



Multifunctional 8 IN / 8 OUT

Available inputs for digital contacts

Multifunctional 4 IN / 4 OUT

Compact Dimensions - 4 module

## IO88E01KNX - IO44E01KNX

- Each output can be configured independently for lights
- ON / OFF or continuous switching (PWM) for electric valves
- Roller shutters and blinds motor reductor
- Fan Coil Actuator for 2/4 pipes systems for heating/cooling with 3 speed motors)

### Configuration range:

- 8 lights
- 4 lights - 2 shutters
- 4 shutters
- 8 traditional switches

Inwall 4 Analog IN or 4/8 Digital In - 4 Led Out Module



## AD84A02KNX

- 4 digital inputs to interface free potential contacts
- 4 led output channels at low voltage that can drive LED for synoptics panels or switches
- 4 analog/digital inputs for free potential contacts or temperature sensors

### Configuration range:

- 8 input switch interface - 4 led output
- 2 local thermostats - 6 switches - 4 led output
- 4 thermostats sensor - 4 switches - 4 led output
- 2 local thermostats - 2 sensors - 4 led output - 4 switches

Inwall 3 IN - 2 Digital - 1 Analog / 2 Out module - With IR receiver



## IO32D01KNX

- 1 analog input for temperature probe
- 2 relay output at 8A for lights (2), shutters (1), valves (on/off or pwm)
- 2 digital inputs for switches.
- IR Receiver Connection

### Configuration range:

- 2 lights - 1 thermostat - 2 switches
- 2 valves - 1 thermostat - 2 switches
- 1 shutter - 1 thermostat - 2 up down switch
- 1 light - 1 valve - 2 switches - 1 thermostat
- 2 lights - 2 switches - 1 IR receiver
- 1 shutter - 2 switches - 1 IR receiver

# Competition Bites?



# Kombat

Universal Actuators 4 / 8 / 12 OUT

First **quality** products for **added value solutions.**

## ACTUATORS - INTERFACE - PRESENCE SENSOR KNX



### PUSH BUTTON INTERFACE 2 IN - 2 OUT LED / PUSH BUTTON INTERFACE 4 IN - 4 OUT LED

The product is dedicated to interface of clean contacts with 2 or 4 input channels, such as sensors, traditional buttons and 2 or 4 low voltage/current output channels to drive LED signal indicator lamps. The inputs can be configured for most common applications: actuators, dimmers, shutters and scenarios.

#### ORDER CODES

Push Button Interface 2 IN - 2 OUT LED  
Push Button Interface 4 IN - 4 OUT LED

**IO22C02KNX**  
**IO44C02KNX**

#### TECHNICAL FEATURES

##### Dimensions

- H: 43 x W: 36 x D: 17 mm

##### Mounting

- Fit in all standard derivation boxes: 2-3 modules rectangular and round

##### Connection

- Bus line: 2 bus connection terminals, max wire section: 0,8mm<sup>2</sup>
- Inputs and outputs: 12-pin plug connector wired with 0,2 mm<sup>2</sup>

##### Supply

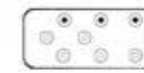
- From the KNX bus 21 .. 30 VDC SELV power consumption <10mA

##### Specific inputs

- 2 or 4 digital inputs for clean contacts
- Maximum length 10 meters twisted cables

##### Specific outputs

- 2 / 4 outputs for driving LED - Max 0.5 mA each



**RC01A01IRC**  
IRC Device



**IR00A01ACC**  
IRX Cabling



**TS01A01ACC**  
Temperature probe



**TS01B01ACC**  
External temperature probe

### INWALL MODULE 3 INPUT / 2 OUTPUT

IO32D01KNX module includes: • 2 digital inputs • 1 analog input • 2 relay output (bistable). Digital inputs are intended to be connected to free potential contacts and can interface sensors, traditional buttons, etc; they can be used to on/off commands, dimming, shutter control, scene recall and control, sequences of 3 objects. Analog input, can manage one temperature probe (with On/Off threshold) or one thermostats to control heating and cooling equipments, valves, 2 and 4 pipes fan coils; etc.. Analog input, alternatively to the temperature sensor, can manage a Infrared Receiver (IRX) in order to forward to the bus up to 8 channel coming from a Infrared Remote Control (IRC) with on/off commands, scenes, sequences of 2 objects, dimmer and shutter. Outputs include switching function with timed delays, stair-case function, scene recall, lock or logic function.

#### ORDER CODE

Inwall Module 3 IN / 2 OUT

**IO32D01KNX**

#### TECHNICAL FEATURES

##### Dimensions

- 52 x 28 mm Weight: approx. 50 g

##### Supply

- Via bus EIB/KNX cable
- Voltage 21..30V DC
- Current Consumption EIB/KNX < 10mA

##### Digital Input

- For free potential contacts (dry contacts)
- Max. length of Connecting Cable: ≤ 30 m (twisted cable)
- Voltage Scanning: 3,3 V DC (internally Generated)
- AWG24 cables with 1800 mm length

##### Analog Input for temperature probe

- For NTC temperature probe eelectron code
- TS01A01ACC (range from -20°C to +100°C)
- TS01B01ACC (range from -50°C to +60°C)
- Max. length of Connecting Cable: ≤ 20 m (twisted cable)

##### Analog Input for Infrared Receiver (IRX)

- These accessories must be used:
- IR01A01ACC (IRX with cable and connector)
- RC80A01IRC (IR remote control 8 channels)

##### Outputs

- 10 A cos 1 - 230 Vac
- Max capacitance @230V: 21µF 5.000 cycles
- Incandescent lamps max load: 1500W 50.000 cycles
- Fluorescent lamps max load: 6 x18W 25.000 cycles
- Halogen lamps max load: 500W 50.000 cycles
- Gas discharge lamps max load: 200W 25.000 cycles



### INWALL 8 INPUT - 4 LED OUTPUT MODULE

AD84A02KNX module includes 4 digital inputs to interface clean contacts and 4 analog or digital inputs for clean contacts or temperature sensors and 4 led outputs. Digital inputs can interface sensors, traditional buttons, etc; 4 low voltage/current output channels to drive LED signal indicator lamps. Inputs 5 to 8, set as analog inputs, enable up to 2 temperature probes (with On/Off threshold) and 2 thermostats to control heating and cooling equipments, valves, 2 and 4 pipes fan coils.

