

### TYB6.2F

Output 2gang 6A/ 1gang shutter/blind, flush mounted  
Input 2gang + output 2gang 6A/ 1gang shutter/blind, flush mounted



### TXB6.2F

Output 2gang 6A/ 1gang shutter/blind, flush mounted  
Input 2gang + output 2gang 6A/ 1gang shutter/blind, flush mounted



## Safety instructions

Electrical equipment may only be installed and assembled by a qualified electrician in accordance with the relevant installation standards, guidelines, regulations, directives, safety and accident prevention regulations of the country.

Failure to comply with these installation instructions may result in damage to the device, fire or other hazards.

**Hazard due to electric shock. Disconnect before working on the device or load. Take into account all circuit breakers that supply dangerous voltages to the device or load.**

**Hazard due to electric shock. The device is not suited for safe disconnection of the mains supply.**

**Hazard due to electric shock on the SELV or PELV installation. Do not connect any loads for low voltage SELV, PELV or FELV together.**

**Connect one motor only. If several motors are connected, motors or device might be destroyed.**

**Use drives with mechanical or electrical final position switches only. Check final position switches for correct adjustment. Observe motor manufacturer's data. The device can be damaged.**

**Observe the motor manufacturer's data regarding change-over time and max. switch-on time (ED).**

**These instructions are an integral component of the product and must be retained by the end user.**

## Design and layout of the device

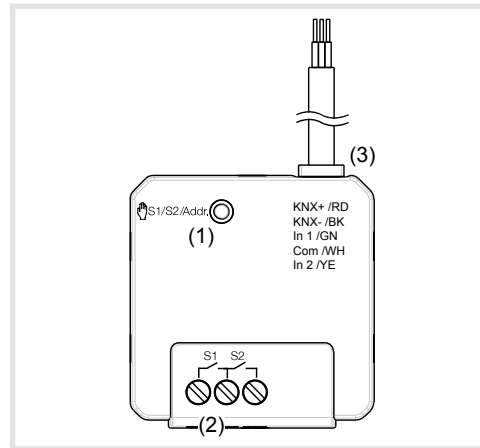


Fig. 1: example device variant with inputs

- (1) Illuminated button for manual operation/ programming button
- (2) Connection of load(s)
- (3) KNX bus connection cable/ connection inputs

## Function

### System information

This device is a product of KNX system and corresponds to the KNX guidelines. Detailed specialised knowledge obtained from KNX training courses is required for understanding. The planning, installation and commissioning of the device is carried out with the help of KNX-certified software.

### Systemlink commissioning

The function of the device is software-dependent. The software is to be taken from the product database. You can find the latest version of the product database, technical descriptions as well as conversion and additional support programmes on our website.

### Easylink commissioning

The function of the device is configuration-dependent. The configuration can also be done using devices developed specially for simple setting and start-up.

This type of configuration is only possible with devices of the easylink system. Easylink stands for easy, visually supported start-up. Preconfigured standard functions are assigned to the in/outputs by means of a service module.

### Functional description

The device receives telegrams from sensors or other controllers via the KNX installation bus and switches electrical loads with its relay contact.

### Correct use

- Switching of electrical loads 230 V ~ with potential-free contact.
- Switching electrically operated motors of 230 V ~ or blinds, shutters, awnings and similar hangings.
- Installation into wall box according to DIN 49073 (use deep box) or junction box surface-mounted/flush-mounted.

### Product characteristics

- Manual activation of the outputs on the device possible, building site operation.
- Status display of the outputs on the device.
- Scene function.
- Forced position by higher-level controller.

### Functions in switch operation

- Time switching functions.

### Functions in roller shutter/blind operation

- Position can be started directly.
- Slat position directly controllable.
- Feedback of operating state, shutter position and slat adjustment.
- 3 Alarms.

### Functions of the inputs

- ON/OFF.
- Dimming.
- Up/down.
- Slat angle/ Stop.
- Alarm.
- Scene.
- Mandatory control.
- Time switching operation.

