

Flush-mounted heating actuator, 1-gang with satellite input  
 Art.-No.: 2501 HZUP

## 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.

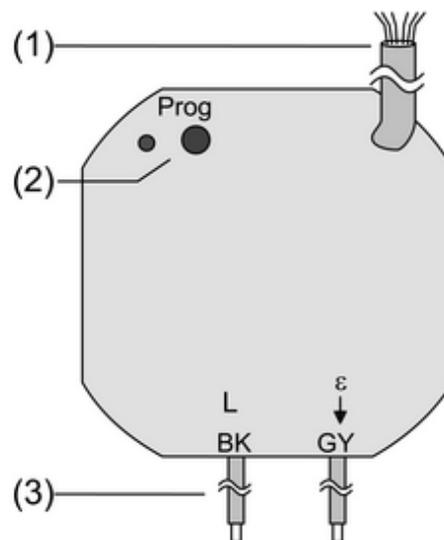
The device is not suitable for disconnection from supply voltage.

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.

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

### 2 Device components



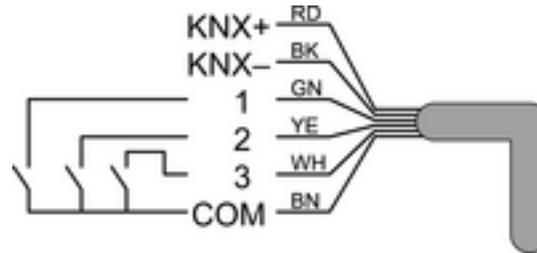
picture 1

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

#### Connection assignment, power cables

BK, black: connection L

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 electrothermal actuators
- Installation in appliance box to DIN 49073
- Connection with enclosed terminals

### Product characteristics

- 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
- 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

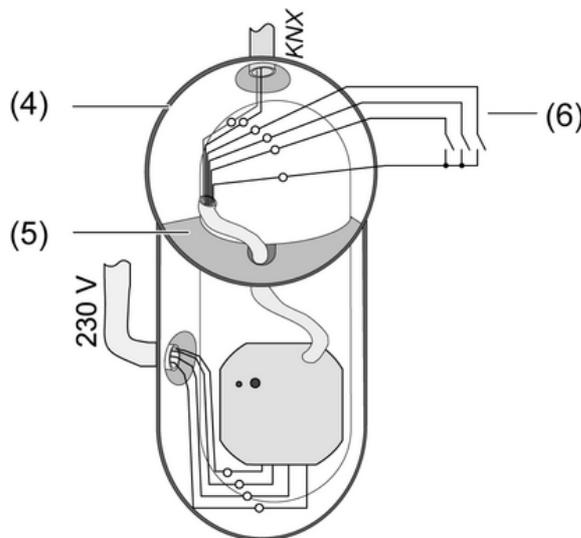


**DANGER!**

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.

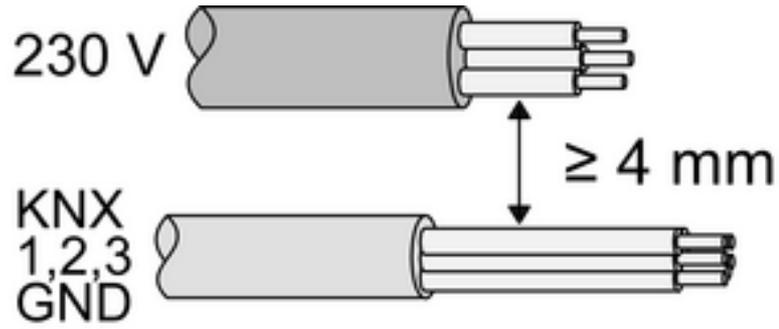
This endangers the safety of the entire KNX installation. People at remote devices may also receive an electric shock.

