

Flush-mounted room climate interface with satellite input  
 Art.-No.: 2531 UP

## Operationsmanual

### 1 Safety instructions

Electrical equipment may only be installed and fitted by qualified electricians.

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

The device is not suitable for disconnection from supply voltage.

The connected actuators are not electrically isolated from the mains – even when switched off.

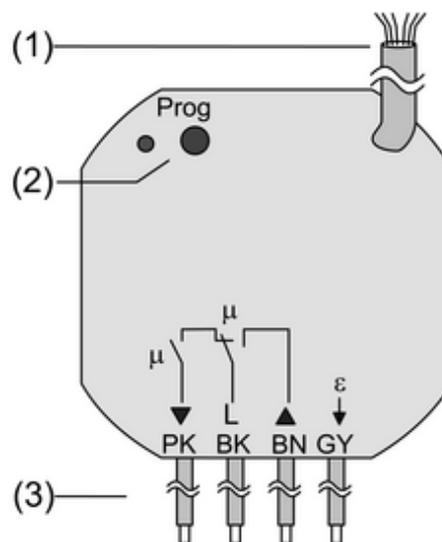
Do not connect any external voltage to the inputs, since doing so may damage the device(s), and the SELV potential on the KNX bus line will no longer be available.

For parallel connection of several drives to an output it is indispensable to observe the corresponding instructions of the manufacturers, and to use a cutoff relay if necessary. There is otherwise risk of irreparable damage to the drives.

Use only Venetian blind drives with mechanical or electronic limit switches. Check the limit switches for correct adjustment. Observe the specifications of the motor manufacturers.

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

### 2 Device components



picture 1

- (1) Control cable
- (2) Programming button and LED
- (3) Connection of mains and power cables

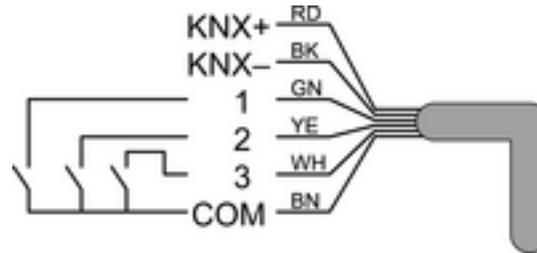
#### Connection assignment, power cables

BK, black: connection L

BN, brown: connection of Venetian blind, up

PK, pink: connection of Venetian blind, down

GY, grey: actuator connection



picture 2

### Connection assignment of control cable

RD, red: KNX+

BK, black: KNX–

GN, green: input 1

YE, yellow: input 2

WH, white: input 3

BN, brown: COM inputs 1...3

## 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. Full functionality with KNX commissioning software version ETS3.0d onwards.

An updated version of the product database, technical descriptions and conversion programs and other auxiliary programs are available on our Internet website.

### Intended purpose

- Switching of electrically-driven Venetian blinds, awnings and similar blinds for AC 230 V mains voltage.
- Switching of electrothermal actuators
- Installation in appliance box to DIN 49073
- Connection with enclosed terminals

### Product characteristics

- Control of Venetian blinds, awnings and similar blinds
- Control of electrothermal actuators
- Three binary inputs for potential-free contacts, usable as extension inputs for local operation
- Supply via bus, no additional power supply necessary

### Venetian blind function

- Blind position directly controllable
- Slat position directly controllable
- Feedback of movement status, blind position and slat position
- Forced position through higher-level controller
- Safety function: 3 independent wind alarms, rain alarm, frost alarm
- Sun protection function

### Actuator function

- Switching operation or PWM operation
- Actuators with characteristics opened or closed without power

- Overload-protected, short circuit-protected
  - Protection against jamming valves
  - Forced position
  - Cyclical monitoring of the input signals configurable.
- i** PWM operation: electrothermal actuators only have the positions Open and Closed. In PWM operation, switch-on and switch-off during the drive's cycle time achieves an almost constant behaviour.