## Information for electricians

### Installation and electrical connection



#### DANGER!

Touching live parts can result in an electric shock!

An electric shock can be lethal!

Disconnect the connecting cables before working on the device and cover all live parts in the area!

### Connecting and installing the device



#### CAUTION!

Impermissible heating if the load of the device is too high!

The device and the connected cables may get damaged in the connection area!

Do not exceed the maximum current carrying capacity!



#### CAUTION!

When connecting the bus/extension units and mains voltage wires in a common wall box, the KNX bus cable might come into contact with the mains voltage.

The safety of the entire KNX installation is at risk. Persons could also get an electric shock even on remote devices.

Do not place bus/extension units and mains voltage terminals in a common terminal compartment. Use a wall box with a firm partition or separate boxes (Figure 2).



#### CAUTION!

Risk of destruction if parallel circuit of several motors!

Final position switches could fuse together. Motors, hangings and the device may be destroyed!

Connect one motor only!

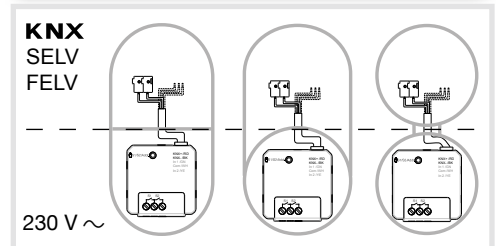


Figure 2: installation with separate terminal compartment

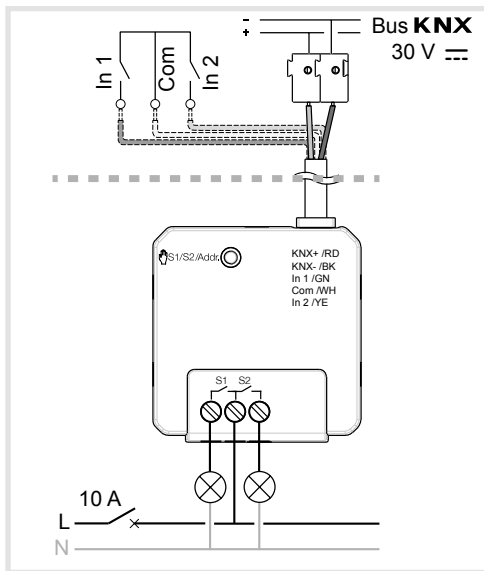


Figure 3: connection of switching loads

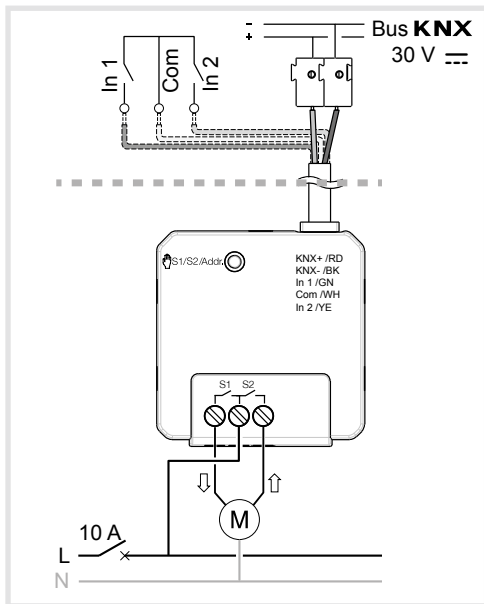


Figure 4: connection of motors

Observe installation regulations for SELV voltage. Maintain a minimum distance of 4 mm between mains voltage and bus wires.

The installation circuit must be protected via circuit breaker 10 A.

Do not connect different phases (outer conductors) to the device.

- Connect bus cable via connecting terminal.
- Connect loads (figure 3/4) to the load connecting terminals (2).
- Place device into the installation box.

