

## SBM31 Input Module

### Application

The SBM31 is an input module on the switch cabinet bus with 16 analog inputs for temperature sensors KP250, PT100, Ni1000 (TK5000).

A characteristic curve is determined separately for each analog input in the parameterization of the DDC controller DDC3000/DDC4000.



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Änderungen vorbehalten - Contents subject to change - Sous réserve de modifications - Reservado el derecho a modificación - Wijzigingen voorbehouden - Con riserva di modifichie - Innehåll som skall ändras - Změny vyhrazeny - Zmiany zastrzeżone - Возможны изменения - A változtatások jogát fenntartjuk - 保留未经通知而改动的权力

## Important Information Regarding Product Safety

### Safety Instructions

This data sheet contains information on installing and commissioning the product "SBM31". Each person who carries out work on this product must have read and understood this data sheet. If you have any questions that are not resolved by this data sheet, you can obtain further information from the supplier or manufacturer.

If the product is not used in accordance with this data sheet, the protection provided will be impaired.

Applicable regulations must be observed when installing and using the device. Within the EU, these include regulations regarding occupational safety and accident prevention as well as those from the VDE (Association for Electrical, Electronic & Information Technologies). If the device is used in other countries, it is the responsibility of the system installer or operator to comply with local regulations.

Mounting, installation and commissioning work on the devices may only be carried out by qualified technicians. Qualified technicians are persons who are familiar with the described product and who can assess given tasks and recognize possible dangers due to technical training, knowledge and experience as well as knowledge of the appropriate regulations.

### Legend



#### WARNING

Indicates a hazard of medium risk which can result in death or severe bodily injury if it is not avoided.



#### CAUTION

Indicates a hazard of low risk which can result in minor or medium bodily injury if it is not avoided.



#### NOTICE

Indicates a hazard of medium risk which can result in material damage or malfunctions if it is not avoided.



#### NOTE

Indicates additional information that can simplify the work with the product for you.

### Notes on Disposal

For disposal, the product is considered waste from electrical and electronic equipment (electronic waste) and must not be disposed of as household waste. Special treatment for specific components may be legally binding or ecologically sensible. The local and currently applicable legislation must be observed.

Item

SBM31 Input module on switch cabinet bus

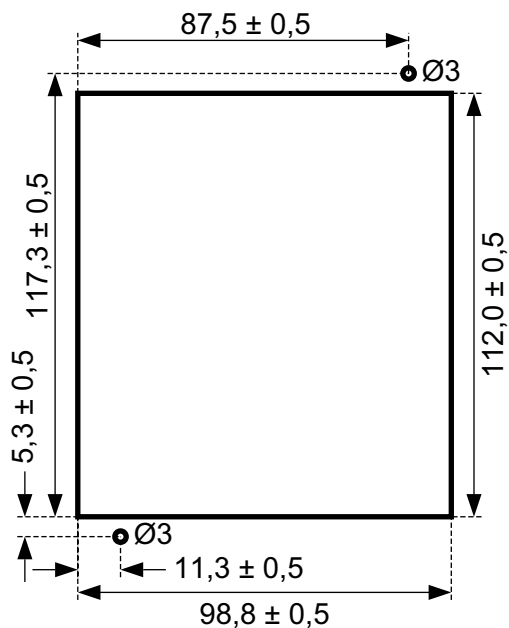
Technical Data

|                        |  |                                   |
|------------------------|--|-----------------------------------|
| Bus connection         | Switch cabinet bus   | 16 modules; 200 m; 40 kBd; CAN    |
| Inputs and outputs     | 16 AI  | See table "Sensor Types", page 3. |
| Nominal voltage        | For SBM  | AC 24 V 10%; 50 to 60 Hz; 8.7 VA  |
| Fuse                   | 630 mA   |                                   |
| Address switch         | 00 to 16 by means of 2 rotary switches behind front panel  |                                   |
| Displays               | LED bus, LED error   |                                   |
| Switches / pushbuttons | None   |                                   |
| Degree of protection   | IP40   |                                   |
| Ambient temperature    | 0 to 45 °C   |                                   |
| Ambient humidity       | During operation: 20 to 80% r.h., non-condensing<br>Out of operation: 5 to 90% r.h., non-condensing  |                                   |
| Housing                | 19" plastic short enclosure, double width with a plug-in base<br>W x H x D; 101 mm x 132 mm x 137 mm |                                   |
| Front cut-out          | 98.8 mm x 112.0 mm   |                                   |
| Weight                 | 0.4 kg   |                                   |
| Marking                | CE   |                                   |