## 4 Information for qualified electricians

### 4.1 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.**

#### Connecting and mounting the device

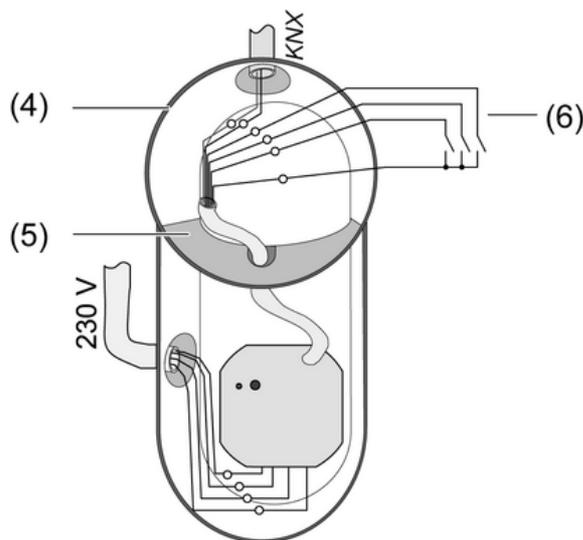


#### **DANGER!**

**When connecting the bus/extensions and mains' voltage wires in a shared appliance box, the KNX bus cable may come into contact with the mains voltage.**

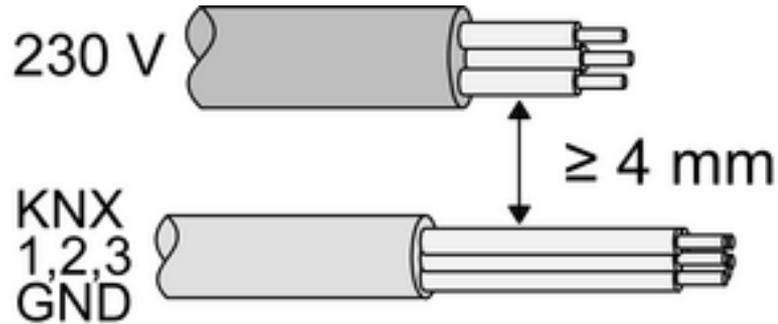
**This endangers the safety of the entire KNX installation. People at remote devices may also receive an electric shock.**

**Do not place bus/extensions and mains voltage terminals in a shared connection compartment. Use an appliance box with a fixed partition wall (picture 3) or separate boxes.**



picture 3

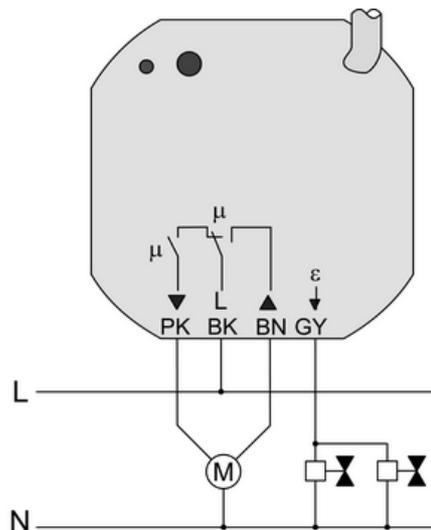
- (4) Appliance box
- (5) Partition
- (6) Potential-free contacts, e.g. for window contact or installation pushbuttons



picture 4

Minimum spacing between the mains voltage and bus/extension wires: 4 mm (picture 4).

- Connect the load (picture 5). Use terminals.
- Connect the device to KNX.
- If necessary, connect potential-free contacts (6) to inputs (picture 2).
- Install the device in the appliance box.

