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The Company

Blumotix designs and manufactures KNX technology devices for intelligent building management. The company was founded in 2003 as a Research and Development undertaking specialised in touch technology.

In 2010, Blumotix launched a partnership with Teleco SpA Group, resulting in the company starting to specialising in the design of devices operating with KNX protocol. In parallel with the research activities came Blumotix's production division for semi-finished products dedicated to home and building automation and the intelligent automation of caravans.



From 2014 to 2020, the company focused on developing a complete catalogue of finished products for KNX home automation before veering off into sectorial production lines (home, hotel, retail/service businesses, industrial and civil systems).

This came following a 2019 review conducted on the internal organisation after the appointment of a new General Manager, currently CEO, with the task to turn the company from being "research-oriented" to being "market-oriented" for production also in OEMs.

Today, Blumotix develops its business by integrating logistics, engineering and production services with those of Teleco Group SpA (a European multinational leader in electronics in the Open-air market). From this integration, Blumotix has obtained a significant efficiency in terms of procurement costs and flexibility in order management (from small to large in very short times), whilst also guaranteeing its customers a continuous service of technical assistance and training in the use of devices.

Blumotix designs and manufactures from its headquarters in Italy, near Ravenna, where the management, Research and Development laboratories and production/assembly areas are located.

In 2009, the company became a member of the Konnex Association as a device manufacturer (License 160 –A0), whilst in 2010 a Stack usage license was obtained along with the ISO 9001:2015 - Quality certification.

A marked propensity for innovation and personalisation of the devices, accompanied by Italian style and design, characterise Blumotix products, setting them apart from all other products on the market.













Why choose Blumotix?

Blumotix designs, develops and produces KNX devices for the automation of buildings, with all devices being made and assembled in Italy, availing of innovation and technology in combination with the elegance of Italian Design.

Personalization

The development of every Blumotix device includes firmware (FW), software (SW) and hardware (HW). Each component is conceived, designed and produced by in-house technicians who operate in compliance with the specifications and standards in force at a national and international level.

The high degree of competence achieved in capacitive technology has allowed us to create a collection of keypads for glass control panels and thermostats, which can also be customised to the specific requests of architects and end customers. The result is an elegant device that is unique in terms of aesthetics, capable of characterising and adapting completely to the environment.

Guaranteed traceability

All Blumotix products are tested one-by-one and identified individually, guaranteeing complete traceability in Italy and around the world.

Certifications

- Blumotix operates with a Quality Management System in respect of UNI EN ISO 9001 standards;
- Blumotix devices are designed and manufactured in compliance with the European standards in force: LVD 2014/35/EU (EN IEC 63044-3, EN IEC 62368-1), EMC 2014/30/EU (EN IEC 63044-5-1, EN IEC 63044-5-2, EN IEC 63044-5-3, IEC 61000-6-1, 2, 3, 4, IEC 61000-3-2, 3, IEC 61000-4-2, 3, 4, 5, 6, 8, 11), RAEE, RoHS 2011/65/EU (IEC 63000:2018), REACH/EN, EN 50090-2-2 concerning fundamental aspects such as waste management, the substances used, electromagnetic compatibility, electrical safety and the environmental conditions for use;
- The devices comply with all specifications required by the association KNX.

Technical assistance and training

Blumotix is structured with a technical assistance service in Italy and abroad.

Through the new Blumotix Academy, periodic training courses on the KNX protocol, devices in the Blumotix catalogue and their installation are offered to all customers.

Remote control of systems via PC, Smartphone and Tablet

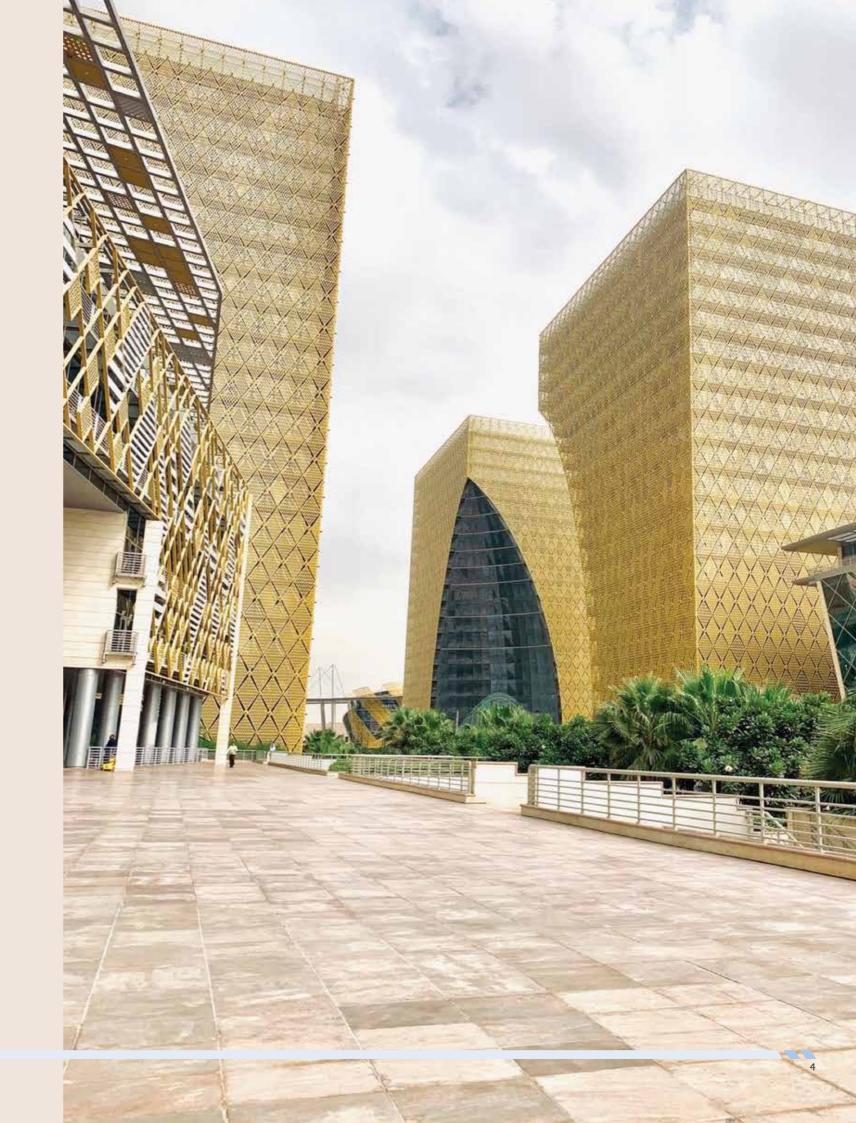
All Blumotix Touch Panels can be remotely controlled via PC, Smartphone and iOS or Android tablets, simply by downloading the KRIM application dedicated to the supervision of the systems.

The human capital

Human Resources is at the heart of Blumotix's management, considering people as the indispensable factor for entrepreneurial success and business development, also in terms of social responsibility towards the environment and the community in which the company is located.

"Technology is nothing. What's important is that you have faith in people, that they're basically good and smart — and if you give them tools, they'll do wonderful things with them.

(cit. Steve Jobs)



A communication protocol that renders buildings intelligent and interoperable

Thanks to KNX technology, Building Automation solutions are becoming increasingly indispensable components, able to integrate all functions pertaining to energy and comfort within buildings.

The decentralised management of each individual component, hailing from the distributed intelligence, guarantees the safety of the system in terms of service and helps reduce the Operating Expense (OpEx) for management.

A single Standard recognised worldwide

KNX is a unique standard for intelligent building management that has received worldwide recognition from over 400 producers.

A certified system

Regardless of the manufacturer, all KNX products are certified by the Association, guaranteeing their compatibility and interoperability.

KNX is the first globally-standardised system for automation control and management in residential and commercial buildings, in conformity with EN50090 and ISO/IEC 14543.

The scalable system ensures rapid implementation

The KNX system renders it possible to adapt the building to the changing needs of users. No masonry work or invasive operations are needed – in a few steps, it is possible to change the intended use or simply increase internal performance.

An advantageous choice

The economic parameters that characterise the management of a building are generally connected to the Capital Expense (CapEx) and Operating Expense (OpEx). The latter are substantially those that most affect the average life of a building, calculated over a period of 25 years. The choice of adopting a KNX-standard Building Automation solution means significant savings compared to a traditional system together with greater possibilities for growth in terms of integration.

On average, operating costs during the life-cycle of the building account for more than 70%. Often even simple functions – such as scenarios or commands that change position within the areas – are extremely advantageous if made with intelligent KNX solutions.

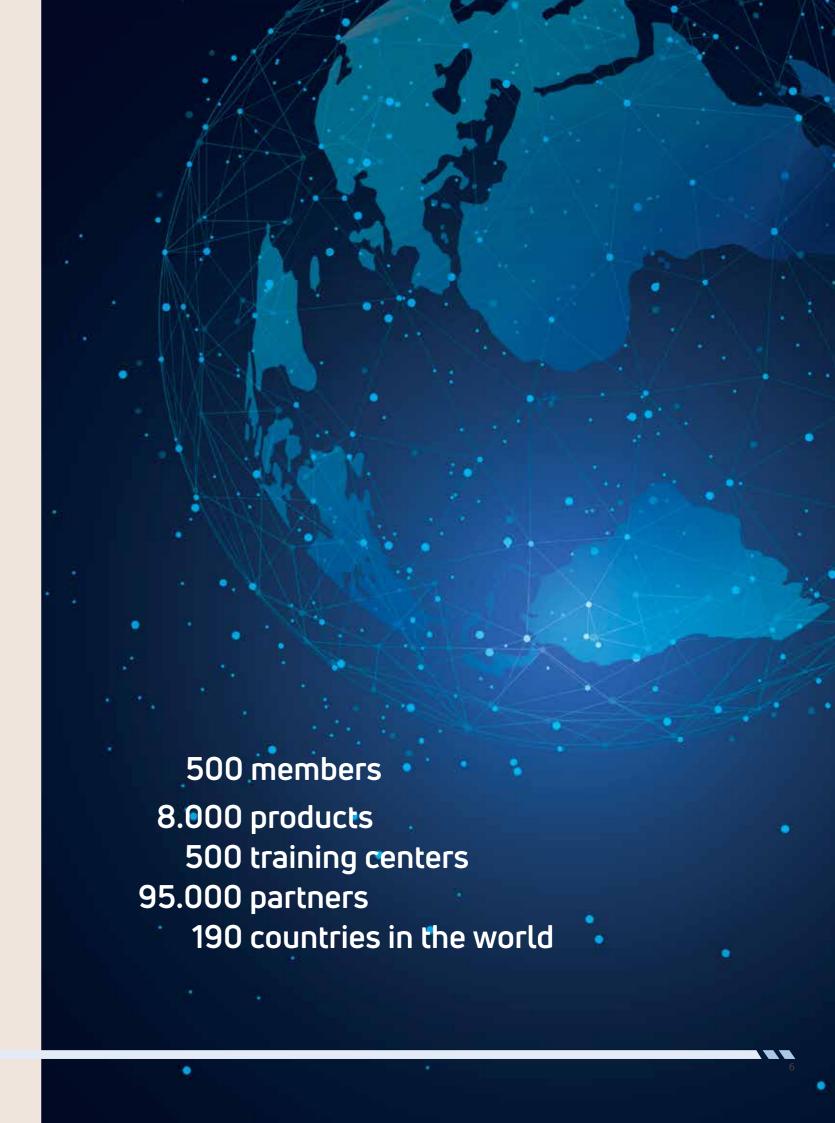
With a traditional installation, it proves complicated and burdensome to follow the various evolutions of a building. Yet with KNX solutions, adapting to organisational changes is simple and economical.

From lighting control to temperature regulation, controlling curtains and blinds through to the management of alarms and automatisms, everything is aimed at achieving an optimal running of energy efficiency.

The three phases that define a KNX solution

Almost all Building Automation systems work well in the laboratory but it is only on real units that these systems demonstrate their validity and effectiveness. In fact, many factors can compromise the final result, from installation and sizing to the choice of the most suitable device, not to mention the actual commissioning and proper configuration.

To ensure that everything works according to expectations, it is important to define the three main phases: design, configuration and commissioning.



1. Choice and Design

The right choice of what to install is the basic aspect behind any design. Interoperability is assured with the KNX protocol, allowing the most suitable device to be chosen from the thousands of certified products.

On the basis of the functional specifications, it is then possible to identify the list of necessary components, in developing a suitable type of system. The correct flow of data is guaranteed via a suitable architecture behind the lines and areas that comprise the system. A protocol based on the transmission to an event prevents the proliferation of data and the saturation of the bus.

2. Configuration

The individual products are configured through the ETS software, which is certified and distributed by the international KNX association.

Each device is distinguished by a physical address (comparable to the name) and by a group address (attributable to the function). Through ETS, it is possible to parameterise each individual component by choosing from amongst dozens of features made available for each product. When done well, programming guarantees the operation and efficiency of the system. It is throughout this phase that the scenarios and automatisms that characterise each system are also created.



3. Commissioning

Commissioning follows the configuration phase. At this point, together with the end customer, the aspects related to performance and personalisation are undertaken. During commissioning, each individual object is fully tested both electrically and functionally.





System architecture

The basic component of each KNX system is the line.

Each line requires at least one power supply, sized according to the number of connected devices.

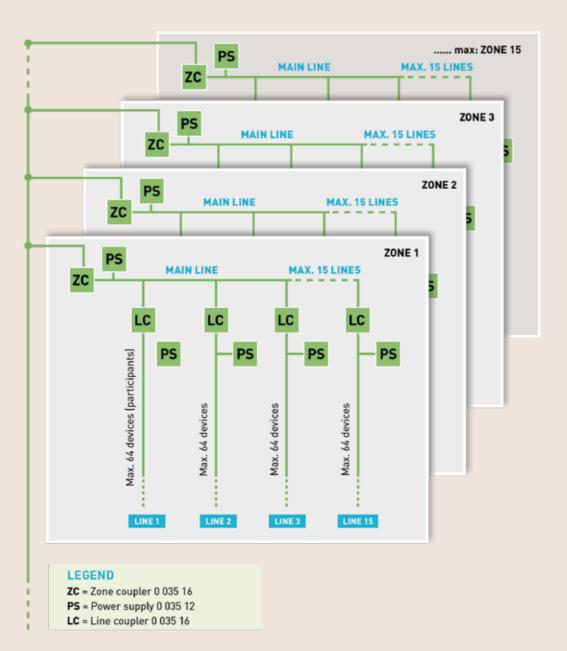
Up to 64 devices can be connected to each line. Indeed, it is possible – through the use of special Line Couplers (LCs) to connect up to a maximum of 15 lines (AREA).

A system can consist in up to a maximum of 15 Areas linked together by area or field couplers (AAs).

The power supply necessary for operating the devices and data signal (telegrams) is conveyed by the same bus cable, also certified (twisted pair).

All devices are characterised by specific addresses on the bus.

To avoid collisions between the telegrams and any loss of data, the CSMA/CA (Carrier Sense Multiple Access/Collision Avoidance) protocol is utilised.

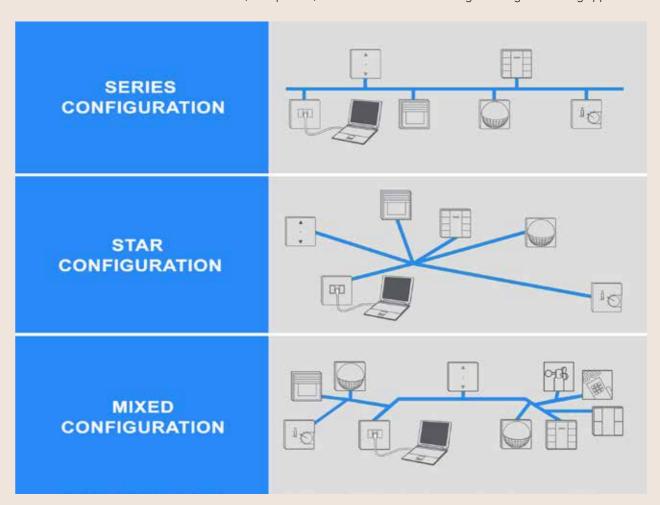


Installation standards

The characteristics of the KNX communication protocol offer the utmost freedom of connection between the devices connected to the line.

Indeed, there is no limit or topological constraint. What's more, it is possible to connect the components in series, in a star, tree or in mixed configuration.

