

## INTRODUCTION

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## We believe

in technology that makes life easier.

We develop devices that make everyday gestures easier.
Our scenario is the whole world.

## We want

to combine technology and design.

To give life to something unique that combines two seemingly distant worlds.



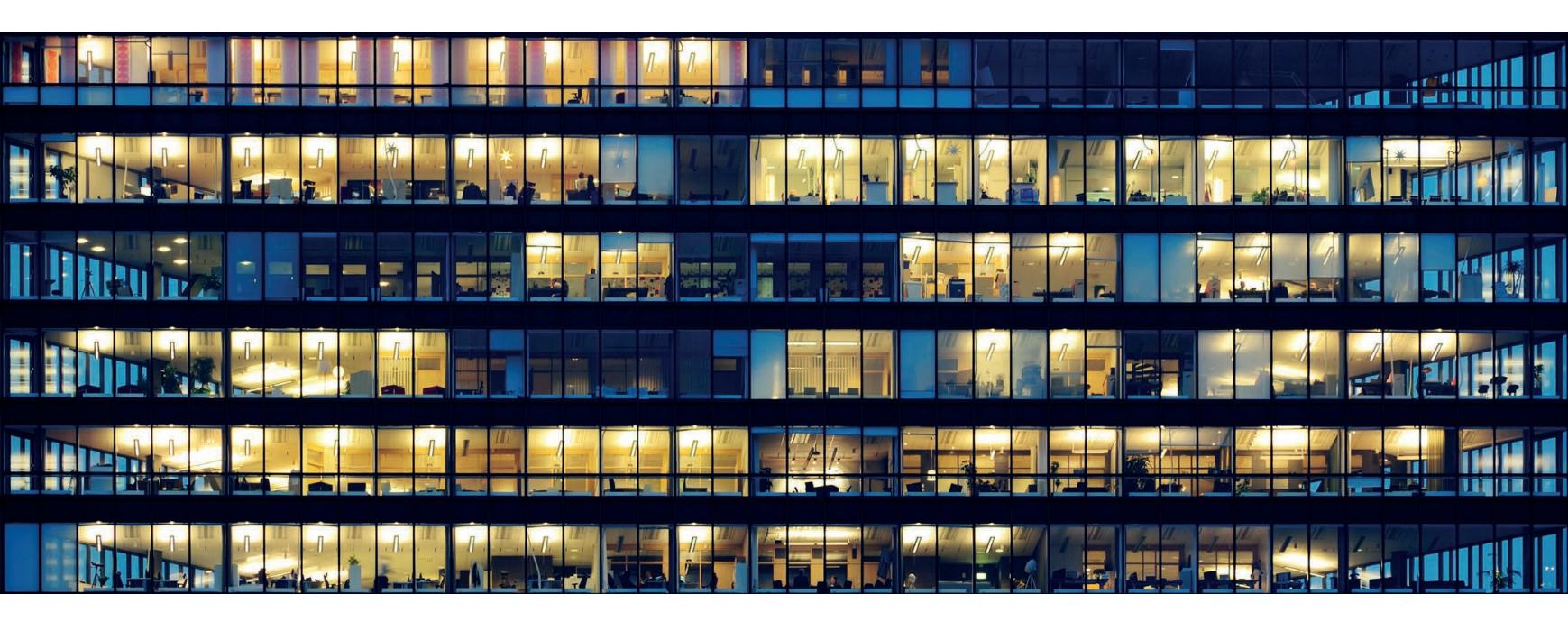
## **The Company**

#### Technology meets design.

We offer a form without ever leaving aside its content. We present a product with a strong technological content which is also cutting edge from an aesthetic point of view. Design becomes the driving force behind technology, the key to opening our doors to the world of smart homes. We use the potential of the KNX system to guarantee high quality standards for a project we have called Ekinex®.

#### Our devices are developed and manufactured in Italy.

Ekinex® has created a line of objects that encloses the essence of the Made in Italy: design, attention to detail, technological innovation and advancement. Designed for a global market, Ekinex® products are an expression of the new Italian tradition, which combines the attention of craftsmanship in the creation of the product to high technological levels. Ekinex® supports the idea of a design that is not just an aesthetic exercise, but one that understands, as fundamental factors, ease of use, immediate understanding of the function and the balanced and intelligent application of technology.



## The automation of buildings

Ekinex® is an intelligent system for controlling homes and buildings, developed in accordance with the open KNX standard. Having an Ekinex® system means to increase comfort and safety, reduce energy consumption and raise the long-term value of a building using products characterized by fine aesthetics and a great simplicity of use.

**Setting up an Ekinex® system is easy**: a signal network is arranged at project level, reaching all those areas where commands, sensors or loads to be system-controlled are expected. The arrangement, achieved by means of a simple signal cable, represents an authentic network for the exchange of information between Ekinex® devices.

The scalability, typical of Ekinex® building control systems, even allows to start off with a basic equipment, both in terms of functions and devices, which may be extended at a later stage, depending on individual requirements, the location's infill and economic availability. **The investment is quickly paid back, and is protected in time.** Thanks to the native openness and interoperability of the KNX standard, the system can even integrate functions that may not be available within the Ekinex® range of products.



### The KNX standard

Great developments in the field of home and building automation were made possible especially thanks to an open, modular and interoperable standard like KNX. This innovative standard was born from the merging of three European systems (EIB, BatiBUS and EHS), developed and brought to the market in the early 90's. The diffusion of the system was facilitated by an intense work of cooperation at normative level in the standard committee at European level. For this reason, too, **KNX is a standard characterized by a total conformity with norm EN 50090** on electronic systems for the control of homes and buildings (HBES, Home and Building Electronic Systems).

The twenty-year presence on the market of this standard offers the best guarantee in terms of reliability and consolidation of the technology used. The openness of the standard and that of the KNX Association, on the other hand, ensure availability of products in the long run and a constant development, both in terms of technology and offering of products, functions and applications.

The vitality of KNX proposals is witnessed by the sustained expansion of the association, seeing the entry of manufacturers, coming from many different areas, and from the tens of thousands of technicians who chose it to specialize in the field of building automation.

Achievable savings with the adoption of the KNX system for Home & Building control:

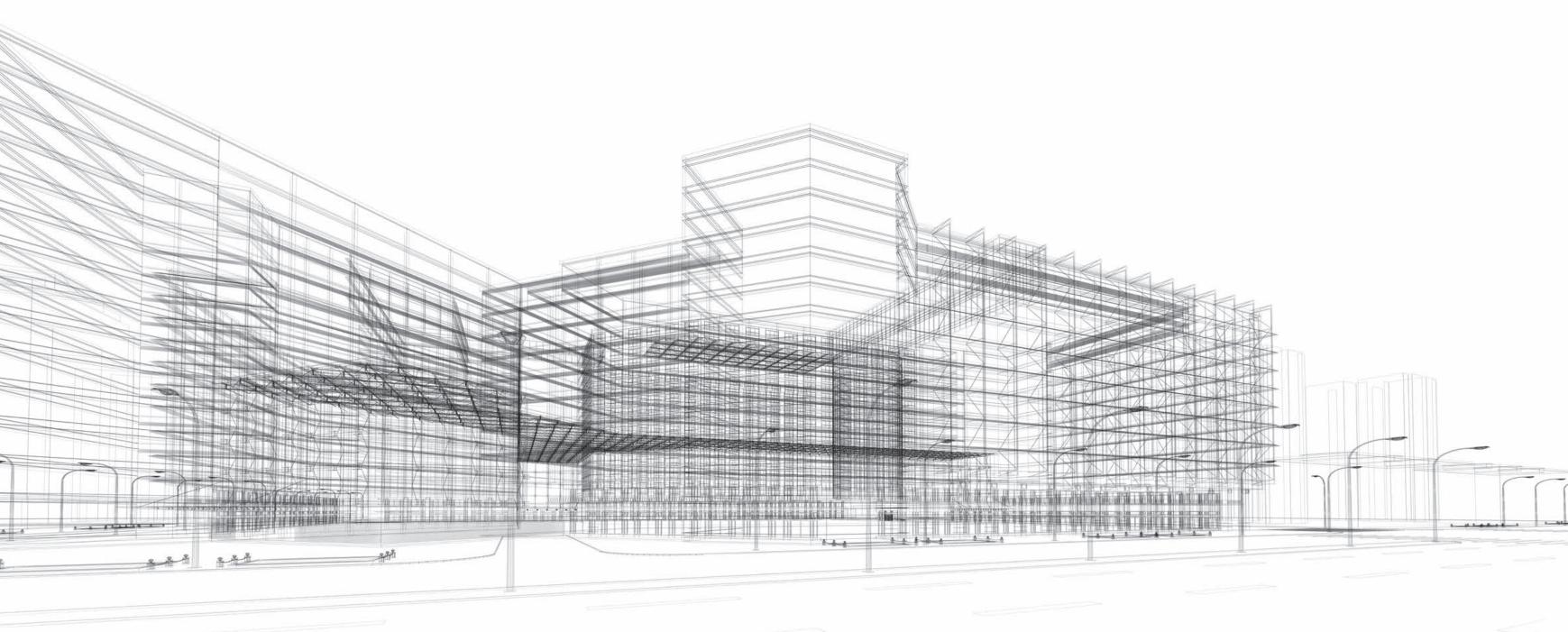
40% over shutters control
50% over individual ambient control
60% over ambient lighting control
60% over ventilation control

For customers, the variety and availability of KNX products has no comparison in other technological areas, and the system openness translates into the highest free choice, thereby avoiding the disadvantageous dependence of having to buy from a single supplier. Thanks to the modularity of the system, a project can be extended in time, starting with a basic configuration and adding more functions later. The native interoperability of KNX products is fundamental to technicians, as it allows to design a system by always choosing the most suitable technical options, reducing compromise and ties caused by isolated systems which do not converse with one another. Moreover, the system offers new professional opportunities to designers and system integrators, making it possible to receive a consistent and high-level technical training and become certified KNX Partners.



The KNX standard is entirely compliant with norm EN 50090 on HBES (Home and Building Electronic Systems) systems)

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## The advantages

Design, realize and use a home & building control plant with the KNX system has many advantages.

#### Designe

- Compliant, open, interoperable system
- Can be used in all types of buildings, from small residential to large service industry ones
- Devices, from over 300 manufacturers, communicating between each other in native mode
- Constant expansion of available functions and applications
- System design by means of standard software (ETS), manufacturer-independent
- Easy realization of commands, controls, supervisions and displays
- Wide availability of complex logic
- Interfacing towards numerous other systems, protocols and standards
- Simple logic connections between functions and devices
- Large choice of device parametrizing options based on single requirements
- Reduction of building's fire load
- Certified training, standardized and available worldwide

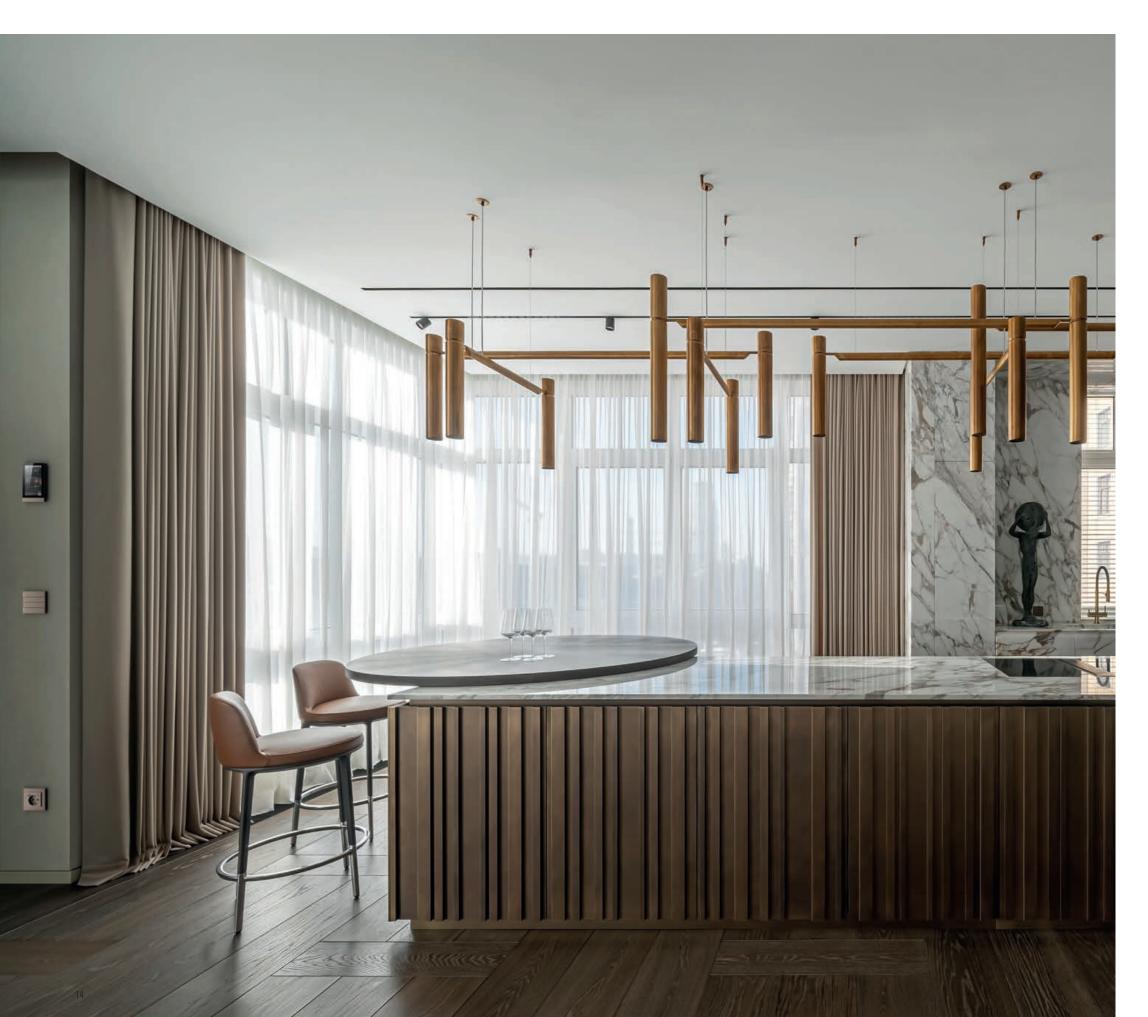
#### Installer

- Reduced device assembly and cabling times
- Unique, fast connection system (cable and bus terminal block) for all manufactures
- High quality and reliability of products (consolidated system)
- Configuration and service commissioning by means of standard, manufacturer-independent software (ETS)
- Speed and flexibility in the expansion and the modification of use
- Remote access for maintenance and diagnosis interventions
- Reduction of cables needed for command, control and distribution circuits
- Certified training, standardized and available worldwide
- Opportunities for professional advancements
- Access to the world of innovative systems

#### User

- Large choice of products
- High comfort, great operation safety
- More information, verification of own consumption habits
- Coordinated working of all building systems
- Multifunctional deployment of several devices
- System scalability and modularity
- Easy upgrading, without needing interventions on cabling nor masonry works
- Independence from single manufacturer
- More efficient building energy class (as per EN 15232)
- Easy system adaptations in case of changing needs
- Time-protected investment (open system)
- Building increase in value





### The Ekinex® devices

The range of Ekinex® KNX devices includes system devices, devices dedicated to single application functions and accessories. System devices allow basic operation of the bus system, while the devices dedicated to single application functions are developed specifically to execute the command, control and/or monitoring the technical systems in the building, like lighting, heating or shading.

They include switching, control and display units, sensors and actuators, etc. **Each device is fitted internally with a communication module linking to the KNX bus.** All devices are realized in multiple mounting versions (protruding or recessed walls, electric cabinets or panels on DIN rails as per EN 60715) in accordance with their destination of use and with the main installation modality. The KNX certification guarantees the interoperability among the devices of different KNX manufacturers. The entire procedure is disciplined by the certification system developed by the KNX Association and is based on conformity tests carried out by third-party laboratories. The tests verify that the devices support the KNX protocol and that any information is coded in accordance with KNX specifications

The presence of a KNX trademark on Ekinex® devices is a guarantee for the customer:

- Ekinex® respects the quality management system in accordance with ISO 9001;
- The devices are compliant with the European norm EN 50090-2-2, concerning fundamental aspects like electromagnetic compatibility, electrical safety and environmental conditions of use;
- They comply with indications in volumes 3 and 6 of KNX specifications;
- They comply with KNX interoperability requirements concerning standardized data type and functional blocks.

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## 20VENTI SERIES

WITCHEM

PLAYER

ALLOFF

WALL-MOUNT DEVICES

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## 20venti - Deep

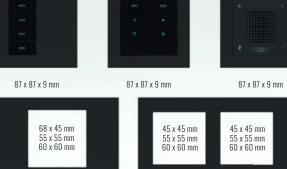
WALL-MOUNT DEVICES

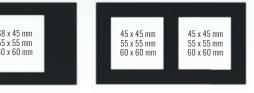
**Intuition, flexibility and continuous growth.** 20venti series in its Deep version represents an evolution of the compact and essential design of 71 series, enriched with new features that facilitate the recognition of functions from the first use. The materials used are plastic, metal and the nanotechnological Fenix NTM®.

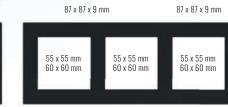
	Deep	Surface	- Rockers
	P	late	KUCKEIS
Plastic*	•	-	•
Metal	•	•	-
Metal HT	•	0	-
Fenix NTM®	•	•	_

\*Not available on plate with 30x60 mm window For more information see page 196









229 x 87 x 9 mm 3 windows 55 x 55 x 55 mm or 3 windows 60 x 60 x 60 mm 128 x 87 x 9 mm 158 x 87 x 9 mm

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## 20venti - Surface

WALL-MOUNT DEVICES

**Essentiality and functionality in a single product.** 20venti series in its Surface version represents an evolution of the compact and essential design of 71 series but is enriched with new features that make it easier to recognize the functions of the keyboard from the first use. KNX technology combined with a range of metal and Fenix NTM® finishes make the Surface 20venti series a contemporary proposal that finds its place in home, office and hotel settings.

#### **Available colour solutions**

	Deep	Surface	Rockers	
	Pla	ate	Vocke12	
Plastic	•	-	•	
Metal	•	•	-	
Metal HT	•	•	-	
Fenix NTM®	•	•	-	

For more information see page 196





30 x 60 mm 45 x 45 mm 55 x 55 mm 60 x 60 mm







98 x 98 x 3 mm

98 x 98 x 3 mm

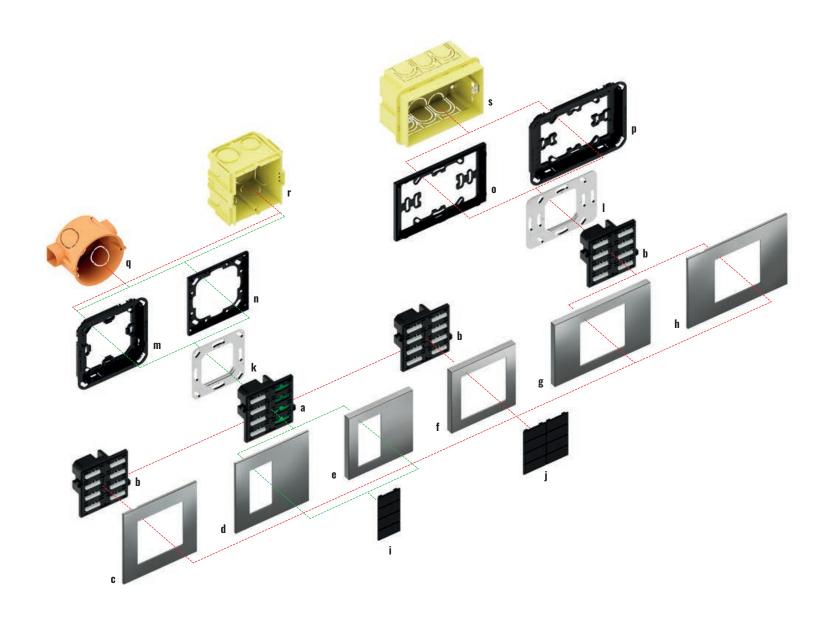
nm 98 x 98 x 3 mm

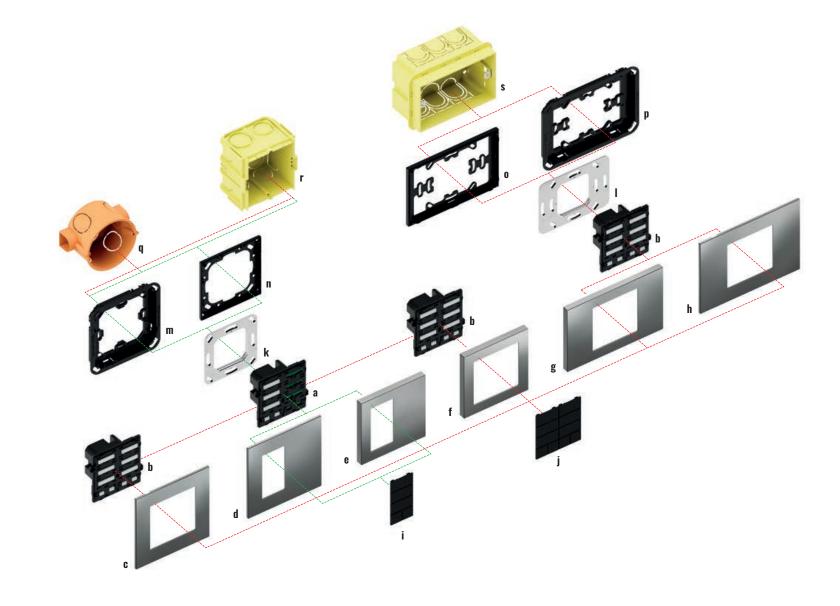
68 x 45 mm 55 x 55 mm 60 x 60 mm

98 x 98 x 3 mm 133 x 98 x 3 mm 168 x 98 x 3 mm



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#### Pushbuttons 20venti series with backlit text/symbols and proximity sensor (4/8 rockers)

-		
Description	Code	Page
a) Pushbuttons 20venti series with backlit text/symbols and proximity sensor 4 rockers	EK-E20-TP-4TS-P	30
<b>b)</b> Pushbuttons 20venti series with backlit text/symbols and proximity sensor 8 rockers	EK-E20-TP-8T-P	31
c) Square plate Surface version (60 x 60 mm window)	EK-SQS	— 179
d) Square plate Surface version (30 x 60 mm window)	EK-SQT	— 179
e) Square plate Deep version (30 x 60 mm window)	EK-DQT	— 175
f) Square plate Deep version (60 x 60 mm window)	EK-DQS	— 1/b
g) Rectangular plate Deep version (60 x 60 mm window)	EK-DRS	176
h) Rectangular plate Surface version (60 x 60 mm window)	EK-SRS	180
i) Rectangular rockers (4 pcs)	EK-T4R-20-BT	162

Description	Code	Page
j) Rectangular rockers (8 pcs)	EK-T4R-20-BT	174
k) Metal mounting support	EK-SMQ-71-1	195
I) Metal mounting support with adapter	EK-SMR-71-1	195
m) Adapter for square Surface plate	EK-TAS-Q-1	191
n) Adapter for square plate 'NF and Deep version	EK-TAQ-1-NF	184-187
o) Adapter for rectangular plate 'NF and Deep version	EK-TAR-1-NF	185-188
<b>p)</b> Adapter for Surface rectangular plate	EK-TAS-R-1	192
q) Round flush-mounting box	not delivered by Ekinex®	-
r) Square flush-mounting box	not delivered by Ekinex®	-
s) Rectangular flush-mounting box (3 modules)	not delivered by Ekinex®	-

#### Pushbuttons 20venti series with backlit text/symbols and proximity sensor (5/10 rockers)

Code	Page	
EK-E20-TP-5TS-P	32	
EK-E20-TP-10T-P	33	
EK-SQS	170	
EK-SQT	- 179	
EK-DQT	- 175	
EK-DQS	- 1/0	
EK-DRS	176	
EK-SRS	180	
EK-T4R-20-BT EK-T2B-20-BT	162	
	EK-E20-TP-5TS-P  EK-E20-TP-10T-P  EK-SQS  EK-SQT  EK-DQS  EK-DRS  EK-SRS  EK-T4R-20-BT	

Description	Code	Page	
j) Rectangular rockers (6 pcs) Rectangular rockers dimmer (2 pcs)	EK-T4R-20-BT EK-T2B-20-BT	162	
k) Metal mounting support	EK-T2B-20-BT	- 183	
I) Metal mounting support with adapter	EK-SMQ-71-1		
m) Adapter for square Surface plate	EK-SMR-71-1	179	
n) Adapter for square plate 'NF and Deep version	EK-TAS-Q-1	172-175	
o) Adapter for rectangular plate 'NF and Deep version	EK-TAQ-1-NF	173-176	
<b>p)</b> Adapter for Surface rectangular plate	EK-TAR-1-NF	180	
q) Round flush-mounting box	EK-TAS-R-1	-	
r) Square flush-mounting box	not delivered by Ekinex®	-	
s) Rectangular flush-mounting box (3 modules)	not delivered by Ekinex®	-	

### **Pushbuttons - 20venti series**

WALL-MOUNT DEVICES





A wider range of combinations and features.
The 20venti series pushbuttons are available on Deep and Surface plates with 4 or 8 rockers modularity and built-in RGB LEDs to create any colour shade.
Buttons with 5 or 10 rockers modularity are also available for dimming lights or managing shutters.