#### ORDER CODE

Inwall 8 Input - 4 Led Output Module

**AD84A02KNX**

#### TECHNICAL FEATURES

##### Dimensions

- H 43 x W 36 x D 24 mm

##### 12 Channels Configurable as:

- [01 ÷ 04] 4 digital inputs (clean contacts)
- [05 ÷ 08] 4 digital or analog inputs (for clean contacts or temperature sensors)
- [09 ÷ 12] 4 digital outputs (outputs for LED)

##### Digital Input - Key Features:

- 8 channels [01 ÷ 08] for clean contacts
- Maximum length 30 m twisted wires - input [01 ÷ 04]
- Maximum length 10m of twisted wires - inputs [05 ÷ 08]
- Wired with 0,2 mm<sup>2</sup> - 18 cm length - inputs [01 ÷ 04]
- Connection through 6-pin screw terminal - inputs [05 ÷ 08]
- Blinds and shutters control
- Scenarios

##### Analog Inputs - Key Features:

- 4 Channels [05 ÷ 08] Configurable as temperature sensor with Eelectron NTC sensor (cod.TS01A01ACC & TS01B01ACC)
- 2 Channels [05 ÷ 06] Configurable as thermostat

##### Digital Outputs - Key Features:

- 4 outputs for driving LED 0.3 mA / channel
- Use with LED Eelectron (Code LD00A01ACC / LD00A11ACC)
- Wired with 0,2 mm<sup>2</sup> 18 WNG - inputs [01÷ 04]

##### Heating and cooling modes

- Command with HVAC mode or setpoint
- Setpoint modification through bus
- 2 points ON / OFF and PWM control algorithm
- 3-speeds fancoil control
- OFF mode on window open detection



**TS01A01ACC**  
Temperature probe



**TS01B01ACC**  
External temperature probe



# ACTUATORS - INTERFACE - PRESENCE SENSOR KNX

## UNIVERSAL MODULE 4 / 8 OUT



The DIN RAIL 4 and 8 Output Modules BO04A01KNX - BO08A01KNX are an EIB/KNX DIN rail mounting devices useful to interface loads (e.g. lamps) for any kind of applications.

Devices has 4 or 8 outputs on board can be configured:

- Each output can be configured independently for load control
- Each output can be configured independently for ON/ OFF or continuous switching (PWM) for Electric valves (solenoid actuators)
- Outputs can be configured in pairs for the management of roller shutters and blinds; up to 2 channels (Channels A to B)
- Outputs can be configured in pairs for management

Of Motor Reductor or for solenoid valves with 3-point control or for ventilating grille; up to 2 or 4 channels (Channels A to B)

- Fan Coil Actuator for 2/4 pipes systems for Heating / Cooling with 3 speed motors) (uses relay from 1 to 5) only for the model BO08A01KNX. Device is intended to be installed on DIN rail.



### ORDER CODES

Universal Module 4 OUT

Universal Module 8 OUT

### TECHNICAL FEATURES

#### Dimensions

- (W x H x D): 72 x 90 x 58 mm

#### Mounting

- 4 modules DIN

#### Connection

- Outputs: 2 screw connectors by channel max 4mm<sup>2</sup>

### BO04A01KNX

### BO08A01KNX

#### Supply

- From KNX bus 21..30 V DC SELV

#### Features relay outputs:

- Resistive: max 16 A
- Incandescent Lamps: max 10 A
- Motors and motor reducers : max 10 A
- Fluorescent lighting transformer electronic: max 4 A
- Fluorescent lamps: (max 140 µF) max 3 A (700W)

## UNIVERSAL MODULE 12 OUT



BO12A01KNX is a Din Rail 12 output 16 A actuator, it can be used to control up to 12 independent loads / lights , control up to 6 independent blind / roller shutters with mechanical end position. This device is intended to be installed on DIN rail.

### ORDER CODES

Universal Module 12 OUT

### TECHNICAL FEATURES

#### Dimensions

- (W x H x D): 90 x 159 x 58 mm

#### Mounting

- 9 modules DIN

#### Supply

- From KNX bus 21..32 V DC SELV
- Current Consumption <10mA

### BO12A01KNX

#### Features relay outputs:

- Resistive: max 16 A
- Incandescent Lamps: max 10 A
- Motors and motoreductor : max 10 A
- Fluorescent lighting transformer electronic: max 4 A
- Fluorescent lamps: (max 140 µF) max 3 A (700W)

## UNIVERSAL 4 IN - 4 OUT C-LOAD



The DIN RAIL 4 Input / 4 Output Modules IO44B02KNX-C 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 (clean contacts) and 4 relay outputs suitable for capacitive loads (-C code).

Inputs can be configured 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 as output channels to drive LED in synoptic monitoring panels. Inputs can be used as switch, dimming, shutter control, scenarios; outputs include switching function, scenarios, logic functions.

Outputs can act as interlocked channels; this function may be used to drive fan coils with 2-pipes / 3 speeds or 4-pipes / 2 speeds. Devices are intended to be installed on DIN rail.

### ORDER CODE

Universal 4 IN / 4 OUT C-Load

### TECHNICAL FEATURES

#### Dimensions

- (W x H x D): 72 x 90 x 58 mm
- Mounting width: 4 DIN modules (1 SU=18 mm)

#### Connection

- Bus line, bus connecting terminal, wire max section 0,8mm<sup>2</sup>
- Outputs: 2 screw connectors by channel max section 4 mm<sup>2</sup>
- Inputs: 3 connectors every 2 inputs, max. section 4 mm<sup>2</sup>

#### Power Supply

- From KNX Bus 21..30 V DC SELV

#### Features

- 4 binary inputs for clean contacts
- Max length 30m twisted cables

#### Features relay outputs

- Resistive: 16 A Max
- Incandescent lamps: 10 A Max
- Motors and motor reducers: 10 A Max
- Fluorescent lighting transformer. Electronic: 6 A Max
- Fluorescent lamps (Max. 140 µ) (700W Max)

## UNIVERSAL 8 IN - 8 OUT C-LOAD



The DIN RAIL 8 Input / 8 Output Module IO88B02KNX-C 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 8 binary inputs (clean contacts) and 8 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 as output channels to drive LEDs in synoptic monitoring panels.

Inputs can be used to for switch, dimming, shutter control, scenarios; outputs include switching function, scenarios, logic functions. Relay from 5 to 8 are equipped with manual command and can be switched manually.

Device is intended to be installed on DIN rail.

