

Binary input 4-gang, 230 V

Art. No. 2114 REG

Binary input 8-gang, 230 V

Art. No. 2118 REG

Binary input 6-gang, 24 V

Art. No. 2126 REG

Operating instructions

1 Safety instructions

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

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

Danger of electric shock. Do not connect FELV and SELV/PELV systems together. 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

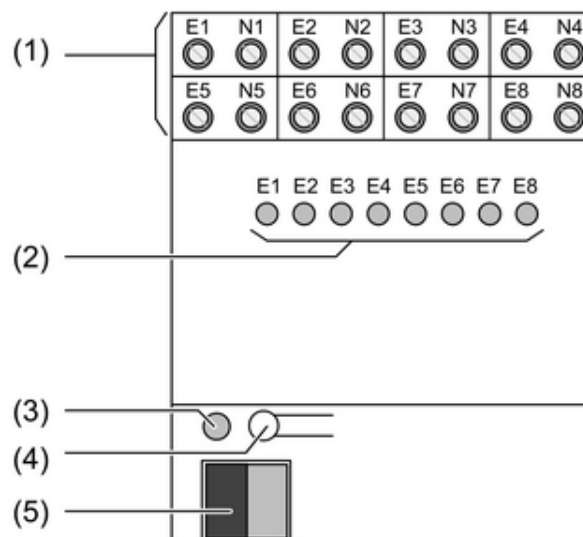


Figure 1: Binary input 8gang 230 V

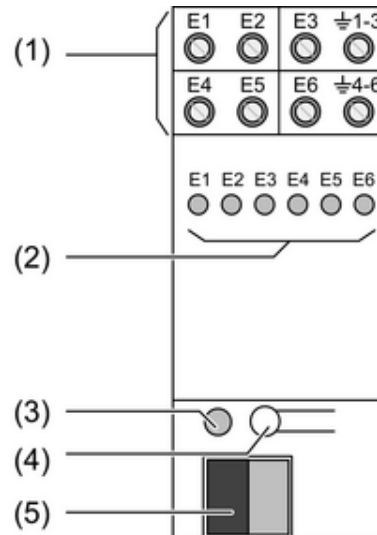


Figure 2: Binary input 6gang 24 V

- (1) Connection for inputs
- (2) Status LED inputs, red
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 in KNX systems, for reporting of states, 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 light moods
- Inputs 1 and 2: pulse and switch counter function
- Inputs can be disabled separately

Characteristics of 230 V binary inputs

- Different external conductors **L1**, **L2**, **L3** can be connected
- Separate reference potentials **N** for each input

Characteristics of 24 V binary input

- AC and DC voltages can be connected
- Separate reference potentials for inputs **E1...E3** and **E4...E6**

4 Information for electrically skilled persons

4.1 Fitting and electrical connection



DANGER!

Electrical shock when live parts are touched.

Electrical shocks can be fatal.

Before carrying out work on the device or load, disengage all the corresponding circuit breakers. Cover up live parts in the working environment.

Fitting the device

Observe the temperature range. Ensure adequate cooling.

- Mount device on DIN rail.

Connect 230 V binary inputs

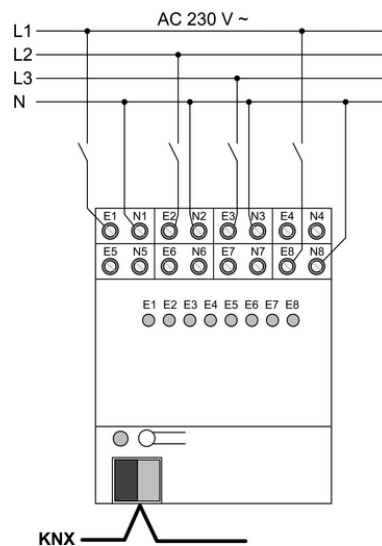


Figure 3: Connection example for 230 V binary inputs

- Connect device as shown in the connection example (figure 3). Connect reference potential **N** separately for each input.

Connect 24 V binary input

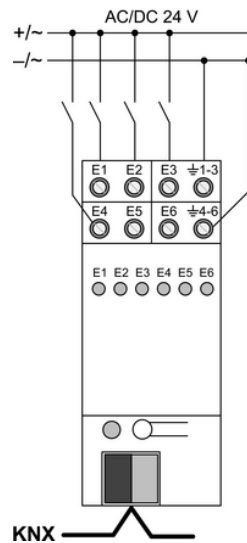


Figure 4: Connection example for 24 V binary input

For DC operation: observe polarity of the input voltage.

