

Datasheet

Subject to technical alteration
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**» APPLICATION**

Duct sensor for measurement of air temperature and other gaseous mediums for HVAC applications (e.g. supply and exhaust ducts).

» TYPES AVAILABLE**Duct/Immersion sensor temperature – passive**

KFK03.xxx.08 Sensor

Duct/Immersion sensor temperature – active TRV 0..10 V | TRA 4..20 mA

KFK03.xxx.08 TRV

KFK03.xxx.08 TRA

* e.g.: PT100, PT1000, NI1000, NI1000TK5000, LM235Z, NTC..., PTC... for other sensors please request.

** mounting length: 100 mm, 150 mm, 200 mm, 250 mm

» SECURITY ADVICE – CAUTION

The installation and assembly of electrical equipment should only be performed by authorized personnel.

The product should only be used for the intended application. Unauthorised 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.

» TECHNICAL DATA

Measuring values	temperature		
Output voltage	TRV 1x 0..10 V , min. load 3 kΩ		
Output ampere	TRA 1x 4..20 mA, max. load 500 Ω		
Output passive	passive PT100 PT100 1/3 DIN PT1000 PT1000 1/3 DIN Ni1000 Ni1000TK5000, NTC10k NTC 10k Precon NTC20k NTC1,8k, LM235Z		
Power supply (type-dependent)	TRV 15..35 V = or 15..26 V ~ SELV	TRA 15..24 V = (±10%) SELV	
Power consumption (type-dependent)	TRV typ. 1 W (24 V =) 1,4 VA (24 V ~)	TRA typ. 0,5 W (24 V =)	
Measuring range temp. (type-dependent)	passive PT / Ni: -50..+160 °C (T160), optional -80..+260 °C (T260), NTC: -50..+150 °C (T150), LM235Z: -50..+120 °C (T120)		
Output signal range temp. *Scaling analogue output (type-dependent)	TRV TRA TRV1 TRA1 -50..+50 °C, TRV2 TRA2 -10..+120 °C, TRV3 TRA3 0..+50 °C, TRV4 TRA4 0..+160 °C, TRA5 TRV5 0..+250 °C		
Operating temperature range * Max. permissible operating temperature	sensor pocket -50..+160 °C optional -80..+260 °C	electronic – TRV TRA -35..+70 °C	electronic – passive -35..+90 °C
Accuracy temperature (type-dependent)	TRV TRA ±0,2 K or ±0,1 % (whatever is greater, typ. at 21 °C)		passive depending on used sensor Sensor, PT100 PT1000: ±0,3 K (typ. bei 0 °C, Kl.B) , Ni1000: ±0,4 K (typ. bei 0 °C), Ni1000TK5000: ±0,4 K (typ. bei 0 °C), NTC10K: ±0,22 K (typ. bei 25 °C)
Sensor	passive 2-wire (default), 3-wire or 4-wire		
Enclosure	shape B, aluminium		
Protection	IP66 according to EN 60529		
Cable entry	M20 for cable with max. Ø=7 mm		
Connection electrical	terminal block, max. 1,5 mm²		
Pocket	stainless steel V4A, Ø=8mm, mounting lengths: 100 150 200 250 mm		
Ambient condition	max. 85% rH short term condensation		

» PRODUCT TESTING AND CERTIFICATION



Declaration of conformity

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

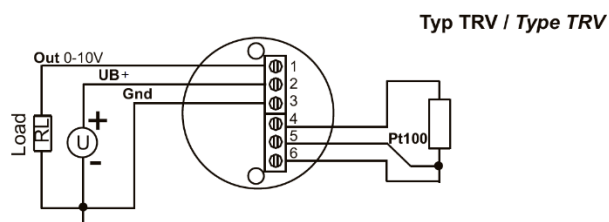
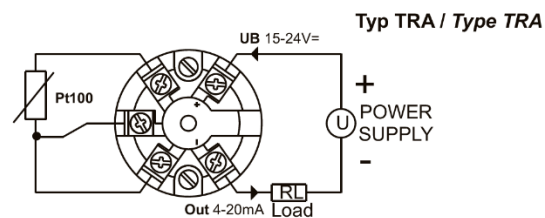
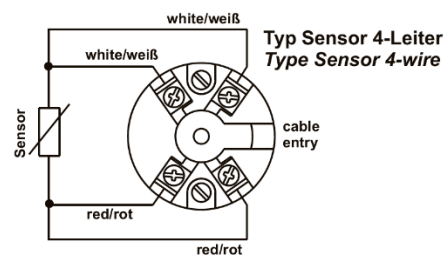
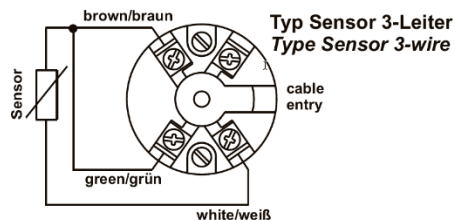
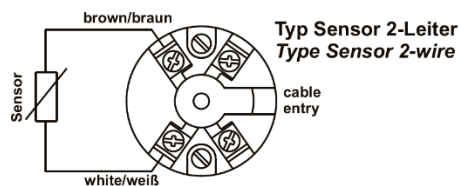
» MOUNTING ADVICES

The sensor can be mounted on the ventilation duct by means of a mounting flange. For risk of condensate permeation in the sensor tube respectively in the immersion pocket the bushing must be installed in a position that occurred condensate can run off.

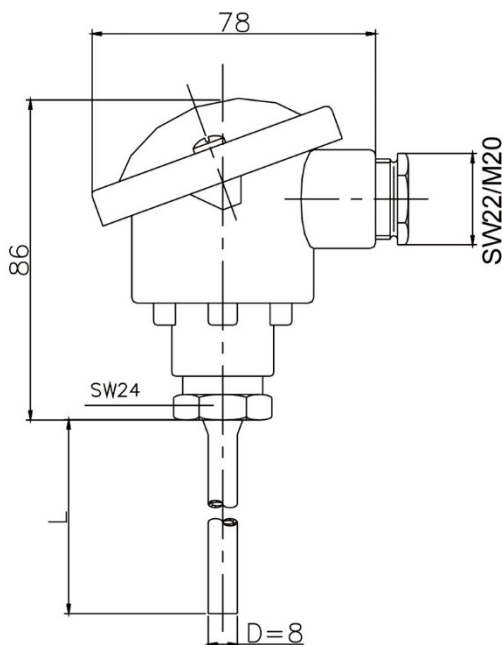
» TERMINAL CONNECTION PLAN

Attention:

With digital sensors such as **AD592**, **SMT160**, **LM235**, **DS1820** the following applies: brown = plus (+), white = minus (-), green=out



» DIMENSIONS (MM)



» ACCESSORIES (OPTIONAL)

Thermowell pockets stainless steel / brass for sensors with pocket $\varnothing=8$ mm

for length	100 mm	150 mm	200 mm	250 mm	350 mm
THVA	584180	584197	584203	594738	675444

VA-thermowell pocket (stainless steel, suitable up to 40 bar) type THVA <xx>.