### ORDER CODE

Universal 8 IN - 8 OUT C-Load

### IO88B02KNX-C

### TECHNICAL FEATURES

#### Dimensions

- (W x H x D): 72 x 90 x 58 mm
- Mounting width: 4 DIN modules (1 SU=18mm)

#### Mounting

- Bus Line: 2 Terminal of bus connection , Max section 0,8mm<sup>2</sup>
- Outputs: 2 screw terminals by channel max. section 4 mm<sup>2</sup>
- Inputs: 3 screw terminals every 2 inputs, max. section 4 mm<sup>2</sup>

#### Supply

- From Bus KNX 21..30 V DC SELV

#### Features

- 8 binary inputs for potential-free contacts
- Max length 30m twisted cables

#### Features relay outputs

- Resistive: 16 A Max
- Incandescent lamps: 10 A Max
- Motors and motor reducers: 10 A Max
- Fluorescent lighting transformer. Electronic: 6 A Max
- Fluorescent lamps (Max. 140 µ) 700W Max

## MULTIFUNCTIONAL 4 IN / 4 OUT - MULTIFUNCTIONAL 8 IN / 8 OUT



The products IO44E01KNX & IO88E01KNX are an EIB/KNX DIN rail mounting devices useful to interface commands (e.g. push buttons) or loads (e.g. lamps) for any kind of applications. The devices are equipped with 4 or 8 binary inputs (clean contacts) and 4 or 8 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...). Inputs can be configured with ETS SW, as output to drive Leds. Inputs can be used to for on/off commands, dimming, shutter control, scenarios; outputs include switching function, scenarios and control logic function.

### ORDER CODES

Multifunctional 4 IN / 4 OUT

Multifunctional 8 IN / 8 OUT

### IO44E01KNX

### IO88E01KNX

### TECHNICAL FEATURES

#### Dimensions- (W x H x D): 72 x 90 x 58 mm

- Mounting width: 4 (1 SU=18mm)

#### Mounting

- Bus Line: 2 Terminal of bus connection , Max section 0,8mm<sup>2</sup>
- Outputs: 2 screw terminals for channel Max. 4 mm<sup>2</sup>
- Inputs: 3 screw terminals every 2 inputs, Max. 4 mm<sup>2</sup>

#### Supply

- From KNX bus 21..30 V DC SELV

#### Features

- 4 or 8 binary inputs for clean contacts
- Max length 30m twisted cables

#### Features relay outputs

- Resistive Loads: 16 A Max - 230 VAC
- Incandescent lamps: 10 A Max
- Motors : 10 A Max
- Fluorescent lighting transformer 2 A Max
- Fluorescent lamps: use always an external counter

## 3 X 300W DIMMER MODULE



The 3 channel Dimmer Module is designed to drive dimmable lighting with KNX bus and allow dimming of incandescent and halogen loads of 230V, BT and TBT. The product can control one (900 W), two (600+300 W) or three (3x300 W) independent lighting circuits. Device is intended to be installed on DIN rail.

### ORDER CODE

3 x 300W Dimmer Module

### DM03B02KNX

### TECHNICAL FEATURES

#### Dimensions

- (H x W x D) 85 x 105 x 60 mm

#### Mounting

- Width 6 mod. DIN (um 18mm)

#### Connections

- Bus line: 2 bus connection terminals, section 0,8 mm<sup>2</sup>
- Outputs: 2 plug-in terminals for each channel section conductors from 0.75 mm<sup>2</sup> to 2.5 mm<sup>2</sup>

#### Supply

- From the KNX bus and power supply 230 V 50/60 Hz

#### Specific Outputs

- 3 power outputs with the following characteristics
- Power: 20 W to 300 W output with the possibility of coupling between them.
- Power consumption without load 5 W

#### Control elements

- 1 button to set the maximum value of brightness Max. or Min.

- 1 button for manual control of each output

#### Indicators

- 1 red LED for programming ETS

# ACTUATORS - INTERFACE - PRESENCE SENSOR KNX

## 3 OUT DIMMER 1-10V



Dimmer used to control lighting circuits via a 1/10V connection, acting upon remote control dimmers or electronic ballasts. Device is intended to be installed on DIN rail.

### ORDER CODE

3 OUT Dimmer 1-10V

**DM03C02KNX**

### TECHNICAL FEATURES

#### Dimensions

- (H x W. X D) 86 x 72 x 66 mm

#### Mounting

- Width 4 DIN modules

#### Connections

- Bus line: 2 bus connection terminals, max section 0,8mm<sup>2</sup>
- Outputs: 2 screw terminals for the relay contact and 2 for the change
- 1-10V, up to section conductors. 2.5 mm<sup>2</sup>

#### Supply

- From the KNX bus 21 .. 30 VDC SELV

#### Specifications 1-10V relay outputs

- 3 power outputs with the following characteristics :
- Incandescent 230V Max. 2300W
- Halogen 2300W
- Halogen lamps with magnetic transformer 1500 VA

- 1500W Halogen lamps with electronic transformer
- 1000W electronic ballast

#### Specifications 1-10V outputs

- 3 outputs 50mA Max.

#### Control elements

- 1 button for programming ETS
- 1 button for setting the maximum value of brightness Max. or min.

- 1 button for manual control of each output

#### Indicators

- 1 red LED for programming ETS
- 3 output status LEDs

## ENERGY METER 80A MONOPHASE WITH KNX INTERFACE



Active energy meters for single phase AC with LCD display backlight for the display of values, an input for switching rates between 2 and direct connection to 80A. The values of instantaneous power, KW / KVA h and score for tariff 1 and 2, are sent via the supplied KNX bus interface.

### ORDER CODE

Energy Meter 80 A Monophase with KNX Interface

**PM10A01KNX**

### TECHNICAL FEATURES

#### Dimensions

- Case - 3 modules DIN 43880
- Fixing 35 mm DIN rail EN 60715
- Depth 70 mm
- Reference standards for active energy - EN 50470-1-3 reactive power - output pulse EN 62053-23-31

#### Functionality

- Connection to single-phase 2-wires
- Rates for active and reactive energy No. 2 T1 or T2

#### Supply

- Power supply voltage 230 VAC
- 184 VAC voltage variation range ... 276 VAC
- Nominal frequency 50 Hz
- Power consumption (Max.) 8 VA - 0.6 W

#### Overload

- Permanent voltage Un 276 V / momentarily (1 s) 300 V
- Permanent current Imax 80 A / momentary (10 ms) 2400 A

#### Accuracy at 23 ± 1 ° C refer to the nominal values

- Energy and power according to EN 50470-3 active% ± 1 (B)
- Energy and reactive power in accordance with EN 62053-23 ± 2%