The Ekinex® 20venti pushbuttons' series controls offer the possibility of numerous variants to meet the most diverse requirements. The basis is represented by the pushbutton that contains a KNX communication module inside. The EK-E20-TP-... is suitable both for mounting on a round or square wall-mounting box with fixing holes with 60 mm centre distance, and for mounting on a 3-place Italian standard rectangular wall-mounting box with fixing holes with 83.5 mm centre distance. Each pushbutton is supplied with a metal mounting bracket which, if necessary, can also be ordered separately; a plastic adapter and a bus line connection terminal complete the supply.

The button must be completed with the buttons and a plate from the Deep or Surface version. The buttons are available in rectangular shape, in plastic material. The button has integrated RGB LEDs that can be freely programmed: for example, for status indication or as a night orientation light. The device also offers the function of a room thermostat, thanks to the integrated temperature sensor. The integrated proximity sensor (optional in the LED version) ensures maximum readability when using the push-button panel and allows visual comfort during the night.

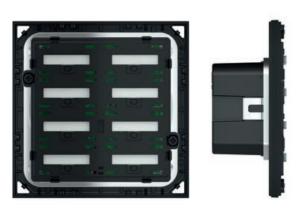
The devices are configured and commissioned using the ETS® software; the relevant application programs can be downloaded from www.ekinex.com.

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## 4/8-fold pushbutton with backlit text/symbols and proximity sensor - 20venti series

WALL-MOUNT DEVICES

#### Description

The Ekinex® 20venti series 4/8-fold pushbutton is used for on/off control of utility devices, dimming of luminaires, control of motorized drives for roller shutters or other programmable control functions. Thanks to the integrated temperature sensor, the button can act as a temperature controller for a room or zone. RGB LED for each rocker. The switch has an integrated KNX bus communication module and is designed for installation in a flush-mounted wall box.

#### Main features

- 4/8 fold version (possibility to configure up to 4 or 8 independent functions)
- RGB LED for each freely programmable rocker
- Integrated temperature sensor
- Integrated proximity sensor
- Room thermostat function
- Plastic casing
- · Connection to bus line with KNX terminal block
- Wall-mounting installation on round or square wall box
- IP20 protection degree (installed)

#### Technical data

- 30 Vdc power supply by KNX bus
- Current consumption from bus < 17 mA

#### Delivery

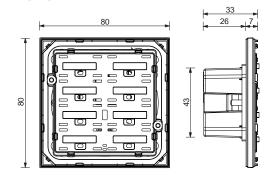
Delivery includes a terminal block for connection to the bus, a plastic adapter, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart), two pairs of fixing screws.

#### Accessories

The following accessories are available to be ordered separately:

- 4 or 8 rectangular 30 x 15 mm plastic rockers with or without backlit text/symbol
- square plate of the Deep and Surface version with 30 x 60 mm or 60 x 60 mm window

#### Dimensions [mm]



#### Order information

30

Code	LED colours	Mounting	Rockers
EK-E20-TP-4TS-P	RGB		4 left with backlit text/symbols
EK-E20-TP-4TD-P	RGB	without frame	4 right with backlit text/symbols
EK-E20-TP-8T-P	RGB		8 with backlit text/symbols

### Co Co

#### **Configuration and commissioning**

By means of ETS5 software or later versions Application program: **APEKE2OTP##.knxprod** (## = version, download from www.ekinex.com)



#### Documentation

For more information see the technical documentation, download from www.ekinex.com







## 8-fold pushbutton with backlit text/symbols and proximity sensor for rectangular wall-box - 20venti series

WALL-MOUNT DEVICES

#### **Description**

The Ekinex® 20venti series 8-fold pushbutton is used for on/off control of utility devices, dimming of luminaires, control of motorized drives for roller shutters or other programmable control functions. Thanks to the integrated temperature sensor, the button can act as a temperature controller for a room or zone. RGB LED for each rocker. The switch has an integrated KNX bus communication module and is designed for installation in a flush-mounted wall box.

#### Main features

- 8 fold version (possibility to configure up to 8 independent functions)
- RGB LED for each freely programmable rocker
- Integrated temperature sensor
- Integrated proximity sensorRoom thermostat function
- Plastic casing
- Connection to bus line with KNX terminal block
- Wall-mounting installation on round, square or rectangular wall box
- IP20 protection degree (installed)

#### Technical data

- 30 Vdc power supply by KNX bus
- Current consumption from bus < 17 mA

#### Deliver

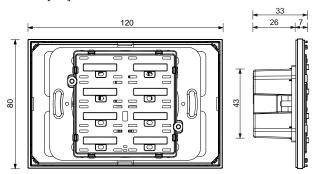
Delivery includes a terminal block for connection to the bus, a plastic adapter, a metal support for installation onto round or square (fixing holes 60 mm apart) or rectangular 3 seater mounting box according to the Italian installation standard provided (fixing holes 83,5 mm apart), two pairs of fixing screws.

#### Accessories

The following accessories are available to be ordered separately:

- 8 rectangular 30 x 15 mm plastic rockers with or without backlit text/symbol
- square plate of the Deep and Surface version with 60 x 60 mm window

#### Dimensions [mm]



#### Order information

Code	LED colours	Mounting	Rockers
EK-E20-TP-8T-P-R	RGB	without frame	8 with backlit text/symbols



#### Configuration and commissioning

By means of ETS5 software or later versions Application program: **APEKE20TP##.knxprod** (## = version, download from www.ekinex.com)





#### Documentation

For more information see the technical documentation download from **www.ekinex.com** 



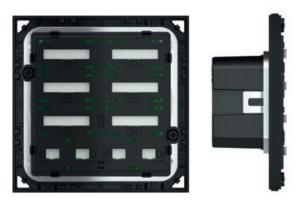
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## 10-fold pushbutton with backlit text/symbols and proximity sensor - 20venti series

WALL-MOUNT DEVICES

#### Description

The Ekinex® 20venti series 5/10-fold pushbutton is used for on/off control of utility devices, dimming of luminaires, control of motorized drives for roller shutters or other programmable control functions. Thanks to the integrated temperature sensor, the button can act as a temperature controller for a room or zone. RGB LED for each rocker. The switch has an integrated KNX bus communication module and is designed for installation in a flush-mounted wall box.

#### Main features

- 5/10 fold version (possibility to configure up to 3 or 6 independent functions plus 2 or 4 paired keys for adjustments)
- RGB LED for each freely programmable rocker
- Integrated temperature sensor
- Integrated proximity sensor
- · Room thermostat function
- Plastic casing
- Connection to bus line with KNX terminal block
- Wall-mounting installation on round or square wall box
- IP20 protection degree (installed)

#### Technical data

- 30 Vdc power supply by KNX bus
- Current consumption from bus < 17 mA

#### Deliver

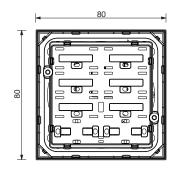
Delivery includes a terminal block for connection to the bus, a plastic adapter, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart), two pairs of fixing screws.

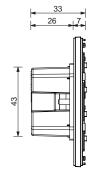
#### Accessories

The following accessories are available to be ordered separately:

- 3 or 6 rectangular 30 x 15 mm plastic rockers with or without backlit text/symbol and 1 or 2 rectangular 30 x 15 mm dimmer plastic rockers
- square plate of the Deep and Surface version with 30 x 60 mm or 60 x 60 mm window

#### Dimensions [mm]





#### Order information

Code	LED colours	Mounting	Rockers
EK-E20-TP-5TS-P	RGB		3 left with backlit text/symbols 1 left dimmer
EK-E20-TP-5TD-P	RGB	without frame	3 right with backlit text/symbols 1 right dimmer
EK-E20-TP-10T-P	RGB	-	6 with backlit text/symbols 2 dimmer

### Ö

#### **Configuration and commissioning**

By means of ETS4 2.0 software (or later versions Application program: **APEKE20TP##.knxprod** (## = version, download from www.ekinex.com)



#### **Document**

For more information see the technical documentation, download from **www.ekinex.com** 







# 10-fold pushbutton with backlit text/symbols and proximity sensor for rectangular wall-box - 20venti series

WALL-MOUNT DEVICES

#### **Description**

The Ekinex® 20venti series 10-fold pushbutton is used for on/off control of utility devices, dimming of luminaires, control of motorized drives for roller shutters or other programmable control functions. Thanks to the integrated temperature sensor, the button can act as a temperature controller for a room or zone. RGB LED for each rocker. The switch has an integrated KNX bus communication module and is designed for installation in a flush-mounted wall box.

#### Main features

- 10 fold version (possibility to configure up to 6 independent functions plus 4 paired keys for adjustments)
- RGB LED for each freely programmable rocker
- Integrated temperature sensor
- Integrated proximity sensorRoom thermostat function
- Plastic casing
- Connection to bus line with KNX terminal block
- Wall-mounting installation on round, square or rectangular wall box
- IP20 protection degree (installed)

#### Technical data

- 30 Vdc power supply by KNX bus
- Current consumption from bus < 17 mA

#### Delivery

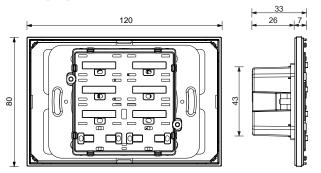
Delivery includes a terminal block for connection to the bus, a plastic adapter, a metal support for installation onto round or square (fixing holes 60 mm apart) or rectangular 3 seater mounting box according to the Italian installation standard provided (fixing holes 83,5 mm apart), two pairs of fixing screws.

#### Accessories

The following accessories are available to be ordered separately:

- 6 rectangular 30 x 15 mm plastic rockers with or without backlit text/symbol and 2 rectangular 30 x 15 mm dimmer plastic rockers
- square plate of the Deep and Surface version with 60 x 60 mm window

#### **Dimensions** [mm]



#### Order information

Code	LED colours	Mounting	Rockers
EK-E20-TP-10T-P-R	RGB	without frame	6 with backlit text/symbols 2 dimmer



#### Configuration and commissioning

By means of ETS4 2.0 software (or later versions)
Application program: APEKE20TP##.knxprod
(## = version, download from www.ekinex.com)





#### **Documentation**

For more information see the technical documentation download from **www.ekinex.com** 



## FF SERIES

WALL-MOUNT DEVICES

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**FF - Form**WALL-MOUNT DEVICES

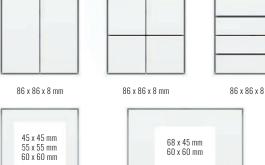
**Simple and linear.** An essential form that suggests an idea of reliability and rigour. The line Form of the FF series has a plastic or metal range of pushbuttons, touch-displays, plates for sockets and integrated LEDs with adjustable light intensity in blue/green or white/red colour combinations. The different finishes can be freely combined with each other.

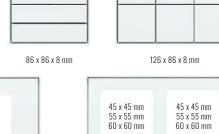
#### Available colour solutions

	Form	Flank	'NF	Deep	Surface	Doolsons
	Frai	mes Plates			— Rockers	
Plastic	•	•	•	•	-	•
Metal	•	•	٠	•	•	•
Metal HT	-	-	-	٠	٠	•
Fenix NTM®	-	-	•	•	•	•

For more information see page 196







86 x 86 x 8 mm 126 x 86 x 8 mm 156 x 86 x 8 mm



FF - Flank
WALL-MOUNT DEVICES

**Minimal and rigorous.** The simplicity of the shapes makes it adaptable to any setting. Distinguishable by its characteristic side edges, the Flank line of the FF series has plastic or metal pushbuttons, thermostats and plates for sockets in many colours, which can be freely combined according to your taste and needs.

#### Available colour solutions

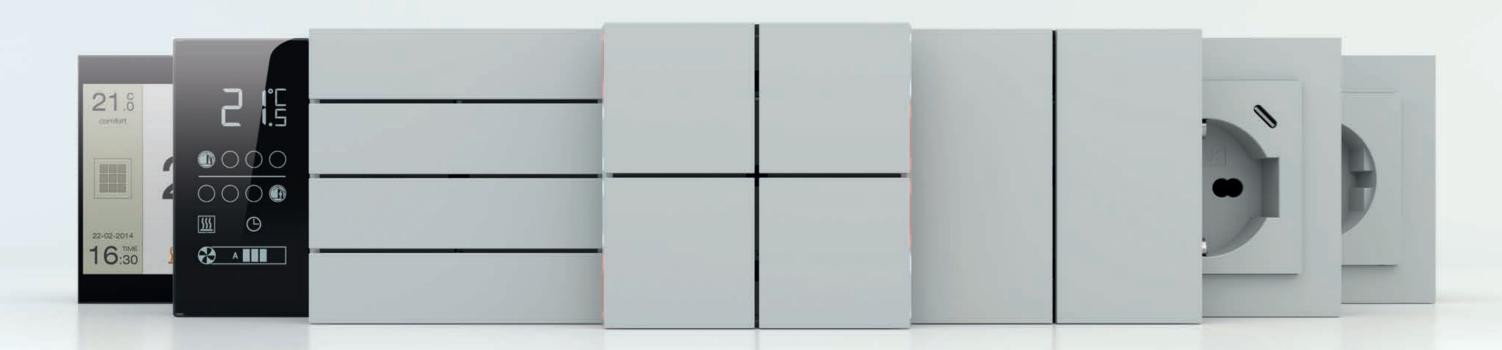
	Form	Flank	'NF	Deep	Surface	Doolsons
	Frai	mes		Plates		Rockers
Plastic	•	•	•	•	-	•
Metal	•	•	•	•	•	•
Metal HT	-	-	-	•	•	•
Fenix NTM®	-	-	•	•	•	•

For more information see page 196





94 x 80 x 8 mm 134 x 80 x 8 mm 165 x 80 x 8 mm



FF - 'NF WALL-MOUNT DEVICES **Essential geometry in forms and a decisive trait.** More than ever less is more. The range of pushbutton controls of the FF 'NF version and its accessories offer the possibility to create numerous variants to meet the most different needs. Finishes in plastic, metal or Fenix NTM® for switches, thermostats and frameless sockets.

	Form	Flank	'NF	Deep	Surface	Doolson
	Frai	mes		Plates		Rockers
Plastic	•	•	•	•	-	•
Metal	•	٠	•	٠	٠	•
Metal HT	-	-	-	٠	٠	•
Fenix NTM®	-	-	•	•	•	•

For more information see page 196







45 x 45 mm 55 x 55 mm 60 x 60 mm

80 x 80 x 8 mm 68 x 45 mm 60 x 60 mm

80 x 80 x 8 mm

45 x 45 mm 55 x 55 mm 60 x 60 mm 45 x 45 mm 55 x 55 mm 60 x 60 mm

80 x 80 x 8 mm 120 x 80 x 8 mm 151 x 80 x 8 mm



FF - Deep WALL-MOUNT DEVICES Versatile and suitable for any setting. The Deep line of the FF series has plastic, metal and Fenix NTM® pushbuttons, thermostats and plates for sockets in numerous colours and sizes and integrated LEDs with adjustable light intensity in blue/green or white/red colour combinations. Versatile and compact, it lends itself to various combinations and matches all interior designs

	Form	Flank	'NF	Deep*	Surface	Doolsons
	Fra	mes		Plates		Rockers
Plastic	•	•	•	•	-	•
Metal	•	•	•	•	•	•
Metal HT	-	-	-	•	•	•
Fenix NTM®	-	-	•	•	•	•





80 x 80 x 8 mm 80 x 80 x 8 mm



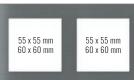
45 x 45 mm 55 x 55 mm 60 x 60 mm

45 x 45 mm 55 x 55 mm 60 x 60 mm





80 x 80 x 8 mm



55 x 55 mm 60 x 60 mm

128 x 87 x 9 mm 158 x 87 x 9 mm 229 x 87 x 9 mm 3 windows 55 x 55 x 55 mm or 3 windows 60 x 60 x 60 mm

87 x 87 x 9 mm

For more information see page 196
\*) In the FF - Deep we suggest the use of the pushbuttons and room thermostats of the FF - 'NF series



## FF - Surface

WALL-MOUNT DEVICES

**Compact and essential.** Creates a continuum with the wall in a few millimetres of thickness. The Surface line of the FF series brushes the surfaces to create an effect of uniformity between button and wall. Declined in two materials with a strong personality, metal and Fenix NTM®, finds its ideal place in all the rooms of the contemporary home.

		Form	Flank	'NF	Deep*	Surface*	Rockers
		Fra	mes		Plates		VOCKEL2
	Plastica	•	•	•	•	-	•
-	Metallo	٠	•	•	•	•	•
-	Metal HT	_	_	-	•	•	•
-	Fenix NTM®	-	-	•	•	•	•





98 x 98 x 3 mm



45 x 45 mm 55 x 55 mm 60 x 60 mm

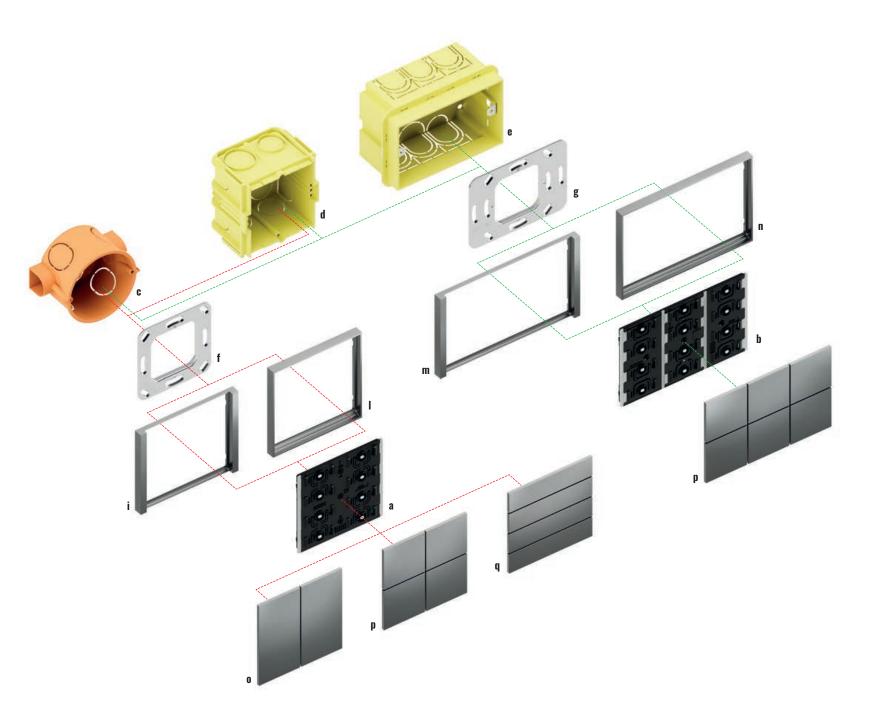
133 x 98 x 3 mm 168 x 98 x 3 mm

For more information see page 196
\*) In the FF - Surface we suggest the use of the pushbuttons and room thermostats of the FF - 'NF series



### **Pushbuttons - FF series**

WALL-MOUNT DEVICES



#### Pushbuttons FF series

Description	Code	Page
a) 4-fold pushbutton and room thermostat FF series	EK-ED2-TP or EK-E32-TP	50-51
<b>b)</b> 6-fold pushbutton FF series	EK-EH2-TP	52
c) Round flush-mounting box	not delivered by Ekinex®	-
d) Square flush-mounting box	not delivered by Ekinex®	-
e) Rectangular flush-mounting box (3 modules)	not delivered by Ekinex®	-
f) Metal mounting support	EK-SMQ-71-1	100
g) Metal mounting support	EK-SMR-71-1	183

Description	Code	Page
i) Square frame Flank version	EK-FLQ	170
I) Square frame Form version	EK-FOQ	169
m) Rectangular frame Flank version	EK-FLR	170
n) Rectangular frame Form version	EK-FOR	169
o) Rectangular vertical rockers	EK-TRV	
p) Square rockers	EK-TQQ	163
q) Rectangular horizontal rockers	EK-TRO	





Four or six channels, square or rectangular keys, with or without frame, with or without LED, with or without temperature sensor and thermostat function. Choose the combination that best suits your needs of style and features.



