

Building & home evolution





Eelectron designs and manufactures electronic devices in Italy with applications based on KNX<sup>®</sup>, Bluetooth<sup>®</sup>, DALI-2<sup>®</sup> standards and software solutions for the end user.

Eelectron's philosophy is aimed at combining aspects of **design** and **functional** and performance **research** through highly innovative devices, interoperable on international standards and connected to the cloud.

The constantly evolving product portfolio is outlined around the building modernization process, focusing on connected room automation, Building Evolution, hotel automation and smart homes.

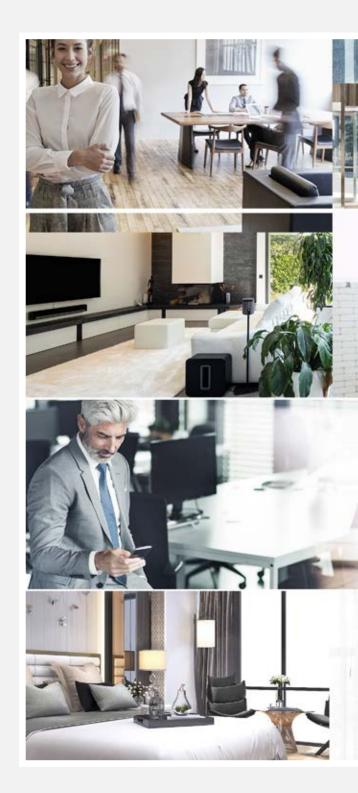
Particular attention is paid to the **reliability of products** and to today's **emerging applications**, for the **benefit of occupants** and managers.

In fact, Eelectron's experience is dedicated to the well-being of people in buildings and is aimed at those who design, install or manage them in the most sustainable, energy efficient, comfortable and healthy ways.

Pre and post-sales assistance and regular training activities are the foundation of a philosophy that places customers and the market at the centre.

Compliance with the strictest international quality standards completes Eelectron's vision, which leads the market following its roots and mission: to technologically innovate products, applications and services.

The catalog is constantly updated, we invite you to subscribe to the eelectron newsletter, by visiting the website www.eelectron. com, and follow our social networks.



Eelectron SpA is a Training Center certificated by KNX Association: basic, advanced and HVAC courses.







Since its founding in 1994, Eelectron has invested to offer the best technology in building applications:

A shareholder of KNX Association (www.knx.org) since 2005:

EIB/KNX is the interoperable global standard in the management sector in intelligent, sustainable and healthy buildings, the expression of 500 leading constructors in the sector and with more than 12 million nodes installed worldwide in renovation, extension and new construction projects.

KNX promotes **long-term investment protection** by combining comfort, energy saving, facilitating planning and maintenance with constantly evolving technology: since 2018 it includes the "Secure" standard for security in "building automation" and for the IOT.

Eelectron, as an official KNX Training Center, has always disseminated the implementation of good programming guidelines and recommendations for "Secure" aspects.

The portfolio is oriented to "vertical markets": **tertiary**, **hospitality**, **residential**, **healthcare** proposing specific applications and integrating standard, reliable and safe technologies.

Eelectron products use and interact with Bluetooth technology (www.bluetooth.org), both for wired/wireless configurations and connected applications such as mobile App and cloud.

The interoperability of KNX promoted by Eelectron is aimed at proposing integrated solutions with other standards, such as recently updated **DALI-2** for modern lighting control (www.dali-alliance.org), or other protocols to meet needs oriented to different market sectors.

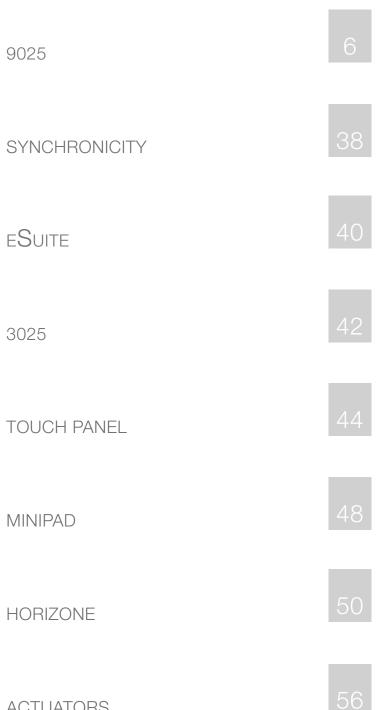
Eelectron is a member and active in the aforementioned associations.





DAL

INDEX



ACTUATORS

## Design Controls

Research, development, design, production. Made in Italy



9025 KNX is a set of touch switches, a range dedicated to temperature management, and a technological system to control smart buildings.









55x55, 4 Controls, different Materials. Integrated thermostat detecting and regulating a desired temperature. Materials, functionalities, finishing are essential values for your environment project.



A product range dedicated to democratic, smart and creative design.

To the interaction between users and lighting control, energy saving, temperature control, entertainment.





## KNX Capacitive Switch

# The KNX<sup>®</sup> 9025 switch range consists of 4 - 8 - 10 channels capacitive buttons. Each button can be configured to manage on/off commands, dimming, shutters and venetians control, scene recall and control, objects sequences etc;

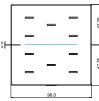
Device includes a 2 stage Room Temperature Controller with integrated PI to control heating and cooling equipments, valves, 2 and 4 pipes fan coils; etc. Device has an embedded temperature sensor and a rear 2 poles connector configurable as digital or analog input; It's possible to connect an additional NTC temperature probe (eelectron codes TS01A01ACC - TS01B01ACC - TS01D01ACC not included) to perform a direct temperature measurement.

9025 range has a RGB led bar on the front side in order to visualize feedbacks or other values available over the KNX bus (function available on the RGB range). Devices are available in 2 ranges: RGB LINE and RGB double glass; each range may have glasses in CUSTOM version. Using glasses in CUSTOM version is possible to light up custom and interchangeable icons matching with the associated function. The 9025 KNX<sup>®</sup> range is mounted in 2 module box and is compliant with main standards (British, German, Italian, etc).

Device is equipped with KNX communication interface.

Technical Features	
Mechanical data	• Dimensions: (W x H x D) 96 x 96 x 36 mm
Mounting	• British box, German box or Italian 2 modules box
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Rear Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 10 m (twisted cable)</li> </ul>
Rear 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>



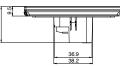




RGB RANGE

LINE SERIES





## 2 Modules Version



## Order Codes

KNX Capacitive Switch Boards CS10A01KNX-1 KNX Capacitive switch - White CS10A01KNX-3 KNX Capacitive switch - Black

#### **RGB** Line Series Covers

9025GL04L01 Single glass 4 ch. - White 9025GL08L01 Single glass 8 ch. - White 9025GL10L01 Single glass 10 ch. - White 9025GL04L03 Single glass 4 ch. - Black 9025GL08L03 Single glass 8 ch. - Black 9025GL10L03 Single glass 10 ch. - Black

#### **RGB** Range Covers

9025GL04B01 Double Glass 4 channels - White 9025GL08B01 Double Glass 8 channels - White 9025GL10B01 Double Glass 10 channels - White 9025GL04B03 Double Glass 4 channels - Black 9025GL08B03 Double Glass 8 channels - Black 9025GL10B03 Double Glass 10 channels - Black

#### Line Series & RGB Range Covers – Custom 9025GL10D01

CUSTOM double glass - White 9025GL10D03 CUSTOM double glass - Black 9025GL10W01 CUSTOM single glass - White 9025GL10W03 CUSTOM single glass - Black

#### **CAPACITIVE**SWITCHES

## 2 Modules Version



#### KNX Capacitive Switch Boards

**RGB Line Series** Covers



CS10A01KNX-1 Capacitive switch KNX - White



CS10A01KNX-3 Capacitive switch KNX - Black



9025GL04L01 Single glass 4 ch. - White



9025GL04L03 Single glass 4 ch. - Black



9025GL08L01 Single glass 8 ch. - White



9025GL08L03 Single glass 8 ch. - Black



9025GL10L01 Single glass 10 ch. - White



9025GL10L03 Single glass 10 ch. - Black

## RGB Double Glass Range Covers



9025GL04B01 Double glass 4 ch. - White



9025GL04B03 Double glass 4 ch. - Black



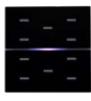
9025GL08B01 Double glass 8 ch. - White



9025GL08B03 Double glass 8 ch. - Black



9025GL10B01 Double glass 10 ch. - White

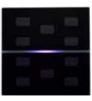


9025GL10B03 Double glass 10 ch. - Black

## Line Series & Double Glass Range Covers - CUSTOM



9025GL10D01 CUSTOM double glass - White



9025GL10D03 CUSTOM double glass - Black



9025GL10W01 CUSTOM single glass - White



9025GL10W03

CUSTOM single glass - Black

CUSTOM version covers have to be associated with dedicated interchangeable icons sheets.

## KNX Capacitive Switch

# The KNX<sup>®</sup> 9025 switch range consists of 4 - 8 – 10 channels capacitive buttons. Each button can be configured to manage on/off commands, dimming, shutters and venetians control, scene recall and control, objects sequences etc;

Device includes a 2 stage Room Temperature Controller with integrated PI to control heating and cooling equipments, valves, 2 and 4 pipes fan coils; etc. Device has an embedded temperature sensor and a rear 2 poles connector configurable as digital or analog input; It's possible to connect an additional NTC temperature probe (eelectron codes TS01A01ACC - TS01B01ACC - TS01D01ACC not included) to perform a direct temperature measurement.

9025 range has a RGB led bar on the front side in order to visualize feedbacks or other values available over the KNX bus (function available on the RGB range). Devices are available in 2 ranges: RGB LINE and RGB double glass; each range may have glasses in CUSTOM version. Using glasses in CUSTOM version is possible to light up custom and interchangeable icons matching with the associated function. The 9025 KNX<sup>®</sup> range is mounted in 3 module box and is compliant with main standards (British, German, Italian, etc).

Device is equipped with KNX communication interface.

Technical Features	
Mechanical data	• Dimensions: (W x H x D) 96 x 126 x 36 mm
Mounting	• British box, German box or Italian 2/3 modules box
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Rear Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 10 m (twisted cable)</li> </ul>
Rear 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>

**3 Modules Version** 

## Order Codes

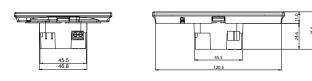
KNX Capacitive Switch Boards CS10A01KNX-1-3M KNX Capacitive switch - 3 Modules -White

CS10A01KNX-3-3M KNX Capacitive switch - 3 Modules -Black

#### **RGB** Line Series Covers

9025GL304L01 Glass 4 channels - 3 Modules - White 9025GL308L01 Glass 8 channels - 3 Modules - White 9025GL310L01 Glass 10 channels - 3 Modules - White 9025GL304L03 Glass 4 channels - 3 Modules - Black 9025GL308L03 Glass 8 channels - 3 Modules - Black 9025GL310L03 Glass 10 channels - 3 Modules - Black

RGB Line Series Covers — Custom 9025GL310W01 Custom glass - 3 Modules - White 9025GL310W03 Custom glass - 3 Modules - Black



## **3 Modules Version**



#### KNX Capacitive Switch Boards



CS10A01KNX-1 - 3M Capacitive switch KNX - White



CS10A01KNX-3 - 3M Capacitive switch KNX - Black

## RGB Line Series Covers



9025GL304L01 Glass 4 ch. - 3 Modules - White



9025GL304L03 Glass 4 ch. - 3 Modules - Black

9025GL310D01

White



9025GL308L01 Glass 8 ch. - 3 Modules - White



9025GL308L03 Glass 8 ch. - 3 Modules - Black



9025GL310L01 Glass 10 ch. - 3 Modules - White



9025GL310L03 Glass 10 ch. - 3 Modules - Black

RGB Line Series Covers - CUSTOM





9025GL310D03 CUSTOM glass - 3 Modules Black

#### **CAPACITIVE**THERMOSTAT

## KNX Thermostat / Humidistat

The 9025 thermostat is a KNX<sup>®</sup> room temperature controller that includes 7 configurable capacitive buttons for on / off, dimming, rolling shutters and venetian controls, scene recall and control, object sequences, local thermostat controls, etc.

Device offers a 2 stage thermostat with integrated PI controller to control heating and cooling equipments, valves, 2 and 4 pipes fan coils etc ..

Device has an embedded temperature sensor and a rear 2 poles connector, configurable as digital or analog input; It's possible to connect an additional NTC temperature probe (eelectron codes TS01A01ACC - TS01B01ACC - TS01D01ACC not included) to perform a direct temperature measurement. A version with integrated temperature and relative humidity sensor is

available usable for controlling actuators for ambient humidity control. 9025 range has a RGB led bar on the front side in order to visualize thermostat operating modes or feedbacks and other values available over the KNX bus. The device includes an RGB led bar on the front to display status or other values available on the KNX bus. Glass covers are available for HOTEL or RESIDENTIAL applications; both covers can be in CUSTOM version. Using glasses in CUSTOM version is possible to light up custom and interchangeable icons matching with the associated function.

The 9025 KNX<sup>®</sup> range is mounted in 2 module box and is compliant with main standards (British, German, Italian, etc).

Device is equipped with KNX communication interface.

**Technical Features** 

Mechanical data	• Dimensions: (W x H x D) 96 x 96 x 36 mm
Mounting	• British box, German box or Italian 2 modules box
Supply	• Via bus ElB/KNX cable: 21 ÷ 32 Vdc
Rear Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 10 m (twisted cable)</li> </ul>
Rear 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>

## 2 Modules Version



## Order Codes

KNX Thermostat/Humidistat Boards RT07A01KNX-1

KNX Capacitive Thermostat - White

RH07A01KNX-1 KNX Capacitive Thermostat/Humidistat White

RT07A01KNX-3 KNX Capacitive Thermostat - Black

RH07A01KNX-3 KNX Capacitive Thermostat/Humidistat Black

Thermostat/Humidistat Covers 9025GT07L01-R Single glass - RESIDENTIAL display White

9025GT07L01-H Single glass - HOTEL display White

9025GT07L03-R Single glass - RESIDENTIAL display Black

9025GT07L03-H Single glass - HOTEL display Black

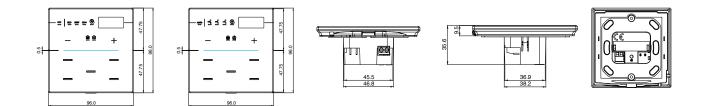
#### Custom version Cover

9025GT07W01-R CUSTOM single glass RESIDENTIAL White

9025GT07W03-R CUSTOM single glass RESIDENTIAL Black

9025GT07W01-H CUSTOM single glass HOTEL - White

9025GT07W03-H CUSTOM single glass HOTEL - Black



## 2 Modules Version



## KNX Capacitive Thermostat Boards



RT07A01KNX-1 KNX capacitive thermostat White



RH07A01KNX-1 KNX capacitive thermostat/humidistat White



RT07A01KNX-3 KNX capacitive thermostat Black



RH07A01KNX-3 KNX capacitive thermostat/humidistat Black



9025GT07L01-R Single Glass RESIDENTIAL display - White



9025GT07L01-H Single Glass HOTEL display - White



9025GT07L03-R Single Glass RESIDENTIAL display - Black



Thermostat/Humidistat RGB Line Series Covers

9025GT07L03-H Single Glass HOTEL display - White

## Custom Version - Residential RGB Line Series



9025GT07W01-R Single CUSTOM Glass RESIDENTIAL display - White



9025GT07W03-R Single CUSTOM Glass RESIDENTIAL display - Black

Custom Version - Hotel RGB Line Series



9025GT07W01-H Single CUSTOM Glass HOTEL display - White



9025GT07W03-H Single CUSTOM Glass HOTEL display - Black

#### **CAPACITIVE**SWITCHES

## KNX Thermostat / Humidistat

The 9025 thermostat is a KNX<sup>®</sup> room temperature controller that includes 7 configurable capacitive buttons for on / off, dimming, rolling shutters and venetian controls, scene recall and control, object sequences, local thermostat controls, etc.

Device offers a 2 stage thermostat with integrated PI controller to control heating and cooling equipments, valves, 2 and 4 pipes fan coils etc ..

Device has an embedded temperature sensor and a rear 2 poles connector, configurable as digital or analog input; It's possible to connect an additional NTC temperature probe (eelectron codes TS01A01ACC or TS01B01ACC - not included) to perform a direct temperature measurement.

A version with integrated temperature and relative humidity sensor is available usable for controlling actuators for ambient humidity control.

9025 range has a RGB led bar on the front side in order to visualize thermostat operating modes or feedbacks and other values available over the KNX bus. The device includes an RGB led bar on the front to display status or other values available on the KNX bus. Glass covers are available for HOTEL or RESIDENTIAL applications; both covers can be in CUSTOM version. Using glasses in CUSTOM version is possible to light up custom and interchangeable icons matching with the associated function.

The 9025 KNX<sup>®</sup> range is mounted in 2 module box and is compliant with main standards (British, German, Italian, etc).

Device is equipped with KNX communication interface.

**Technical Features** 

Mechanical data	• Dimensions: (W x H x D) 96 x 96 x 36 mm
Mounting	British box, German box or Italian 2 modules box
Supply	• Via bus ElB/KNX cable: 21 ÷ 32 Vdc
Rear Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 10 m (twisted cable)</li> </ul>
Rear 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>

## **3 Modules Version**



## **Order Codes**

KNX Thermostat/Humidistat Boards RT07A01KNX-1-3M

KNX Capacitive Thermostat - 3 Modules White

RH07A01KNX-1-3M KNX Capacitive Thermostat/Humidistat 3 Modules - White

RT07A01KNX-3-3M KNX Capacitive Thermostat - 3 Modules Black

RH07A01KNX-3-3M KNX Capacitive Thermostat/Humidistat 3 Modules - Black

## Thermostat/Humidistat RGB Line Series Covers

9025GT307L01-R Single glass RESIDENTIAL display - 3 Modules - White

9025GT307L01-H Single glass HOTEL display - 3 Modules White

9025GT307L03-R Single glass RESIDENTIAL display - 3 Modules - Black 9025GT307L03-H

Single glass HOTEL display - 3 Modules Black

Custom Version | RGB Line Series 9025GT307W01-R

CUSTOM single glass RESIDENTIAL - 3 Modules - White

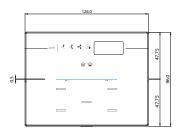
9025GT307W03-R CUSTOM single glass RESIDENTIAL - 3 Modules - Black

9025GT307W01-H

CUSTOM single glass HOTEL - 3 Modules White

9025GT307W03-H

CUSTOM single glass HOTEL - 3 Modules Black



## **3 Modules Version**



## KNX Capacitive Thermostat Boards



RT07A01KNX-1-3M KNX capacitive thermostat - White



RH07A01KNX-1-3M



RT07A01KNX-3-3M KNX capacitive thermostat/humidistat - White KNX capacitive thermostat - Black



RH07A01KNX-3-3M KNX capacitive thermostat/humidistat - Black



9025GT307L01-R Single Glass RESIDENTIAL display - White



9025GT307L03-R Single Glass RESIDENTIAL display - Black



9025GT307L01-H Single Glass HOTEL display - White



9025GT307L03-H Single Glass HOTEL display - Black



9025GT307W01-R CUSTOM Single Glass RESIDENTIAL display - White



9025GT307W03-R CUSTOM Single Glass RESIDENTIAL display - Black



9025GT307W01-H CUSTOM Single Glass HOTEL display - White



9025GT307W03-H CUSTOM Single Glass HOTEL display - Black

## Thermostat/Humidistat RGB Line Series Covers

Custom Version - Residential | RGB Line Series

## Custom Version - Hotel | RGB Line Series

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## KNX Thermostat / Humidistat



RT07A01KNX-1 KNX capacitive thermostat White



RT07A01KNX-3 KNX capacitive thermostat Black



9025GT07B01-R Double glass RESIDENTIAL display White



9025GT07B03-R Double glass RESIDENTIAL display Black



RH07A01KNX-1 KNX capacitive thermostat/humidistat White



RH07A01KNX-3 KNX capacitive thermostat/humidistat Black

#### Thermostat/Humidistat Covers



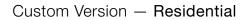
9025GT07B01-H Double glass HOTEL display White



9025GT07B03-H Double glass HOTEL display Black



9025GT07D01-R CUSTOM double glass RESIDENTIAL display White





9025GT07D03-R CUSTOM double glass RESIDENTIAL display Black



9025GT07D01-H CUSTOM double glass HOTEL display White



9025GT07D03-H CUSTOM double glass HOTEL display Black

## 2 Modules Version



## Order Codes

Thermostat/Humidistat KNX RT07A01KNX-1 KNX Capacitive Thermostat - White

RH07A01KNX-1 KNX Capacitive Thermostat/Humidistat White

RT07A01KNX-3 KNX Capacitive Thermostat - Black

RH07A01KNX-3 KNX Capacitive Thermostat/Humidistat Black

Thermostat/Humidistat Covers 9025GT07B01R Double glass RESIDENTIAL display - White

9025GT07B01H Double glass HOTEL display - White

9025GT07B03R Double glass RESIDENTIAL display - Black

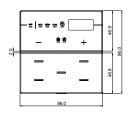
9025GT07B03H Double glass HOTEL display - Black

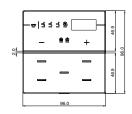
Custom Version Covers 9025GT07D01R CUSTOM Double glass RESIDENTIAL display - White

9025GT07D03R CUSTOM Double glass RESIDENTIAL display - Black

9025GT07D01H CUSTOM Double glass HOTEL display -White

9025GT07D03H CUSTOM Double glass HOTEL display -Black





L display

Custom Version - Hotel

## **Icons** Sheet Sets

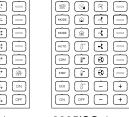
9025ISA-1 icon sheet SET A | White 32 icons



9025ISB-1 icon sheet SET B | White 32 icons

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9025ISC-1 icon sheet SET C | White

32 icons

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9025ISD-1

icon sheet SET D | White 32 icons



9025ISE-1

icon sheet

32 icons

SET E | White

\* 9025ISF-1

icon sheet SET F | White 32 icons



MODE

MODE

AUTO

ECO

icon sheet SET H | White 32 icons

9025ISA-3 icon sheet SET A | Black 32 icons



icon sheet SET B | Black 32 icons



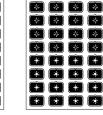
9025ISC-3 icon sheet SET C | Black 32 icons



9025ISD-3 icon sheet SET D | Black 32 icons



9025ISE-3 icon sheet SET E | Black 32 icons



9025ISF-3 icon sheet SET F | Black 32 icons



9025ISH-3

icon sheet SET H | Black 32 icons

## Order Codes

9025ISA-1 Icon sheet SET A - 32 icons - White

9025ISB-1 Icon sheet SET B - 32 icons - White

9025ISC-1 Icon sheet SET C - 32 icons - White

9025ISD-1 Icon sheet SET D - 32 icons - White

9025ISE-1 Icon sheet SET E - 32 icons - White

9025ISF-1 Icon sheet SET F - 32 icons - White

9025ISH-1 Icon sheet SET H - 32 icons - White

9025ISA-3 Icon sheet SET A - 32 icons - Black

9025ISB-3 Icon sheet SET B - 32 icons - Black

9025ISC-3 Icon sheet SET C - 32 icons - Black

9025ISD-3 Icon sheet SET D - 32 icons - Black

9025ISE-3 Icon sheet SET E - 32 icons - Black

9025ISF-3 Icon sheet SET F - 32 icons - Black

9025ISH-3 Icon sheet SET H - 32 icons - Black

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## 9025 Multisensor Controller

## HUMIDITY - TEMPERATURE

The environmental sensor HC06A01KNX is a device of the 9025 series, it is wall-mounted and finished with a white or black glass.