### Connect inputs

green	white	yellow	red	black
In 1	Com	In 2	KNX+	KNX-

Table 1: connection assignment of the control line

- Connect potential-free contacts to the inputs.

## Start-up

### Systemlink: loading physical address and application software

- Switch on bus voltage.
- Press programming button (1).  
The button lights up.

**I** If the button does not light up, no bus voltage is present.

- Load the physical address into the device.  
Status LED of the button goes out.
- Load application software.
- Note down the physical address on the device.

### Easylink

Information on the system configuration can be taken from the extensive description of the service module Easylink.

### Start up the device

- Switch on mains voltage on the outputs.

### Switch test mode on/off

The device is connected. Bus voltage and switching voltage are present.

- Keep button (1) pressed > 5 s with a pointed object until it flashes green.

The device is in test mode.

Or with test mode switched on

- Keep button (1) pressed > 5 s until it flashes green 3 times.

The device is in normal operation.

**I** After approx. 5 min. without any further operation, the device exits test mode automatically.

### Operating output in test mode

Operation takes place by briefly pressing a button repeatedly (1).

The device is in test mode. The button flashes green until the first operation.

- Press the button (1) for a short time.

The output changes its switching state.

**I** The switching takes place according to the following sequence:  
S1 closed - S1 open - S2 closed - S2 open.

### Resetting the device to the factory settings

- The device provides the possibility of restoring the factory setting via a programming button.

**I** The programming is lost after resetting to the factory setting. Activation via the bus is no longer possible.

- Hold down the button (1) for (> 10 s) until it flashes red.

## Appendix

### Technical data

Supply voltage KNX	21 → 32 V SELV
Breaking capacity	μ 6 A AC1 230 V~
Switching current at cos φ = 0.6	max. 6 A
Minimum switching current	10 mA
Operating altitude	max. 2000 m
Degree of contamination	2
Surge voltage	4 kV
Degree of protection of housing	IP20
Impact protection	IK 04
Overvoltage class	III
Operating temperature	-5 °C → 45 °C
Storage/transport temperature	-20 °C → +70 °C
Maximum switching cycle rate at full load	20 switching cycle/minute
Connection capacity	0.75 mm <sup>2</sup> → 2.5 mm <sup>2</sup>
max. tightening torque	0.5 Nm
Upstream protection	circuit breaker 10 A
Communication Media	TP
Configuration mode	S mode - Easy link controller
Cross-head design	PZ1
Installation type flush-mounted installation switch/flush-mounted electronic/flush-mounted/surface-mounted junction box	
Dimensions	44 x 43 x 22.5 mm
Own consumption on the KNX bus:	
typical	7 mA
in standby	5 mA
Incandescent lamps	500 W
HV halogen lamps	500 W
Conventional transformer	500 VA
Electronic transformer	500 W
Fluorescent lamps	
-without ballast	500 W
-with electronic ballast	6 x 48 W
Energy-saving lamps	2 x 13 W
LED lamps	2 x 13 W
Change-over time for change of direction	software-dependent
Variant with inputs	
Number of inputs	2
Input type	potential-free
Total length of extension unit cable	max. 9.9 m
Scanning voltage extension unit inputs	12 V → 1 mA

## Troubleshooting

### Test mode not possible. Red programming LED lights up.

Cause: push-button (1) was pressed too short.

Short press on push-button, red LED goes out.

Press push-button again (> 5 s).

### Bus operation is not possible

Cause 1: bus voltage is not present.

Check bus connection terminal for correct polarity.

Check bus voltage by briefly pressing the programming button (1), red LED lights up if bus voltage is present.

Cause 2: device was reset to the factory setting.

Repeat programming and start-up.



Correct Disposal of this product (Waste Electrical & Electronic Equipment).

(Applicable in the European Union and other European countries with separate collection systems).

This marking shown on the waste or its literature indicates that it should not be disposed with other household waste at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this product from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this device for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes of disposal.

Usable in all Europe and in Switzerland