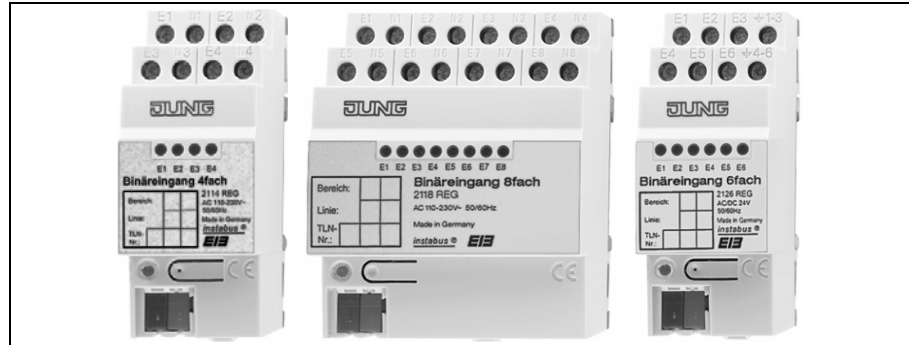


## Operating Instructions Binary input 4-, 6-, 8- channel



### 1. System information

This unit is a product of the instabus-EIB-System and corresponds to the EIBA Guidelines. Detailed technical knowledge acquired in instabus training courses is a prerequisite for the understanding of the system.

The functions of the device are software-dependent. Detailed information on the software and the functions implemented and the software itself are available from the manufacturer's product data bank.

Planning, installation and commissioning of the device are effected with the help of EIBA-certified software.

For the product database and technical descriptions please refer to the internet at [www.jung.de](http://www.jung.de) offering up-to-date information..

### 2. Function

The binary inputs can detect the presence and the change of signal voltages at their signal inputs.

Binary inputs can therefore be used to request the status of conventional pushbuttons/switches, auxiliary contacts, door and window contacts and - depending on programmed parameters - to transmit the switching status as digital information to the instabus EIB.

The inputs can be used independent of each other. Each input is equipped with an LED indicating the status of the contact connected.

Signal voltages can be applied to all inputs at the same time (100% duty cycle).

The signal voltages of 24 V AC/DC or 230 V AC to be supervised must be available externally.

### 3. Safety instructions

**Attention: Electrical equipment must be installed and fitted by qualified electricians only.**

**Non-observance of the installation instructions may cause fire or other hazards.**

**Disconnect the mains voltage before connecting the inputs.**

## 4. Features

- Status indication for each input
- Different phases possible with the 230 V versions
- Separate reference potential for each input with 230 V versions
- Separate reference potentials (GND) for inputs 1 through 3 and 4 through 6 with the 24 V versions
- Supplementary software-independent debouncing circuits for the inputs integrated

## 5. Connection

### 8-channel binary input 230 V (fig. A)

### 4-channel binary input 230 V (fig B)

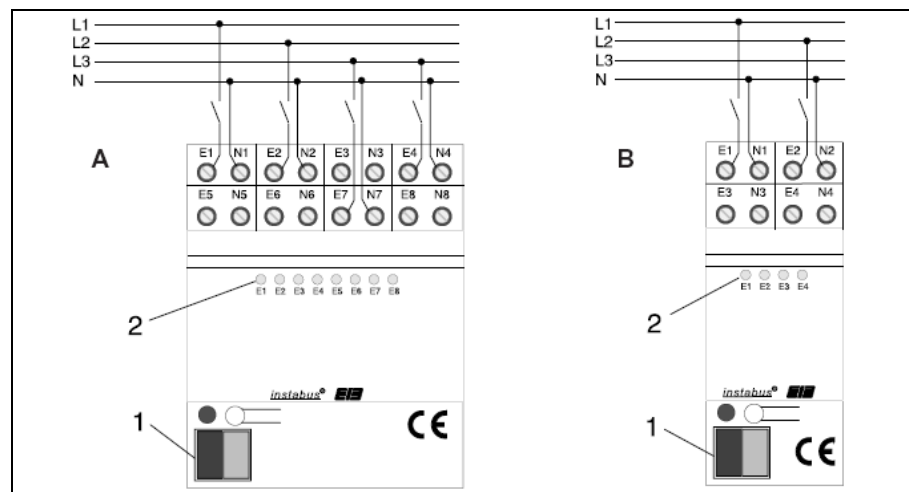
The bus is connected via the bus connection terminal (1).

The contacts are connected as shown in fig. A or fig. B.

The reference potential N must be connected separately for each input.

The inputs (E1 through E<sub>n</sub>) can be connected to different phase conductors.

A signal at the input is indicated by the corresponding LED (2).