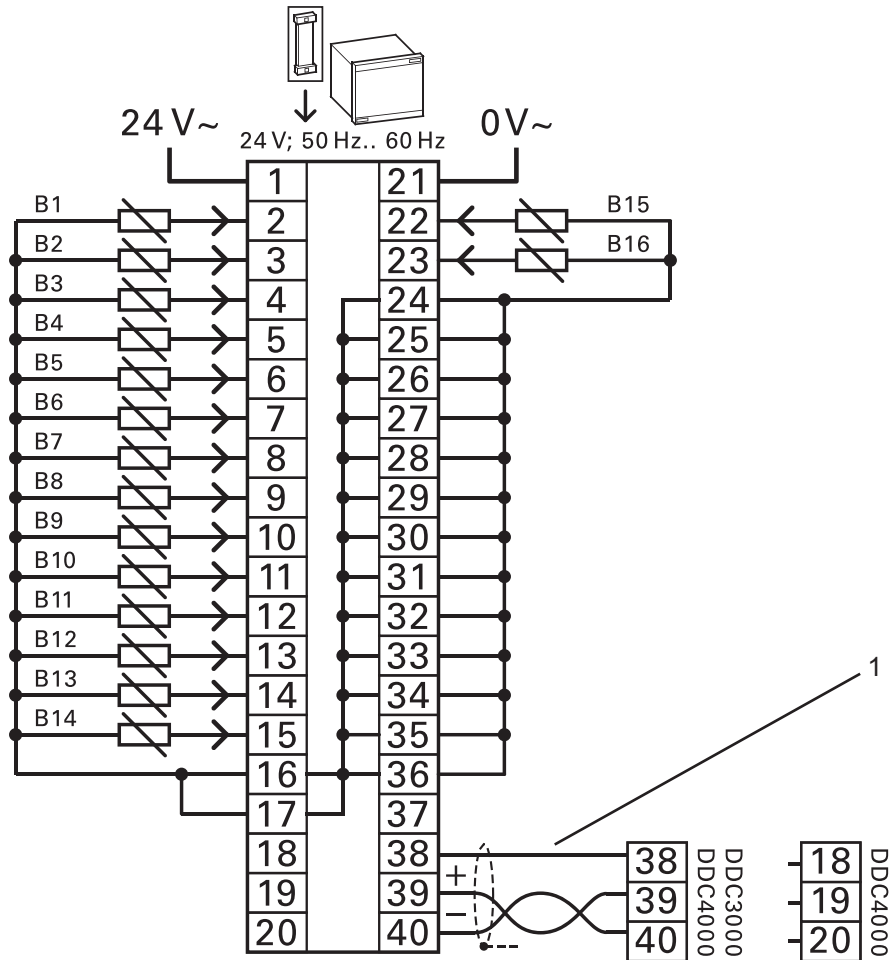
Sensor Types

| Sensor Type     | Value Range  |
|-----------------|--------------|
| KP250           | -50 to 150°C |
| PT100           | -40 to 150°C |
| Ni1000 (TK5000) | -50 to 150°C |

Installation Dimensions



**Connection**



1 Switch cabinet bus

**Switch cabinet bus**

When connecting the switch cabinet bus, use a cable of at least type JY(St)Y 2x2x0.8 Lg: two x two leads stranded into a pair, plastic insulation and an electrostatic shield with a lead diameter of at least 0.8 mm. Use a stranded pair of leads for the data lines (+ and -) and another free lead for the ground (0).

At the end of the switch cabinet bus (farthest point from the DDC controller), install a terminating resistor of about 180 ohms between both data lines (+ and -). The terminating resistor is included with the DDC controller.

The maximum cable length for the switch cabinet bus is 200 m.