

Binary input 6-gang
Art. No. : 2116REG

Operating instructions

1 Safety instructions



Electrical devices may only be mounted and connected by electrically skilled persons.

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

Danger of electric shock. When connecting SELV/PELV systems, ensure safe isolation from other voltages.

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

2 Device components

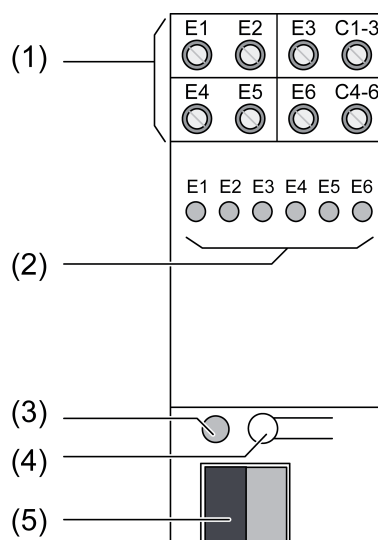


Figure 1

(1) Connection for inputs

E1...E6: Signal inputs

C1-3: Common reference potential for inputs **E1...E3**

C4-6: Common reference potential for inputs **E4...E6**

(2) Status LED inputs, yellow
On: voltage for signal level '1' present.
Off: voltage for signal level '0' present.

(3) Programming LED

(4) Programming button

(5) KNX connection

3 Function

System information

This device is a product of the KNX system and complies with the KNX directives. Detailed technical knowledge obtained in KNX training courses is a prerequisite to proper understanding.

The function of this device depends upon the software. Detailed information on loadable software and attainable functionality as well as the software itself can be obtained from the manufacturer's product database. Planning, installation and commissioning of the device are carried out with the aid of KNX-certified software. The latest versions of product database and the technical descriptions are available on our website.

Intended use

- Polling of conventional switching or push-button contacts, window contacts etc. in KNX systems, for reporting of states, meter levels, operation of loads, etc.
- Mounting on DIN rail according to EN 60715 in distribution boxes

Product characteristics

- Status LED for each input
- Detection of voltage levels and changes on the input
- Transmitting the input state to the bus
- Transmission behaviour freely settable
- Functions: switching, dimming, blinds up/down, brightness values, temperatures, calling up and saving scenes
- Pulse and switch counter function
- Inputs can be disabled separately
- AC and DC voltages can be connected

4 Information for electrically skilled persons



DANGER!

Electrical shock when live parts are touched.

Electrical shocks can be fatal.

Before working on the device, disconnect all the corresponding miniature circuit breakers. Cover up live parts in the working environment.

4.1 Mounting and electrical connection

Fitting the device

Observe the temperature range. Ensure adequate cooling.

- Mount device on DIN rail.

Connect mains-powered circuits

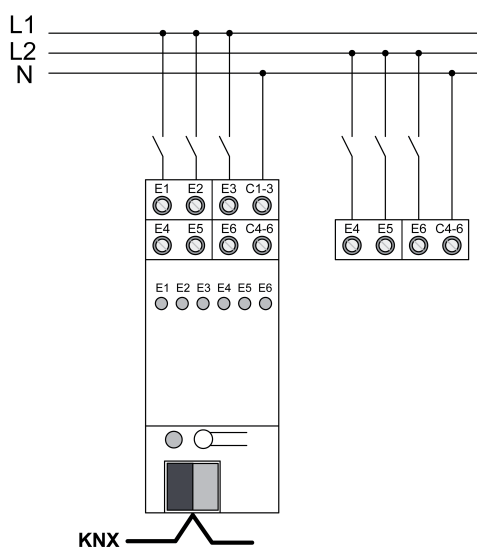


Figure 2: Connecting mains-powered circuits

With mains-powered circuits, connect the shared reference potential **N** to the terminals **C1-3** and **C4-6**.

Connect all the inputs of an input group **E1...E3** or **E4...E6** to the same external conductor.

For DC operation: observe polarity of the input voltage.

- Connecting mains-powered circuits according to the connection example (figure 2).

Connecting SELV/PELV circuits

- i** Low-voltage circuits at the inputs must possess the same protection measure. Do not connect SELV/PELV and FELV systems together.
- Connect SELV/PELV circuits as shown in the connection example (figure 3). Comply with the polarity.
- i** Label SELV/PELV circuits.

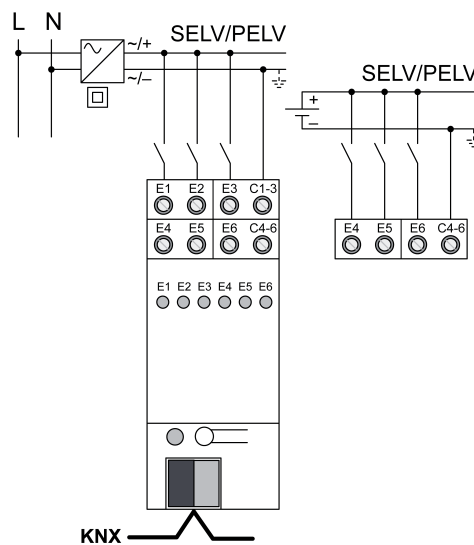


Figure 3: Connecting SELV/PELV circuits

Connecting FELV circuits

- Connecting FELV circuits in the same way as mains-powered circuits (figure 2).
- i** If mains-powered power sources are connected at the same time, then installation rules according to FELV apply for the connected low-voltage circuits - irrespective of the safety of the current source (figure 4).

