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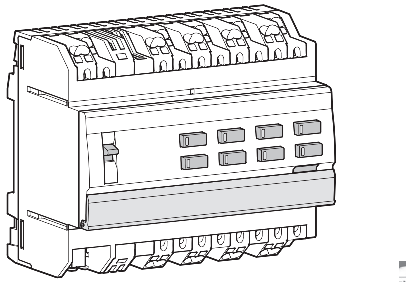

6LE000335A

TP RF 230V~ Bus 30V

TYAS628C

Output shutter/blind 8-fold

Safety instructions

GB

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.

Do connect only one motor per output. When connecting several motors, motors or device may 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 could get damaged.

Do not connect any three-phase motors. The device could get 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.

Design and layout of the device

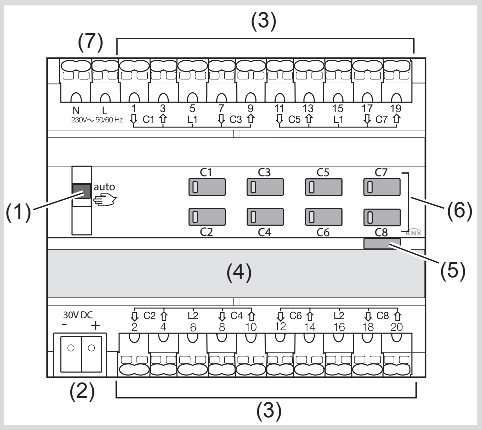

Fig. 1: example device variant 8gang

(1) Slide switch **auto**/☞
(2) KNX bus connection terminal
(3) Connections loads
(4) Labelling field with cover
(5) Illuminated programming button
(6) Operation button for manual operation per output with status LED
(7) Mains power supply connections (only 8gang)

With the 4gang variant, the basic design corresponds to the 8gang device variant.

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 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.

Easylink start-up

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 or 8 outputs from which each output can be activated independently.

Correct use

- Switching electrically operated motors of 230 V AC 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.
- Connection of various external conductors possible.

Blind actuators only

- Slat position directly controllable.

Only 8gang variants

- Manual operation (building site operation) without bus connection for connected mains voltage possible.

Operation

Manual operation switch on/off

With the 8gang variants, control of the outputs is possible even without bus voltage when mains voltage is connected e.g. for operation at building sites.

Bus or mains power 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, only the safety interlock with the highest priority is taken into account.

Systemlink start-up:
depending on the programming, the manual operation is either 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!

Do connect only one motor per output.

Installing the appliance

Observe temperature range. Provide sufficient cooling.

- Mount device onto DIN rail in accordance with DIN EN 60715.

Connect device

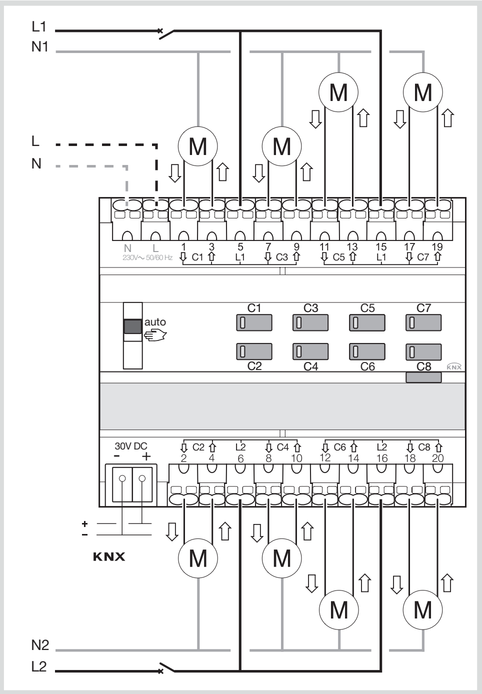

Fig 2: device connection

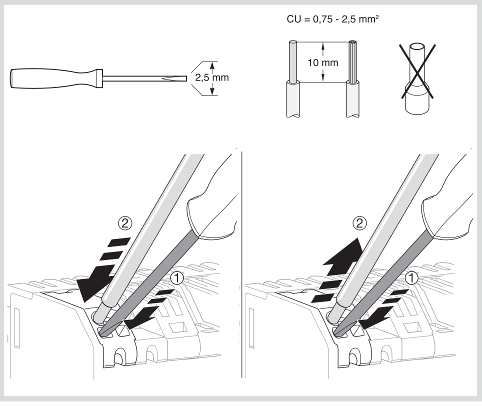

Fig 3: Installation/deinstallation with plug-in terminals

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

- Connect bus cable via connecting terminal (2).

Mains voltage can be connected optionally for device variants 8/4gang (7). Reduction of the power supply load is possible (see Technical data).

- Connect motors.

Start-up

Systemlik: loading the physical address and application software

The switch (1) is in position **auto**.

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

  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 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 on mains voltage on the outputs.
- Switch on mains supply (variant 8gang).

Determine operation time and slat adjusting time

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	DC 21…32 V SELV
Breaking capacity	µ230 V, 6 A AC1
Energy dissipation	2 W
Switching current at cos Φ = 0.8	max. 6 A
Operating altitude	max. 2000 m
Degree of contamination	2
Surge voltage	4 kV
Degree of protection of housing	IP20
Degree of protection of housing under front panel	IP30
Impact protection	IK 04
Overvoltage class	III
Operating temperature	-5 …+ 45 °C
Storage/transport temperature	-20 °C … +70 °C
Maximum switching cycle rate at full load	20 switching cycle/minute
Connection capacity	0.75 mm²…2.5 mm²
Standards	EN50491-3 ; EN60669-2-1

Variants 4gang

Own consumption on the KNX bus:	
- typical	5,2 mA (TYA..) 5 mA (TXA..)
- in standby	4,5 mA (TYA..) 3 mA (TXA..)
Dimension	4 TE, 4 x 17.5 mm

Variants 8gang

Auxiliary voltage	230 V AC, + 10 % .. - 15 % 240 V, + 6 % .. - 6%
Mains frequency	50/60 Hz
Own consumption on the KNX bus:	
- typical	15,5 mA (TYA..) 6 mA (TXA..)
- in standby	8,8 mA (TYA..) 4 mA (TXA..)
Own consumption on the KNX bus with mains connection:	
- typical	2 mA (TXA.., TYA..)
- in standby	2 mA (TXA.., TYA..)
Dimension	6 TE, 6 x 17.5 mm

Troubleshooting

Manual operation not possible

Cause 1: switch (1) not moved to ☞ .

Move switch to ☞ .

Cause 2: manual operation is not 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.

8gang: If mains voltage without bus voltage is present - red LED of programming button (5) flashes.

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.