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

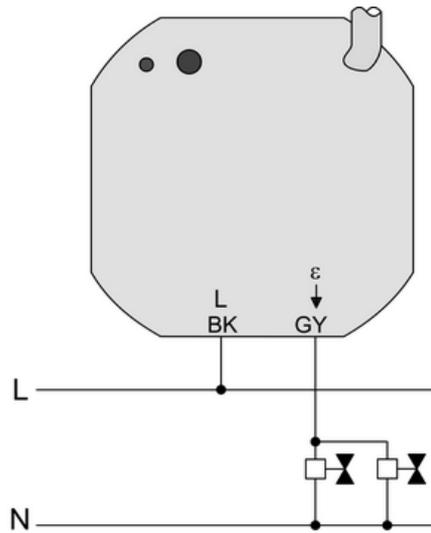
- (4) Appliance box
- (5) Partition
- (6) Potential-free contacts, e.g. for window contact or installation pushbuttons



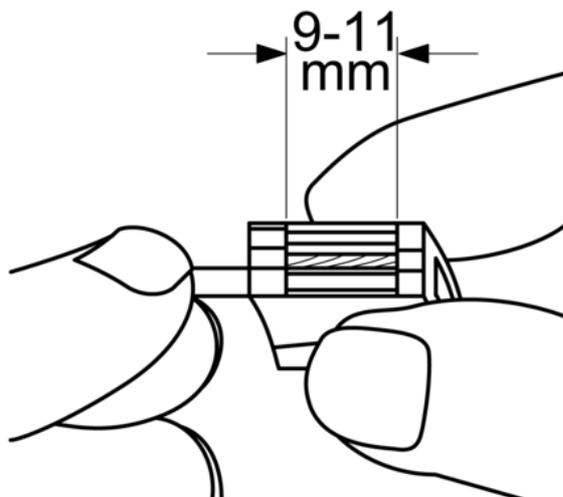
picture 4

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.

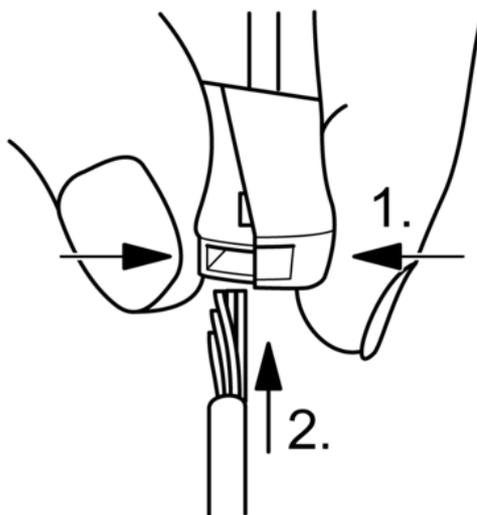


picture 5

**Use terminals**

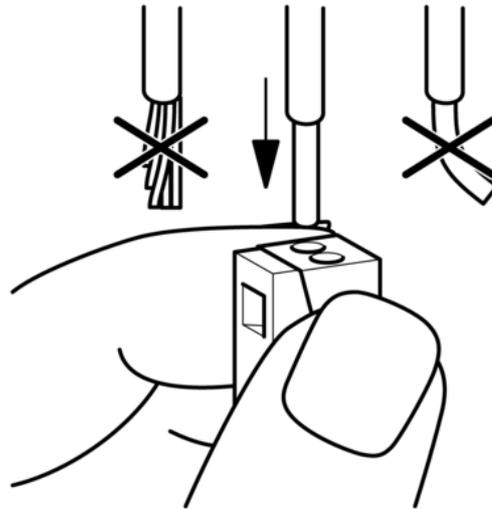
picture 6: Stripping length

- 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
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>
KNX	
KNX medium	TP 1
Commissioning mode	S mode
Rated voltage KNX	DC 21 V ... 32 V SELV
Power consumption KNX	max. 240 mW



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Connection mode KNX

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**

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

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### **KNX equipment**

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