

BA-T1 Digital temperature indicator for L&S T1 sensors

Single point digital temperature indicator for L&S T1 sensors. Suitable for mounting on front of control panels.



BA-T1

Technical data

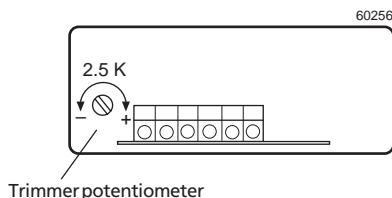
Supply voltage	Low voltage (SELV, PELV)
Nominal voltage	AC 24 V, 50/60 Hz
– Max. voltage tolerance	+10/–15 %
Power consumption	≤ 2.5 VA
Primary fuse	None
Measuring input:	
T1 sensor input	Input resistance ≥100 MΩ
T1 supply voltage	10 kΩ from 15 V _{ref} .
Calibration of measured value	± 2.5 K (trimmer potentiometer)
Display	LCD, 3½ -digit, with 1 character space for engineering unit [°C]
– Height of digits	10 mm
Measuring range	– 50 ... 150 °C
Resolution	0.1 °C
Accuracy	± 0.6 °C
Measuring cycle	0.3 s
Error indication	Open circuit: ' I '
	Short circuit: ' – I '
Frame colour (front)	NCS 5005 R20B (light grey)
Maintenance	None required
Connection terminals	Screw terminals for max. 2.5 mm ²
Connecting cable	See installation notes
Weight (including packaging)	0.16 kg
Dimensions (W x H x D)	72 x 36 x 90 mm
General ambient conditions	
Conditions of use	For indoor use, inside control panel
Temperature range:	
– Operation	0 ... 50 °C
– Storage/transport	– 20 ... 60 °C
Ambient humidity:	
– Operation	5 ... 85 %rh, without condensation
– Storage/transport	Max. 95 %rh, without condensation
Mounting	Flush-mounted on panel fronts
Orientation	Any
Safety	
Product safety	EN60730-1
– Overvoltage category	II
– Contamination level	2
Electrical safety	SELV-E (PELV to IEC364-4-41)
Conformity	Meets the requirements for CE marking

Principle of operation

The temperature, measured by an external L&S T1 temperature sensor is displayed digitally. The supply voltage and input signal for the indicator are electrically isolated by a built-in isolating transformer.

The digital indicator is compatible with controllers which use the L&S T1 measuring bridge. The BA-T1 indicator may also be used as a (stand-alone) thermometer.

The temperature display can be calibrated with a trimmer potentiometer.



Trimmer potentiometer

Construction

Single-part plastic housing, incorporating the front cover, with electronic printed circuit board and LCD digital display.

Mounting / Installation

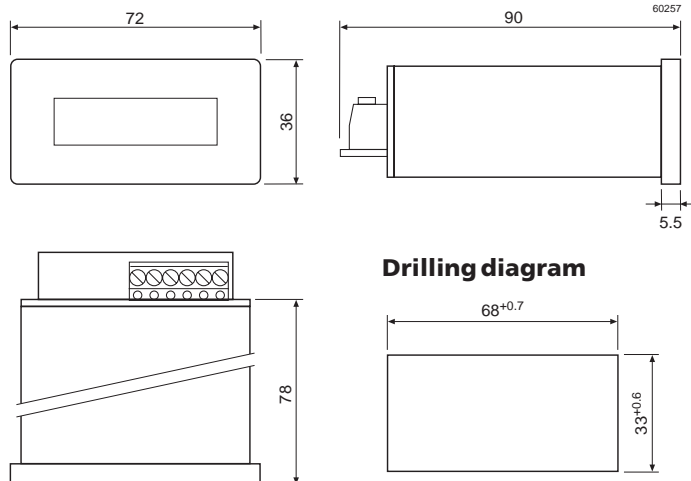
The BA-T1 single point digital indicator is suitable for flush-mounting on the front of control panels and electrical enclosures. It is inserted into the required cut-out from the front, and secured from the rear with the two side clips on the indicator housing.



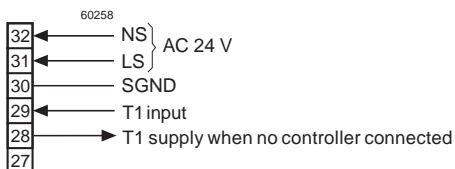
Disposal

Separate and recycle the printed circuit board, housing and (LCD) display.

Dimensions [mm]

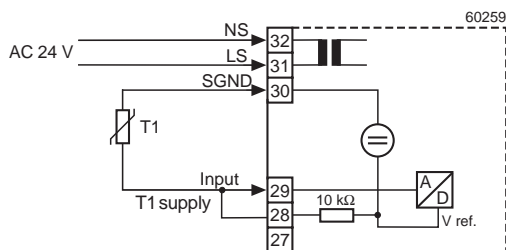


Terminal layout



Connection diagram

T1 sensor without controller



T1 sensor with controller

