

Digital temperature indicator**BA-N1000**

for L&S Ni1000 sensors

**Single point digital temperature indicator**

- suitable for front-mounting on control panels
- with 1 input for L&S Ni1000 sensor elements
- with measuring range of – 50 ...150 °C
- with liquid crystal display (LCD), 10 mm high, 3½ digits
- for nominal voltage AC 24 V, 50/60 Hz

Use

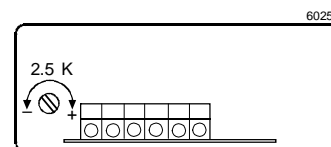
The BA-N1000 digital temperature indicator is suitable for frontal mounting in control panels, control panel doors or covers. It is normally used to indicate temperature but operation as a stand-alone thermometer is also possible.

Functions

The temperature, measured by an external L&S Ni1000 temperature sensor, is displayed digitally. The supply voltage and input signal for the indicator are electrically isolated by a built-in isolating transformer.

The temperature display can be calibrated with a trimmer potentiometer.

Trimmer potentiometer

**Ordering**

When placing an order, please specify the quantity, product description and type code.

Example:

1 Digital temperature indicator type BA-N1000

Compatibility

The digital temperature indicator is compatible with all controllers of the ranges DESIGO RX (controller QAX20), CLASSIC (Ni1000 units), DESIGO 30 (Ni1000 units) and INTEGRAL RS (Ni1000 modules).

The indicator may also be used as a (stand-alone) thermometer.

Mechanical design

The BA-N1000 consists of a single-part plastic housing incorporating front cover and electronic printed circuit board with LCD digital display.

Mounting and Installation

The BA-N1000 single point digital indicator is suitable for flush-mounting on the front of control panels and electrical enclosures. It is inserted into required cut-out from the front, and secured from the rear with the two side clips on the indicator housing.



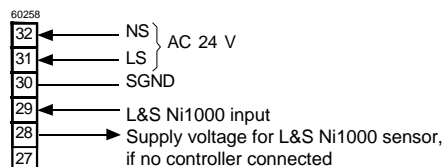
Disposal

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

Technical data

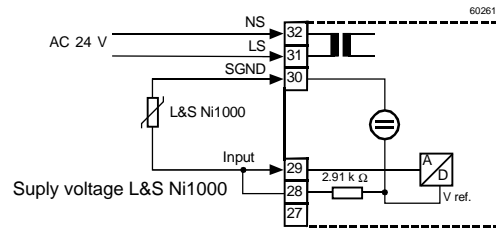
| | |
|-------------------------------|--|
| Supply voltage | Low voltage (SELV, PELV) |
| Nominal voltage | AC 24 V, 50/60 Hz |
| – Max. voltage tolerance | +10/–15 % |
| Power consumption | ≤ 2.5 VA |
| Primary fuse | None |
| Measuring input: | |
| L&S Ni1000 sensor input | Input resistance ≥ 100 Mohms |
| L&S Ni1000 sensor supply | 2.91 kohms from 10 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 ' |
| Connection terminals | Screw terminals for max. 2.5 mm ² |
| Connecting cable | See installation notes |
| Weight (incl. packaging) | 0.16 kg |
| Dimensions (W x H x D) | 72 x 36 x 90 mm |
| Frame colour (front) | NCS 5005 R20B (light grey) |
| Maintenance | None required |
| General ambient conditions | |
| Conditions of use | For indoor use; inside control panels |
| 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 |

Connection terminals

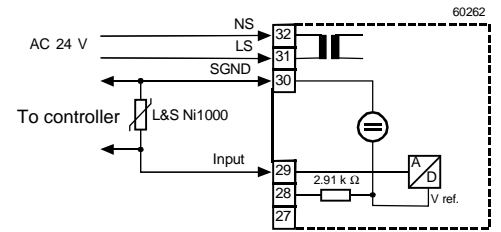


Connection diagrams

L&S Ni1000 sensor without controller



L&S Ni1000 sensor with controller



Dimensions

All dimensions in mm