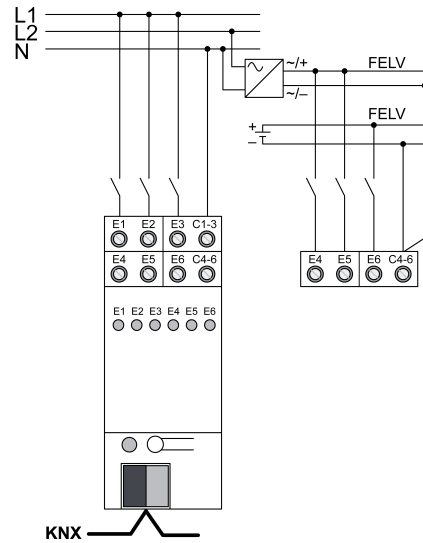


Figure 4: Joint connection of mains and low-voltage circuits

Installing the cover

It is necessary to install a cover to protect the bus connection against hazardous voltages in the connection area.

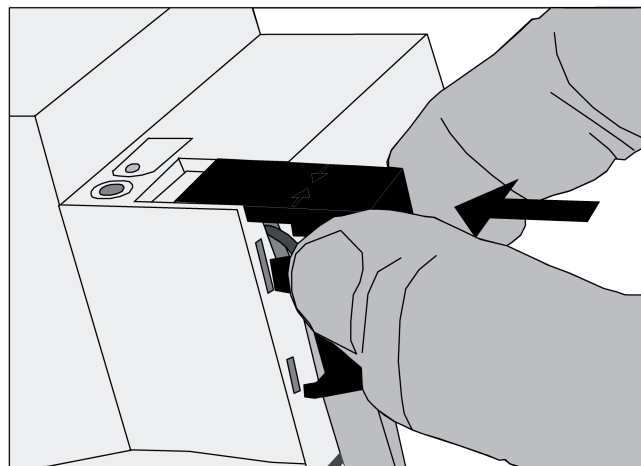


Figure 5: Installing the cover

- Route the bus line towards the rear.
- Install cover on top of the bus terminal so that it snaps into place (figure 5).

Removing the cover

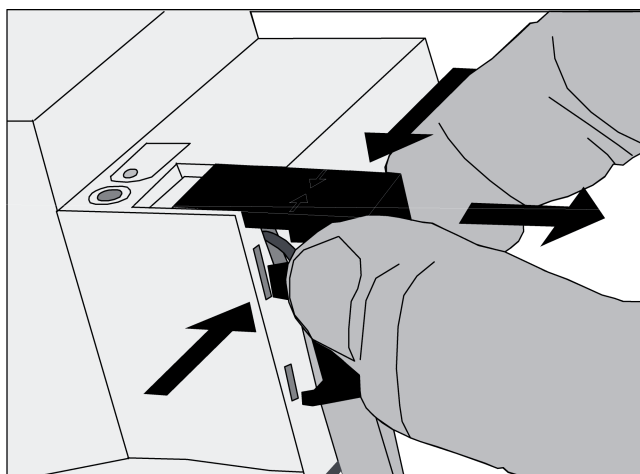


Figure 6: Removing the cover

- Press the cover to the side and pull it off (figure 6).

4.2 Commissioning

Load the address and the application software

- Switch on the bus voltage.
- Assign physical address.
- Load the application software into the device.
- Note the physical address on the device label.

5 Appendix

5.1 Technical data

KNX	
KNX medium	TP
Commissioning mode	S-mode
Rated voltage KNX	DC 21 ... 32 V SELV
Current consumption KNX	max. 7.5 mA
Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-25 ... +75 °C
Relative humidity	max. 93 % (No moisture condensation)
Inputs	
Rated voltage	AC/DC 10 ... 230 V
Signal level "0" signal	AC/DC 0 ... 2 V
Signal level "1" signal	AC/DC 7 ... 265 V
Input current at nominal voltage	approx. 0.7 mA
Rated frequency AC signal	30 ... 60 Hz
Signal length, pulse counter	min. 100 ms
Cable length	max. 100 m
Number of contacts per input	
NO contacts	max. 50
NC contacts	max. 50
Housing	
Fitting width	36 mm / 2 modules
Power loss	max. 1 W
Connection	

single stranded	0.5 ... 4 mm ²
Finely stranded without conductor sleeve	0.5 ... 4 mm ²
Finely stranded with conductor sleeve	0.5 ... 2.5 mm ²

5.2 Accessories

Connection cover

Art. No. 2050 K

5.3 Warranty

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

ALBRECHT JUNG GMBH & CO. KG

Volmestraße 1
58579 Schalksmühle
GERMANY

Telefon: +49 2355 806-0
Telefax: +49 2355 806-204
kundencenter@jung.de
www.jung.de