# **Actuators**



OUT 1 OUT 2 OUT 3 OUT 4 OUT 5 OUT 6 OUT 7 OUT 8

OUT 0 OUT 10 OUT 11 OUT 12 OUT 13 OUT 14 OUT 15 OUT 16

OUT 0 OUT 10 OUT 11 OUT 12 OUT 13 OUT 14 OUT 15 OUT 16

OUT 0 OUT 10 OUT 11 OUT 12 OUT 13 OUT 14 OUT 15 OUT 16

OUT 0 OUT 10 OUT 14 OUT 15 OUT 16

OUT 0 OUT 15 OUT 16

OUT 16 OUT 15 OUT 16

OUT 16 OUT 15 OUT 16

OUT 16 OUT 15 OUT 16

OUT 17 OUT 16

OUT 18 OUT 15 OUT 16

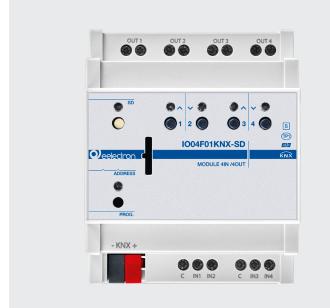
OUT 16 OUT

Lighting Management
Dimming, DALI, DMX
Climate Control
Shutters Management
Sensors
Metering
System Components
Interfaces













Universal actuator 16 IN / 16 OUT with manual control Universal actuator 4 IN / 4 OUT with manual control Heating actuator 8 IN / 8 OUT with manual control

Universal actuator 16 OUT with manual control

DALI Gateway TW 2 CH



Multi Sensor

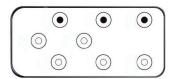
## **Inwall** Module

3 IN / 2 OUT

IO32D01KNX module includes: 2 digital inputs, 1 analog input, 2 relay outputs (bistable).

Digital inputs are intended to be connected to free potential contacts and can interface sensors, conventional push buttons, etc; they can be used for on/off controls, 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 functions coming from a Infrared Remote Control (IRC) with on/off commands, scenes, sequences of 2 objects, dimmers and shutters. Outputs include switching functions with timed delays, staircase functions, scene recall, lock or logic functions.







### **Technical Features**

Mechanical data	• Dimensions: (Ø x H) 52 x 28 mm
Mounting	• Inwall
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 30 m (twisted cable)</li> </ul>
Input - analog mode for temperature probe	<ul> <li>For NTC temperature probe eelectron code:</li> <li>TS01A01ACC (range from -20°C to +100°C)</li> <li>TS01B01ACC (range from -50°C to +60°C)</li> <li>TS01D01ACC (range from -40°C to 125°C)</li> <li>Max. length of Connecting Cable: ≤ 20 m (twisted cable)</li> </ul>
Input - analog mode for Infrared Receiver (IRX)	<ul> <li>These accessories must be used:</li> <li>IR01A01ACC (IRX with cable and connector)</li> <li>RC80A01IRC (IR remote control 8 channels)</li> </ul>
Output rate	<ul> <li>10 A cos φ 1 - 230 Vac</li> <li>Max capacitance @230 V: 21 μF 5.000 cycles</li> <li>Incandescent lamps max load: 1500 W 50.000 cycles</li> <li>Fluorescent lamps max load: 6 x18 W 25.000 cycles</li> <li>Halogen lamps max load: 500 W 50.000 cycles</li> <li>Gas discharge lamps max load: 200 W 25.000 cycles</li> </ul>

### **Order Codes**

#### IO32D01KNX

Inwall Actuator 3 IN / 2 OUT

#### IR00A01ACC IRX Cabling

## RC80A01IRC IRC Device

4 IN / 4 OUT PLUS - F Series

Device IO04F01KNX is a DIN rail EIB / KNX actuators with 4 relay outputs that can be configured as:

- 4 outputs for light / load control
- 4 channels for valve in PWM (solenoid actuators)
- 2 channels for roller shutter / venetian control
- 2 channels for 3-point valve control
- 1 fan coil actuators 2-pipes

The device also includes 4 inputs that can be connected to pushbuttons, switches, or be configured as outputs to activate individual signaling LEDs (eelectron code LD00A01ACC / LD00A11ACC) and can be used for on / off, dimming, shutters or venetian blinds / scenarios, sequences, step-by-step commands, etc. 4 inputs (of the 16) are configurable as analogue for the connection of NTC temperature probes (see probes eelectron code TS00A01ACC / TS00B01ACC) with which to send 4 temperature measurements on the bus and manage a simple on / off controls (e.g. thermo furniture).