The Ekinex® pushbuttons of FF series range and related accessories offer the possibility to realize several variations that will satisfy the most diverse needs. The base is represented by the 4-fold (EK-ED2-TP and EK-E32-TP) and 6-fold (EK-EH2-TP) pushbuttons; each one is fitted with a KNX communication module. The 4-fold pushbutton is suitable for mounting into a flush mounting box, either round or square, provided with fixing holes 60 mm apart, while the 6-fold version is also ideal for mounting into a rectangular wall mounting box 3 seater according to the Italian installation standard provided with fixing holes 83,5 mm apart. Each device is supplied with its relative metal support which, in case of necessity, can also be ordered separately. A terminal block complete the supply.

The pushbuttons must be finished off with an operation surface (rockers) and a frame. The rockers are available in square and rectangular shapes, plastic material, aluminium or Fenix NTM®, in several colour and finishing variations. The rockers can be personalized with symbols and texts, so to make their function immediately understandable. Versions EK-ED2-TP and EK-EH2-TP have integrated LEDs which can be programmed freely: as an example, as a status feedback or as an orientation light at night time. Two colour combinations are available for the LEDs: blue / green or red / white. The same versions also offer a room thermostat function, thanks to the integrated temperature sensor. The frames, square and rectangular, are available in two stylish alternatives (Form and Flank) and are available in plastic material or aluminium. The 'NF version of the 4-fold pushbutton is mounted without frame and is provided with a side profile in white or black colour.

The pushbuttons simply get connected to the unique signal bus cable and do not require auxiliary power supply; the devices are supplied at SELV (Safety Extra Low Voltage) voltage, thus offering a much higher safety level than traditional commands. The configuration and commissioning is carried out by means of the ETS® software. The related application programs can be downloaded from the www.ekinex.com website.



## 4-fold basic pushbutton - FF series

WALL-MOUNT DEVICES

#### Description

The 4-fold pushbutton of Ekinex® FF series commands loads on/off switching, controls the dimming of lighting devices, controls motor drives for shutters or executes any other programmable command and control function. The device integrates a KNX bus communication module and is intended for mounting onto a wall mounting box; it is supplied by a SELV voltage directly from the KNX bus and does not require any auxiliary power supply.

#### **Main features**

- 4-fold (possibility to configure up to 8 independent functions)
- Plastic casing
- Wall-mounting installation
- Connection to bus line with KNX terminal block
- Frontal programming pushbutton and LED
- IP20 protection degree (installed)
- Weight 80 g (with mounting support)

#### Technical data

- 30 Vdc power supply through KNX bus
- Current consumption from bus < 15 mA

#### Deliver

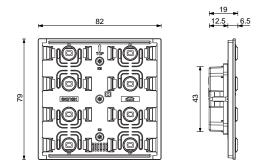
Delivery includes a terminal block for connection to the bus, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart) and two pairs of fixing screws.

#### **Accessories**

The following accessories are available to be ordered separately:

- square or rectangular rockers
- square frame Form or Flank version

#### Dimensions [mm]



#### Order information

50

Code	Mounting	Side profile	
EK-E32-TP	with square frame Form or Flank version	hlack	
EK-E32-TP-NF	without frame		
EK-E32-TP-NFW	('NF version)	white	



#### Configuration and commissioning

By means of ETS5 software or later versions Application program: **APEKE32TP##.knxprod** (## = version, downloadable from www.ekinex.com)



#### Documentation

For more information see the technical documentation, download from www.ekinex.com





## 4-fold pushbutton and room thermostat - FF series

WALL-MOUNT DEVICES

#### Description

The 4-fold pushbutton of Ekinex® FF series commands loads on/off switching, controls the dimming of lighting devices, controls motor drives for shutters or executes any other programmable command and control function. Thanks to the integrated temperature sensor, the pushbutton can work as a thermostat for a room or a zone. The LEDs can be chosen in the colour combinations blue / green or white / red. The device integrates a KNX bus communication module and is intended for mounting onto a wall mounting box; it is supplied by a SELV voltage directly from the KNX bus and does not require any auxiliary power supply.

#### Main features

- 4-fold (possibility to configure up to 8 independent functions)
- 4 freely programmable LEDs for each channel
- 2 colour combination available for the LEDs (blue/green or red/white)
- Integrated temperature sensor
- Room thermostat function
- Plastic casing
- Wall-mounting installation on round or square wall box
- Connection to bus line with KNX terminal block
- Frontal programming pushbutton and LED
- IP20 protection degree (installed)
- Weight 80 g (with mounting support)

#### Technical data

- 30 Vdc power supply through KNX bus
- Current consumption from bus < 15 mA

#### Delivery

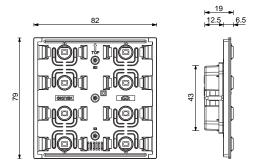
Delivery includes a terminal block for connection to the bus, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart) and two pairs of fixing screws.

#### **Accessories**

The following accessories are available to be ordered separately:

- square or rectangular rockers
- square frame Form or Flank version

#### Dimensions [mm]



#### Order information

order information						
Code	LED colours	Mounting	Side profil			
EK-ED2-TP	blue / green	with square frame Form				
EK-ED2-TP-RW	red / white	or Flank version	black			
EK-ED2-TP-BG-NF	blue / green		DIAGK			
EK-ED2-TP-RW-NF	red / white	without frame				
EK-ED2-TP-BG-NFW	blue / green	('NF version)	white			
EK-ED2-TP-RW-NFW	red / white		white			



#### Configuration and commissioning

By means of ETS5 software or later versions Application program: **APEKED2TP##.knxprod** (## = version, downloadable from www.ekinex.com





For more information see the technical documentation, download from www.ekinex.com







## 6-fold pushbutton - FF series

WALL-MOUNT DEVICES

#### Description

The 6-fold pushbutton of Ekinex® FF series commands loads on/off switching, controls the dimming of lighting devices, controls motor drives for shutters or executes any other programmable command and control function. Thanks to the integrated temperature sensor, the pushbutton can send the room temperature value on the bus to other KNX devices. The LEDs can be chosen in the colour combinations blue / green or white / red. The device integrates a KNX bus communication module and is intended for mounting onto a wall mounting box; it is supplied by a SELV voltage directly from the KNX bus and does not require any auxiliary power supply.

#### Main features

- 6-fold (possibility to configure up to 12 independent functions)
- 4 freely programmable LEDs for each channel
- 2 colour combination available for the LEDs (blue/green or red/white)
- Integrated temperature sensor
- Plastic casing
- Wall-mounting installation on round, square or rectangular wall box
- Connection to bus line with KNX terminal block
- Rear programming pushbutton and LED
- IP20 protection degree (installed)
- Weight 75 g (with mounting support)

#### Technical data

- 30 Vdc power supply through KNX bus
- Current consumption from bus < 15 mA

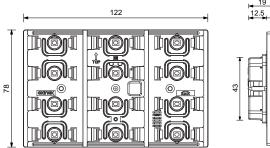
Delivery includes a terminal block for connection to the bus, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart) or rectangular mounting box (fixing holes 83,5 mm apart) and two pairs of fixing screws.

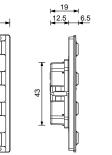
#### Accessories

The following accessories are available to be ordered separately:

- square rockers
- rectangular frame Form or Flank version

#### Dimensions [mm]





Code	LED colours	Mounting
EK-EH2-TP	blue / green	with rectangular frame
EK-EH2-TP-RW	red / white	Form or Flank version



By means of ETS5 software or later versions Application program: **APEKEH2TP##.knxprod** 





For more information see the technical documentation,







## **Room thermostats**

WALL-MOUNT DEVICES

54

#### Aesthetics and functionality conjugated according to the Ekinex® style.

The room temperature controls of the FF series contain the characteristics of a product with a strong technological footprint combined with a focus on aesthetic component. Available in different models, integrated LEDs and two custom keys, the Ekinex® room controllers are with their high performance able to meet the most different needs.

#### **Available colour solutions**

	Form	Flank	- Rockers
	Fra	mes	- Kuckers
Plastic	•	•	•
Metal	•	•	•
Metal HT	-	-	•
Fenix NTM®	-	_	•

For more information see page 196







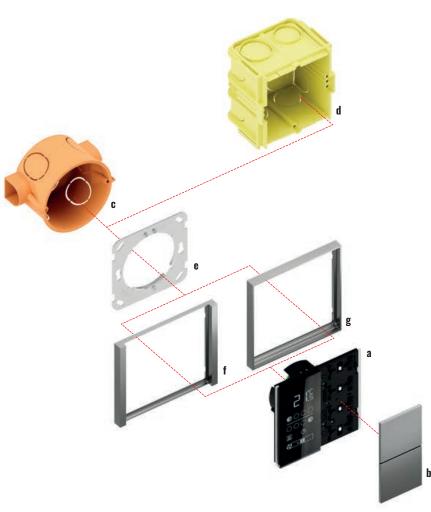


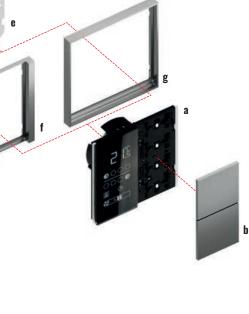
94 x 86 x 8 mm **Flank** 

80 x 80 x 8 mm

### **Room thermostats - FF series**

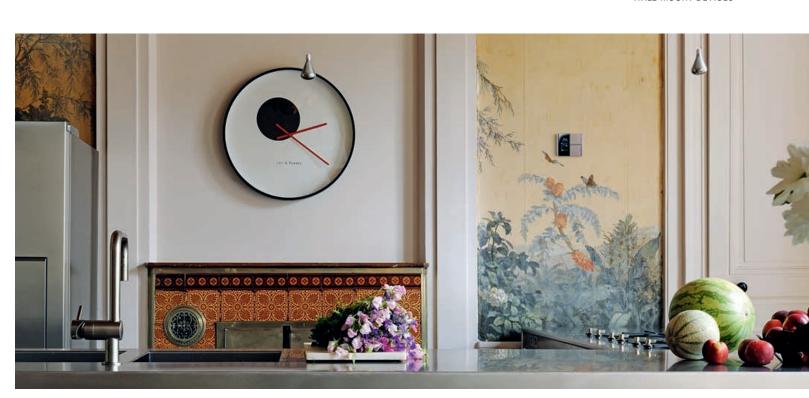
WALL-MOUNT DEVICES





#### **Room thermostats FF series**

Description	Code	Page
a) Room thermostat FF series	EK-EP2-TP or EK-EQ2-TP	59-60
<b>b)</b> Set 2 rockers for thermostat FF series	EK-TQQEP2	165
c) Round flush-mounting box	not delivered by Ekinex®	-
d) Square flush-mounting box	not delivered by Ekinex®	-
e) Metal mounting support	EK-SMQ-1	183
f) Square frame of Flank version	EK-FLQ	170
g) Square frame of Form version	EK-FOQ	169



Form, Flank, 'NF. Three different variations for a room temperature control device with unique performance.



The Ekinex® thermostats of FF series range and related accessories offer the possibility to realize several variations that will satisfy the most diverse needs. The base is represented by the thermostats EK-EP2-TP and EK-EQ2-TP (with relative humidity sensor); each one integrates a KNX communication module. The device is suitable for mounting into a flush mounting box, either round or square, provided with fixing holes 60 mm apart. Each thermostat is delivered with its relative metal support which, in case of necessity, can also be ordered separately. A terminal block completes the delivery.

The pushbuttons must be finished off with an operation surface (rockers) and a frame. The rockers are available in square shape, plastic material, aluminium or Fenix NTM® in several colour and finishing variations. A special set includes two customized rockers with symbols for the thermostat functions. Each thermostat has integrated LEDs which can be programmed freely: as an example, as a status feedback or as an orientation light at night time. Two colour combinations are available for the LEDs: blue / green or red / white. The square frames are available in two stylish alternatives, Form and Flank , and share the same choice of materials, colours and finishings as for rockers. The 'NF version of the thermostat is mounted without frame and is provided with a side profile in white or black colour.

The thermostats simply get connected to the unique signal bus cable and do not require auxiliary power supply; the devices are powered at SELV (Safety Extra Low Voltage) voltage, thus offering a much higher safety level than traditional commands. The configuration and commissioning is carried out by means of the ETS® software. The related application programs can be downloaded from the www.ekinex.com website.





## **Easy room thermostat - FF series**

WALL-MOUNT DEVICES



### **Room thermostat - FF series**

WALL-MOUNT DEVICES

#### Description

The Ekinex® Easy room thermostat FF-series is a digital electronic thermostat with a user-friendly interface for the end user and system integrator. While using a single differentiated set point for heating and cooling with only one on/off operating mode, the unit allows the control of terminals with one or two stages (such as radiators, floor and ceiling radiant panels, etc.) and fan-coil units with 2 or 4 pipe hydraulic supply. The product is equipped with an LCD display with adjustable back-lighting, a sensor for room temperature measurement and two freely configurable inputs. The indicator LEDs can be chosen in blue/green or white/red colour combinations. The device has an integrated KNX bus communication module and is designed for installation in a flush-mounted wall box; it is powered by the KNX bus and requires no auxiliary power supply.

#### Main features

- LCD display with adjustable backlighting
- 2 keys for controlling the thermostat functions
- 4 freely programmable LEDs for each button
- 2 colour combinations available for LEDs (blue/green or white/red)
- Integrated temperature sensor
- 2 freely programmable inputs
- Plastic housing
- Bus line connection via KNX terminal
- Programming button and LED on front panel
- Recessed wall mounting on round or square box
- IP20 degree of protection (installed)
  Weight 85 g (with mounting bracket)

#### Technical data

- 30 Vdc power supply through KNX bus
- Current consumption from bus < 13 mA

#### Deliver

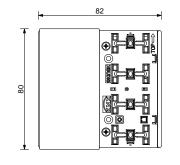
Delivery includes a terminal block for connection to the bus, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart) and two pairs of fixing screws.

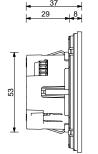
#### Accessorie

The following accessories are available to be ordered separately:

- set of two square rockers with symbols for room thermostat
- square frame Form or Flank version

#### **Dimensions** [mm]





#### Description

The Ekinex® room temperature controller of FF series regulates independently the temperature of a room or a zone. In combination with one or more KNX actuators, the room temperature controller is able to control the heating and cooling emission of a series of terminal units for the thermal exchange (such as radiators, fan-coils, floor and ceiling radiant panels, etc.). The device is provided with a LCD-display with adjustable backlight, sensors for temperature and brightness measuring and two freely configurable inputs. The LEDs can be chosen in the colour combinations blue / green or white / red. The device integrates a KNX bus communication module and is intended for mounting onto a wall mounting box; it is powered by a SELV voltage directly from the KNX bus and does not require any auxiliary power supply.

#### Main features

- LCD-display with adjustable backlight
- 2 rockers for controlling thermostat functions
- 4 freely programmable LEDs for each channel
- 2 colour combination available for the LEDs (blue/green or red/white)
- Integrated temperature sensor
- 2 freely configurable inputs
- Plastic casing
- Connection to bus line with KNX terminal block
- Frontal programming pushbutton and LED
- Wall-mounting installation on round or square wall box
- IP20 protection degree (installed)
- Weight 85 g (with mounting support)

#### Technical data

- 30 Vdc power supply through KNX bus
- Current consumption from bus < 13 mA

#### Delivery

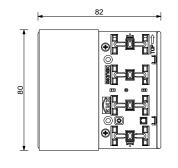
Delivery includes a terminal block for connection to the bus, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart) and two pairs of fixing screws.

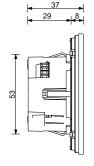
#### Accessories

The following accessories are available to be ordered separately:

- set of two square rockers with symbols for room thermostat
- square frame Form or Flank version

#### Dimensions [mm]





#### Order information

58

Code	LED colours	Mounting	Side profile
EK-ER2-TP	blue / green	with square frame	
EK-ER2-TP-RW	red / white	Form or Flank version	-
EK-ER2-TP-BG-NF	blue / green		blook
EK-ER2-TP-RW-NF	red / white	without frame ('NF version) white	шаск
EK-ER2-TP-BG-NFW	blue / green		white
EK-ER2-TP-RW-NFW	red / white		wnite



#### **Configuration and commissioning**

By means of ETS5 software or later versions Application program: **APEKER2TP##.knxprod** (## = version, download from www.ekinex.com)





For more information see the technical documentation, download from **www.ekinex.com** 



#### Order information

Order information				
	Code	LED colours	Mounting	Side profile
	EK-EP2-TP	blue / green	with square frame	
	EK-EP2-TP-RW	red / white	Form or Flank version	-
	EK-EP2-TP-BG-NF	blue / green		black
	EK-EP2-TP-RW-NF	red / white	without frame	DIACK
	EK-EP2-TP-BG-NFW	blue / green	('NF version)	white
	EK-EP2-TP-RW-NFW	red / white	_	white



#### Configuration and commissioning

By means of ETS5 software or later versions Application program: **APEKEP2TP##.knxprod** (## = version, download from www.ekinex.com)





For more information see the technical documentation, download from www.ekinex.com









## Room thermostat with relative humidity sensor - FF series

WALL-MOUNT DEVICES

#### **Description**

The Ekinex® room temperature controller of FF series regulates independently the temperature of a room or a zone. In combination with one or more KNX actuators, the room temperature controller is able to control the heating and cooling emission of a series of terminal units for the thermal exchange (such as radiators, fan-coils, floor and ceiling radiant panels, etc.). The device is provided with a LCD-display with adjustable backlight, sensors for temperature, relative humidity and brightness measuring and two freely configurable inputs. The LEDs can be chosen in the colour combinations blue / green or white / red. The device integrates a KNX bus communication module and is intended for mounting onto a wall mounting box; it is powered by a SELV voltage directly from the KNX bus and does not require any auxiliary power supply.

#### Main features

- LCD-display with adjustable backlight
- 2 rockers for controlling thermostat functions
- 4 freely programmable LEDs for each channel
- 2 colour combination available for the LEDs (blue/green or red/white)
- Integrated temperature and relative humidity sensor
- 2 freely configurable inputs
- Plastic casing
- Connection to bus line with KNX terminal block
- Frontal programming pushbutton and LED
- Wall-mounting installation on round or square wall box
- IP20 protection degree (installed)
- Weight 85 g (with mounting support)

#### **Technical data**

- 30 Vdc power supply through KNX bus
- Current consumption from bus < 13 mA

#### Deliver

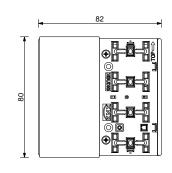
Delivery includes a terminal block for connection to the bus, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart) and two pairs of fixing screws.

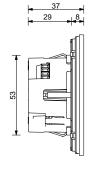
#### **Accessories**

The following accessories are available to be ordered separately:

- set of two square rockers with symbols for room thermostat
- square frame Form or Flank version

#### Dimensions [mm]





#### **Order information**

Code	LED colours	Mounting	Side profile	
EK-EQ2-TP	blue / green	with square frame		
EK-EQ2-TP-RW	red / white	Form or Flank version		
EK-EQ2-TP-BG-NF	blue / green	LII-		
EK-EQ2-TP-RW-NF	red / white	— black _ without frame ('NF version)	шаск	
EK-EQ2-TP-BG-NFW	blue / green		white	
EK-EQ2-TP-RW-NFW	red / white		white	



#### **Configuration and commissioning**

By means of ETS5 software or later versions Application program: APEKEQ2TP##.knxprod (## = version, download from www.ekinex.com)





#### Documentatio

For more information see the technical documentation, download from **www.ekinex.com** 







## Touch&See

WALL-MOUNT DEVICES



14 2013

Lined 1 7 14 21 38 Hariss 1 8 15 32 39 good 3 15 17 24 31 search 4 17 16 28 30 search 5 12 9 26 18 30 search 6 13 20 27 1

62

20.5 16:30 **M O O** 





21.8 PULIZIA TIMER 5 SIMULAZIONE

**Technology in a touch.** When you want to touch the technology, see with your eyes your settings, know the weather or create the comfort you would like, trust Touch&See. The high resolution touch-display and the versatile and intuitive interface are thought to provide highest user comfort and uncompromising aesthetics. The transition from one function to the next one is via side-scrolling pages, from those you can access several sub-menus. You can also set the display brightness according to your own needs or it can be automatically adjusted according to the brightness.

#### **Available colour solutions**

	Form	Flank	- Rockers
	Fra	mes	- Kockers
Plastic	•	•	•
Metal	•	•	•
Metal HT	-	-	•
Fenix NTM®	-	-	•

For more information see page 196



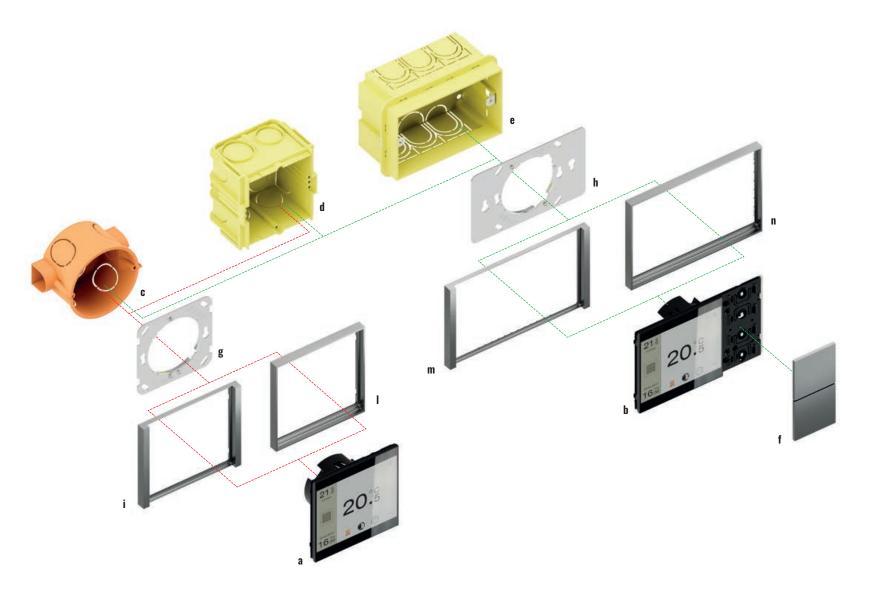




80 x 80 x 8 mm 'NF - Deep - Surface

### Touch&See - FF series

WALL-MOUNT DEVICES







Control and display unit with two-channel pushbutton. You will be amazed at all you can do. The Ekinex® Touch&See display and control units allow to perform a great number of switching, control and display bus functions, utilizing the easiest and most compact devices, with their 3.5" touch-screen and their graphic pages having a clear meaning and immediate understanding.

