

**Switching actuator, 1gang, 16A**

Order-No. : 1059 00

Switching actuator 2gang, 6 A

Order-No. : 1057 00

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

Danger of electric shock. Before working on the device or before exchanging light bulbs, disconnect mains voltage and switch off circuit breakers.

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

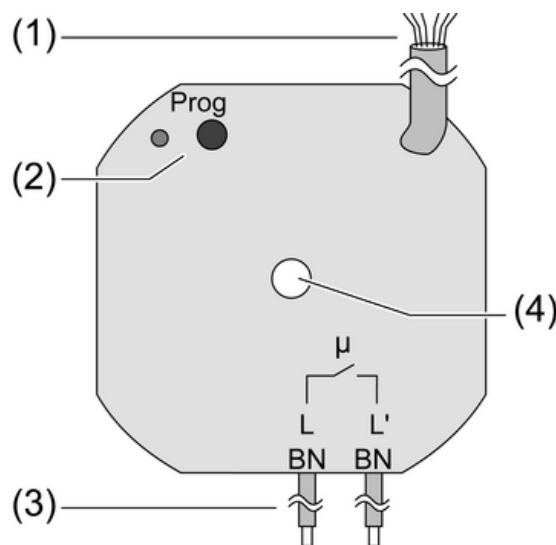
2 Device components

Figure 1: Switch actuator 1gang

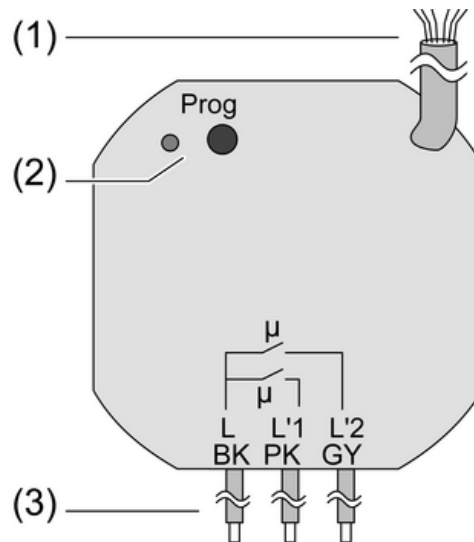


Figure 2: Switch actuator 2gang

- (1) Control cable
- (2) Programming button and LED
- (3) Connection of mains and power cables
- (4) Opening for fastening – only switch actuator 1gang

Connection assignment, power cables

Switch actuator 1gang:

BN, brown: connection external conductor L, output L'

Switch actuator 2gang:

BK, black: connection external conductor L

PK, pink: connection output L'1

GY, grey: connection output L'2

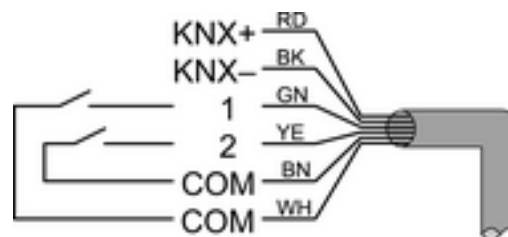


Figure 3

Connection assignment of control cable

RD, red: KNX+

BK, black: KNX-

GN, green: input 1

YE, yellow: input 2

WH, white: COM input 1

BN, brown: COM input 2

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

- Switching of electrical loads for AC 230 V mains voltage.
- Installation in appliance box to DIN 49073
- Connection with enclosed terminals

Product characteristics

- Two binary inputs for potential-free contacts, usable as extension inputs for local operation
- Operation as NO or NC contacts
- Feedback function for each output
- An additional function for each output: logical, forced-position or time function
- Time functions: switch-on delay, switch-off delay, staircase lighting timer
- Supply via bus, no additional power supply necessary

 Switch actuator 2gang: When activated by a central telegram the relay outputs of the actuator switch with a slight time delay.

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 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 line 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 (Figure 4) or separate boxes.

