KNX Sensors Temperature

Product Page





1.1 Product Page

The KNX-Sensor Temperature **SK02-T** with the PT1000 probe is used to measure the air temperature in dry interiors IP20. The integrated KNX bus coupler does not need additional auxiliary supply.

The transducer with the bus coupler is enclosed in a plastic casing which fulfils protection degree IP20.

In the application software, the default controller types (increase / decrease), RTR (relative / absolute) with the settings (PI-continuous / switched) and two-point are available.

Additional functions like frost alarm, limits for temperature readings, minimum / maximum value and a tracking control are included.

The sensor is configured by ETS (KNX Tool Software) and the application program. Controlling functions such as signal threshold and other adjustments are parameterized by the ETS (KNX Tool Software).



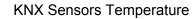
e1

Applications

- · Recording the temperature of indoor areas
- · General monitoring and control of temperatures
- · Monitoring and control of temperatures for heating and cooling purposes and for logging
- · Decentralised control for constant KNX-Valves or electro-thermal valves
- · Storing the maximum and minimum values
- · Room temperature controller with options Comfort / Standby / Night / Frost Protection
- · Direct set point presetting and display of actual values via the KNX bus

PT1000 Sensor: -25 .. +55 °C Measurement Range: Accuracy: ± 0,01 °C Resolution: ± 0,3 °C 25.0 71.0 + Accuracy of the sensors 4.0 Operating Temperature: -25 .. +55 °C -25 .. +55 °C Storage Temperature: Protection Class: IP20 71.0 59.8

Subject to change Page 1







1.2 Technical Data

Technical Data - SK02-T

| Measurement | Temperature |
|--|---|
| Object Typ | 2-Byte-float |
| Temperature Controller HVAC Modi | HVAC with Increase / Decrease Options HVAC with Relative Set Point Adjustment HVAC with Absolute Set Point Adjustment |
| Temperature Controller Operating Modes | Comfort Temperature Standby Temperature Night Temperature Frost Protection Temperature |
| Temperature Controller Controller Output | Steady PI Controller Switched PI Controller (PWM) Two-Position Controller |
| Temperature Controller HVAC-Display | HVAC-Status Byte |
| Limit Alarm (upper / lower) | Temperature |
| Minimum / Maximum Temperature | Saved Minimum / Maximum Actual Temperature |
| Frost Protection Alarm | Falling Below Frost Protection Temperature |
| Tracking | Temperature |
| Adjustment Parameters | Offset Adjustment, Output Inversion |
| Lock and Reset Object | Minimum / Maximum Temperature |
| Send Options | Do not Send Periodic Sending by Adjustments |
| Environment Temperature | Storage: -25 +55°C Operating: -25 +55°C |
| Environment Humidity | 0 95% rH not Condensed |
| Temperature Range | -25 55°C |
| Accuracy | ± 0,3°C |
| Resolution | ± 0,01°C |

arcus-eds | KNX

KNX Sensors Temperature





Technical Data - SK02-T (Fortsetzung)

| Operating Voltage | EIB/KNX Bus Voltage 21 32VDC |
|--------------------------|---|
| Power Consumption | approx. 240mW (at 24VDC) |
| Auxiliary Supply | not Required |
| Bus Coupler | Integrated |
| Start-up with ETS | ARC_TFK.VD2 |
| | Product: Sensor Temperature SK02 |
| Curcuit Points | EIB-2-Pole Clamps (red / black) |
| Protection Class | IP20 |
| Assembly Type Transducer | On-wall mounting, 2 screws (68 mm grid) |
| Casing Transducer | White Plastic |
| Casing Dimensions | 71 x 71 x 25 mm (W x D x H) |
| Article Number | 30102201 |
| | |
| Probe | PT1000 |

arcus-eds | KNX

KNX Sensors Temperature

Product Page

SK02-T with Integrated Temperature Probe



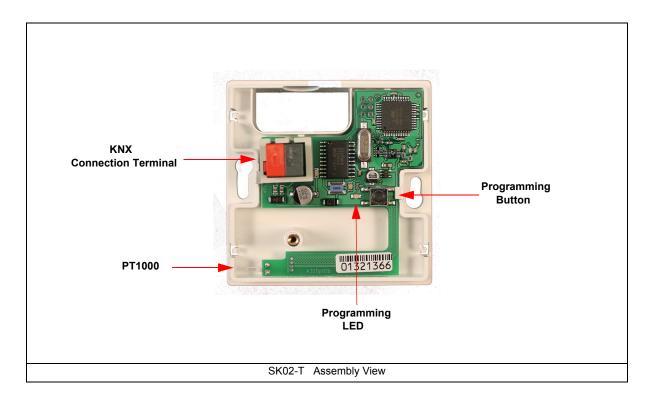
1.3 Startup

The KNX Sensor is set up using the ETS (KNX Tool Software) and the applicable application program.

The sensor is delivered unprogrammed.

All functions are programmed and parameterized with ETS.

Please read the ETS instructions.



1.4 Assembly

The **SK02-T** sensors are for indoor areas.

They fulfill protection class (IP20).

When connecting the PT1000 sensor does not have to be polarity independent.

Lead the KNX bus cable through the hole in the casing before mounting it to a wall or ceiling. Remove the bus clamps from the device and connect the cable to it. Place the bus clamps back onto the device. After programming the device, fix the lid back with its respective screw and push in the screw cap.

Be careful not to damage the electronics during the installation process

In Case of Bus Voltage Recurrence

All changes made using the help key for the KNX/EIB bus are saved if the device has been correctly parameterized. The controller and outputs start with their current values and the ETS parameter settings are saved.

Discharge Program and Reset Sensor

In order to delete the programming (projecting) and to reset the module back to delivery status, it must be switched to zero potential (disconnect the EIB bus coupler).

Press and hold the programming button while reconnecting the EIB bus coupler and wait until the programming LED lights up (approx. 5-10 seconds).

Now you can release the programming button.

The module is ready for renewed projecting.

If you release the programming button too early, repeat the aforementioned procedure.