The base is represented by the control and display unit (EK-EC2-TP-...) and the control and display unit with integrated 2-fold pushbutton (EK-EF2-TP-...); each one integrates a KNX communication module. The control and display unit is suitable for round or square wall mounting boxes with fixing holes 60 mm apart; the unit with the integrated 2-fold pushbutton is also suitable for rectangular wall mounting boxes provided with fixing holes 85 mm apart (3 seater according to the Italian installation standard).

Each Touch&See unit is delivered with a metal mounting support which, in case of necessity, can also be obtained separately; the terminal blocks complete the supply. The Touch&See unit needs to be finished with a frame; in the case of units with integrated 2-fold pushbuttons, it will also be necessary to provide it with two square rockers, available in plastic or aluminium and in several colours and finishings. The frames, either square or rectangular, are available in two alternative styles (Form and Flank) and share the same choice of materials, colours and finishing. The rockers can be personalized with symbols and text, in order to make their function immediately understandable. Each channel of the 2-fold pushbutton has integrated LEDs which can be programmed freely: as an example, as a status feedback or as an orientation light at night time. Two colour combinations are available for the LEDs: blue / green or red / white. The 'NF version of the Touch&See EK-EC2-TP-... is mounted without frame and is provided with a side profile in white or black colour.

The Touch&See units have to be connected to the signal bus cable and to an auxiliary power supply; the devices are powered at SELV (Safety Extra Low Voltage) voltage, thus offering a much higher safety level than traditional commands. The configuration and commissioning is carried out by means of the ETS® software. The related application programs can be downloaded from the www.ekinex.com website.

#### Touch&See FF series

Description	Code	Page
a) Touch&See display	EK-EC2-TP	66
<b>b)</b> Touch&See display with 2-fold pushbutton	EK-EF2-TP	67
c) Round flush-mounting box	not delivered by Ekinex®	-
d) Square flush-mounting box	not delivered by Ekinex®	-
e) Rectangular flush-mounting box (3 modules)	not delivered by Ekinex®	-
f) Square rockers	EK-TQQ	163

Description	Code	Page
g) Metal mounting support	EK-SMQ-1	100
h) Metal mounting support	EK-SMR-1	———    183
i) Square frame Flank version	EK-FLQ	170
I) Square frame Form version	EK-FOQ	169
m) Rectangular frame Flank version	EK-FLR	170
n) Rectangular frame Form version	EK-FOR	169



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## **Touch&See display**

WALL-MOUNT DEVICES

#### Delivery

Delivery includes a terminal block for connection to the bus, a terminal block for connection to the auxiliary power supply, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart) and two pairs of fixing screws.

#### Accessories

The following accessories are available to be ordered separately:

square frame Form or Flank version

#### Main features

Description

• 3,5" TFT back-lit touch display, 320 x 240 pixel resolution, 65,536 colours

Ekinex® Touch&See is a KNX device for the switching, control and display of

bus functions. By means of its touch-screen and its graphical user interface,

it is possible to control KNX actuators in an easy and intuitive way, to display

the information coming from the KNX actuators and sensors and to perform as a

room thermostat for up to 8 independent zones, receiving the measured room

temperature values from the bus. The device integrates a KNX bus communication

module and is designed for wall mounting boxes; it is powered by a SELV voltage

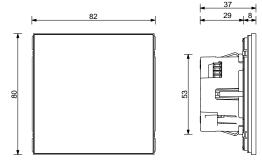
directly from the KNX bus and requires an auxiliary 30 Vdc power supply.

- Seven main graphic pages
- Plastic casing
- Connection to bus line with KNX terminal block
- Connection to auxiliary power supply with yellow / white terminal block
- Programming pushbutton and LED on the rear
- Wall-mounting installation on round or square wall box
- IP20 protection degree (installed)
- Weight 110 g (with mounting support)

#### Technical data

- SELV power supply from KNX bus (communication)
- 30 Vdc auxiliary power supply (screen)

#### Dimensions [mm]



#### Order information

Code	Mounting	Side profile
EK-EC2-TP	with square frame of Form or Flank version	-
EK-EC2-TP-00-NF	without frame ('NE version)	black
EK-EC2-TP-00-NFW	— without frame ('NF version)	white



#### Configuration and commissioning

By means of ETS5 software or later versions Application program: **APEKEC2TP##.knxprod** (## = version, download from www.ekinex.com)





#### **Documentation**

For more information see the technical documentation, download from **www.ekinex.com** 







## Touch&See display with 2-fold pushbutton

WALL-MOUNT DEVICES

#### **Description**

Ekinex® Touch&See with 2-fold pushbutton is a KNX device for the switching, control and display of bus functions. By means of its touch-screen and the graphical user interface, it is possible to control KNX actuators in an easy and intuitive way, to display information coming from KNX actuators and sensors and to perform as a room thermostat for a maximum of 8 independent zones. One temperature value can be measured from the integrated sensor, while the other values can be received from the bus. The integrated 2-fold pushbutton allows the on/off command of loads, the dimming of lighting devices, the control of motor drives for shutters or the execution of any other programmable command and control function. The LEDs can be chosen in the colour combinations blue / green or white / red. The device integrates a KNX bus communication module and is designed or mounting onto a wall-mounting box; it is powered by SELV voltage directly from the KNX bus and requires an auxiliary 30 Vdc power supply.

#### Main features

- 3,5" TFT back-lit touch display, 320 x 240 pixel resolution, 65,536 colours
- Seven main graphic pages
- Integrated temperature sensor
- 2-fold pushbutton (possibility to configure up to 4 independent functions)
- 4 freely programmable LEDs for each channel
- 2 colour combination available for the LEDs (blue/green or red/white)
- Plastic casing
- Connection to bus line with KNX terminal block
- Connection to auxiliary power supply with yellow / white terminal block
- Programming pushbutton and LED on the rear
- Wall-mounting installation on round,square or rectangular wall box
- IP20 protection degree (installed)
- Weight 130 g (with mounting support)

#### Technical data

- SELV power supply from KNX bus (communication)
- 30 Vdc auxiliary power supply (screen)

#### Order information

Code	LED colours	Mounting
EK-EF2-TP	blue / green	with rectangular frame of
EK-EF2-TP-RW	red / white	Form or Flank version

#### Delivery

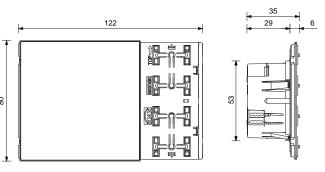
Delivery includes a terminal block for connection to the bus, a terminal block for connection to the auxiliary power supply, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart) or rectangular mounting box (fixing holes 83,5 mm apart) and two pairs of fixing screws.

#### Accessories

The following accessories are available to be ordered separately:

- square rockers
- rectangular frame Form or Flank version

#### Dimensions [mm]





#### Configuration and commissioning

By means of ETS5 software or later versions Application program: **APEKEF2TP##.knxprod** (## = version, download from www.ekinex.com)





For more information see the technical documentation, download from www.ekinex.com

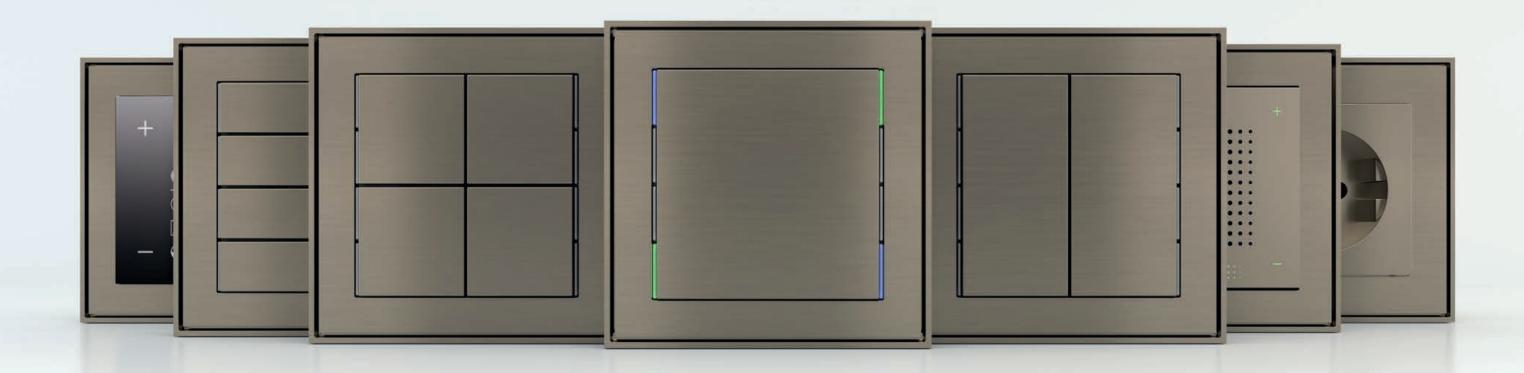


# 71 SERIES WALL-MOUNT DEVICES

Form	72
Flank	74
'NF	76
Deep	78
Surface	80



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**71 - Form** WALL-MOUNT DEVICES

Elegant and refined. The compactness that adapts to your style. With an ultra-thin frame, the Form line of the 71 series has integrated plastic or metal pushbuttons, thermostats and plates for sockets and LEDs with adjustable light intensity in blue/green or white/red colour combinations. The different finishes can be freely combined with each other.

The state of the s							
	Form	Flank	'NF	Deep	Surface	Doolsono	
	Frai	nes		Plates		- Rockers	
Plastic	•	•	•	•	_	•	
Metal	•	•	٠	٠	٠	•	
Metal HT	-	-	-	٠	٠	•	
Fenix NTM®	-	-	•	•	•	•	

For more information see page 196





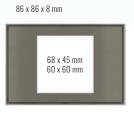
45 x 45 mm 55 x 55 mm 60 x 60 mm





86 x 86 x 8 mm

86 x 86 x 8 mm



45 x 45 mm 55 x 55 mm 60 x 60 mm 45 x 45 mm 55 x 55 mm 60 x 60 mm

86 x 86 x 8 mm 126 x 86 x 8 mm 156 x 86 x 8 mm

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71 - Flank
WALL-MOUNT DEVICES

**Harmony and essentiality.** The rigorous simplicity of detail. The Flank line of the 71 series has pushbuttons, thermostats and plates for sockets with simple shapes that can be distinguished by the characteristic side edges. The plastic or metal finishes can be combined according to your taste and needs.

# Available colour solutions

	Form	Flank	'NF	Deep	Surface	Daaltara
	Frai	nes		Plates		Rockers
Plastic	٠	•	•	•	-	•
Metal	•	•	٠	٠	٠	•
Metal HT	-	-	-	٠	٠	•
Fenix NTM®	_	-	•			•

For more information see page 196





94 x 80 x 8 mm

94 x 80 x 8 mm





94 x 80 x 8 mm

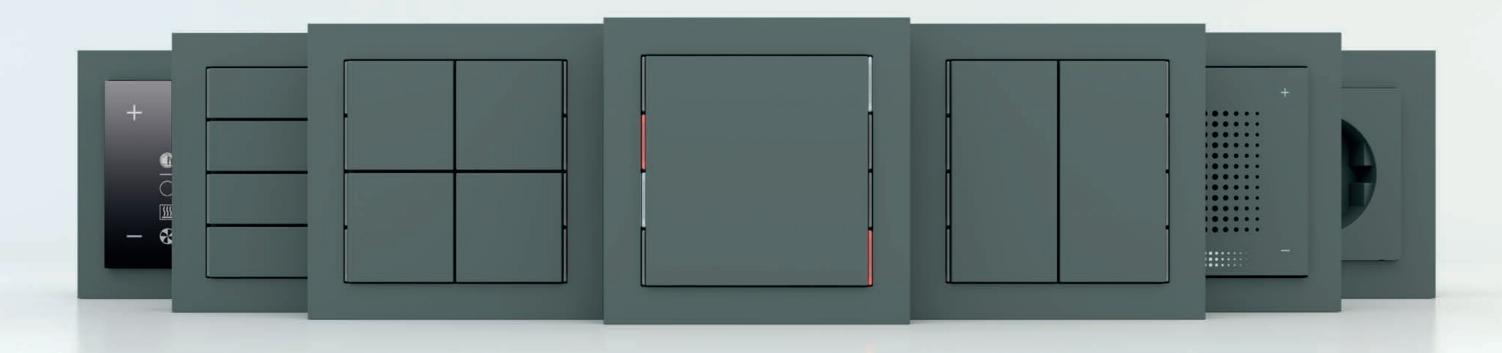
94 x 80 x 8 mm







134 x 80 x 8 mm 165 x 80 x 8 mm



71 - 'NF WALL-MOUNT DEVICES **Simple and rational.** Frameless, the 'NF line of the 71 Series provides pushbuttons, thermostats and plates for sockets in plastic, metal and Fenix NTM®, the super opaque and soft touch nanotechnological material. Equipped with LEDs with adjustable light intensity in blue/green or white/red combinations.

	Form	Flank	'NF	Deep	Surface	Doolsono
	Fra	mes		Plates		Rockers
Plastic	•	•	•	•	-	•
Metal	•	٠	•	٠	٠	•
Metal HT	-	-	-	•	•	•
Fenix NTM®	-	-	•	•	•	•

For more information see page 196





45 x 45 mm 55 x 55 mm 60 x 60 mm



80 x 80 x 8 mm





80 x 80 x 8 mm

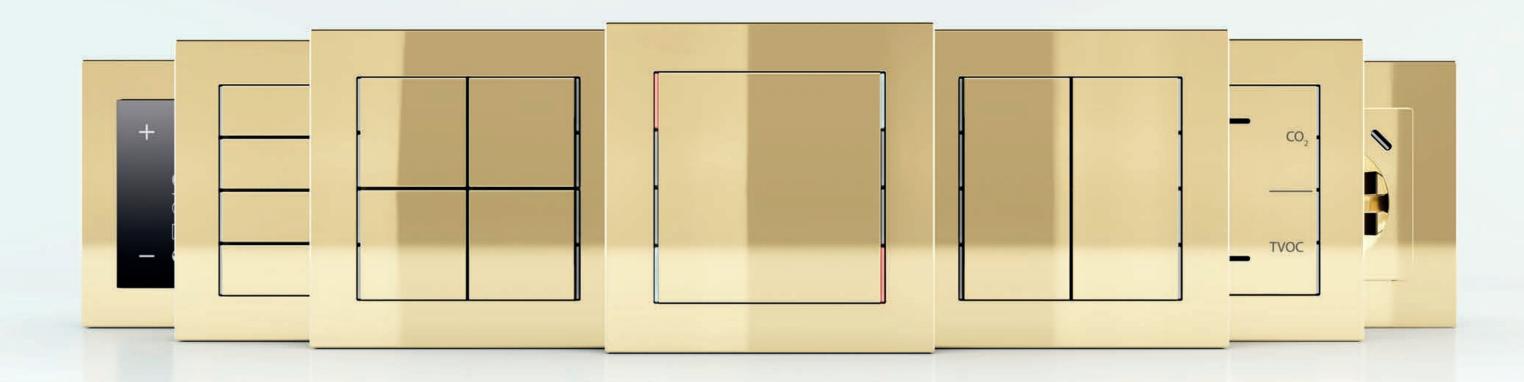




45 x 45 mm 55 x 55 mm 60 x 60 mm 45 x 45 mm 55 x 55 mm 60 x 60 mm

158 x 80 x 9 mm

80 x 80 x 9 mm 128 x 80 x 9 mm



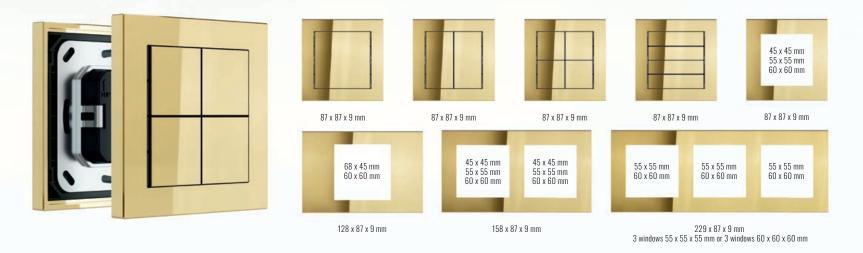
71 - Deep WALL-MOUNT DEVICES

**Slim and elegant.** The Deep line of the 71 series provides plastic, metal and Fenix NTM® pushbuttons, thermostats and plates for sockets in a wide range of colours and sizes with integrated LEDs that can be freely combined with each other. Ideal for even the most eclectic and elegantly designed spaces.

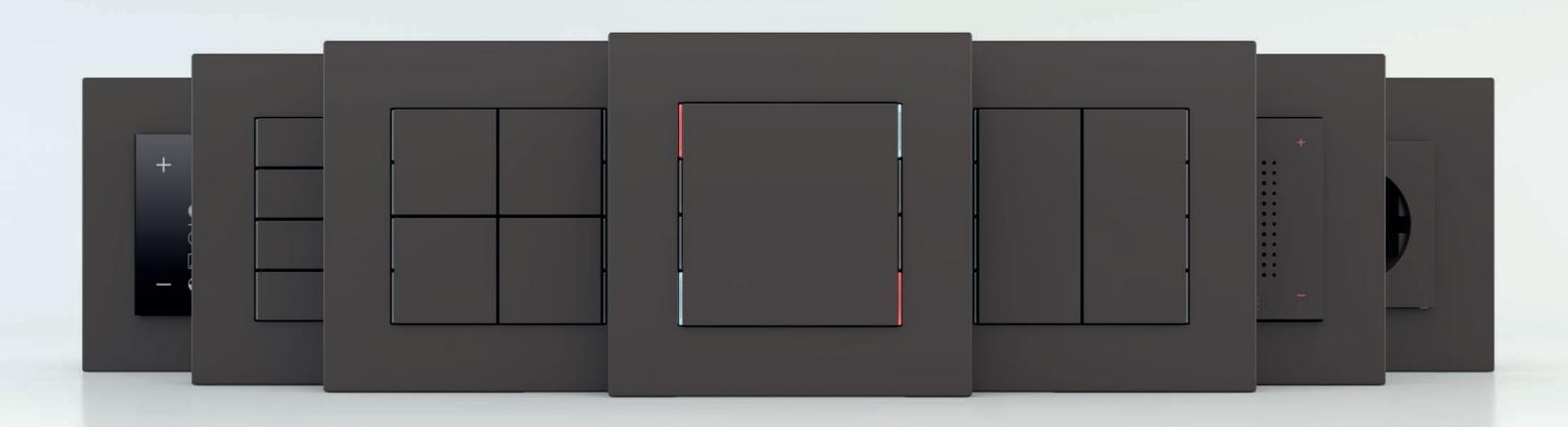
# Available colour solutions

	Form	Flank	'NF	Deep	Surface	Doolsono
	Frai	mes		Plates		Rockers
Plastic	•	•	•	•	-	•
Metal	•	•	•	•	•	•
Metal HT	-	-	-	•	•	•
Fenix NTM®	-	-	•	•	•	•

For more information see page 196



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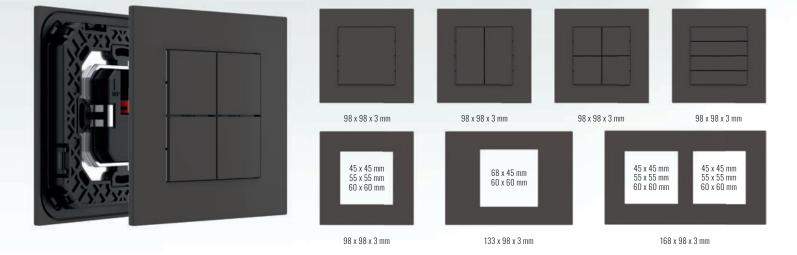
# 71 - Surface WALL-MOUNT DEVICES

**Essentiality and functionality for the contemporary home.** Designed to create a continuum with the wall, the Surface line of the 71 series integrates with the background almost as if it were part of it. The different available combinations make it particularly versatile and successful in the most different situations. The materials used are metal and the nanotechnological Fenix NTM®.