The HC06A01KNX device integrates humidity and temperature sensors. The device is also equipped with a 2-way connector on the rear side that can be configured as a digital or analogue input; in fact it is possible to connect an additional NTC probe to the device (eelectron code TS01A01ACC - TS01B01ACC - TS01D01ACC not included) to obtain a second temperature measurement.

The device includes 2 double-stage thermostats for controlling two distinct areas, both with an integrated PI controller for driving heating and cooling equipment, valves, 6-way valves, 2 and 4-pipe fan coils, etc ...

The humidity sensor manages the reading of the relative humidity in the environment and allows threshold control with hysteresis of humidification and dehumidification equipments.

The device embeds 6 capacitive keys for the management of on / off commands, dimmers, shutters and blinds, execution and learning of scenarios, object sequences, local thermostat controls, etc.

It includes a RGB LED on the front side for displaying states (temperature, humidity and CO2) or other quantities available on the KNX bus.



## Order Codes

KNX Capacitive Switch Boards HC06A01KNX-3 Humidity Sensor + Temperature - Inwall -No Display - White

HC06A01KNX-1 Humidity Sensor + Temperature - Inwall -No Display - Black

RGB Range Covers 9025GH06L01 Single glass line 6 ch. - White

9025GH06L03 Single glass line 6 ch. - Black



9025GH06 L01 Single glass line 6 ch. - White



9025GH06 L03 Single glass line 6 ch. - Black

## **Technical Features**

Mechanical data	• Dimensions: (W x H x D) 96 x 96 x 36 mm
Mounting	• British box, German box or Italian 2 modules box
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Rear Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 10 m (twisted cable)</li> <li>Voltage Scanning 3,3 Vdc (internally generated)</li> </ul>
Rear 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>

## 9025 Multisensor Controller

## CO2 - HUMIDITY - TEMPERATURE

The environmental sensor MC06A01KNX is a device of the 9025 series, it is wall-mounted and finished with a white or black glass.

In the MC06A01KNX device there are 3 sensors available: temperature, humidity and  $CO_2$ , this measure is detected by using an integrated probe specially designed to detect  $CO_2$  data directly and not through calculations based on other sensors.

The device is also equipped with a 2-way connector on the rear side that can be configured as a digital or analogue input; in fact it is possible to connect an additional NTC probe to the device (eelectron code TS01A01ACC - TS01B01ACC - TS01D01ACC not included) to obtain a second temperature measurement.

The device includes 2 double-stage thermostats for controlling two distinct areas, both with an integrated PI controller for driving heating and cooling equipment, valves, 6-way valves, 2 and 4-pipe fan coils, etc ...

The humidity sensor manages the reading of the relative humidity in the environment and allows threshold control with hysteresis of humidification and dehumidification equipments.

The device embeds 6 capacitive keys for the management of on / off commands, dimmers, shutters and blinds, execution and learning of scenarios, object sequences, local thermostat controls, etc.

It includes a RGB LED on the front side for displaying states (temperature, humidity and  $CO_2$ ) or other quantities available on the KNX bus.



9025GM06L01 Single glass line 6 ch. - White



9025GM06L03 Single glass line 6 ch. - Black

## **Technical Features**

Mechanical data	• Dimensions: (W x H x D) 96 x 96 x 40 mm
Mounting	• British box, German box or Italian 2 modules box
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Rear Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 10 m (twisted cable)</li> <li>Voltage Scanning 3,3 Vdc (internally generated)</li> </ul>
Rear 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>



## Order Codes

## KNX Capacitive Switch Boards MC06A01KNX-1

Multisensor CO<sub>2</sub> + Humidity + Temperature - Inwall - No Display - White

#### MC06A01KNX-3

Multisensor CO<sub>2</sub> + Humidity + Temperature - Inwall - No Display - Black

RGB Range Covers 9025GM06L01 Single glass line 6 ch. - White

9025GM06L03 Single glass line 6 ch. - Black



## 9025 Temperature Probe

The device TS01D01ACC of the 9025 series is a temperature probe connectible to  $KNX^{\ensuremath{\circledast}}$  devices.

The device is used in combination with the glass covers available in white (eelectron code 9025GS00A01) or black (eelectron code 9025GS00A03) variants;

The device is mounted in 2 or 3 module box and is compliant with main standards (British, German, Italian, etc).



## Technical Features

Mechanical data	• Dimensions: (W x H x D) 96 x 96 x 36 mm
Rear 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: ≤ 30 m (twisted cable)</li> </ul>
Environmental Specification	<ul> <li>Operating temperature: -5 °C + 45 °C</li> <li>Storage temperature: - 20 °C + 55 °C</li> </ul>

## Order Codes

TS01D01ACC-1 Temperature probe - White

TS01D01ACC-3 Temperature probe - Black

TS01D01ACC-1-3M Temperature probe - 3 Modules - White

TS01D01ACC-3-3M Temperature probe - 3 Modules - Black

9025GS00A01 Single glass - White

9025GS00A03 Single glass - Black

9025GS300A01 Single glass - 3 Modules - White

9025GS300A03 Single glass - 3 Modules - Black



## KNX Capacitive Switch Boards



TS01D01ACC-1 Temperature probe - White



TS01D01ACC-3 Temperature probe - Black



TS01D01ACC-1-3M Temperature probe - 3 Modules - White



TS01D01ACC-3-3M Temperature probe - 3 Modules - Black





9025GS00A01 Single glass - White



9025GS00A03 Single glass - Black



9025GS300A01 Single glass - 3 Modules - White



Single Glass Covers

9025GS300A03 Single glass - 3 Modules - Black

#### DESIGNFRAMES

## 9025 Frames

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Design frames and supports are available in 9025 glossy finish. A complement created to harmonize the aesthetics of electrical sockets and fruit holders as well. Available in PMMA and adapt with the most common European standard inwall boxes in 2, 3 and 4 modules formats.

\*Compatible with 4Box<sup>®</sup>, Vitrum Design<sup>®</sup>, Biticino Living light<sup>®</sup>, Vimar Plana<sup>®</sup>, Vimar Arké<sup>®</sup> sockets.



## **Order Codes**

AJ.19.L.02 Support For 2 Modules Cover Frame (Pack Of 10 pcs.)\*

AJ.19.L.03 Support For 3 Modules Cover Frame (Pack Of 10 pcs.)\*

AJ.19.L.04 Support For 4 Modules Cover Frame (Pack Of 10 pcs.)\*

EEBP200790001-3 Design Frame - Black Lucid - 2 Modules -Pmma (Pack Of 10 pcs)\*

EEBP200790000-1 Design Frame - White - 2 Modules -Pmma (Pack Of 10pcs)\*

EEEP300790001-3 Design Frame - Black Lucid - 3 Modules -Pmma (Pack Of 10 pcs.)\*

EEEP300790000-1 Design Frame - White - 3 Modules -Pmma (Pack Of 10 pcs)\*

EEQP400790001-3 Design Frame - Black Lucid - 4 Modules -Pmma (Pack Of 10 pcs.)\*

EEQP400790000-1 Design Frame - White - 4 Modules -Pmma (Pack Of 10 pcs)\*

#### **DESIGN**FRAMES





AJ.19.L.02 Support For 2 Modules Cover Frame



AJ.19.L.03 Support For 3 Modules Cover Frame



AJ.19.L.04 Support For 4 Modules Cover Frame



EEBP200790001-3 Design Frame - Black Lucid - 2 Modules



EEBP200790000-1 Design Frame - White - 2 Modules



EEEP300790001-3 Design Frame - Black Lucid - 3 Modules



EEEP300790000-1 Design Frame - White - 3 Modules



EEQP400790001-3 Design Frame - Black Lucid - 4 Modules



EEQP400790000-1 Design Frame - White - 4 Modules

## 9025 Access Control

## KNX TRANSPONDER READER

The 9025 series devices dedicated to access control management are KNX<sup>®</sup> devices and use RFID - MIFARE<sup>®</sup> technology. The range includes: TR00C01KNX: Doorpanel transponder reader, TH00C01KNX: Transponder holder, TE00C01KNX: Transponder card programmer

The products are intended to be installed with the glass covers which can be customized on request.

The upper part of the glass is backlit (to illuminate the room number or a logo - both customizations on request); in the lower part there are 3 freely configurable backlit capacitive buttons.

For TR00C01KNX: 1 button (typically with bell function) and 2 LEDs for displaying the MUR and DND states.

The transponder is read by placing it in front of the reader, at a maximum distance of 30 mm. The color of the reader RGB LED bar indicates that the card has been recognized and shows different (configurable) colors for status or anomalies reporting, such as:

- Card recognized (welcome): default color Green
- Incorrect system code: color default Orange
- Unrecognized ID card: default color Red
- Wrong Card Date (validity expired): default color Yellow
- Wrong time of day (Entry forbidden time): default color Magenta
- Wrong day of the week (Entry prohibited day): default color Blue-Cyan

The reader also integrates a buzzer (which can be activated with the ETS parameter) for anomalies signaling.

The 9025 KNX<sup>®</sup> range is mounted in 2 modules box and is compliant with main standards (British, German, Italian, etc). Device is equipped with KNX communication interface.

# 2 Modules Version

## Order Codes

#### KNX Transponder Reader

TR00C01KNX-1 Transponder Reader with 3 control buttons White

#### TR00C01KNX-3

Transponder Reader with 3 control buttons Black

## Transponder Reader RGB Line Series Covers

9025PTR03L01 Single plexiglass - White

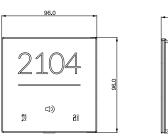
9025PTR03L03 Single plexiglass - Black

9025GTR03L01 Single glass - White

9025GTR03L03 Single glass - Black

## **Technical Features**

Mechanical data	• Dimensions: (W x H x D) 96 x 96 x 36 mm
Mounting	• British box, German box or Italian 2 modules box
Supply	<ul> <li>Via bus ElB/KNX cable: 21 ÷ 32 Vdc</li> <li>Auxiliary supply: 12 ÷ 24 Vdc / ac</li> </ul>



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## 2 Modules Version



## KNX Transponder Reader



TR00C01KNX-1 Transponder Reader with 3 control buttons - White



TR00C01KNX-3 Transponder Reader with 3 control buttons - Black



9025PTR03L01 Single plexiglass - White



9025PTR03L03 Single plexiglass - Black



9025GTR03L01 Single glass - White



Transponder Reader Covers | RGB Line Series

9025GTR03L03 Single glass - Black

## 9025 Access Control

#### KNX TRANSPONDER READER

The 9025 series devices dedicated to access control management are KNX<sup>®</sup> devices and use RFID - MIFARE<sup>®</sup> technology. The range includes: TR00C01KNX: Doorpanel transponder reader, TH00C01KNX: Transponder holder, TE00C01KNX: Transponder card programmer

The products are intended to be installed with the glass covers which can be customized on request.

The upper part of the glass is backlit (to illuminate the room number or a logo - both customizations on request); in the lower part there are 3 freely configurable backlit capacitive buttons.

For TR00C01KNX: 1 button (typically with bell function) and 2 LEDs for displaying the MUR and DND states.

The transponder is read by placing it in front of the reader, at a maximum distance of 30 mm. The color of the reader RGB LED bar indicates that the card has been recognized and shows different (configurable) colors for status or anomalies reporting, such as:

- Card recognized (welcome): default color Green
- Incorrect system code: color default Orange
- Unrecognized ID card: default color Red
- Wrong Card Date (validity expired): default color Yellow
- Wrong time of day (Entry forbidden time): default color Magenta
- Wrong day of the week (Entry prohibited day): default color Blue-Cyan

The reader also integrates a buzzer (which can be activated with the ETS parameter) for anomalies signaling.

The 9025 KNX<sup>®</sup> range is mounted in 3 modules box and is compliant with main standards (British, German, Italian, etc). Device is equipped with KNX communication interface.

## **Technical Features**

Mechanical data	• Dimensions: (W x H x D) 126 x 96 x 36 mm
Mounting	• British box, German box or Italian 2 or 3 modules box
Supply	<ul> <li>Via bus ElB/KNX cable: 21 ÷ 32 Vdc</li> <li>Auxiliary supply: 12 ÷ 24 Vdc / ac</li> </ul>



## Order Codes

#### KNX Transponder Reader

TR00C01KNX-1-3M Transponder Reader with 3 control buttons 3 Modules - White

#### TR00C01KNX-3-3M

Transponder Reader with 3 control buttons 3 Modules - Black

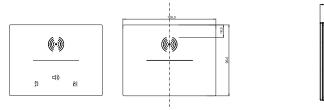
## Transponder Reader RGB Line Series Covers

9025PTR303L01 Single plexiglass - 3 Modules - White

9025PTR303L03 Single plexiglass - 3 Modules - Black

9025GTR303L01 Single glass - 3 Modules - White

9025GTR303L03 Single glass - 3 Modules - Black



## **3 Modules Version**

HOSPITALITY

## 3 Modules Version



## KNX Transponder Reader



TROOCO1KNX-1-3M Transponder Reader with 3 control buttons 3 Modules - White



TR00C01KNX-3-3M Transponder Reader with 3 control buttons 3 Modules - Black



9025PTR303L01 Single plexiglass - 3 Modules - White



9025PTR303L03 Single plexiglass - 3 Modules - Black



9025GTR303L01 Single glass - 3 Modules - White



Transponder Reader Covers | RGB Line Series

9025GTR303L03 Single glass - 3 Modules - Black

## 9025 Access Control

## KNX TRANSPONDER HOLDER

The 9025 series devices dedicated to access control management are KNX<sup>®</sup> devices and use RFID - MIFARE<sup>®</sup> technology. The range includes: TR00C01KNX: Doorpanel transponder reader, TH00C01KNX: Transponder holder, TE00C01KNX: Transponder card programmer.

The products are intended to be installed with the glass covers which can be customized on request.

The upper part of the glass is backlit (to illuminate the room number or a logo - both customizations on request); in the lower part there are 3 freely configurable backlit capacitive buttons.

For TR00C01KNX: 1 button (typically with bell function) and 2 LEDs for displaying the MUR and DND states

For TH00C01KNX: 1 button (typically with CAMERA LIGHTS function) and 2 buttons for setting MUR and DND

The transponder is read by placing it in front of the reader, at a maximum distance of 20 mm; in the case of the transponder pocket, the card is inserted into a compartment from the top of the device. The color of the reader RGB LED bar indicates that the card has been recognized and shows different (configurable) colors for status or anomalies reporting. The reader also integrates a buzzer (which can be activated with the ETS parameter) for anomalies signaling. Device is equipped with KNX communication interface.

## 2 Modules Version



## Order Codes

#### KNX Transponder Holder

TH00C01KNX-1 Transponder Holder with 3 control buttons White

#### TH00C01KNX-3

Transponder Holder with 3 control buttons Black

#### Transponder Holder RGB Line Series Covers

9025PTH03L01 Single plexiglass - White

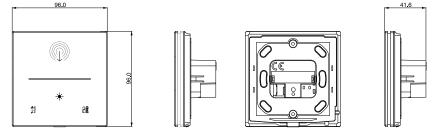
9025PTH03L03 Single plexiglass - Black

9025GTH03L01 Single glass - White

9025GTH03L03 Single glass - Black

## **Technical Features**

Mechanical data	• Dimensions: (W x H x D) 96 x 96 x 41,6 mm
Mounting	• British box, German box or Italian 2 modules box
Supply	<ul> <li>Via bus ElB/KNX cable: 21 ÷ 32 Vdc</li> <li>Auxiliary supply: 12 ÷ 24 Vdc / ac</li> </ul>



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## 2 Modules Version



## KNX Transponder Holder



TH00C01KNX-1 Transponder Holder with 3 control buttons - White



TH00C01KNX-3 Transponder Holder with 3 control buttons - Black



9025PTH03L01 Single plexiglass - White



9025PTH03L03 Single plexiglass - Black



9025GTH03L01 Single glass - White



Transponder Holder Covers | RGB Line Series

9025GTH03L03 Single glass - Black

## 9025 Access Control

## KNX TRANSPONDER HOLDER

The 9025 series devices dedicated to access control management are KNX<sup>®</sup> devices and use RFID - MIFARE<sup>®</sup> technology. The range includes: TR00C01KNX: Doorpanel transponder reader, TH00C01KNX: Transponder holder, TE00C01KNX: Transponder card programmer.

The products are intended to be installed with the glass covers which can be customized on request.

The upper part of the glass is backlit (to illuminate the room number or a logo - both customizations on request); in the lower part there are 3 freely configurable backlit capacitive buttons.

For TR00C01KNX: 1 button (typically with bell function) and 2 LEDs for displaying the MUR and DND states

For TH00C01KNX: 1 button (typically with CAMERA LIGHTS function) and 2 buttons for setting MUR and DND

The transponder is read by placing it in front of the reader, at a maximum distance of 20 mm; in the case of the transponder pocket, the card is inserted into a compartment from the top of the device. The color of the reader RGB LED bar indicates that the card has been recognized and shows different (configurable) colors for status or anomalies reporting. The reader also integrates a buzzer (which can be activated with the ETS parameter) for anomalies signaling. Device is equipped with KNX communication interface.

**3 Modules Version** 



## Order Codes

Transponder Holder TH00C01KNX-1-3M Transponder Holder with 3 control buttons 3 Modules - White

TH00C01KNX-3-3M Transponder Holder with 3 control buttons 3 Modules - Black

## Transponder Holder RGB Line Series Covers

9025PTR303L01 Single plexiglass - 3 Modules - White

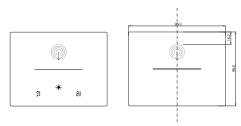
9025PTR303L03 Single plexiglass - 3 Modules - Black

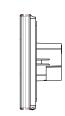
9025GTR303L01 Single glass - 3 Modules - White

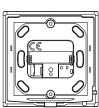
9025GTR303L03 Single glass - 3 Modules - Black

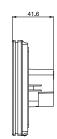
## **Technical Features**

Mechanical data	• Dimensions: (W x H x D) 126 x 96 x 36 mm
Mounting	• British box, German box or Italian 2 or 3 modules box
Supply	<ul> <li>Via bus ElB/KNX cable: 21 ÷ 32 Vdc</li> <li>Auxiliary supply: 12 ÷ 24 Vdc / ac</li> </ul>









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## 3 Modules Version



## KNX Transponder Holder



TH00C01KNX-1-3M Transponder Holder with 3 control buttons 3 Modules - White



THOOCO1KNX-3-3M Transponder Holder with 3 control buttons 3 Modules - Black



9025PTH303L01 Single plexiglass - 3 Modules - White



9025PTH303L03 Single plexiglass - 3 Modules - Black



9025GTH303L01 Single glass - 3 Modules - White



Transponder Holder Covers | RGB Line Series

9025GTH303L03 Single glass - 3 Modules - Black

## 9025 Access Control

## KNX TRANSPONDER ENCODER

It is a USB desktop device compatible with USB-HID specification.

