Flush mounting room temperature sensor

Datasheet

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thermokor

Application

Room operating unit for room/space temperature measurement with fan stage adjustment and manual override. Designed for control and monitoring systems.

Types Available

Room operating unit temperature - without sensor

WRF06 S without sensor <Switch ranges>, <Fan stages> WRF06 <Operating elements> without sensor <Switch ranges>, LED green

Room operating unit temperature – passive

WRF06 <Operating elements> <Sensor> <Switch ranges>, LED green

<Operating elements>: Rotary switch (S), Button+Diode (TD)

<Switch ranges>: see technical data

<Fan stages>: 2,3,4 or 5 Fan stages (FS2, FS3, FS4 or FS5)

<Sensor>: PT100/PT1000/NI1000/NI1000TK5000/LM235Z/NTC.../PTC... other sensors on request

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.

General remarks concerning sensors

Especially with regard to passive sensors in 2-wire conductor versions, the wire resistance of the supply wire has to be considered. If necessary the wire resistance has to be compensated by the follow-up electronics. Due to self-heating, the wire current affects the measurement accuracy, so it should not exceed 1 mA.

When using lengthy connection wires (depending on the cross section used) the measuring result might be falsified due to a voltage drop at the common GND-wire (caused by the voltage current and the line resistance). In this case, 2 GND-wires must be wired to the sensor - one for supply voltage and one for the measuring current.

Sensing devices with a transducer should always be operated in the middle of the measuring range to avoid deviations at the measuring end points. The ambient temperature of the transducer electronics should be kept constant. The transducers must be operated at a constant supply voltage (± 0.2 V). When switching the supply voltage on/off, onsite power surges must be avoided.

Technical Data

Measuring values	temperature
Power supply	1524 V = (±10%) or 24 V ~ (±10%)
Power consumption	typ. 0,9 W (24 V =) 1 VA (24 V ~)
Measuring range temperature	-35+70 °C
Accuracy temperature	typ. ±0,3 K (typ. at 21 °C), depending on used sensor
Switch range Berker	S.1, B.3 aluminum, B.7 glass, Q.1, Q.3, K.1, K.5 aluminum stainless steel
Switch range Busch-Jaeger	Busch-balance® SI, Busch-Duro 2000® SI, Reflex SI, solo®, future® linear, impuls, Busch-axcent®, alpha nea®
Switch range Feller	EDIZIOdue
Switch range Gira	E2, Standard 55, Esprit, Event, F100
Switch range Jung	LS 990, A 500, AS 500, A plus, A creation, CD 500
Switch range Merten	M-Smart, M-Arc, M-Plan, 1-M, Atelier-M, M-Pure, Artec, Artec stainless steel,
	Antique
Switch range Peha	Aura, Aura glass
Rotary switch (S)	for fan stage adjustment (max. 5 stages), 5-stages (auto,0,I,II,III), 2-stages (0,I),
	3-stages (0,1,11), 4-stages (0,1,11,111), double frame has to be used in combination with temperature sensor
Button (T)	for presence detection, switching capacity max, 600 mW
	for status feedback, green (standard), several LEDs possible (e.g. green, vellow
	red)
Protection	IP20 according to EN 60529
Connection electrical	terminal block, max. 1,5 mm ² , pluggable
Ambient condition	-35+70 °C, max. 85% rH non-condensing
Mounting	flush mounted in standard EU box (Ø=55 mm)
Notes	for other sensors please request, for other operating elements please request,
	max. 3 buttons and max. 3 LEDs

Connection Plan



The terminal assignments vary depending on the type of the device. Terminal plan is attached to the device.

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WRF06 TD + Gira E2





