Power supply with IP interface
Ref.-no.: 20320 1S IPS R

(GB)

Operating instructions

1 Safety instructions

Electrical equipment may only be fitted and connected by electrically skilled persons.

Serious injuries, fire or property damage possible. Please read and follow manual fully.

Danger of electric shock. During installation and cable routing, comply with the regulations and standards which apply for SELV circuits.

These instructions are an integral part of the product and must remain with the end customer.

2 Device components

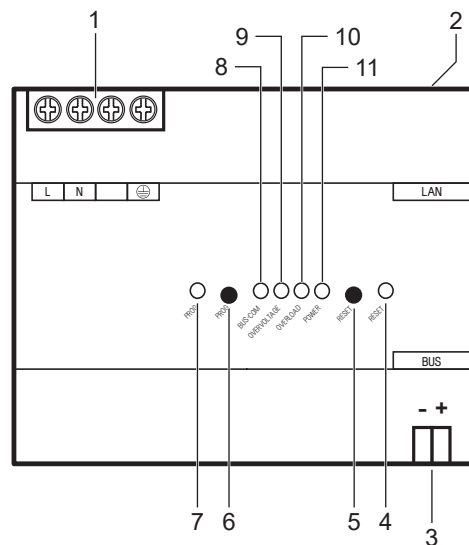

Fig. 1: Device components

(1) Mains connection
(2) LAN connection
(3) KNX connection
(4) RESET LED
(5) RESET button
(6) PROG button
(7) PROG LED
(8) BUS-COM LED
(9) OVERVOLTAGE LED
(10) OVERLOAD LED
(11) POWER LED

3 Function

System information

The device can be updated. Firmware can be easily updated.

The device is KNX Data Secure capable. KNX Data Secure offers protection against manipulation in building automation and can be configured in the ETS project. Detailed specialist knowledge is required. A device certificate, which is attached to the device, is required for safe commissioning. During mounting, the certificate must be removed from the device and stored securely.

Planning, installation and commissioning of the device are carried out with the aid of the ETS, version 5.7 and above.

Intended use

- Supplying KNX devices with bus voltage
- Connection between KNX devices and PC or other data processing devices via IP
- Operation as data interface
- Mounting on DIN rail according to EN 60715 in distribution boxes

Product characteristics

- Output with integrated choke for supplying KNX bus lines
- Reset of KNX lines via reset button or communication object
- Short-circuit proof
- Overvoltage proof
- No-load protection
- Support of KNX Data Secure from ETS version 5.7 upwards
- Support of KNX IP Secure from ETS version 5.7 upwards
- LED display for KNX communication, Ethernet communication and programming mode
- Configuration via ETS
- SNTP server
- Max. 8 connections to IP terminal devices, e.g. for simultaneous visualisation and configuration
- Electrical isolation between KNX and IP network

4 Information for electrically skilled persons

Installation and electrical connection

⚠️ **DANGER**
Electrical shock on contact with live parts in the installation environment.
Electrical shocks can be fatal.
Before working on the device, disconnect the power and cover live parts in the area!

Mounting

Observe ambient temperature. Ensure sufficient cooling.
- Mount device on DIN rail.

Connection

Requirements:
- Ethernet connection with 10/100 Mbit
- KNX/EIB bus connection
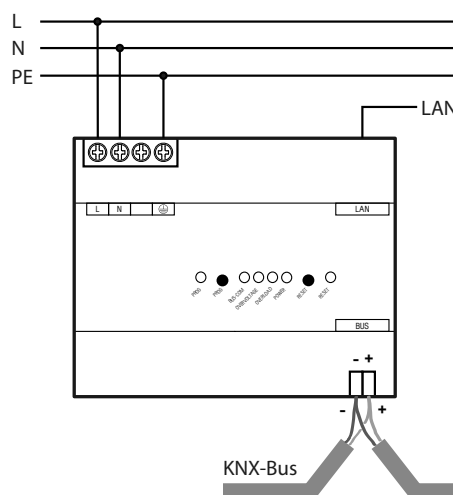- Power supply via a suitable circuit breaker

Fig. 2: Connection

- Connect protective conductor and mains voltage.
- Connect LAN and KNX.