It is also possible to enable 4 complete thermostat modules; each thermostat module manages 2 stages with integrated PI controller for driving heating and cooling equipment, valves, 2 and 4-pipe fan coils, etc.

Version IO04F01KNX-SD includes a microSD card reader includes a microSD card with which you can save the programming of the device to be able to restore it on an identical device in order to avoid programming in field or to allow a fast restore in case of failure.



## **Technical Features**

Mechanical data	Dimensions: 4 DIN modules
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 30 m (twisted cable)</li> </ul>
Input - analog mode for temperature probe	<ul> <li>For NTC temperature probe eelectron code:</li> <li>TS01A01ACC (range from -20°C to +100°C)</li> <li>TS01B01ACC (range from -50°C to +60°C)</li> <li>TS01D01ACC (range from -40°C to 125°C)</li> <li>Max. length of Connecting Cable: ≤ 20 m (twisted cable)</li> </ul>
Output rate	<ul> <li>16 A cos φ 1 - 230 Vac</li> <li>8 A cos φ 0.6 - 230 Vac</li> <li>Max current relay output: 16 A/16 AX (140 μF)</li> <li>Max peak current: 165 A / 20 ms</li> <li>Incandescent lamps: max 10 A</li> <li>Motors e motor reduction units: max 10 A</li> <li>Fluorescent lamps (max 140 μF) max 3 A (700 W)</li> <li>Electronic ballast: max 6 A</li> <li>LED's lamps drivers: always check that the maximum peak current drawn by led power supply is lower than maximum peak current allowed for the relay</li> </ul>

### **Order Codes**

#### IO04F01KNX

Universal Actuator 4 IN / 4 OUT Plus

#### IO04F01KNX-SD

Universal Actuator 4 IN / 4 OUT + SD Card

8 IN / 8 OUT PLUS - F Series

Device IO08F01KNX is a DIN rail EIB / KNX actuators with 8 relay outputs that can be configured as:

- 8 outputs for light / load control
- 8 channels for valve in PWM (solenoid actuators)
- 4 channels for roller shutter / venetian control
- 4 channels for 3-point valve control
- 2 fan coil actuators 2-pipes

It is also possible to combine 2 or 3 relays with logic interlock for 4-pipe / 3-speed fan coil control or combine groups of relays (up to 8) for special function using logic interlock.

The device also includes 8 inputs that can be connected to pushbuttons, switches, or be configured as outputs to activate individual signaling LEDs (eelectron code LD00A01ACC / LD00A11ACC) and can be used for on / off, dimming, shutters or venetian blinds / scenarios, sequences, step-by-step commands, etc. 4 inputs (of the 8) are configurable as analogue for the connection of NTC temperature probes (see probes eelectron code TS00A01ACC / TS00B01ACC) with which to send 4 temperature measurements on the bus and manage a simple on / off controls (e.g. thermo furniture).

It is also possible to enable 2 complete thermostat modules; each thermostat module manages 2 stages with integrated PI controller for driving heating and cooling equipment, valves, 2 and 4-pipe fan coils, etc.

Version IO08F01KNX-SD includes a microSD card reader includes a microSD card with which you can save the programming of the device to be able to restore it on an identical device in order to avoid programming in field or to allow a fast restore in case of failure.