It is a device designed to program cards or RFID devices used for Eelectron access control.

No drivers are required to use this device with the dedicated software module.

It's powered by the PC USB port to which is connected.

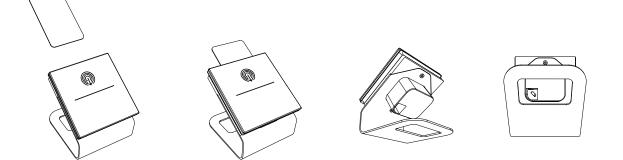


## Order Codes

TE00C01USB Transponder Encoder USB - Black

## Technical Features

Mechanical data	<ul> <li>Case: plastic (PC-ABS) / Aluminum</li> <li>Dimensions: (W x H x D): 96 x 98 x 100 mm</li> <li>Weight: ca. 320 g.</li> </ul>
Power Supply	<ul> <li>Via bus USB: 5 V DC</li> <li>Current Consumption: max 160 mA @ 5 V</li> </ul>



## **MIFARE** Accessories

#### TRANSPONDER CARD MIFARE 1K

The card CD00M01TRC is based on MIFARE 1K Classic technology,

#### TRANSPONDER FITBAND MIFARE 1K

CD00M04TRB is a wristband, in polyurethane, with a unique and modern design.

Comfortable, water resistant and easy to wear, the case of this product can be customized with silkscreen colour printing, and epoxy.

Ideal for access control in recreational clubs, amusement parks, spa and swimming pools, it is available in black, blue, pink and yellow.

#### TRANSPONDER KEYHOLDER MIFARE 1K

**Technical Features** 

**RFID Features** 

Mechanical data

Customization:

Chip

The keyholder CD00M02TRK is based on MIFARE 1K Classic technology.

• Frequency: 13.56 MHz

• Memory size: 1024 Byte

• IC type: MIFARE 1K Classic EV1 (Type 4)







## Order Codes

CD00M02TRC Transponder Card MIFARE 1K - 50 pcs. White

CD00M03TRC Transponder Card MIFARE 1K - 200 pcs. White

CD00M02TRK Transponder Keyholder MIFARE 1K 50 pcs.

CD00M04TRB Transponder Wearable (bracelet) MIFARE 1K - 50 pcs.

CD00Q02TRC Transponder Combo Card - MIFARE 1K 125 KHz - 50 pcs. - White

CD00Q03TRC Transponder Combo Card - MIFARE 1K 125 KHz - 200 pcs. - White

CD00A02TRC Transponder Card - 125 KHz - 50 pcs. White

CD00A03TRC Transponder Card - 125 KHz - 200 pcs. White

#### CD00B02KNX

Transponder Card - 125 KHz - 50 pcs.

<ul> <li>UID: 4 o 7 Byte</li> <li>Standard protocol: ISO 14443A</li> <li>Reading distance: Up to 5 cm (dep. upon the reader)</li> </ul>
Card • Dimensions: (mm): 86x54 • Material: PVC Fitband • Size (mm): 205x15   ø 55 • Weight (g): 19 • Material housing: Polyurethane Keyholder • Size (mm): 40.5x32x4.2 • Weight (g): 6 • Material housing: ABS • Attachment: Key ring
Card • Printing: silkscreen color print, digital print, offset print, thermal printing • Colour: white Fitband • Printing: silkscreen color print, and epoxy • Colour: black, blue, pink, yellow Keyholder • Printing: operate cilkscreen color print

• Printing: epoxy, silkscreen color print

· Colour: blue, black, green, grey, yellow, red, white



## 9025 Access Control

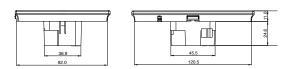
#### KNX NUMERIC KEYPAD

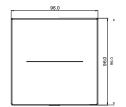
The 9025 KNX<sup>®</sup> numeric keypad dedicated to access control management consists of 10-channel capacitive buttons. The product can be installed with glass covers, white or black, which show the numbers from 0 to 9 which can be backlit. Device includes a 2 stage Room Temperature Controller with integrated PI to control heating and cooling equipments, valves, 2 and 4 pipes fan coils; etc.. Device has an embedded temperature sensor and a rear 2 poles connector configurable as digital or analog input; It's possible to connect an additional NTC temperature probe (eelectron codes TS01A01ACC or TS01B01ACC - not included) to perform a direct temperature measurement. The device includes an RGB LED bar on the front side of the numeric keypad in order to visualize the recognition of the entered code and shows different colors (configurable) for status or anomalies reporting such as:

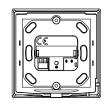
- Password recognized (welcome): default Green color
- Incorrect system code: default color Orange
- Password not recognized: default color Red
- Incorrect Date Password (validity expired): default color Yellow
- Wrong time of day (Entry prohibited time): default color Magenta
- Wrong day of the week (Entry prohibited day): default color Blue-Cyan

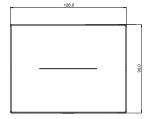
The numeric keypad also integrates a buzzer that can be enabled or disabled in order to give acoustic feedback when a key is pressed. The 9025 KNX<sup>®</sup> numeric keypad is mounted in 2 or 3 modules box and is compliant with main standards (British, German, Italian, etc). Device is equipped with KNX communication interface.











#### **Technical Features** Mechanical data • Dimensions (2 modules): (W x H x D): 96 x 96 x 36 mm • Dimensions (3 modules): (W x H x D): 126 x 96 x 36 mm • British box, German box or Italian 2 or 3 modules box Mounting Supply • Via bus USB: 5 V DC • max 20 mA @ 29V • max 24 mA @ 21V (economy mode) max 12 mA @ 29V Rear Input - digital For free potential contacts (dry contacts) mode Max. length of Connecting Cables ≤ 10 m (twisted cable) • Voltage Scanning: 3,3 V DC (internally generated) Rear input -For NTC temperature probe eelectron code: analog mode for TS01A01ACC (range from -20°C to +100°C) temperature probe TS01B01ACC (range from -50°C to +60°C) TS01D01ACC (range from -40°C to 125°C) • Max. length of Connecting Cable: ≤ 30 m (twisted cable)

## Order Codes

KP10C01KNX-1 KNX capacitive numeric keypad for access control - White

#### KP10C01KNX-3

KNX capacitive numeric keypad for access control - Black

#### KP10C01KNX-1-3M KNX capacitive numeric keypad for access control 3 Modules - White

KP10C01KNX-3-3M KNX capacitive numeric keypad for access control - 3 Modules - Black

9025GKP10L1 Single Glass Cover - White

9025GKP10L3 Single Glass Cover - Black

9025GKP310L1 Single Glass Cover - 3 Modules - White

9025GKP310L3 Single Glass Cover - 3 Modules - Black



## KNX Capacitive Switch Boards



KP10C01KNX-1 KNX capacitive numeric keypad for access control - White



KP10C01KNX-1-3M KNX capacitive numeric keypad for access control 3 modules - White



KP10C01KNX-3 KNX capacitive numeric keypad for access control - Black



KP10C01KNX-3-3M KNX capacitive numeric keypad for access control - 3 modules - Black



9025GKP10L1 Single Glass Cover - White



9025GKP10L3 Single Glass Cover - Black



9025GKP30L1 Single Glass Cover - 3 Modules - White



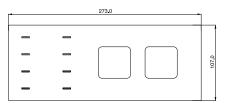
Numeric Keypad Covers | RGB Line Series

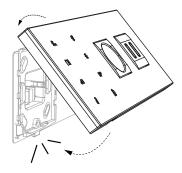
9025GKP30L3 Single Glass Cover - 3 Modules - Black

## 9025 BEDSIDE PANEL

9025 custom Bedside Panel includes the features of the Standard 9025 switch: consists of 2 - 4 - 8 - 10 channels capacitive buttons. Each button can be configured to manage on/off commands, dimming, shutters and venetians control, scene recall and control, objects sequences etc; device includes a 2 stage Room Temperature Controller with integrated PI to control heating and cooling equipments, valves, 2 and 4 pipes fan coils; etc. Device has an embedded temperature sensor and a rear 2 poles connector configurable as digital or analog input; It's possible to connect an additional NTC temperature probe (eelectron codes TS01A01ACC - TS01B01ACC - TS01D01ACC not included) to perform a direct temperature measurement.

The glass bedside panel, as in the CUSTOM version of the 9025 series, has the possibility of back lighting custom and interchangeable icons matching with the associated function. The product is intended to fulfill the request of the hotel market including high possibility of customization through dedicated icons set, two sockets (not included) and a minimal elegant design.







## **Order Codes**

KNX Capacitive Switch Boards CS05B01KNX-1 KNX Capacitive switch - White

CS05B01KNX-3 KNX Capacitive switch - Black

#### **Bedside Panel Plate**

9025GL10C01-B2R Custom Bedside Panel Plate - 2 Sockets -Right White

9025GL10C03-B2R Custom Bedside Panel Plate - 2 Sockets -Right Black

9025GL10C01-B2L Custom Bedside Panel Plate - 2 Sockets -Left White

9025GL10C03-B2L Custom Bedside Panel Plate - 2 Sockets -Left Black HOSPITALITY



## KNX Capacitive Switch Boards



CS10A01KNX-1 Capacitive switch KNX - White



CS10A01KNX-3 Capacitive switch KNX - Black



9025GL10C01-B2L Custom bedside panel plate – 2 sockets -Left - White



9025GL10C01-B2R Custom bedside panel plate – 2 sockets -Right - White



9025GL10C03-B2L Custom bedside panel plate – 2 sockets -Left - Black



9025GL10C03-B2R Custom bedside panel plate – 2 sockets -Right - Black

## Custom Bedside Panel Plate

## 9025 Access Control

## DOOR PANEL

The KNX® 9025 capacitive doorpanel is a capacitive switch with RGB led bar; it is used in combination with the glass covers available in black or white; these cover glasses can be ordered in a specific version for the required application. The upper part of the glass can have a personalized, backlit room number; the lower part provides a key for the bell function, one for the 'do not disturb' function (DND) and one for the 'make up room' function (MUR). 2 other buttons customizable on request are available. Device includes a 2 stage Room Temperature Controller with integrated PI to control heating and cooling equipments, valves, 2 and 4 pipes fan coils; etc. Device has an embedded temperature sensor and a rear 2 poles connector configurable as digital or analog input; It's possible to connect an additional NTC temperature probe (eelectron codes TS01A01ACC - TS01B01ACC -TS01D01ACC not included) to perform a direct temperature measurement. Device has a RGB led bar on the front side in order to visualize feedbacks or other values available over the KNX bus (function available on the RGB range).



## Order Codes

KNX Capacitive Switch Boards CS05B01KNX-1 KNX Capacitive switch - White

CS05B01KNX-3 KNX Capacitive switch - Black

Door Panel Covers 9025GL03P01 Door panel 2 ch. - White + RGB

9025GL03P03 Door panel 2 ch. - Black + RGB

Technical Features		
Mechanical data	• Dimensions: (W x H x D) 96 x 96 x 36 mm	
Mounting	• British box, German box or Italian 2 modules box	
Rear Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 10 m (twisted cable)</li> </ul>	
Rear 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>	

HOSPITALITY



#### KNX Capacitive Switch Boards



CS05B01KNX-1 KNX Capacitive switch door panel - White



CS05B01KNX-3 KNX Capacitive switch door panel - Black



9025GL03P01 Door panel 2 ch. - Single glass - White + RGB DND/MUR + Bell



9025GL03P03 Door panel 2 ch. - Single glass - Black + RGB DND/MUR + Bell

#### Door Panel RGB Line Covers

# 9025 Access Control

The 9025 KNX<sup>®</sup> numeric keypad dedicated to access control management consists of 10-channel capacitive buttons.

The protection level is IP54 rated:

- Protected from water spray from any direction
- Protected from limited dust ingress

The product is installed with black glass covers, which show the numbers from 0 to 9 which can be backlit.

Device includes a 2 stage Room Temperature Controller with integrated PI to control heating and cooling equipments, valves, 2 and 4 pipes fan coils; etc..

Device has an embedded temperature sensor and a rear 2 poles connector configurable as digital or analog input; It's possible to connect an additional NTC temperature probe (eelectron codes TS01A01ACC or TS01B01ACC – not included) to perform a direct temperature measurement.

The device includes an RGB LED bar on the front side of the numeric keypad in order to visualize the recognition of the entered code and shows different colors (configurable) for status or anomalies reporting.

The outdoor numeric keypad also integrates a buzzer that can be enabled or disabled in order to give acoustic feedback when a key is pressed.

The 9025 KNX® numeric keypad is mounted in 2 module boxes and is compliant with the main standards (British, German, Italian, etc).



#### Order Codes

OUTKC01KNX Outdoor numeric keypad - Black

OUTMC01ACC RFID accessory for outdoor mounting IP54

9025GKP10L3 Single Glass Cover - Black

#### **Technical Features**

Mechanical data	• Dimensions (2 modules): (W x H x D): 96 x 96 x 36 mm
Mounting	• British box, German box or Italian 2 modules box
Supply	<ul> <li>21 ÷ 32V DC</li> <li>max 10 mA @ 29 V</li> <li>12 V AC 12-30 V DC</li> <li>20 mA @ 24 V DC</li> </ul>
Rear Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 10 m (twisted cable)</li> <li>Voltage Scanning: 3,3 V DC (internally generated)</li> </ul>
Rear 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: ≤ 30 m (twisted cable)</li> </ul>

**CAPACITIVE**SWITCHES



KNX Capacitive Switch Boards



OUTKC01KNX Outdoor KNX numeric pad Black

Numeric Keypad Covers | RGB Line Series



9025GKP10L3 Single Glass Cover - Black

Accessory for outdoor mounting



OUTMC01ACC RFID accessory for outdoor mounting IP54 Black

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# 9025 Access Control

The protection level is IP54 rated:

- Protected from water spray from any direction
- Protected from limited dust ingress

The products is intended to be installed with the glass covers which can be customized on request. The upper part of the glass is backlit (to illuminate the room number or a logo – both customizations on request); in the lower part there's 1 button (typically with bell function) and 2 LEDs for displaying the MUR and DND states.

The transponder is read by placing it in front of the reader, at a maximum distance of 30 mm.

The color of the reader RGB LED bar indicates that the card has been recognized and shows different (configurable) colors for status or anomalies reporting such as:

- Card recognized (welcome): default color Green
- Incorrect system code: Orange color default
- Unrecognized ID card: default color Red
- Wrong Card Date (validity expired): default color Red
- Wrong day of the week (Entry prohibited day): default color Purple
- Wrong time of day (Entry forbidden time): default color Purple

The reader also integrates a buzzer (which can be activated with the ETS parameter) for anomalies signaling.

#### **Technical Features**

Mechanical data	• Dimensions (2 modules): (W x H x D): 96 x 96 x 36 mm
Mounting	• British box, German box or Italian 2 modules box
Supply	<ul> <li>21 ÷ 32V DC</li> <li>max 10 mA @ 29 V</li> <li>12 V AC 12-30 V DC</li> <li>20 mA @ 24 V DC</li> </ul>
Rear Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 10 m (twisted cable)</li> <li>Voltage Scanning: 3,3 V DC (internally generated)</li> </ul>
Rear 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: ≤ 30 m (twisted cable)</li> </ul>



#### Order Codes

OUTRC01KNX Outdoor KNX Transponder Reader - Black

OUTMC01ACC RFID accessory for outdoor mounting IP54

9025GTR03L03 Single Glass Cover - Black CAPACITIVESWITCHES



KNX Transponder Reader



OUTRC01KNX Outdoor KNX Transponder Reader Black

KNX Transponder Reader Covers | RGB Line Series



9025GTR03L03 Single Glass Cover - Black

Accessory for outdoor mounting



OUTMC01ACC RFID accessory for outdoor mounting IP54 Black

## Transponder Reader

The Synchronicity series devices dedicated to access control management are KNX devices and use RFID - MIFARE® technology.

The transponder is read by placing it in front of the reader, at a maximum distance of 20 mm; in the case of the transponder pocket, the card is inserted into a compartment from the top of the device.

The Synchronicity KNX range is mounted in 2 or 3 modules box and is compliant with main standards (British, German, Italian, etc).

Device is equipped with KNX communication interface.

The AC22D01KNX-3 external card reader is an EIB/KNX device dedicated to access control.







<b>Technical Features</b>
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Mechanical data	• Dimensions: (W x H x D) 110 x 78 x 16 mm
Mounting	• British box, German box or Italian 2/3 modules box
Supply	<ul> <li>Via bus ElB/KNX cable: 21 ÷ 32 Vdc</li> <li>Supplementary 112 ÷ 24 V AC / DC +/-10%</li> </ul>
Rear Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 10 m (twisted cable)</li> </ul>
Output rate	• Max load 24 Vac/dc, 2 A

#### Order Codes

TR22D01KNX-1 Transponder reader 13.5MHz - White

TR22D01KNX-3 Transponder reader 13.5MHz - Black

AC22D01KNX-3 Outdoor transponder reader 13.5MHz, 2IN/2OUT - Black

PX10A24ACC Plexi plate for Outdoor reader - White

PX15A14ACC Plexi plate for Outdoor reader - Black

## Synchronicity

Synchronise events - Synchronise colours

## Transponder Holder

The Synchronicity series devices dedicated to access control management are KNX devices and use RFID - MIFARE® technology.

The products are intended to be installed with the plexiglass covers which can be customized on request.

The transponder is read by placing it in front of the reader, at a maximum distance of 20 mm; in the case of the transponder pocket, the card is inserted into a compartment from the top of the device.

The Synchronicity KNX range is mounted in 2 or 3 modules box and is compliant with main standards (British, German, Italian, etc).

Device is equipped with KNX communication interface.





#### **Technical Features**

Mechanical data	• Dimensions: (W x H x D) 110 x 78 x 16 mm
Mounting	• British box, German box or Italian 2/3 modules box
Supply	<ul> <li>Via bus ElB/KNX cable: 21 ÷ 32 Vdc</li> <li>Supplementary 112 ÷ 24 V AC / DC +/-10%</li> </ul>
Rear Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 10 m (twisted cable)</li> </ul>
Output rate	• Max load 24 Vac/dc, 2 A

#### Order Codes

TH22D01KNX-1 Transponder holder 13.5Mhz - White

TH22D01KNX-3 Transponder holder 13.5Mhz - Black GRMS

## eSuite Software

eSuite software is dedicated for hotel management, for the supervision of KNX environments, access control and alarms. The software can be interfaced with BMS. Client remote management can be done via Internet or Ethernet. The package is available with Embedded PC including 2 clients.

#### **Technical Features**

- Number of pages according to installed license.
- Number of clients according to installed license
- Up to 10 profiling groups
- Unlimited users
- Advanced ETS project data import
- Interfaced to third parties PMS
- Timer management
- Alarms management





#### **Order Codes**

#### SW01F11ACS

Embedded pc with eSuite sw – full package – 0 clients - closed license - 10 Rooms

#### SW01F01ACS

Embedded pc with eSuite sw - full package - 2 clients - start up license

#### SW01F10ACS

Embedded pc with eSuite sw - license - cost per single room

#### SW07D05KNX

Embedded rack pc with eSuite sw - full package - 2 clients - start up license

SW00D03KNX eSuite additional client

SW00D04KNX eSuite interface to management system

SW00D04DVL eSuite connectivity to PMS custom development

SW00D06KNX eSuite connectivity to Horizone & Virtual Badge applications

SW00T05KNX eSuite IP (tunneling) module/unit price per IP node



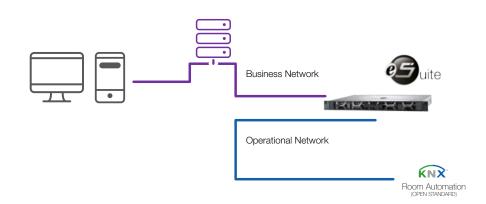
#### eSuite Staff Experience for Staff daily operations

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Hotel Backoffice Applications Connectivity



- Property Management Systems
- E-Lock Servers or in room applications
- Other IP related services

## 55x55 KNX Switch

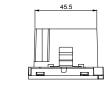
#### 4 CHANNELS + THERMOSTAT

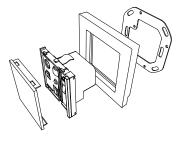
SB40AxxKNX is a KNX tactile 4 channels push button which can be configured to manage on/off commands, dimming, shutters and venetians control, scene recall and control, sequences of 3 objects, etc. Device includes a 2 stage Room Temperature Controller with integrated PI to control heating and cooling equipments, valves, 2 and 4 pipes fan coils, etc. Device has a rear connector (2 poles) configurable as digital or analog input. It's possible to connect a NTC temperature probe (eelectron codes TS01A01ACC - TS01B01ACC - TS01D01ACC not included) to have a direct temperature measurement. SB40AxxKNX has a RGB led bar on the front side in order to visualize feedbacks or other values available over the KNX bus. SB40AxxKNX is intended to be used in British box, German box or Italian 2 modules box. Device is equipped with KNX communication interface.