There are also few installation rules which, if respected, ensure the utmost reliability of the system in any application.



Within the bus line, the following precautions must be observed:

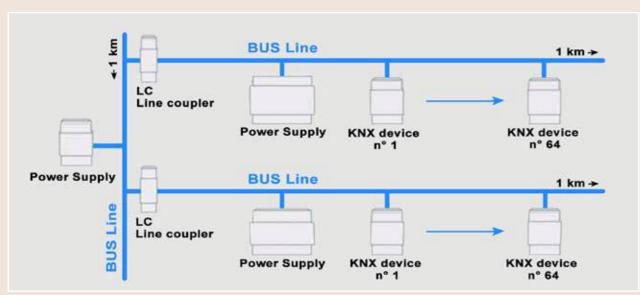
- Maximum cable length between the power supply and the bus device: 350 m.
- Maximum line length between two bus devices: 700 m.
- Total length of all cables within a line: 1,000 m.
- Maximum number of power supplies on the same line: 2 (at least 200 m apart)

The sizing of the power supply to be utilised on each line is also simple. It is possible to associate a maximum consumption of 10mA for each KNX bus device, an assumption which renders the choice of power supply type swift and intuitive, being now available in three different sizes:

- 160mA for up to 16 devices
- 320mA for up to 32 devices
- 640mA for up to 64 devices

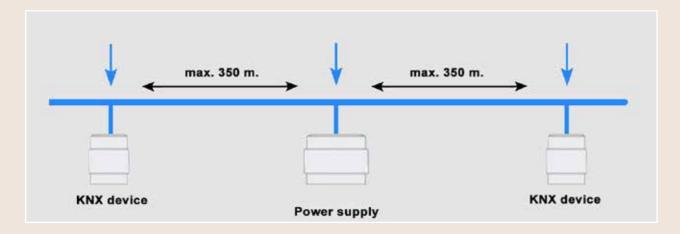


If more than one line is present, the sizing must take into account an additional power supply capable of powering the backbone and the same number of line couplers as there are lines present.



Principle of operation

The principle of operation is simple: every device is assigned a physical address that is unique and even traceable within the architecture to the single component.



Via the bus, each component communicates with one or more devices by means of a data telegram.

Within the telegram there is generally a range of useful information for operation, in addition to the address of the sender and the recipient.

To allow communication between the devices, the group address is utilised. This can have either a 2-level (main group/sub-group) or 3-level (main group/intermediate group/sub-group) structure.

Each device also has its own intelligence, which makes it completely independent from the other devices. This characteristic of distributed intelligence ensures the general continuity of service to the system and allows to immediately recognise any system failure.

The physical address identifies the name of the device and its location within the system, being generally defined in the configuration phase by pressing a button.

The group address, rather, defines the logical connection and determines the mutual assignment of the devices connected to the bus.

Different solutions for different areas of application

The office is where the main automation of the building must converge. An intelligent environment will react and adapt to the various conditions of the day, ensuring everyday comfort only when it serves to benefit greater energy efficiency.

The constant luminosity varies and adjusts according to sunlight, with fan coils that are activated only in case of presence detection, air quality is constantly monitored, along with the activation of preferential sockets whilst security is guaranteed by elegant numeric code keypads.



Meeting rooms

Thanks to Blumotix's KNX systems, it becomes easy to setup a room for a presentation or meeting. The room thus adapts to the needs at hand, hence it proves no longer necessary to make adjustments to suit the various nature of each event.

In a "smart" meeting room, there is no need to turn the lights on or off individually – simply press a single button or – even more simply – control the desired scenario from a smartphone to simultaneously activate a series of functions: the presentation screen automatically lowers, the blinds come down, the projector and microphone switch on and the lighting dims.





Control of the buildings

Blumotix manufactures intelligent devices for the automation and control of homes and buildings, developed according to the data communication protocol of the international KNX standard.

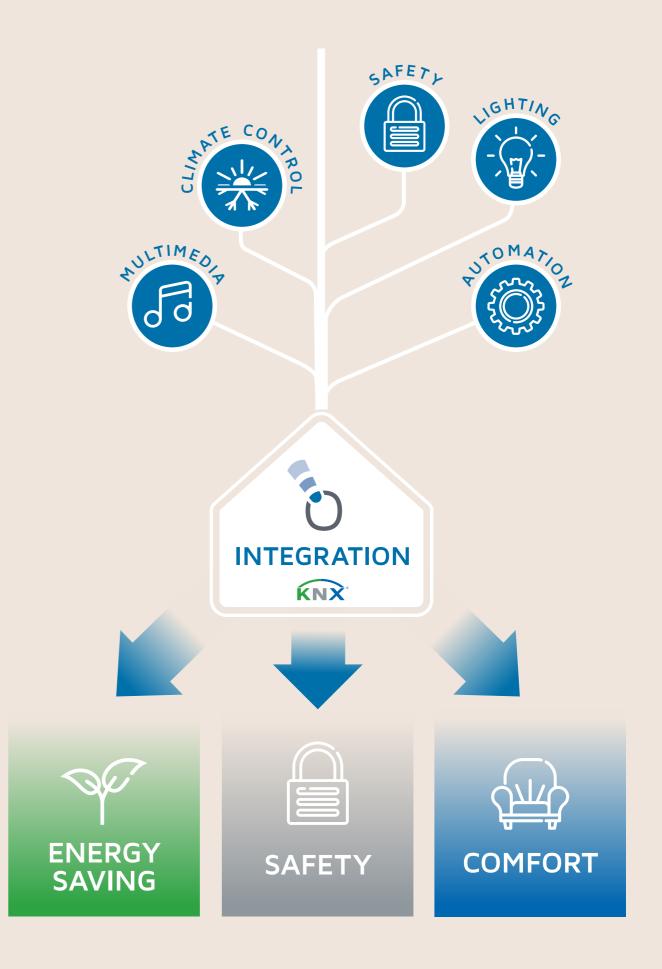
Creating a system with Blumotix devices means increasing the comfort and safety of use, reducing energy consumption and increasing the value of the building thanks to the products characterised by their ease of use along with their elegant and customizable design.

Producing a Blumotix home automation system is simple and economically sustainable. In the planning stages, simply select the most suitable devices for performing the desired function before arranging them in field according to the regulation and directions set out under the KNX protocol. The connection, completed by means of a special bus cable, guarantees communication between the various components installed and represents the network for information exchange.

The scalability, typical of a Building Automation system created with KNX technology and distributed intelligence typical of such systems, also means costs can be broken down proportionally, avoiding having to make any large initial investments.

Blumotix KNX product range includes system devices, devices dedicated to individual application functions and accessories.

The system devices facilitate the operation of the bus system, whilst the equipment dedicated to the individual application functions is developed to perform command, control and/or monitor the various technical installations of the building – such as lighting, heating, shading, audio and so on. Each object has an internal module for communication with the KNX bus, rendering each autonomous and interoperable, capable of working with over 7,000 devices on the market belonging to the same international standard.





Fields and Applications

Hall and waiting rooms

The Qubik multifunctional control panel with integrated temperature regulator renders it possible to create a comfortable and pleasant environment. Here there are two appliances in one: an elegant multifunctional and freely-configurable keypad for controlling lighting, scenarios, shutters or any other command along with an intelligent control unit for adjusting the room temperature according to individual needs and times.



Corridors

Corridors in offices are often used only in transit yet always require a guaranteed minimum degree of brightness, which remains constant throughout the various hours of the day even as the sun exposure changes. Thanks to Blumotix's motion and presence detectors, it is possible to define the degree of brightness and have the system adapt to the external conditions and the passage of people.

Everyday comfort, safety and energy efficiency coexist at all times on the KNX protocol.



KNX solutions for shops, advanced services and shopping centres

Lighting management is certainly one of the salient features to bear in mind within any retail environment. After all, illuminating objects in the right way and enhancing their characteristics helps to sell quicker and better. Through a single DALI actuator, up to 64 bulbs can be adjusted to define the degree of brightness and the status of each light, along with setting 16 different predefined scenarios.



Temperature regulation also becomes an important factor. Visiting a commercial area in which there is the right temperature and correct humidity means customers and visitors are in the ideal conditions, encouraging them to remain in the space for a long time and significantly increasing the chances of making a purchase.

Even the management of signage can now be automated – not only in terms of defined timeframes but also the activation with light sensors or through astronomical calendars that turn on the signage at sunset.





Theaters, cinemas but also churches and sports centres

The main feature of such environments is to accommodate large numbers of people who gather to participate in events, shows and all kinds of gatherings. Safety along with comfort and operational flexibility are the main components that must be taken into account in managing buildings for such occasions.

Programmed commands activate predefined scenarios to adjust the intensity of the lights and create the right atmosphere, CO_2 sensors to always guarantee proper air quality and to automatically activate forced ventilation when necessary, safety numeric keypads that enable areas reserved for personnel only and touch screens capable of centralising commands and on which alarms and supervision devices converge.



Schools and Universities

School environments are generally multidisciplinary areas in which there are various environments, such as class-rooms, corridors, gyms and assembly areas. Each of these needs to be managed in terms of light, temperature and presence, along with safety and supervision.

The set-up can also manage the transition from standard time to summer time with predefined schedules, whilst there is the possibility to utilise the technology in the classrooms in a variable manner, integrating the different technological tools present (PCs, interactive whiteboard, laboratory equipment) with home automation, along with air-quality control and general supervision of security systems.

The opportunity to respond to such needs renders schools and universities ideal buildings in which to use KNX systems.



Hotels and accommodation facilities

Particular attention is paid to all accommodation facilities, which in Italy exceed 34,000 units.

B&Bs, farmhouses, motels and hotels of all categories and levels scattered throughout the Italian territory represent a fundamental resource in a market that is always seeking elements able to guarantee customers a distinctive experience in terms of comfort and safety.

Needs vary according to the type of structure. Thanks to the Blumotix solutions, however, it is possible to customize services according to the requirements at hand.

Through "Doory" numeric keypad, the real heart of the system, it is possible to manage entrance to the rooms with the utmost security and flexibility. Differentiated management according to the type of accommodation facility, option to send the security codes via email if there is no reception (such as for farmhouses and B&Bs) or advanced solutions for hotels equipped with management software dedicated to billing and technological supervision of the systems..



Aesthetic coordination and simplicity

"Doory" glass numeric keypads perfectly coordinate with the KNX commands of the "Qubik" collection in offering a complete solution for the internal and external management of the rooms (presence, power, lights, shutters, climate and so on) and common areas. Each device can store up to 100 codes, guaranteeing customers and service personnel maximum flexibility.





From small establishments to five-star hotels

Hotel management systems must always guarantee extreme safety for customers and managers.

If there is no continuous supervision, access keys must be issued to customers in a safe manner. It is in this context that the characteristics of Blumotix solutions truly come to the fore.

Indeed, thanks to a special application provided free of charge, it is possible to remotely send to customers the numerical security codes able to open and operate the room for the period reserved. Moreover, a suitably-configured motion detector signals the presence of the guest inside the room and optimises energy consumption.



Some advantages of using the home automation system for room management are:

- Optimisation and reduction of management costs in terms of accommodation services: reception and concierge ${\sf cont}$
- Energy Saving: integrated control of lights, climate, windows, curtains and shutters
- Security: room attendance control, through the access control system

NEMO: management BMS software

In addition to the numeric keypad for access control, on large complex structures where it is necessary to have more capillary management of the individual services and where it is essential for staff to have a total overview of the systems, a complete solution is available that is able to provide a 360° view of the establishment. This solution can also communicate with the (optional) billing management systems and connect remotely, facilitating the interoperability between different reception areas.



NEMO (Networking Enterprise Management Optimization) management software has a graphical interface simple, which allows the management of all technological systems present within the structure (also with technologies other than KNX).

It is available on different platforms (PC, tablet, smartphone); the simple and intuitive graphic interface allows you to offer a high quality service to managers, while reducing consumption and management costs.

Cod	Туре
BX-HTLS1	Sw NEMO Hotel MINI <15 rooms
BX-HTLS2	Sw NEMO Hotel BASIC <30 rooms
BX-HTLS3	Sw NEMO Hotel STANDARD < 60 rooms
BX-HTLS4	Sw NEMO Hotel PROFESSIONAL <100 rooms
BX-HTLS5	Sw NEMO Hotel ENTERPRISE <200 rooms
BX-HTLS1-365	Sw 365 NEMO Hotel MINI <15 rooms
BX-HTLS2-365	Sw 365 NEMO Hotel BASIC < 30 rooms
BX-HTLS3-365	Sw 365 NEMO Hotel STANDARD < 60 rooms
BX-HTLS4-365	Sw 365 NEMO Hotel PROFES <100 rooms
BX-HTLS5-365	Sw 365 NEMO Hotel ENTERPR <200 rooms

By choosing BX-HTLSx-365 solution, you purchase a license that allows you to have continuous technical assistance and annual software update.



The European Directive EN 15232 on energy savings

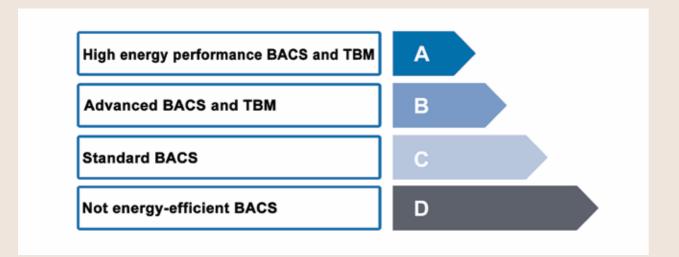
It is estimated that buildings in the residential and tertiary market utilise over 40% of available energy, consequently becoming the main contributors to carbon dioxide (CO_2) emissions.

Energy efficiency inevitably becomes the first strategy in coping with the growing demand for power. There are three main ways to obtain it, through:

- passive system
- active system
- behaviours

EN 15232 is the standard introduced through the European Directive in the field of energy efficiency. The EPBD (Energy Performance of Buildings Directive) defines the impact of automation set-ups (active systems) on the energy performance of the edifice.

By way of example, four efficiency classes have been introduced, each of which is identified by a letter (from A to D). The letter "D" marks the lower class, being equivalent to a building without any automation system. The letters "C" to "A" represent a higher degree of automation, with the letter "A" being the maximum level.



Class D – "NON-ENERGY EFFICIENT": includes traditional technical systems without automation and control, not being efficient from an energy point of view;

Class C – "STANDARD" (reference): corresponds to systems equipped with "traditional" Building Automation and Control Systems (BACS), possibly equipped with a communication BUS;

Class B – "ADVANCED": includes systems equipped with an advanced Building Automation and Control System (BACS) whilst also being fitted with certain functions for the Technical Building Management (TBM) systems specific to the centralised and coordinated handling of individual systems. "Room controller devices must be able to communicate with the building automation system."

Class A – "HIGH ENERGY PERFORMANCE": corresponds to the best BAC and TBM systems, offering levels of precision and completeness for the automatic control such as to guarantee the best energy functioning for the system. "Room controllers must be able to manage HVAC systems, taking into account various factors (for example, pre-set values based on presence detection, air quality, etcetera) and include additional integrated functions for multidisciplinary rapports between HVAC and various building services (such as the electricity, lighting, sunshading, and so on)."

Once equipped with automation and control systems, one of these classes is assigned to the building. The potential for thermal and electrical energy can be calculated for each class based on the type of building and its relative use. The values of Energy Class C are used as a reference for comparing the efficiency.