### **Technical Features**

Mechanical data	Dimensions: 4 DIN modules
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 30 m (twisted cable)</li> </ul>
Input - analog mode for temperature probe	<ul> <li>For NTC temperature probe eelectron code:</li> <li>TS01A01ACC (range from -20°C to +100°C)</li> <li>TS01B01ACC (range from -50°C to +60°C)</li> <li>TS01D01ACC (range from -40°C to 125°C)</li> <li>Max. length of Connecting Cable: ≤ 20 m (twisted cable)</li> </ul>
Output rate	<ul> <li>16 A cos φ 1 - 230 Vac</li> <li>8 A cos φ 0.6 - 230 Vac</li> <li>Max current relay output: 16 A/16 AX (140 μF)</li> <li>Max peak current: 165 A / 20 ms</li> <li>Incandescent lamps: max 10 A</li> <li>Motors e motor reduction units: max 10 A</li> <li>Fluorescent lamps (max 140 μF) max 3 A (700 W)</li> <li>Electronic ballast: max 6 A</li> <li>LED's lamps drivers: always check that the maximum peak current drawn by led power supply is lower than maximum peak current allowed for the relay</li> </ul>

### **Order Codes**

#### IO08F01KNX

Universal Actuator 8 IN / 8 OUT Plus

#### IO08F01KNX-SD

Universal Actuator 8 IN / 8 OUT + SD Card

12 IN / 12 OUT PLUS — F Series

Device IO12F01KNX is a DIN rail EIB / KNX actuators with 12 relay outputs that can be configured as:

- 12 outputs for light / load control
- 12 channels for valve in PWM (solenoid actuators)
- 6 channels for roller shutter / venetian control
- 6 channels for 3-point valve control
- 3 fan coil actuators 2-pipes / 2 fan coil actuators 4-pipes

The device also includes 12 inputs that can be connected to pushbuttons, switches, or be configured as outputs to activate individual signaling LEDs (eelectron code LD00A01ACC / LD00A11ACC) and can be used for on / off, dimming, shutters or venetian blinds / scenarios, sequences, step-by-step commands, etc. 4 inputs (of the 12) are configurable as analogue for the connection of NTC temperature probes (see probes eelectron code TS00A01ACC / TS00B01ACC) with which to send 4 temperature measurements on the bus and manage a simple on / off controls (e.g. thermo furniture).

It is also possible to enable 3 complete thermostat modules; each thermostat module manages 2 stages with integrated PI controller for driving heating and cooling equipment, valves, 2 and 4-pipe fan coils, etc.

Version IO12F01KNX-SD includes a microSD card reader includes a microSD card with which you can save the programming of the device to be able to restore it on an identical device in order to avoid programming in field or to allow a fast restore in case of failure.



## **Technical Features**

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Mechanical data	Dimensions: 6 DIN modules
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 30 m (twisted cable)</li> </ul>
Input - analog mode for temperature probe	<ul> <li>For NTC temperature probe eelectron code:</li> <li>TS01A01ACC (range from -20°C to +100°C)</li> <li>TS01B01ACC (range from -50°C to +60°C)</li> <li>TS01D01ACC (range from -40°C to 125°C)</li> <li>Max. length of Connecting Cable: ≤ 20 m (twisted cable)</li> </ul>
Output rate	<ul> <li>16 A cos φ 1 - 230 Vac</li> <li>8 A cos φ 0.6 - 230 Vac</li> <li>Max current relay output: 16 A/16 AX (140 μF)</li> <li>Max peak current: 165 A / 20 ms</li> <li>Incandescent lamps: max 10 A</li> </ul>

• Electronic ballast: max 6 A

Motors e motor reduction units: max 10 A
 Fluorescent lamps (max 140 μF) max 3 A (700 W)

 LED's lamps drivers: always check that the maximum peak current drawn by led power supply is lower than maximum peak current allowed for the relay

### **Order Codes**

#### IO08F01KNX

Universal Actuator 12 IN / 12 OUT Plus

#### IO08F01KNX-SD

Universal Actuator 12 IN / 12 OUT + SD Card

16 IN / 16 OUT PLUS - F Series

Device IO16F01KNX is a DIN rail EIB / KNX actuators with 16 relay outputs that can be configured as:

- 16 outputs for light / load control
- 16 channels for valve in PWM (solenoid actuators)
- 8 channels for roller shutter / venetian control
- 8 channels for 3-point valve control
- 4 fan coil actuators 2-pipes

It is also possible to combine 2 or 3 relays with logic interlock for 4-pipe / 3-speed fan coil control or combine groups of relays (up to 8) for special function using logic interlock.