ℹ️ The bus load must not exceed the output current.

ℹ️ Do not connect any other products to the bus output. The bus communication could be affected by this.

5 Commissioning

Switching on

After connecting, the device is switched on automatically.

Boot procedure

The automatic boot procedure starts after switching on. The six LEDs flash on the front of the device as a running light during the boot procedure.

The duration of the boot procedure is prolonged if the IP address is assigned to the device via DHCP. DHCP is specified by the factory settings. The green POWER LED flashes during the assignment of the IP address.

At the end of the booting procedure, the green POWER LED lights up.
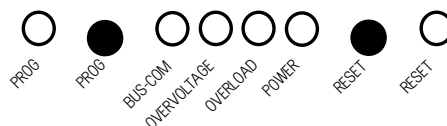
6 Operation

Fig. 3: Operation

LED displays

There are six LEDs on the front of the device. The LEDs indicate the following device statuses during operation:
- PROG LED lights up/flashes red:
  Programming mode is activated.
- BUS-COM LED lights up/flashes yellow:
  Lights up: Voltage on the device bus is normal.
  Flashes: Device bus is active.
- OVERVOLTAGE LED lights up yellow:
  Voltage on the device bus is too high.
- OVERVOLTAGE LED lights up red:
  Overload on the device bus
- POWER LED lights up/flashes green:
  Lights up: Device is ready for operation.
  Flashes: Overload or excessive voltage
- RESET LED lights up red:
  Device bus is reset.

Programming mode

Program interface:
- Press PROG button.
    PROG LED lights up red.

Program additional functions:
- Press the PROG button again.
    PROG LED flashes red.

Terminate programming mode:
- Press the PROG button again.

Diagnostic messages

Acknowledge diagnostic messages:
- Press RESET button briefly.

Reset

Reset device bus for 20 seconds:
- Press RESET button for 2 ... 4 seconds.
    RESET LED lights up red.
    Power supply on the device bus is interrupted and the device bus is short-circuited.
    Power is switched on again.

7 Configuration

The device is configured via parameters in the ETS product database.

You can find detailed information about the configuration or parameterization of the device in the product documentation. The product documentation is available for downloading on our website.

KNX IP Secure

Requirements:
- Safe commissioning activated
- FDSK entered/scanned or device certificate added

Configuration of KNX IP Secure:
- Activate secure tunnelling.
- Define a password for each tunnel (max. 8 tunnels).
- Define a password for commissioning and authentication code.

ⓘ Document all passwords and store them securely.

8 Technical data

Rated voltage	AC 110 ... 240 V (± 10 %)
Mains frequency	50/60 Hz
Power loss (max. load of all outputs)	max. 1.4 W
Efficiency	approx. 88 %
Rated voltage	DC 230 V (± 10 %)
Rated output	12 W
KNX	
KNX medium	TP 256
Bus output voltage	DC 28 ... 31 V SELV
Output current	320 mA
Short-circuit current	max. 1 A
Parallel operation with identical power supply	no
KNX connection	Connection terminal
IP communication	Ethernet 10/100 BaseT (10/100 Mbit/s)
IP connection	1 x RJ45
Ambient temperature	−5 ... +45 °C
Storage/transport temperature	−25 ... +75 °C
Relative humidity	max. 93 % (no moisture condensation)
Installation width	108 mm (6 rail units)
Connection mode:	Screw terminals
single wire	1 ... 4 mm²
stranded without ferrule	1 ... 4 mm²
stranded with ferrule	1 ... 2.5 mm²

9 Warranty

The warranty follows about the specialty store in between the legal framework as provided for by law.