BACS energy-efficiency factors in non-residential buildings						
	BACS efficiency classes and factors			BACS efficiency classes and factors Energy saving		Energy saving
Type of building/	D	C (rif.)	C (III.) B A		(ref. Class D)	(ref. Class C)
place	Without automation	Standard automation	Advanced automation	High efficiency	C/D B/D A/D	B/C A/C
Offices	1.10	1.00	0.93	0.87	9% 15% 219	6 7% 13%
Conference rooms	1.06	1.00	0.94	0.89	6% 11% 169	6% 11%
Schools	1.07	1.00	0.93	0.86	7% 13% 20%	6 7% 14%
Hospitals	1.05	1.00	0.98	0.96	5% 7% 99	6 2% 4%
Hotels	1.07	1.00	0.95	0.90	7% 11% 169	6 5% 10%
Restaurants	1.04	1.00	0.96	0.92	4% 8% 129	6 4% 8%
Shops/Wholesalers	1.08	1.00	0.95	0.91	7% 12% 169	6 5% 9%

BACS energy-efficiency factors in residential buildings									
	BACS efficiency classes and factors			Energy saving		Energy saving			
Type of building/	D C (rif.) B A		(ref	. Clas	s D)	(ref. C	lass C)		
place	Without automation	Standard automation	Advanced automation	High efficiency	C/D	B/D	A/D	B/C	A/C
Apartments, villas,									
other buildings	1.08	1.00	0.93	0.92	7%	14%	15%	7%	8%

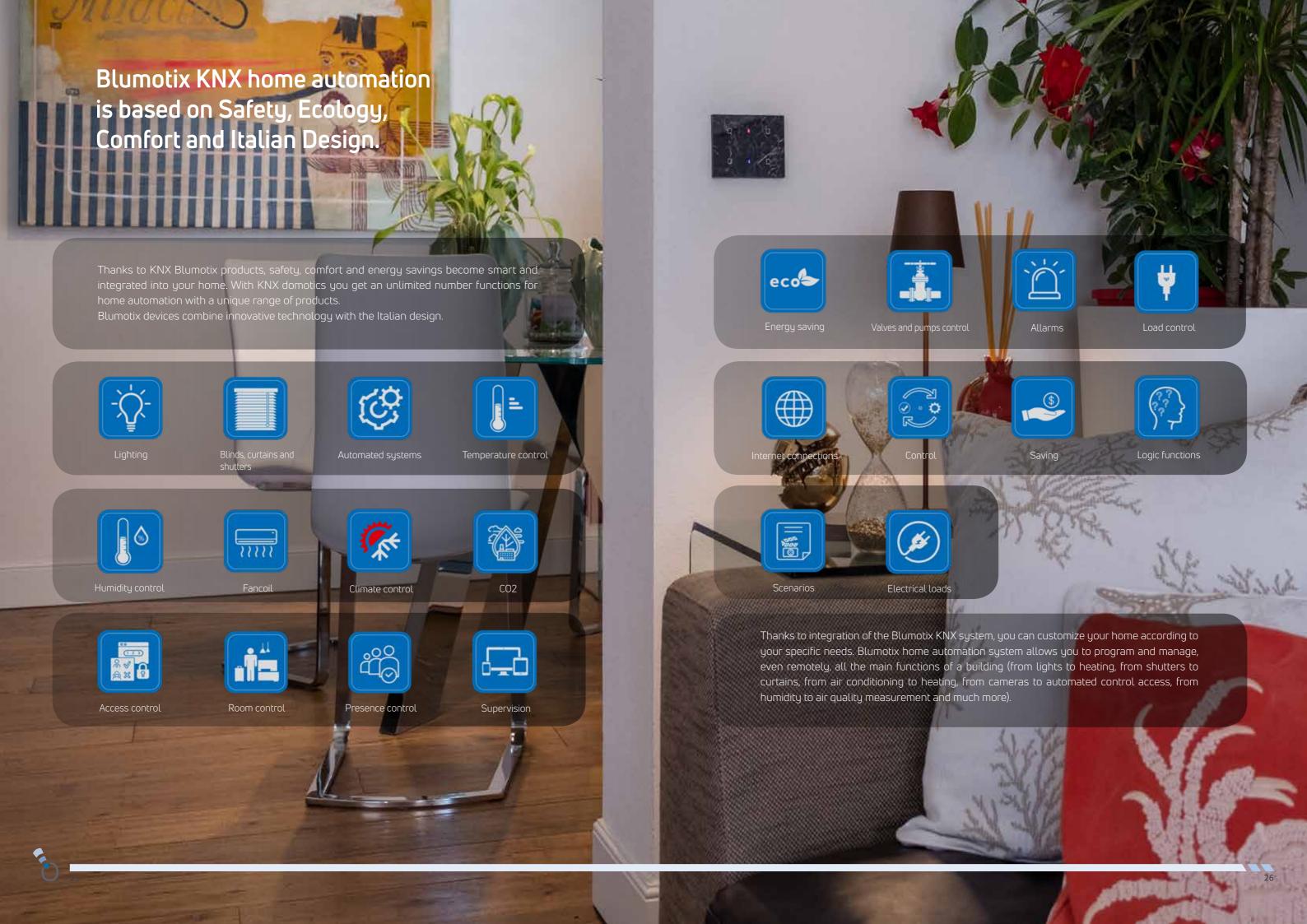
A NEED FOR AWARENESS: home automation and energy savings

Why connect the need for awareness with energy savings? It may seem like a bit of a gamble but home automation integrated with solar power and heating systems ensures great economic and comfort advantages. A smart home is also an eco-friendly home. Not surprisingly, home automation systems increase the energy class and value of the property. The systems that can be managed include: boilers, air-conditioners, heat pumps and solar-run appliances.









Control panels

QUBIK COLLECTION

Qubik is a push-button panel with state-of-the-art KNX touch control technology. Qubik's technological innovation is the option of being able to programme the device's functions in a customised mode based on the end user's needs. Specifically, it is possible to initiate them in three different modes: by simple touch (short press), by long press, and by sequential press (multifunction).

The Collection push-button panel supports the following control functions: switches, shutters and blinds, dimmers,

The device, on a white or black base, features up to 8 capacitive buttons including in its square version and is fitted with 2/4 RGB LEDs that can light up in 7 different colours: red, green, blue, yellow, turquoise, magenta and white. The Qubik push-button panel has a temperature sensor with thermostat function, which can be programmed and integrated into the system, for remote control of the temperature in the different rooms where the keypad is installed.

The collection includes several exclusive designs:

Qubik Line - Qubik Button - Qubik Icon - Qubik Marble - Qubik Sensitive - Qubik Vertical







The Qubik collection, in all its versions, offers the great opportunity of being able to customise the fronts according to specific customer requirements.

In fact, by having a single flush-mounted electronic engineering base, it is possible to choose and combine different designs in an original way, as they are interchangeable in the front plates. This also allows the fronts to be changed at any time after the first purchase without having to replace the entire device.

For all the glass lines, the collection includes the equivalent thermostats, which can also be customised.

Depending on the different versions, the thermostats have control and measurement of: temperature, temperaturehumidity and temperature-humidity-CO2.

CAPACITIVE KEYPADS Glass Line

KNX glass keypad, rectangular/square, black/ white, with silver lines



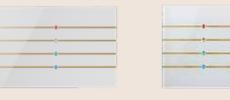


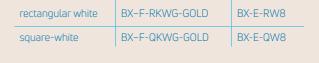


Model	Cod. Cover	Cod. Elettronics
rectangular white	BX-F-RKWG-SILVER	BX-E-RW8
square-white	BX-F-QKWG-SILVER	BX-E-QW8

rectangular black	BX-F-RKBG-SILVER	BX-E-QB8
square black	BX-F-QKBG-SILVER	BX-E-QB8





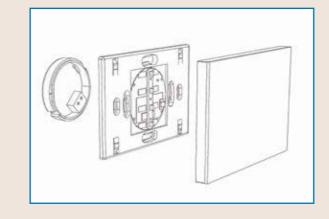






rectangular black	BX-F-RKBG-GOLD	BX-E-QB8
square black	BX-F-QKBG-GOLD	BX-E-QB8

- Power supply: via KNX bus, 29 V dc SELV
- Current consumption from bus < 10 mA
- Version with up to 8 freely configurable functions
- 4 freely programmable RGB LEDs
- Integrated temperature sensor
- Room thermostat function
- Plastic casing
- Recessed wall mounting on round, rectangular or square housing
- Operating temperature: -5 ÷ +45 °C (indoor use)
- Connection to bus line via KNX terminal • Degree of protection IP20 (installed)
- Dimensions: square 80 X 80 mm
- Dimensions: rectangular 120 X 80 mm
- Thickness: 8 mm





CAPACITIVE KEYPADS Glass Button

Glass keypad, rectangular/square, black/ white, 4 buttons.





Model	Cod. Cover	Cod. Elettronics
rectangular white	BX-F-RW4	BX-E-RW4
square white	BX-F-QW4	BX-E-QW4





rectangular black	BX-F-RB4	BX-E-RB4
square black	BX-F-QB4	BX-E-QB4

Glass keypad, rectangular/square, black/ white, 8 buttons.





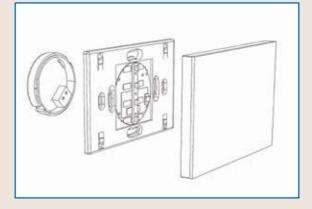
rectangular white	BX-F-RW8	BX-E-RW8
square white	BX-F-QW8	BX-E-QW8

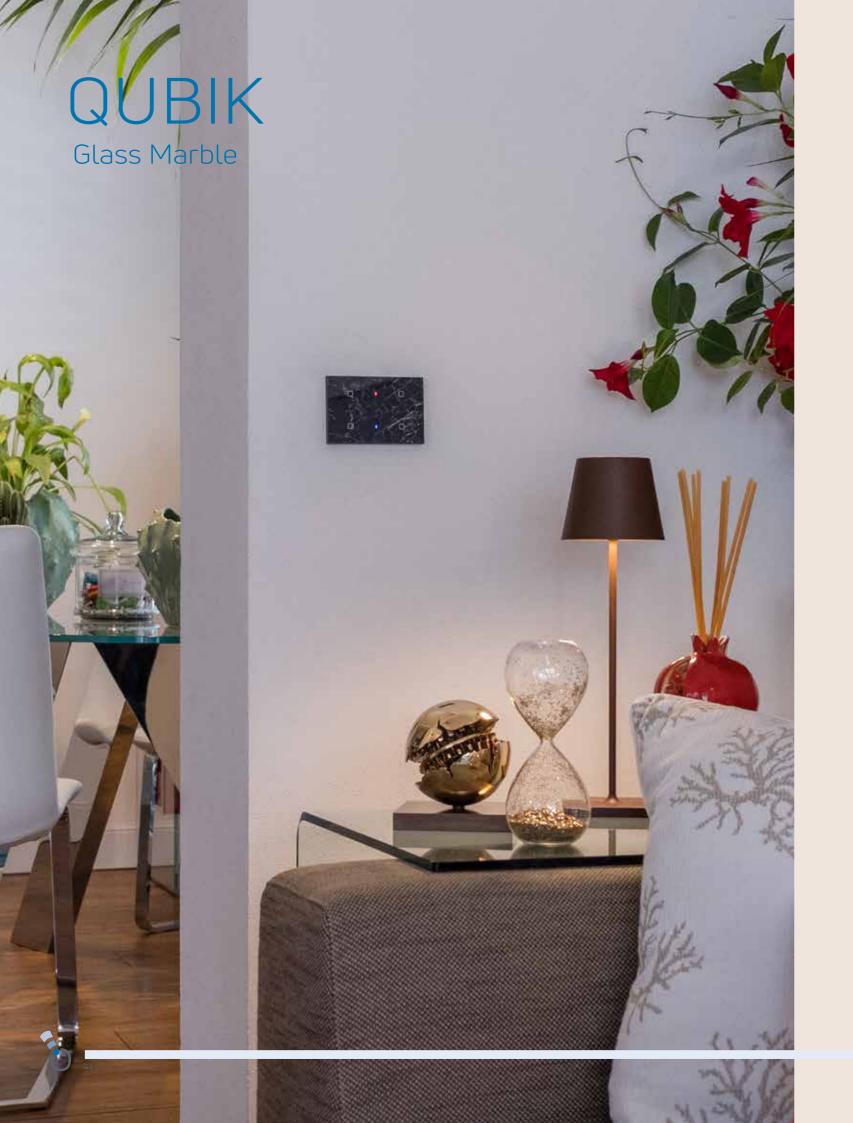




rectangular black	BX-F-RB8	BX-E-RB8
square black	BX-F-QB8	BX-E-QB8

- Power supply: via KNX bus, 29 V dc SELV
- Current Consumption by bus < 10 mA
- Version with 4/8 customizable functions
- 2/4 freely configurable RGB Leds
- Integrated temperature sensor
- Room thermostat function
- Flush-mounted on round, rectangular of square box
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Bus line connection via KNX terminal
- Degree of protection IP20 (installed)
- Dimensions: square 80 X 80 mm
- Dimensions: rectangular 120 X 80 mm
- Thickness: 8 mm

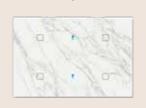




CAPACITIVE KEYPADS Glass Marble

square black

Glass keypad with marble effect, rectangular/square, black/white, 4 buttons.







Model	Cod. Cover	Cod. Elettronics
rectangular white	BX-F-RWM4	BX-E-RW4
square white	BX-F-QWM4	BX-E-QW4
rectangular black	BX-F-RBM4	BX-E-RB4

BX-F-QBM4

BX-E-QB4

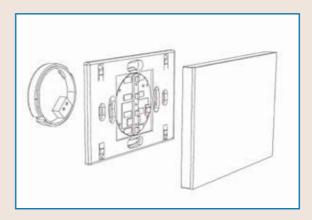
Glass keypad with marble effect, rectangular/square, black/white, 8 buttons







rectangular white	BX-F-RWM8	BX-E-RW8
square white	BX-F-QWM8	BX-E-QW8
	l	I
rectangular black	BX-F-RBM8	BX-E-RB8
square black	BX-F-QBM8	BX-E-QB8



- Power supply: via KNX bus, 29 V dc SELV
- Current Consumption by bus < 10 mA
- Version with 4/8 customizable functions
- 2/4 freely configurable RGB Leds
- Integrated temperature sensor
- Room thermostat function
- Plastic case
- Flush-mounted on round, rectangular of square box
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Bus line connection via KNX terminal
- Degree of protection IP20 (installed)
- Dimensions: square 80 X 80 mm
- Dimensions: rectangular 120 X 80 mm
- Thickness: 8 mm



TECHNICAL DATA

- Power supply: via KNX bus, 29 V dc SELV
- Current Consumption by bus < 10 mA
- Version with 2/4/8 customizable functions
- 2/4 freely configurable RGB Leds
- Integrated temperature sensor
- Room thermostat function
- Plastic case
- Flush-mounted on round, rectangular of square box

- Operating Temperature: -5 ÷ +45 °C (internal use)
- Bus line connection via KNX terminal
- Degree of protection IP20 (installed)
- Dimensions: square 80 X 80 mm
- Dimensions: rectangular 120 X 80 mm
- Thickness: 8 mm

All keypads are available in square and rectangular versions in white and black colours.

CAPACITIVE KEYPADS Glass Icon

Glass keypad with 1 shutter control and 2 light ON-OFF controls

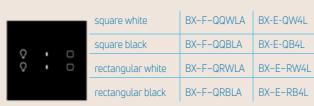
Glass keypad with 1 light control and 2 light ON-OFF controls

			Model	Cod. Cover	Cod. Elettronics
		^	square white	BX-F-QQWLG	BX-E-QW8L
	:	Û U	square black	BX-F-QQBLG	BX-E-QB8L
Ç	:	0	rectangular white	BX-F-QRWLG	BX-E-RW8L
			rectangular black	BX-F-QRBLG	BX-E-RB8L

			Modello	Cod. Cover	Cod. Elettronics
			square white	BX-F-QQWLH	BX-E-QW8L
0	1	0.0	square black	BX-F-QQBLH	BX-E-QB8L
0 1 0		rectangular white	BX-F-QRWLH	BX-E-RW8L	
		rectangular black	BX-F-QRBLH	BX-E-RB8L	

Glass keypad with 2 light ON-OFF controls

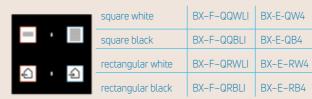
Glass keypad with 2 Shutter/Venetian blind controls



	square white	BX-F-QQWLD	BX-E-QW8L
0	square black	BX-F-QQBLD	BX-E-QB8L
	rectangular white	BX-F-QRWLD	BX-E-RW8L
	rectangular black	BX-F-QRBLD	BX-E-RB8L

Glass keypad with 2 predefined "in/out" and "roller shutter up/shutter down" scenarios

Glass keypad with 2 light settings



	square white	BX-F-QQWLF	BX-E-QW8L
♦ • •	square black	BX-F-QQBLF	BX-E-QB8L
Š , č	rectangular white	BX-F-QRWLF	BX-E-RW8L
· ·	rectangular black	BX-F-QRBLF	BX-E-RB8L

Glass keypad with 4 predefined scenarios "indoors/outdoors" - "roller shutters up/shutter down" - "light ON/light OFF" - "thermo ON/thermo OFF".