The device also includes 16 inputs that can be connected to pushbuttons, switches, or be configured as outputs to activate individual signaling LEDs (eelectron code LD00A01ACC / LD00A11ACC) and can be used for on / off, dimming, shutters or venetian blinds / scenarios, sequences, step-by-step commands, etc. 4 inputs (of the 16) are configurable as analogue for the connection of NTC temperature probes (see probes eelectron code TS00A01ACC / TS00B01ACC) with which to send 4 temperature measurements on the bus and manage a simple on / off controls (e.g. thermo furniture). It is also possible to enable 2 complete thermostat modules if inputs  $3 \div 8$  and  $11 \div 16$  are not used; each thermostat module manages 2 stages with integrated PI controller for driving heating and cooling equipment, valves, 2 and 4-pipe fan coils, etc.

Version IO16F01KNX-SD includes a microSD card reader includes a microSD card reader with which you can save the programming of the device to be able to restore it on an identical device in order to avoid programming in field or to allow a fast restore in case of failure.



### **Technical Features**

Mechanical data	Dimensions: 8 DIN modules
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 30 m (twisted cable)</li> </ul>
Input - analog mode for temperature probe	<ul> <li>For NTC temperature probe eelectron code:</li> <li>TS01A01ACC (range from -20°C to +100°C)</li> <li>TS01B01ACC (range from -50°C to +60°C)</li> <li>TS01D01ACC (range from -40°C to 125°C)</li> <li>Max. length of Connecting Cable: ≤ 20 m (twisted cable)</li> </ul>
Output rate	<ul> <li>16 A cos φ 1 - 230 Vac</li> <li>8 A cos φ 0.6 - 230 Vac</li> <li>Max current relay output: 16 A/16 AX (140 μF)</li> <li>Max peak current: 165 A / 20 ms</li> <li>Incandescent lamps: max 10 A</li> <li>Motors e motor reduction units: max 10 A</li> <li>Fluorescent lamps (max 140 μF) max 3 A (700 W)</li> <li>Electronic ballast: max 6 A</li> <li>LED's lamps drivers: always check that the maximum peak current drawn by led power supply is lower than maximum peak current allowed for the relay</li> </ul>

### **Order Codes**

#### IO16F01KNX

Universal Actuator 16 IN / 16 OUT Plus

#### IO16F01KNX-SD

Universal Actuator 16 IN / 16 OUT + SD Card

## Module 4 Digital Inputs

4 IN - F Series

The BI04F01KNX device is equipped with 4 inputs for interfacing dry contacts, for example sensors, switch buttons, etc.

Inputs functions are: on / off control, dimmers, roller shutters and scene recall, etc.

Short and long pressure management, switching, sequences are possible. The lines can be monitored using an end of line resistor (EOL) of  $1.8 \mathrm{K}\Omega$  [1/8W] value which allows the device to manage sensors with a higher level of safety such as magnetic contacts, motion detectors.

The pulse counter function is also available for counting the pulses detectable on each input. One of the 4 inputs can be configured as analogue for the connection of NTC temperature probes (see eelectron probes code TS00A01ACC / TS00B01ACC) with which to send the temperature measurement on the bus or manage a complete thermostat module. The thermostat manages 2 stages with an integrated PI controller for controlling heating and cooling equipment, valves, 2 and 4-pipe fan coils, etc. Two of the 4 inputs can be configured as "smart sensor" for the connection of 'plug-in sensor' (see SM03E01ACC  $\rm CO_2$  - temperature, SM03E02ACC VOC - temperature - eCO $_2$ ). On the front panel there is a LED to display the status of each input.

The device integrates the "Virtual Holder Logic"; the field of application is the hotel room: through a magnetic sensor installed on the door and connected to a digital input, accurate presence information is managed. The presence detection solution can deduce the presence of people in the room using one or more dedicated sensors. It also detects an unexpected presence and is able to differentiate more behaviors.

