ( integral component=0 by PI-Controller ). 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 SK10-THC-ALKFx**

Measurement	Temperature Relative Humidity
Calculated Values	Absolute Humidity Dewpoint Temperature Enthalpie
Control	Integrated
Temperature Range	-25 .. +80°C
Resolution	0.02°C
Accuracy	± 0,4°C (5..60°C), else ± 0,8°C
rel. Humidity Range	0 .. 100% r.H
Resolution	0.02% r.H
Accuracy	± 3% r.H (20..80%) @ +25°C, else ± 5% r.H
Operating Voltage	KNX Bus Voltage 21 .. 32VDC
Power Consumption	approx. 240mW ( at 24VDC )
Environment Temperature KNX-Module	Operating: -25 .. +80°C Storage: -25 .. +80°C
Environment Humidity KNX-Module	0 .. 100% r.H Non Condensing
Bus Coupler	Integrated
Auxiliary Supply	Not Required
Startup with the ETS Version 4 or higher	<b>HLK305</b>
Curcuit Points	KNX 2-Pole Clamps ( red / black )
Protection Class	IP54
Housing KNX-Module	Plastic
Dimensions Housing KNX-Module	( 72 x 64 x 44 ) mm
Article Number	ALKF1 : 30531161      with detached sensor head - 2m PVC ALKF2 : 30531162      sensor head directly on the housing

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Condensation Monitor**Imprint**

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**Liability**

The selection of the devices and the determination of the suitability of the devices for a specific purpose are solely the responsibility of the purchaser. No liability or guarantee is assumed for these. The information in the catalogs and data sheets does not represent a guarantee of particular properties, but results from empirical values and measurements. Liability for damage caused by incorrect operation/project planning or malfunctions of the devices is excluded. Rather, the operator/planner must ensure that no further damage can occur as a result of incorrect operation, incorrect configuration and malfunctions.

**Safety regulation**

Caution! Installation and assembly of electrical devices may only be carried out by a qualified electrician.

The buyer/operator of the system must ensure compliance with the relevant safety regulations of the VDE, TÜV and the responsible energy supply companies. No warranty is accepted for defects and damage caused by improper use of the devices or non-observance of the operating instructions.

**Disposal**

The crossed-out wheeled bin symbol on the device or packaging means that the product must not be disposed of with other general waste at the end of its useful life.

**Warranty**

We provide warranty within the scope of the legal provisions.

In the event of a claim, please contact us and send the device, with a description of the error, to our company address below.

**Manufacturer**

The CE mark is a free trade mark, which is aimed exclusively at the authorities and does not include any assurance of properties.



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