#### **Technical Features**

Mechanical data	• Dimensions: (H x W x D) : 55 x 55 x 37 mm
Mounting	• British box, German box or Italian 2 modules box
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Rear Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 10 m (twisted cable)</li> </ul>
Rear 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>









#### **Order Codes**

SB40A01KNXPLCR Knx switch 4 channels + Thermostat 55x55mm - Chromo - Plastic

SB40A11KNXPLBL

Knx switch 4 channels + Thermostat 55x55mm - Black - Plastic

SB40A21KNXPLWH Knx switch 4 channels + Thermostat 55x55mm - White - Plastic

#### SB40A09KNXPLCR

Knx switch 4 channels + Thermostat 55x55mm - Chromo - Plastic + Linemark

SB40A19KNXPLBL

Knx switch 4 channels + Thermostat 55x55mm - Black - Plastic + Linemark

SB40A29KNXPLWH

Knx switch 4 channels + Thermostat 55x55mm - White - Plastic + Linemark

SB40A01KNXMT60

Knx switch 4 channels + Thermostat 55x55mm - Chromo + Alluminium

(Order codes are referred only to switches without frames).











Metal





## 9025 KNX Touch Panel 3,5"

#### EVO21

The touch panel is equipped with a 3,5 inches coloured display; dimming, status, values, lighting, shutters and timers are controlled and password protected when needed. Using the embedded temperature sensor and the embedded room temperature controller function is possible to manage valves, fancoil or other HVAC equipments. The device includes a number of pre-programmed logic including control of electrical loads with automatic power-off priority, (this feature is available in combination with eelectron KNX power measuring device). The panel 3.5 "Touch has an LED for status display and a buzzer to give sound signals with alarm function.

The device is equipped with a Micro-USB connection accessible from the front by simply removing the external cover; allows connection to the programming device for customizing icons, screensavers or logics. Similarly, a Micro-SD Card slot is available for updating the device's firmware. Available in two colours (white and black) is based on Linux OS but can be programmed using only ETS without any additional SW. Device is equipped with KNX communication interface





#### **Technical Features**

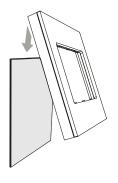
Mechanical data	• Dimensions: (W x H x D) : 96 x 96 x 15 mm
Mounting	Inwall box: 2 modules Italian, German box, Swiss box
Supply	<ul> <li>Via bus ElB/KNX cable: 21 ÷ 32 Vdc</li> <li>Auxiliary power supply: 9 ÷ 32 Vdc</li> <li>Current Consumption (Aux): 55 mA @24 Vdc</li> </ul>

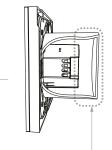
#### **Order Codes**

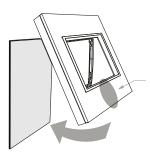
TP35A01KNX-1 Touch Panel KNX 3,5 EVO21 - White

TP35A01KNX-3 Touch Panel KNX 3,5 EVO21 - Black

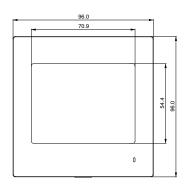












TOUCHPANEL



## eelecta KNX Touch Panel 3,5"

The Eelecta touch panel: powerful control in a distinctive shape. With a couloured display, dimming, status, values, lighting, shutters and timers are controlled and password protected when needed. Using the embedded temperature sensor, chrono or fancoil controlling functions are managed. DMX couloured Led or lights are controlled with the optional DMX interface, and load control with automatic cut off of prioritized functions is performed with the available power meter. Based on Linux<sup>®</sup> OS but Ets programmed, the 3.5" touch panel has Led indicator for status display and an audio signal for alarm functions and is available in three colours.





#### **Technical Features**

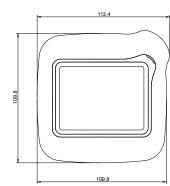
Mechanical data	• Dimensions: (H x W x D) : 113 x 113 x 48mm
Mounting	Inwall box: 2 or 3 modules Italian, German box, Swiss box
Supply	<ul> <li>Via bus ElB/KNX cable: 21 ÷ 32 Vdc</li> <li>Auxiliary power supply: 9 ÷ 32 Vdc</li> <li>Current Consumption (Aux): 55 mA @24 Vdc</li> </ul>

#### Order Codes

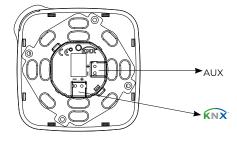
VS00E10KNX Touch Panel KNX 3,5 + Thermostat Ceramic White

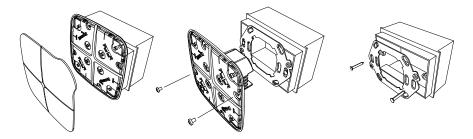
VS00E20KNX Touch Panel KNX 3,5 + Thermostat Chromo

VS00E30KNX Touch Panel KNX 3,5 + Thermostat Black Matte









## 3025 KNX Touch Panel 3,5"

SQUARE

The 3025 Touch Panel: powerful control in a distinctive shape. With a couloured display, dimming, status, values, lighting, shutters and timers are controlled and password protected when needed. Using the embedded temperature sensor, chrono or fancoil controlling functions are managed. DMX couloured Led or lights are controlled with the optional DMX interface, and load control with automatic cut off of prioritized functions is performed with the available power meter. Based on Linux® OS but Ets programmed, the 3,5" Touch Panel has Led indicator for status display and an audio signal for alarm functions and is available in three colours.



#### **Order Codes**

VS00G10KNX Touch Panel KNX 3,5 SQUARE White Glass

VS00G11KNX Touch Panel KNX 3,5 SQUARE Ice White Glass

VS00G30KNX Touch Panel KNX 3,5 SQUARE Black Glass

VS00P10KNX Touch Panel KNX 3,5 SQUARE Plexi Glass

VS00P20KNX Touch Panel KNX 3,5 SQUARE Plexi Chromo

VS00P15KNX Touch Panel KNX 3,5 SQUARE Plexi Black

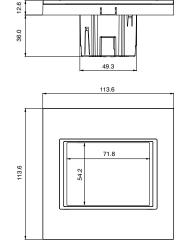
VS00W60KNX Touch Panel 3,5" SQUARE Metal

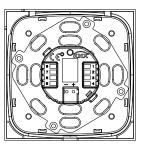
VS00W50KNX Touch panel 3,5" SQUARE Oak White

VS00W51KNX Touch panel 3,5" SQUARE Oak Black

#### **Technical Features**

Mechanical data	• Dimensions: (H x W x D): 113 x 113 x 48 mm
Mounting	• British box, German box or Italian 2 or 3 modules box
Supply	<ul> <li>Via bus ElB/KNX cable: 21 ÷ 32 Vdc</li> <li>Auxiliary power supply: 9 ÷ 32 Vdc</li> </ul>





TOUCHPANELS



#### Plexiglass







Black VS00P15KNX

#### Glass



White VS00G10KNX



Black VS00G30KNX

## MiniPad Evo21

Eelecta® Minipad pushbutton range of KNX devices is divided in 4 different models based on the number of switch, input and temperature sensors provided with the device. Product has 4 (8) push buttons which can be configured to manage lights, dimmers, shutters, etc; and 4 inputs (where present) on the backside to interface free potential contacts (for example sensors, traditional buttons, etc.) It has 5 white led in the front side, each led freely configurable by ets and 2 versions have a temperature sensor included which can be configured as a room thermostat.

The device is equipped with appropriate communication interface with the bus type TP1 (twisted pair) KNX European standard, according CEI EN 50090.



#### **Order Codes**

MB40B1FKNX-WH 4 channels KNX - White Ceramic

MB80C1FKNX-WH 8 channels KNX - TS/ Circular functions -White Ceramic

MB40B3FKNX-BL 4 channels KNX - Black Matte

MB80C3FKNX-BL

8 channels KNX - TS/ Circular functions -Black Matte

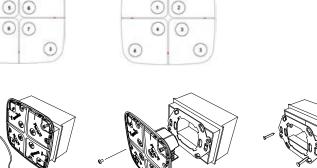
rechilical realures			
Mechanical data	• Dimensions (H. x W.) 90 x 90 mm		
Mounting	Inwall box: 2 modules Italian, German box, Swiss box		
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc		
Rear Input - digital mode	<ul> <li>For free potential contacts (dry contacts)</li> <li>Max. length of Connecting Cables ≤ 10 m (twisted cable)</li> </ul>		

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# **Technical Features**



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MINIPAD



Linear Cover





#### **Min**iPad



Ceramic White - Opaline Center 1A - WH



Black Matte - Opaline Center 3C - BL

## Horizone Web Server

HORIZONE is a webserver specifically engineered for supervision and monitoring of Home & Building Automation systems. Based on KNX standard and suitable for integration with Modbus standard and other technologies used in intelligent buildings, alarm systems, fire and smoke detections systems, audio/video distribution systems. Compatible with operating system Mac OS X, Microsoft Windows, Apple iOS and Google Android, the configuration and use of HORIZONE takes place directly through its web interface, which can be accessed through a the most popular browser on the market browser from any device (pc/mac, smartphone e tablet) or with free app available on iOS and Android store.



#### Order Codes

IN00B02WEB Web Server Horizone 200 points

IN00B03UPG Upgrade up to 800 points

IN00B04UPG Upgrade up to 1400 points

SIZES

	KNX GROUP ADDRESSES	SCENES	LOGICS		LOADS
Horizone Web Server 200 KNX group addresses	200	30	30	UNLIMITED	10
Upgrade up to 800 KNX group addresses	800	100	100	UNLIMITED	20
Upgrade up to 1400 KNX group addresses	1400	100	100	UNLIMITED	40

\*\*On demand Horizone Upgrade over 1400 KNX group addresses

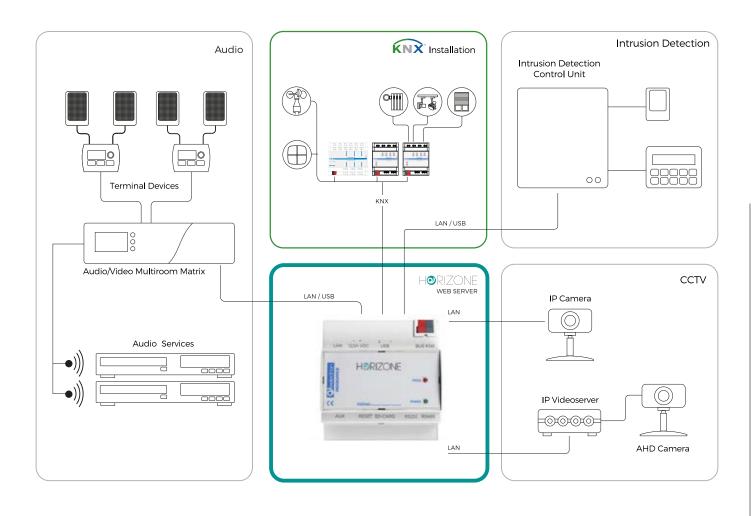
Hardware Features				
Mechanical data	• Dimensions: 5 DIN modules			
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc			
Aux Supply	<ul> <li>12 ÷ 24 Vdc</li> <li>18 mA @12 V; 110 mA @24 V</li> </ul>			
Communication ports• KNX • RS232 (1x)Screw connector • RS485 (1x)• RS485 (1x)Screw connector • USB 2.0 (2x) • LAN (1x) RJ-45 jack (10/100 Mbps)				

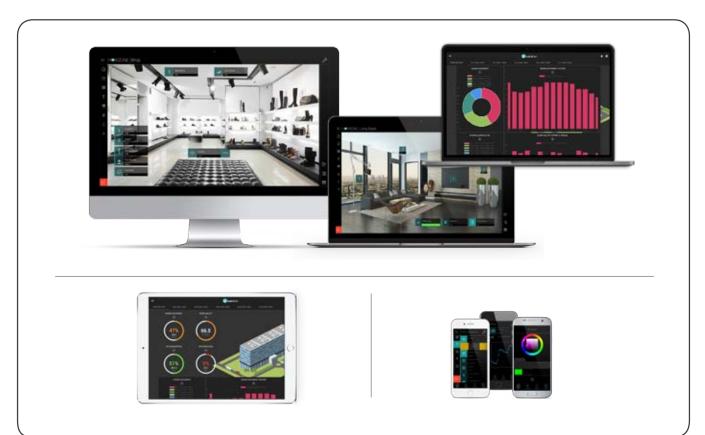
Additional Software Modules				
IN00B02MBS	MODBUS Module for HORIZONE WS			
IN00B02BEN	BENTEL Module for HORIZONE WS			
IN00B02IES	ELMO/IESS Module for HORIZONE WS			
IN00B02TEC	TECNOALARM Module for HORIZONE WS			
IN00B02TUT	TUTONDO Module for HORIZONE WS			
IN00B02VIV	VIVALDI Module for HORIZONE WS			
IN00B02VOI	VOIP Module for HORIZONE WS			
IN00B02SON	SONOS Module for HORIZONE WS			
IN00B02DAT	$\bullet$ Report and Accounting Module for HORIZONE WS			

Software Features					
Standard technologies	• KNX • RS232 / RS485 / TCP				
User interface	<ul><li>Web / HTML5</li><li>App iOS / Android</li></ul>				
Number of clients	Unlimited				
Simultaneous connections	• Up to 20				
Features	<ul> <li>Lighting</li> <li>HVAC</li> <li>Blinds / Shutters</li> <li>Irrigation</li> <li>Alarms</li> <li>Power consumption</li> <li>Load management</li> <li>Weather</li> <li>IP Camera</li> <li>Door intercom system (with SIP standard)</li> <li>Cloud services</li> <li>Voice control</li> <li>IFTTT</li> </ul>				
Advanced functions	<ul> <li>Scenarios with parametrical wait functions</li> <li>Boolean logics</li> <li>Thresholds and values comparators</li> <li>Mathematical operations</li> <li>Scheduler</li> <li>Notifications</li> <li>Advanced logic module</li> </ul>				
Users and security	<ul><li>Unlimited users</li><li>SSL Internet secure access</li></ul>				



## Horizone Web Server





## Horizone Virtual Badge

Virtual Badge is an innovative access control system, which allows the opening of gates with your smartphone, without the need for keys or badge readers physically installed in front of each door. The management of permission of the users, and the sending of virtual access keys, is entirely manageable via app, both locally and remotely, and is therefore ideal also for unattended structures.



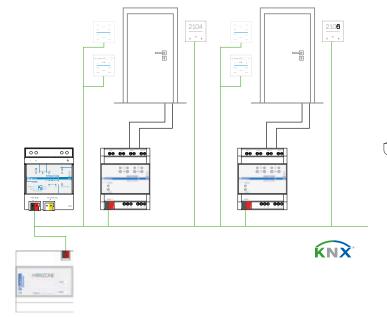
## Virtual Badge

#### Order Codes

Virtual Badge + Horizone Server				
Target	<ul><li>Access Control</li><li>Home automation management</li><li>Integration of bus and technological systems</li></ul>			
Technology	<ul> <li>KNX</li> <li>Anti-Intrusion Systems *</li> <li>Audio Systems *</li> <li>IP cameras *</li> <li>Modbus *</li> </ul>			
Room 1-4	<ul> <li>Horizone Web Server +</li> <li>Virtual Badge License +</li> <li>Other license if required</li> </ul>			
Every 4 room	Additional Virtual Badge License			

\* For compatibility list, see technical documentation for Horizone Web Server

IN00B02RAC-04
Access control module - 4 zones
IN00B02RAC-08
Access control module - 8 zones
IN00B02RAC-12
Access control module - 12 zones
IN00B02RAC-16
Access control module - 16 zones
IN00B02RAC-20
Access control module - 20 zones
IN00B02RAC-24
Access control module - 24 zones
IN00B02RAC-28
Access control module - 28 zones
IN00B02RAC-30
Access control module - 30 zones
IN00B02RAC-32
Access control module - 32 zones
IN00B02RAC-34
Access control module - 34 zones
IN00B02RAC-38
Access control module - 38 zones
IN00B02RAC-40
Access control module - 40 zones





## Horizone MINI Web Server

HORIZONE MINI is a webserver specifically engineered for supervision and monitoring of Home & Building Automation systems. Based on KNX standard and suitable for integration with Modbus standard\*. Compatible with operating system Mac OS X, Microsoft Windows, Apple iOS and Google Android, the configuration and use of HORIZONE takes place directly through its web interface, which can be accessed through a the most popular browser on the market browser from any device (pc/mac, smartphone e tablet) or with free app available on iOS and Android store.

\*Only for Modbus energy meter

Software Features				
Standard technologies	<ul> <li>KNX (max 200 group addresses)</li> <li>RS485 / TCP</li> <li>Energy meter USB</li> </ul>			
User interface	<ul><li>Web / HTML5</li><li>App iOS / Android</li></ul>			
Number of clients	Unlimited			
Simultaneous connections	• Up to 20			
Features	<ul> <li>Lighting</li> <li>HVAC</li> <li>Blinds / Shutters</li> <li>Irrigation</li> <li>Alarms</li> <li>Energy management</li> <li>Load management</li> <li>Weather</li> <li>Door intercom system (with SIP standard)</li> <li>SONOS</li> <li>Cloud services</li> <li>Voice control</li> <li>IFTTT</li> </ul>			
Advanced functions	<ul> <li>Scenarios with parametrical wait functions</li> <li>Boolean logics</li> <li>Thresholds and values comparators</li> <li>Mathematical operations</li> <li>Scheduler</li> <li>Programmable events</li> <li>Notifications</li> </ul>			



#### Order Codes

IN00M02WEB Horizone MINI Web Server 200 points

SIZES

	KNX GROUP ADDRESSES	SCENES	LOGICS	PAGES	LOADS
Horizone Web Server 200 KNX group addresses	200	30	30	12	10

Hardware Features			
Dimensions	<ul> <li>90,5 x 62 x 36 mm</li> <li>2 DIN rail Module</li> </ul>		
Aux Supply	<ul> <li>12 ÷ 24 Vdc</li> <li>18 mA @12 V; 110 mA @24 V</li> </ul>		
Communication ports	<ul> <li>KNX</li> <li>RS485 (1x) Screw connector</li> <li>USB 2.0 (1x)</li> <li>LAN (1x) RJ-45 jack (10/100 Mbps)</li> </ul>		

## Energy Meter USB

#### USB ENERGY METER

This is an indirect insertion single-phase energy meter for DIN rail mounting and the connection is made via USB with the Horizone webserver or Horizone Mini.

Through the user interface of the web server to which it is connected, it allows monitoring of the power, voltage and current relative to the point where it is mounted. Thanks to the amperometric clamp supplied, with opening insertion, it is possible to measure any electrical phase available in the electrical panel, without having to intervene directly in the relative wiring. To work requires a free USB port on the Horizone or Horizone Mini webserver.

#### Order Codes

PM10M01USB USB Energy Meter



TOUCHPANEL

## IP Touch Panel 5"

Horizone IP Touch Panel is an Android based touch panel with a coloured 5" display in which can be installed third-party applications for the integration of different systems.

#### **Technical Features Order Codes** • 81x132x14 mm VS05H10WEB Dimensions: Horizone Touch Panel 5" - Black • Inwall Box 2M - Ex. Bticino 502E • Inwall Box Round 60 Diameter - Ex. Gewiss 24232 • Inwall Box 3M - Ex. Bticino 503E Orientation Horizontal or Vertical Supply • POE (Power Over Ethernet) • LCD HD IPS 5" Monitor Resolution • 1280x720 px 104 mm Ш 132 Color • 16,7 Millions Colors (True Colors) Brightness • 400 nits **Touch Screen** Capacitive with multi touch & gestures support 58 mm Speakers • High definition audio through incorporated amps - 2 W 81 mm Microphone • Integrated - echo canceling high resolution Gyroscope • Auto survey orientation Proximity Integrated **Brightness Sensor** Integrated • LAN 100 baselT Connectivity • CE / FCC CLASS B / FCC part15 / ROHS / WEEE Certification LAN TABLET SMARTPHONE **Operating System** • Android 6 Ś ŝ ſ ROUTER WIF CLOUD LAN POWER UNIT 12-24V USB 230V HORIZONE MINI IMPIANTO KNX 230V 00 00 00 00 ENERGY METER BUS KNX

#### TOUCHPANEL

## HORIZONE

## IP Touch Panel 8"

Horizone IP Touch Panel is an Android based touch panel with a coloured 8" display in which can be installed third-party applications for the integration of different systems.