Moreover, 10 logic blocks are available to implement simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators; It is possible to use predefined algorithms as proportional controls of temperature and humidity or dew point calculation.



## **Technical Features**

Mechanical data	Dimensions: 4 DIN modules
Supply	<ul> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> <li>Auxiliary supply: 230 Vac</li> </ul>
Input - digital mode	For free potential contacts (dry contacts)     Max. length of Connecting Cables ≤ 100 m (twisted cable)
Input - analog mode 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: ≤ 30 m (twisted cable)

## **Order Codes**

## BI04F01KNX Din Module 4 Digital Inputs

## Module 8 Digital Inputs

8 IN - F Series

The BI08F01KNX device is equipped with 8 inputs for interfacing dry contacts, for example sensors, switch buttons, etc.

Inputs functions are: on / off control, dimmers, roller shutters and scene recall, etc.

Short and long pressure management, switching, sequences are possible. The lines can be monitored using an end of line resistor (EOL) of  $1.8 \mathrm{K}\Omega$  [1/8W] value which allows the device to manage sensors with a higher level of safety such as magnetic contacts, motion detectors.

The pulse counter function is also available for counting the pulses detectable on each input. One of the 8 inputs can be configured as analogue for the connection of NTC temperature probes (see eelectron probes code TS00A01ACC / TS00B01ACC) with which to send the temperature measurement on the bus or manage a complete thermostat module. The thermostat manages 2 stages with an integrated PI controller for controlling heating and cooling equipment, valves, 2 and 4-pipe fan coils, etc. Two of the 4 inputs can be configured as "smart sensor" for the connection of 'plug-in sensor' (see SM03E01ACC  $\rm CO_2$  - temperature, SM03E02ACC VOC - temperature - eCO $_2$ ). On the front panel there is a LED to display the status of each input.

The device integrates the "Virtual Holder Logic"; the field of application is the hotel room: through a magnetic sensor installed on the door and connected to a digital input, accurate presence information is managed. The presence detection solution can deduce the presence of people in the room using one or more dedicated sensors. It also detects an unexpected presence and is able to differentiate more behaviors.

Moreover, 10 logic blocks are available to implement simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators; It is possible to use predefined algorithms as proportional controls of temperature and humidity or dew point calculation.



## Technical Features

Mechanical data	Dimensions: 4 DIN modules
Supply	<ul> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> <li>Auxiliary supply: 230 Vac</li> </ul>
Input - digital mode	For free potential contacts (dry contacts)     Max. length of Connecting Cables ≤ 100 m (twisted cable)
Input - analog mode 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: ≤ 30 m (twisted cable)

#### **Order Codes**

## BI08F01KNX Din Module 8 Digital Inputs

## Module 16 Digital Inputs

16 IN - F Series

Device 16 Input Module BI16F01KNX is an EIB/ KNX DIN rail mounting device useful to interface commands (e.g. push buttons) for any kind of applications. The device is equipped with 16 binary inputs. Inputs can be connected to conventional switching devices (potential free), 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 for on/off commands, dimming, shutter control, scene recall and control; outputs include switching function, scene recall and control logic function.

Device is equipped with KNX communication interface.



## **Technical Features**

Mechanical data	Dimensions: 8 DIN modules
Supply	<ul> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> <li>Auxiliary supply: 230 Vac</li> </ul>
Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 100 m (twisted cable)</li> </ul>

## **Order Codes**

#### BI16F01KNX

Din Module 16 Digital Inputs

## **Universal** Module

4 OUT - PLUS — **F Series** 

Device BO04F01KNX is a DIN rail EIB / KNX actuators with 4 relay outputs that can be configured as:

- 4 outputs for light / load control
- 4 channels for valve in PWM (solenoid actuators)
- 2 channels for roller shutter / venetian control
- 2 channels for 3-point valve control
- 1 fan coil actuators 2-pipes

Version BO04F01KNX-SD includes a microSD card reader with which you can save the programming of the device to be able to restore it on an identical device in order to avoid programming in field or to allow a fast restore in case of failure.



