

### Binary input, 6-gang 10-230 V AC/DC

Order No.: 2126 00



### **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

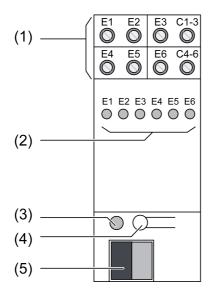


Figure 1

### (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.

82595012 02.02.2017 **1/6** 



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**

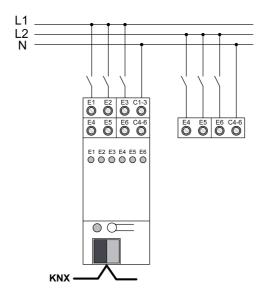


Figure 2: Connecting mains-powered circuits

82595012 02.02.2017 **2/6** 



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.

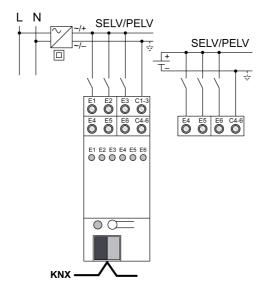


Figure 3: Connecting SELV/PELV circuits

#### **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).

82595012 02.02.2017 3/6

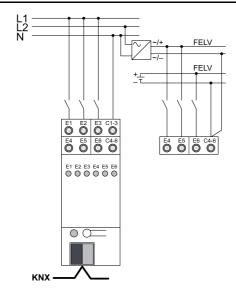


Figure 4: Joint connection of mains and low-voltage circuits

### Installing the cover

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

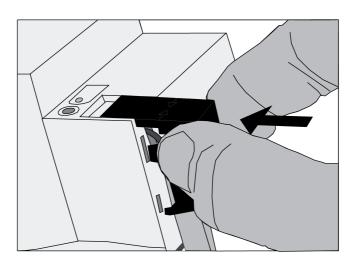


Figure 5: Installing the cover

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

82595012 02.02.2017 4/6



36 mm / 2 modules

max. 1 W

### Removing the cover

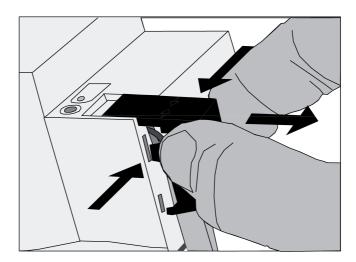


Figure 6: Removing the cover

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

Housing

Fitting width Power loss

Connection

### 5.1 Technical data

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

82595012 02.02.2017 **5/6** 



single stranded Finely stranded without conductor sleeve Finely stranded with conductor sleeve 0.5 ... 4 mm<sup>2</sup> 0.5 ... 4 mm<sup>2</sup> 0.5 ... 2.5 mm<sup>2</sup>

### **5.2 Warranty**

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

Please submit or send faulty devices postage paid together with an error description to your responsible salesperson (specialist trade/installation company/electrical specialist trade). They will forward the devices to the Gira Service Center.

### Gira

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82595012 02.02.2017 6/6