# :hager

easylink

S



## TYB601B Output 1gang 10 A, flush mounted

TXB601B

Output 1gang 10 A, flush mounted

### Safety instructions

Electrical equipment may only be installed and assembled by a qualified electrician in accordance with the relevant installation standards, quidelines, 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 sup-

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

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

## Design and layout of the device

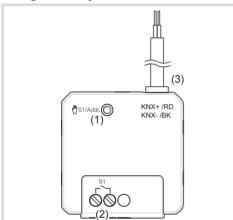


Figure 1: device overview

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

## **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.

### S-Mode start-up

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.

## E-Mode start-up

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

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 AC 230 V with potential-free contact.
- Installation into wall box according to DIN 49073 (use deep box) or junction box surface-mounted/flush-mounted.

#### Product characteristics

- Time switching functions
- 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.

#### 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).

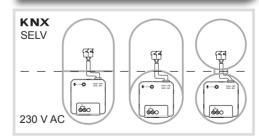


Figure 2: installation with separate terminal compartment

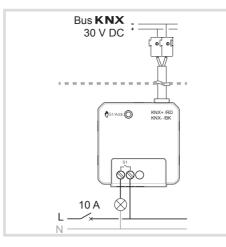


Fig 3: device connection 1gang

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.

- Connect bus cable via connecting terminal.
- Connect load to the load connecting terminals
- Place device into the installation box.

#### Start-up

#### S-mode: loading the physical address and applicatiln software

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

#### E-mode

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/manual operation.

Or with manual operation switched on

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

The device is in normal operation.

After approx. 5 min. without any further operation, the device exits manual operation 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.

#### Resetting the device to the factory settings

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

- The programming is lost after resetting to the factory setting. Activation via the bus is no longer possible.
- Hold down the \( \bar{\gamma} \) button **S1/Addr.** (1) for > 10 s until it flashes red.

The device is reset to the factory setting.

#### **Appendix**

## Technical data

Supply voltage KN	X	2132 V DC SELV
Breaking capacity		μ 10 A AC1 230 V~
Switching current at $\cos \Phi = 0.8$		8 max. 10 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		JP20
Impact protection		IK 04
Overvoltage class		III
Ambient 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>		0.75 mm <sup>2</sup> 2.5 mm <sup>2</sup>
Installation type flush-mounted installation switch/ flush-mounted electronic/ flush-mounted/surface-mounted junction box		
Standards		
Dimensions	44 x 43 x 22.5 mm	
Own consumption on the KNX bus:		
typical		7 mA
in standby		5 mA
Incandescent lamps		600 W

## Troubleshooting

Energy-saving lamps

Halogen lamps

Conventional transformer

Electronic transformer

Fluorescent lamps

- without ballast

- with EVG

LED lamps

## Test mode not possible. Red programming LED

600 W

600 VA

600 W

600 W

6 x 58 W

5 x 15 W

5 x 15 W

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.