Glass keypad with 4 light ON/OFF controls

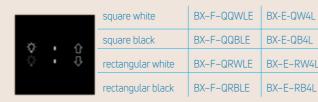


square white	BX-F-QQWLM	BX-E-QW8
square black	BX-F-QQBLM	BX-E-QB8
rectangular white	BX-F-QRWLM	BX-E-RW8
rectangular black	BX-F-QRBLM	BX-E-RB8

	square white	BX-F-QQWLB	BX-E-QW8L
0 1 0	square black	BX-F-QQBLB	BX-E-QB8L
9 : 0	rectangular white	BX-F-QRWLB	BX-E-RW8L
* 3 00	rectangular black	BX-F-QRBLB	BX-E-RB8L

Glass keypad with 1 light control

Glass keypad with 1 Shutter/Venetian blind control



	square white	BX-F-QQWLC	BX-E-QW4L
☆	square black	BX-F-QQBLC	BX-E-QB4L
	rectangular white	BX-F-QRWLC	BX-E-RW4L
	rectangular black	BX-F-QRBLC	BX-E-RB4L





TECHNICAL DATA KEYPADS

- Power supply: via KNX bus, 29 V dc SELV
- Current consumption from bus < 10 mA
- 4/8 freely configurable functions
- 4 freely programmable RGB LEDs
- Integrated temperature sensor
- Room thermostat function
- Plastic casing
- Recessed wall mounting on round, rectangular or square box
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Connection to bus line via KNX terminal
- Degree of protection IP20 (installed)
- Dimensions: square 80 X 80 mm
- Thickness: 8 mm

TECHNICAL DATA THERMOSTATS

- Power supply: via KNX bus, 29 V dc SELV
- Current consumption from bus < 10 mA
- OLED display with blue backlighting
- 4 capacitive buttons for thermostat function control
- Temperature and humidity function control
- Plastic casing
- Programming button and LED on the rear
- Recessed wall mounting on round, rectangular or square box
- Operating Temperature: -5 \div +45 °C (internal use)
- Connection to bus line via KNX terminal
- IP20 degree of protection (installed)
- Dimensions: square 80 X 80 mm
- Thickness: 8 mm

CAPACITIVE KEYPADS Glass Vertical

Square glass keypad, cream, on white base, 8 functions

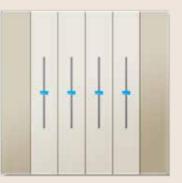
Model	Cod. Cover	Cod. Elettronics
square	BX-F-QQCV	BX-E-QW8

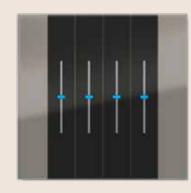
Square glass keypad, grey, on black base, 8 functions

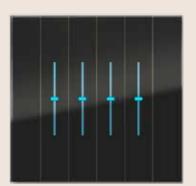
Model	Cod. Cover	Cod. Elettronics
square	BX-F-QQGV	BX-E-QB8

Square glass keypad, black, on black base, 8 functions

Model	Cod. Cover	Cod. Elettronics
soliare	BX-F-QQBV	BX-F-QB8







CAPACITIVE THERMOSTATS Glass Vertical

Square glass thermostat, on white base 4 functions

Model	Cod. Cover	Cod. Elettronics
quadrato	BX-F-QQCVT	BX-E-QWTU

Square glass thermostat, grey, on black base, 4 functions

Model	Cod. Cover	Cod. Elettronics	
quadrato	BX-F-00G\/T	BX-F-ORTH	

Square glass thermostat, black, on black base, 4 functions

ics	Model	Cod. Cover	Cod. Elettronics	
	quadrato	BX-F-QQBVT	BX-E-QBTU	







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CAPACITIVE THERMOSTATS Glass Line

KNX glass thermostat, rectangular/square, black/white, with silver lines.









Model	Cod. Cover	Cod. Elettronics
square white	BX-F-QKWGT-SILVER	BX-E-QWT8
rectangular white	BX-F-RKWGT-SILVER	BX-E-RWT8

square black	BX-F-QKBGT-SILVER	BX-E-QBT8	
rectangular black	BX-F-RKBGT-SILVER	BX-E-RBT8	

KNX glass thermostat, rectangular/square, black/white, with gold lines.





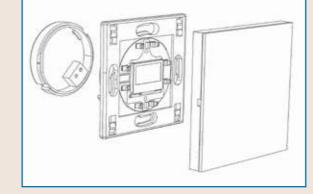




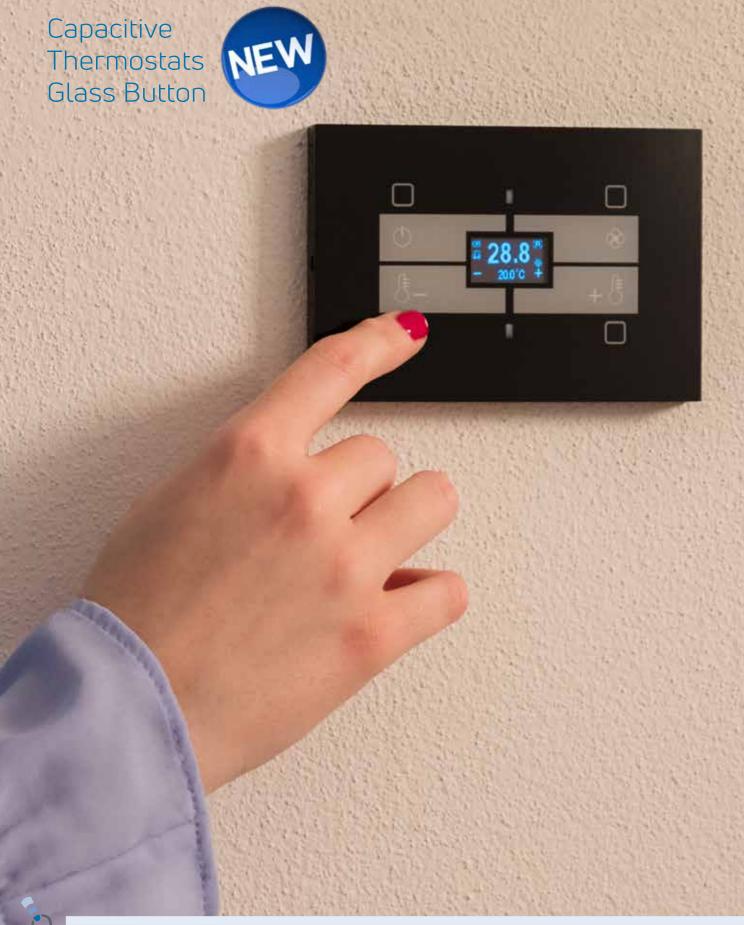
square white	BX-F-QKWGT-GOLD	BX-E-QWT8
rectangular white	BX-F-RKWGT-GOLD	BX-E-RWT8

square black	BX-F-QKBGT-GOLD	BX-E-QBT8
rectangular black	BX-F-RKBGT-GOLD	BX-E-RBT8

- Power supply: via KNX bus, 29 V dc SELV
- Current Consumption by KNX bus <10 mA
- OLED display with blue backlight
- 4 capacitive buttons to control thermostat functions
- Freely configurable 4 RGB rear Leds
- 4 freely configurable inputs
- Button and programming Led on the back
- Plastic case
- Flush-mounted on round, rectangular of square box
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Bus line connection via KNX terminal
- Degree of protection IP20 (installed)
- Dimensions: square 80 X 80 mm
- Dimensions: rectangular 120 X 80 mm
- Thickness: 8 mm



QUBIK



CAPACITIVE THERMOSTATS Glass Button

KNX thermostat in square/rectangular black/white glass, with 4 programmable functions





Model	Cod. Cover	Cod. ElettronicTemp.	Cod. Elettronic Temp/ Humidity	Cod. Elettronic Temp/ Humidity/CO2
square white	BX-F-QWT4	BX-E-QWT4	BX-E-QWTU4	BX-E-QWTU4C2
rectangular white	BX-F-RWT4	BX-E-RWT4	BX-E-RWTU4	BX-E-RWTU4C2





square black	BX-F-QBT4	BX-E-QBT4	BX-E-QBTU4	BX-E-QBTU4C2
rectangular black	BX-F-RBT4	BX-E-RBT4	BX-E-RBTU4	BX-E-RBTU4C2

KNX thermostat in square/rectangular black/white glass





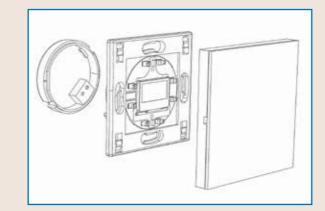
square white	BX-F-QWT	BX-E-QWT	BX-E-QWTU	BX-E-QWTUC2
rectangular white	BX-F-RWT	BX-E-RWT	BX-E-RWTU	BX-E-RWTUC2





square black	BX-F-QBT	BX-E-QBT	BX-E-QBTU	BX-E-QBTUC2
rectangular black	BX-F-RBT	BX-E-RBT	BX-E-RBTU	BX-E-RBTUC2

- Power supply: via KNX bus, 29 V dc SELV
- Current Consumption by KNX bus <10 mA
- OLED display with blue backlight
- 4 capacitive buttons to control thermostat functions
- Freely configurable 2 Leds (only in BX-RWT4,
- BX-RBT4, BX-QWT4, BX-QBT4)
- 4 freely configurable inputs (only in BX-RWT4,
- BX-RBT4, BX-QWT4, BX-QBT4)
- Button and programming Led on the back
- Plastic case
- Flush-mounted on round, rectangular of square box
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Bus line connection via KNX terminal
- Degree of protection IP20 (installed)
- Dimensions: square 80 X 80 mm
- Dimensions: rectangular 120 X 80 mm
- Thickness: 8 mm



QUBIK

Capacitive
Thermostats
Glass Marble





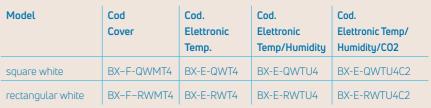


CAPACITIVE THERMOSTATS Glass Marble

Marble-effect glass square/rectangular black/white KNX thermostat with 4 programmable functions









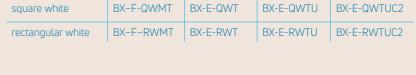


square black	BX-F-QBMT4	BX-E-QBT4	BX-E-QBTU4	BX-E-QBTU4C2
rectangular black	BX-F-RBMT4	BX-E-RBT4	BX-E-RBTU4	BX-E-RBTU4C2

Marble-effect glass square/rectangular black/white KNX thermostat







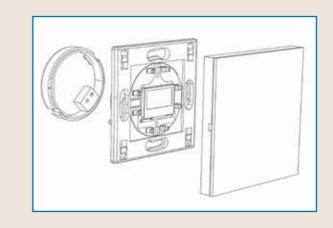




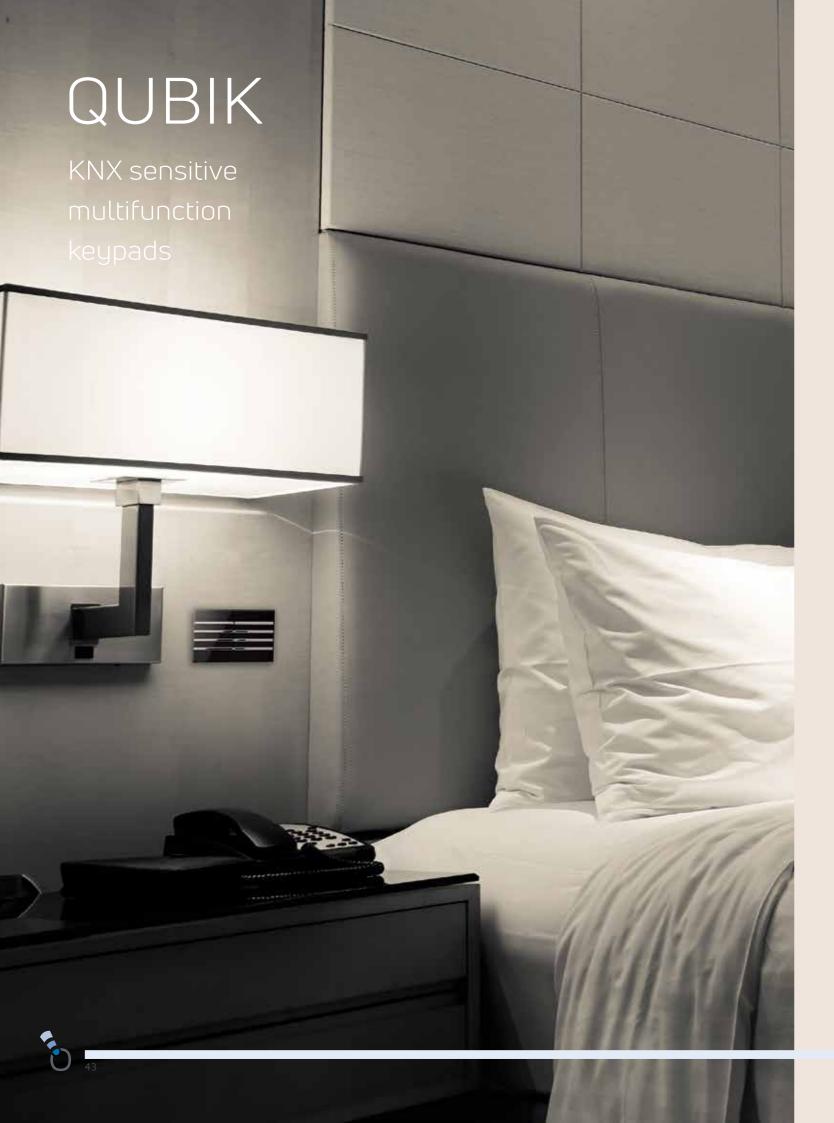
square black	BX-F-QBMT	BX-E-QBT	BX-E-QBTU	BX-E-QBTUC2
rectangular black	BX-F-RBMT	BX-E-RBT	BX-E-RBTU	BX-E-RBTUC2

TECHNICAL DATA

- Power supply: via KNX bus, 29 V dc SELV
- Current Consumption by KNX bus <10 mA
- OLED display with blue backlight
- 4 capacitive buttons to control thermostat functions
- Freely configurable 2 Leds (BX-RWMT4, BX-RBMT4, BX-QWMT4, BX-QBMT4)
- 4 freely configurable inputs (only in BX-RWMT4, BX-RBMT4, BX-QWMT4, BX-QBMT4)
- Button and programming Led on the back
- Plastic case
- Flush-mounted on round, rectangular of square box
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Bus line connection via KNX terminal
- Degree of protection IP20 (installed)
- Dimensions: square 80 X 80 mm
- Dimensions: rectangular 120 X 80 mm
- Thickness: 8 mm

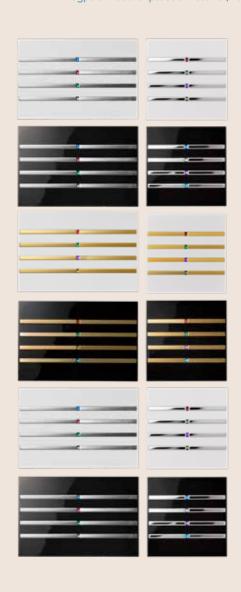


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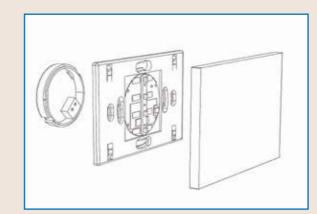
KNX sensitive multifunction keypads

KNX keypad made of plastic material, rectangular/square, black/white, with metal silver/gold/chrome keys



Model	Cod. Cover	Cod. Elettronic
rectangular white	BX-F-RKW-SILVER	BX-E-RW8
square white	BX-F-QKW-SILVER	BX-E-QW8
rectangular black	BX-F-RKB-SILVER	BX-E-QB8
square black	BX-F-QKB-SILVER	BX-E-QB8
rectangular white	BX-F-RKW-GOLD	BX-E-RW8
square white	BX-F-QKW-GOLD	BX-E-QW8
rectangular black	BX-F-RKB-GOLD	BX-E-QB8
square black	BX-F-QKB-GOLD	BX-E-QB8
rectangular white	BX-F-RKW-CHROME	BX-E-RW8
square white	BX-F-QKW-CHROME	BX-E-QW8
rectangular black	BX-F-RKB-CHROME	BX-E-QB8

- Power supply: via KNX bus, 29 V dc SELV
- Current consumption by KNX bus < 10 mA
- Version of 8 configurable functions
- Freely configurable 4 RGB rear Leds
- Integrated temperature sensor
- Ambient thermostat function
- Plastic case
- Flush-mounted on round, rectangular of square box
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Bus line connection via KNX terminal
- Degree of protection IP20 (installed)
- Dimensions: square 80 X 80 mm
- Dimensions: rectangular 120 X 80 mm
- Thickness 6 mm





The Qubik doory numeric keypad

Qubik doory is an smart numeric keypad that serves as an access control system.

