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Choke

Order-No. 0581 00



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1 Product definition

1.1 Product catalogue

Product name: Choke

Use: System device

Design: Rail-mounted device

Order-No. 0581 00

1.2 Function

The KNX choke is a system component. It decouples a KNX line from the respective KNX power supply and thus prevents the short-circuit of the data telegrams by the power supply unit. The choke additionally forms the line terminator required for function-oriented signal transmission.

If an unchoked voltage output of a KNX power supply is used, the KNX choke can be used to supply another KNX line.

2 Installation, electrical connection and operation

2.1 Safety instructions

Electrical equipment may only be installed and fitted by electrically skilled persons. The applicable accident prevention regulations must be observed.

Failure to observe the instructions may cause damage to the device and result in fire and other hazards.

Hazard due to electric shock on all parts of the bus installation. During assembly with data rail, cover free areas of the data rail with cover strips.

The device may not be opened or operated outside the technical specifications.

2.2 Device components

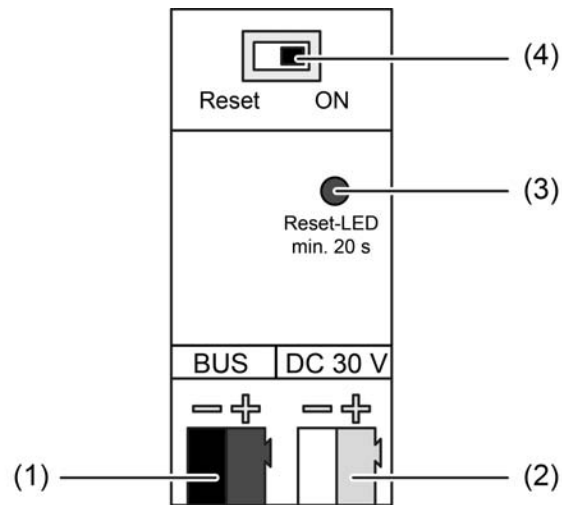


Figure 1: Device components

- (1) Bus connection
- (2) Connection DC 30 V
- (3) Reset LED (red)
On: Bus line is short-circuited, bus reset.
- (4) Reset switch for bus line
Position ON: Bus line in operation
Position Reset: Bus line is short-circuited, bus reset.

i A bus reset should take at least 20 seconds.

2.3 Fitting and electrical connection



DANGER!

Electrical shock when live parts are touched.

Electrical shocks can be fatal.

Before working on the device, disconnect the power supply and cover up live parts in the working environment.

Fitting and connecting device with data rail

If a data rail is used, bus line and power supply DC 30 V can be supplied to the device via data rail contacts.

The connection of additional cables to the device via terminals is optional if the bus line and power supply are already connected to the data rail via additional data rail connectors. In this case, the terminals of the device can be used as additional data rail connectors to connect an outgoing bus cable, for example.

If no data rail connectors are used, bus line and power supply DC 30 V must be connected to the device via terminals. The data rail will then be supplied via the device.

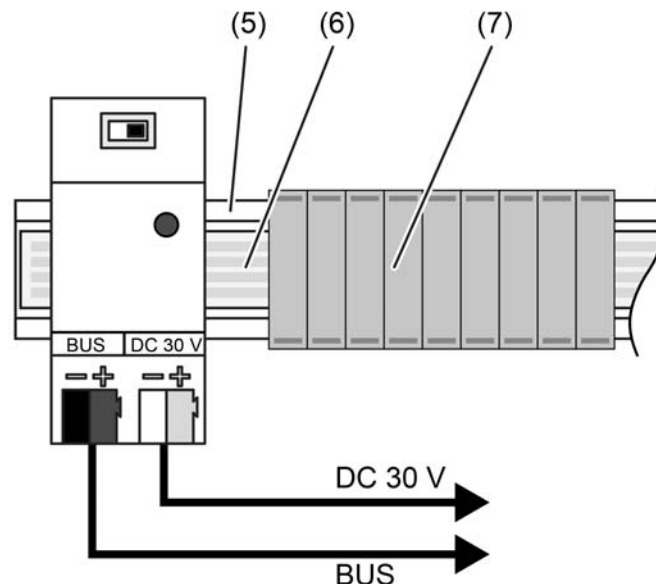


Figure 2: Device connection with data rail

Data rail (6) is glued into mounting rail (5).

- Snap device onto DIN rail.
- Cover free areas of the data rail with cover strips (7).

Optional, if additional data rail connectors are available:

- Connect power supply to the terminal (2) (Figure 1).
- Connect bus line to terminal (1).

Fitting and connecting device without data rail

The device can be used without data rail. Bus line and power supply DC 30 V must be connected to the device via terminals.

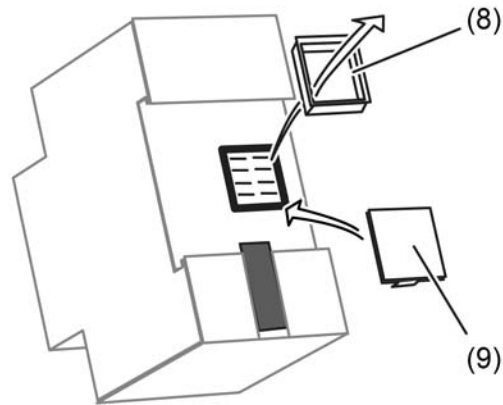


Figure 3: Rear view of device

- Remove the guide (8) of the data rail contacts. To do this, insert a small screwdriver laterally between the housing and guide and raise the guide.
- Attach the enclosed insulating cap (9) onto the data rail contacts and lock into place by pressing.
- Snap device onto DIN rail.
- Connect power supply to the terminal (2) (Figure 1).
- Connect bus line to terminal (1).

2.4 Commissioning

After properly fitting, the device is ready for operation. The device has no physical address and no application program either. Consequently, commissioning by the ETS is not necessary.

- i A KNX choke can generally be added to an ETS project in order to create parts lists or to test projects successfully, for example. A product entry is available in the manufacturer's catalogue (without application program) for the KNX choke whereby the device is integrated into a line or area and thus the ETS project can be completed.

3 Technical data

General

Mark of approval	KNX/EIB
Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-25 ... +70 °C
Relative humidity	5 ... 93 % (No moisture condensation)
Fitting width	36 mm / 2 modules
Weight	approx. 100 g

Connection KNX "Bus"

KNX medium	TP 1
Bus output voltage	DC 28 ... 31 V SELV
Output current	640 mA (all outputs)
Connection, Bus	Connection terminal

Connection "DC 30 V"

Rated voltage	DC 29 ... 32 V SELV
Connection of power supply	Connection terminal

4 Scope of functions

- Decoupling of bus line and power supply.
- Operation with or without KNX data rail possible.
- Contact to the data rail via contact spring system.
- Terminals on the panel of the device for bus terminal and power supply.
- Reset switch for activation of the bus line.
- Indicator LED for reset state.

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