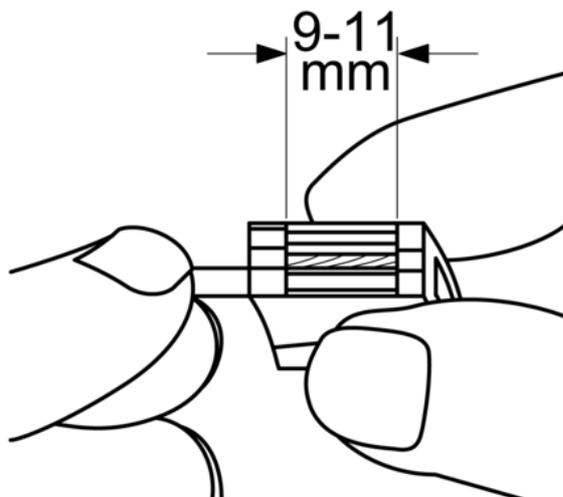


picture 5

**i** In the as-delivered state, Inputs 1 and 2 operate the Venetian blind output. Input 3 has no function.

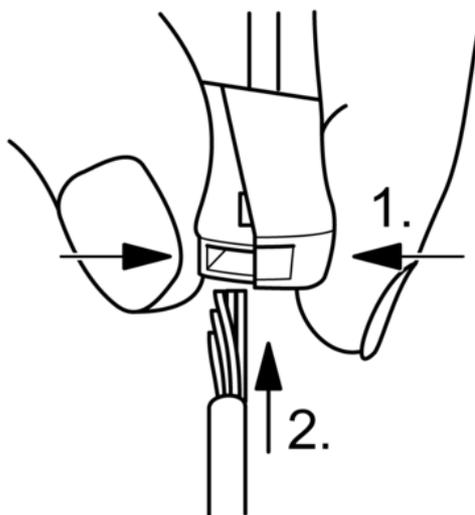
#### Function of Inputs 1 and 2 in the as-delivered state

Input	NO contact	Blind
1	Press briefly	Adjust slats Up / Stop
1	Press for a long time	Move up
2	Press briefly	Adjust slats Down / Stop
2	Press for a long time	Move down

**Use terminals**

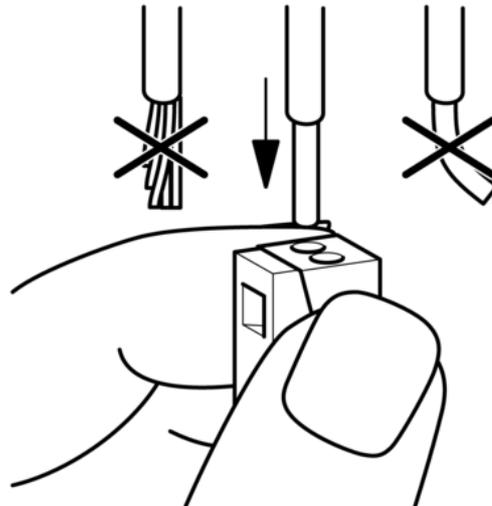
picture 6: Stripping length

- Strip 9 - 11 mm of the cable (picture 6).



picture 7: Connection of the fine-wire cable

- Push the terminal together on the side with the square opening and connect a fine-wire cable (picture 7).



picture 8: Connection of the single-stranded cable

- Push the single-stranded cable into the round opening on the installation side up to the stop (picture 8).

## 4.2 Commissioning

### Load the address and the application software

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

## 5 Appendix

### 5.1 Technical data

Supply	
Rated voltage	AC 230 / 240 V ~
Mains frequency	50 / 60 Hz
Switching voltage	AC 250 V~
Ambient conditions	
Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-25 ... +70 °C
Venetian blind output	
Contact type	μ
Switching current AC1	3 A
Minimum switching current AC	100 mA
Motors 230 V	600 VA
Heating output	
Output type	Semi-conductor (Triac), ε
Switching current	5 ... 25 mA
Switch-on current	max. 600 mA (2 s)
Number of drives per output	max. 2
Control cable and inputs	
Control cable (preterminated)	YY6x0.6
Input type	Potential-free
Total length of extension unit cable	max. 5 m
Poll voltage, extension inputs	approx. 5 V
Dimension Ø×H	53×28 mm
Connection type	Terminal (enclosed)
Single-stranded	1.0 ... 2.5 mm <sup>2</sup>



Flush-mounted room climate interface with satellite input



KNX  
KNX medium  
Commissioning mode  
Rated voltage KNX  
Power consumption KNX  
Connection mode KNX

TP 1  
S mode  
DC 21 V ... 32 V SELV  
max. 240 mW  
Connection terminal on control cable

## 5.2 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 unit postage-free with a description of the defect to our central customer service office:

### **ALBRECHT JUNG GMBH & CO. KG**

Service Center  
Kupferstr. 17-19  
D-44532 Lünen  
Service-Line: +49 (0) 23 55 . 80 65 51  
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mail.vka@jung.de

### **General equipment**

Service-Line: +49 (0) 23 55 . 80 65 55  
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mail.vkm@jung.de

### **KNX equipment**

Service-Line: +49 (0) 23 55 . 80 65 56  
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