The Qubik doory numeric keypad is a glass KNX touch device, backlit and equipped with a proximity sensor.

It is particularly suitable for hospitality establishments, as the glass can be customised with a room number and standard functions, typical of hotel services (do not disturb, make up room).

The keypad provides management of room access via numeric code without the need for any other support (key or magnetic card).

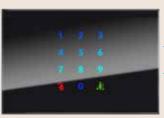
Combined with the numeric keypad there is a glass KNX touch panel, to be installed inside the room, for the activation of functions related to the keypad and in direct communication with the reception for emergency signals.

The numeric keypad access control system can be integrated with the BMS BX -NEMO software, which can be interfaced with the main hotel management systems on the market, allowing the supervision and management of the hotel's systems and all its accesses from a smartphone, tablet or traditional pr

QUBIK collection – Doory numeric keypads

Horizontal/vertical KNX keypad for access control in black/white glass, with customised hotel details





Model	Cod. Cover	Cod. Elettronics
horizontal white	BX-F-R120WH	BX-E-R120WH
horizontal black	BX-F-R120BH	BX-E-R120BH





vertical white	BX-F-R12VWH	BX-E-R12VWH
vertical black	RX-F-R12VRH	RX-F-R12VRH

Horizontal/vertical KNX keypad for access control in black/white glass





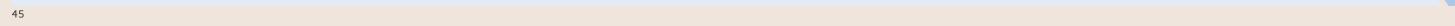
Model	Cod. Cover	Cod. Elettronics
horizontal white	BX-F-R120WS	BX-E-R120WS
horizontal black	BX-F-R120BS	BX-E-R120BS





vertical white	BX-F-R12VWS	BX-E-R12VWS
vertical black	BX-F-R12VBS	BX-E-R12VBS







Simplified management of all hotel functions, via supervision software for use at reception:

- check-in/check-out
- no need for card programming/clearing
- control of room condition from reception
- control of room loads from reception

Energy efficiency and cost savings:

- Possible activation of room utilities (TV lighting, etc.) only when the guest is present in the room.
- Intelligent and optimised climate control
- Room presence management with virtual badge integrated into the keypad.

Security:

- Room access via numeric code
- Check room presence of guest and hotel staff from reception, or smartphone, or tablet
- Display of room alarms and alerts from reception, or smartphone, or tablet.
- There is also a basic version of the keypad, suitable for B&Bs, holiday farms and small resorts, which comes with the integrated use of two APPs: Doory and KRIM.
- The access control, in its basic version, can also be used in the residential or tertiary sector: office buildings, laboratories, common areas in apartment blocks, etc.

TECHNICAL DATA

- Power supply: via KNX bus, 29 V dc SELV
- Current consumption from bus < 20 mA
- Glass number keypads White or Black
- Each keypad includes the numbers 0 to 9 and the control keys # and * in the basic version and customisation with "do not disturb" and "make up room" symbols in the Hotel version.
- Backlighting of numbers in white
- Proximity sensor
- Front programming button
- PRG signalling LED
- Plastic casing

- Recessed wall mounting on round, square and rectangular box
- The KNX firmware installed is dedicated to access control, with the possibility of storing up to 100 codes of 4/6-digit length on the device.
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Connection to bus line via KNX terminal
- IP20 degree of protection (installed)
- Dimensions: rectangular 120 X 80 mm
 Thickness: 8 mm

Panel Control Hotel Room

KNX control panel for hotel room interior, square, black/white





Model	Cod. Cover	Cod. Elettronics
square black	BX-F-F80B	BX-E-F80B
square white	BX-F-F80W	BX-E-F80W

KNX control panel for hotel room interior, rectangular, black/white



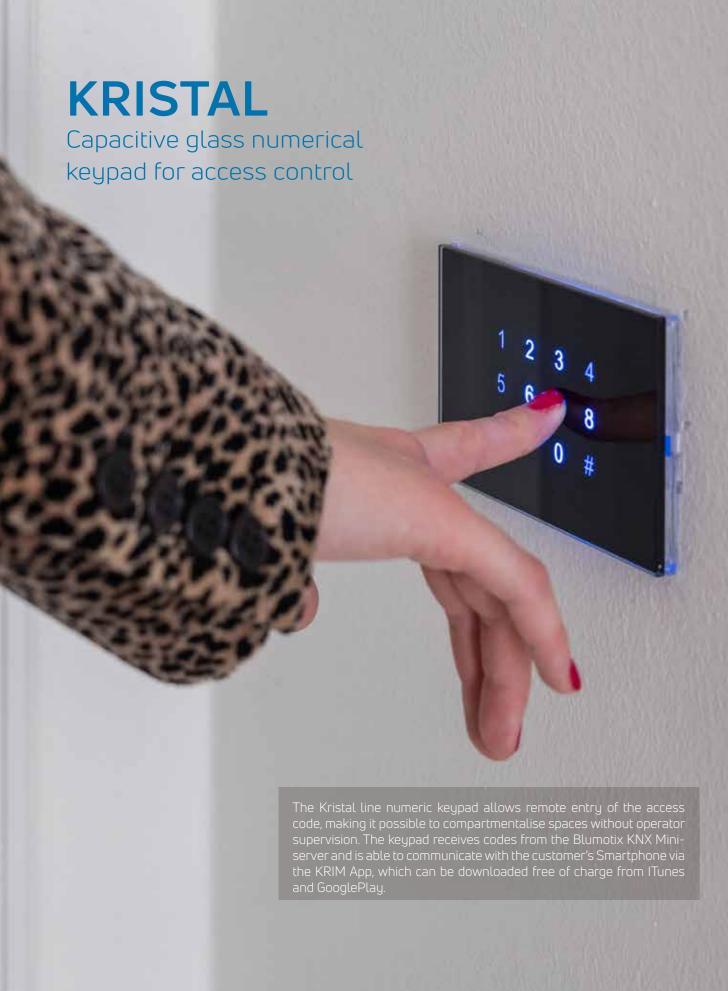


rectangular black	BX-F-F120B	BX-E-F120B
rectangular white	BX-F-F120W	BX-E-F120W

TECHNICAL DATA

- Power supply: via KNX bus, 29 V dc SELV
- Current consumption from bus < 10 mA
- 4 freely programmable RGB LEDsIntegrated temperature sensor
- Room thermostat function
- Plastic casing
- Recessed wall mounting on round, rectangular or square box
- Operating Temperature: $-5 \div +45$ °C (internal use)
- Connection to bus line via KNX terminal
- Degree of protection IP20 (installed)
- Dimensions: square 80 X 80 mm
- · Dimensions: rectangular
- Thickness: 8 mm

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KRISTAL LINE - Numeric Keypads







BX-R120W

Horizontal KNX keypad for access control in glass colour white

BX-R12VW

Vertical KNX keypad for access control in glass colour white





BX-R120B

Horizontal KNX keypad for access control in glass colour black

BX-R12VB

Vertical KNX keypad for access control in glass colour black

KRISTAL Doory numeric keypad

is an ideal touch device for secure and automated control of any type of environment, as it allows remote supervision of controlled accesses.

The keypad can therefore be used to compartmentalise industrial, civil and service facilities in general without the need for keys.

As an intelligent capacitive keypad, it can also be used for B&Bs, holiday farms and small resorts.

Also included in the price of the keypad are the APPs: Doory and KRIM.

The glasses in this line cannot be customised with hotel functions.

The Doory and KRIM APPs

Enable you to manage check-in and check-out operations from your smartphone/ tablet, to renew and update the access key when new guests arrive and whenever necessary. In addition, to open a door in case you have forgetten the code; the manager can do this automatically from the phone by pushing just one button. For interfacing with hotel management software, however, the BX-NEMO supervision software is required.





TECHNICAL DATA

- Power supply: via KNX bus, 29 V dc SELV
- Current consumption from bus < 10 mA
- Glass number keypads White or Black
- Each keypad includes the numbers 0 to 9 and the control keys # and *
- Backlighting of numbers in blue Proximity sensor
- Front programming button
- PRG signalling LED
- Plastic casing

- Recessed wall mounting on rectangular box
- The installed KNX firmware is dedicated to access control, with the possibility of storing up to 100 codes of 6-digit length.
- Operating temperature: -5 ÷ +45 °C (indoor use)
- Connection to bus line via KNX terminal
- IP20 degree of protection (installed)
- Dimensions: rectangular 120 X 80 mm
- Thickness: 8 mm

Power Supply BX-B640



DESCRIPTION

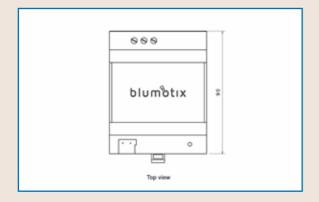
The BX-B640 is a KNX power supply unit with 640 mA current output. It is ideal for powering networks with up to 64 devices.

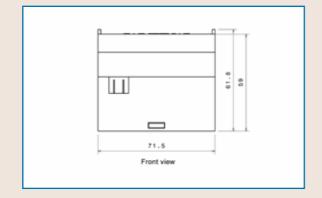
It features Soft Start, a gradual switch-on mechanism that allows the loading of the capacities present in the system without causing drops in the output voltage and protects the system from malfunctions caused by sudden public network blackouts or inefficiencies.

TECHNICAL DATA

- Input Voltage: 110 ÷ 230 V ac, 50/60 Hz
- Power Consumption: 20 W
- Fuse: 2 A rapid
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Electric connections: screw terminals, max. cable section 2,5 mm²
- Degree of protection: IP20
- Dimensions: 4 DIN modules

DIMENSIONS





Power Supply BX-B320



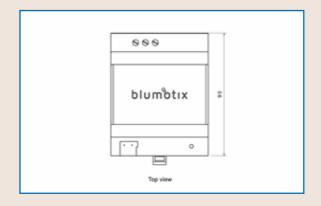
DESCRIPTION

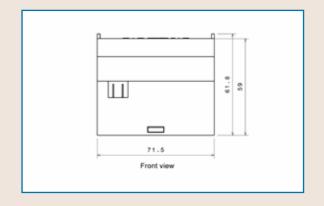
The BX-B320 is a KNX power supply unit with 320 mA current output. It is ideal for powering networks with up to 32 devices.

It features Soft Start, a gradual switch-on mechanism that allows the loading of the capacities present in the system without causing drops in the output voltage and protects the system from malfunctions caused by sudden public network blackouts or inefficiencies.

TECHNICAL DATA

- Input Voltage: 110 ÷ 230 V ac, 50/60 Hz
- Power Consumption: 15 W
- Fuse: 2 A rapid
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Electric connections: screw terminals, max. cable section 2,5 mm²
- Degree of protection: IP20
- Dimensions: 4 DIN modules







Power Supply BX-B160



DESCRIPTION

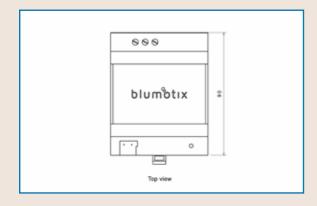
The BX-B160 is a KNX power supply unit with 160 mA current output. It is ideal for powering networks with up to 16 devices.

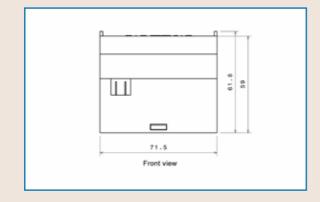
It features Soft Start, a mechanism that allows the capacities in the system to be loaded without causing a drop in output voltage and protects the system from malfunctions caused by sudden public network blackouts or inefficiencies.

TECHNICAL DATA

- Input voltage: 110 ÷ 230 V ac, 50/60 Hz
- Power consumption: 10 W
- Fuse: 2 A rapid
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Electric connections: screw terminals, max. cable section 2,5 mm²
- Degree of protection: IP20
- Dimensions: 4 DIN modules

DIMENSIONS





Power Supply BX-PW15 General purpose 12V/15W



DESCRIPTION

Device for supplying power to the Touch Panels, particularly suitable for the Kairos 24, Kairos 27 and Theo 10 models. The power supply unit can operate with input voltages between 100 and 240 V ac.

TECHNICAL DATA

- Input voltage: 100 ÷ 240 V ac, 50/60 Hz
- Output voltage: 12 V dc
- Maximum power: 15 W
- Insulation: Class II
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Humidity: max. 93% (non-condensing)
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Electric connections: screw terminals, max. cable section 2,5 mm²
- Degree of protection: IP30

Line coupler BX-LC02



DESCRIPTION

BX-LC02 is an area/line coupler which interconnects two KNX data transmission lines ensuring galvanic decoupling between them. Each bus line of a KNX installation can operate independently of the other areas/lines.

BX-LCO2 supports KNX Data Secure communication (KNX Data Secure telegrams can be processed and filtered according to settings).



USB Interface BX-DINUSB NEW

DESCRIPTION

BX-DINUSB is a DIN-rail KNX interface for KNX / USB bi-directional communication that allows you to connect to a bus line with your PC. The USB connection is galvanically isolated from the KNX bus. Ideal for the use of the ETS software, both for programming and for data monitoring sessions.

TECHNICAL DATA

- PC connection to KNX systems.
- Addressing, programming and KNX device diagnostics.
- Compatible with KNX Data Secure products.
- Quick download of applications (Long Frame support from ETS5).
- Compatible with ETS4, ETS5 (and higher).



USB Interface BX-USB



DESCRIPTION

BX-USB is a KNX bi-directional KNX / USB communication interface that allows you to connect to a bus line with your PC. The USB connection is galvanically isolated from the KNX bus.

Ideal for use with ETS software, both for programming and data monitoring sessions. Compatible with the KNX Association Falcon driver.

TECHNICAL DATA

- Compatibility: ETS3 and later Falcon
- Power consumption: USB 200mw KNX 100mw
- Dimensions (L1-L2-H): 90-91-12 mm

Terminals BX-SP01



TECHNICAL DATA

- Number of contacts: 8
- Number of potentials: 2
- Min wire dimensions: 22AWG
- Max wire dimensions: 18AWG
- Rated voltage: 100VAC
- Maximum current: 6A

DESCRIPTION

BX-SP01 is a box of 50 KNX connectors. These are connectors for applications that comply with the European Installation Bus (EIB) standard and enable communication between the device and the KNX bus.

KNX cable BX-SP05/06

THE CABLE IS COMPOSED OF:

- 1. Conductor
- 2. Insulation
- 3. Separator
- 4. Shielding5. Drainage
- 6. Sheath

DESCRIPTION

BX-SP05/06 is a 100 m skein of 4/2-pole KNX cable. The cable is made of 2 twisted pairs with 0.8mm cross section, shielded with Al/Pet tape, fire retardant and low halogen emission.

TECHNICAL DATA

- Cable $2 \times 2 \times 0.80 \text{ mm}^2$
- Conductor: annealed copper (cl. 1)
- Insulation: PVC quality R2
- Separator: Pet tape
- Drainage: tinned copper annealed (formation 1 x 0,40 mm)
- Shielding: Al/Pet tape
- Sheath: PVC quality RZ
- Sheath colour: RAL 6018
- Reduced halogen emission: <22%
- Capacity according to: <100 pF/m a 10 KHz
- Inductance: <0,85 uH/m a 10 KHz
- Rated voltage: 300 V
- Maximum voltage: 330 V
- Test voltage: 4000 V
 Temp. Max exercise: 70 °C
- Short-circuit temp. 160 °C
- Temp. Installation: 0 °C
- Radius of curvature: 53 mm



Gateway BX-DALIPLUS



DESCRIPTION

The BX-DALIPLUS gateway is a completely new device that allows a KNX line to be merged with a DALI line. BX-DALIPLUS operates as a "master" on the DALI and features the traditional 16-18 V dc output on terminals named D+ and D- and a maximum current limitation to 250 mA. It allows the control and regulation of up to 64 DALI devices, managed individually or in groups up to a maximum of 16.