## **Technical Features**

Mechanical data	Dimensions: 4 DIN modules
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Output rate	<ul> <li>16 A cos φ 1 - 230 Vac</li> <li>8 A cos φ 0.6 - 230 Vac</li> <li>Max current relay output: 16 A/16 AX (140 μF)</li> <li>Max peak current: 165 A / 20 ms</li> <li>Incandescent lamps: max 10 A</li> <li>Motors e motor reduction units: max 10 A</li> <li>Fluorescent lamps (max 140 μF) max 3 A (700 W)</li> <li>Electronic ballast: max 6 A</li> <li>LED's lamps drivers: always check that the maximum peak current drawn by led power supply is lower than maximum peak current allowed for the relay</li> </ul>

## **Order Codes**

#### BO04F01KNX

Universal Actuator 4 OUT Plus

#### BO04F01KNX - SD

Universal Actuator 4 OUT + SD Card

8 OUT - PLUS - F Series

Device BO08F01KNX is a DIN rail EIB / KNX actuators with 8 relay outputs that can be configured as:

- 8 outputs for light / load control
- 8 channels for valve in PWM (solenoid actuators)
- 4 channels for roller shutter / venetian control
- 4 channels for 3-point valve control
- 2 fan coil actuators 2-pipes

It is also possible to combine 2 or 3 relays with logic interlock for 4-pipe  $\!\!/$  3-speed fan coil control or combine groups of relays (up to 8) for special function using logic interlock .

Version BO08F01KNX-SD includes a microSD card reader with which you can save the programming of the device to be able to restore it on an identical device in order to avoid programming in field or to allow a fast restore in case of failure.



## **Technical Features**

Mechanical data Supply	<ul> <li>Dimensions: 4 DIN modules</li> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> </ul>
Output rate	<ul> <li>16 A cos φ 1 - 230 Vac</li> <li>8 A cos φ 0.6 - 230 Vac</li> <li>Max current relay output: 16 A/16 AX (140 μF)</li> <li>Max peak current: 165 A / 20 ms</li> <li>Incandescent lamps: max 10 A</li> <li>Motors e motor reduction units: max 10 A</li> <li>Fluorescent lamps (max 140 μF) max 3 A (700 W)</li> <li>Electronic ballast: max 6 A</li> <li>LED's lamps drivers: always check that the maximum peak current drawn by led power supply is lower than maximum peak current allowed for the relay</li> </ul>

## **Order Codes**

#### BO08F01KNX

Universal Actuator 8 OUT Plus

#### BO08F01KNX - SD

Universal Actuator 8 OUT + SD Card

## **Universal** Module

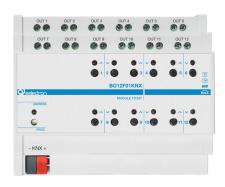
12 OUT - PLUS - F Series

Device BO12F01KNX is a DIN rail EIB / KNX actuators with 16 relay outputs that can be configured as:

- 12 outputs for light / load control
- 12 channels for valve in PWM (solenoid actuators)
- 6 channels for roller shutter / venetian control
- 6 channels for 3-point valve control
- 3 fan coil actuators 2-pipes / 2 fan coil actuators 4-pipes

It is also possible to combine 2 or 3 relays with logic interlock for 4-pipe / 3-speed fan coil control or combine groups of relays (up to 6) for special function using logic interlock.

Version BO12F01KNX-SD includes a microSD Card reader includes a microSD card reader with which you can save the programming of the device to be able to restore it on an identical device in order to avoid programming in field or to allow a fast restore in case of failure.