- Connect device as shown in the connection example (figure 4). Common reference potential for inputs **E1...E3** and **E4...E6**.

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

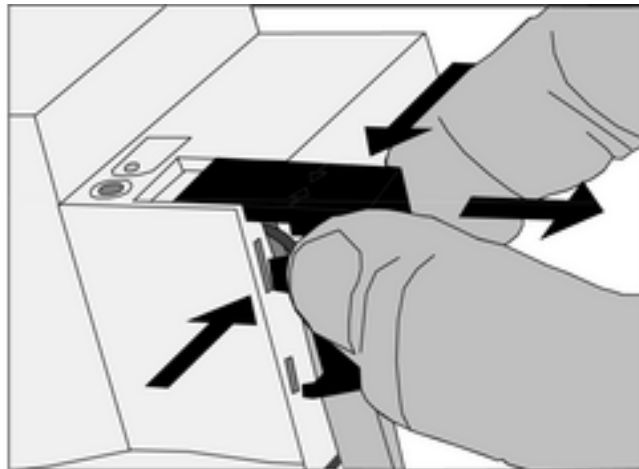


Figure 6: Removing the cover

- 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

Binary input 4-gang, 230 V, Art. No. 2114 REG

Mark of approval	VDE
KNX	
KNX medium	TP 1
Commissioning mode	S-mode
Rated voltage KNX	DC 21 ... 32 V SELV
Power consumption KNX	max. 150 mW
Connection type for bus	Connection terminal
Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-25 ... +70 °C
Inputs	
Rated voltage	AC 110 ... 230 V ~
Signal level "0" signal	AC 0 ... 70 V ~
Signal level "1" signal	AC 90 ... 253 V ~
Mains frequency	50 / 60 Hz
Input current at nominal voltage	approx. 7 mA
Signal duration	min. 200 ms
Signal delay	
rising edge	approx. 2 ms
falling edge	approx. 40 ms
Housing	
Fitting width	36 mm / 2 modules
Power loss	max. 1.7 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
Cable length	max. 100 m

Binary input 8-gang, 230 V, Art. No. 2118 REG

Mark of approval	VDE
KNX	
KNX medium	TP 1
Commissioning mode	S-mode
Rated voltage KNX	DC 21 ... 32 V SELV
Power consumption KNX	max. 240 mW
Connection type for bus	Connection terminal
Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-25 ... +70 °C
Inputs	
Rated voltage	AC 110 ... 230 V ~
Signal level "0" signal	AC 0 ... 70 V ~
Signal level "1" signal	AC 90 ... 253 V ~
Mains frequency	50 / 60 Hz
Input current at nominal voltage	approx. 7 mA
Signal duration	min. 200 ms
Signal delay	
rising edge	approx. 2 ms
falling edge	approx. 40 ms
Housing	
Fitting width	72 mm / 4 modules
Power loss	max. 3.4 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
Cable length	max. 100 m

Binary input 6-gang, 24 V, Art. No. 2126 REG

KNX	
KNX medium	TP 1
Commissioning mode	S-mode
Rated voltage KNX	DC 21 ... 32 V SELV
Power consumption KNX	max. 225 mW
Connection type for bus	Connection terminal
Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-25 ... +70 °C
Inputs	
Rated voltage	AC/DC 24 V
Signal level "0" signal	AC/DC -42 ... +1.8 V
Signal level "1" signal	AC/DC 8 ... 42 V
Input current at nominal voltage	approx. 4 mA
Signal duration	min. 200 ms
Signal delay	
rising edge	approx. 2 ms
falling edge	approx. 40 ms
Housing	
Fitting width	36 mm / 2 modules
Power loss	max. 2 W
Connection	
single stranded	0.2 ... 4 mm ²
finely stranded without conductor sleeve	0.34 ... 4 mm ²
finely stranded with conductor sleeve	0.14 ... 2.5 mm ²

Cable length

max. 100 m

5.2 Accessories

Connection cover

Art. No. 2050 K

5.3 Warranty

We reserve the right to make technical and formal changes to the product in the interest of technical progress.

We provide a warranty as provided for by law.

Please send the device with a description of the defect to our central customer service office.

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