# **Available colour solutions**

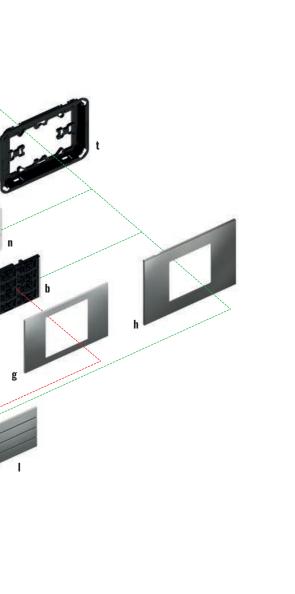
	Form	Flank	'NF	Deep	Surface	Doolsono
	Frai	mes		Plates		Rockers
Plastic	•	•	•	•	-	•
Metal	•	٠	٠	•	•	•
Metal HT	-	-	-	•	•	•
Fenix NTM®	-	-	•	•	•	•

For more information see page 196



# **Pushbuttons - 71 series**

WALL-MOUNT DEVICES





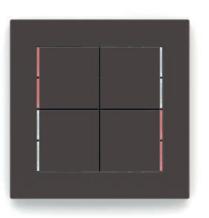
Description	Code	Page
a) b) Pushbutton 71 series	EK-E12-TP o EK-E22-TP	84-86
c) Square plate Surface version*	EK-SQS	179
d) Square plate*	EK-PQS	172
e) Square plate Deep version*	EK-DQP	175
f) Rectangular plate Deep version*	EK-DRS	176
g) Rectangular plate*	EK-PRS	173
h) Rectangular plate Surface version*	EK-SRS	180
i) Square rocker (1)	EK-T1Q	
j) Rectangular vertical rockers (2)	EK-T2R	166
k) Square rockers (4)	EK-T4Q	100
I) Rectangular horizontal rockers (4)	EK-T4R	•
m) Metal mounting support	EK-SMQ-71-1	100
n) Metal mounting support with adapter	EK-SMR-71-1	183

Description	Code	Page
o) Adapter for square Surface plate	EK-TAS-Q-1	179
<b>p)</b> Adapter for square plate - Form or Flank frames	EK-TAQ-1	172
<b>q)</b> Adapter for square plate 'NF and Deep version	EK-TAQ-1-NF	172-175
r) Adapter for rectangular plate 'NF and Deep version	EK-TAR-1-NF	173-176
s) Adapter for rectangular plate - Form or Flank frames	EK-TAR-1	173
t) Adapter for Surface rectangular plate	EK-TAS-R-1	180
u) Square frame Flank version	EK-FLQ	170
u1) Square frame Form version	EK-FOQ	169
v) Rectangular frame Flank version	EK-FLR	170
v1) Rectangular frame Form version	EK-FOR	169
w) Round flush-mounting box	not delivered by Ekinex®	
x) Square flush-mounting box	not delivered by Ekinex®	
y) Rectangular flush-mounting box (3 modules)	not delivered by Ekinex®	
*) 60 x 60 mm window		
y) Rectangular flush-mounting box (3 modules)		





71 series: infinite number of combinations for a unique style. The series of 71 buttons are available in square or rectangular version with single, double or triple window (Deep version only).



The Ekinex® pushbuttons of 71 series range and related accessories offer the possibility to realize several variations that will satisfy the most diverse needs. The base is represented by the device which is fitted with a KNX communication module. The EK-E12-TP-... version of the pushbutton is suitable for mounting into a flush mounting box, either round or square, provided with fixing holes 60 mm apart, and is also suitable for mounting into a rectangular wall mounting box 3 seater according to the Italian installation standard provided with fixing holes 83,5 mm apart. Each pushbutton is delivered with its relative metal support which, in case of necessity, can also be ordered separately. A plastic adapter and a terminal block complete the supply.

The pushbuttons must be finished off with an operation surface (rockers), a plate with 60 x 60 mm window and a frame. The rockers are available in square and rectangular shapes of different modularities, in plastic material, aluminium or Fenix NTM® and in several colours. Version EK-E12-TP-... has integrated LEDs which can be programmed freely: as an example, as a status feedback or as an orientation light at night time. Two colour combinations are available for the LEDs: blue / green or red / white. The same version also offers a room thermostat function, thanks to the integrated temperature sensor. The frames, square and rectangular, are available in two stylish alternatives (Form and Flank) and are available in plastic material or aluminium and in several colours and finishings. The 'NF version of the pushbutton is mounted without frame and is provided with a side profile in white or black colour.

The pushbuttons simply get connected to the unique signal bus cable and do not require auxiliary power supply; the devices are supplied at SELV (Safety Extra Low Voltage) voltage, thus offering a much higher safety level than traditional commands. The configuration and commissioning is carried out by means of the ETS® software. The related application programs can be downloaded from the www.ekinex.com website.





# 4-fold basic pushbutton - 71 series

WALL-MOUNT DEVICES

Delivery includes a terminal block for connection to the bus, a plastic adapter, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart), two pairs of fixing screws.

### Accessories

The following accessories are available to be ordered separately:

- set of 1 square rocker, 2 vertical rectangular rockers, 4 square rockers or 4 horizontal rectangular rockers
- square and double frame Form or Flank version
- square, double and triple plate with 60 x 60 mm window

# **Main features**

Description

• 4-fold (possibility to configure up to 8 independent functions) Plastic casing

The 4-fold pushbutton of Ekinex® 71 series commands loads on/off switching, controls

the dimming of lighting devices, controls motor drives for shutters or executes any

other programmable command and control function. The device integrates a KNX

bus communication module and is intended for mounting onto a wall mounting box;

it is supplied by a SELV voltage directly from the KNX bus and does not require any

• Connection to bus line with KNX terminal block

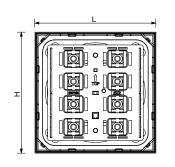
auxiliary power supply.

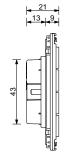
- Frontal programming pushbutton and LED
- Wall-mounting installation on round or square wall box
- IP20 protection degree (installed)
- Weight 70 g (with mounting support)

## Technical data

- 30 Vdc power supply by KNX bus
- Current consumption from bus < 15 mA

# **Dimensions** [mm]





Mounting with frame: 81 x 77 (L x H) Mounting without frame ('NF): 80 x 80 (L x H)

84

order information		
Code	Mounting	Side profile
EK-E22-TP	with square and double frame Form or Flank version	-
EK-E22-TP-NF	without frame ('NF version)	black
EK-E22-TP-NFW	WILLIOUL HAITIE ( NF VEISIOH)	white

By means of ETS5 software or later versions Application program: APEKE22TP##.knxprod (## = version, downloadable from www.ekinex.com)





For more information see the technical documentation







# 4-fold basic pushbutton and room thermostat for rectangular wall-box - 71 series

WALL-MOUNT DEVICES

# **Description**

The 4-fold pushbutton of Ekinex® 71 series commands loads on/off switching, controls the dimming of lighting devices, controls motor drives for shutters or executes any other programmable command and control function. The device integrates a KNX bus communication module and is intended for mounting onto a wall mounting box; it is supplied by a SELV voltage directly from the KNX bus and does not require any auxiliary power supply.

Mounting

with rectangular frame

without frame ('NF version)

# Main features

- 4-fold (possibility to configure up to 8 independent functions)
- Plastic casing
- Connection to bus line with KNX terminal block
- Frontal programming pushbutton and LED
- Wall-mounting installation on round, square or rectangular wall box
- IP20 protection degree (installed)
- Weight 100 g (with mounting support)

## Technical data

Order information

Code

EK-E22-TP-R

EK-E22-TP-NF-R

EK-E22-TP-NFW-R

- 30 Vdc power supply by KNX bus
- Current consumption from bus < 15 mA

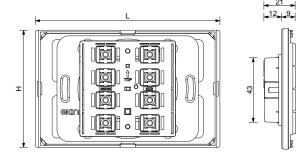
Delivery includes a terminal block for connection to the bus, a plastic adapter, a metal support for installation onto round or square (fixing holes 60 mm apart) or rectangular 3 seater mounting box according to the Italian installation standard provided (fixing holes 83,5 mm apart), two pairs of fixing screws.

# Accessories

The following accessories are available to be ordered separately:

- set of 1 square rocker, 2 vertical rectangular rockers, 4 square rockers or 4 horizontal rectangular rockers
- rectangular frame Form or Flank version
- rectangular plate with 60 x 60 mm window

# **Dimensions** [mm]



Mounting with frame: 122 x 77 (L x H) Mounting without frame ('NF): 120 x 80 (L x H)

Side profile

hlack

white

By means of ETS5 software or later versions Application program: APEKE22TP##.knxprod (## = version, downloadable from www.ekinex.com)





For more information see the technical documentation,



4-fold pushbutton and room

thermostat for rectangular

wall-box - 71 series

WALL-MOUNT DEVICES





# 4-fold pushbutton and room thermostat - 71 series

WALL-MOUNT DEVICES

# Dolivory

Delivery includes a terminal block for connection to the bus, a plastic adapter, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart), two pairs of fixing screws.

# Accessories

The following accessories are available to be ordered separately:

- set of 1 square rocker, 2 vertical rectangular rockers, 4 square rockers or 4 horizontal rectangular rockers
- square and double frame Form or Flank version
- square, double and triple plate with 60 x 60 mm window

# Main features

Description

• 4-fold (possibility to configure up to 8 independent functions)

the KNX bus and does not require any auxiliary power supply.

- 4 freely programmable LED for each channel
- 2 colour combination available for the LED (blue / green or red / white)

The 4-fold pushbutton of Ekinex® 71 series commands loads on/off switching,

controls the dimming of lighting devices, controls motor drives for shutters or

executes any other programmable command and control function. Thanks to the

integrated temperature sensor, the pushbutton can work as a thermostat for a

room or a zone. The LED can be chosen in the colour combinations blue / green or

white / red. The device integrates a KNX bus communication module and is intended

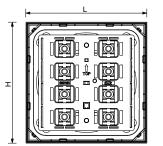
for mounting onto a wall mounting box; it is powered by a SELV voltage directly from

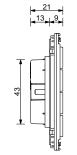
- · Room thermostat function
- Integrated temperature sensor
- Plastic casing
- Connection to bus line with KNX terminal block
- Frontal programming pushbutton and LED
- Wall-mounting installation on round or square wall box
- IP20 protection degree (installed)
- Weight 70 g (with mounting support)

# Technical data

- 30 Vdc power supply by KNX bus
- Current consumption from bus < 15 mA

# Dimensions [mm]





Mounting with frame: 81 x 77 (L x H) Mounting without frame ('NF): 80 x 80 (L x H)

## Order information

86

Code	LED colours	Mounting	Side profile	
EK-E12-TP	blue / green	with square and double frame Form or	_	
EK-E12-TP-RW	red / white	Flank version	-	
EK-E12-TP-BG-N	blue / green		blook	
EK-E12-TP-RW-N	F red / white	 without frame ('NF	black	
EK-E12-TP-BG-N	FW blue / green	version)	white	
EK-E12-TP-RW-N	FW red / white		white	

## Configuration and commissi

By means of ETS5 software or later versions Application program: **APEKE12TP##.knxprod** (## = version, download from www.ekinex.com)



# Doo

## Documentation

For more information see the technical documentation, download from **www.ekinex.com** 



# Description

The 4-fold pushbutton of Ekinex® 71 series commands loads on/off switching, controls the dimming of lighting devices, controls motor drives for shutters or executes any other programmable command and control function. Thanks to the integrated temperature sensor, the pushbutton can work as a thermostat for a room or a zone. The LED can be chosen in the colour combinations blue / green or white / red. The device integrates a KNX bus communication module and is intended for mounting onto a wall mounting box; it is powered by a SELV voltage directly from the KNX bus and does not require any auxiliary power supply.

### Main features

- 4-fold (possibility to configure up to 8 independent functions)
- 4 freely programmable LED for each channel
- 2 colour combination available for the LED (blue / green or red / white)
- Room thermostat function
- · Integrated temperature sensor
- Plastic casing
- Connection to bus line with KNX terminal block
- Frontal programming pushbutton and LED
- Wall-mounting installation on round, square or rectangular wall box

LED colours

blue / green

red / white

blue / green

red / white

blue / green

red / white

Mounting

version

with rectangular

frame Form or Flank

without frame ('NF version)

- IP20 protection degree (installed)
- Weight 100 g (with mounting support)

# Technical data

**Order information** 

Code

EK-E12-TP-R

EK-E12-TP-RW-R

EK-E12-TP-BG-NF-R

EK-E12-TP-RW-NF-R

FK-F12-TP-BG-NFW-R

EK-E12-TP-RW-NFW-R

- 30 Vdc power supply by KNX bus
- Current consumption from bus < 15 mA

# Delivery

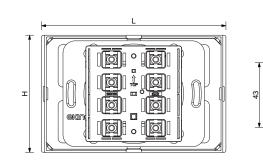
Delivery includes a terminal block for connection to the bus, a plastic adapter, a metal support for installation onto round or square (fixing holes 60 mm apart) or rectangular 3 seater mounting box according to the Italian installation standard provided (fixing holes 83,5 mm apart), two pairs of fixing screws.

# Accessories

The following accessories are available to be ordered separately:

- set of 1 square rocker, 2 vertical rectangular rockers, 4 square rockers or 4 horizontal rectangular rockers
- rectangular frame Form or Flank version
- rectangular plate with 60 x 60 mm window

# Dimensions [mm]



Mounting with frame: 122 x 77 (L x H)
Mounting without frame ('NF): 120 x 80 (L x H)

# - ,0

Side profile

black

## Configuration and commissioni

By means of ETS5 software or later versions Application program: **APEKE12TP##.knxprod** (## = version, download from www.ekinex.com)



12 9



## Documentation

For more information see the technical documentation, download from **www.ekinex.com** 





# **Room thermostats**

WALL-MOUNT DEVICES

**Create a positive atmosphere.** The different operating modes of the 71 series room temperature control allow you to adapt the control to your needs, save energy and ensure your comfort. The numerous integrated functions ensure a comfortable environment in all seasons. The 71 room temperature control will make you want to come back home.

	Form	Flank	'NF	Deep	Surface
	Fra	mes		Plates	
Plastic	•	•	•	•	-
Metal	•	•	•	•	•
Metal HT	-	-	-	•	•
Fenix NTM®	-	-	•	•	•

For more information see page 196





86 x 86 x 8 mm **Form** 

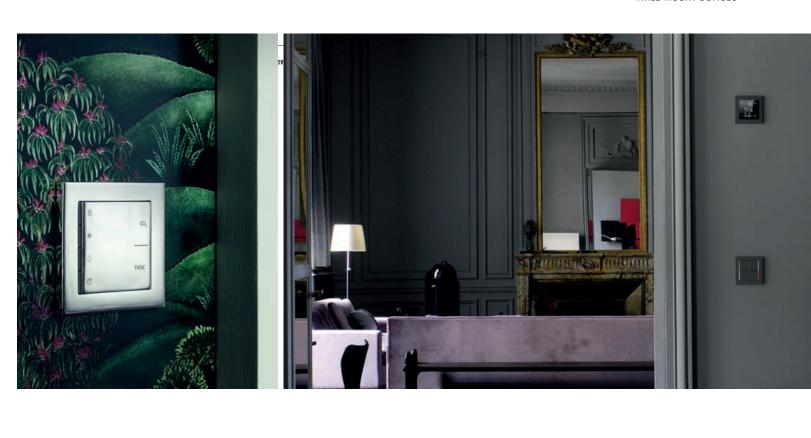




86 x 86 x 9 mm **Deep** 

# **Room thermostats - 71 series**

WALL-MOUNT DEVICES



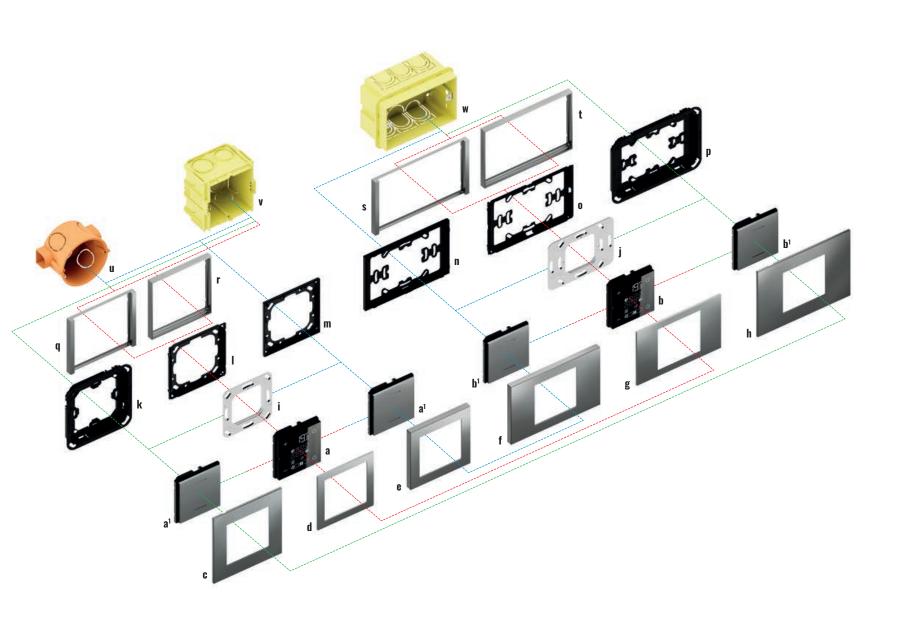
Many different combinations, possibilities installation horizontally or vertically, 71 room temperature control meets all requirements. Yours too...



The Ekinex® thermostats of 71 series range and related accessories offer the possibility to realize several variations that will satisfy the most diverse needs. The base is represented by the device which is fitted with a KNX communication module. The EK-E72-TP version of the thermostat is suitable for mounting into a flush mounting box, either round or square, provided with fixing holes 60 mm apart, while the EK-E72-TP-...-R version is also suitable for mounting into a rectangular wall mounting box 3 modules according to the Italian installation standard provided with fixing holes 83,5 mm apart. Each thermostat is delivered with its relative metal support which, in case of necessity, can also be ordered separately. A plastic adapter and a terminal block complete the supply.

Depending on the version, the thermostat must be finished off with a square or rectangular plate with 60 x 60 mm window and a square or rectangular frame. The frames are available in two stylish alternatives (Form and Flank). Plates and frames are in plastic material, aluminium or Fenix NTM®, in several colour and finishing variations. The 'NF versions of the thermostats are mounted without frame and are provided with a side profile in white or black colour.

The thermostats simply get connected to the unique signal bus cable and do not require auxiliary power supply; the devices are powered at SELV (Safety Extra Low Voltage) voltage, thus offering a much higher safety level than traditional commands. The configuration and commissioning is carried out by means of the ETS® software. The related application programs can be downloaded from the www.ekinex.com website.



# Room thermostats and Multisensors 71 series

Description	Code	Page
a) b) Thermostat 71 series	EK-E72-TP	92
a1) b1) Multisensor 71 series	EK-ET2 o EK-ES2	94-96
c) Square plate Surface version*	EK-SQS	179
d) Square plate*	EK-PQS	172
e) Square plate Deep version*	EK-DQP	175
f) Rectangular plate Deep version*	EK-DRS	176
g) Rectangular plate*	EK-PRS	173
h) Rectangular plate Surface version*	EK-SRS	180
i) Metal mounting support	EK-SMQ-71-1	100
j) Metal mounting support with adapter	EK-SMR-71-1	- 183
k) Adapter for square Surface plate	EK-TAS-Q-1	179
1) Adapter for square plate - Form or Flank frames	EK-TAQ-1	172

Description	Code	Page
m) Adapter for square plate 'NF and Deep version	EK-TAQ-1-NF	172-175
n) Adapter for rectangular plate 'NF and Deep version	EK-TAR-1-NF	173-176
o) Adapter for rectangular plate - Form or Flank frames	EK-TAR-1	173
<b>p)</b> Adapter for Surface rectangular plate	EK-TAS-R-1	180
<b>q)</b> Square frame Flank version	EK-FLQ	170
r) Square frame Form version	EK-FOQ	169
s) Rectangular frame Flank version	EK-FLR	170
t) Rectangular frame Form version	EK-FOR	169
u) Round flush-mounting box	not delivered by Ekinex®	
v) Square flush-mounting box	not delivered by Ekinex®	
w) Rectangular flush-mounting box (3 modules)	not delivered by Ekinex®	
*) 60 x 60 mm window		





# Room thermostat - 71 series

WALL-MOUNT DEVICES





# **Room thermostat for** rectangular wall-box - 71 series

# Description

The Ekinex® room temperature controller of 71 series regulates independently the temperature of a room or a zone. In combination with one or more KNX actuators. the room temperature controller is able to control the heating and cooling emission of a series of terminal units for the thermal exchange (such as radiators, fan-coils, floor and ceiling radiant panels, etc.). The device is provided with a LCD-Display with adjustable backlight, and a sensor for temperature measuring. The device integrates a KNX bus communication module and is intended for mounting onto a wall mounting box; it is powered by a SELV voltage directly from the KNX bus and does not require any auxiliary power supply.

# Main features

- LCD-Display with adjustable backlight
- 4 capacitive pushbuttons for controlling of the thermostat functions
- Integrated temperature sensor
- Plastic casing
- Connection to bus line with KNX terminal block
- Frontal programming pushbutton and LED
- Wall-mounting installation on round or square wall box
- IP20 protection degree (installed)
- Weight 90 g (with mounting support)

# Technical data

- 30 Vdc power supply by KNX bus
- Current consumption from bus < 13 mA

# Delivery

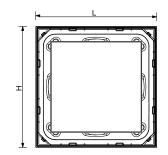
Delivery includes a terminal block for connection to the bus, a plastic adapter, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart), two fixing screws.

### Accessories

The following accessories are available to be ordered separately:

- square and double frame Form or Flank version
- square, double and triple plate with 60 x 60 mm window

# **Dimensions** [mm]





Mounting with frame: 81 x 77 (L x H) Mounting without frame ('NF): 80 x 80 (L x H)

Code	Mounting	Side profile
EK-E72-TP	with square and double frame Form or Flank version	-
EK-E72-TP-NF	without frame (ME varsion)	black
EK-E72-TP-NFW	without frame ('NF version)	white

By means of ETS5 software or later versions Application program: APEKE72TP##.knxprod (## = version, download from www.ekinex.com)



For more information see the technical documentation



# **Description**

The Ekinex® room temperature controller of 71 series regulates independently the temperature of a room or a zone. In combination with one or more KNX actuators. the room temperature controller is able to control the heating and cooling emission of a series of terminal units for the thermal exchange (such as radiators, fan-coils, floor and ceiling radiant panels, etc.). The device is provided with a LCD-Display with adjustable backlight, and a sensor for temperature measuring. The device integrates a KNX bus communication module and is intended for mounting onto a wall mounting box; it is powered by a SELV voltage directly from the KNX bus and does not require any auxiliary power supply.

# Main features

- LCD-Display with adjustable backlight
- 4 capacitive pushbuttons for controlling of thermostat functions
- Integrated temperature sensor
- Plastic casing
- Connection to bus line with KNX terminal block
- Frontal programming pushbutton and LED
- Wall-mounting installation on round, square or rectangular wall box
- IP20 protection degree (installed)
- Weight 120 g (with mounting support)

# Technical data

**Order information** 

Code

EK-E72-TP-R

EK-E72-TP-NF-R

EK-E72-TP-NFW-R

- 30 Vdc power supply by KNX bus
- Current consumption from bus < 13 mA

Mounting

with rectangular frame Form or Flank version

without frame ('NF version)

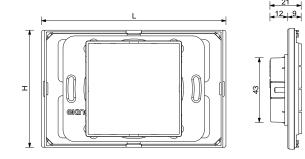
Delivery includes a terminal block for connection to the bus, a plastic adapter, a metal support for installation onto round or square (fixing holes 60 mm apart) or rectangular 3 seater mounting box according to the Italian installation standard provided (fixing holes 83,5 mm apart), two pairs of fixing screws.

