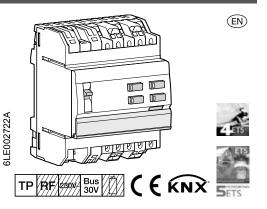
# :hager



#### **TYA624B**

Output 4gang shutter 24 V

# TYA624D

Output 4gang shutter/blind 24 V

#### TXA624D

Output 4gang shutter/blind 24 V

# 3

# 2

# Design and layout of the device

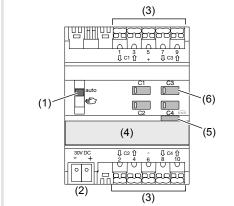


Figure 1: device overview

- (1) Slide switch auto/€
- (2) KNX bus connection terminal
- (3) Connections of loads
- (4) Labelling field with cover
- (5) Illuminated programming button
- (6) Operation button for manual operation per output with status LED

#### **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 comprehension. 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 devices are used to control motor-operated building fittings such as shutters and blinds via the KNX bus. The devices have 4 outputs from which each output can be activated independently.

#### Correct use

- Switching of electrically driven 24 V motors for blinds, shutters, awnings and similar hangings.
- Mounting on DIN rail according to DIN EN 60715 in the distribution box.

#### Product characteristics

- independent outputs, activation via KNX bus.
- Status display of the outputs on the device.
- manual activation of the outputs on the device possible, building site operation.
- Position can be started directly.
- 3 Alarms.
- Scene function.
- Forced position by higher-level controller.

#### Blind actuators only

Slat position directly controllable.

## Operation

#### Manual operation switch on/off

Bus voltage supply is present.

● Push switch (1) to position €

Manual operation is switched on, the outputs can be controlled using the operation buttons (6) independently of each other.

During manual operation, the controller is deactivated via the KNX bus.

Systemlink commissioning: depending on the programming, the manual operation is activated permanently or for a time period configured via the application software.

If the manual operation is blocked via the application software, no activation takes place.

#### Or

Move switch (1) to position auto.

The manual operation is switched off. Operation takes place solely via the KNX bus. The output takes the position predefined by the bus controller.

#### Operating outputs in manual operation

Operation takes place per output by brief repeated presses on the operation button (6) (table 1).

Status	Behaviour when briefly pressing the button
Manual operation is switched on, initial operation of an output.	Move DOWN, regardless of output status.
Movement operation active, status LED of the button (6) lights up.	Movement operation stops.
Output is in standby, status LED of the button (6) is off.	Movement operation in opposite direction of the last movement.

Table 1: manual 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!



# **CAUTION!**

Risk of destruction if parallel connection of several motors on one output!

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

Only connect one motor per output!

# 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.

Connect one motor per output 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.

Risk of injury. Use the device to control blind and shutter drives or awnings only. Do not switch any other loads.

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.

6LE002722A

#### Installing the appliance

- Observe temperature range. Provide sufficient
- Mount device onto DIN rail in accordance with DIN EN 60715.

#### Connect device

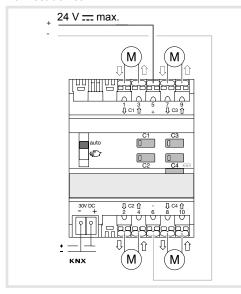


Fig 2: device connection

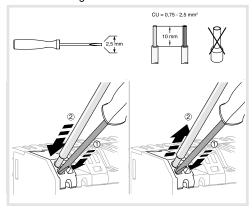
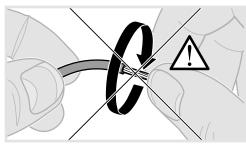


Fig 3: installation/deinstallation with plug-in terminals



Connect bus cable via connecting terminal (2).

- Connect bus voltage.
- Connect motors.

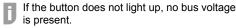
### Start-up

#### Systemlink: loading physical address and application software

The switch for manual operation (1) is in position auto.

- Switch on bus voltage.
- Press programming button (5).

The button lights up.



- Load the physical address into the device. Status LED of the button goes out.
- Load application software.
- Note down the physical address on the labelling field (4).

#### **Easylink**

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

## Starting up the device

Switch the operating voltage on.

# Determine operation time and slat adjusting

In blind/roller shutter operation, the operation time for positioning the sunshade is important. The position is calculated based on the operation time. The slat adjusting time for slat blinds, determined by the design, is part of the total operation time. The opening angle of the slats is therefore set as operation time between opened and closed position.

- The operation time for UP is normally longer than the operation time for DOWN and must be measured separately if necessary.
- Measure UP and DOWN operation time of the hanging
- Measure slat adjusting time between OPEN and CLOSED
- Enter measured values into the parameter setting - running time... or slat step time.

#### **Functional test**

The functionality of the outputs is displayed via the status LED of the operation button (6).

# Appendix

#### **Technical data**

Supply voltage KNX 21-32V .... SELV

Own consumption on the KNX bus:

5,2 mA (TYA..) typical 5 mA (TXA..) 4,5 mA (TYA..) - in standby 3 mA (TXA..)

Breaking capacity μ 6A DC1 24V .... **Energy dissipation** 2 W Switching current === max. 6 A Operating altitude max. 2000 m Degree of contamination

4 kV Surge voltage Degree of protection of housing IP20 Degree of protection of housing

under front panel IP30 Impact protection **IK 04** Overvoltage class Ш

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> Dimension 4 TE, 4 x 17.5 mm Communication media KNX TP 1 Configuration mode S-Mode, easy link

controller (TXA624D)

## Troubleshooting

#### Manual operation not possible

Cause 1: switch (1) not moved to .

Move switch to € ...

Cause 2: manual operation has not been enabled (Systemlink).

Enable manual operation via application software.

#### 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 (5), red LED lights up if bus voltage is present.

Cause 2: manual operation is active. Switch (1) is in position 🐑.

Move switch (1) to position auto.

#### Shutters/blinds do not move to the final position

Cause: Operation time for the shutters/blinds set incorrectly.

Check operation times. Measure again and reprogram if necessary.



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 product or its literature indicates that it hould not be disposed with other household wasted at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this 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 item 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