

ST64-01.01

Temperature indicator

Order number 900208.004

Old Id.Nr.: 292193



Wiring diagram



Product description

The temperature indication ST64-01.01 was developed for applications in the cooling field. Its 3 digit display permits the indication of temperatures between -60... 400°C. The indicator works with 24V AC or DC and has flat plugs for the connection of supply voltage and sensor. Any temperature derivations can be adjusted by help of the included software.

Sensor: Pt100

Range: -60...400°C

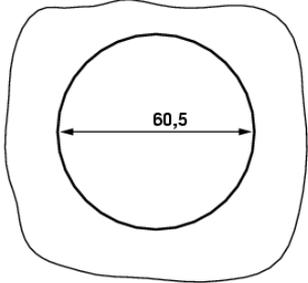
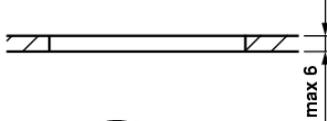
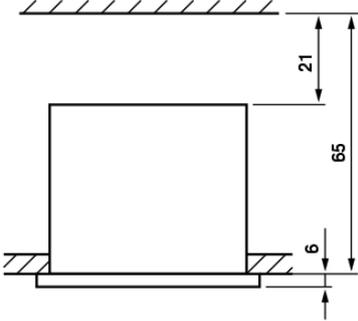
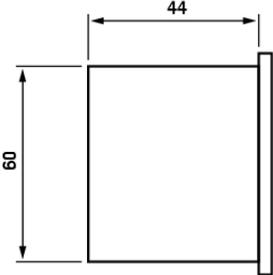
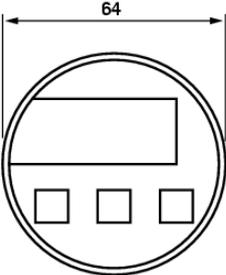
Front size: 64mm round

Panel cutout: 60,5mm round

Connector: flat plug

Power supply: 24 V~/=

ST 64 ...



SOFTWARE Temperature indicator

First control level

Setting of control parameters

The temperature indicator ST64 has three hidden keys which are located below the display. Simultaneously pressing the left and central key for at least 4 seconds opens a parameter list containing control parameters.

With the left and central key the list can be scrolled in both directions.

Pressing the right key will give you the value of the respective parameter. Pressing also the left or central key at the same time the value can be adjusted.

Return to the initial position takes place automatically, if no key is pressed for 60 seconds

Parameter	Function description	Adjustment range	Standard setting	Custom setting
P0	Indicate actual value			
P6	Actual value correction	-20...+20 K	0.0 K	

Parameter description:

P0: Actual value

Indicates the actual measuring value.

P6: Actual value correction

This parameter allows the correction of actual value deviations caused for example by sensor tolerances or extremely long sensor lines. The regulation measure value is increased or decreased by the here adjusted value.

Second control level

Setting of control parameters

Access to the second control level is granted when selecting the last P-parameter on the first control level. Continue to press the left key for approximately 10 seconds until "PA" appears. Continue to press the left key and additionally press the central key for about 4 seconds and the first A-parameter of the second control level is indicated.

With the left and central key you can scroll the list in both directions. Pressing the right key will give you the value of the respective parameter. By pressing the left or central key at the same time the value can be adjusted.

Return to the initial position takes place automatically, if no key is pressed for 60 seconds, or by simultaneously pressing the left and central key for approx. 4 seconds.

Parameter	Function description	Adjustment range	Standard setting	Custom setting
A8	Display mode (all parameter indications are presented in 0.1°K)	0: integrals 1: decimals in 0.1°C	1	
A19	Parameter lock	0: no lock 1: A-parameter locked 2: A- and P-parameter locked	2	
A60	Sensor type	11: Pt100 – 2wire 21: PTC 22: Pt1000 – 2wire	Dependent on hardware	

Parameter	Function description	Adjustment range	Standard setting	Custom setting
A70	Software filter	1: inactive average value with: 1...128: 1..128 measuring values	8	
A80	Temperature scale	0: Fahrenheit 1: Celsius	1	
Pro	Program version	-	-	

Parameter description:

A8: Display mode

The value can be indicated in integrals or with decimals in 0.1°K. In general, all parameter indications are presented in 0,1°K.

A19: Parameter lock

This parameter enables locking of each parameter level. If third level is locked, only parameter A19 may be changed.

A60: Sensor type

This parameter permits selection of the sensor type, if the needed hardware prerequisites are available.

A70: Software filter

With several measuring values, it is possible to obtain an average value. This parameter can determine by how many measured values an average value is to be formed. If a sensor with a very fast reaction to external influences is used, an average value ensures a calm signal process.

A80: Temperature scale

Indication can be switched between Fahrenheit and Celsius. At conversion, the parameters and setpoints maintain their numerical value and adjustment range. (Example: A controller with the desired value of 0°C is switched to Fahrenheit. The new desired value is then interpreted as 0°F, which corresponds to a temperature of -18°C).

Status messages

Message	Cause	Error elimination
F1L	Sensor error, short-circuit at sensor F1	Check sensor
F1H	Sensor error, open-circuit at sensor F1	Check sensor
EP, display flashes	Data loss at parameter memory	If error cannot be eliminated by switching on/off, the controller must be repaired

Technical data of ST64-01.01

Measuring input

F1: Resistance thermometer Pt100-2L
Measuring range: -60...400°C
Measuring accuracy: +/- 1K or +/- 0.5% of measuring range

Display

One 3-digit LED Display, height 13 mm, colour red

Power supply

16...36V DC, ca. 1.5VA
12...24V AC, ca. 1.5VA

Connectors

Pins 1 and 2: flat plug 6.3 x 0.8 mm
Pins 5 and 6: flat plug 2.8 x 0.5 mm

Ambient conditions:

Storage temperature: -20...+70°C
Operating temperature: 0...+55°C
Relative humidity: max. 75% without dew

Weight

ca. 200g

Enclosure

Front IP65

Installation data

Front size: round, 64 mm diameter
Panel cut-out: round, 60.5 mm diameter
Installation depth: ca. 65 mm with connector
Mounting: by fixing strap