The device can also manage up to 16 scenarios.

Error messages of the individual reactor and each lamp can be transmitted to the KNX via appropriate communication objects. It is possible to control individual DALI devices even if they are assigned to different groups. A DALI device can be part of several groups. It has a post-installation function for the modification of installations already in service.

It also includes advanced DALI driver address programming functions.

It is possible to configure the device via ETS or via the DCA interface which can be downloaded from the KNX or Blumotix website.

TECHNICAL DATA

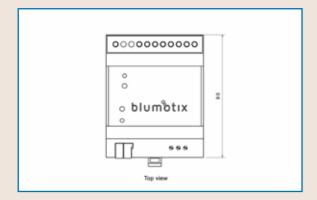
- Supply voltage: 100 ÷ 240 V ac, 50/60 Hz
- Outputs: DALI D+, D-, 16 ÷ 18 V dc, 250 mA max, short-circuit proof
- Interfaces: KNX, DALI
- Single master control device type, Category I
- Compatible with DT6 LED lamp drivers
- Operating temperature: -5 ÷ +45 °C (internal use)
- Connection to KNX bus: 2-pole plug-in terminal d=0.8 mm
- Electrical connections: power supply and DALI screw terminal, 1,5 \div 2,5 mm 2
- Degree of protection: IP 20
- Dimensions: 4 DIN modules

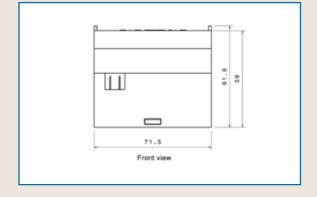
DGA

DCA

Graphic interface app for programming, compatible with ETS software.

DIMENSIONS





Universal Dimmer BX-DUNIV



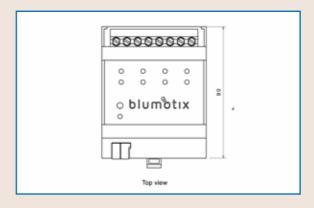
DESCRIPTION

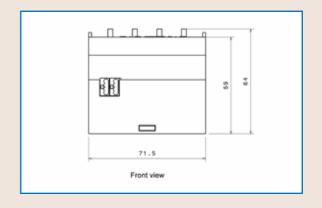
Universal KNX Blumotix dimmer actuator (RLC, LED, CFL) with 2 channels. BX-DUNIV is the dimmer capable of delivering up to 300 W at 230 V ac on each of the two available lines. The dimming curves can be configured to suit the type of light source used. Possibility of driving the lamps in two modes: "LE" Leading Edge, with start phase cut, and "TE" Trailing Edge, with end phase cut. The front panel features manual controls for adjusting the outputs.

BX-DUNIV is able to achieve low brightness, even with modern fluorescent lamps or LEDs, stabilises the brightness of energy-saving sources and solves unwanted side effects: buzzing, flashing, unstable operation.

TECHNICAL DATA

- Input voltage: 230 V ac, 50/60 Hz
- Power Supply 29 V dc KNX bus
- KNX section with bus power supply: 10 mA
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Humidity: max. 93% (non-condensing)
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Electric connections: screw terminals, max. cable section 4 mm²
- Degree of protection: IP20
- Dimensions: 4 DIN modules







Constant voltage dimmer BX-DM04



DESCRIPTION

KNX Blumotix 4-channel dimmer actuator for dimming White and RGB LED strips (common anode connection) operating at 12 and 24 V ac.

It provides a maximum current of 7.8 A per channel corresponding to a 40 metre RGB LED strip (14.4 W/m at 24 V). BX-DMO4 regulates brightness by modulating the output voltage.

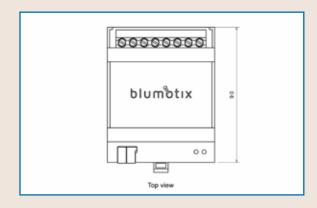
TECHNICAL DATA

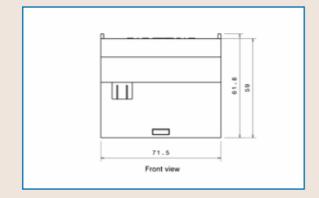
- Auxiliary power supply 12 ÷ 24 V dc, max 750 W
- Output voltage: PWM (Vout max = Vin)
- Output current: max 7.8 A for channel
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Humidity: max. 93% (non-condensing)
- Degree of protection: IP20
- Dimensions: 4 DIN modules

KNX FUNCTIONS

- LED intensity adjustment
- Modulation output voltage of the power supply
- 4 independent channels

DIMENSIONS





Constant voltage dimmer BX-DM03



DESCRIPTION

BX-DM03, KNX Blumotix actuator, common anode dimmer for LED lamps with current control.

It has 4 channels that can be programmed to work independently with white lamps or can be synchronised to control the colours of an RGB/RGBW lamp.

Its main feature is that it works with an external power supply unit that can be chosen according to the power to be applied. Each channel can be programmed via dip switches to deliver the appropriate current for the type of lamp installed according to the pre-set standard values: 350 mA, 700 mA and 1000 mA, with 12 or 24 or 48 V dc power supply units.

TECHNICAL DATA

- Input voltage: up to 48 V dc
- Maximum output current: 350 mA, 700 mA, 1000 mA
- Maximum output voltage modulated as a function of input voltage
- Number of outputs: 4
- Power consumption: up to 200 W
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Dimensions: 4 DIN modules

KNX FUNCTIONS

- Individually programmable channels
- Brightness adjustment with 4-bit objects (DT3 incremental method) and 1 Byte objects (DT5 brightness percentage)
- On and off function with 1-bit objects (DT1 on off)
- Saving the brightness value when the channel is switched off
- Notification of status
- RGBW operating mode with synchronized channels
- Timed management of power-on, power-off and transition
- 24 programmable scenarios and execution in sequence of colored transitions exploiting the order of the scenarios in sequential or causal way.





Contact interfaces 2 and 4 channels with LEDs
BX-T2XIOL
BX-T4XIOL



DESCRIPTION

BX-T2XIOL and BX-T4XIOL are 2-channel and 4-channel pushbutton and output management interfaces.

What makes them different from the other interfaces is the signalling LED.

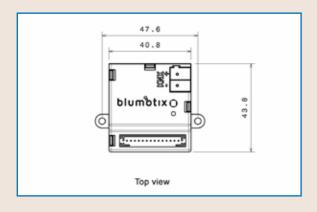
On the 15 cm long cable there are 2 or 4 twisted pairs for direct connection to the buttons.

The output management is completely independent from the inputs and allows a very flexible configuration.

KNX FUNCTIONS

- Power-on utilities
- Opening and closing of shutters/blinds
- Scenarios
- Setting of a light source
- Cyclic sending of values
- Sending forcing and blocking values
- Multi-action commands

DIMENSIONS

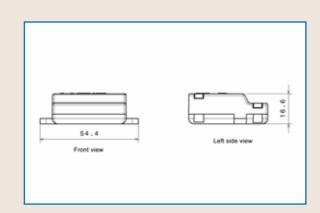


TECHNICAL DATA

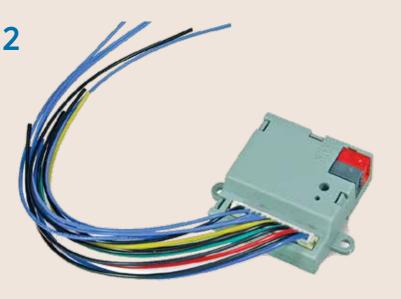
- Power Supply 29 V dc KNX bus
- Power consumption: <0,25 W
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Maximum cable length: 10 mt
- Degree of protection: IP20
- Dimensions: 54 x 44 x 17 mm

OUTPUTS

- On-off state
- Alarm status 1
- Alarm status 2
- Led control with 2 1-bit communication objects
- Fixed and variable frequency flashing



Contact interfaces 2 and 4 channels BX-2XIO BX-4XIO



DESCRIPTION

BX-2XIOL and BX-4XIOL are 2-channel and 4-channel pushbutton and output management interfaces. On the 15 cm long cable there are 2 or 4 twisted pairs for direct connection to the buttons.

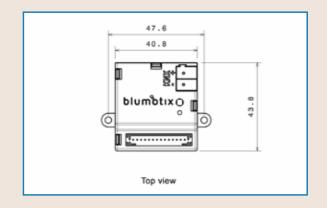
The output management is completely independent from the inputs and allows a very flexible configuration.

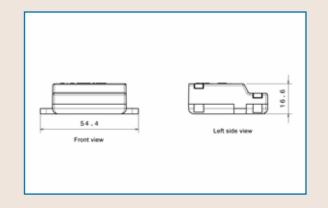
KNX FUNCTIONS

- Power-on utilities
- Opening and closing of shutters/blinds
- Scenarios
- Dimmer adjustment
- Long press command

TECHNICAL DATA

- Power Supply 29 V dc SELV KNX bus
- Power consumption: <0,25 W
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Maximum cable length: 10 mt
- Degree of protection: IP20
- Dimensions: 54 x 44 x 17 mm







4-channel contact interfaces with flushmounted temperature probe BX-TE



DESCRIPTION

BX-TE is a KNX pushbutton interface device with 4 inputs that converts a traditional push-button panel into a KNX source. It has no local control commands, and therefore requires a supervisory device in the installation for setting and displaying, such as a Blumotix Touch Panel or an iOS or Android Smartphone with KRIM, an application developed by Blumotix, installed. The temperature probe provides an accurate reading of the room temperature and makes the necessary adjustments for conditioning control. It is small in size and can be installed on the back of the hole covers of the traditional civil series, suitably perforated to allow correct ambient temperature measurement.

KNX FUNCTIONS

- Power-on utilities
- Opening and closing of shutters/blinds
- Setting of a light source
- Scenarios
- Very precise temperature reading thanks to digital temperature probe
- Climate control: set-point setting; summer/winter mode selection; fancoil/velux function; PID control; temperature control

TECHNICAL DATA

- Power supply: via KNX bus 29 V dc SELV
- Power consumption: 0,25 W
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Maximum length of input cables and probe: 10 m
- Degree of protection: IP20
- Dimensions: 54mm x 44mm x 17mm

Power-on utilities

• Opening and closing of shutters/blinds

4-channel contact

interfaces with flush-

mounted temperature

and humidity probe

BX-TU

DESCRIPTION

• Setting of a light source

KNX FUNCTIONS

- Scenarios
- Very precise temperature reading thanks to digital temperature probe
- Climate control: set-point setting; summer/winter mode selection; fancoil/velux function; PID control; humidity level control.

TECHNICAL DATA

BX-TU is a KNX pushbutton interface device with 4 inputs that converts a traditional pushbutton panel into a KNX source.

correct ambient temperature measurement. The version with humidity probe measures the dew point temperature.

such as a Blumotix Touch Panel or an iOS or Android Smartphone with KRIM, an application developed by Blumotix, installed.

It does not have local control commands, and therefore requires a supervisory device in the installation for setting and displaying,

The temperature probe provides an accurate ambient temperature reading and makes the necessary adjustments for climate control.

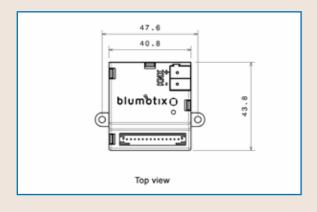
BX-TU is equipped with an extremely sophisticated solid state digital temperature and humidity probe, capable of measuring

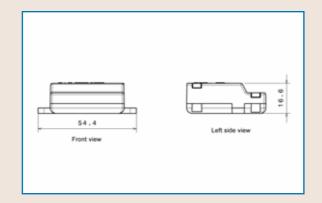
temperature between -40 °C and +125 °C, and relative humidity between 0% and 100%. and does not require any calibration procedure.

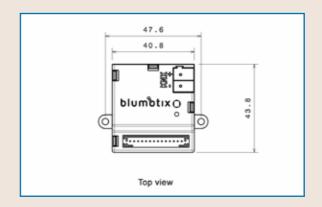
It has reduced dimensions and can be installed on the back of the hole covers of the traditional civil series, suitably perforated to allow

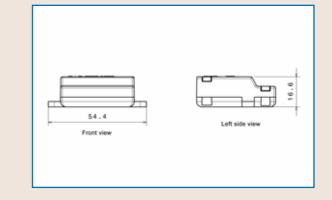
- Power supply: KNX bus, 29 V dc SELV
- Power consumption 0,25 W
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Maximum length of input cables and probe: 10m
- Degree of protection: IP20
- Dimensions: 54mm x 44mm x 17mm

DIMENSIONS















BX-TUC2 is a KNX push-button interface device with 4 inputs to transform a conventional push-button panel into a KNX source. It has no local control commands and therefore requires the use of a supervisor.

BX-TUC2 features a temperature probe that provides an accurate reading of the room temperature and makes the necessary adjustments for climate control in the market. The humidity probe measures % values with dew point measurement. The digital CO2 probe measures the CO2 present in the air and via threshold management it is possible to carry out checks to improve air quality; it does not require any calibration procedure. All probes are solid state and extremely sophisticated. They are small in size and can be installed on the back of the covers of traditional civil series, suitably drilled to allow correct measurement of room temperature/humidity and CO2.

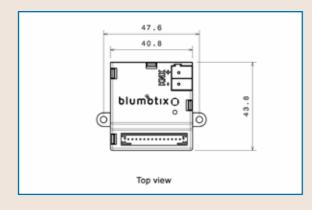
KNX FUNCTIONS

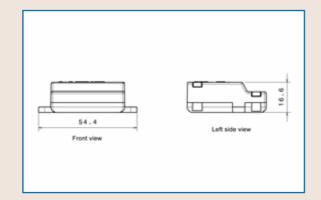
- Switching on utilities
- Opening and closing shutters
- Setting of a light source
- Scenarios
- Dimmer adjustment
- Long press commands
- Highly accurate temperature, humidity and CO2 readings thanks to digital probe; control logic for managing mechanical ventilation with thresholds is included
- Air conditioning control: set- point setting; summer/winter mode selection; fancoil function; PID control; humidity level control; air quality control.

TECHNICAL DATA

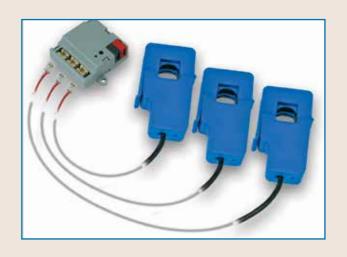
- Power supply: via KNX bus, 29 V dc SELV
- Power consumption: <0,25 W
- Operating temperature: -5 ÷ +45 °C (uso interno)
- Connection to KNX bus: morsetto ad innesto 2 poli d=0.8 mm
- Integrated temperature, relative humidity and CO2 sensors
- Maximum cable length: 10 mt
- Degree of protection: IP20
- Dimensions: 54 x 44 x 17 mm
- Temperature reading between $-40 \,^{\circ}\text{C}$ e $+125 \,^{\circ}\text{C}$.
- Relative humidity probe reading between 0% and 100%.
- CO2 probe reading between 400 ppm and 8192

DIMENSIONS





Current meter BX-ES03 with optional current clamp BX-TA01



DESCRIPTION

The BX-ES03 is a KNX device for measuring alternating electric current. Specifically, it measures the alternating current consumed by an integrated power line. The device includes an intelligent load control logic.

The meter has 3 analogue inputs for receiving independent current measurements from the BX-TA01 current clamps. The 3 inputs are independently programmable.

BX-TAO1 allows induction measurement of the consumption of a power line without the need to interrupt the conductor. This is made possible by the snap-on mechanism whereby cables up to 13 mm2 in diameter can be attached. The clamp has a sensitivity of 60 A/V and enables the instrument to measure electrical currents up to a maximum of 150 A.

KNX FUNCTIONS

- Energy saving: by enabling thresholds capable of notifying events on the KNX bus
- Load control: detection of overloads and tripping mechanisms to limit consumption.
- Power measurement
- Energy metering
- External probe input

TECHNICAL DATA

- Power supply: KNX bus, 29 V dc SELV
- Integrated load control (up to 8)
- Clamp sensitivity: 60 A/V
- Maximum detectable power: 10,7 kW (230 V ac)
- Connection to the BUS: coupling terminal, 2 pins, d=0.8 mm
- Degree of protection: IP20
- Dimensions: 54 x 44 x 17 mm

O



Radio frequency motion detector BX-DET01



DESCRIPTION

Concealed motion detector for installation above false ceilings or recessed. It can also be installed in masonry walls, wood, plasterboard etc. It allows a wide and easy parameterization by ETS, being suitable for lighting, people detection and anti-break in functions. Radio frequency technology.

