

Din Rail 4 Input / 2 Shutter Output Module

SH42A01KNX

Product and Applications description

The DIN RAIL 4 Input / 2 Shutter Output Module SH42A01KNX is an EIB/KNX DIN rail mounting device equipped with 4 binary inputs (potential free) and 4 relay in order to drive 2 independent shutter actuators.

Inputs can be connected to conventional switching devices, e.g. push buttons, switches, floating contacts, and can be used for on/off commands, dimming, shutter control, scene recall and control.

Outputs (4 relays) can control 2 independent drivers for shutter, blinds, roller motors; relays have HW interlock and can run motors up to 230V AC.

Shutter commands are also possible through local switches, independent for each channel and located in the front of the device. A couple of led show the movement direction for each shutter.

Local switches can be enabled / disabled manually through a switch or via bus.

Device is intended to be installed on DIN rail.

The device configuration for commissioning in terms of physical address, group addresses and parameters is done with ETS (Engineering Tool Software) through a download of the Application Program

ETS application program

Downloadable from website: www.eelectron.com

Technical Specifications

Power Supply

- Via Bus EIB/KNX
- Current consumption < 15 mA

Inputs

- Number: 4 potential free contacts (independent)
- Maximum cable length: ≤ 10m
- Signal voltage V_n - 12 V DC (internally generated)

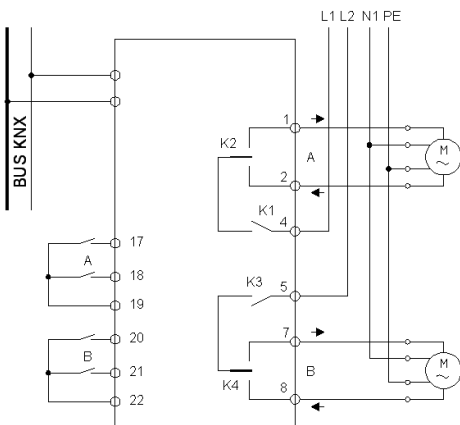
Outputs

- Number: 2 (independent)
- Maximum load for motors and ratio-motors: 6 A

Command and visualization elements

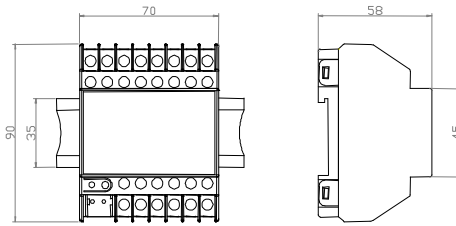
- Red led and EIB/KNX switch for ETS programming
- Two switches for manual control of each output channel :
 - Long press: Up / Down
 - Short press: Stop / Louvers Step
- Two led per channel for signaling Up / Down movement
- One led and one switch to enable / disable local switch

Wiring Diagram



Physical specifications and Dimensions

- Dimensions: (W x H x D): 70 x 90 x 58 mm
- Mounting width: 4 (1 SU=17,5mm)
- Weight: ca. 200 g.
- Installation: on 35mm mounting DIN rail (EN 60715)



Electrical Safety

- Pollution degree: 2 (according to IEC 60664-1)
- Protection class IP 20 (according to EN 60529)
- Safety Class III (according to IEC 61140)
- Over voltage category III (according to IEC 664-1)
- Bus: Safety extra low voltage - SELV
- Compliant to EN 50090-2-2

Electromagnetic compatibility

Compliant to: EN 50081-1, EN 50082-2 e EN 50090-2.2

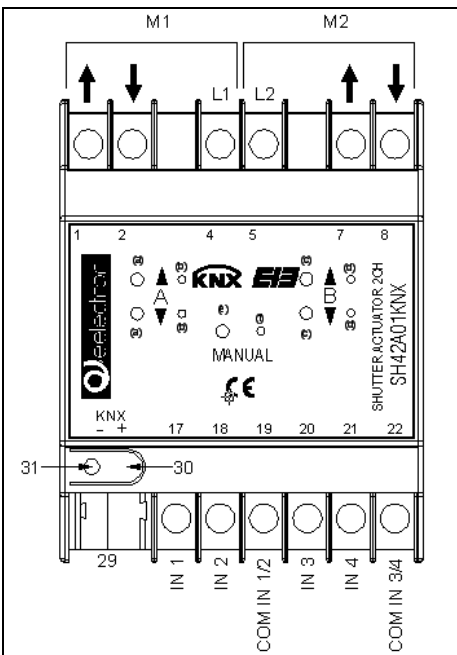
Environmental specifications

- According to EN 50090-2.2
- Operative temperature: 0°C + 45°C
- Storage temperature: -20 + 55°C
- Relative Humidity: max 90 % not condensing

CE Mark

In accordance with the EMC and low voltage guidelines

Terminals and connections



Screw Terminals:

- 3 Connect to UP movement of Motor 1
- 4 Connect to DOWN movement of Motor 1
- 6 Connect to Line of Motor 1
- 9 Connect to Line of Motor 2
- 10 Connect to UP movement of Motor 2
- 11 Connect to DOWN movement of Motor 2
- 23 IN 1 free potential contact
- 24 IN 2 free potential contact
- 25 COM1/2 common for inputs 1 and 2
- 26 IN 3 free potential contact
- 27 IN 4 free potential contact
- 28 COM3/4 common for inputs 3 and 4

- 29 Bus terminal connector block :
 - Negative - Black
 - + Positive - Red

Programming:

- 30. ETS programming led
- 31. ETS programming switch

Installation Instructions

Device must be used for permanent indoor installations in dry locations within distribution boards or wall boxes.

WARNING

- The prevailing safety rules must be heeded.
- Device must be mounted and commissioned by an authorised installer.
- The applicable safety and accident prevention regulations must be observed.
- The device must not be opened. Any faulty devices should be returned to manufacturer.
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.

Mounting and Wiring hints

General Description

The device configuration (KNX physical address assignment) is done by pressing the programming push button (31) located on the front of the housing.

Connecting bus cables

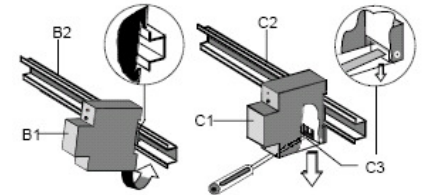
- Connect each single KNX/EIB bus core inside the terminal block observing bus polarity.
- Slip the bus connection block into the guide slot placed on the front side of this device and press the block down to the stop.

Mounting DIN-rail devices (see next figure)

- Slide the device (B1) onto the DIN-rail (B2) and swivel back the device until the slide clicks into the rail firmly.

Dismounting DIN-rail devices (see next figure)

- Press down the slide (C3) with a screw-driver, click it into place by a slight pressure and swivel the device (C1) from the DIN-rail (C2).



For further information please visit www.eelectron.com

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