Outdoor temperature sensor



Datasheet

Subject to technical alteration Issue date: 30.01.2017



Application

For measuring temperature in outdoor areas, in cold stores and greenhouses, production plants and warehouses. Designed for locking on control and display systems.

Types Available

Outdoor sensor temperature - passive

AGS54+ <sensor>

<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

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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.

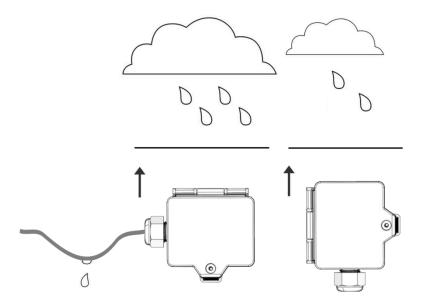
Sensing devices with a transducer should always be operated in the middle of the measuring range to avoid deviations at the measuring end points. The ambient temperature of the transducer electronics should be kept constant. The transducers must be operated at a constant supply voltage $(\pm 0.2 \text{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

Technical Data

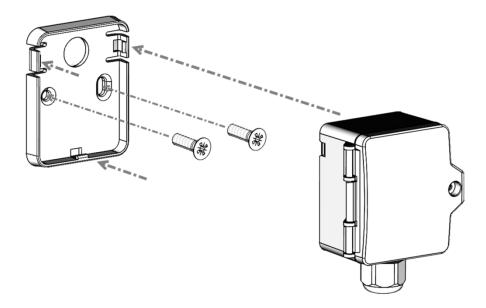
Measuring value	temperature
Output voltage	passive sensor
Measuring range temp	-35+90 °C
Accuracy temperature	typ. ±0,3 K (typ. at 21 C°), depending on used sensor
Enclosure	enclosure USE-S, PC, pure white
Protection	IP65 according to EN 60529
Cable entry	M16 for wire max. Ø=0.31 in., removable
Connection electrical	removable plug-in terminal, max. 2,5 mm ²
Ambient condition	-35+90 °C, max. 85% rH short term condensation
Delivery contents	incl. mounting base enclosure USE pure white
Notes	other sensors on request

Mounting Advices

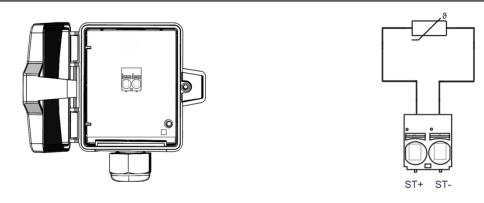
In case of outdoor installation avoid direct rain and sun contact. Probably use sun respectively rain protection. Cable entry from bottom or side. For side cable routing set loop so that precipitation can drain defined. Observe permissible ambient condition.



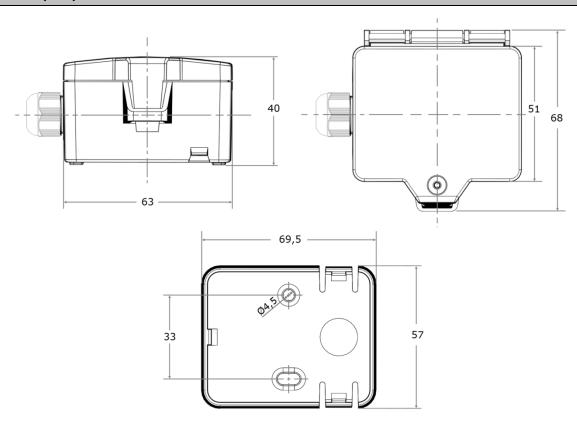
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Connection Plan



Dimensions (mm)



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Accessories (optional)

Mounting clip enclosure USE pure white Mounting base enclosure USE pure white Rawlplugs and screws (2 pcs. each) Sun/rain protection RS150 Item No. 616423 Item No. 616430 Item No. 102209 Item No. 103329

Sealing inserts cable entry (packaging unit 10 pcs.)

Ø	3 mm	5 mm	7 mm	8 mm
Item No.	641036	641012	639248	641340