# Accessories

The following accessories are available to be ordered separately:

- rectangular frame Form or Flank version
- rectangular plate with 60 x 60 mm window

# **Dimensions** [mm]



Mounting with frame: 122 x 77 (L x H) Mounting without frame ('NF): 120 x 80 (L x H)

Side profile

black

white

By means of ETS5 software or later versions Application program: APEKE72TP##.knxprod (## = version, download from www.ekinex.com)





For more information see the technical documentation,





# Multisensor quality air with regulator

WALL-MOUNT DEVICES

# Description

The Ekinex® multisensor 71 series detects values of temperature, relative humidity and  $\mathrm{CO}_2$  equivalent concentration in an air mass. The device can act as a temperature regulator of a room or zone; it can also perform the regulation by thresholds of relative humidity and  $\mathrm{CO}_2$  concentration. The frontal LEDs indicate if the device is in heating, cooling, dehumidification or  $\mathrm{CO}_2$  threshold mode. The device integrates a KNX bus communication module and is intended for mounting onto a wall mounting box; it is supplied by a SELV voltage directly from the KNX bus and does not require any auxiliary power supply.

# **Main features**

- Integrated temperature and relative humidity sensors
- Integrated VOCs (Volatile Organic Compounds) sensor with output signal for CO<sub>2</sub> equivalent
- Room thermostat function
- Threshold regulator function for relative humidity and CO<sub>2</sub>
- LEDs for heating, cooling, dehumidification or CO<sub>2</sub> threshold mode indication
- Plastic casing
- Connection to bus line with KNX terminal block
- Frontal programming pushbutton and LED
- Wall-mounting installation on round or square wall box
- IP20 protection degree (installed)
- Weight 90 g (with mounting support)

# **Technical data**

- 30 Vdc power supply by KNX bus
- Current consumption from bus < 13 mA

## Order information

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Code	Mounting	Side profile
EK-ET2-TP	with square and double frame Form or Flank version	-
EK-ET2-TP-NF	11 16 (ME : )	black
EK-ET2-TP-NFW	without frame ('NF version)	white

## Delivery

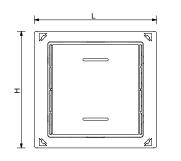
Delivery includes a terminal block for connection to the bus, a plastic adapter, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart), two pairs of fixing screws.

# Accessories

The following accessories are available to be ordered separately:

- 1 full front cover with 60 x 60 mm modularity
- square and double frame Form or Flank version
- square, double and triple plate with 60 x 60 mm window

# **Dimensions** [mm]





# Configura

## Configuration and commissioning

By means of ETS5 software or later versions Application program: **APEKET2TP##.knxprod** (## - version, downloadable from www.ekinex.com)



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# Documentation

For more information see the technical documentation, download from **www.ekinex.com** 







# Multisensor quality air with regulator for rectangular wall-box

WALL-MOUNT DEVICES

# **Description**

The Ekinex® multisensor 71 series detects values of temperature, relative humidity and  $\mathrm{CO}_2$  equivalent concentration in an air mass. The device can act as a temperature regulator of a room or zone; it can also perform the regulation by thresholds of relative humidity and  $\mathrm{CO}_2$  concentration. The frontal LEDs indicate if the device is in heating, cooling, dehumidification or  $\mathrm{CO}_2$  threshold mode. The device integrates a KNX bus communication module and is intended for mounting onto a wall mounting box; it is supplied by a SELV voltage directly from the KNX bus and does not require any auxiliary power supply.

# Main features

- Integrated temperature and relative humidity sensors
- Integrated VOCs (Volatile Organic Compounds) sensor with output signal for  $\mathrm{CO}_2$  equivalent
- Room thermostat function
- Threshold regulator function for relative humidity and CO<sub>2</sub>
- LEDs for heating, cooling, dehumidification or CO<sub>2</sub> threshold mode indication
- Plastic casing
- Connection to bus line with KNX terminal block
- Frontal programming pushbutton and LED
- Wall-mounting installation on round, square or rectangular wall box
- IP20 protection degree (installed)
- Weight 120 g (with mounting support)

# Technical data

- 30 Vdc power supply by KNX bus
- Current consumption from bus < 13 mA

	Code	Mounting	Side profile
	EK-ET2-TP-R	with rectangular frame Form or Flank version	-
-	EK-ET2-TP-NF-R	without frame ('NF version)	black
	EK-ET2-TP-NFW-R		white

## Jelivery

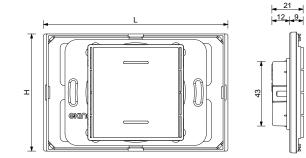
Delivery includes a terminal block for connection to the bus, a plastic adapter, a metal support for installation onto round or square (fixing holes 60 mm apart) or rectangular 3 seater mounting box according to the Italian installation standard provided (fixing holes 83,5 mm apart), two pairs of fixing screws.

### Accessorie

The following accessories are available to be ordered separately:

- 1 full front cover with 60 x 60 mm modularity
- rectangular frame Form or Flank version
- rectangular plate with 60 x 60 mm window

# Dimensions [mm]



Mounting with frame: 122 x 77 (L x H)
Mounting without frame ('NF): 120 x 80 (L x H)

# O

## Configuration and commissioning

By means of ETS5 software or later versions Application program: **APEKET2TP##.knxprod** (## = version, downloadable from www.ekinex.com)





## Documentation

For more information see the technical documentation, download from www.ekinex.com



O3 18

18

229 IN-Rail mount modules 311 Tools 315 Sales kit 321 al section General



# Multisensor with humidity, TVOC and CO<sub>2</sub> eq. regulator

WALL-MOUNT DEVICES

# Description

The Ekinex® EK-ES2-TP multisensor with EK-ES2-TP controller is a KNX S-mode device for independent temperature control of a room or building area. The module includes 3 sensors: temperature, humidity percentage and air quality, expressed in terms of TVOC (Total Volatile Organic Compounds) or CO<sub>2</sub> equivalent. It can also function as a controller for these three quantities, valid for a single zone to be controlled. The front LEDs indicate the heating, cooling, dehumidification, humidification and TVOC or CO<sub>2</sub> threshold status. The push-button and the programming LED are located on the front in the area below the button. The device integrates a KNX bus communication module and is intended for mounting onto a wall mounting box; it is supplied by a SELV voltage directly from the KNX bus and does not require any auxiliary power supply.

# **Main features**

- Integrated temperature and relative humidity sensors
- VOC (Volatile Organic Compounds) sensor with output signal for CO<sub>2</sub> equivalent and TVOC
- Room thermostat function
- Threshold regulator function for relative humidity, TVOC and CO<sub>2</sub>
- Available an alarm signal on the  ${\rm CO_2}$  level also useful to obtain 1 LEED certification point
- Compatibility with Belimo actuators for the control of dampers in VAV boxes and 6-way valves
- Plastic casing
- Connection to bus line with KNX terminal block
- Frontal programming pushbutton and LED
- Wall-mounting installation on round or square wall box
- IP20 protection degree (installed)
- Weight 90 g (with mounting support)

## Order information

Code	Mounting	Side profile
EK-ES2-TP	with square and double frame Form or Flank version	-
EK-ES2-TP-NF	without frame ('NF version) -	black
EK-ES2-TP-NFW		white

# Technical data

- 30 Vdc power supply by KNX bus
- Current consumption from bus < 13 mA
- Max. bus power < 390 mW</li>

# Delivery

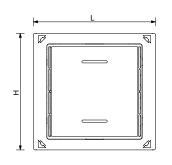
Delivery includes a terminal block for connection to the bus, a plastic adapter, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart), two pairs of fixing screws.

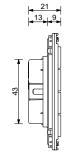
### **Accessories**

The following accessories are available to be ordered separately:

- 1 full front cover with 60 x 60 mm modularity
- square and double frame Form or Flank version
- square, double and triple plate with 60 x 60 mm window

# Dimensions [mm]





Mounting with frame: 81 x 77 (L x H) Mounting without frame ('NF): 80 x 80 (L x H)

# Configurati

## Configuration and commissioning

By means of ETS5 software or later versions Application program: **APEKES2TP##.knxprod** (## = version, downloadable from www.ekinex.com)





## Documentation

For more information see the technical documentation, download from **www.ekinex.com** 







# Multisensor with humidity, TVOC and CO<sub>2</sub> eq. regulator for rectangular wall-box

WALL-MOUNT DEVICES

# Description

The Ekinex® EK-ES2-TP multisensor with EK-ES2-TP controller is a KNX S-mode device for independent temperature control of a room or building area. The module includes 3 sensors: temperature, humidity percentage and air quality, expressed in terms of TVOC (Total Volatile Organic Compounds) or CO<sub>2</sub> equivalent. It can also function as a controller for these three quantities, valid for a single zone to be controlled. The front LEDs indicate the heating, cooling, dehumidification, humidification and TVOC or CO<sub>2</sub> threshold status. The push-button and the programming LED are located on the front in the area below the button. The device integrates a KNX bus communication module and is intended for mounting onto a wall mounting box; it is supplied by a SELV voltage directly from the KNX bus and does not require any auxiliary power supply.

# Main features

- Integrated temperature and relative humidity sensors
- VOC (Volatile Organic Compounds) sensor with output signal for CO<sub>2</sub> equivalent and TVOC
- Room thermostat function
- Threshold regulator function for relative humidity, TVOC and CO<sub>2</sub>
- Available an alarm signal on the  ${\rm CO_2}$  level also useful to obtain 1 LEED certification point
- Compatibility with Belimo actuators for the control of dampers in VAV boxes and 6-way valves
- Plastic casing
- Connection to bus line with KNX terminal block
- Frontal programming pushbutton and LED
- Wall-mounting installation on round, square or rectangular wall box
- IP20 protection degree (installed)
- Weight 120 g (with mounting support)

## Order information

	Code	Mounting	Side profile
	EK-ES2-TP-R	with rectangular frame Form or Flank version	-
	EK-ES2-TP-NF-R	without frome ('ME version)	black
	EK-ES2-TP-NFW-R	without frame ('NF version)	white

# Technical data

- 30 Vdc power supply by KNX bus
- Current consumption from bus < 13 mA
- Max. bus power < 390 mW</li>

# Delivery

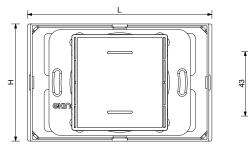
Delivery includes a terminal block for connection to the bus, a plastic adapter, a metal support for installation onto round or square (fixing holes 60 mm apart) or rectangular 3 seater mounting box according to the Italian installation standard provided (fixing holes 83,5 mm apart), two pairs of fixing screws.

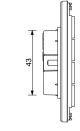
### Accessories

The following accessories are available to be ordered separately:

- 1 full front cover with 60 x 60 mm modularity
- rectangular frame Form or Flank version
- rectangular plate with 60 x 60 mm window

# Dimensions [mm]





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Mounting with frame: 122 x 77 (L x H)
Mounting without frame ('NF): 120 x 80 (L x H)

# Configuration and co

By means of ETS5 software or later versions Application program: **APEKES2TP##.knxprod** (## = version, downloadable from www.ekinex.com





Documentation

For more information see the technical documentation, download from **www.ekinex.com** 



# VOICE ASSISTANT

WALL-MOUNT DEVICES





# Eséguo voice assistant

WALL-MOUNT DEVICES **COMING SOON** 

Wall-mounted device, with smart speaker function, which can be integrated with Amazon's Alexa artificial intelligence and Google Assistant. In combination with Delégo Ekinex, it manages scenarios and commands, in addition to the usual Alexa functions. A perfect family feeling with the Ekinex 71 series.

# Available colour solutions

Transport Colour Colours						
	Form	Flank	'NF	Deep	Surface	- Front cover*
	Fra	mes		Plates		- FIUIIL GUVEI
Plastic	•	•	•	•	-	•
Metal	•	•	•	•	•	•
Metal HT	-	-	-	•	•	-
Fenix NTM®	-	-	•	•	•	•

<sup>\*</sup> The metal or Fenix NTM® colour effect is achieved by painting For more information see page 196













# Eséguo voice assistant

WALL-MOUNT DEVICES

COMING SOON



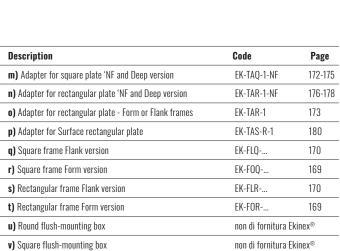


The Eséguo voice assistant based on the Amazon Alexa platform and certified Alexa built-in and its accessories offer the possibility of numerous customisations to meet the most diverse needs.

The EK-VA2-WL-... voice assistant, which contains a WiFi communication module, is suitable for mounting on a round or square wall-mounted flush-mounted box with 60 mm fixing holes, or for mounting on an Italian standard 3-post rectangular wall-mounted box with 83.5 mm fixing holes. Each device is supplied with its own metal mounting bracket, which can also be ordered separately if required. A plastic adapter (can be ordered separately), fixing screws and a 12-24 Vdc power supply complete the supply.

Depending on the version, the voice assistant must be completed with a square or rectangular plate with a 60 x 60 mm window and a square or rectangular frame. The plates are available in plastic, aluminium, metal HT or Fenix NTM® in a variety of colours and finishes. The frames are available in two formal solutions (Form and Flank) in plastic or aluminium. 'NF versions of the voice assistant are mounted without a frame and have a choice of black or white side profile.

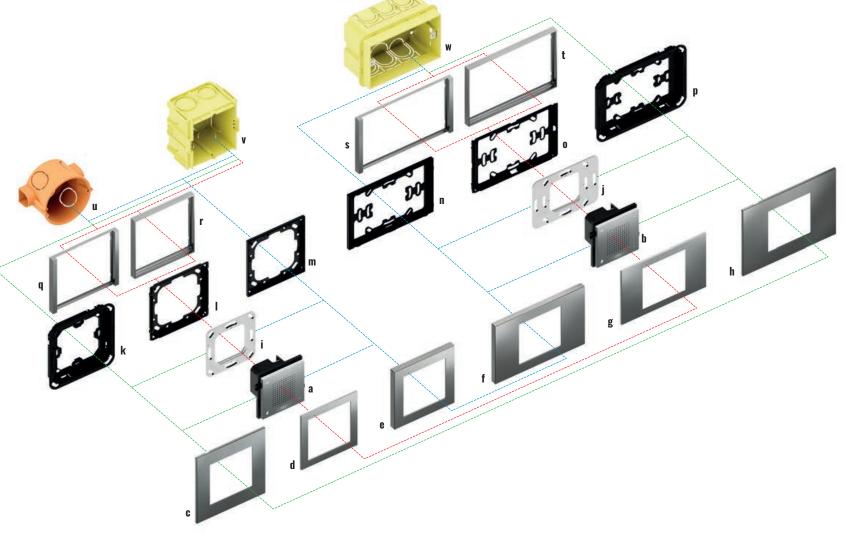
The voice assistants are connected to a 12-24 Vdc power supply; configuration and commissioning is done via a dedicated app. Using the Alexa App, skill can be configured to control home automation equipment and KNX systems via Delégo.



non di fornitura Ekinex®

w) Rectangular flush-mounting box (3 modules)

\*) 60 x 60 mm window



# Eséguo voice assistant

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Description	Code	Page
a) b) Eséguo voice assistant	EK-VA2-WL	106
c) Square plate Surface version*	EK-SQS	179
d) Square plate*	EK-PQS	172
e) Square plate Deep version*	EK-DQP	175
f) Rectangular plate Deep version*	EK-DRS	176
g) Rectangular plate*	EK-PRS	173
h) Rectangular plate Surface version*	EK-SRS	180
i) Metal mounting support	EK-SMQ-71-1	100
j) Metal mounting support	EK-SMR-71-1	—— 183
k) Adapter for square Surface plate	EK-TAS-Q-1	179
I) Adapter for square plate - Form or Flank frames	EK-TAQ-1	172





# Eséguo voice assistant

WALL-MOUNT DEVICES

COMING SOON





# Eséguo voice assistant for rectangular wall-box

WALL-MOUNT DEVICES

COMING SOON



# Description

Voice assistant for wall box installation, based on the Amazon Alexa platform and certified Alexa built-in. The connection is WiFi only and can therefore be installed in any domestic installation, as it does not require a KNX standard connection.

# Main features

- Cloud-based voice assistant that interprets natural language to interact with the user
- Built-in Alexa certificate
- Ability to request information and control compatible devices, apps and services to perform specific actions, including smart home actions. All through voice.

# Some examples

- Web searches and real-time updates on traffic, weather, sports, news, etc.
- Entertainment: streaming music as a command to other devices (radio, Spotify, Amazon Music, Deezer, Apple Music, etc.) and videos on smart displays using services such as Prime Video, Netflix, or via Fire TV Stick or Fire TV Cube
- Manage your calendar (appointments, alarms and reminders)
- Manage your shopping and to-do list
- Home automation and smart home control: WiFi bulbs, smart outlets, smart thermostats, IP cameras, wireless video surveillance systems, smart locks and other connected devices.
- Automatic installation of updates through the cloud
- Customisation by installing skills, i.e. additional functionality created by third parties, to increase interaction between Alex and other services, products and platforms

# **Technical Data**

- Power supply 12-24 Vdc
- Current consumption 40 mW
- Wall mounting on round or square box
- Degree of protection IP20 (installed)
- Plastic housing and front cover
- Climatic classification 3K5 and mechanical classification 3M2 (according to EN 50491-2)
- Pollution degree 2 (according to IEC 60664-1)

## Order information

Code	Mounting	
EK-VA2-WL	with square and double frame Form or Flank version, without frame ('NF version)	

- Dimensions: 80 x 80 x 38.5 mm (square) or 120 x 80 x 38.5 mm (rectangular)
- Operating temperature: 5... + 45°C
- Storage temperature: 25... + 55°C
- Transport temperature: 25... + 70°C
- Relative humidity: 95% non-condensing

## Deliver

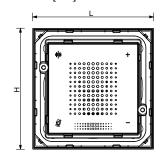
The following items are included in shipment: a terminal for connection to the bus line, a plastic adapter, a metal bracket for mounting on a round or square box (60 mm hole spacing) and two pairs of screws.

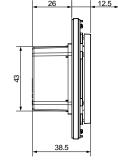
# Accessories

The following accessories are available for the completion and must be ordered separately:

- square and double frame Form or Flank version
- square, double and triple plate with 60 x 60 mm window

# **Dimensions** [mm]





Mounting with frame: 81 x 77 (L x H)
Mounting without frame ('NF): 80 x 80 (L x H)

# Coi

## onfiguration and commissioning

For more information see the technical documentation

Through dedicated App







# **Description**

Voice assistant for wall box installation, based on the Amazon Alexa platform and certified Alexa built-in. The connection is WiFi only and can therefore be installed in any domestic installation, as it does not require a KNX standard connection.

# **Main features**

- Cloud-based voice assistant that interprets natural language to interact with the user
- Built-in Alexa certifica
- Ability to request information and control compatible devices, apps and services to perform specific actions, including smart home actions. All through voice.

# Some examples

- Web searches and real-time updates on traffic, weather, sports, news, etc.
- Entertainment: streaming music as a command to other devices (radio, Spotify, Amazon Music, Deezer, Apple Music, etc.) and videos on smart displays using services such as Prime Video. Netflix. or via Fire TV Stick or Fire TV Cube
- Manage your calendar (appointments, alarms and reminders)
- Manage your shopping and to-do list
- Home automation and smart home control: WiFi bulbs, smart outlets, smart thermostats, IP cameras, wireless video surveillance systems, smart locks and other connected devices.
- Automatic installation of updates through the cloud
- Customisation by installing skills, i.e. additional functionality created by third parties, to increase interaction between Alex and other services, products and platforms

# **Technical Data**

- Power supply 12-24 Vdc
- Current consumption 40 mW
- Wall mounting on round or square box
- Degree of protection IP20 (installed)
- Plastic housing and front cover
- Climatic classification 3K5 and mechanical classification 3M2 (according to EN 50491-2)
- Pollution degree 2 (according to IEC 60664-1)

## Order information

Code	Mounting
EK-VA2-WL	with rectangular frame Form or Flank version, without frame ('NF version)

- Dimensions: 80 x 80 x 38.5 mm (square) or 120 x 80 x 38.5 mm (rectangular)
- Operating temperature: 5... + 45°C
- Storage temperature: 25... + 55°C
- Transport temperature: 25... + 70°C
- Relative humidity: 95% non-condensing

### Delivery

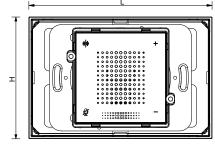
Delivery includes a terminal block for connection to the bus, a plastic adapter, a metal support for installation onto round or square (fixing holes 60 mm apart) or rectangular 3 seater mounting box according to the Italian installation standard provided (fixing holes 83,5 mm apart), two pairs of fixing screws.

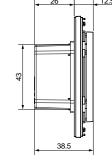
# Accessories

The following accessories are available for the completion and must be ordered separately:

- rectangular frame Form or Flank version
- rectangular plate with 60 x 60 mm window

# Dimensions [mm]





Montaggio con cornice: 122 x 77 (L x H) Montaggio senza cornice ('NF): 120 x 80 (L x H)



## Configuration and commissioning

Through dedicated App









# HOTEL SOLUTIONS

WALL-MOUNT DEVICES

Card rader	116
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Accédo software	120
Smart-card	121
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USB Tacihay® Kay	192



03 **18** 229 297 311 315 321 331 335 Introduction **Wall-mount devices** DIN-Rail mount modules Supervision Tools Sales kit Technical section General terms of sale General index



# **Hotel solutions**

WALL-MOUNT DEVICES

# Ideal for building automation functions in accommodation and hospitality facilities

Ekinex offers advanced solutions for the automation of accommodation facilities, designed to offer guests comfort and environmental quality and high energy efficiency to managers and owners.

