» FTB+

Room sensor for humidity and temperature, wall flush mounting

thermokon®
HOME OF SENSOR TECHNOLOGY

Datasheet

Subject to technical alteration
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» APPLICATION

Wall-mounted recessed sensor for inconspicuous humidity and temperature measurement in living rooms, offices and large rooms. Designed for control and monitoring applications.

» TYPES AVAILABLE

Room sensor temperature + humidity – active 2x 0..10 V

FTB+ VV 34.06 L15m
FTB+ VV 66.06 L15m

Room sensor temperature + humidity – active 2x 4..20 mA

FTB+ AA 34.06 L15m
FTB+ AA 66.06 L15m

» SECURITY ADVICE – CAUTION

The installation and assembly of the device should only be performed by authorized personnel.

The product should only be used for the intended application. Unauthorized modifications are prohibited! The product must not be used in relation with any equipment that in case of a failure may threaten, directly or indirectly, human health or life or result in danger to human beings, animals or assets. Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Please comply with

- Local laws, health & safety regulations, technical standards and regulations
- Condition of the device at the time of installation, to ensure safe installation
- This data sheet and installation manual

»NOTES ON DISPOSAL

As a component of a large-scale fixed installation, Thermokon products are intended to be used permanently as part of a building or a structure at a pre-defined and dedicated location, hence the Waste Electrical and Electronic Act (WEEE) is not applicable. However, most of the products may contain valuable materials that should be recycled and not disposed of as domestic waste. Please note the relevant regulations for local disposal.

»APPLICATION NOTICE FOR HUMIDITY SENSORS

Refrain from touching the sensitive humidity sensor/element. Touching the sensitive surface will void warranty.

For standard environmental conditions re-calibration is recommended once a year to maintain the specified accuracy.

When exposed to high ambient temperature and/or high levels of humidity or presence of aggressive gases (i.e. chlorine, ozone, ammonia) the sensor element may be affected and re-calibration may be required sooner than specified. Re-calibration and deterioration of the humidity sensor due to environmental conditions are not subject to the general warranty.

»TECHNICAL DATA

Measuring values	temperature, humidity (humidity output configurable)	
Output voltage	**VV** 2x 0..10 V or 0..5 V, configurable via Jumper, min. load 10 kΩ	
Output ampere	**AA** 2x 4..20 mA, max. load 500 Ω	
Power supply	**VV** 15..24 V = (±10%) or 24 V ~ (±10%) SELV	**AA** 15..24 V = (±10%) SELV
Power consumption	**VV** typ. 0,4 W (24 V =) | 0,8 VA (24 V ~)	**AA** typ. 1 W (24 V =)
Measuring range temp.	**VV | AA** adjustable at the transducer: 0..+200 | +40..+140 | -40..+160 | 0..+100 °F, default setting: 0..+200 °F	
Measuring range humidity	0..100% rH non-condensing	
Measuring range abs. hum.	adjustable at the transducer: 0..50 | 0..80 g/m³, default setting: 0..50 g/m³	
Measuring range enthalpy	0..85 KJ/kg	
Measuring range dew point	adjustable at the transducer: +40..+140 | 0..+200 °F, default setting: +40..+140 °F	
Accuracy temperature	±0,3 K (typ. at 70 °F within default measuring range)	
Accuracy humidity	±2% between 10..90% rH (typ. at 70 °F)	
Enclosure	enclosure USE-M, PC, pure white	
Protection	**enclosure** IP65 according to EN 60529	
Cable entry	Flextherm M20, for wire max. Ø=0.18..0.35 in., removable	
Connection electrical	removable plug-in terminal, max. 14AWG, connection wire between sensor head module and enclosure: PVC 15m (49,2ft.)	
Sensor head	**34.06** stainless steel V2A, wall sleeve Ø 0.5 x length 1.4 in. .	**66.06** stainless steel V2A, wall sleeve Ø 0.5 x length 26.14 in.
Ambient condition	**enclosure** -4..+158 °F, max. 85% rH short term condensation	**sensor head** -40..+248 °F, short term condensation

»PRODUCT TESTING AND CERTIFICATION

CE

Declaration of conformity

The declaration of conformity of the products can be found on our website https://www.thermokon.de/.