#### Measuring inputs

- Listing phase / W - direct
- Current range (Ist ... IMax) 0,025 direct connection ... 80 A

- Frequency: 50 Hz

- Input waveform - sinusoidal

- Minimum current for the measurement of energy (Ist) 25 mA

#### S0 output according to EN 62053-31

- Pulse output for active energy and reactive
- Quantity Pulse 1000 imp / kWh
- 30 ± 2 ms pulse duration
- Power required min. 5 ... .230% ± 5 VAC / Vdd
- Maximum Series Pulse ON (Max. 230 V AC / DC) 90 mA
- Maximum Series Pulse OFF (leakage current Max. 230 VAC / DC) 1 µA

#### Optical Interface

- Front Calibration (precision control) LED imp / kWh 1000

# ACTUATORS - INTERFACE - PRESENCE SENSOR KNX

## ENERGY METER THREE PHASE WITH KNX INTERFACE



Active energy meter for three phase alternating with a backlit LCD display for displaying the values, an input for switching rates between 2 rates and direct connection to 80 A. The values of instantaneous power, KW / KVA h and scored for rate 1 and 2, are sent via the supplied KNX bus interface.

### ORDER CODE

Energy meter three phase with KNX interface

**PM30A01KNX**

### TECHNICAL FEATURES

#### Main Features

- Case 5 DIN 43880 DIN modules
- Fixing 35 mm DIN rail EN 60715
- Depth 70 mm

#### Reference standards:

- Active energy - EN 50470-1-3
- Reactive energy - output pulse EN 62053-23-31

#### Functionality

- Electricity network connection 4-wires
- Rates for active and reactive energy No. 2 T1 or T2

#### Supply

- Power supply voltage 230 VAC
- Voltage variation range 184 VAC ... 276 VAC
- Nominal frequency 50 Hz
- Power consumption (Max.) 8 -0.6 W VA

#### Overload

- Permanent voltage Un, phase / phase 480 V
- 1 second: phase / phase 800 V
- Permanent phase/N 276 V
- 1 second: phase/N 300 V
- Permanent current Imax 80A
- Momentary (0.5 s) 120A
- Momentary (10 ms) 2400 A

#### Accuracy at 23 ± 1 ° C refer to the nominal values

- Energy and power according to EN 50470-3 active ± 1% class 1 (B)

- Energy and reactive power in accordance with EN 62053-23 class 2 ± 2%

#### Measuring inputs

- Listing phase /N - direct
- Current range (Ist ... Imax) direct connection 0,015... 80 A
- Frequency: 50 Hz
- Input waveform - sinusoidal
- Minimum current for the measurement of energy (Ist) 15 mA

#### S0 output according to EN 62053-31

- Pulse output for active energy and reactive
- Quantity impulse 500 imp / kWh
- 30 ± 2 ms pulse duration
- Power required min. 5 ... .230% ± 5 VAC / Vdd

#### Optical interface

- Calibration Front (precision control) LED imp / kWh 1000

## KNX-DMX INTERFACE



Interface between the KNX bus and the DMX512 bus. Combine items for building automation control devices dedicated to enlightenment and special effects. One-way gateway that receives telegrams from the KNX bus and data bus to DMX512. Scenarios of all 512 channels can be configured and managed with KNX group addresses.

### ORDER CODE

KNX-DMX Interface

**IC00B01DMX**

### TECHNICAL FEATURES

#### Dimensions

- 107x75x31mm

#### Mounting

- Width Mod 6. DIN

#### Operating Temperature

- -5 ° C / 45 ° C

#### Control Elements

- 3 x 16 potentiometers, stepper positions
- 1 button (user), 2 LEDs (user)
- 1 button programming for KNX and LED

#### KNX Power

- 20 - 32V DC, 150 mW

#### Programming

- Using the USB port

#### Supply

- 9-30V DC, 100mA, separated

## KNX PRESENCE SENSORS - INWALL OR SURFACE MOUNT



Presence sensor dedicated to KNX installations in offices, conference rooms, schools, hospitals etc.. Up 4 different operating modes are possible: the first is standard semi-automatic or fully automatic mode (switching), the second is a semi-automatic or fully automatic mode with the constant adjustment of brightness (dimming), the third is to slave mode, the fourth is a permanent adjustment of the light (control of light is not dependent on the presence). Two target values are set (specified in Lux) and a reference value remains fixed (specified in%). The values can be modified using a communication object. Soft Start for passing reference to enlightenment.

Reflectivity for a better adjustment to environmental conditions. HVAC channels activated by push button.

### ORDER CODE

KNX Presence Sensors - Inwall

**PD00C01KNX**

KNX Presence Sensors - Surface Mount

**PD00C02KNX**

### TECHNICAL FEATURES

#### Dimensions:

- 98 x 50 mm H - Model Code PD00C01KNX
- 80 x 84.5 mm H - Model Code PD00C02KNX

#### Supply

- 24VDC to KNX / EIB-Bus Network

#### Detection area:

- 360 ° circular

#### Range (diameter) in meters:

- Sitting 4.00 m
- Movement away 10.0 m
- Movement approaching 6.0 m

#### Degree of protection:

- FM IP20 / Class II / EC
- Ambient temperature: -25 ° C to +50 ° C



# SYSTEM COMPONENTS

## POWER SUPPLY 160 - 320 - 640 MA

Power supply for generating bus voltage on a line with a maximum current of 160, 320 or 640mA according to the model. With integrated choke to decouple the power supply voltage from the bus. Connection with screw terminals. Mounting on DIN rails EN 50022. Connection via bus terminal.

### ORDER CODE

160 mA Power Supply

**PS00C01KNX**

320 mA Power Supply

**PS00B02KNX**

640 mA Power Supply

**PS00B03KNX**

### TECHNICAL FEATURES

#### Dimensions

- H 90 x W 72 x D 58 mm for PS00C01KNX & PS00B02KNX
- H 90 x W 110 x D 58 mm for PS00B03KNX

#### Mounting

- Width (UM = 18mm) 4 mod. DIN (PS00B01KNX & PS00B02KNX)
- 6 mod. DIN (PS00B03KNX)

#### Connection

- Bus line connecting terminal, wire max section 0,8mm<sup>2</sup>
- Power supply 230V with plug-in terminals, cable max section 2,5mm<sup>2</sup>

#### Supply

- Line voltage: 230V AC, 50-60Hz

#### Output voltage

- 29 ± 1V DC

#### Output current / model

- Max 160mA, 320mA, 640mA with protection against short circuit

#### Control elements

- 1 switch to reset output power

#### Reports

- 1 green LED for power bus
- 1 red LED for overload warning

## BUS LINE COUPLER KNX

LC00A01KNX can be used as a line coupler to connect a line to a main line or as a backbone coupler to connect a main line to a backbone line. LC00A01KNX supports long messages (up to 250 bytes) and provide a configurable special function activating by a frontal button which is very useful in commissioning / installing phase or during system tuning.