# **Available colour solutions**

	Form	Flank	'NF	Deep	Surface	Card reader
	Frai	nes		Plates		Card programmer
Plastic	•	•	•	•	-	-
Metal	•	•	•	•	•	-
Metal HT	-	-	-	•	•	-
Fenix NTM®	-	-	•	•	•	-

For more information see page 196







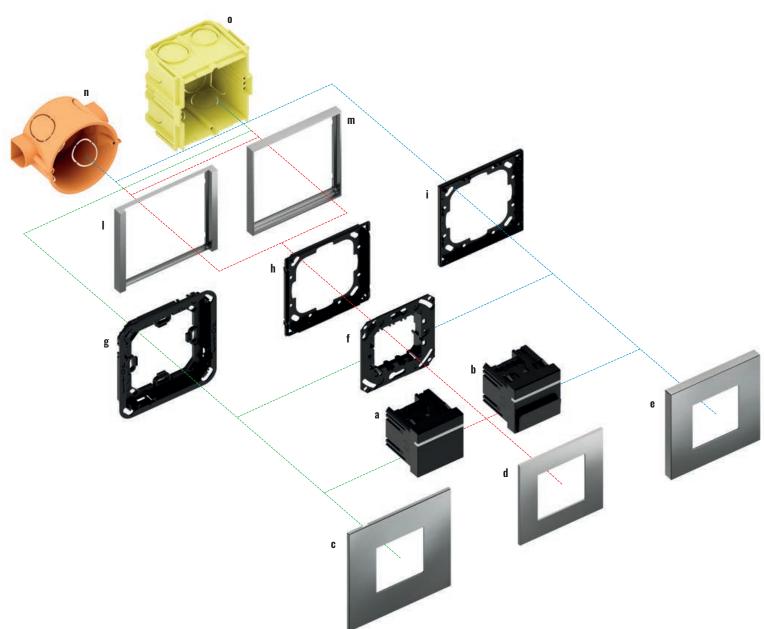


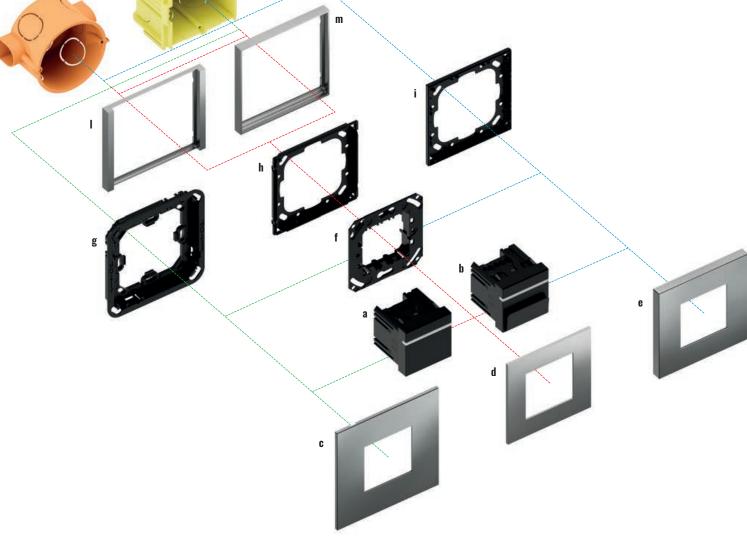




# **Access control**

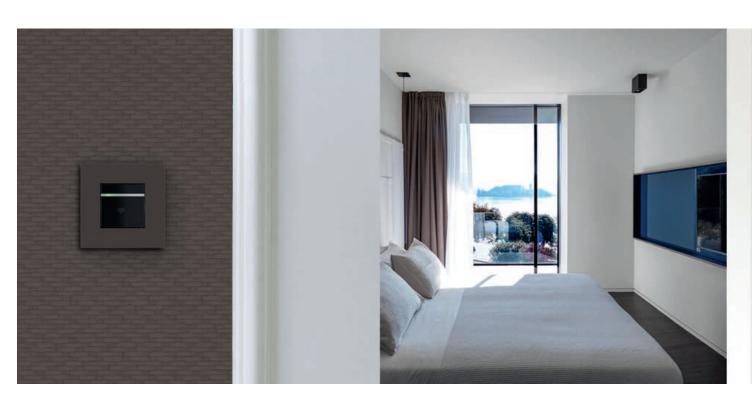
WALL-MOUNT DEVICES





ACCC33 CUILLUI		
Description	Code	Page
a) Card reader	EK-TR2-TP	116
<b>b)</b> Card holder	EK-TH2-TP	117
c) Square plate Surface version*	EK-SQG	179
<b>d)</b> Square plate*	EK-PQG	172
e) Square plate Deep version*	EK-DQG	175
f) Adapter for card holder and card reader	EK-SP-TX2	-
g) Adapter for Surface square plate	EK-TAS-Q-1	179

Description	Code	Page
h) Adapter for square plate	EK-TAQ-1	170
i) Adapter for 'NF and Deep square plate	EK-TAQ-1-NF	172-175
I) Square frame of Flank version	EK-FLQ	170
m) Square frame of Form version	EK-FOQ	169
n) Round flush-mounting box	not delivered by Ekinex®	-
o) Square flush-mounting box	not delivered by Ekinex®	-
*) 45 x 45 mm window		



The use of Ekinex® temperature control devices in combination with the system for access and presence detection, makes it possible to offer guests of a hotel maximum comfort and, at the same time, to safeguard the objectives of energy efficiency and cost savings defined in the technical and economic planning.



KNX devices series for controlled access to rooms and for detection of presence by means of smart-cards. Ideal for creating KNX standard automation functions in hospitality and hospitality structures (hotels, residences, guesthouses or bed & breakfasts) with the aesthetic uniformity of Ekinex® wall products (push-button controls and room thermostats), in combination with products from switchboard (EK-HO1-TP and EK-HU1-TP controllers) and with the Ekinex® Accédo management and supervision software.

The products are equipped with an RFID-type front antenna capable of feeding the smart-card card that is approached and reading the programmed information. The EK-TR2-TP wall reader enables access following validation of the card based on the configured authorizations. The EK-TH2-TP wall pocket activates presence following the insertion of the card in the appropriate front pocket. Both products can manage guest cards of the accommodation facility, based on the system codes, the reservation and the check-in / check-out period, service cards based on time slots and pass-dates. To program cards, use the product EK-TP2-TP, which is very similar to the reader with the possibility of activating the front antenna also for writing operations.

The programming of the cards in the reception area as well as the activation of a reader outside the room and an inside pocket takes place on the KNX network infrastructure. In addition to the power supplied by the KNX bus, an external auxiliary power supply is required for the RFID antenna at 12/24 Vac / dc. The basic programming of the devices as well as the configuration of the automation functions is carried out through the ETS application program; card programming and enabling room and controlled access devices in common areas requires the use of Ekinex® Accédo management and supervision software. Both devices can notify the passage and validation events of each type of card via the KNX bus with an internal buffer to cope with the unavailability of the communication bus due to excessive data traffic.





# Card reader

WALL-MOUNT DEVICES

The Ekinex® EK-TR2-TP card reader with RFID technology is used for access control in combination with the EK-TH2-TP card holder pocket. Equipped with a bi-stable relay (4A@24Vac/dc), an input for potential-free contacts and a 3-colour front signal LED (white, green and red). The device has an integrated KNX bus communication module and is designed for wall mounting in a flush-mounted box; it is supplied with SELV

# **Functionality**

Description

- Access control via KNX TP bus (twisted pair)
- Enabling access after card validation
- Management of the guest based on the booking and the check-in/check-out time; management of users based on time slots and passe-partouts

voltage via the KNX bus and requires an auxiliary power supply at 12-24 Vac/dc.

- Programmable output for electric lock activation or as simple actuator activated by KNX telegrams
- Validation in progress signalling (green led) or unauthorized card (red led); possibility of enabling the "don't disturb" or "camera remake" commands
- Notification of validation events to supervisory system with memory buffer

# Main features

- Plastic casing
- Bus line connection via KNX terminal
- Recessed wall mounting on round box
- Degree of protection IP20 (installed)
- Weight 50 g (with mounting bracket)

# **Technical data**

- 30 Vdc power supply via KNX bus
- Auxiliary power supply 12-24 Vac/dc
- Current consumption from the bus < 10 mA

# Delivery

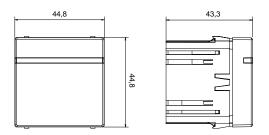
Delivery includes a terminal block for connection to the bus, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart), two pairs of fixing screws.

### **Accessories**

The following accessories are available to be ordered separately:

- Smart-card EK-TCE-10 (Ekinex logo in black, pack of 10 cards) or EK-TCC-10 (personalised with customer logo, pack of 10 cards)
- square plate with 45 x 45 mm window
- plastic adapter

# **Dimensions** [mm]



Code	Mounting	Package
FK-TR2-TP	square plate with 45x45 mm window	— 1 pcs.
EN-INZ-IF	optional frame Form or Flank version	ι μυδ.

Ekinex® Accédo software for programming access control functions and cards. Project file: APEKTRTPTH2TP##.knxproj (downloadable from www.ekinex.com)



For more information see the technical documentation





# Card holder

WALL-MOUNT DEVICES

# Description

The Ekinex® EK-TH2-TP card holder with RFID technology is used for presence detection in combination with the EK-TR2-TP card reader. Equipped with a bistable relay (4A@24Vac/dc), an input for potential-free contacts and a front signal LED (white). The luminaire has an integrated KNX bus communication module and is designed for wall mounting in a flush-mounted box; it is supplied with SELV voltage via the KNX bus and requires an auxiliary power supply at 12-24 Vac/dc.

# **Functionality**

- Presence detection via bus and communication to supervision system via KNX TP bus (twisted pair)
- Enabling presence after inserting the card into the front pocket
- Guest management of the structure according to the booking and the check-in/ check-out period; user management according to time slots and passe-partouts
- Output programmable according to card validation or as actuator activated by KNX telegrams. Delay to card extraction configurable for courtesy light management
- Binary input available for connection of conventional button (with switching, dimming or roller shutter/awning function) or signal contact (e.g. window opening)
- White front LED: flashing when the card is not inserted, off when the card is inserted; LED control via KNX bus telegrams possible
- · Notification of presence events detected to supervision system with memory buffer

# Main features

- Plastic casing
- Bus line connection via KNX terminal
- Recessed wall mounting on round box
- Degree of protection IP20 (installed)
- Weight 50 g (with mounting bracket)

# Technical data

- 30 Vdc power supply via KNX bus
- Auxiliary power supply 12-24 Vac/dc
- Current consumption from the bus < 10 mA

# Delivery

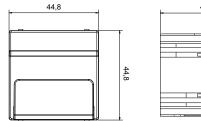
Delivery includes a terminal block for connection to the bus, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart), two pairs of fixing screws.

### Accessories

The following accessories are available to be ordered separately:

- Smart-card EK-TCE-10 (Ekinex logo in black, pack of 10 cards)
- or EK-TCC-10 (personalised with customer logo, pack of 10 cards) • square plate with 45 x 45 mm window
- plastic adapter

# **Dimensions** [mm]



44,8	1	47,4
	44,8	

0.00			
Code	Mounting	Package	
FK-TH2-TP	square plate with 45x45 mm window	— 1 pcs.	
EK-IHZ-IF	optional frame Form or Flank version	— трсь.	



Ekinex® Accédo software for programming access control functions and cards. Project file: APEKTRTPTH2TP##.knxproj (downloadable from www.ekinex.com)



For more information see the technical documentation.



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# Cards programmer

WALL-MOUNT DEVICES

# Description

The Ekinex® EK-TP2-TP card programmer with RFID technology is used for programming cards to be used with the EK-TR2-TP card reader and the Ekinex EK-TH2-TP card holder. Equipped with a bi-stable relay (4A@24Vac/dc) and an input for potential-free contacts the device has an integrated KNX bus communication module and is designed to be mounted in a flush-mounted wall box; it is supplied with SELV voltage via the KNX bus and requires an auxiliary power supply at 12-24 Vac/dc.

# Functionality

- Programming of cards via KNX TP bus (twisted pair) and Ekinex Accédo software
- Card programming with different user profiles: guest, staff and passe-partouts
- Guest booking management and check-in/check-out operation
- Card activation based on time slots for service personnel
- Event notification to the supervision system with memory buffer

## Main features

- Plastic casing
- Bus line connection via KNX terminal
- Recessed wall mounting on round box
- Degree of protection IP20 (installed) Weight 50 g (with mounting bracket)

# Technical data

- 30 Vdc power supply via KNX bus
- Auxiliary power supply 12-24 Vac/dc
- Current consumption from the bus < 10 mA

# Delivery

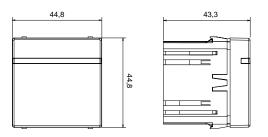
Delivery includes a terminal block for connection to the bus, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart), two pairs of fixing screws.

### Accessories

The following accessories are available to be ordered separately:

- Smart-card EK-TCE-10 (Ekinex logo in black, pack of 10 cards)
- or EK-TCC-10 (personalised with customer logo, pack of 10 cards)
- square plate with 45 x 45 mm window
- plastic adapter

# Dimensions [mm]



Code Mounting		Package	
FK-TP2-TP	square plate with 45x45 mm window	1 000	
EK-IFZ-IF	optional frame Form or Flank version	— 1 pcs.	



Ekinex® Accédo software for programming access control functions and cards. Project file: APEKTRTPTH2TP##.knxproj (downloadable from www.ekinex.com)



For more information see the technical documentation.





# Description

The card programmer kit is a table-top control panel, coordinated with the aesthetic lines of the Ekinex® wall-mounted products, to be installed at one or more reception points in an accommodation facility, in combination with the KNX standard products for controlled access to rooms and public areas EK-TR2-TP and EK-TH2-TP and the Ekinex® Accédo EK-ACC-SW supervision and card programming software.

# **Functionality**

The programmer kit, suitable for reception desks in hospitality facilities such as hotels and reception centers, is equipped with an elegant frame in pre-painted aluminum in bromine gray and performs the following functions:

- Programming smart-cards with RFID (Radio Frequency)
- Identification) technology, 13,56 MHz frequency, Mifare Classic 1kB protocol
- Signaling via buzzer of the bathroom tie rod alarms
- Alarm silencing through manual button

# Main features

- 1 KNX transponder card programmer cod. EK-TP2-TP
- 1 universal KNX interface EK-CC2-TP (2 IN / 2 OUT)
- 1 buzzer 12Vac, 5VA anthracite Colour
- 1 push button 1P NO, 10A at 250Vac anthracite Colour

The external power supply not included in the supply must be made with transformer 12Vac 1A. The card programmer and the universal interface with 2 inputs and 2 outputs must be connected to the KNX TP bus (twisted pair) by means of the redblack terminal provided.

# **Desktop cards** programmer kit

WALL-MOUNT DEVICES

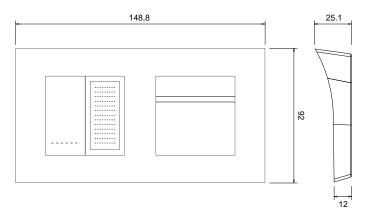
### Other features

- card programming with RFID technology, 13,56 MHz frequency, Mifare protocolo, Classic 1 KB
- 4M table-top box, Colour gray, with plastic housing
- Degree of protection IP20 when installed (according to EN 60529)
- Insulation class II (according to EN 60335-1)
- Climatic classification 3K5 (indoor use, dry) and mechanical classification 3M2 (according to EN50491-2)
- Device weight: 250 g
- Dimensions 148,8 x 92 x 25,1 mm (W x H x D)

# **Environmental conditions**

- Operating temperature: 0°C ... + 40°C
- Storage temperature: 10 ... + 70°C
- Transport temperature: 10 ... + 70°C
- Relative humidity: 95% non condensing

# **Dimensions** [mm]



Code Mounting		Mounting	Package
	EK-TPBOX-TP	plate with 45x45 mm windows	1 pcs.



Ekinex® Accédo software for programming access control functions and cards. Project file: APEKTRTPTH2TP##.knxproj (downloadable from www.ekinex.com)



For more information see the technical documentation.





# Accédo software

SOFTWARE

# Description

Software for the management of systems technology, particularly suitable for hotels, residences, guesthouses or bed&breakfast. Client-servers' architecture with HTML5 server functionality. Programming of transponder cards for access control, presence detection and (optional) electronic money functionality. Automatic import of ETS projects with easy and intuitive creation of graphic pages, drag&drop functionality, advanced copy/paste and undo/redo. Integrated control of calendars, scenarios and schedules. Interface to other communication protocols such as BACnet, Modbus, M-Bus, etc.

### Order information

Code	Composition	Package
EK-ACC-L12	Software License up to 12 reader	
EK-ACC-L25	Software License up to 25 reader	_
EK-ACC-L50	Software License up to 50 reader	1 200
EK-ACC-L100	Software License up to 100 reader	– 1 pcs.
EK-ACC-L200	Software License up to 200 reader	_
EK-ACC-LC	Client License for additional programming workstation	_

# Requirements

- Operating System: Windows 10 I/O RS232
- Processor: Intel Core i5 3.3 GHz or higher
- RAM memory: min. 4 GB
- SSD: 240 GB
- Resolution: Full HD



For more information see the technical documentation, download from **www.ekinex.com** 





Smart-card with RFID technology to be used with the EK-TR2-TP reader and the EK-TH2-TP card holder for controlled access to rooms and for presence detection in accommodation and hospitality facilities (hotels, residences, guest houses or bed&breakfast).

### Order information

Description

Code Customization		Package
EK-TCE-10	Ekinex® logo in black colour	10 pcs.
EK-TCC-10	personalized with customer logo	on request

# Smart-card

ACCESSORIES

# Main features

- Plastic material, standard dimensions 85 x 54 x 1 mm (W x H x D)
- Maximum non-contact recognition distance with EK-TR2-TP reader: 3-5 cm



### Configuration and commissionin

The **EK-TP2-TP** card programming device and the **Ekinex® Accédo software**, dedicated to the management of accommodation and hospitality facilities, are required for card programming.



# Tosibox® Lock router

REMOTE ASSISTANCE



REMOTE ASSISTANCE

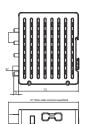




# Description

It establish a secure connection via VPN (Virtual Private Network) tunnel with an automation system. The connection can be made via a PC or with one or more iOS or Android smartphone users. If a KNX/IP interface/router is installed on the KNX standard automation system, it can be accessed remotely directly via ETS. Quick and easy physical association between the Lock module and the Key and realization of a point-to-point VPN via the MatchMaking service. Remote connection of installations with Internet connection with dynamic, static and private IP. Possibility to connect modems with 2G/3G/4G radiotelephone network.

# Dimensions [mm]







33,90

	Tosibox® Lock 150	Tosibox® Lock 500	Tosibox® Lock 500i
General features			
Power supply	12/24Vdc, with Jack, power supply included	12/48Vdc with connector, power supply not included	12/48Vdc with connector, power supply not included
Installation	external	DIN Rail	DIN Rail
Dimension	132 x 99 x 35.5 mm	110 x 58 x 127 mm	110 x 58 x 127 mm
Temperature range	-20 °C +55 °C	-20 °C +60 °C	-20 °C +60 °C
Degree of protection	IP20	IP20	IP20
Connections			
WAN	1xRJ45 – 10/100TX		
LAN	3xRJ45 – 10/100TX (one door for local service access)		
WiFi	Client mode e Access Point, 802.11b/g/n		
2G/3G/4G	External modem	External modem	Integrated dual-SIM modem
VPN Features			
VPM throughput	10 Mbps	70 Mbps	70 Mbps
VPN Encryption		Blowfish 128 bit CBC, AES 128/192/256 bit CBC	
VPN Authentication	PKI, 3072 bit RSA		
Certifications			
	CE. FCC	CE. FCC. UL	CE. FCC. UL

## Order information

Code	Composition	Package
EK-DEL-TBL1	Tosibox® Lock 150 Router, external installation, for VPN connections with automation system	
EK-TBL5	Tosibox® Lock 500 Router, DIN rail installation, for VPN connections with automation system	1 pcs.
EK-DEL-TBL5-SIM	Tosibox® Lock 500i Router, DIN rail installation, with integrated 2G/3G/4G dual SIM modem, for VPN connections with automation system	_

# **Awards and recognitions**







# Description

Quickly and securely create a Virtual Private Network (VPN) tunnel between a PC and one or more Lock routers and generate activation codes for iOS and Android VPN client apps on smartphones using 2048-bit RSA encryption. The Key can be configured as Master Key, Backup Key or Sub Key with limited access to a subset of installations. The Tosibox® SoftKey is a purely software key that can be combined with a Key to avoid transporting the physical dongle.

# Supported operating systems

- Windows 8-10 (32/64 bit)
- Windows 7 (32/64 bit)
- Windows Vista (32/64 bit)
- Windows XP (SP3)
- Mac OS X Leopard 10.5 or newer

# Order information

Code	Composition	Package	
EK-DEL-TBK1	Key with Tosibox® Cryptographic microcontroller Key that makes 1 PC client + 1 mobile client	_	
EK-DEL-TBSK1	Tosibox® SoftKey software key to be combined with a key, with Sub Key function		
EK-DEL-TBMC1	Additional license for Tosibox® Key with 1 mobile client	1 pcs.	
EK-DEL-TBMC5	Additional license for Tosibox® Key with 5 mobile clients		
EK-DEL-TBMC10	Additional license for Tosibox® Key with 10 mobile clients		

# **Main features**

- Hardware-based 2048-bit RSA key encryption. 4096 bit RSA SoftKeys
- TLS Data Encryption, Blowfish-128-CBC, AES-128-CBC, AES-256-CBC
- Layer2/Layer3 VPN Types (OpenVPN)
- Two-factor authentication support
- Dimensions: 74.8 x 23.2 x 10.3 mm (L x W x H)
- Weight: 25 g
- Case: metallic
- Operating temperature: -0°C, ..., +70°C
- Storage temperature: -20°C, ..., +85°C

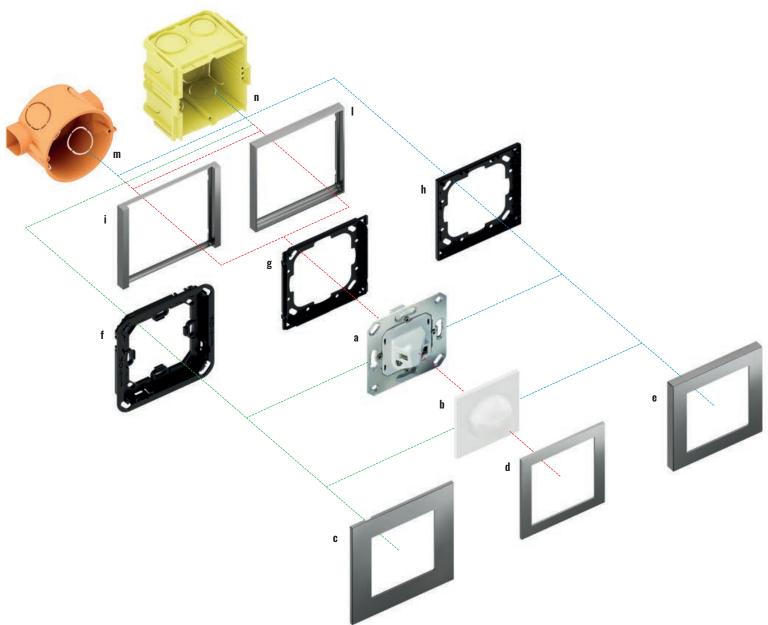
# SENSORS

WALL-MOUNT DEVICES

Movement sensor	128
Ceiling mounted presence sensor	129
Presence sensor for outdoor mounting	131

# Sensors

WALL-MOUNT DEVICES







Movement and presence sensors complete with frames Form, Flank or in the' 'NF, Deep and Surface versions for aesthetics coordinated to the Ekinex® pushbuttons.