- Detection area 2,5 m from the floor: Guaranteed 6x3 m/Maximum: 12x6 m.
- Power: 29 V dc from auxiliary power supply or from KNX BUS
- Auxiliary power supply of 12 ÷ 30 V dc (recommended), 35 mA from the auxiliary power supply, 1 mA from KNX BUS
- Safety low-voltage SELV, direct current 24 V
- Consumption (depending on the source)
- BUS KNX (Optional) 35mA from BUS KNX
- Mounting: on false ceilings or recessed in plasterboard and brick walls
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Type of protection: IP20
- Dimensions: 25 x 45 x 65 mm
- Weight: 115 g

Motion Detectors

BX-93382

KNX presence and brightness detector with infrared technology, in false ceiling version, suitable for detection in offices, meeting rooms, schools, hotel rooms and entirely made of white polycarbonate.

Equipped with a special optical system, suitable for detecting even the smallest movements, with 360° detection area and can be installed up to a height of 5m. Constant brightness adjustment and control outputs for HVAC, operating temperature: $-5 \div +45^{\circ}$ C (indoor use)



BX-93383

KNX presence and brightness detector with infrared technology, in semi-recessed version, can also be ceiling mounted with base code 93307, suitable for detecting in offices, meeting rooms, schools, hotel rooms and made entirely of white polycarbonate. Featuring a special optical system suitable for detecting even the smallest movements, with a 360° detection area and installable up to a height of 5 metres. Constant brightness adjustment and control outputs for HVAC, operating temperature: $-5 \div +45$ °C (indoor use).

BX-93384

KNX presence and brightness detector with infrared technology, in false ceiling version, for large detection areas, entirely made of white polycarbonate.

Featuring a special optical system suitable for detecting even the smallest movements, with 360° detection area and can be installed up to a height of 10m. Constant brightness adjustment and control outputs for HVAC, operating temperature: $-5 \div +45 \, ^{\circ}\text{C}$ (indoor use).

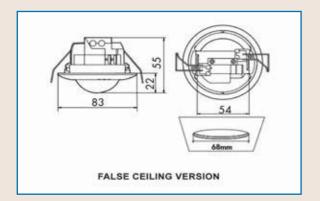


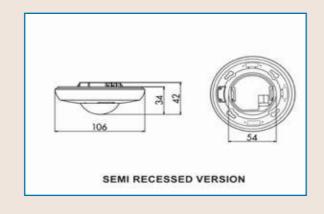
BX-93385

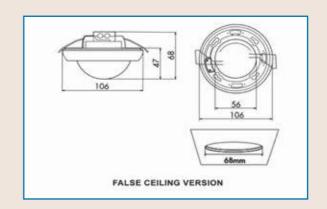
KNX presence and brightness detector with infrared technology, in semi-recessed version, for large detection areas, made entirely of white polycarbonate. Featuring a special optical system suitable for detecting even the smallest movements, with a 360° detection area that can be installed up to a height of 10 metres. Constant brightness adjustment and control outputs for HVAC, operating temperature: -5 \div +45 °C (indoor use).

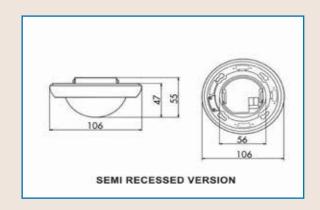


DIMENSIONS

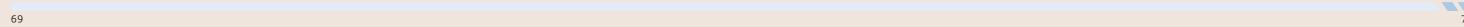












12-channel switching actuator BX-ACT12



DESCRIPTION

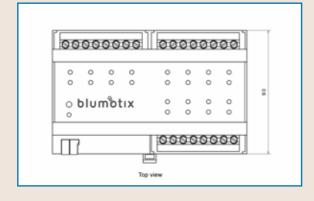
The BX-ACT12 is a 12-channel DIN rail-mounted load actuator for independent switching of loads by means of closing contacts. The 230 V ac switching output can be controlled by push buttons on the front. A green LED indicates the status of the channel. It features 16 A bi-stable relays with contacts connected directly to the terminals, without phase sharing. The screw terminals can accept cable sections of up to 5 mm2.

The relays used can withstand an inrush current of up to 320 A in the first 2 ms, making them particularly suitable for controlling inductive loads such as fluorescent or neon lamps.

KNX FUNCTIONS

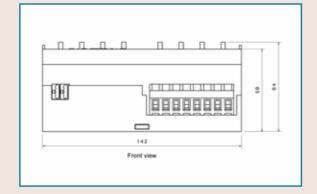
- Switching function
- Staircase light function
- Scenario function
- Logic functions: 16 generic logic operators are available to be assigned to the desired channels
- Channel status feedback

DIMENSIONS



TECHNICAL DATA

- Input voltage: 230 V ac, 50/60 Hz
- Power supply: KNX bus, 29 V dc SELV
- Current consumption by KNX bus: 12 mA
- Rated current of contacts: 16 A
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Electric connections: screw terminals, max. cable section 5 mm² (AWG10)
- Degree of protection: IP 20
- Dimensions: 8 DIN modules



8-channel switching actuator BX-ACT08



DESCRIPTION

The BX-ACT08 is an 8-channel load actuator for DIN rail mounting, for independent switching of loads via the closing contacts. The 230 V ac switching output can be controlled by push buttons on the front. A green LED indicates the status of the channel. It features 16 A bi-stable relays with contacts connected directly to the terminals, without phase sharing.

The screw terminals can accommodate cable sections up to 5 mm2.

The relays used can withstand an inrush current of up to 320 A in the first 2 ms, making them particularly suitable for controlling inductive loads such as fluorescent or neon lamps.

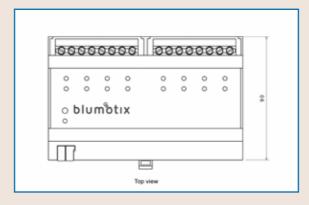
KNX FUNCTIONS

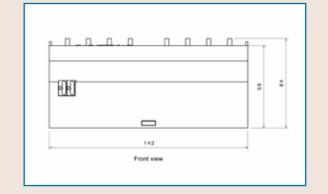
- Switching function
- Staircase light function
- Scenario function
- Logic functions: 16 generic logic operators are available to be assigned to the desired channels
- Channel status feedback

TECHNICAL DATA

- Input voltage: 230 V ac, 50/60 Hz
- Power supply: KNX bus, 29 V dc SELV
- Current consumption by KNX bus: 12 mA
- Rated current of contacts: 16 A
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Electric connections: screw terminals, max. cable section 5 mm² (AWG10)
- Degree of protection: IP 20
- Dimensions: 8 DIN modules

DIMENSIONS







4-channel switching actuator **BX-ACT04**



DESCRIPTION

The BX-ACT04 is a 4-channel load actuator for DIN rail mounting, for independent switching of loads via the closing contacts. The 230 V ac switching output can be controlled via push buttons on the front. A green LED indicates the status of the channel. It features 16A bi-stable relays with contacts connected directly to the terminals, without phase sharing. The screw terminals can accommodate cable sections up to 5 mm2.

The relays used can withstand an inrush current of up to 320 A in the first 2 ms, making them particularly suitable for controlling inductive loads typical of fluorescent or neon lamps.

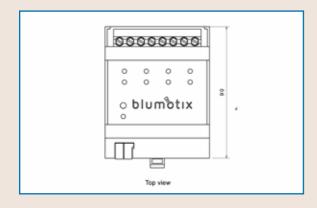
KNX FUNCTIONS

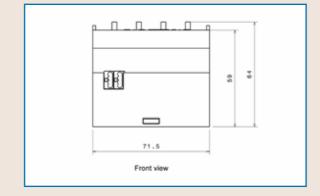
- Switching function
- Staircase light function
- Scenario function
- Logic functions: 16 generic logic operators are available to be assigned to the desired channels
- Channel status feedback

TECHNICAL DATA

- Input voltage: 230 V ac, 50/60 Hz
- Power supply: KNX bus, 29 V dc SELV
- Current consumption by KNX bus: 12 mA
- Rated current of contacts: 16 A
- Operating Temperature: -5 ÷ +45 °C (internal use)
- · Connection to the BUS: coupling terminal, 2 pins, d=0.8 mm
- Electric connections: screw terminals, max. cable section 5 mm² (AWG10)
- Degree of protection: IP 20
- Dimensions: 4 DIN modules

DIMENSIONS





6-channel roller shutter/Venetian blind actuator **BX-BLD6**



DESCRIPTION

The BX-BLD6 is an actuator for 6 roller shutters with relay outputs 16 A 230 V ac, 50/60 Hz, KNX standard, DIN rail installation (60715 TH35); it occupies 4×17.5 mm modules. The roller shutter / venetian blind actuator controls independent 230 V ac drives for the control and operation of roller shutters, venetian blinds, roller blinds and blackout blinds. The devices are powered by the bus and do not require an external auxiliary voltage; the output contacts are interlocked and potential-free in order to protect the drives from damage.

KNX FUNCTIONS

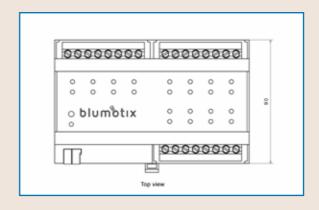
- Full up and down run
- Partial run with stop in position from 0 to 100% of the run . Power supply: KNX bus, 29 V dc SELV
- Position setting (change of preset position during operation)
- Slat tilt adjustment (for blinds)
- Insertion into scenarios
- Automatic control for protection from direct sunlight
- Automatic control for protection against weather conditions (rain, wind, frost)

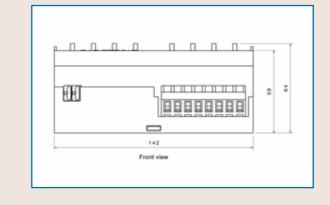
CONNECTIONS

The connection to the bus and to the shutter control devices is made directly via the terminals on the front of the actuator.

TECHINCAL DATA

- Input voltage: 230 V ac, 50/60 Hz
- Consumption on bus: 12 mA
- 6 independent outputs
- Rated current IN: 16 A
- Operating Temperature: $-5 \div +45$ °C (internal use)
- . Connection to the BUS: coupling terminal, 2 pins, d=0.8 mm
- Electric connections: screw terminals, max. cable section 5 mm² (AWG10)
- Degree of protection: IP 20
- Dimensions: 8 DIN modules







4-channel roller shutter/Venetian blind actuator **BX-BLD4**



DESCRIPTION

The BX-BLD4 is an actuator for 4 roller shutters with relay outputs 16 A 230 V ac, 50/60 Hz, KNX standard, DIN rail installation (60715 TH35); it occupies 4×17.5 mm modules. The roller shutter / venetian blind actuator controls independent 230 V ac drives for the control and operation of roller shutters, venetian blinds, roller blinds and blackout blinds. The devices are powered by the bus and do not require an external auxiliary voltage; the output contacts are interlocked and potential-free in order to protect the drives from damage.

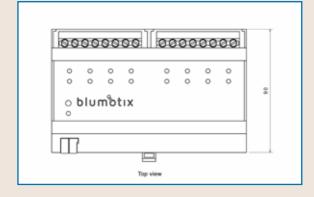
KNX FUNCTIONS

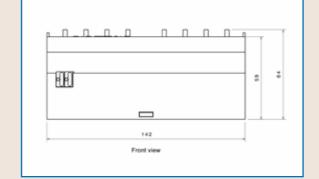
- Full up and down run
- Partial run with stop in position from 0 to 100% of the run lenath
- Position setting (change of preset position during operation)
- Slat tilt adjustment (for blinds)
- Insertion into scenarios
- Automatic control for protection from direct sunlight
- Automatic control for protection against weather conditions (rain, wind, frost)

CONNECTIONS

The connection to the bus and to the shutter control devices is made directly via the terminals on the front of the actuator.

DIMENSIONS





TECHINCAL DATA

- Power supply: KNX bus, 29 V dc SELV
- Consumption on bus: 12 mA
- 4 independent outputs
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Electric connections: screw terminals, max. cable
- Dimensions: 8 DIN modules

- Input voltage: 230 V ac, 50/60 Hz

- Rated current IN: 16 A
- Connection to the BUS: coupling terminal, 2 pins, d=0.8 mm
- section 5 mm² (AWG10)
- Degree of protection: IP 20

2-channel roller shutter/ Venetian blind actuator **BX-BLD2**



DESCRIPTION

The BX-BLD2 is an actuator for 2 roller shutters with relay outputs 16 A 230 V ac, 50/60 Hz, KNX standard, DIN rail installation (60715 TH35); it occupies 4×17.5 mm modules. The roller shutter / venetian blind actuator controls independent 230 V ac drives for the control and operation of roller shutters, venetian blinds, roller blinds and blackout blinds. The devices are powered by the bus and do not require an external auxiliary voltage; the output contacts are interlocked and potential-free in order to protect the drives from damage.

KNX FUNCTIONS

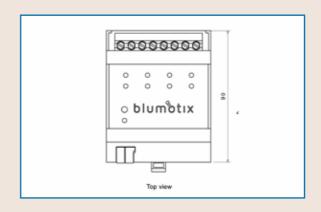
- Full up and down run
- Partial run with stop in position from 0 to 100% of the run
- Position setting (change of preset position during operation)
- Slat tilt adjustment (for blinds)
- Insertion into scenarios
- Automatic control for protection from direct sunlight
- Automatic control for protection against weather conditions (rain, wind, frost)

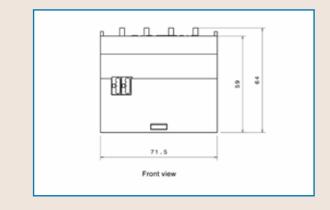
CONNECTIONS

The connection to the bus and to the shutter control devices is made directly via the terminals on the front of the actuator.

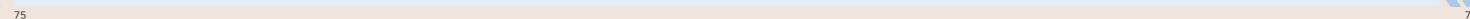
TECHINCAL DATA

- Input voltage: 230 V ac, 50/60 Hz
- Power supply: KNX bus, 29 V dc SELV
- Consumption on bus: 12 mA
- 2 independent outputs
- Rated current IN: 16 A
- Operating Temperature: -5 ÷ +45 °C (internal use)
- · Connection to the BUS: coupling terminal, 2 pins,
- Electric connections: screw terminals, max. cable section 5 mm² (AWG10)
- Degree of protection: IP 20
- Dimensions: 4 DIN modules









24-channel multifunctional actuator BX-SW24



DESCRIPTION

The BX-SW24 is a 24-channel DIN-rail-mounted combination (light/shutter) actuator for independent switching of loads via the closing contacts.

The 230 V ac switching output can be controlled by the push buttons on the front.

A green LED indicates the status of the channel.

It is equipped with 16 A bistable relays with contacts connected directly to the terminals, without phase sharing. The screw terminals can accept cable sections up to 5 mm2.

The relays used can withstand an inrush current of up to 320 A in the first 2 ms, making them particularly suitable for controlling inductive loads such as fluorescent or neon lamps.

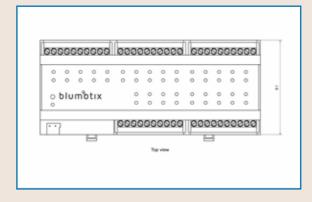
KNX FUNCTIONS

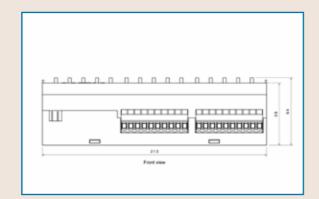
- Switching function
- Staircase light and delay functions
- Channel status feedback
- Checking roller shutters and Venetian blinds
- Locking function
- General functions

TECHINCAL DATA

- Input voltage: 230 V ac, 50/60 Hz
- Power supply: KNX bus, 29 V dc SELV
- Consumption on bus: 12 mA
- Rated current IN: 16 A
- Operating Temperature: $-5 \div +45$ °C (internal use)
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Electric connections: screw terminals, max. cable section 5 mm² (AWG10)
- Degree of protection: IP 20
- Dimensions: 12 DIN modules

DIMENSIONS





12-channel multifunctional actuator BX-MFB12



DESCRIPTION

The BX-MFB12 is a 12-channel DIN-rail-mounted multifunctional actuator for independent switching of loads by means of closing contacts.