### ORDER CODE

Bus Line Coupler KNX

**LC00A01KNX**

### TECHNICAL FEATURES

#### Dimensions

- H 80 x W 36 x D 58 mm

#### Mounting

- 2 mod. DIN

#### Connections

- KNX/EIB instabus terminal for superordinate and subordinate line

#### Supply

- From KNX bus 21..32 V DC SELV

#### Control elements

- 1 button: Programming for ETS

#### Indicators

- LED Bus Stat Main green - Off: main line error - On: main line ok
- LED Bus Stat Main red - On: manual overwrite active
- LED Bus Stat Sub green - Off: sub line error or not connected On: sub line ok

- LED Traffic Main green - Blinking: bus traffic on main line Off: no traffic on main line
- LED Traffic Sub green - Blinking: bus traffic on sub line Off: no traffic on sub line
- LED Traffic Main red - Blinking: transmission error on main line
- LED Traffic Sub red - Blinking: transmission error on sub line
- LED Group Address - Routing of group telegrams - Off: main and sub different - Green: filter table active - Green and red: route all - Red: block
- LED Physical Address - Routing of physical addressed telegrams - Off: main and sub different - Green: filter table active - Green and yellow: route all - Yellow: block

## USB - IP - IP ROUTER INTERFACE / KNX

These devices allows the communication between computers, IP devices with the KNX bus system.

- KNX / USB 1.1 or 2 interface for direct connection to your computer
- KNX / IP interface for direct or LAN connection for programming or supervision of the KNX system.
- KNX / IP router, is used for connectionless and simultaneous transmission of KNX telegrams to several devices. It can also be used as a programming interface KNX bus system

### ORDER CODE

USB / KNX Interface

**IN00A02USB**

IP / KNX Interface

**IN00A02IPI**

IP ROUTER / KNX Interface

**IN00A01RIP**

### TECHNICAL FEATURES

#### Dimensions

- Weight: 100 g Dimensions: H: 90 x W: 36 x D: 65 mm

#### Mounting

- Width (UM = 18mm) 2 mod. DIN

#### Connections for USB / KNX

- Bus line with bus connecting terminal, wire max section 0,8mm<sup>2</sup>
- USB type B socket

#### Connections for Interface IP - IP Router / KNX

- Bus line bus connecting terminal, wire max section 0,8mm<sup>2</sup>
- Complementary power supply: 2-wire screw terminals with max section 4 mm<sup>2</sup>
- Network RJ45 LAN jack

#### Supply

- From the KNX bus 21 .. 30 VDC SELV <300 mW
- Additional 5V DC <200 mW through USB for KNX/USB interface
- Additional 12/24 V DC for KNX/IP interface
- Additional 12/24 V DC for KNX/IP Router

#### Indicators

- 1 green LED active connection
- 1 yellow LED notified of data traffic

# ACCESSORIES

## EIB / KNX BUS CABLE



It is used for installation in "smart" building applications. Guarantees perfect communication in accordance with specifications established by EIB / KNX, and is suitable for applications with fixed wiring inside channels and under plaster.

### ORDER CODE

Double-bus cable 2x2x0, 8 coils 100mt

**CV00A01KNX**

Double-bus cable 2x2x0, 8 coils 500mt

**CV05A01KNX**

Double-bus cable 2x2x0, 8 coils 1000mt

**CV10A01KNX**

Single bus cable 1x2x0, 8 coils 100mt

**CV00A02KNX**

Single bus cable 1x2x0, 8 coils 500mt

**CV05A02KNX**

Single bus cable 1x2x0, 8 coils 1000mt

**CV10A02KNX**

### TECHNICAL FEATURES

#### Inner conductor:

- Solid bare copper wire

#### Construction:

- 1x2x0,80 mm or 2x2x0,8 mm

#### Dielectric:

- Low Smoke Zero Halogen fire retardant compound (LSZHFRNC)

#### Colours:

- Red, Black or Red, Black, Yellow, White

#### Outer Jacket

- Low Smoke Zero Halogen fire retardant compound (LSZHFRNC)

#### Classified

- CEI 20-11 M1

#### According to:

- IEC 60332-1, IEC 61034-1, IEC 61034-2, IEC 60754-1, IEC 60754-2

#### Diameter

- 5,20 mm ± 0,20

#### Colour

- Green (RAL 6018)

## 3V LED INDICATOR

Packages of 20 or 60 pcs LED with Blue or White light 3V wired red / black.



### ORDER CODE

3v LED indicator light blue wiring red-black - 20 pcs

**LD00A01ACC**

3v LED indicator light blue wiring red-black - 60 pcs

**LD00A02ACC**

3v LED indicator light white wired red-black -20 pcs

**LD00A11ACC**

3v LED indicator light white wired red-black -60 pcs

**LD00A12ACC**

### TECHNICAL FEATURES

#### Dimensions

- 3 mm x 4.3 mm (width and height) and 3.85 mm (radius)
- Current: 20 mA
- Reverse Voltage: 5 V
- Luminous Intensity: 4000 Min - Max 9000mcd

## BUS CONNECTOR

BUS Connector Red / Black for EIB / KNX, with direct plug connection. They can be connected up to 4 pairs of wires to a KNX device can also be used as a branch terminal.



### ORDER CODE

Wago connector Red / Black Box 10 pcs

**WG00A01ACC**

Wago connector Red / Black Box 500 pcs

**WG00A02ACC**

### TECHNICAL FEATURES

- Wire 22 to 18 AWG (0.6 - 1 mm)
- EN detected voltage 100V
- Rated current 6A
- Stripping length from 5 to 6 mm
- Weight 1.6 gr
- Dimensions alt. x width. x depth.: 11.5 x 10 x 10 mm

The EIB / KNX technology standard is now the most widely used in the field of control for buildings with service and residential uses, and covers more than 10,000 devices produced by some 130 leading manufacturers in electronics / devices, and more than 12 million nodes installed worldwide.

