

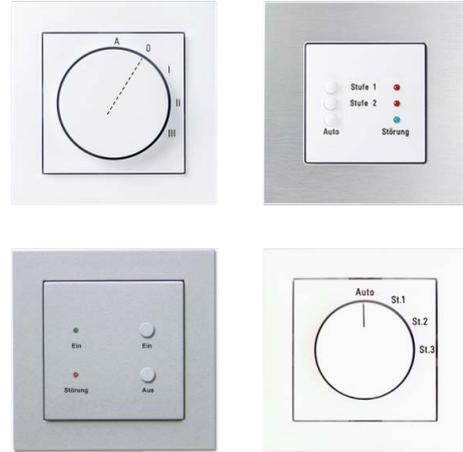
WRF06 x

Flush mounting room temperature sensor

thermokon[®]
HOME OF SENSOR TECHNOLOGY

Datasheet

Subject to technical alteration
Issue date: 9/27/2022 · A120



(Illustration may be similar or different)

» 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 oder 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

» PRODUCT TESTING AND CERTIFICATION



Declaration of conformity

The declaration of conformity of the products are available on our website <https://www.thermokon.de/>.

» 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 ($\pm 0,2$ V). When switching the supply voltage on/off, onsite power surges must be avoided.

» TECHNICAL DATA

Measuring values <i>(type dependent)</i>	temperature
Measuring range temperature <i>(type dependent)</i>	-31..+158 °F
Accuracy temperature <i>(type dependent)</i>	typ. $\pm 0,3$ 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) <i>(optional)</i>	for fan stage adjustment (max. 5 stages), 5-stages (auto,0,I,II,III), 2-stages (0,I), 3-stages (0,I,II), 4-stages (0,I,II,III), double frame has to be used in combination with temperature sensor
Button (T) <i>(optional)</i>	for presence detection, switching capacity max. 600 mW
LED (D) <i>(optional)</i>	for status feedback, green (standard), several LEDs possible (e.g. green, yellow, red), LED voltage 24V = / 24V ~
Protection	IP20 according to EN 60529
Connection electrical	terminal block, max. 15AWG pluggable
Ambient condition	-31..+158 °F, max. 85% rH non-condensing
Mounting	flush mounted in standard EU box ($\varnothing=2.17$ in.)
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.

» DIMENSIONS (IN.)

WRF06 x + Gira E2

