![eelectron logo]

Din Rail 4 Input / 4 Output Module

IO44B01KNX

Product and Applications description

The DIN RAIL 4 Input / 4 Output Module IO44B01KNX is an EIB/KNX DIN rail mounting device useful to interface commands (e.g. push buttons) or loads (e.g. lamps) for any kind of applications.
The device is equipped with 4 binary inputs (potential free) and 4 binary relay outputs.

Inputs can be connected to conventional switching devices, e.g. push buttons, switches, floating contacts, for switching functions with pulse edge evaluation (e.g. rising or falling edge, toggle, etc...). Inputs can be configured with ETS SW, as output channels to drive LEDs in synoptic monitoring panels.

Inputs can be used to for on/off commands, dimming, shutter control, scene recall and control; outputs include switching function, scene recall and control logic function.

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
- Input signal current at close contact = 0,5mA per channel
- Maximum cable leght: ≤ 30m

Channels used as input
- Signal voltage Vn - 12 V DC (internally generated)

Channels used as output (for LED output)
- Input signal current = 0,5mA per channel

Outputs

- Number: 4 relays
  16 A cos φ 1 - 230 Vac
  8 A cos φ 0.6 - 230 Vac

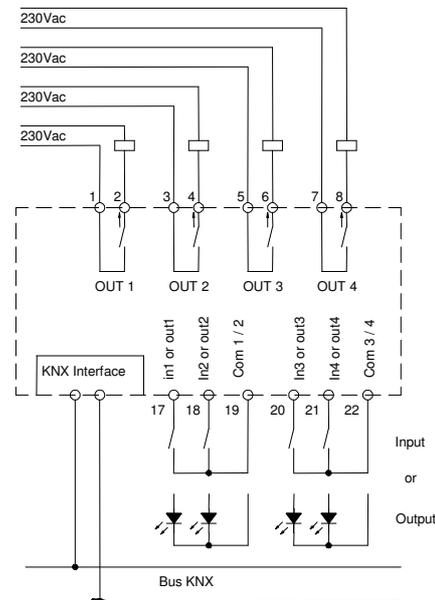|	
Resistive loads:	max 16 A
Incandescent lamps:	max 10 A
Motors e motor reduction units:	max 10 A
Fluorescent lamps:	max 2 A

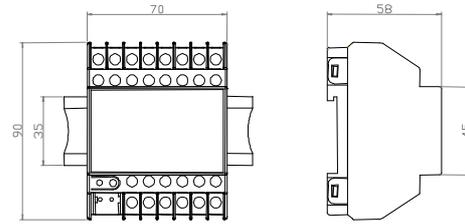Fluorescent lamps with electronic transformer: max 2 A
Fluorescent lamps uncompensated: use always an external relay

Wiring Diagram

Physical specifications and Dimensions

- Housing: plastic
- Dimensions: (W x H x D):: 70 x 90 x 58 mm
- Mounting width: 4 (1 SU=17,5mm)
- Weight: ca. 180 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
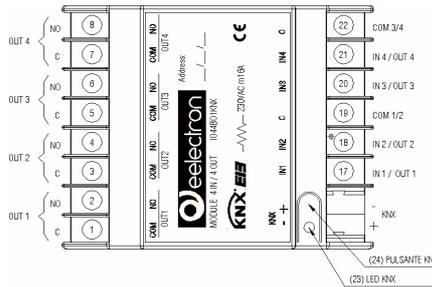
Compliant to: EN 50081-1, EN 50082-2 e EN 50090-2.2

Environmental specifications

- According to EN 50090-2.2
- Operative temperature: 0 ℃ + 45 ℃
- 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:

1. COM OUT 1
2. OUT 1 NA contact relay 1
3. COM OUT 2
4. OUT2 NA contact relay 2
5. COM OUT 3
6. OUT3 NA contact relay 3
7. COM OUT 4
8. OUT4 NA contact relay 4

17. IN 1 free potential contact or output led 1
18. IN 2 free potential contact or output led 2
19. COM1/2 common for inputs or outputs 1 and 2
20. IN 3 free potential contact or output led 3
21. IN 4 free potential contact or output led 4
22. COM3/4 common for inputs or outputs 3 and 4

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

Programming:

23   ETS programming led
24   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 (24) 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).
.
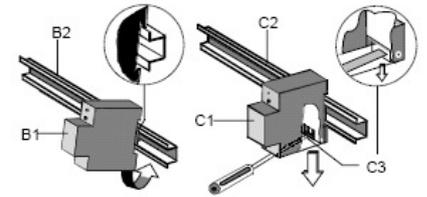
For further information please visit www.eelectron.com