The 230 V ac switching output can be controlled by the push buttons on the front.

A green LED indicates the status of the channel.

It features 16 A bistable relays with contacts connected directly to the terminals, without phase sharing.

The screw terminals can accept cable sections up to 5 mm2.

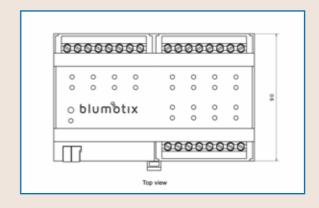
The relays used can withstand an inrush current of up to 320 A in the first 2 ms, making them particularly suitable for controlling inductive loads such as fluorescent or neon lamps.

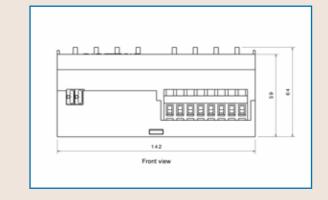
KNX FUNCTIONS

- Switching function
- Staircase light function
- Scenario function
- Logical functions: 16 generic logical operators are available to be assigned to the desired channels without restrictions.
- Channel status feedback
- Checking roller shutters and venetian blinds
- Thermostatic valve control with PWM algorithm and fancoil devices

TECHINCAL DATA

- Input voltage: 230 V ac, 50/60 Hz
- Power supply: KNX bus, 29 V dc SELV
- Consumption on bus: 12 mA
- Rated current IN: 16 A
- Operating Temperature: $-5 \div +45$ °C (internal use)
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Electric connections: screw terminals, max. cable section 5 mm² (AWG10)
- Degree of protection: IP 20
- Dimensions: 8 DIN modules







8-channel multifunctional actuator BX-MFB08



DESCRIPTION

The BX-MFB08 is an 8-channel DIN-rail-mounted multifunctional actuator for independent switching of loads by means of closing contacts.

The 230 V ac switching output can be controlled by the push buttons on the front.

A green LED indicates the status of the channel.

It features 16 A bi-stable relays with contacts connected directly to the terminals, without phase sharing.

The screw terminals can accept cable sections up to 5 mm2.

The relays used can withstand an inrush current of up to 320 A in the first 2 ms, making them particularly suitable for controlling inductive loads such as fluorescent or neon lamps.

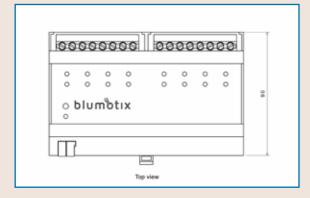
KNX FUNCTIONS

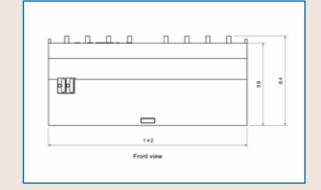
- Switching function
- Staircase light function
- Scenario function
- Logical functions: 16 generic logical operators are available to be assigned to the desired channels without restrictions.
- Channel status feedback
- Checking roller shutters and venetian blinds
- Thermostatic valve control with PWM algorithm and fancoil devices

TECHINCAL DATA

- Input voltage: 230 V ac, 50/60 Hz
- Power supply: KNX bus, 29 V dc SELV
- Consumption on bus: 12 mA
- Rated current IN: 16 A
- Operating Temperature: $-5 \div +45$ °C (internal use)
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Electric connections: screw terminals, max. cable section 5 mm² (AWG10)
- Degree of protection: IP 20
- Dimensions: 8 DIN modules

DIMENSIONS





4-channel multifunctional actuator BX-MFB04



DESCRIPTION

The BX-MFB04 is an 4-channel DIN-rail-mounted multifunctional actuator for independent switching of loads by means of closing contacts.

The 230 V ac switching output can be controlled by the push buttons on the front.

A green LED indicates the status of the channel.

It features 16 A bi-stable relays with contacts connected directly to the terminals, without phase sharing.

The screw terminals can accept cable sections up to 5 mm2.

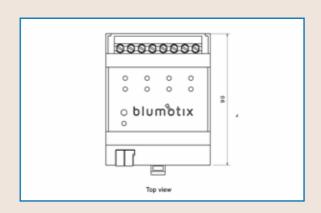
The relays used can withstand an inrush current of up to 320 A in the first 2 ms, making them particularly suitable for controlling inductive loads such as fluorescent or neon lamps.

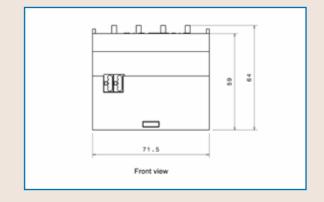
KNX FUNCTIONS

- Switching function
- Staircase light function
- Scenario function
- Logical functions: 16 generic logical operators are available to be assigned to the desired channels without restrictions.
- Channel status feedback
- Checking roller shutters and venetian blinds
- Thermostatic valve control with PWM algorithm and fancoil devices

TECHINCAL DATA

- Input voltage: 230 V ac, 50/60 Hz
- Power supply: KNX bus, 29 V dc SELV
- Consumption on bus: 12 mA
- Rated current IN: 16 A
- Operating Temperature: $-5 \div +45$ °C (internal use)
- Connection to the BUS: coupling terminal, 2 pins, d=0.8 mm
- Electric connections: screw terminals, max. cable section 5 mm² (AWG10)
- Degree of protection: IP 20
- Dimensions: 4 DIN modules









Flush-mounted actuator 1 channel and 3 inputs BX-CI01



The new BLUMOTIX flush-mount actuators are part of the KNX Secure devices. BX-CI01 is a 1 module 16 A KNX on/off actuator.

The actuator is also equipped with two inputs for mounting in a box for switches. They can be connected to potential-free contacts.

The two inputs can be locked independently or play various functions.

It also has an additional input allowing for example the connection of remote temperature probe (NTC).



KNX FUNCTIONS

- NC contact and NO contact operation
- Feed-back function
- Connection and forced-run function
- Central switching functions
- Timed functions: on/off delay, staircase light switch with pre-warning function
- Scenario function
- Hour counter
- Control function Switching
- Control function Brightness adjustment (incl. colour temperature control)
- Venetian blind control function
- Switching control function Transducer (1 byte, 2 bytes, 3 bytes and 6 bytes incl. default values for RGBW and colour temperature)
- Control function scenario activation
- Control function 2-channel control
- Control function External control of a controller
- Blocking functions
- Adjustable suppression time

TECHINCAL DATA

- Output via KNX telegrams or controllable external control inputs
- Three external control inputs on connection of deenergised contacts or condensate/leakage sensors.
- NTC temperature sensor connectable to input 3.
- Sensor R25°C 33 KΩ B25/100 4300K
- Power supply via KNX, no additional supply voltage required
- Compatible with KNX Data Secure.

Multifunctional flush-mounted actuator 2 channels and 3 inputs BX-CI02

DESCRIPTION

The new BLUMOTIX recessed actuators are part of the KNX Secure category. BX-CI02 is a switch actuator, 2 channels / actuator for blinds, 1channel. The actuator is also equipped with two inputs for mounting in one box for switches. They can be connected to potential-free contacts.

The two inputs can be locked independently or perform various functions.



blumotix

Combi Actuator

BX-CI02 16 AX 250 V- μ

2CH 16A + 3 Dig. Input

SWITCH FUNCTIONS

- NC and NO contact operation
- Feed-back function
- Linking and forced-run function
- Central switching functions with collective feed-back
- Timed functions: on/off delay, staircase light switch with pre-warning function
- Scenario function
- Hour counter

EXTERNAL CONTROL INPUT FEATURES

- Control function Switching
- Control function Brightness adjustment (incl. colour temperature control)
- Venetian blind control function
- Switching control function Transducer (1 byte, 2 bytes, 3 bytes and 6 bytes incl. default values for RGBW and colour temperature)
- Control function Scenario activation
- Control function 2-channel control
- Control function External control of a controller
- Blocking functions
- Adjustable suppression time

PROPERTIES VENETIAN BLIND MODE

- Suitable for AC 110...230 V motors
- Operating modes "Venetian blind with slats", "Roller shutter/awning", "Window ventilation/roof window"
- Directly controlled blind position
- Direct slat position adjustment possible
- Feedback of motion status, blind position and slat position
- Forced position for superordinate control
- Safety function: 3 independent wind alarms, rain alarm, frost alarm
- Sun protection function with automatic heating/cooling
- Blocking function (blocking protection)
- Scenario function

TECHINCAL DATA

- Output via KNX telegrams or controllable external control inputs.
- Three external control inputs on connection of powerless contacts or condensate/leakage sensors.
- NTC temperature sensor connectable to input 3.
- Sensor R25°C 33 KΩ B25/100 4300K
- Power supply via KNX, no additional supply voltage required
- Compatible with KNX Data Secure.



THEO 10 Touch panel 10,1" BX-T10



DESCRIPTION

The THEO line is designed to integrate all the functions necessary for home control.

THEO Touch Panels allow you to control any KNX installation in a simple and intuitive way.

The use of multi-finger capacitive glass allows you to drag and slide the controls to make the use of the device even simpler and more intuitive. The IPS display offers HD quality video definition with a very wide vertical and horizontal viewing angle.

The integrated webserver allows remote control of the KNX system directly from a Smartphone or Tablet using the Blumotix KRIM App available in IOS and Android versions. KRIM is free of charge and can be downloaded from iTunes or Google Play.



KNX FUNCTIONS

- Light control
- Window control
- Air conditioning
- Load control
- Camera management
- Timer and chronothermostat
- Scenario programming

TECHNICAL DATA

- Output power Supply: 12 ÷ 24 V dc
- Power absorption: 15 W
- Display: 10,1" IPS 16:9 1280x800 pixel
- CPU iMx6 Dual Lite 1 GHz
- RAM DDR21Gb
- Slot micro USB OTG
- Integrated BCU KNX
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Connection to the BUS: coupling terminal, 2 pins, d=0.8 mm
- Degree of protection: IP20
- . Dimensions: 282 x 168 x 12 mm

THEO 7 Touch panel 7" BX-T7



DESCRIPTION

The THEO line is designed to integrate all the functions necessary for home control.

THEO Touch Panels allow you to control any KNX installation in a simple and intuitive way.

The use of multi-finger capacitive glass allows you to drag and slide the controls to make the use of the device even simpler and more intuitive. The IPS display offers HD quality video definition with a very wide vertical and horizontal viewing angle.

The integrated webserver allows remote control of the KNX system directly from a Smartphone or Tablet using the Blumotix KRIM App available in IOS and Android versions. KRIM is free of charge and can be downloaded from iTunes or Google Play.



Flush-mounting Box BX-KW07



Flush-mounting Box for Theo 10 e 7

KNX FUNCTIONS

- Light control
- Window control
- Air conditioning
- Load control
- Camera management
- Timer and chronothermostat
- Scenario programming

TECHNICAL DATA

- Output power Supply: 12 ÷ 24 V dc
- Power absorption: 10 W
- Display: 7,0 IPS 16:9 1024 × 600 pixel
- CPU iMx6 Dual Lite 1 GHz
- RAM DDR21Gb
- Slot micro USB OTG
- Integrated BCU KNX
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Degree of protection: IP20
- Dimensions: 282 x 168 x 12 mm



KAIROS 24 4,3" Touch panel with miniserver BX-K24MS



DESCRIPTION

The resistive Touch Panels of the Blumotix Kairos line allow the user to display and modify the status of each KNX device installed in the system in a simple and intuitive way, thus enabling complete home control.

The appearance of the individual Touch Panels is fully customisable thanks to the possibility of modifying the graphic characteristics of the user interface by inserting maps, plans, images and icons to describe your home in the most intuitive way.

KAIROS 24 comes complete with a KNX Miniserver that supports remote connection with your smart-phone. Thanks to the free KRIM app, available for iOS and Android mobile devices, you can control your home remotely. Navigation can be fully programmed using the free Sentiero software, both in terms of graphic features and command organisation.



KNX FUNCTIONS

- Light control
- Window control
- Air conditioning
- Load control
- Camera management
- Timer and chronothermostat
- Scenario programming

TECHNICAL DATA

- Power supply: : 12 ÷ 24 V dc
- Power absorption: 2 W
- 4.3 inch TFT color display
- Screen resolution 480 x 272 pixels
- LED backlight
- Computer ARM9 454 MHz
- RAM DDR2 128 Mb
- Micro SD slot
- Integrated BCU KNX
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Degree of protection: IP20
- Rectangular flush-mounting box (504)
- Dimensions: 147 x 87 x 37 mm

KAIROS 27 7" Touch panel with miniserver BX-K27MS



DESCRIPTION

The resistive Touch Panels of the Blumotix Kairos line allow the user to display and modify the status of each KNX device installed in the system in a simple and intuitive way, thus enabling complete home control.

The appearance of the individual Touch Panels is fully customisable thanks to the possibility of modifying the graphic characteristics of the user interface by inserting maps, plans, images and icons to describe your home in the most intuitive way.

KAIROS 27 comes complete with a KNX Miniserver that supports remote connection with your smart-phone. Thanks to the free KRIM app, available for iOS and Android mobile devices, you can control your home remotely. Navigation can be fully programmed using the free Sentiero software, both in terms of graphic features and command organisation.



KNX FUNCTIONS

- Light control
- Window control
- Air conditioning
- Load control
- Camera management
- Timer and chronothermostat
- Scenario programming

TECHNICAL DATA

- Power supply: 12 ÷ 24 V dc
- Absorption: 2 W
- 7 inch TFT color display
- Resolution 800 x 480 pixels
- LED backlight
- Computer ARM9 454 MHz
- RAM DDR2 128 Mb
- Micro SD slot
- Integrated BCU KNX
- Network card: 100 Mb (RJ45)
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Degree of protection: IP20
- Rectangular flush-mounting box (504)
- Dimensions: 219 x 126 x 40 mm



Miniserver BX-MS02

DESCRIPTION

The BX-MS02 is a modern solid state memory server that allows you to view and control functions in your Konnex system via remote devices connected to the TCP/IP network.

The device is suitable for installation on 35 mm DIN rail. Interaction is via the KRIM and Doory apps that can be downloaded and installed on your terminal. Dedicated versions are available for iOS, Android and Windows 7. The Blumotix BX-MS02 KNX Miniserver comes with Sentiero programming software that can be installed to create graphical displays for control screens.



TECHNICAL DATA

- Power supply: : 12 ÷ 24 V dc
- Consumption 8 W
- SDRAM 128 Mb
- SD slot
- Integrated BCU KNX
- Ethernet port 100 Mb (RJ45)
- Operating Temperature: -5 ÷ +45 °C (internal use)
- Connection to the BUS: coupling terminal, 2 pins, d=0,8 mm
- Degree of protection: IP20
- Dimensions: 4 DIN modules

KNX/multi-protocol logic controller **BX-BLUSERVER**

DESCRIPTION

BX-BLUSERVER is the easiest way to program complex logic in KNX/EIB, Modbus, BACnet networks. BX-BLUSERVER will allow you to efficiently customise building automation processes, offering unlimited flexibility benefits to end users in a cost-effective way.

BX-BLUSERVER is an embedded platform with integrated Ethernet, USB, KNX/EIB, Serial interfaces.

BX-BLUSERVER can be used as a cross-standard gateway, logic engine, visualisation platform, IP Router.

Scripting templates provide a flexible and intuitive configuration interface and integration with cloud/web services and thirdparty devices. Through the application of customised scripts, the BX-BLUSERVER can simultaneously function as a • Object logging with trend support and data export to external servers thermostat, security panel, lighting controller, etc.

REMOTE CONTROL APP







- Power-over-Ethernet supply
- Automatic control and information of the Ethernet connection in case of problems
- Application development and application shop
- Cloud-ready device with Microsoft Azure, Amazon Web Services and other supported services
- Gateway and uniform control of KNX, ModBus RTU/TCP, BACnet IP, DMX, M-Bus, GSM and more
- Unlimited scenario and logic engine
- Unlimited visualisation platform for PC and touch devices
- Dimensions: 3 DIN units
- Remote control of KNX bus and reprogramming of KNX device
- iOS Siri and Google Voice control supported via native apps.











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