#### **Technical Features Order Codes** VS05H10WEB Dimensions: • 224x149x16 Horizone Touch Panel 8" - Black Inwall Box 154x98x69 mm – Ex. Bticino 16204 Orientation • Horizontal or Vertical Supply • POE (Power Over Ethernet) Туре • LCD HD IPS 8" Resolution • 1280x720 px Ш 103 mm Color • 16,7 Millions Colors (True Colors) 149 Brightness • 400 nits Touch Screen • Capacitive with multi touch & gestures support 183 mm • High definition audio through incorporated amps - 2 W Speakers 224 mm • Integrated - echo canceling high resolution Microphone Gyroscope • Auto survey orientation Proximity Integrated **Brightness Sensor** Integrated LAN 100 baseIT Connectivity Certification • CE / FCC CLASS B / FCC part15 / ROHS / WEEE LAN TABLET SMARTPHONE VOCAL ASSISTANT <u></u> **Operating System** • Android 6 ŝ [ -ROUTER WIFI CLOUD LAN POWER UNIT 12-24V USB 230V HORIZONE MINI IMPIANTO KNX 230V ----------ENERGY METER BUS KNX

**O**eelectron

## Actuators



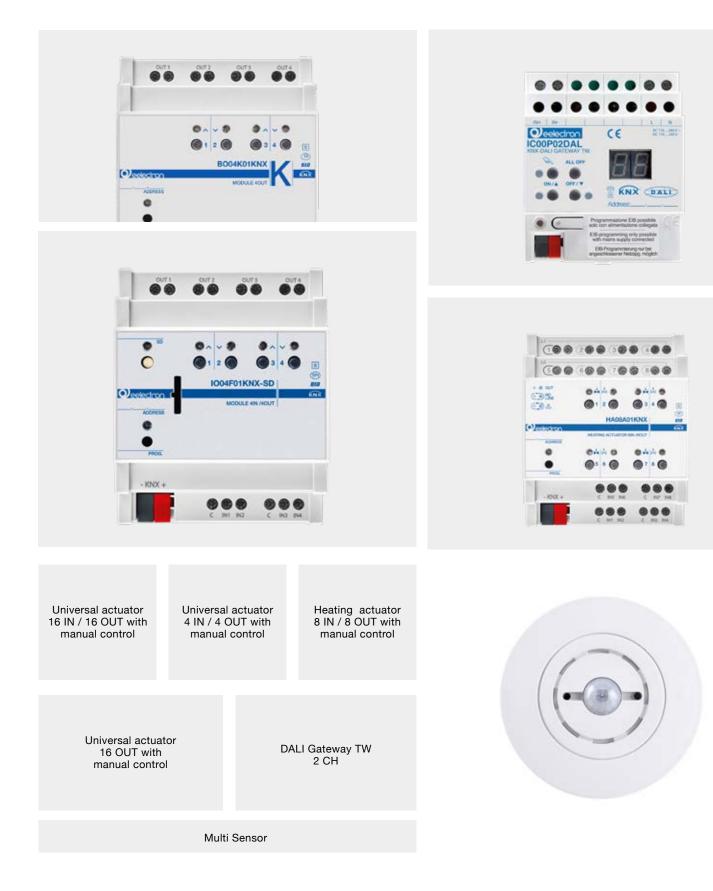
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Lighting Management Dimming, DALI, DMX Climate Control Shutters Management Sensors Metering System Components Interfaces





Actuators, Dimmers, Presence Detectors, System components



## Inwall Module

4 IN / 2 OUT

IO42E01KNX is an input and outputs interface device and can be configured with ETS® to communicate with the KNX Data Secure protocol.

Module includes:2 digital inputs

- 1 analog / digital input
- 1 digital / analog / smart sensor input
- 2 relay output (bistable)

Digital inputs are intended to be connected to free potential contacts and can interface sensors, traditional buttons, etc.Inputs 3 and 4 can be configured as analogue for the connection of NTC temperature probes (see eelectron probes code TS01A01ACC / TS01B01ACC/ TS01D01ACC) 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.

Input 4 can be configured as "smart sensor" for connection of the plug-in sensors: SM03E01ACC that includes a di temperature sensor (range from -5°C to +50°C) and a CO2 sensor (range from 10 ppm to 1000 ppm) and SM03E02ACC that includes a temperature sensor (range from -5°C to +50°C) and a VOC sensor for measuring Indoor Air Quality (IAQ) and CO<sub>2</sub> equivalent (eCO<sub>2</sub>).

Device 2 outputs on board can be configured:

• Each output can be configured independently for load control (2 independent channels).

• Outputs can be configured in pairs for the management of roller shutters and blinds; (1 channel).

• For controlling a servomotor, in pairs.

• For logic interlock control.

The device integrates an antenna with BEACON BLE (Bluetooth Low Energy) function. Data format compatible with iBeacon<sup>®</sup> and Eddystone<sup>®</sup>. BLE technology allows the sending of messages to mobile devices. These devices must have an app that allows them to receive information from BLE beacons. Moreover, 12 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. The device also 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. It also detects an unexpected presence and is able to differentiate more behaviors.

#### **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>
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

#### IO42E01KNX

Inwall module 4 Input / 2 Output KNX

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: &lt; 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**

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: &lt; 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 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 ElB/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>

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#### 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  $1.8K\Omega$  [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 CO<sub>2</sub> - temperature, SM03E02ACC VOC - temperature -  $eCO_2$ ). On the front panel there is a LED to display the status of each input.

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 ElB/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>
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>Max. length of Connecting Cable: ≤ 30 m (twisted cable)</li> </ul>

#### Order Codes

#### BI04F01KNX

Din Module 4 Digital Inputs

SM03E01ACC Plug-in sensor CO<sub>2</sub> + Temperature

**SM03E02ACC** Plug-in sensor VOC +  $CO_2$  +  $eCO_2$  + Temperature

### 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  $1.8K\Omega$  [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 inputs (1, 3, 5, 7). 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 CO<sub>2</sub> - temperature, SM03E02ACC VOC - temperature -  $eCO_2$ ). On the front panel there is a LED to display the status of each input.

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 ElB/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>
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>Max. length of Connecting Cable: ≤ 30 m (twisted cable)</li> </ul>

#### **Order Codes**

BI08F01KNX Din Module 8 Digital Inputs

#### SM03E01ACC Plug-in sensor CO<sub>2</sub> + Temperature

**SM03E02ACC** Plug-in sensor VOC +  $CO_2$  +  $eCO_2$  + Temperature

## 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.

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Technical Features		
Mechanical data	Dimensions: 8 DIN modules	
Supply	<ul> <li>Via bus ElB/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

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 ElB/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	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

BO08F01KNX Universal Actuator 8 OUT Plus

BO08F01KNX - SD Universal Actuator 8 OUT + SD Card

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.

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#### **Technical Features**

Mechanical data Supply	<ul> <li>Dimensions: 6 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

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.

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# **Technical Features**

Mechanical data	Dimensions: 8 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

BO16F01KNX Universal Actuator 16 OUT Plus

BO16F01KNX - SD Universal Actuator 16 OUT + SD Card

#### OUTPUTS

# 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.

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# **Technical Features**

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

**Technical Features** 

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 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 Teatures					
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

8 OUT - 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



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> </ul>

**Technical Features** 

- Tungsten: max 8 A
- Electronic ballast: max 8 A
- 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

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

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# Technical Features

Mechanical data	Dimensions: 8 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

BO12K01KNX Universal Actuator 12 OUT

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# Universal **Dimmer**

1 CHANNEL 700 W - MASTER AND SLAVE

DM01D01KNX is a KNX power dimmer 1-channel acting as a Master Dimmer to which you can connect up to two Slave Modules (cod. DM01D01ACC) with identical characteristics to the Master power dimmer and connected to it by a local two wires bus.

Dimmer DM01D01KNX can be used in one of the following configurations: **Trailing Edge**: The dimmer turns off part of the final part of the waveform of the input voltage resulting in reduced lamp output. This load regulation is used for resistive or capacitive loads (typically halogen lamps with electronic transformer or incandescent lamps).

Leading Edge: The dimmer turns off part of the initial part of the waveform of the input voltage, resulting in reduced lamp output. This load regulation is used for inductive loads (typically ferromagnetic transformers or toroidal).

The three channels are independent and can therefore operate on different phases of the same three phase systems respecting the limit of 230 Vac between phase and neutral.





## **Technical Features**

Mechanical data	• Dimensions: 4 DIN modules
Supply	<ul> <li>Via bus ElB/KNX cable: 21 ÷ 32 Vdc</li> <li>Input power supply: 230 Vac 50/60 Hz</li> </ul>
Connections	<ul> <li>Power supply &amp; load cable: max 2,5 mm<sup>2</sup></li> <li>Local bus length: max 2 m between 2 modules</li> </ul>
Output rate	<ul> <li>Incandescent or halogen lamps: 20-700 W</li> <li>Ferromagnetic transformer 20-700 VA</li> <li>Electronic transformer: 20-700 VA</li> <li>Dimmable LED Lamps: Max 160 W</li> <li>Compact fluorescent lamps (ESL/CFL): Max 160 W</li> </ul>

## Order Codes

DM01D01KNX Universal Dimmer 1 Channel 700 W Master

DM01D01ACC Universal Dimmer 1 Channel 700 W Slave

# Universal Dimmer

2 CHANNELS X 300 W

DM02A02KNX is a KNX universal power dimmer 2 channels with automatic identification of load type and with settable parameters to optimize control of different lamps like LED, incandescent and halogen, CFL dimmable lights, low voltage lamps with electronic or ferromagnetic transformer.

The 2 channels can be used independently or combined in pair to drive higher power loads; always respect the maximum power values indicated in the table of this instruction sheet and check in the handbook how to configure the outputs as combined in ETS. To define the maximum load and in particular the maximum number of lamps that can be connected, the DimmerLoadTester software is available; with it is possible to analyze the peak absorption of a single lamp and calculate the maximum number of lamps that can be connected.

Load control is possible in leading and trailing edge.



# **Technical Features**

Mechanical data	• Dimensions: 4 DIN modules		
Supply	<ul> <li>Via bus EIB/KNX cable: 21 ÷ 32 \</li> <li>Input power supply: 230 Vac 50</li> </ul>		
Output rate		Single	Paired
	Incandescent or halogen lamps (230 V~ 50/60 Hz) 300 W 600 W RC LIN	300 W	600 W
	Ferromagnetic transformer (Halogen lamps 12/24 V ~ 50/60 Hz) 200 VA 400 VA L (1) LIN	200 VA	400 VA
	Electronic transformers (Halogen lamps 12/24 V ~ 50/60 Hz)	60 VA	100 VA
	Dimmable LED lamps (230 V~ 50/60 Hz) - L	60 W	100 W
	Dimmable LED lamps (230 V~ 50/60 Hz) - RC	120 W	200 W
	Compact Fluorescent Lamps (ESL/CFL)	60 W	100 W

# Order Codes

DM02A02KNX Universal DIN Dimmer 2 Channels x 300 W

# Universal Dimmer

4 CHANNELS X 300 W

DM04A02KNX is a KNX universal power dimmer 4-channels with automatic identification of load type and with settable parameters to optimize control of different lamps like LED, incandescent and halogen, CFL dimmable lights, low voltage lamps with electronic or ferromagnetic transformer.

The 4 channels can be used independently or combined in pair (1+2 and 3+4) to drive higher power loads; always respect the maximum power values indicated in the table of this instruction sheet and check in the handbook how to configure the outputs as combined in ETS. To define the maximum load and in particular the maximum number of lamps that can be connected, the DimmerLoadTester software is available; with it is possible to analyze the peak absorption of a single lamp and calculate the maximum number of lamps that can be connected.

Load control is possible in leading and trailing edge.



## **Technical Features**

Mechanical data	Dimensions: 8 DIN modules					
Supply	<ul> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> <li>Input power supply: 230 Vac 50/60 Hz</li> </ul>					
Output rate		Single	Paired			
	Incandescent or halogen lamps (230 V~ 50/60 Hz) 300 W 600 W RC LIN	300 W	600 W			
	Ferromagnetic transformer (Halogen lamps 12/24 V ~ 50/60 Hz) 200 VA 400 VA L (1) LIN	200 VA	400 VA			
	Electronic transformers (Halogen lamps 12/24 V ~ 50/60 Hz)	60 VA	100 VA			
	Dimmable LED lamps (230 V~ 50/60 Hz) - L	60 W	100 W			
	Dimmable LED lamps (230 V~ 50/60 Hz) - RC	120 W	200 W			
	Compact Fluorescent Lamps (ESL/CFL)	60 W	100 W			

# Order Codes

DM04A02KNX Universal DIN Dimmer 4 Channels x 300 W

# Led Dimmer

CV LED DIMMER 4 CHANNELS KNX

DL04A01KNX is a dimming actuator for LED in DC with constant voltage (CV). The device allows to drive 4 independent channels or 1 RGB channel and 1 single color channel or 1 channel RGBW. Module can be powered from 12 to 48 Vdc and consequently can manage the outputs (LED strips) with voltage from 12 to 48 Vdc. The device includes a 16 A relay, suitable for switching capacitive loads, that allows a complete shutdown of the external power supply when all loads are switched off (for example at night) ensuring the maximization of the energy saving.

Available functions include block, logic, scenes, color sequences, etc. Device is equipped with KNX communication interface.



## **Technical Features**

Mechanical data	Dimensions: 4 DIN modules
Supply	<ul> <li>From KNX bus 21 ÷ 32 Vdc SELV</li> <li>AUX input to supply LED's : 12 ÷ 48 Vdc ± 10%</li> <li>Current Consumption ≤16 A</li> </ul>
Output rate	<ul> <li>Max output for each channel: 4 A</li> <li>PWM frequency: 200 / 260 / 400 Hz</li> </ul>
Hardware protection	<ul><li>Over current</li><li>Over temperature</li><li>Reverse Polarity</li></ul>

# Order Codes

DL04A01KNX Led Dimmer CH 4 Channels KNX

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# Dimmer

4 CHANNELS X 1-10 V

DM04D01KNX is a KNX 4 channel dimmer with switching and brightness setting for lamps with operating devices with 1-10 V interface.

- Manual switching of the relays is independent of the Bus
- Switching of capacitive loads and the resulting high switchon currents
- Flexible assignment of control inputs to switching outputs, e.g. to control RGBW lamps
- Operation of the switching outputs as a switching actuator
- Connection of various external conductors
- No additional power supply necessary
- Feedback of switching state and brightness value
- Switch position display
- Burnin function for fluorescent lamps
- Switchon and dimming behaviour can be set
- Time functions: switchon delay, switchoff, delay, staircase lighting timer with run-on time
- Integration into light scenes
- Operating hours counter

## **Technical Features**

Mechanical data	• Dimensions: 4 DIN modules
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Output rate	<ul> <li>Fluorescent lamps 16 AX</li> <li>Minimum switching current 100 mA</li> <li>Switch on current 150 µs 600 A</li> <li>Switch on current 600 µs 300 A</li> <li>Ohmic load 3680 W</li> <li>Capacitive load 16 A / 200 µF</li> <li>Incandescent lamps 3680 W</li> <li>HV halogen lamps 3680 W</li> <li>LV halogen lamps with inductive transformer 2000 VA</li> <li>LV halogen lamps with Tronic transformer 2500 W</li> <li>Fluorescent lamps T5/T8 uncompensated 3680 W</li> <li>Parallel compensated 2500 W / 200 µF</li> <li>Twinlamp circuit 3680 W / 200 µF</li> <li>Compact fluorescent lamps uncompensated 3680 W</li> <li>Parallel compensated 2500 W / 200 µF</li> <li>Mercury vapour lamps uncompensated 3680 W</li> <li>Parallel compensated 3680 W / 200 µF</li> </ul>



## **Order Codes**

DM04D01KNX 4 Channels x 1-10 V

# Valves / Loads Actuator

8 IN / 4 + 4 OUT

The HA88B01KNX device is EIB/KNX DIN rail actuator with 16 A - 230 Vac relay outputs; the device also include inputs for dry contacts (potential-free).

The outputs can be configured as:

- 4 outputs for light / load control
- 8 (4) channels for valve control in ON / OFF or PWM
- 4 (2) channels for 3-points valve control
- 1 fan coil actuators 2-pipes with 3 speeds
- 1 fan coil actuators 4-pipes with 3 speeds

Inputs from 1 to 4 can be configured as outputs to activate single signaling LEDs (see eelectron leds code LD00A01ACC / LD00A11ACC) or can be configured as analogue inputs for the connection of NTC temperature probes (see eelectron probes code TS00A01ACC / TS00B01ACC ) with which to send 4 temperature measurements on the bus or to manage 4 complete thermostat modules.

Each thermostat module manages 2 stages with an integrated PI controller for controlling heating and cooling equipment, valves, 2 and 4 pipe fan coils, etc. Additional 4 thermostat modules are available in the device for a total of 8. Moreover, 4 logic blocks are available to implement simple expressions with logical/threshold operator or complex expressions with algebraic and conditional operators; It's possible to use predefined algorithms as proportional controls of temperature and humidity or dew point calculation. Device is equipped with KNX communication interface and is intended for installation on DIN rail in LV distribution cabinets.

## **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: ≤ 30 m (twisted cable)</li> </ul>
Output rate - triac	• 24 ÷ 230 Vac 50/60 Hz
Output rate - relay	<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 3A (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

HA88B01KNX Valves / Loads Actuator 8 IN / 4 + 4 OUT

# Fan Coil Controller

Universal Fancoil Controller 0-10 V

The TC57A01KNX device is a DIN rail EIB / KNX actuator for fan coil control with 3 x 0-10 V outputs and 3x16 A relays. Two 0-10 V outputs are dedicated to proportional valves, variable fan speeds can be controlled with a third 0-10 V output or with 3 relays on board. If the 3 relays are not used for speeds, they can switch lights or other loads. An analogue input is also available for reading 0-10 V or 4-20 mA signals in order to interface temperature, humidity or  $CO_2$  probes; the third 0-10 V output can also be configured as analog input. Five digital inputs are available for dry contact reading for the connection of buttons, window contacts, alarms; Two inputs can be connected to NTC temperature probes (eelectron codes TS00A01ACC and TS00B01ACC).

The internal logic can manage a 2-4 tube fan coil with an internal 2-stage PI algorithm. A sophisticated parameterization allows its use in modern systems that require a differentiation of the behaviour between speed and valves (independent regulation differentials), ventilation to avoid air stratification, logics for efficient maintenance of comfort and energy saving.



## **Technical Features**

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: ≤ 30m (twisted cable)</li> </ul>
Input - analog mode for general purpose	• 0 - 10 V / 4 - 20 mA
Output rate - relay	<ul> <li>16 A cos φ 1 - 230 Vac</li> <li>8 A cos φ 0.6 - 230 Vac</li> <li>Resistive load: max 16 A</li> <li>Incandescent lamps: max 8 A</li> <li>Fluorescent lamps (max 140 μF) max 3 A (700 W)</li> </ul>
Output rate - analog mode for general purpose	• 0 - 10 V, max 2.5 mA

## **Order Codes**

TC57A01KNX Universal Fan Coil Controller 3 X 0-10 V | 5 IN - 3 OUT

# Fan Coil Controller Plus

Universal Fancoil Controller Plus 4 X 0-10 V | 5 IN - 3 OUT

The TC57B01KNX device is a DIN rail EIB / KNX actuator for fan coil control with 4 x 0-10 V outputs and 3x16 A relays. Two 0-10 V outputs are dedicated to proportional valves, variable fan speeds can be controlled with a third 0-10 V output or with 3 relays on board. If the 3 relays are not used for speeds, they can switch lights or other loads. An analogue input (IN 5) is also available for reading 0-10 V or 4-20 mA signals in order to interface temperature, humidity or CO<sub>2</sub> probes; the fourth 0-10 V output can also be configured as analog input. Five digital inputs are available for dry contact reading for the connection of buttons, window contacts, alarms; Two inputs can be connected to NTC temperature probes (eelectron codes TS00A01ACC and TS00B01ACC).

The internal logic can manage a 2-4 tube fan coil with an internal 2-stage PI algorithm. A sophisticated parameterization allows its use in modern systems that require a differentiation of the behaviour between speed and valves (independent regulation differentials), ventilation to avoid air stratification, logics for efficient maintenance of comfort and energy saving.



