

Room pendulum sensor TH-CO2-RPFF

TH-CO2-RPFF	TH-CO2-RPFF-MMF
	

1. Device description

The room pendulum sensors TH-CO2-RPFF and TH-CO2-RPFF-MMF are sensors for recording the air parameters temperature, moisture and CO2 content in high interiors. The Sensor TH-CO2-RPF-MMF with a metal-sinter-filter can also be used under impending condensation conditions. Both sensors are used together with the KNX coupling modules SK10-THC or SK07-THC.

1.1 Short description :

Measuring and control unit with room pendulum sensor for temperature, moisture and CO₂,
Protection class IP65 (SK10) / IP54 (Fühler)

- Room pendulum sensor for hanging from the ceiling
- Measured values:
 - Air temperature, can be weighted with an external temperature
 - Relative humidity
 - CO₂-Concentration in PPM
- Computed values
 - Absolute humidity
 - Dew point temperature with alarm / regulation in the event of a risk of condensation
 - Energy content (Enthalpy)
- Control functions for heating and cooling applications (can also be combined)
- Setpoint temperatures for Comfort, Standby, Economy and Protection, selectable via KNX HVAC objects
- Storage of minimum- and maximum-temperature
- Heat- and frost-alarm
- Limits for temperature and humidity
- Fan control by humidity limits and external inputs
- 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

For the exact functionality of the coupling module, see description "Manual ETS-App HLK305"

2. Data of pendulum sensors TH-CO2-RPFF(-MMF)

Room pendulum sensor TH-CO2-RPFF	
Operating voltage	3.3 VDC
Power consumption	50mW Ø / 100mW peak
Connection	4-Wires GND / VCC / SCL / SDA [w (white) / y (yellow) / br (brown) / gn (green)]
Ambient temperature	Storage -25 .. +85°C Operation -10 .. +60°C
Ambient moisture	0% .. 100% not condensing
Measurement range temperature	-25 .. +80°C
Resolution	0,02°C
Accuracy	± 0,4°C (5..60°C), otherwise ± 0,8°C
Measurement range moisture	0 .. 100% r.H.
Resolution	0,02% r.H.
Accuracy	± 3% r.H. (20..80%) @ +20°C, otherwise ± 5%
Measurement range CO2	0 .. 40000 ppm
Resolution	1ppm
Accuracy	50ppm +5% of measured value (@ 400..2000ppm)
Response time CO2 (63%)	120s
Protection class	IP54
Installation	Hanging under the ceiling
Housing	Aluminium/Plastic/Brass
Dimensions	(20 x 120) mm (D x L)
Cable length	2m (Standard , Special lengths on request)
Article number	90100064

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3. Device combinations

SK10-THC-CO2-RPFF	SK10-THC-CO2-RPFF-MMF
	

SK10-THC-CO2-RPFF	
Ambient temperature Modul	Storage -25 .. +80°C Operation -25 .. +80°C
Ambient moisture Modul	0% bis 100% not condensing
Buscoupler	integrated
Auxiliary voltage	not necessary
Commissioning with the ETS from version 4	HLK305
Connections	KNX-2-pole Clamp (red / black)
Power consumption	240mW (10mA @ 24V Bus voltage)
Protection class module	IP65
Housing KNX-Module (SK10)	Plastic
Dimensions KNX-Module (SK10)	(72 x 64 x 40) mm
Article number	30532064

SK10-THC-CO2-RPFF-MMF	
Ambient temperature Modul	Storage -25 .. +80°C Operation -25 .. +80°C
Ambient moisture Modul	0% bis 100% not condensing
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Auxiliary voltage	not necessary
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Connections	KNX-2-pole Clamp (red / black)
Power consumption	240mW (10mA @ 24V Bus voltage)
Protection class module	IP65
Housing KNX-Module (SK10)	Plastic
Dimensions KNX-Module (SK10)	(72 x 64 x 40) mm
Article number	30532066

On request, the sensors can also be delivered with a flush-mounted SK07-THC.

4. Imprint

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