»INSTALLATION

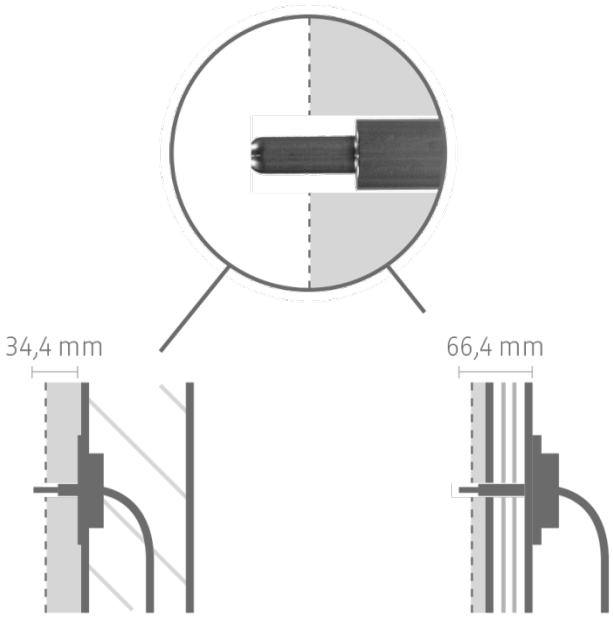
Before plastering, place the sensor sleeve on a trial basis and mark the orientation (top).

To plastering the sensor, replace the sensor sleeve with the plastic dummy. If necessary, treat the plastic dummy with a suitable release agent to prevent it from sticking to the plaster.

After setting the plaster, remove the plastic dummy and attach the sensor sleeve according to the marked orientation.

Before final plastering, treat the sensor sleeve with the release agent to avoid sticking to the plaster.

(the picture shows the situation after completion)