# **Technical Features**

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	For NTC temperature probe eelectron code: • TS01A01ACC (range from -20°C to +100°C) • TS01B01ACC (range from -50°C to +60°C) • TS01D01ACC (range from -40°C to 125°C) • Max. length of Connecting Cable: ≤ 30m (twisted cable)
Input - analog mode for general purpose	• 0 - 10 V / 4 - 20 mA
Output rate - relay	<ul> <li>16 A cos φ 1 - 230 Vac</li> <li>8 A cos φ 0.6 - 230 Vac</li> <li>Resistive load: max 16 A</li> <li>Incandescent lamps: max 8 A</li> <li>Fluorescent lamps (max 140 μF) max 3 A (700 W)</li> </ul>
Output rate - analog mode for general purpose	• 0 - 10 V, max 2.5 mA

# Order Codes

TC57B01KNX Universal Fan Coil Controller Plus 4 X 0-10 V | 5 IN - 3 OUT

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# Heating Actuator

4 IN / 4 OUT

The HA04A01KNX device is a EIB/KNX DIN rail actuators for electrothermal valves with 4 Triac outputs at  $24 \div 230$  Vac; the devices include 4 inputs for dry (potential-free) contacts. The outputs can be configured as:

- 4 channels for valve control in ON / OFF or PWM
- 2 channels for 3-points valve control

Inputs can be connected to buttons or switches (potential-free) and can be used for on / off commands, dimming, shutters or blinds / scenarios, sequences, step commands, etc. Inputs from 1 to 4 can be configured as outputs to activate single signalling LEDs (see eelectron leds code LD00A01ACC / LD00A11ACC) or can be configured as analogue inputs for the connection of NTC temperature probes (see eelectron probes code TS00A01ACC / TS00B01ACC ) with which to send 4 temperature measurements on the bus or to manage 4 complete thermostat modules. Each thermostat module manages 2 stages with an integrated PI controller for controlling heating and cooling equipment, valves, 2 and 4 pipe fan coils, etc. Additional 4 thermostat modules are available in the device for a total of 8. Moreover, 8 logic blocks are available to implement simple expressions with logical/threshold operator or complex expressions with algebraic and conditional operators; It's possible to use predefined algorithms as proportional controls of temperature and humidity or dew point calculation.

Device is equipped with KNX communication interface and is intended for installation on DIN rail in LV distribution cabinets.



## **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: ≤ 30 m (twisted cable)</li> </ul>
Output rate - triac	• 24 ÷ 230 Vac 50/60 Hz

## Order Codes

HA04A01KNX Actuator for Electrothermal Valves 4 Inputs / 4 Outputs

# Heating Actuator

8 IN / 8 OUT

The HA08A01KNX device is a EIB/KNX DIN rail actuators for electrothermal valves with 8 Triac outputs at 24 ÷ 230 Vac; the devices include 8 inputs for dry (potential-free) contacts. The outputs can be configured as:

- 8 channels for valve control in ON / OFF or PWM
- 4 channels for 3-points valve control

Inputs can be connected to buttons or switches (potential-free) and can be used for on / off commands, dimming, shutters or blinds / scenarios, sequences, step commands, etc. Inputs from 1 to 4 can be configured as outputs to activate single signaling LEDs (see eelectron leds code LD00A01ACC / LD00A11ACC) or can be configured as analogue inputs for the connection of NTC temperature probes (see eelectron probes code TS00A01ACC / TS00B01ACC ) with which to send 4 temperature measurements on the bus or to manage 4 complete thermostat modules. Each thermostat module manages 2 stages with an integrated PI controller for controlling heating and cooling equipment, valves, 2 and 4 pipe fan coils, etc. Additional 4 thermostat modules are available in the device for a total of 8. Moreover, 8 logic blocks are available to implement simple expressions with logical/threshold operator or complex expressions with algebraic and conditional operators; It's possible to use predefined algorithms as proportional controls of temperature and humidity or dew point calculation.

Device is equipped with KNX communication interface and is intended for installation on DIN rail in LV distribution cabinets.

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## **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: ≤ 30 m (twisted cable)</li> </ul>
Output rate - triac	• 24 ÷ 230 Vac 50/60 Hz

# Order Codes

HA08A01KNX Actuator for Electrothermal Valves 8 Inputs / 8 Outputs

# Motorized valve drive

The device VD21A01KNX is a motorized valve drive for heating or cooling valves; Screw onto valve head. The valve drive is matched to standard valve base types using an M30×1.5 connection. In the basic setting, the valve drive fits the valve bases of make Heimeier. Adapters must be used for valve bases of other manufacturers. No function guarantee can be accepted for this.

Product characteristics

- Integrated temperature sensor
- Room temperature control
- Mechanical display of the valve stroke
- Automatic detection of the valve stroke
- An input, which can be used as a binary input
- Use in heating circuit distributor possible
- Integrated bus coupling unit
- Valve protection function



## **Technical Features**

Mechanical data	• L×A×H 76×47×85 mm
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Connecting cable	<ul> <li>Cable type: J-YY 1×2×0,6 mm</li> <li>Cable length: 1 m</li> <li>Total length per line: 30 m</li> <li>Number of drives per line: 30</li> </ul>
Connection cable, binary input/ remote sensor	<ul> <li>Poll voltage, extension inputs: approx. 3,3 V</li> <li>Cable length: 10 m</li> <li>Single stranded: 0,08 1,5 mm<sup>2</sup></li> <li>Finely stranded without conductor sleeve: 0,08 mm<sup>2</sup> 1,0 mm<sup>2</sup></li> <li>Finely stranded with conductor sleeve: 0,14 mm<sup>2</sup> 0,5 mm<sup>2</sup></li> </ul>

# Order Codes

VD21A01KNX Motorized valve drive **CLIMATE** CONTROL

# Analog / Digital Interface ANALOG / DIGITAL MODULE 8 INPUT - 4 LED OUTPUT - 4 THERMOSTATS

AD84C01KNX module includes 4 digital inputs to interface dry contacts and 4 analog or digital inputs for dry contacts or temperature sensors and 4 LED outputs. Digital inputs can interface sensors, traditional buttons, etc; 4 low voltage/current outputs can drive LED for synoptics panels or switches. Inputs 5 ÷ 8, set as analog inputs, can enable up to 4 temperature probes (with On/Off threshold) or 4 thermostats to control heating and cooling equipments, valves, 2 and 4 pipes fan coils; etc. Device is equipped with KNX communication interface.



## **Technical Features**

Mechanical data	• Dimensions: (H x W x D) : 43 x 36 x 24 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: ≤ 30 m (twisted cable)</li> </ul>
Output rate - LED	For LED use Eelectron LED code: • LD00A01ACC / LD00A11ACC) 0.5 mA / 3.3 V

# **Order Codes**

AD84C01KNX Analog / Digital Module 8 Input - 4 Led Output - 4 Thermostats

#### **PUSH BUTTON INTERFACES**

# Push Button Interface

2 IN - 2 OUT LED / 4 IN - 4 OUT LED / 6 IN - 2 OUT LED

The device is dedicated to interface dry contacts with 2,4 or 6 input channels, such as sensors, conventional push buttons and 2 or 4 low voltage/current output channels to drive LED signal indicator lamps. These devices are extremely compact size (only  $34 \times 34 \times 11$  mm) and can also be used in installations where the inwall space available is reduced.

The digital inputs can interface sensors, traditional buttons, etc; the 4 low-voltage output channels can drive LEDs for synoptic panels or switches. Outputs can drive low voltage LED; if possible use high-efficiency LED Eelectron cod. LD00A01ACC (blue color) or LD00A11ACC (white color).

There are also 8 blocks of logic functions freely configurable by ETS (6 blocks available on IO62D01KNX). Device is equipped with KNX communication interface.







# **Technical Features**

Mechanical data	• Dimensions: (H x W x D) : 34 x 34 x 11 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>
Output rate - LED	For LED use Eelectron LED code: • LD00A01ACC / LD00A11ACC 0.5 mA / 3.3 V

# Order Codes

IO22D01KNX Push Button interface inwall 2 in - 2 led out module

IO44D01KNX Push Button interface inwall 4 in - 4 led out module

IO62D01KNX Push Button interface inwall 6 in - 2 led out module

# **DALI** Gateway

KNX - DALI

The DALI Gateway is an interface between a KNX installation and a DALI lighting system (Digital Addressable Lighting Interface). The DALI Gateway allows the switching and dimming of a maximum of 64 lights with a DALI operating device (e.g. electronic ballast). Up to 6 different addressing types of the DALI Gateway allow group orientated and individually-address control of DALI lights via KNX telegrams. This allows the integration of room-specific light controls, for example, of open-plan offices, multipurpose spaces, production facilities, training and conference rooms into the higher-level of KNX building management.

Depending on the configuration, up to 32 independent DALI groups are available for group addressing. For alternative control, these can be supplemented with 64 individually-addressable DALI device channels, as necessary. Optionally, master control of all connected DALI components is possible (broadcast). This means that there is no need to commission DALI, the lighting systems with few functions can be started up quickly and easily (simplified configuration without DALI commissioning).

The DALI Gateway is supplied completely via the mains voltage connection and makes the DALI system voltage (typically 16 Vdc) available. The device is designed for mounting on DIN rails.



# Technical Features

Mechanical data	Dimensions: 4 DIN modules
Supply	<ul> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> <li>Auxiliary supply: 110 ÷ 240 Vac (50/60 Hz)</li> </ul>
Output	<ul> <li>Control of up to 64 DALI devices</li> <li>Automatic ECG replacement</li> <li>Individual, group or central addressing</li> <li>Emergency lighting management</li> <li>Effect control for dynamic lighting effects or colour games</li> <li>Manual operation of the DALI groups</li> <li>Disabling function for each DALI group</li> <li>Operating hours counter</li> </ul>

## **Order Codes**

IC00P01DAL Gateway KNX/DALI

# **DALI** Gateway

KNX - DALI

The DALI Gateway is an interface between a KNX installation and a DALI lighting system (Digital Addressable Lighting Interface). The DALI Gateway allows the switching and dimming of a maximum of 64 lights with a DALI operating device (e.g. electronic ballast). Up to 6 different addressing types of the DALI Gateway allow group orientated and individually-address control of DALI lights via KNX telegrams. This allows the integration of room-specific light controls, for example, of open-plan offices, multipurpose spaces, production facilities, training and conference rooms into the higher-level of KNX building management.

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The DALI Gateway is supplied completely via the mains voltage connection and makes the DALI system voltage (typically 16 Vdc) available. The device is designed for mounting on DIN rails.



## Technical Features

Mechanical data Supply	<ul> <li>Dimensions: 4 DIN modules</li> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> <li>Auxiliary supply: 110 ÷ 240 Vac (50/60 Hz)</li> </ul>
Output	<ul> <li>Control of up to 64 DALI devices</li> <li>Automatic ECG replacement</li> <li>Individual, group or central addressing</li> <li>Emergency lighting management</li> <li>Effect control for dynamic lighting effects or colour games</li> <li>Manual operation of the DALI groups</li> <li>Disabling function for each DALI group</li> <li>Operating hours counter</li> </ul>

## Order Codes

IC00P02DAL Gateway KNX/DALI - tunable white

# **DALI** Gateway

KNX - DALI - 2 CHANNELS

The DALI Gateway is an interface between a KNX installation and a DALI lighting system (Digital Addressable Lighting Interface). The DALI Gateway allows the switching and dimming of a maximum of 64 lights with a DALI operating device (e.g. electronic ballast). Up to 6 different addressing types of the DALI Gateway allow group orientated and individually-address control of DALI lights via KNX telegrams. This allows the integration of room-specific light controls, for example, of open-plan offices, multipurpose spaces, production facilities, training and conference rooms into the higher-level of KNX building management.

Depending on the configuration, up to 32 independent DALI groups are available for group addressing. For alternative control, these can be supplemented with 64 individually-addressable DALI device channels, as necessary. Optionally, master control of all connected DALI components is possible (broadcast). This means that there is no need to commission DALI, the lighting systems with few functions can be started up quickly and easily (simplified configuration without DALI commissioning).

The DALI Gateway is supplied completely via the mains voltage connection and makes the DALI system voltage (typically 16 Vdc) available. The device is designed for mounting on DIN rails.

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# Technical Features

Mechanical data	• Dimensions: 4 DIN modules
Supply	<ul> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> <li>Auxiliary supply: 110 ÷ 240 Vac (50/60 Hz)</li> </ul>
Output	<ul> <li>Control of up to 64 DALI devices</li> <li>Automatic ECG replacement</li> <li>Individual, group or central addressing</li> <li>Emergency lighting management*</li> <li>Effect control for dynamic lighting effects or colou games</li> <li>Manual operation of the DALI groups</li> <li>Disabling function for each DALI group</li> <li>Operating hours counter</li> </ul>

## **Order Codes**

IC02D01DAL Gateway KNX DALI TW 2 Ch

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KNX - DMX

Interface between KNX bus and DMX512 bus. Combines devices for building automation with control devices dedicated to lighting 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.



## **Technical Features**

Mechanical data	Dimensions: 6 DIN modules
Supply	<ul> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> <li>Auxiliary supply: 9-30 Vdc, 100 mA, separated</li> </ul>
Output	• DMX / RS485 bus

## Order Codes

IC00B01DMX Gateway KNX-DMX

# Weather Station Plus

KNX

Measurement and evaluation of weather data: Wind speed, Wind direction, Precipitation, Brightness, Global radiation Twilight, Temperature, Relative air humidity and Air pressure

- Installation on the outside of buildings, preferable in the roof and facade area
- Operation with additional power supply Product characteristics
- Integrated GPS/GLONASS receiver for automated positioning
- Calculation of additional weather data: Absolute air humidity, chill temperature, comfort
- Function for shading control
- Integrated KNX bus coupling unit
- Measurement data acquisition and limit value monitoring
- Software logic modules for linking events
- Integrated heating



# Technical Features

Mechanical data	• Dimensions: Ø×H 130×68 mm
Supply	<ul> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> <li>Auxiliary power supply: 21 ÷ 32 Vadc, Current consumption 100 ÷ 400 mA (dependent on the weather)</li> </ul>
Degree of protection	• IP44

# Order Codes

#### WS00A01KNX Weather Station Plus KNX

# KNX Basic Presence Detector

The BASIC version of Eelectron presence detectors range is suitable for ceiling mounting up to 4 m height.

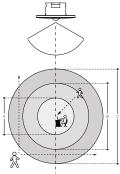
Presence detection, based on a passive infrared sensor has 5 independently configurable channels with different functions that can be activated.

The device has a rear connector with 3 digital inputs that can be connected to buttons or switches free of potential and used for on / off commands, dimming, shutters or blinds / scenarios, sequences, step commands, etc. One of the 3 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.

12 logic blocks are available to implement simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators.

The device also 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 (also to the sensor itself), 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.





#### Detection range

BASIC - STANDARD - MULTI - SPACE

h	А	В	С
2.5 m	3.8 m	7.0 m	10.0 m
3.0 m	4.0 m	8.0 m	12.0 m
3.5 m	5.0 m	9.0 m	13.0 m
4.0 m	6.0 m	11.0 m	14.0 m

A | Person working at the desk

B Person moving towards the sensorC Person moving sideways with respect to the sensor

## **Technical Features**

Mechanical data	• Dimensions: Ø × H 81 x 37 mm
Mounting	Ceiling mounting, flush-mounted, surface installation
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: ≤ 30 m (twisted cable)</li> </ul>

# **Order Codes**

PD00E00KNX KNX Presence detector Basic

PD00F00KNX-3 KNX Presence detector Basic - Black

PD00E00ACC Surface mounting enclosure

PD00E00ACC-3 Surface mounting enclosure - Black

PD00E01ACC Box mounting frame

PD00E03ACC Swiss box mounting frame - White

PD00E03ACC-3 Swiss box mounting frame - Black

# KNX Standard Presence Detector

WITH LIGHTING CONTROL

The STANDARD version of Eelectron presence detectors range is suitable for ceiling mounting up to 4 m height and includes a brightness sensor for environmental lighting control. Presence detection, based on a passive infrared sensor, has 5 independently configurable channels with different functions that can be activated: presence with or without brightness control and with automatic or semi-automatic detection; constant brightness independent or presence dependent with automatic or semi-automatic activation.

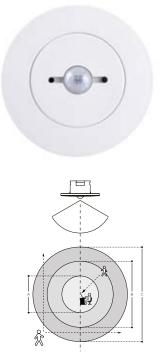
The device has a rear connector with 3 digital inputs that can be connected to buttons or switches free of potential and used for on / off commands, dimming, shutters or blinds / scenarios, sequences, step commands, etc. One of the 3 inputs can be configured as analogue for the connection of NTC temperature probes (see eelectron probes code TS00A01ACC / TS00B01ACC) with which to send the temperature measurement on the bus. 12 logic blocks are available to implement simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators.

The device also 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 (also to the sensor itself), 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

The device manages the ambient lighting based on the measured illuminance; it is also possible to enable the logic called "Circadian Rhythm" with which brightness and color temperature are imposed on the basis of predefined curves or on the basis of the real position of the sun during the day with respect to a terrestrial coordinate.

## **Technical Features**

Mechanical data	• Dimensions: Ø × H 81 x 37 mm		
Mounting	Ceiling mounting, flush-mounted, surface installation		
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: ≤ 30 m (twisted cable)</li> </ul>		



#### Detection range

BASIC - STANDARD - MULTI - SPACE

h	А	В	С
2.5 m	3.8 m	7.0 m	10.0 m
3.0 m	4.0 m	8.0 m	12.0 m
3.5 m	5.0 m	9.0 m	13.0 m
4.0 m	6.0 m	11.0 m	14.0 m

A | Person working at the desk

B Person moving towards the sensor C Person moving sideways with respect to the sensor

## Order Codes

PD00E01KNX KNX Presence detector Standard with lighting control

PD00E01KNX-3 KNX Presence detector Standard with lighting control - Black

PD00E00ACC Surface mounting enclosure

PD00E00ACC-3 Surface mounting enclosure - Black

PD00E01ACC Box mounting frame

PD00E03ACC Swiss box mounting frame - White

PD00E03ACC-3 Swiss box mounting frame - Black

# KNX High Bay Presence Detector

WITH LIGHTING CONTROL

The HIGH BAY version of Eelectron presence detectors range is suitable for ceiling mounting up to 16 m height and includes a brightness sensor for environmental lighting control. Presence detection, based on a passive infrared sensor, has 5 independently configurable channels with different functions that can be activated: presence with or without brightness control and with automatic or semi-automatic detection; constant brightness independent or presence dependent with automatic or semi-automatic activation.

The device has a rear connector with 3 digital inputs that can be connected to buttons or switches free of potential and used for on / off commands, dimming, shutters or blinds / scenarios, sequences, step commands, etc. One of the 3 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. 12 logic blocks are available to implement simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators.

The device also 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 (also to the sensor itself), 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.

The device manages the ambient lighting based on the measured illuminance; it is also possible to enable the logic called "Circadian Rhythm" with which brightness and color temperature are imposed on the basis of predefined curves or on the basis of the real position of the sun during the day with respect to a terrestrial coordinate.

## **Technical Features**

Mechanical data	• Dimensions: Ø × H 81 x 37 mm
Mounting	Ceiling mounting, flush-mounted, surface installation
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	For NTC temperature probe eelectron code: • TS01A01ACC (range from -20°C to +100°C) • TS01B01ACC (range from -50°C to +60°C) • TS01D01ACC (range from -40°C to 125°C) • Max. length of Connecting Cable: ≤ 30 m (twisted cable)



#### Detection range

h	Ø
5 m	6 m
12 m	14 m
16 m	19 m

## Order Codes

#### PD00E09KNX KNX High bay presence detector with lighting control

PD00E09KNX-3 KNX High bay presence detector with lighting control - Black

PD00E00ACC Surface mounting enclosure

PD00E00ACC-3 Surface mounting enclosure - Black

PD00E01ACC Box mounting frame

PD00E03ACC Swiss box mounting frame - White

PD00E03ACC-3 Swiss box mounting frame - Black

# KNX Multi.Sensor Presence Detector

WITH LIGHTING CONTROL, TEMPERATURE, HUMIDITY, SOUND SENSOR

The MULTI.SENSOR of Eelectron presence detectors range is suitable for ceiling mounting up to 4 m height. The device includes a brightness sensor for environmental lighting control, humidity and temperature sensors with the relative control algorithms and a sound sensor that can be used in rooms with parts not totally visible to the infrared sensor.

Presence detection, based on a passive infrared sensor, has 5 independently configurable channels with different functions that can be activated: presence with or without brightness control and with automatic or semi-automatic detection; constant brightness independent or presence dependent with automatic or semi-automatic activation.

The device has a rear connector with 3 digital inputs that can be connected to buttons or switches free of potential and used for on / off commands, dimming, shutters or blinds / scenarios, sequences, step commands, etc. One of the 3 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.

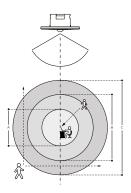
The humidity sensor manages the measurement of the ambient relative humidity and allows the control with thresholds and hysteresis of humidification and dehumidification equipments.