## **Technical Features**

Mechanical data	Dimensions: 6 DIN modules
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Output rate	<ul> <li>16 A cos φ 1 - 230 Vac</li> <li>8 A cos φ 0.6 - 230 Vac</li> <li>Max current relay output: 16 A/16 AX (140 μF)</li> <li>Max peak current: 165 A / 20 ms</li> <li>Incandescent lamps: max 10 A</li> <li>Motors e motor reduction units: max 10 A</li> <li>Fluorescent lamps (max 140 μF) max 3 A (700 W)</li> <li>Electronic ballast: max 6 A</li> <li>LED's lamps drivers: always check that the maximum peak current drawn by led power supply is lower than maximum peak current allowed for the relay</li> </ul>

## **Order Codes**

#### BO12F01KNX

Universal Actuator 12 OUT Plus

#### BO12F01KNX - SD

Universal Actuator 12 OUT + SD Card

16 OUT - PLUS - F Series

Device BO16F01KNX is a DIN rail EIB / KNX actuators with 16 relay outputs that can be configured as:

- 16 outputs for light / load control
- 16 channels for valve in PWM (solenoid actuators)
- 8 channels for roller shutter / venetian control
- 8 channels for 3-point valve control
- 4 fan coil actuators 2-pipes

It is also possible to combine 2 or 3 relays with logic interlock for 4-pipe  $\!\!/$  3-speed fan coil control or combine groups of relays (up to 8) for special function using logic interlock .

Version BO16F01KNX-SD includes a microSD Card reader includes a microSD card reader with which you can save the programming of the device to be able to restore it on an identical device in order to avoid programming in field or to allow a fast restore in case of failure.



## **Technical Features**

Mechanical data Supply	<ul> <li>Dimensions: 8 DIN modules</li> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> </ul>
Output rate	<ul> <li>16 A cos φ 1 - 230 Vac</li> <li>8 A cos φ 0.6 - 230 Vac</li> <li>Max current relay output: 16 A/16 AX (140 μF)</li> <li>Max peak current: 165 A / 20 ms</li> <li>Incandescent lamps: max 10 A</li> <li>Motors e motor reduction units: max 10 A</li> <li>Fluorescent lamps (max 140 μF) max 3 A (700 W)</li> <li>Electronic ballast: max 6 A</li> <li>LED's lamps drivers: always check that the maximum peak current drawn by led power supply is lower than maximum peak current allowed for the relay</li> </ul>

## **Order Codes**

#### BO16F01KNX

Universal Actuator 16 OUT Plus

#### BO16F01KNX - SD

Universal Actuator 16 OUT + SD Card

## **Universal** Module

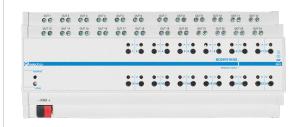
24 OUT - PLUS - F Series

Device BO24F01KNX is a DIN rail EIB / KNX actuators with 16 relay outputs that can be configured as:

- 24 outputs for light / load control
- 24 channels for valve in PWM (solenoid actuators)
- 12 channels for roller shutter / venetian control
- 12 channels for 3-point valve control
- 6 fan coil actuators 2-pipes / 4 fan coil actuators 4-pipes

It is also possible to combine 3,4 or 5 relays with logic interlock for 4-pipe / 3-speed fan coil control or combine groups of relays (up to 6) for special function using logic interlock .

Version BO24F01KNX-SD includes a microSD Card reader includes a microSD card reader with which you can save the programming of the device to be able to restore it on an identical device in order to avoid programming in field or to allow a fast restore in case of failure.



## **Technical Features**

TCOTITIOAL L'OUTUICS	
Mechanical data	Dimensions: 12 DIN modules
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Output rate	<ul> <li>16 A cos φ 1 - 230 Vac</li> <li>8 A cos φ 0.6 - 230 Vac</li> <li>Max current relay output: 16 A/16 AX (140 μF)</li> <li>Max peak current: 165 A / 20 ms</li> <li>Incandescent lamps: max 10 A</li> <li>Motors e motor reduction units: max 10 A</li> <li>Fluorescent lamps (max 140 μF) max 3 A (700 W)</li> <li>Electronic ballast: max 6 A</li> <li>LED's lamps drivers: always check that the maximum peak current drawn by led power supply is lower than maximum peak current allowed for the relay</li> </ul>

### **Order Codes**

#### BO24F01KNX

Universal Actuator 12 OUT Plus

#### BO24F01KNX - SD

Universal Actuator 12 OUT + SD Card

4 OUT — **K Series** 

The device BO04K01KNX is a DIN actuator with  $16A-230\ V$  AC relay outputs for controlling loads or shutters and blinds, it has 4 relay outputs and they can be configured in different ways:

- Every single output configured independently to control lights or generic
- Outputs configured in pairs to manage shutters, blinds, etc. .. (equipped with mechanical end position)

8 logic blocks are available to implement simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators Device is equipped with KNX communication interface.