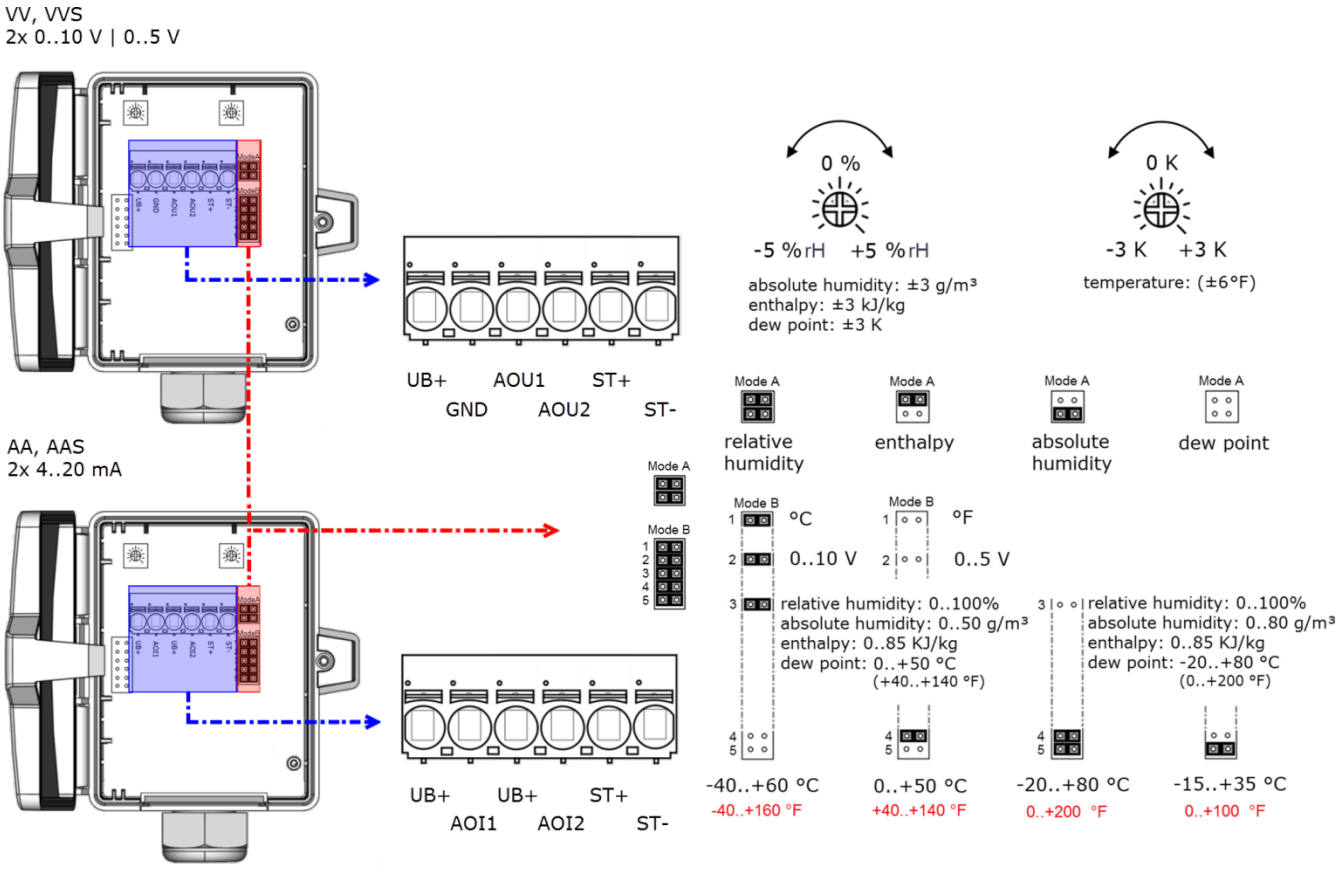


»CONNECTION PLAN AND CONFIGURATION

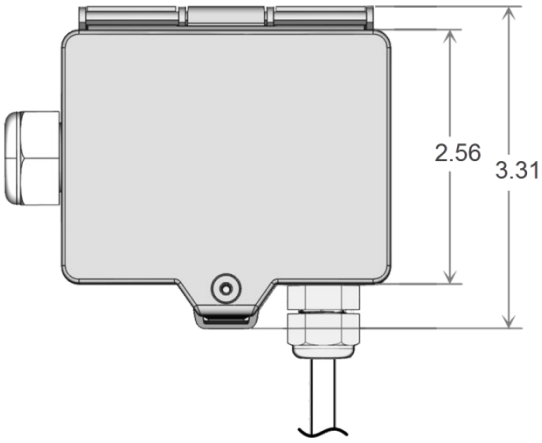
Note *(type FTB+ AA)*
When only using the temperature output, the humidity output must always be connected to mass/GND of the analog input module.
fig. (Measuring range and offset adjustment, default settings: 0 °F..+200 °F | 0 °F)

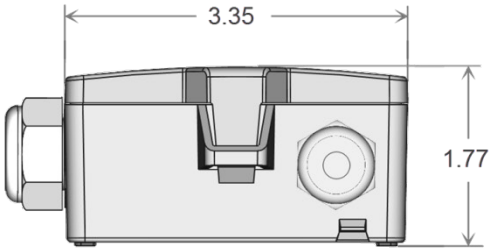
AOI1 | AOU1 → humidity

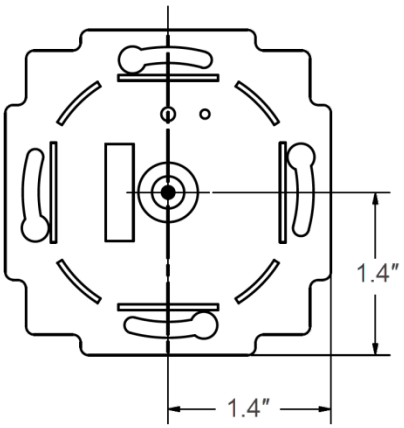
AOI2 | AOU2 → temperature

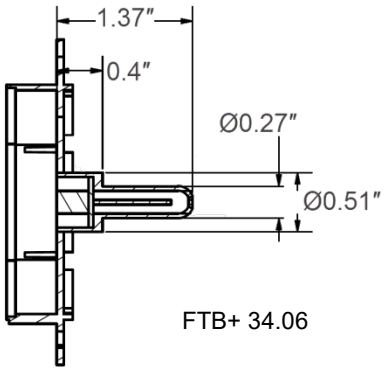


»DIMENSIONS (IN.)

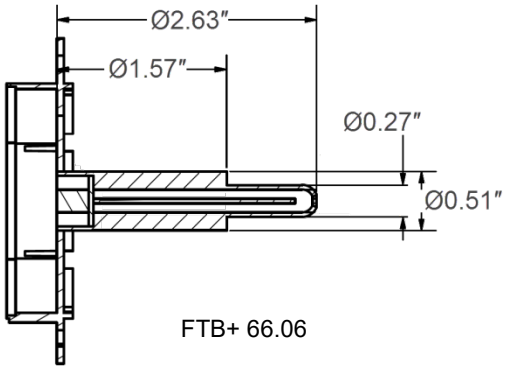








FTB+ 34.06



FTB+ 66.06

»ACCESSORIES (INCLUDED IN DELIVERY)

Mounting base enclosure USE pure white	Item No. 631228
Mounting kit universal	Item No. 698511

• Cover screw + screw cover• 2 Rawlplugs • 2 Screws (countersunk head) • 2 Screws (rounded head)

»ACCESSORIES (OPTIONAL)

Sealing insert M20 USE white, 2x Ø=0.28 in. (for 2 wire; PU 10 pieces)	Item No. 641333