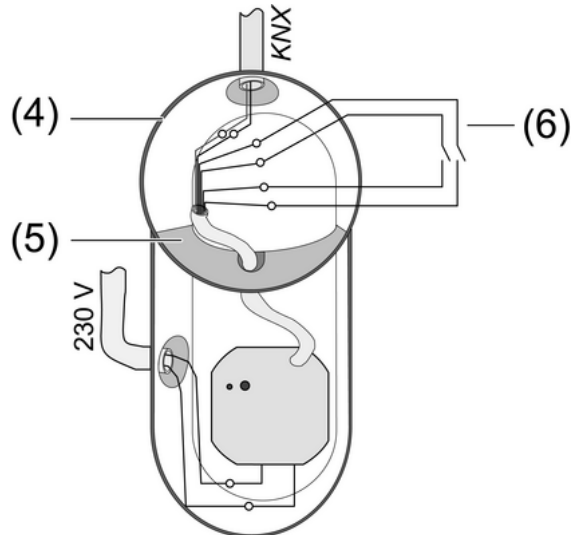


Figure 4: Installation in appliance box

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

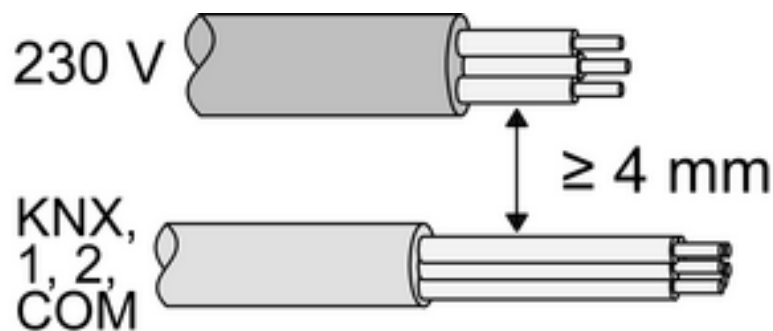


Figure 5: Spacing between mains cable and control cable

Minimum spacing between the mains voltage and bus/extension wires: 4 mm (Figure 5).

Do not exceed permissible total load including transformer power dissipation.

- Connect the load. Use the supplied sprung screwless terminals. Flexible cable ends must be tin-plated.
- Connect the device to KNX.
- If necessary, connect potential-free contacts to the inputs (Figure 3).
- Install the device in the appliance box.

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

Input contact	Switch actuator 1gang	Switch actuator 2gang
1 close	Toggle	Switch-over output 1
1 open	–	–
2 close	Toggle	Switch-over output 2
2 open	–	–

4.2 Commissioning

Load the address and the application software

- Switch on the bus voltage
- Press the programming button.
The programming LED lights up.
- Assign physical address.
The programming LED goes out.
- Write the physical address on the device label.
- Load the application software into the device.

5 Appendix

5.1 Technical data

Switching actuator, 1gang, 16A, Order-No. 1059 00

Rated voltage	AC 250 V~
Mains frequency	50 / 60 Hz
Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-25 ... +70 °C
Switching outputs	
Contact type	μ
Switching current	16 A
Capacitive load	10 A / 105 μF
Switch-on current 20 ms	max. 400 A
Lamp loads	
Incandescent lamps	2500 W
HV halogen lamps	2200 W
Inductive transformers	1000 VA
Tronic transformers	1000 W
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. -19 V
Dimensions Ø×H	53×28 mm
Ø Centre hole	7.5 mm
Connection of outputs	
Connection mode	Screwless terminal (enclosed)
KNX	
KNX medium	TP 1
Commissioning mode	S-mode
Rated voltage KNX	DC 21 ... 32 V SELV
Connection type for bus	Connection terminal
Power consumption KNX	typical 150 mW

Switching actuator 2gang, 6 A, Order-No. 1057 00

Rated voltage	AC 250 V~
Mains frequency	50 / 60 Hz
Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-25 ... +70 °C
Switching outputs	
Contact type	μ
Switching current	6 A
Capacitive load	6 A / 14 μF
Switch-on current 20 ms	max. 120 A
Lamp loads	

Incandescent lamps	1200 W
HV halogen lamps	1200 W
Inductive transformers	500 VA
Tronic transformers	500 W
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. -19 V
Dimensions Ø×H	53×28 mm
Connection of outputs	
Connection mode	Screwless terminal (enclosed)
KNX	
KNX medium	TP 1
Commissioning mode	S-mode
Rated voltage KNX	DC 21 ... 32 V SELV
Connection type for bus	Connection terminal
Power consumption KNX	typical 150 mW

5.2 Warranty

The warranty is provided in accordance with statutory requirements via the specialist trade.

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.

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