## **Technical Features**

Mechanical data	Dimensions: 4 DIN modules
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Output rate	<ul> <li>16 A cos φ 1 - 230 Vac</li> <li>8 A cos φ 0.6 - 230 Vac</li> <li>Max current relay output: 16 A cos φ 1 - 250 Vac</li> <li>Max peak current: 117 A (TV-8 rating)</li> <li>Incandescent lamps: max 5 A</li> <li>Motors e motor reduction units: max 3 A</li> <li>Tungsten: max 8 A</li> <li>Electronic ballast: max 8 A</li> <li>LED's lamps drivers: always check that the maximum peak current drawn by led power supply is lower than maximum peak current allowed for the relay</li> </ul>

## **Order Codes**

#### BO04K01KNX

Universal Actuator 4 OUT

## **Universal** Module

 $8 \, \text{OUT} - \text{K Series}$ 

The device BO08K01KNX is a DIN actuator with 16A - 230 V AC relay outputs for controlling loads or shutters and blinds. It has 8 relay outputs and they can be configured in different ways:

- Every single output configured independently to control lights or generic loads
- Outputs configured in pairs to manage shutters, blinds, etc. .. (equipped with mechanical end position)

8 logic blocks are available to implement simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators Device is equipped with KNX communication interface



## **Technical Features**

roommod. rodanoo	
Mechanical data	Dimensions: 6 DIN modules
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Output rate	<ul> <li>16 A cos φ 1 - 230 Vac</li> <li>8 A cos φ 0.6 - 230 Vac</li> <li>Max current relay output: 16 A cos φ 1 - 250 Vac</li> <li>Max peak current: 117 A (TV-8 rating)</li> <li>Incandescent lamps: max 5 A</li> <li>Motors e motor reduction units: max 3 A</li> <li>Tungsten: max 8 A</li> <li>Electronic ballast: max 8 A</li> <li>LED's lamps drivers: always check that the maximum peak current drawn by led power supply is lower than maximum peak current allowed for the relay</li> </ul>

## **Order Codes**

#### BO08K01KNX

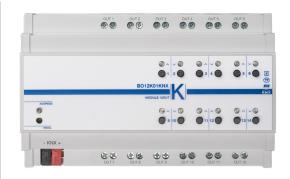
Universal Actuator 8 OUT

12 OUT — **K Series** 

The device BO12K01KNX is a DIN actuator with 16A - 230 V AC relay outputs for controlling loads or shutters and blinds. It has 12 relay outputs and they can be configured in different ways:

- Every single output configured independently to control lights or generic loads
- Outputs configured in pairs to manage shutters, blinds, etc. .. (equipped with mechanical end position)

8 logic blocks are available to implement simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators Device is equipped with KNX communication interface



## **Technical Features**

Mechanical data	<ul> <li>Dimensions: 8 DIN modules</li> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> </ul>
Output rate	<ul> <li>16 A cos φ 1 - 230 Vac</li> <li>8 A cos φ 0.6 - 230 Vac</li> <li>Max current relay output: 16 A cos φ 1 - 250 Vac</li> <li>Max peak current: 117 A (TV-8 rating)</li> <li>Incandescent lamps: max 5 A</li> <li>Motors e motor reduction units: max 3 A</li> <li>Tungsten: max 8 A</li> <li>Electronic ballast: max 8 A</li> <li>LED's lamps drivers: always check that the maximum peak current drawn by led power supply is lower than maximum peak current allowed for the relay</li> </ul>

## **Order Codes**

#### BO12K01KNX

Universal Actuator 12 OUT