



Climate sensor SK10-THC-AFF-(MMF)

SK10-THC-AFF	SK10-THC-AFF-MMF
Article-No.: 30531053	Article-No.: 30531058
	
Surface mounting IP65	Surface mounting IP65

- **SK10-THC-AFF**
The sensor is protected from dust by a poroplast plastic sleeve.
- **SK10-THC-AFF-MMF**
The sensor is protected from direct condensation and dust by a hydrogas metal membrane filter.

Attention !

The sensor must be installed with the sensor nose facing downwards so that any humidity can drip off.

Device description

The KNX sensor SK10-THC-AFF is used to record and control various indoor and outdoor air parameters.

- Air temperature (sensor on housing) also weighted with external temperature
- Relative humidity (sensor on housing)
- Calculated values absolute humidity, dew point temperature and energy content (enthalpy)
- 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 and humidity
- Fan control by humidity limits and external inputs
- Detecting of dew point temperature and alarm / regulation at risk of condensation
- 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

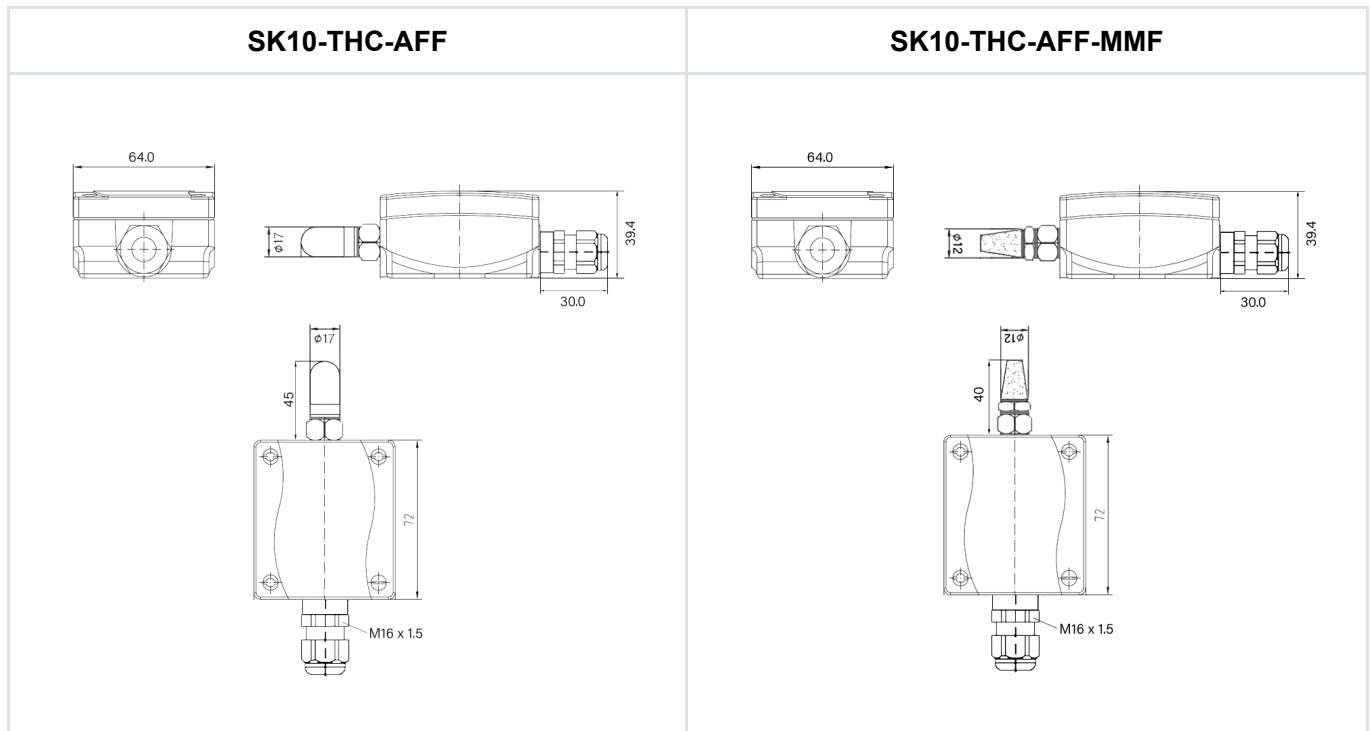
Four logic blocks for the logical link between internal and external signals.

- 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

Technical data

SK10-THC-AFF-(MMF)	
Supply voltage	KNX 21 .. 32V DC
KNX load	10mA
Operating/storage temperature	-25 .. +80°C/-25 .. +80°C
Dimensions	see drawing
Article number	30531053 30531058 (MMF)
ETS-application	HLK305
Protection class	IP65
Measured value temperature	
Measuring range	-25 .. +80°C
Resolution	0,02°C
Accuracy	±0,4°C (5..60°C), else ±0,8°C
Measured value relative humidity	
Measuring range	0 .. 100% r.H
Resolution	0,02%
Accuracy	±3% r.H (20..80%) at +20°C, else ±5%
Calculated values	
Absolute humidity	g/m ³
Dew point temperature	°C
Enthalpy	kJ/kg

Drawing



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. 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 let go of the programming button and the module is ready for a new project planning.

If you let go of the programming button too early, repeat the procedure.

Imprint

Editor: Arcus-EDS GmbH, Rigaer Str. 88, 10247 Berlin

Responsible for the content: Hjalmar Hevers, Sascha Bergmann

Reprint, also in part, only permitted with the approval of Arcus-EDS GmbH.

All information without guarantee, technical changes and price changes reserved.

Liability

The selection of the devices and the determination of the suitability of the devices for a certain intended use are only in the buyer's responsibility. For this there is none liability or warranty assumed. The information in the catalogs and data sheets is not an assurance of special properties, but result from experience and measurements. Liability for damage caused by incorrect operation/project planning or malfunctions of the devices is excluded. Rather, the operator/projector must ensure that incorrect operation, misconceptions and malfunctions cannot cause any further damage.

Safety regulations

Danger! Installation and assembly of electrical devices may only be carried out by an electrical specialist. Compliance with the corresponding safety regulations of the VDE, TÜV and the responsible Energy supply companies must be ensured by the buyer/operator of the system. No guarantee is assumed for defects and damage caused by improper use of the devices or by not observing the operating instructions.

Warranty

We provide warranty within the scope of the legal provisions. In the event of a malfunction, please contact us and send the device with an error description Our company address mentioned below.

Manufacturer



Arcus-EDS GmbH
Rigaer Str. 88
10247 Berlin

Disposal



The symbol of the crossed -out garbage bin on the device or the packaging means that the product at the end of his service life may not be disposed of with other general waste.

Registered trademarks



The CE sign is a free traffic sign that turns exclusively to the authority and none Assurance of properties.



Registered trademark of the Konnex Association