12 logic blocks are available to implement simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators. The device also 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 (also to the sensor itself), 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. The device manages the ambient lighting based on the measured illuminance; it is also possible to enable the logic called "Circadian Rhythm" with which brightness and color temperature are imposed on the basis of predefined curves or on the basis of the real position of the sun during the day with respect to a terrestrial coordinate.

iecnnical Features		
Mechanical data	• Dimensions: Ø × H 81 x 37 mm	
Mounting	Ceiling mounting, flush-mounted, surface installation	
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: ≤ 30 m (twisted cable)</li> </ul>	

pobnical Easturas





BASIC - STANDARD - MULTI - SPACE

А	В	С
3.8 m	7.0 m	10.0 m
4.0 m	8.0 m	12.0 m
5.0 m	9.0 m	13.0 m
6.0 m	11.0 m	14.0 m
	3.8 m 4.0 m 5.0 m	3.8 m         7.0 m           4.0 m         8.0 m           5.0 m         9.0 m

A | Person working at the desk

B | Person moving towards the sensor C | Person moving sideways with respect to the sensor

# Order Codes

#### 

PD00E02KNX
KNX Presence detector Multi.Sensor -
lighting control, temperature, humidity,
sound sensor
PD00E02KNX-3
KNX Presence detector Multi.Sensor -
lighting control, temperature, humidity,
sound sensor - Black
PD00E00ACC
Surface mounting enclosure
PD00E00ACC-3
Surface mounting enclosure - Black
PD00E01ACC
Box mounting frame
SM03E01ACC
Plug-in sensor CO <sub>2</sub> + Temperature SM03E01ACC-3
Dlug in appar (CO) - Tomporatura - Plack
Plug-in sensor $CO_2$ + Temperature - Black
SM03E02ACC
SM03E02ACC <sup>2</sup> Plug-in sensor VOC + eCO <sub>2</sub> + Temperature
SM03E02ACC <sup>2</sup> Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - White
SM03E02ACC <sup>2</sup> Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - White SM03E02ACC-3
SM03E02ACC <sup>2</sup> Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - White SM03E02ACC-3 Plug-in sensor VOC + eCO <sub>2</sub> + Temperature
SM03E02ACC Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - White SM03E02ACC-3 Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - Black
SM03E02ACC <sup>2</sup> Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - White SM03E02ACC-3 Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - Black PD00E03ACC
SM03E02ACC <sup>2</sup> Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - White SM03E02ACC-3 Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - Black PD00E03ACC Swiss box mounting frame - White
SM03E02ACC <sup>2</sup> Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - White SM03E02ACC-3 Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - Black PD00E03ACC Swiss box mounting frame - White PD00E03ACC-3
SM03E02ACC Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - White SM03E02ACC-3 Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - Black PD00E03ACC Swiss box mounting frame - White PD00E03ACC-3 Swiss box mounting frame - Black
SM03E02ACC Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - White SM03E02ACC-3 Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - Black PD00E03ACC Swiss box mounting frame - White PD00E03ACC-3 Swiss box mounting frame - Black PD00E07ACC-1
SM03E02ACC Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - White SM03E02ACC-3 Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - Black PD00E03ACC Swiss box mounting frame - White PD00E03ACC-3 Swiss box mounting frame - Black PD00E07ACC-1 Double squared ring - White
SM03E02ACC Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - White SM03E02ACC-3 Plug-in sensor VOC + eCO <sub>2</sub> + Temperature - Black PD00E03ACC Swiss box mounting frame - White PD00E03ACC-3 Swiss box mounting frame - Black PD00E07ACC-1

# KNX Space Presence Detector

WITH LIGHTING CONTROL, TEMPERATURE, HUMIDITY, SOUND SENSOR, UTILIZATION RANGE AND OCCUPANCY

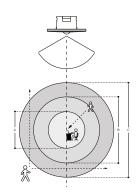
The SPACE sensor of Eelectron presence detectors range is suitable for ceiling mounting up to 4 m height. The device includes a brightness sensor for environmental lighting control, humidity and temperature sensors with the relative control algorithms and a sound sensor that can be used in rooms with parts not totally visible to the infrared sensor. Presence detection, based on a passive infrared sensor, has 5 independently configurable channels with different functions that can be activated: presence with or without brightness control and with automatic or semi-automatic detection; constant brightness independent or presence dependent with automatic or semiautomatic activation. The device has a rear connector with 3 digital inputs that can be connected to buttons or switches free of potential and used for on / off commands, dimming, shutters or blinds / scenarios, sequences, step commands, etc. One of the 3 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. The humidity sensor manages the measurement of the ambient relative humidity and allows the control with thresholds and hysteresis of humidification and dehumidification equipments. 12 logic blocks are available to implement simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators. The device also 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 (also to the sensor itself), 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. The device manages the ambient lighting based on the measured illuminance; it is also possible to enable the logic called "Circadian Rhythm" with which brightness and color temperature are imposed on the basis of predefined curves or on the basis of the real position of the sun during the day with respect to a terrestrial coordinate.

To further integrate presence detection, the **Utilization function** can enable functionalities for mapping space status and related usage/availability i.e. space occupancy and % of utilization rates and can be used to create dashboards, analytics, etc. Moreover, the integrated **Occupancy function** detects useful data for the processing of information related to the intensity of the activity of occupants within the monitored areas allowing the generation of a "heat map" of the building areas.

# **Technical Features**

Mechanical data	• Dimensions: Ø × H 81 x 37 mm
Mounting	Ceiling mounting, flush-mounted, surface installation
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	For NTC temperature probe eelectron code: • TS01A01ACC (range from -20°C to +100°C) • TS01B01ACC (range from -50°C to +60°C) • TS01D01ACC (range from -40°C to 125°C) • Max. length of Connecting Cable: ≤ 30 m (twisted cable)





#### BASIC - STANDARD - MULTI - SPACE

h	А	В	С
2.5 m	3.8 m	7.0 m	10.0 m
3.0 m	4.0 m	8.0 m	12.0 m
3.5 m	5.0 m	9.0 m	13.0 m
4.0 m	6.0 m	11.0 m	14.0 m

A | Person working at the desk

B | Person moving towards the sensor

C | Person moving sideways with respect to the sensor

# Order Codes

#### PD00E03KNX

KNX Presence detector Space - lighting control, temperature, humidity, sound sensor, utilization range and occupancy PD00E03KNX-3 KNX Presence detector Space - lighting control, temperature, humidity, sound sensor, utilization range and occupancy -Black

PD00E00ACC Surface mounting enclosure PD00E00ACC-3 Surface mounting enclosure - Black PD00E01ACC Box mounting frame SM03E01ACC Plug-in sensor CO<sub>2</sub> + Temperature SM03E01ACC-3 Plug-in sensor CO<sub>2</sub> + Temperature - Black SM03E02ACC Plug-in sensor VOC + eCO<sub>2</sub> + Temp. - White SM03E02ACC-3 Plug-in sensor VOC + eCO<sub>2</sub> + Temp. - Black PD00E03ACC Swiss box mounting frame - White PD00E03ACC-3 Swiss box mounting frame - Black PD00E07ACC-1 Double squared ring - White PD00E07ACC-3 Double squared ring - Black

# KNX Wide Range Presence Detector

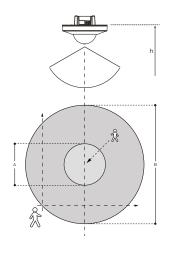
WITH LIGHTING CONTROL

The device KNX Wide Range (PD00E20KNX) is an extended range presence and motion sensor suitable for use in indoor environments where a wide range coverage is required. It is equipped with a rear connector with 2 digital inputs that can be connected to potential-free buttons or switches and used for on / off, dimming, rolling shutters or blinds / scenarios, sequences, stepby-step commands, etc. The second input can be configured as analog for the connection of NTC temperature probes (see probes eelectron code TS00A01ACC / TS00B01ACC) to send the temperature measurement on the bus or manage a complete thermostat module. The thermostat manages 2 stages with integrated PI controller for driving heating and cooling equipment, valves, 2 and 4 pipe fan coils, etc.

Presence detection, based on a passive infrared sensor, has 5 independently configurable channels with different functions that can be activated: presence with or without brightness control and with automatic or semi-automatic detection; constant brightness independent or presence dependent with automatic or semi-automatic activation. The PD00E20KNX Wide Range sensor uses 3 distinct sensing elements; by means of the ETS parameterization it is possible to assign different behaviors to the different elements.

Moreover, 12 logic blocks are available to implement simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators; It's possible to use predefined algorithms as proportional controls of temperature and humidity or dew point calculation. The device also integrates the "Virtual Holder Logic" and it is also possible to enable the logic called "Circadian Rhythm".





^	h = 2.5 m		h = 2.5 m
A	ø = 7 m	Б	ø = 24 m

A | Person working at the desk B | Person moving towards the sensor

## Order Codes

#### PD00E20KNX

KNX Wide Range Presence detector - lighting control

#### PD00E05ACC

Surface mounting enclosure

SM03E01ACC Plug-in sensor CO<sub>2</sub> + Temperature

#### SM03E02ACC

Plug-in sensor VOC +  $eCO_2$  + Temperature - White

# **Technical Features**

Mechanical data	• Dimensions: Ø × H 105 x 66.5 mm
Mounting	• Ceiling mounting, flush-mounted, surface installation
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	For NTC temperature probe eelectron code: • TS01A01ACC (range from -20°C to +100°C) • TS01B01ACC (range from -50°C to +60°C) • TS01D01ACC (range from -40°C to 125°C) • Max. length of Connecting Cable: ≤ 30 m (twisted cable)

# KNX Corridor Presence Detector

WITH LIGHTING CONTROL

The device KNX Corridor (PD00E21KNX) is an extended range presence and motion sensor for corridors suitable for use in indoor environments where a wide range coverage is required. It is equipped with a rear connector with 2 digital inputs that can be connected to potential-free buttons or switches and used for on / off, dimming, rolling shutters or blinds/scenarios, sequences, step-by-step commands, etc. The second input can be configured as analog for the connection of NTC temperature probes (see probes eelectron code TS00A01ACC / TS00B01ACC) to send the temperature measurement on the bus or manage a complete thermostat module. The thermostat manages 2 stages with integrated PI controller for driving heating and cooling equipment, valves, 2 and 4 pipe fan coils, etc.

Presence detection, based on a passive infrared sensor, has 5 independently configurable channels with different functions that can be activated: presence with or without brightness control and with automatic or semi-automatic detection; constant brightness independent or presence dependent with automatic or semi-automatic activation. The PD00E21KNX Wide Range sensor uses 2 distinct sensing elements; by means of the ETS parameterization it is possible to assign different behaviors to the different elements.

Moreover, 12 logic blocks are available to implement simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators; It's possible to use predefined algorithms as proportional controls of temperature and humidity or dew point calculation. The device also integrates the "Virtual Holder Logic" and it is also possible to enable the logic called "Circadian Rhythm".

# 

A	40 m	В	5 m
h	2.5 m	h	2.5 m
С	16 m	D	3 m
h	2.5 m	h	2.5 m

## **Technical Features**

Mechanical data	• Dimensions: Ø × H 105 x 66.5 mm
Mounting	• Ceiling mounting, flush-mounted, surface installation
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	For NTC temperature probe eelectron code: • TS01A01ACC (range from -20°C to +100°C) • TS01B01ACC (range from -50°C to +60°C) • TS01D01ACC (range from -40°C to 125°C) • Max. length of Connecting Cable: ≤ 30 m (twisted cable)

# Order Codes

#### PD00E21KNX

KNX Corridor Presence detector - lighting control

PD00E05ACC Surface mounting enclosure

SM03E01ACC Plug-in sensor CO<sub>2</sub> + Temperature

#### SM03E02ACC

Plug-in sensor VOC +  $eCO_2$  + Temperature - White

# **Conventional Presence** Detector

2 CH. CEILING MOUNTING PIR DETECTOR

The device is a ceiling flush mount PIR detector. The load will be switched on automatically when the movement is detected and the ambient light level is below the Lux setting value. Until there is no movement detected and the pre-set delay time has been expired, load will be switched off automatically. User can pre-set the desired Lux and Time values by VR or IR setting for automatic control lighting on / off with low initial cost and great energy saving potential. Can also be used in many different places for automation control. It can be widely used in home, office, conference room, classrooms, hotel, corridor, underground parking lots, etc.





## **Technical Features**

Mechanical data	• Dimensions: (H x W x D): 64x80x80 mm
Mounting	Ceiling mounting, surface installation
Range	<ul> <li>Up to Ø12 m at height of 2.5 m</li> <li>Operating temperature: 20° C to +50° C</li> </ul>
Output rate CH1 - for lighting	<ul> <li>Incandescent Lamp: Max. 2000 W</li> <li>AC Halogen Lamp: Max. 1000 W</li> <li>LV Halogen Lamp: Max. 1000 VA / 600 W (traditional Max. 1000VA / 900 W (electronics)</li> <li>Fluorescent Lamp: <ul> <li>Max. 1000 VA / 600 W (uncompensated)</li> <li>Max. 900 VA / 100 μF</li> <li>25 x (1 x 18 W); 12 x (2 x 18 W);</li> <li>15 x (1 x 36 W); 7 x (2 x 36 W);</li> <li>10 x (1 x 58 W); 5 x (2 x 58 W)</li> </ul> </li> <li>LED Lamp : Max. 400 W</li> <li>Energy Saving Lamp: Max. 600 VA / 400 W (include CFL and PL lamp)</li> </ul>
Output rate CH2 - for Automation Control	<ul> <li>(Lux is invalid):</li> <li>Max. 5 A (cos = 1) for 250 Vac</li> <li>Max. 5 A for 30 Vdc</li> <li>Max. 1 A (cos = 0.4) for 250 Vac</li> </ul>

## **Order Codes**

PD02X01CON 2 Ch. ceiling mounting PIR detector 230V AC – ø 12m
PD02X01ACC Surface mounting enclosure
PD02X02CON 2 Ch. ceiling mounting PIR detector 230V AC – ø 24 m

103

# Plug In Sensor CO<sub>2</sub> + Temperature

The code SM03E01ACC identifies the accessory of the devices code: PD00E02KNX – KNX MULTI presence detector – lighting, temperature, humidity, sound. PD00E03KNX – KNX Space presence detector- lighting, temperature, humidity, sound , occupancy and utilization.

PD00E20KNX – wide range presence detector with lighting control. PD00E21KNX – presence detector for corridor with lighting control.

This accessory includes a temperature probe (range from -5  $^\circ$  C to +50  $^\circ$  C) and a CO, sensor.



## **Technical Features**

Mechanical data	• Dimensions: Ø × H 81 x 37 mm
Mounting	Ceiling mounting, flush-mounted, surface installation
Supply	• Aux supply: 9 ÷ 32 Vdc 9 ÷ 24 Vac
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: ≤ 30 m (twisted cable)</li> </ul>

## Order Codes

SM03E01ACC-3 Plug-in sensor CO<sub>2</sub> + Temperature - Black

PD00E00ACC Surface mounting enclosure

PD00E00ACC-3 Surface mounting enclosure - Black

PD00E01ACC Box mounting frame

PD00E03ACC Swiss box mounting frame - White

PD00E03ACC-3 Swiss box mounting frame - Black

PD00E07ACC-1 Double squared ring - White

PD00E07ACC-3 Double squared ring - Black

# Plug In Sensor VOC + eCO<sub>2</sub> + Temperature

The code SM03E02ACC identifies the accessory of the devices code: PD00E02KNX – KNX MULTI presence detector – lighting, temperature, humidity, sound. PD00E03KNX – KNX Space presence detector- lighting, temperature, humidity, sound , occupancy and utilization.

PD00E20KNX – wide range presence detector with lighting control. PD00E21KNX – presence detector for corridor with lighting control.

This accessory includes a temperature probe (range from -5  $^\circ$  C to + 50  $^\circ$  C) and a CO2 sensor.



<b>Technical Features</b>
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Mechanical data	• Dimensions: Ø × H 81 x 37 mm
Mounting	Ceiling mounting, flush-mounted, surface installation
Supply	• Aux supply: 9 ÷ 32 Vdc 9 ÷ 24 Vac
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	For NTC temperature probe eelectron code: • TS01A01ACC (range from -20°C to +100°C) • TS01B01ACC (range from -50°C to +60°C) • TS01D01ACC (range from -40°C to 125°C) • Max. length of Connecting Cable: ≤ 30 m (twisted cable)

# Order Codes

SM03E02ACC Plug-in sensor VOC + eCO<sub>2</sub> + Temperature - White

 $\begin{array}{l} \textbf{SM03E02ACC-3} \\ \textbf{Plug-in sensor VOC} + \textbf{eCO}_2 + \textbf{Temperature} \\ \textbf{- Black} \end{array}$ 

PD00E00ACC Surface mounting enclosure

PD00E00ACC-3 Surface mounting enclosure - Black

PD00E01ACC Box mounting frame

PD00E03ACC Swiss box mounting frame - White

PD00E03ACC-3 Swiss box mounting frame - Black

PD00E07ACC-1 Double squared ring - White

PD00E07ACC-3 Double squared ring - Black

105

# KNX Presence Detector Standard BLE

WITH LIGHTING CONTROL

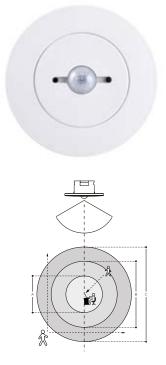
The STANDARD BLE sensor include a brightness sensor for environmental lighting control. Its has a rear connector with 3 digital inputs that can be connected to buttons or switches free of potential. One of the 3 inputs can be configured as analogue for the connection of NTC temperature probes (see eelectron probes code TS00A01ACC / TS00B01ACC / TS00D01ACC) 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. The device allow integration with the Plug-in wireless door lock system interface (IC01H10DLS) for the detection of door opening / closing data and the management of an automated room KNX. The plug-in can manage up to 8 doors and allows the wiring of the three rear inputs which remain available even if the plugin is connected to the rear connector. It also integrate an antenna with BEACON BLE (Bluetooth Low Energy) function. Data format compatible with iBeacon® and Eddystone®. BLE technology allows the sending of messages to mobile devices. These devices must have an app that allows them to retrieve information from BLE beacons. Presence detection, based on a passive infrared sensor, has 5 independently configurable channels with different functions that can be activated: presence with or without brightness control and with automatic or semi-automatic detection; constant brightness independent or presence dependent with automatic or semi-automatic activation. Moreover, 12 logic blocks are available to implement simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators; It's possible to use predefined algorithms as proportional controls of temperature and humidity or dew point calculation. The device also 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 (also to the sensor itself), accurate presence information is managed. It also detects an unexpected presence and is able to differentiate more behaviors. The device manages the ambient lighting based on the measured illuminance; it is also possible to enable the logic called "Circadian Rhythm" with which brightness and color temperature are imposed on the basis of predefined curves or on the basis of the real position of the sun during the day with respect to a terrestrial coordinate. This function allows you to recreate lighting comfort in an environment as close as possible to reality.

The measurement of lighting in the environment is carried out indirectly and it is therefore necessary to carry out a calibration. The sensor is installed on the ceiling and the detected brightness may differ significantly from that of the work surface; using the ETS software it is possible to set correction parameters for the device basing on a local measurement using the lux meter.

Avoid direct sunlight or artificial light radiating the sensor directly.

## **Technical Features**

Mechanical data	• Dimensions: Ø × H 81 x 37 mm
Mounting	• Ceiling mounting, flush-mounted, surface installation
Supply	<ul> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> <li>Current consumption: ≤ 10 mA</li> <li>Current consumption PD00E1x + IC01H10DLS: ≤ 15 mA</li> </ul>
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	For NTC temperature probe eelectron code: • TS01A01ACC (range from -20°C to +100°C) • TS01B01ACC (range from -50°C to +60°C) • TS01D01ACC (range from -40°C to 125°C) • Max. length of Connecting Cable: ≤ 30 m (twisted cable)



#### Detection range

#### BASIC - STANDARD - MULTI - SPACE

h	А	В	С
2.5 m	3.8 m	7.0 m	10.0 m
3.0 m	4.0 m	8.0 m	12.0 m
3.5 m	5.0 m	9.0 m	13.0 m
4.0 m	6.0 m	11.0 m	14.0 m

A | Person working at the desk

B Person moving towards the sensor C Person moving sideways with respect to the sensor

## Order Codes

PD00E11KNX KNX Presence detector Standard BLE with lighting control PD00E11KNX-3 KNX Presence detector Standard BLE with lighting control - Black PD00E00ACC Surface mounting enclosure PD00E00ACC-3 Surface mounting enclosure - Black PD00E01ACC Box mounting frame PD00E03ACC Swiss box mounting frame - White PD00E03ACC-3 Swiss box mounting frame - Black PD00E07ACC-1 Double squared ring - White PD00E07ACC-3 Double squared ring - Black

# KNX Space BLE Presence Detector

WITH LIGHTING CONTROL, TEMPERATURE, HUMIDITY, SOUND SENSOR, UTILIZATION RANGE AND OCCUPANCY

The SPACE BLE sensor includes a brightness sensor for environmental lighting control, humidity and temperature sensors with the relative control algorithms and a sound sensor that can be used in rooms with parts not totally visible to the infrared sensor. A rear connector with 3 digital inputs that can be connected to buttons or switches free of potential. One of the 3 inputs can be configured as analogue for the connection of NTC temperature probes (see eelectron probes code TS00A01ACC / TS00B01ACC / TS00D01ACC) 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. The device allow integration with the Plug-in wireless door lock system interface (IC01H10DLS) for the detection of door opening / closing data and the management of an automated room KNX. The plug-in can manage up to 8 doors and allows the wiring of the three rear inputs which remain available even if the plug-in is connected to the rear connector. It integrate an antenna with BEACON BLE (Bluetooth Low Energy) function. Data format compatible with iBeacon® and Eddystone®. BLE technology allows the sending of messages to mobile devices. These devices must have an app that allows them to retrieve information from BLE beacons. The humidity sensor manages the measurement of the ambient relative humidity and allows the control with thresholds and hysteresis of humidification and dehumidification equipments.

