



Limit-value switch for Temperature GST 2

3 measuring ranges available:
 A = -30° - 0°C / B = 0° - 50°C / C = 50° - 100°C

Temperature sensors ST 1R / ST 1F

SPECIAL FEATURES:

- Potential-free changeover contact
- Electrically isolated sensor input (PELV)
- Adjustable switch-on/off delay
- Display for switch threshold and switch state
- Low power input

GENERAL:

The GST 2 is a universally applicable limit-value switch for temperature monitoring. With 3 available temperature ranges, a large number of applications can be covered. The measurement input provides an electrically isolated extra-low voltage (PELV) for NTC-type temperature sensors. Adjustable switch-on/off delays and the potential-free changeover contact provide rapid and simple adaptation to a very wide variety of measuring conditions and applications.

APPLICATION:

Monitoring or controlling heating and cooling systems, plant protection, room thermostats etc.

OPERATION:

When the temperature falls below the set minimum limit, the "hold" LED lights up. After the preset on-delay "t_{on}" has elapsed, the relay is activated. When the temperature rises above the limit again, the "hold" LED goes out and the relay contact returns to its rest position. The switch status at the changeover contact is displayed by LEDs 12 and 14.

ORDERING INFORMATION:

Part No.	Type	Description
gst2a9	GST 2A	Limit value switch temp. -30°C - 0°C
gst2b9	GST 2B	Limit value switch temp. 0°C - 50°C
gst2c9	GST 2C	Limit value switch temp. 50°C - 100°C
st1r00	ST 1R	Temperature sensor pipe mounted type
st1f00	ST 1F	Temperature sensor flat mounted type

TECHNICAL DATA GST 2:

Operating voltage	230V 50/60Hz 10%
Power input	approx. 0.7W
Measuring range	Type A: -30°C 0°C Type B: 0°C 50°C Type C: 50°C 100°C
Switching hysteresis	approx. 1°C
Switch-on delay	adjustable 1-30 seconds
Switch-off delay	adjustable 1-30 seconds
Voltage level at sensor input	10V DC PELV (short-circuit resistant)
Relay output	1 changeover, 250V~ 10A potential free
Contact load capacity	See data sheet "Relay contacts"
Ambient temperature	-10°C to +45°C
Interference immunity	compliant IEC 0801-4 level 4
Equipment protection	compliant IEC 0801-5 level 3
Creepage / clearance	compliant VDE 0110 Gr. C/250V
Insulated housing	Flameproof to VDE 0304 Part 3, level FV 0
Connections	Socket terminals with captive screws M3.5
Installation position	Freely selectable
Fixing	Clip fastening on 35 mm standard rail DIN EN 50022
External dimensions	18x88(45)x58mm
Installation depth	55 mm
Weight	approx. 80g
Colour conforming to RAL	Grey 7035 / green 6029

TECHNICAL DATA ST 1R / ST 1F:

Version ST 1R	Pipe-mounted sensor
Version ST 1F	Flat-mounted sensor
Sensor type	NTC (R25=47k 5%)
Line length	1.5m (extendable to 50m)
Dimensions	approx. 53x13mm