KNX is approved by:

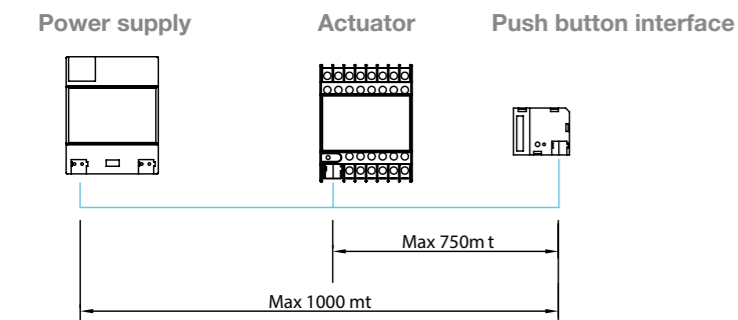
- European Standard (CENELEC EN 50090, CEN EN CEN 13321-1 and EN 1332-2 "KNXnet / IP")
- International Standard (ISO / IEC 14543-3)
- Chinese Standard (GB / Z 20965)
- U.S. Standard (ANSI / ASHRAE 135)

For more information see the Konnex website at: [www.konnex.org](http://www.konnex.org)

## BUS LINE EXTENSION

The structure of a KNX installation comprises areas, lines and devices. Each line consists of a power supply that provides voltage (SELV 29V), and a maximum of 64 devices connected in any installation topology. More bus lines can communicate with each other through "Line / Area Couplers". To achieve coupling between 15 lines, you need to create an Area composed of a total of 960 devices: this can be coupled to a maximum of 15 other Areas.

A bus line can have a maximum length of 1,000m (considered as the sum of all segments in the line), and the maximum distance between the adapter and the farthest device or between two devices is 750 m.

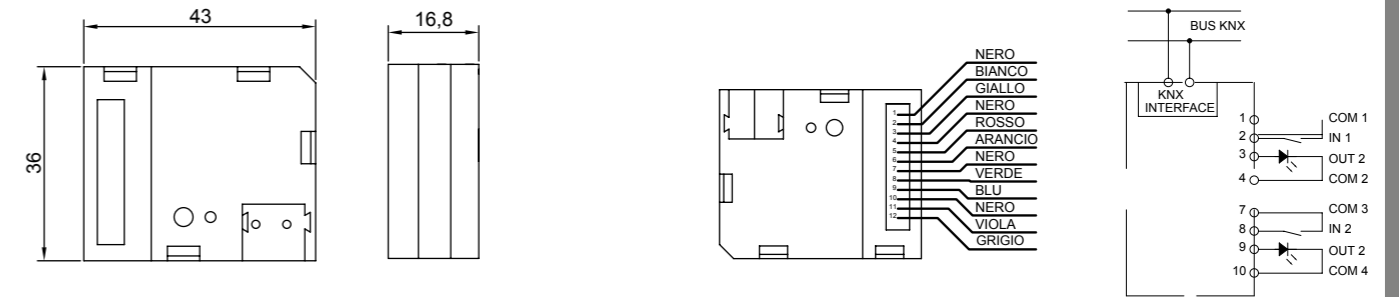


## TECHNICAL CHARACTERISTICS OF THE SYSTEM

System Data	
Bus cable	
Cable type	2 x 2 x 0.8 double cable. A pair of conductors (red, black) for signal transmission and power. A pair of conductors (yellow, white) for additional applications (SELV).
Disposizione cavo	1 x 2 x 0.8 single cable. A pair of conductors (red, black) for signal transmission and power.
Length of a line (conductor diameter: 0.8 mm)	max 1000m (including all derivations)
Distance between two bus devices	max 700 m
Distance between a bus and power (320 mA) with integrated coil	max 350 m
Bus appliances	
Number of Areas	15 max
Number of lines per Area	15 max
Number of bus devices per line	64 max
Topology	Spin, star, tree configurations
Power	
System voltage	21-30 V DC (safety voltage SELV)
Power Supply	160, 320 or 640 mA
Power line in case of high demand for current	2 power supplies (max) at a minimum distance of 200 m
Transmission	
Transmission technique	Decentralized, event-driven, serial, symmetric
Speed	9600 bit/s

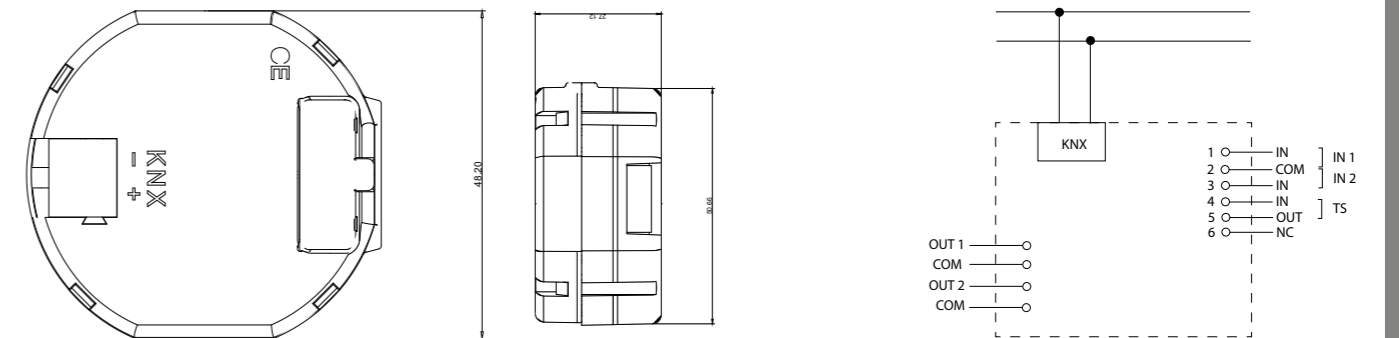
## PUSH BUTTON INTERFACE 2 IN / 2 OUT LED - PUSH BUTTON INTERFACE 4 IN / 4 OUT LED