The presence detection is based on a passive infrared sensor, it has 5 independently configurable channels with different functions that can be activated: presence with or without brightness control and with automatic or semi-automatic detection; constant brightness independent or presence dependent with automatic or semi-automatic activation.

Moreover, 12 logic blocks are available to implement simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators; It's possible to use predefined algorithms as proportional controls of temperature and humidity or dew point calculation.

The device also 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 (also to the sensor itself), accurate presence information is managed. It also detects an unexpected presence and is able to differentiate more behaviors. The device manages the ambient lighting based on the measured illuminance; it is also possible to enable the logic called "Circadian Rhythm" with which brightness and color temperature are imposed on the basis of predefined curves or on the basis of the real position of the sun during the day with respect to a terrestrial coordinate. This function allows you to recreate lighting comfort in an environment as close as possible to reality.

The measurement of lighting in the environment is carried out indirectly and it is therefore necessary to carry out a calibration. The sensor is installed on the ceiling and the detected brightness may differ significantly from that of the work surface; using the ETS software it is possible to set correction parameters for the device basing on a local measurement using the lux meter.

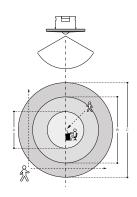
Avoid direct sunlight or artificial light radiating the sensor directly.

The SPACE BLE sensor integrates the "Utilization function" which enables functionalities for mapping space status and related usage/availability (eg occupancy index and % of utilization rates) and the "Occupancy function" that detects useful data for the processing of information related to the intensity of the activity of the occupants within the monitored areas (to generate a 'heat map' of the building areas).

# **Technical Features**

Mechanical data	• Dimensions: $\emptyset \times H 81 \times 37 \text{ mm}$
Mounting	Ceiling mounting, flush-mounted, surface installation
Supply	<ul> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> <li>Current consumption: ≤ 10 mA</li> <li>Current consumption PD00E1x + IC01H10DLS: ≤ 15 mA</li> </ul>
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	For NTC temperature probe eelectron code: • TS01A01ACC (range from -20°C to +100°C) • TS01B01ACC (range from -50°C to +60°C) • TS01D01ACC (range from -40°C to 125°C) • Max. length of Connecting Cable: $\leq$ 30 m (twisted cable)





BASIC - STANDARD - MULTI - SPACE

h	А	В	С
2.5 m	3.8 m	7.0 m	10.0 m
3.0 m	4.0 m	8.0 m	12.0 m
3.5 m	5.0 m	9.0 m	13.0 m
4.0 m	6.0 m	11.0 m	14.0 m

A | Person working at the desk

B | Person moving towards the sensor

C | Person moving sideways with respect to the sensor

# Order Codes

#### PD00E13KNX

KNX Presence detector Space - lighting control, temperature, humidity, sound sensor, utilization range and occupancy PD00E13KNX-3

KNX Presence detector Space - lighting control, temperature, humidity, sound sensor, utilization range and occupancy - Black

#### PD00E00ACC

Surface mounting enclosure PD00E00ACC-3 Surface mounting enclosure - Black PD00E01ACC Box mounting frame SM03E01ACC Plug-in sensor CO<sub>2</sub> + Temperature SM03E01ACC-3 Plug-in sensor CO<sub>2</sub> + Temperature - Black SM03E02ACC Plug-in sensor VOC + eCO<sub>2</sub> + Temperature White SM03E02ACC-3 Plug-in sensor VOC + eCO<sub>2</sub> + Temperature Black PD00E03ACC Swiss box mounting frame - White PD00E03ACC-3 Swiss box mounting frame - Black PD00E07ACC-1 Double squared ring - White PD00E07ACC-3 Double squared ring - Black

# Plug-in wireless door lock system interface

The device can only work if connected to a BLE presence sensor with E-lock interface (PD00E11KNX – PD00E13KNX).

The IC01H10DLS plug-in wireless door lock system interface has three inputs: two digital inputs for dry contacts and an input that can be configured as analog or digital.

The plug-in can manage up to 8 doors and allows the wiring of the three rear inputs to a device of the range of BLE presence sensors with Eelectron E-lock interface for the detection of door opening / closing data and the management of a room automated KNX.



## Technical Features

Mechanical data	• Dimensions: 43 x 36 x 24 mm
Supply	<ul> <li>Via PD00E1xKNX 21÷ 32V DC</li> <li>Current consumption: ≤ 5 mA</li> <li>Current consumption PD00E1x + IC01H10DLS: ≤ 15 mA</li> </ul>
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 -5°C to +45°C)</li> <li>Max. length of Connecting Cable: ≤ 30 m (twisted cable)</li> </ul>

# Order Codes

IC01H10DLS Plug-in wireless door lock system interface SENSORS

# Double Squared Ring Frame for Multi.Sensor

Double squared ring for PD00ExxKNX and SM range (Sensor+Plugin), available in black and light grey.



# **Technical Features**

Dati meccanici

• Dimensioni: 180 x 95 mm

# Order Codes

PD00E07ACC-1 Double squared ring Bianco

PD00E07ACC-3 Double squared ring Black

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# Energy Meter SINGLE PHASE - MID

The device PM10E02IRE – Single-phase Digital Energy meter – Direct connection 80 A integrates all the measurement functions necessary to monitor a single-phase electrical installation:

- 0.25-5 (80) A, Class B, 230 VAC 50 Hz, -25 °C ÷ +55 °C, 4 Quadrants, 2 Tariffs
- Active Energy Class B (according to EN-50470) and Reactive Energy Class 2 (according to IEC 62053-23)
- Direct connected (up to 80 A)
- Backlightet LCD display and 3 push-button keys (to read Energies, V, I, PF, F, P, Q and to configure some parameters)
- Display with 8 digits.
- Self supplied (by the input voltage itself)
- DIN modules width (36 mm)
- 2 Tariffs controlled by a 230 VAC digital input
- 2 S0 standard low voltage pulse outputs MID certified





# **Technical Features**

Mechanical data	<ul> <li>Dimensions: 2 DIN Modules (PM10E02IRE)</li> <li>Dimensions: 1 DIN Module (PM00A00IRI)</li> </ul>
Supply	<ul> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> <li>Operating supply voltage range: 92 ÷ 276 Vac</li> <li>Reference current 5 A / max current 63A / min. current 0.25 A / starting current 0.015 A</li> <li>Nominal frequency 50 Hz / frequency range: 45 ÷ 65 Hz</li> <li>Max Power consumption (voltage circuit) &lt; 2VA (1 W)</li> </ul>
Functionality	<ul> <li>Connection to single-phase network (2-wires)</li> <li>Tariff for active and reactive energy: n° 2 - T1 / T2</li> </ul>
Overload capability	<ul> <li>Permanent voltage 276 Vac / temporary (1 s) 300 Vac</li> <li>Permanent current 63 A / temporary (10 ms) 1890 A</li> </ul>
Protective class	Class II

# Order Codes

PM10E02IRE Single-phase Digital Energy meter – Direct connection 80 A – MID

PM00A00IRI EIB-KNX interface

# Energy Meter

ENERGY METER THREE-PHASE ENERGY METER 80 A – MID ENERGY METER THREE PHASE WITH EXTERNAL TA 1-5A – MID

Devices provide all relevant measures for the evaluation of an electrical network: I, U, PF, F, THD%, Powers (displayed for each phase and 3 phase), and Imported/Exported Active/Reactive Energies.

- Direct connection (80 A)
- Current range 0.25-5(80) A
- 2 tariffs and with IR lateral communication available
- 2 S0 Pulse outputs MID certified

Devices are intended to be installed on DIN rail.







Technical Fea <sup>.</sup>	tures
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Mechanical data	<ul> <li>Dimensions: 4 DIN Modules (PM30E01IRE, PM30E02IRE)</li> <li>Dimensions: 1 DIN Module</li> </ul>
Supply	<ul> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> <li>Reference voltage Line to Neutral: 230 Vac</li> <li>Reference voltage Line to Line: 400 Vac</li> <li>Operating supply voltage range: 92 ÷ 276 / 160 ÷ 480 Vac</li> <li>cod. PM30E01IRE: reference current 5 A / maximum current 63 A / minimum current 0.25 A / starting current 0.015 A</li> <li>cod. PM30E02IRE: reference current 1 A / maximum current 6 A / minimum current 0.01 A / starting current 0.001 A</li> <li>cod. PM30E02IRE: max CT ratio 10000/5 A or 2000/1 A; ratio adjusting step 5 or 1 A</li> <li>Nominal frequency 50 A / frequency range: 45 ÷ 65 Hz</li> <li>Max Power consumption (voltage circuit) ≤2 VA (0.6 W)</li> </ul>
Functionality	<ul> <li>Connection to three-phase network (4-wires)</li> <li>Tariff for active energy: n° 2 - T1 / T2</li> </ul>
Overload capability	Voltage: • continuos phase-phase 480 Vac • 1 second phase-phase 800 Vac • cod. PM30E01IRE: continuos phase-N 276 Vac • cod. PM30E02IRE: continuos phase-N 800 Vac • 1 second phase-N 300 Vac Current: • cod. PM30E01IRE: • continuous 80 A • 10ms 2400 A • cod. PM30E02IRE: • continuous 6 A • 0,5 ms 120 A

# Order Codes

PM30E01IRE Three-phase Digital Energy Meter Direct connection 80 A – MID

# PM30E02IRE

Three-phase Digital Energy Meter with external TA 1-5 A – MID

PM00A00IRI

EIB-KNX interface

# KNX Time / Astronomical Master

ES01A00KNX is a digital electronic switch for time management of electrical utilities. It allows time programming (daily, weekly or yearly) or astronomical. ES01A00KNX can control 9 different channels on bus KNX. The programming of channel 1 is also replicated on the relay located on the device. Each channel can be associated with a different programming (time or astronomical). ES01A00KNX also offers the possibility of connecting via BUS a GPS module, ES01A00ACC (available as an accessory), which allows the acquisition of the time and the position through the satellite system, ensuring greater accuracy over time. The backup battery allows you to keep the settings even in case of blackout and can be replaced through the cover (sealable).



# **Technical Features**

Mechanical data	Dimensions: 3 DIN Modules
Supply	<ul> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> <li>Auxiliary supply: 115 ÷ 230 Vac 50/60 Hz</li> </ul>
Output rate	<ul> <li>Capacity at 250 Vac 16 A</li> <li>Lamp loads</li> <li>Incandescent lamps 2000 W</li> <li>Fluorescent lamps (compensated) 250 VA</li> <li>Low voltage halogen lamps 11000 VA</li> <li>Halogen lamps at 240 V 2000 W</li> <li>Low consumption lamps (CFL) 200 VA</li> <li>Low consumption lamps (Downlights) 200 VA</li> <li>LED 25 VA</li> </ul>

# Order Codes

ES01A00KNX KNX time/astronomical master

ES01A00ACC Additional GPS module

# Bridge

KNX BRIDGE WITH IP INTERFACE AND POWER SUPPLY

The IPSBA01KNX device integrates a KNX power supply with auxiliary output with a total current of 640mA, and an IP interface, allowing KNX installations to be implemented quickly and efficiently. Device can be linked to a Cloud platform, through MQTT protocol, and share relevant data detected from connected KNX devices. The voltage of the bus output as well as that of the auxiliary output is 30V DC. The device is compact having a size of only 4 DIN modules. The KNX IP interface allows you to connect a KNX network to an IP backbone; the IP address can be obtained via DHCP server or manually configured via ETS®. The device works in accordance with the KNXnet / IP specifications; up to 5 different IP addresses can be assigned. The device is also a KNX bus node, with its own application program and can be configured with ETS® to communicate using KNX Data Secure protocol. Logic blocks are available to implement simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators; It's possible to use predefined algorithms as proportional controls of temperature and humidity or dew point calculation. The device also 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 (also to the sensor itself), 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. It is also implemented the control logic called "OnLine-OffLine" that checks all KNX TP devices of the subnet connected to the power supply are operating "On Line", alerting the backbone if one of them goes into "Off Line" status. On the device there are pushbuttons and signaling LEDs for bus reset operations as well as for Factory Reset or for displaying activity on the KNX bus and on the IP backbone. The device is intended for installation on DIN bar in LV distribution switchboards.

# **Technical Features**

Mechanical data

• Dimensions: 4 DIN Modules

- Supply
- Input voltage: 180 ...264 V AC, 50/60 Hz
- Output voltage: DC 30 V (SELV)Output current: 640 mA (KNX+AUX)



# Order Codes

IPSBA01KNX KNX Bridge with IP interface and KNX-+AUX power supply 640mA

# **Power** Supply

640 mA

Power supply for generating bus voltage on a line with a maximum current of 640 mA. With integrated choke to decouple the power supply voltage from the bus. Connection with screw terminals.

Mounting on DIN rails EN 50022. Bus connection via bus terminal.



Technical Features	
Mechanical data	Dimensions: 3 DIN Modules
Supply	<ul> <li>Input voltage: 180 ÷ 264 Vac</li> <li>Output voltage: Rated voltage 30 Vdc</li> <li>Output current: Rated current 640 mA</li> </ul>

# Order Codes

PS00D03KNX 640 mA Power Supply

# Power Supply

640 mA

The power supply unit PS00E03KNX provides the system power necessary for the KNX/EIB bus. The connection to the bus line is via the bus connection block located on the front side. The integrated choke prevents the data telegrams from short-circuiting on the bus line. When the built-in reset button is operated, the bus devices are returned to their initial state. For each bus line, at least one power supply unit PS00E03KNX is needed. Up to two power supply units may be attached to a single bus line. The distance between power supply unit PS00E03KNX and any of its bus devices must not exceed 350 m. The power supply unit PS00E03KNX has a voltage and current regulation and is therefore short-circuit proof. Short power failures can be bridged with a backup interval of approximately 200ms. The power supply unit PS00E03KNX can supply 30 Vdc power from an additional pair of terminals.

Output voltage: Rated voltage 30 VdcOutput current: Rated current 640 mA



Technical Features	
Mechanical data	• Dimensions: 5 DIN Modules
Supply	Input voltage: 180 ÷ 264 Vac

PS00E03KNX

**Order Codes** 

640 mA Power Supply

# **Power** Supply

1280 mA

The power supply unit PS00D04KNX provides the system power necessary for the KNX/EIB bus. The connection to the bus line is via the bus connection block located on the front side. The integrated choke prevents the data telegrams from short-circuiting on the bus line. When the built-in reset button is operated (press the RESET button for at least 20 seconds to reset the KNX Bus), the bus devices are returned to their initial state. For each bus line, at least one power supply unit PS00D04KNX is needed. Up to two power supply units may be attached to a single bus line. The distance between power supply unit PS00D04KNX and any of its bus devices must not exceed 350 m. The power supply unit PS00D04KNX has a voltage and current regulation and is therefore short-circuit proof. Short power failures can be bridged with a backup interval of approximately 200 ms. The power supply unit PS00D04KNX can supply DC 30 V power from an additional pair of terminals.



Technical Features	
Mechanical data	Dimensions: 4 DIN Modules
Supply	<ul> <li>Input voltage: AC 180 ÷ 264 V, 50 / 60 Hz</li> <li>Output voltage: DC 30 V (SELV)</li> <li>Output current: 1280 mA</li> </ul>

# Order Codes

PS00D04KNX 1280 mA Power Supply

## SYSTEM COMPONENTS & INTERFACES

# Surveillance Module KNX

The LM00B01KNX logic module permits to monitor the status of the devices connected to a BUS line.

It is possible to enable the notification mode of the correct functionality of the device via a communication object.

256 surveillance blocks are available through which 3 basic functions can be activated individually or in different combinations: Alive, Alarm and Warning.

- The "On line" function sends a message on the bus as long as the monitored device is active on the bus.

- The "Alarm" function sends an alarm message when the monitored device does not send any message for a time exceeding the surveillance time.

- The "Warning" function can be used to prompt the monitored device.

A little before the alarm is sent, a reading value is generated on the communication object that must be connected to a readable group object of the monitored device (for ex. temperature, a status).

Moreover, 16 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.

For greater security, it is possible to install two LM00B01KNX logic modules on the same BUS line, configuring them as primary and secondary. When the primary device goes out of service, the secondary takes over control of the line; when the operation of the primary device resumes, the secondary returns to the control status of the primary device only.



# Mechanical data • Plastic enclosure: PC-GF • Dimensions: DIN rail / 1 Module • Module KNX Supply • Via EIB/KNX cable 21 ÷ 32V DC<br/>• Current Consumption ≤ 5 mA • Order Codes

# KNX IP Interface KNX Secure

INTERFACE

The KNX IP Interface IN00S01IPI is a compact interface used to connect a PC to the KNX network. The connection is made through LAN (IP). Power is supplied via the KNX bus. The IP address can be obtained by a DHCP server or by manual configuration (ETS®) respectively. This device works according to the KNXnet/IP specification using the core, the device management and the tunneling part. The device supports KNX Security which can be enabled in ETS. With its interface functionality (tunneling) KNX security prevents from unauthorized access. The buttons are for diagnostic purposes. The LEDs indicate the operating status and communication errors on the bus.



# Mechanical data • Dimensions: 1 DIN Modules Supply • Via bus EIB/KNX cable: 21 ÷ 32 Vdc Lan connection • RJ-45 socket • Up to 8 simultaneous tunneling connection

# **Order Codes**

IN00S01IPI IP-KNX Interface KNX Secure

# **IP Router-KNX Secure**

INTERFACE

With the KNX / IP router, a bidirectional communication among more KNX bus lines is possible through LAN networks. If the device is connected to a PC with an appropriate software (for example, ETS), it can also be used like a programming interface for KNX bus system. The IP address can be dynamically assigned via a DHCP server, or manually configured using ETS parameters. Communications are made in accordance with KNXnet / IP specifications. During the data transfer, it is possible to configure a filter table and keep up to 150 messages in the "buffer" memory.



# **Technical Features**

Mechanical data	Dimensions: 1 DIN Modules
Supply	• Via bus EIB/KNX cable: 21 ÷ 32 Vdc
Lan connection	<ul> <li>RJ-45 socket</li> <li>Up to 8 simultaneous tunneling connection</li> </ul>

# Order Codes

IN00S01RIP Router IP-KNX Interface KNX Secure

# Line Coupler

The LC00B01KNX KNX line coupler has been made in a compact design. It connects two KNX bus segments (for example, a KNX line with a KNX area). The device has a filter table (8k bytes) and ensures a galvanic isolation between the lines. The coupler supports KNX long frames and is compatible with the ETS® software (ETS 4.2 or higher).

The buttons on the front panel allow disabling the telegram filter for testing purposes. The LEDs indicate operating conditions as well as communication errors on the KNX bus.



Technical Fe	eatures
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Mechanical data Supply Dimensions: 1 DIN Modules

• Via bus EIB/KNX cable: 21 ÷ 32 Vdc

# Order Codes

LC00B01KNX Line Coupler KNX



The device enables the KNX bus system to be interfaced to a PC equipped with a port for programming or managing through appropriate software.



# **Technical Features**

Mechanical data	Dimensions: 1 DIN Modules
Supply	<ul> <li>Via bus EIB/KNX cable: 21 ÷ 32 Vdc</li> <li>USB consumption: &lt; 15 mA</li> </ul>
USB Connection	<ul><li>Connector type B</li><li>Max. cable length: 5 m</li></ul>

Order Codes

IN00A03USB USB-KNX Interface

## ACCESSORIES



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.

# **Technical Features**

Inner Conductor	Solid bare copper wire
Construction	• 1 x 2 x 0,8 or 2 x 2 x 0,8 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
Diameter	• 5,20 mm ± 0,20 colour
Colour	• Green (RAL 6018)



# Order Codes

CV00A01KNX Double-bus cable 2x2x0, 8 coils 100 m

CV05A02KNX Single bus cable 1x2x0, 8 coils 500 m

# Miniature LED Lamps

**3V BLUE OR WHITE** 

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



# Order Codes

LD00A01ACC Miniature LED Lamps Blue 3 V 20 pcs

LD00A11ACC Miniature LED Lamps White 3 V 20 pcs

# **Technical Features**

Dimension

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

# **KNX** Connector

RED / BLACK

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, it can also be used as a branch terminal.



Technical Features	
Dimension	• (H. x W. x D.) 11.5 x 10 x 10 mm
Features	<ul> <li>Wire 22 to 18 AWG (0.6 - 1 mm)</li> <li>EN detected voltage 100 V</li> <li>Rated current 6 A</li> <li>Stripping length from 5 to 6 mm</li> </ul>

# Order Codes

WG00A01ACC KNX Connector Red / Black Box 100 pcs

# Temperature Probe

INTERNAL/ EXTERNAL



# Order Codes

TS01A04ACC Temperature probe 4 pcs TS01B04ACC External temperature probe 4 pcs





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