### 6-channel binary input 24 V (fig. C)

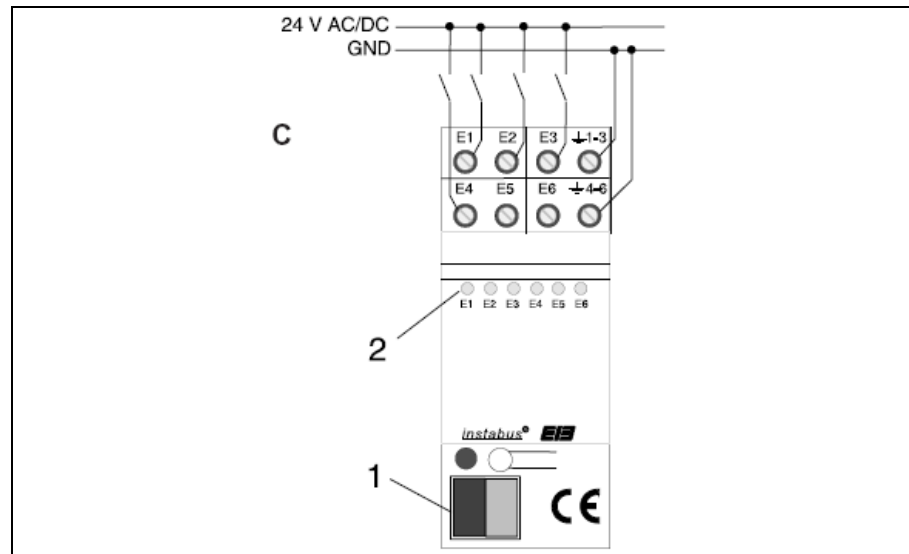
The bus is connected via the bus connection terminal (1). The contacts are connected as shown in fig. C.

Reference potential GND must be connected separately for inputs 1 through 3 and 4 through 6.

In DC operation, the (E1 through E6) are independent of polarity.

When a signal is present at one of the inputs, the corresponding LED (2) is lit up.

- ① Important: For 24 V and 230 V voltages separate cables must be used.

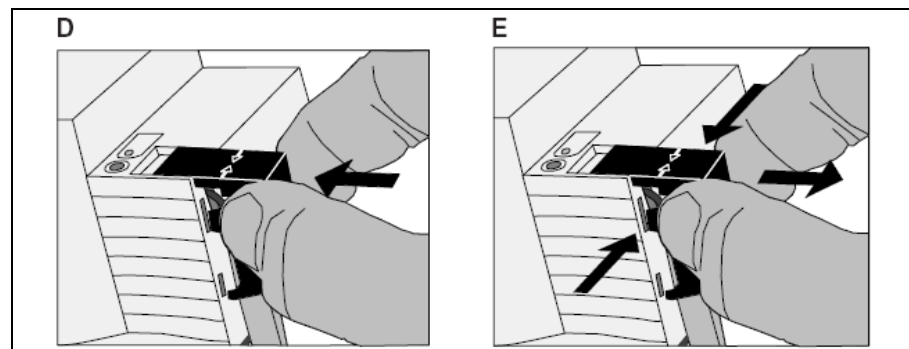


## 6. Cap

Slide the cap with the bus wires at the bottom over the bus terminal (fig. D) until it is heard to engage.

To remove the cap, push sideways and withdraw (fig. E).

The cap can be supplied as an extra part (Art. no. 2050 K).



## 7. Technical Data

### General:

instabus EIB supply : 21 - 32 V DC

instabus EIB power consumption

4-channel binary input 230 V: max. 150 mW

8-channel binary input 230 V: max. 240 mW

6-channel binary input 24 V: max. 225 mW

Installation space requirements

4-channel binary input 230 V: 36 mm (2 module)

8-channel binary input 230 V: 72 mm (4 module)

6-channel binary input 24 V: 36 mm (2 module)

Ambient temperature : -5 °C ... +45 °C

Storage temperature : -25 °C ... +75 °C

## KNX

instabus EIB connection :	instabus connecting terminal
Binary input connection :	screw-type terminals
Ø for binary inputs 230 V :	0,75 to 4 mm <sup>2</sup> single-wire or 2 x 1,5 to 2,5 mm <sup>2</sup> single-wire 0,75 to 4 mm <sup>2</sup> stranded wire without ferrule or 0,75 to 2,5 mm <sup>2</sup> stranded wire with ferrule
Ø for binary inputs 24 V :	0,2 to 4 mm <sup>2</sup> single-wire or 2 x 0,2 to 2,5 mm <sup>2</sup> single-wire 0,75 to 4 mm <sup>2</sup> stranded wire without ferrule or 0,5 to 2,5 mm <sup>2</sup> stranded wire with ferrule

## General specification of inputs:

Minimum signal duration	
for pulse counting :	200 ms at 5 Hz signal clock with mark-to-space ratio 1:1
Signal delay (software-independent)	
rising edge :	ca. 2 ms
falling edge :	ca. 40 ms
Length of input line :	max. 100 m (unshielded)

## Universal binary input 4-channel 230 V / 8-channel 230 V:

Signaalspanning :	110 tot 230 V AC, 50 / 60 Hz
Ingangsstroom / kanaal :	ca. 7 mA bij 230 V AC
Signaalniveau	
'0'-signaal :	0 tot 70 V AC
'1'-signaal :	90 tot 253 V AC

## Universal binary input 6-channel 24 V:

Signal voltage :	8 to 42 V AC/DC
Input current / channel :	appr. 4 mA at 24 V AC/DC
Signal level	
'0' signal :	0 to 1,8 V AC / -42 to +1,8 V DC
'1' signal :	8 to 42 V AC/DC

**Technical specifications subject to change**

## 8. Guarantee

Our products are under guarantee within the scope of the statutory provisions.

**Please return the unit postage paid to our central service department giving a brief description of the fault:**

ALBRECHT JUNG GMBH & CO. KG

Service-Center

Kupferstr. 17-19

D-44532 Lünen

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Telefax: +(49) 23 55 . 80 61 65

E-Mail: mail.vka@jung.de

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E-Mail: mail.vkm@jung.de

### KNX equipment

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E-Mail: mail.vkm@jung.de

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