IO22C02KNX - IO44C02KNX



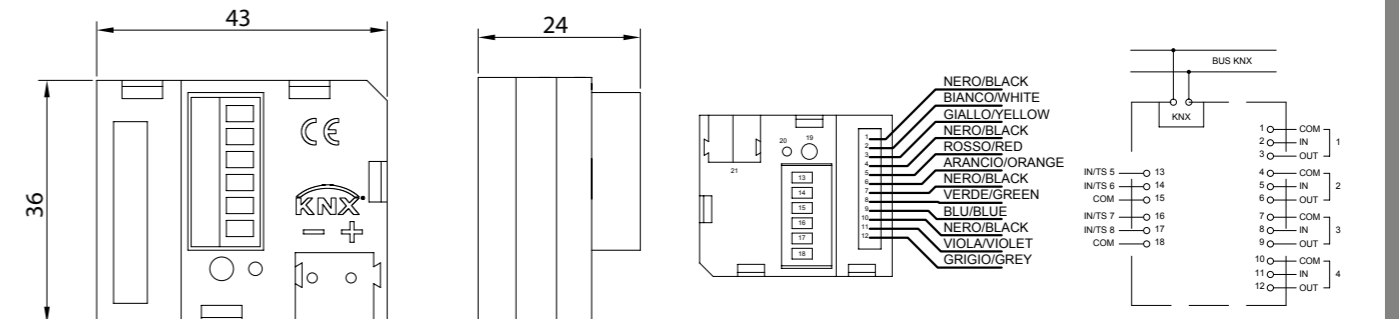
## INWALL MODULE 3 IN / 2 OUT

IO32D01KNX



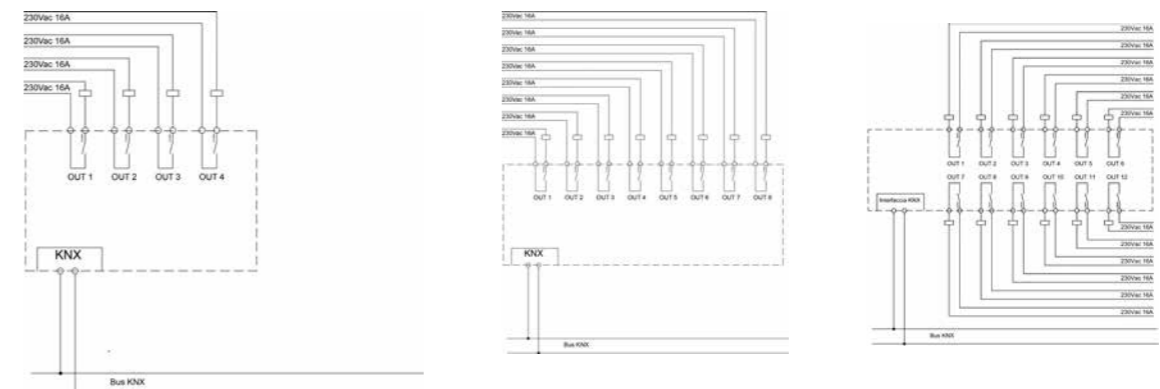
## INWALL 8 INPUT/4 LED OUTPUT MODULE

AD84A02KNX

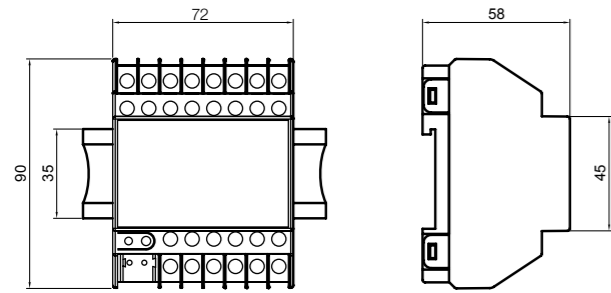


## UNIVERSAL 4 OUT / 8 OUT / 12 OUT

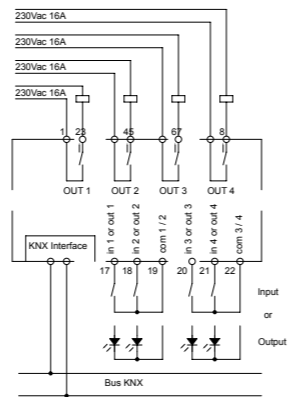
BO04A01KNX - BO08A01KNX - BO012A01KNX



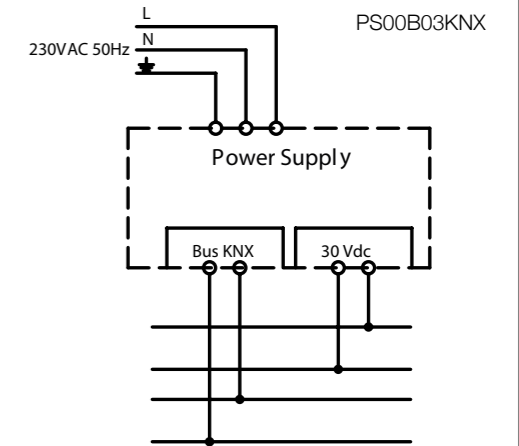
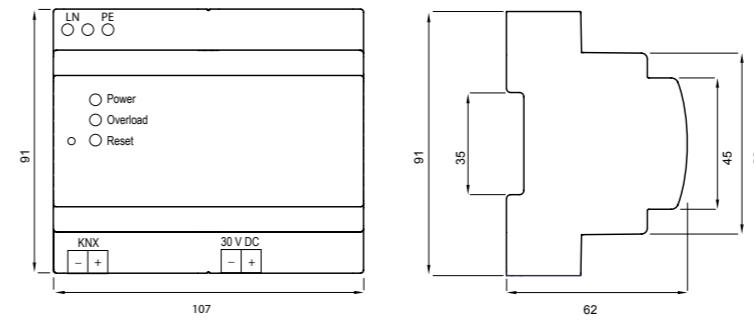
UNIVERSAL 4 IN / 4 OUT C-LOAD - MULTIFUNCTIONAL 4 IN / 4 OUT



