



Power Supply Unit

PS00B02KNX (320mA)

Product and Applications Description

The power supply unit PS00B02KNX provides the system power necessary for the instabus EIB. The connection to the bus line is established by clicking the device onto the DIN-rail (with a data rail installed) and/or via the bus connection block located on the front side.

The integrated choke prevents the data telegrams from short-circuiting on the bus line. When the built-in reset switch is operated (operation > 20s), the bus devices are returned to their initial state.

For each bus line, at least one power supply unit PS00B02KNX is needed. Up to two power supply units may be attached to a single bus line.

A second unit is not required unless the supply voltage at a bus device is less than 21 V. The cable length between the two power supply units must be at least 200 m.

When more than 30 bus devices are installed in short bus cable distance (e.g. 10 m), e.g. in distribution boards, the power supply unit PS00B02KNX should be arranged near these bus devices. The distance between power supply unit PS00B02KNX and any of its bus devices must not exceed 350 m.

The power supply unit PS00B02KNX has a voltage and current regulation and is therefore short-circuit proof. Short power failures can be bridged with a backup interval of approximately 200 ms.

To ensure an uninterrupted power supply a separate circuit with safety separation should be used for the power supply unit PS00B02KNX's power supply line.

The power supply unit PS00B02KNX can supply DC 30 V power from an additional pair of terminals (yellow-white).

Application Programs

Requires no application programs.

Technical Specifications

Input voltage

- rated voltage: AC 100.240 V, 50...60Hz

Rated power intake

approx. 24 VA

Output voltage

- rated voltage: DC 29 V
- safety extra low voltage (SELV)
- permissible range: DC 28 ... 31 V

Output current

- rated current : 320 mA PS00B02KNX
- short-circuit current: PS00B02KNX limited to 1,0 A

Backup interval

on input voltage failure: approx. 200 ms at rated current

Connections

- mains connection, screwless plug-in terminals: strip insulation for 9 ... 10 mm
- permissible conductor types/cross sections:
 - 0,5 ... 3,3 mm² (AWG 12) single core
 - 0,5 ... 2,5 mm² plain flexible conductor
 - 0,5 ... 3,3 mm² (AWG 12) stranded conductor
 - 0,5 ... 3,3 mm² (AWG 12) flexible conductor with terminal pin, crimped on gas tight
- bus line:
 - pressure contacts on data rail,
 - screwless extra low voltage terminal (red.black)
 - Ø 0,6 ... 0,8 mm
- output voltage (no choke) :
 - screwless extra low voltage terminal (yellow-white)
 - Ø 0,6 ... 0,8 mm

Physical specifications

- dimensions: DIN-rail mounted device, width: 4 SU (1 SU = 18 mm)
- weight: approx. 240 g

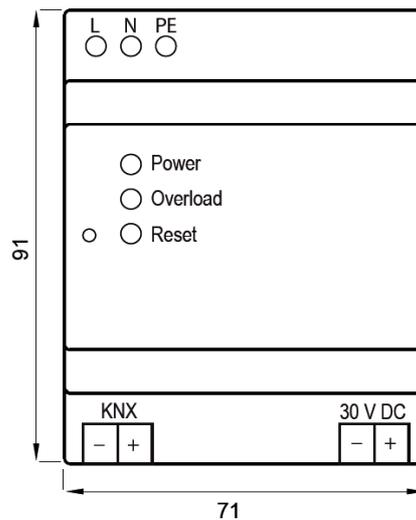
Electrical safety

- protection (according to EN 60529): IP 20

Environmental specifications

- ambient temperature operating: - 5 ... + 45 °C
- storage temperature: - 25 ... + 70 °C
- relative humidity (non-condensing): 5 % to 93 %

Location and Function of the Display and Operator Elements



Installation Instructions

- The device may be used for permanent interior installations in dry locations within distribution boards or small casings with DIN rail EN 60715-TH35-7.5.



WARNING

- The device may be built into distribution boards (230/400V) together only with appropriate VDE-devices.
- The device must be mounted and commissioned by an authorized electrician.
- Free DIN rail areas with stuck-in data rails must be covered with covers.
- A safety disconnection of the device must be possible.
- The prevailing safety rules must be heeded.
- The device must not be opened.
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.

Mounting and Wiring

General description

The device can be installed to system distribution boards, surface or flush mounted, or to any DIN-rail.

General Notes

- Any faulty devices should be returned to the local Eelectron office.
- If you have further questions about the product, please contact our Technical Support.