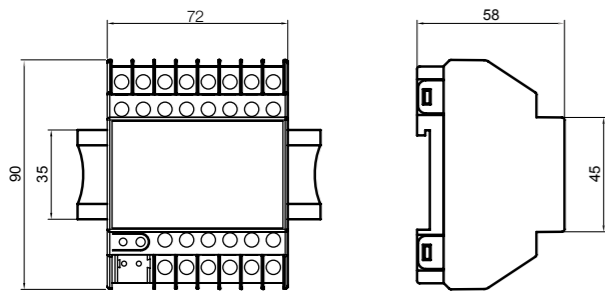
IO44B02KNX-C - IO44E01KNX



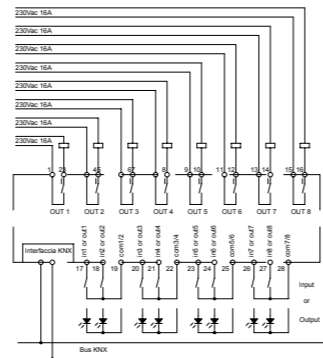
640 mA POWER SUPPLY



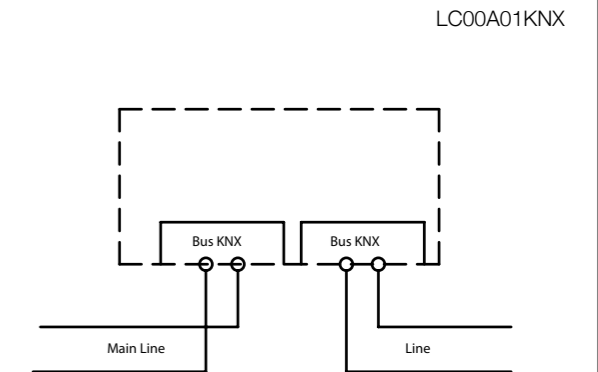
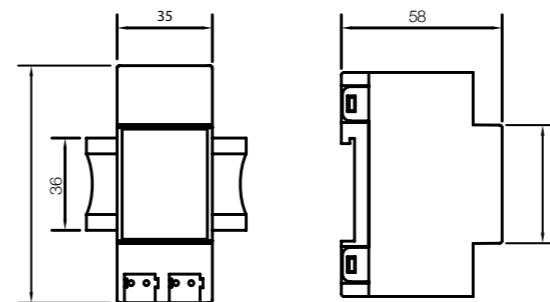
UNIVERSAL 8 IN / 8 OUT C-LOAD - MULTIFUNCTIONAL 8 IN / 8 OUT



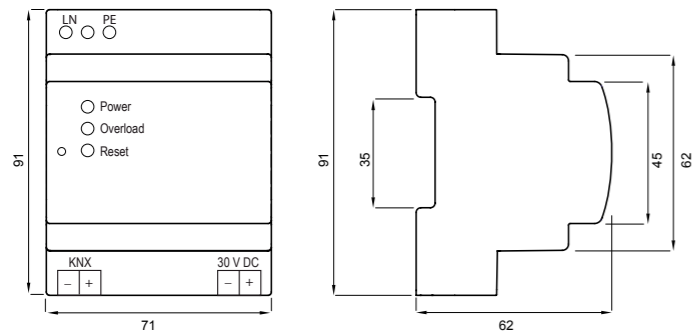
IO88B02KNX-C - IO88E01KNX



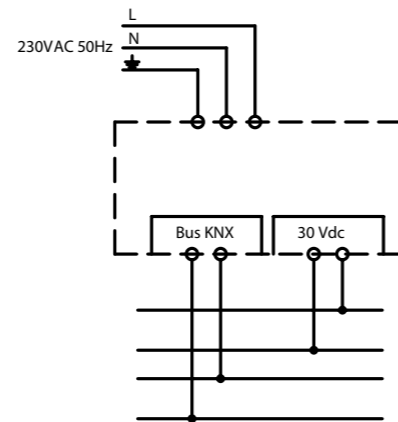
BUS LINE COUPLER KNX



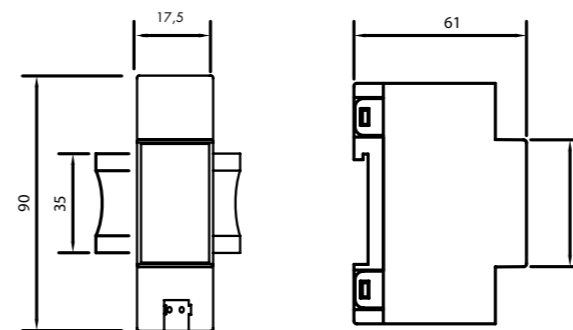
160 mA POWER SUPPLY



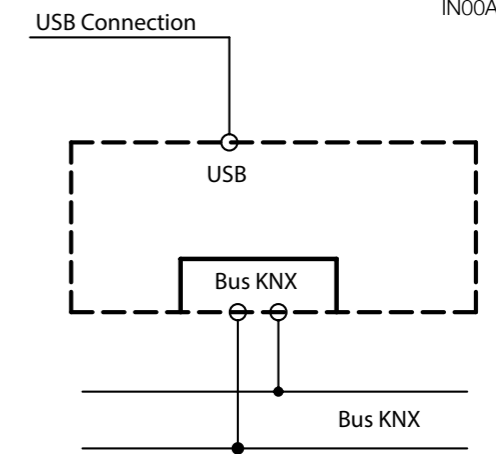
PS00C01KNX



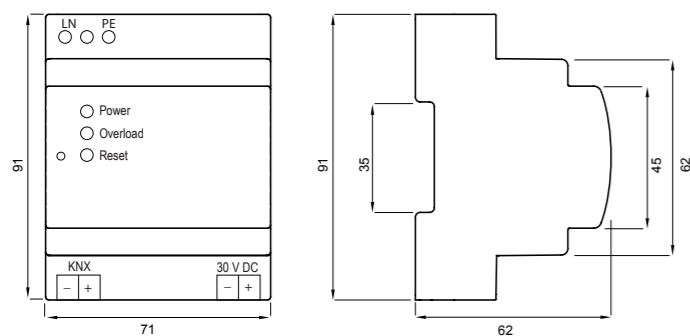
USB/KNX INTERFACE



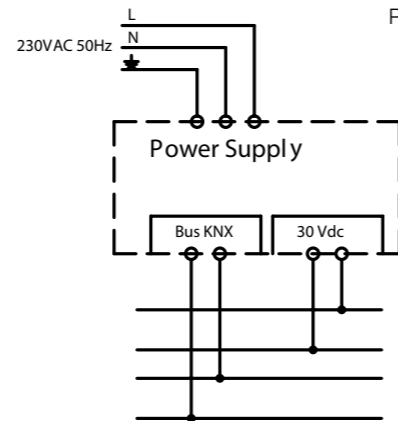
IN00A02USB



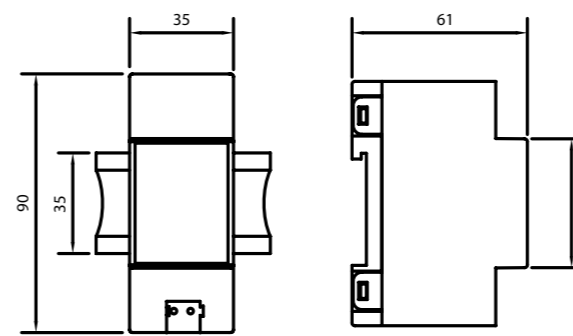
320 mA POWER SUPPLY



PS00B02KNX



IP ROUTER /KNX INTERFACE - IP/KNX INTERFACE



IN00A01RIP  
IN00A02IPI