The Ekinex® movement sensor allows to control automatically bus functions, such as lighting or room heating and cooling. The base is represented by the device (EK-SM2-TP) which integrates a KNX communication module. The device, delivered with the corresponding metal mounting support and a terminal block for the bus connection, is suitable for round or square wall mounting boxes with fixing holes 60 mm apart.

The movement sensor needs to be finished with a square, double and triple plate with 60 x 60 mm window and a square frame of Flank or Form version, available in plastic or aluminium and in several colours and finishings. The device may be also installed with frame by separately ordering a square 'NF, Deep or Surface adapter provided with a side profile in white or black colour ("NF only).

The movement sensor has to be connected to the signal bus cable; the device is powered at SELV (Safety Extra Low Voltage) voltage, thus offering a much higher safety level than traditional sensors. The configuration and commissioning is carried out by means of the ETS® software. The related application programs can be downloaded from the www.ekinex.com website.

## Movement sensor

moromone concor		
Description	Code	Page
a) Movement sensor with metallic support	EK-SM2-TP-GA_	128
b) Cover with lens		120
c) Square plate Surface version*	EK-SQS	179
<b>d)</b> Square plate*	EK-PQS	172
e) Square plate Deep version*	EK-DQS	175
f) Adapter for Surface square plate	EK-TAS-Q-1	179

Description	Code	Page
g) Adapter for square plate	EK-TAQ-1	172
h) Adapter for 'NF and Deep square plate	EK-TAQ-1-NF	172-175
i) Square frame of Flank version	EK-FLQ	170
I) Square frame of Form version	EK-FOQ	169
m) Round flush-mounting box	not delivered by Ekinex®	-
n) Square flush-mounting box	not delivered by Ekinex®	-
*) 60 x 60 mm window		



# **Movement sensor**

WALL-MOUNT DEVICES

# Description

The Ekinex® EK-SM2-TP movement sensor detects movement and presence of people in a semi-circular area. It is ideally used in corridors, transit areas, toilets, staircases, elevators and, in general, all areas having occasional transit. The device has one channel for lighting, and one channel for the control of HVAC devices. Movement and presence detection are operated by three PIR sensors (passive infra-red); one further sensor measures room luminosity. The device can work in semi-automatic or automatic mode. The device integrates a KNX bus communication module, is suitable for flush-mounting boxes and is powered by a SELV voltage by means of the KNX bus.

# Main features

- 180° detection range (semi-circular)
- Max distance 10 m (mounted at 3 m height)
- Mounting height from 1 to 3 m
- 3 passive infra-red (PIR) sensors
- Adjustable sensitivity (10 levels)
- Master or slave configuration
- Connection to bus line with KNX terminal block
- Frontal programming pushbutton and LED
- Wall-mounting installation on round or square wall box
- Metal support with screws for mounting on round or square mounting box (holes 60 mm apart)
- IP20 protection degree (installed)
- Weight 40 g

## Technical data

- SELV voltage from KNX bus
- Power absorption 0,4 W

# Delivery

Delivery includes a terminal block for connection to the bus, a plastic adapter, a metal support for installation onto round or square mounting box (fixing holes 60 mm apart) and two fixing screws.

128

Code	Lens colour	Package	
EK-SM2-TP-GAA	Bianco	1 pcs.	
EK-SM2-TP-GAE	Nero	1 pcs.	

# **Accessories**

The following accessories are available to be ordered separately:

- square frame Form or Flank version
- square plate with window 60 x 60 mm

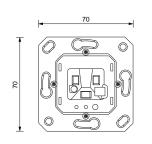


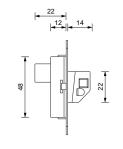


EK-SM2-TP-GAA

EK-SM2-TP-GAE

# Dimensions [mm]





# Configuration and commissioning

By means of ETS5 software or later versions Application program: APEKSM2TP##.vd4 (## = version, download from www.ekinex.com)



For more information see the technical documentation



# **Description**

The Ekinex® presence sensor EK-DF2-TP is a ceiling flush mount Passive Infrared (PIR) motion detector, for the detection of movement and presence of people in indoor spaces with a coverage area of 360°. The detection area can be extended using other sensors configured as slave devices. An integrated light sensor, combined with the motion detector, can manage light switching depending on brightness level as well as presence. The device has two distinct output channels for lighting, with independent parameters; the operation can be automatic or semi automatic. The device is also capable of maintaining a constant brightness level in the room by controlling a dimmable light source. All of the above parameters can be set by the user either through ETS or by means of a dedicated IR remote during installation. The device has two additional HVAC channels, which act in a similar way as the Light Control channels but without the standby time and light level dependence. An additional alarm channel can switch the load on or off depending on the number of trigger events (movements) detected in a time frame of configurable duration

# Main features

- Semi-automatic or fully automatic operation
- Two independent Light control channels
- Two independent HVAC control channels
- One alarm channel
- An additional device can be used as slave for any of the channels
- Detection span of 360°, sectors can be masked through optical shields
- Adjustable Sensitivity, with "Walk test" to verify detection range
- Parameters can be set from ETS or through an IR remote

# Technical data

- Rated voltage: 24 Vdc (21 30 Vdc) supplied by KNX bus
- Current consumption (on KNX bus): max 10 mA (operation) / 5 mA (Standby)
- Detection range: 360° circular (maskable), **up to 9 m diameter at 2.5 m**

# mounting height

- Light measurement range: 10..2000 Lux
- Housing, lens and frame in plastic material
- Safety standards: IEC 61000-6-1 / IEC 61000-6-3 / EN55014 / EN 50491

Code	Package
EK-DF2-TP	1 pcs.

# **Ceiling mounted** presence sensor WALL-MOUNT DEVICES

# **Environmental conditions**

- Operating temperature: 20 ... + 40°C
- Relative humidity: 95% not condensing
- Environmental protection: IP20

# Switching, display and detection elements

The device is equipped with:

- on the rear side, a programming pushbutton
- visible through the plastic lens, a blue programming LED, a red signalling LED, a PIR sensor, a brightness sensor and an IR receiver

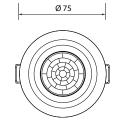
The following accessories are available to be ordered separately:

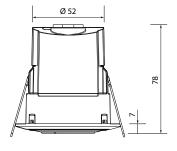
• IR Remote Controller - EK-QR6-IR and support for protruding mounting - EK-QS3





# **Dimensions** [mm]







By means of ETS5 software or later versions Application program: APEKDF2TP##.knxprod





For more information see the technical documentation







# **Ceiling mounted** presence sensor

WALL-MOUNT DEVICES

# Presence sensor for outdoor mounting

WALL-MOUNT DEVICES

# **Description**

The Ekinex® presence sensor EK-DG2-TP is a ceiling flush mount Passive Infrared (PIR) motion detector, for the detection of movement and presence of people in indoor spaces with a coverage area of 360°. The detection area can be extended using other sensors configured as slave devices. An integrated light sensor, combined with the motion detector, can manage light switching depending on brightness level as well as presence. The device has two distinct output channels for lighting, with independent parameters; the operation can be automatic or semi automatic. The device is also capable of maintaining a constant brightness level in the room by controlling a dimmable light source. All of the above parameters can be set by the user either through ETS or by means of a dedicated IR remote during installation. The device has two additional HVAC channels, which act in a similar way as the Light Control channels but without the standby time and light level dependence. An additional alarm channel can switch the load on or off depending on the number of trigger events (movements) detected in a time frame of configurable duration.

# Main features

- Semi-automatic or fully automatic operation
- Two independent Light control channels
- Two independent HVAC control channels
- One alarm channel
- An additional device can be used as slave for any of the channels
- Detection span of 360°, sectors can be masked through optical shields
- Adjustable Sensitivity, with "Walk test" to verify detection range
- Parameters can be set from ETS or through an IR remote

# Technical data

- Rated voltage: 24 Vdc (21 30 Vdc) supplied by KNX bus
- Current consumption (on KNX bus): max 10 mA (operation) / 5 mA (Standby)
- Detection range: 360° circular (maskable), **up to 12 m diameter at 2.5 m**

# mounting height

**Order information** 

Code

130

FK-DG2-TP

- Light measurement range: 10..2000 Lux
- Housing, lens and frame in plastic material
- Safety standards: IEC 61000-6-1 / IEC 61000-6-3 / EN55014 / EN 50491

**Package** 

1 pcs.

# **Environmental conditions**

- Operating temperature: 20 ... + 40°C
- Relative humidity: 95% not condensing
- Environmental protection: IP20

# Switching, display and detection elements

The device is equipped with:

- on the rear side, a programming pushbutton
- visible through the plastic lens, a blue programming LED, a red signalling LED, a PIR sensor, a brightness sensor and an IR receiver

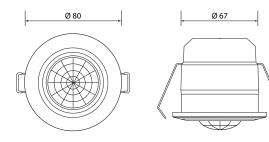
The following accessories are available to be ordered separately:

• IR Remote Controller - EK-QR6-IR and support for protruding mounting - EK-QS3





# **Dimensions** [mm]





By means of ETS5 software or later versions Application program: APEKDG2TP##.knxprod (## = version, download from www.ekinex.com



For more information see the technical documentation,



EK-DG2-TP



# Description

The Ekinex® EK-DH4-TP presence sensor is an infrared motion detector passive (PIR) for outdoor ceiling or wall mounting, for motion and presence detection of people in outdoor spaces with a 360° coverage area. The detection area can be extended using other sensors configured as slave devices. One integrated light sensor, combined with the motion detector, can manage the ignition of light according to brightness level and presence. The device has two channels of separate output for lighting, with independent parameters; the operation can be automatic or semi-automatic. All the above listed parameters can be set by the user via ETS or via a dedicated IR remote control during installation. The device has two additional HVAC channels, which act similarly to brightness control channels, but without the standby time function and light level dependency. One additional alarm channel can activate or deactivate the load depending on the number of trigger events (movements) detected in a configurable time interval.

# Main features

- Semi-automatic or fully automatic operation
- Two independent light control channels
- Two independent HVAC control channels
- An alarm channel
- An additional device can be used as a slave for any of the channels
- Detection range of 360° (180° on the wall), sectors can be masked through optic screens
- Adjustable sensitivity, with "Walk test" to verify the detection radius
- Parameters can be set by ETS or via an IR remote control.

# Technical data

Order information

Code

FK-DH4-TP

- Rated voltage: 24 VDC (21-30 VDC) supplied by KNX bus
- Current consumption (on KNX bus): max. 10 mA (operation) / 5 mA (standby)
- Sensing range: 360° circular (masking), up to 32 m diameter at 2.5 m mounting height

# • Light measuring range: 10..2000 Lux

- Housing, lens and frame in plastic material
- Safety standards: IEC 61000-6-1 / IEC 61000-6-3 / EN 55014 / EN 50491

**Package** 

1 pcs.

# · Environmental conditions

- Operating temperature: 20 ... + 40°C
- Relative humidity: 95% not condensing
- Environmental protection: IP20

# Switching, display and detection elements

The device is equipped with:

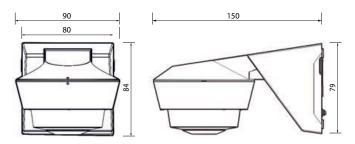
- on the rear side, a programming pushbutton
- visible through the plastic lens, a blue programming LED, a red signalling LED, a PIR sensor, a brightness sensor and an IR receiver

The following accessories are available to be ordered separately:

• IR Remote Controller - EK-QR6-IR



# **Dimensions** [mm]



# Configuration and commissioning

By means of ETS5 software or later versions Application program: APEKDH4TP##.knxprod



For more information see the technical documentation





# POWER SOCKETS / KEYSTONE SYSTEM

WALL-MOUNT DEVICES

Power socket Italian version (standard and USB A-C)
Power socket Schuko version (standard and USB A-C)
Keystone System
146
147





# Power socket Italian Version (standard and USB A-C)

WALL-MOUNT DEVICES



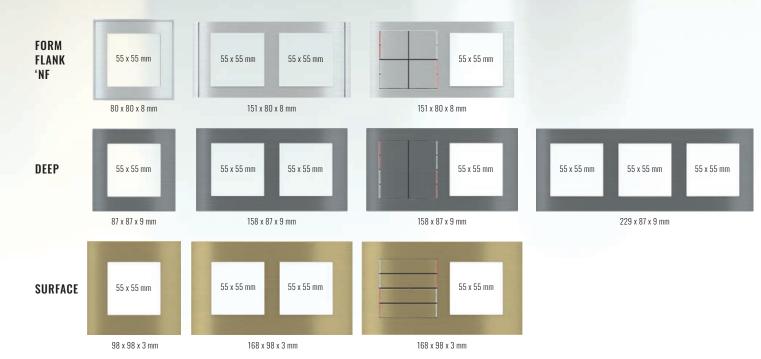


**The new Ekinex Italian standard sockets** are available in a dual-step version (10-16A) with and without USB, bringing them in line with the latest charging standards with A and C ports and a maximum of 3.5A.

## **Available colour solutions**

	Form	Flank	'NF	Deep	Surface	Italian standard	Italian USB A/0
	Fra	mes		Plates		Front	cover*
Raw plastic	-	-	-	-	-	•	•
Plastic	•	•	•	•	-	•	•
Metal	•	•	•	•	•	•	•
Metal HT	-	-	-	•	•		•
Fenix NTM®		_	•	•	•	•	•

<sup>\*</sup> The metal or Fenix NTM® colour effect is achieved by painting For more information see page 196





# Power socket Schuko Version (standard and USB A-C)

WALL-MOUNT DEVICES



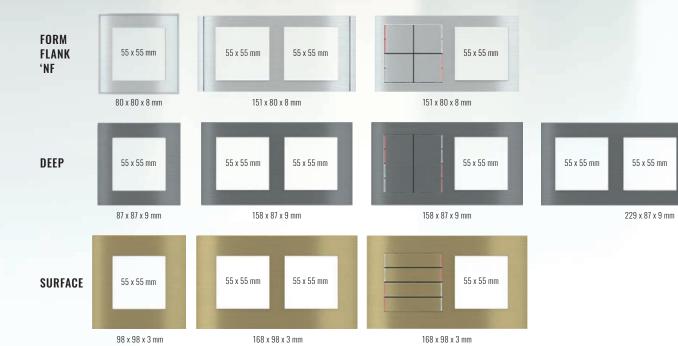


**The new Ekinex Schuko standard** sockets are available in versions with or without USB, bringing them in line with the latest charging standards with A and C ports and a maximum of 3.5A.

## Available colour solutions

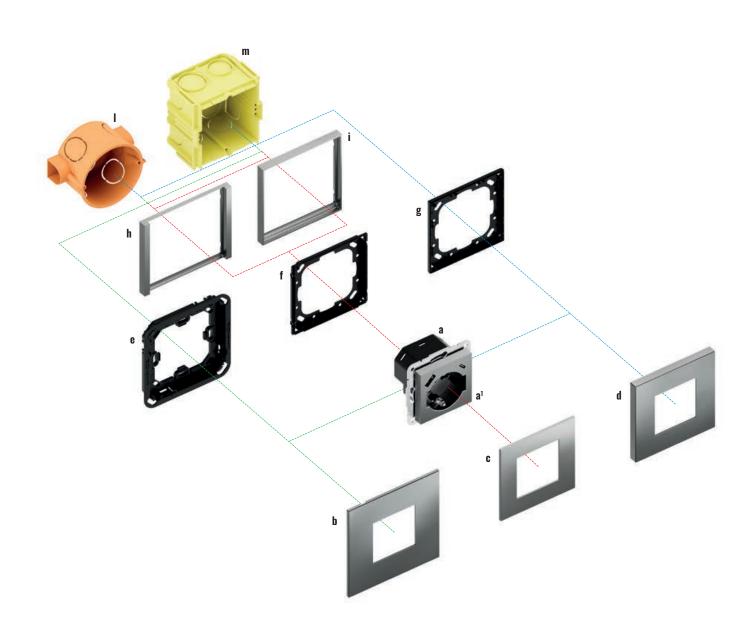
Available colou	r solutions						
	Form	Flank	'NF	Deep	Surface	Schuko standard	Schuko USB A/0
	Fra	ımes		Plates		Front	cover*
Raw plastic	-	-	_	-	-	•	•
Plastic	•	•	•	•	-	•	•
Metal	•	•	•	•	•	•	•
Metal HT	-	-	-	•	•	•	•
Fenix NTM®	-	-	•	•	•	•	•

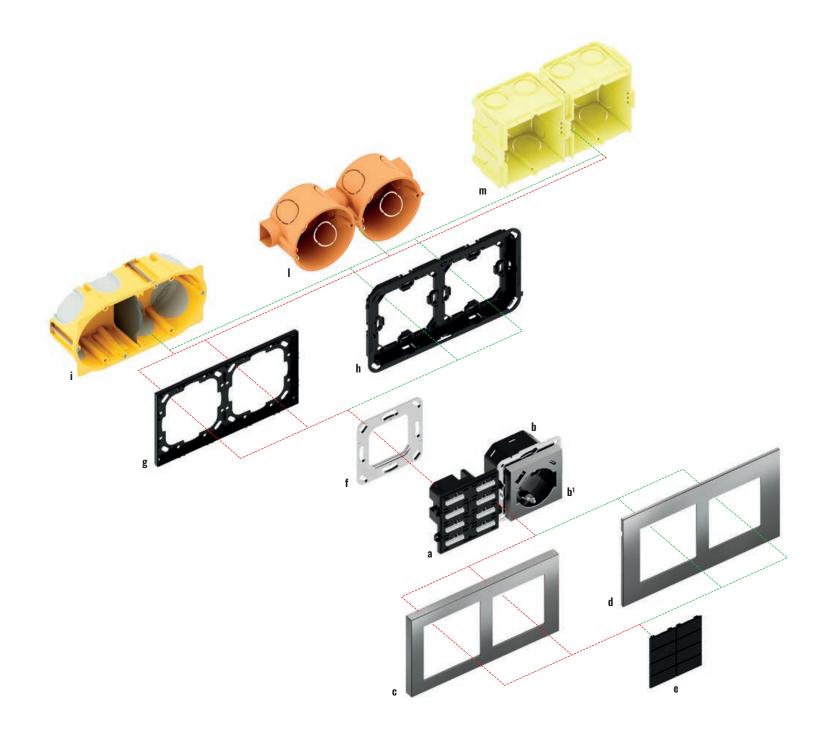
<sup>\*</sup> The metal or Fenix NTM® colour effect is achieved by painting For more information see page 196



55 x 55 mm







## Single installation

Description	Code	Page
a) Power socket (window 55 x 55 mm)	EK-PWS-IT or EK-PWS-IT-USB	146
	EK-PWS-DE or EK-PWS-DE-USB	147
a1) Front cover	EK-PSC-IT or EK-PSC-IT-USB	146
	EK-PSC-DE or EK-PSC-DE-USB	147
<b>b)</b> Surface square plate*	EK-SQG	179
c) Square plate*	EK-PQG	172
d) Deep square plate*	EK-DQG	175

Description	Code	Page
e) Adapter for square Surface plate	EK-TAS-Q-1	179
f) Adapter for square plate - Form or Flank frames	EK-TAQ-1	172
g) Adapter for square plate 'NF and Deep version	EK-TAQ-1-NF	172-175
h) Square frame of Flank version	EK-FLQ	170
i) Square frame of Form version	EK-FOQ	169
I) Round built-in box	not delivered by Ekinex®	-
m) Square built-in box	not delivered by Ekinex®	-
*) 55 x 55 mm window		

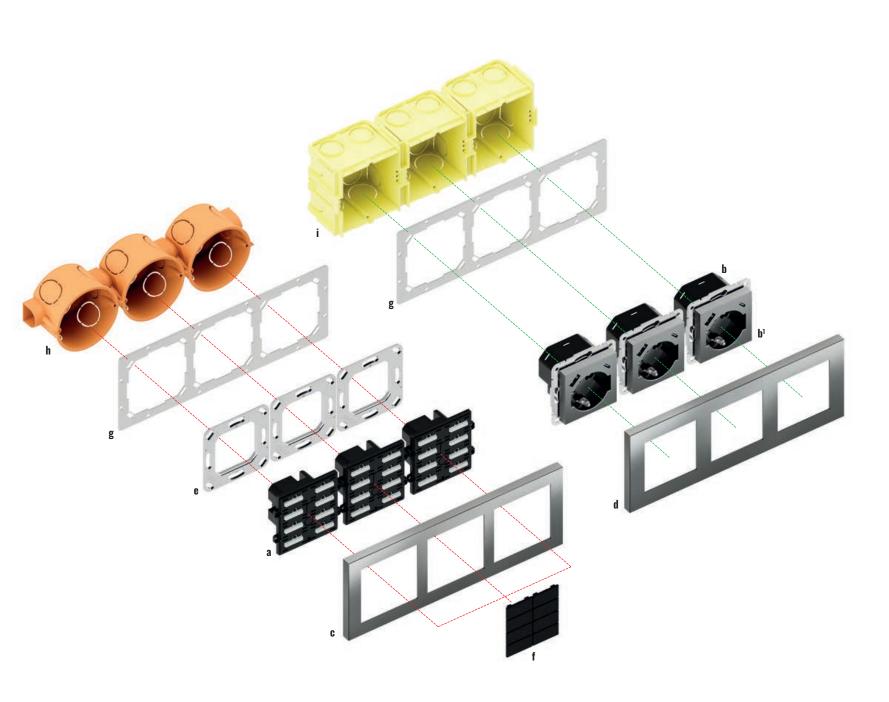
# Double installation with centre distance 71 mm (20venti series)

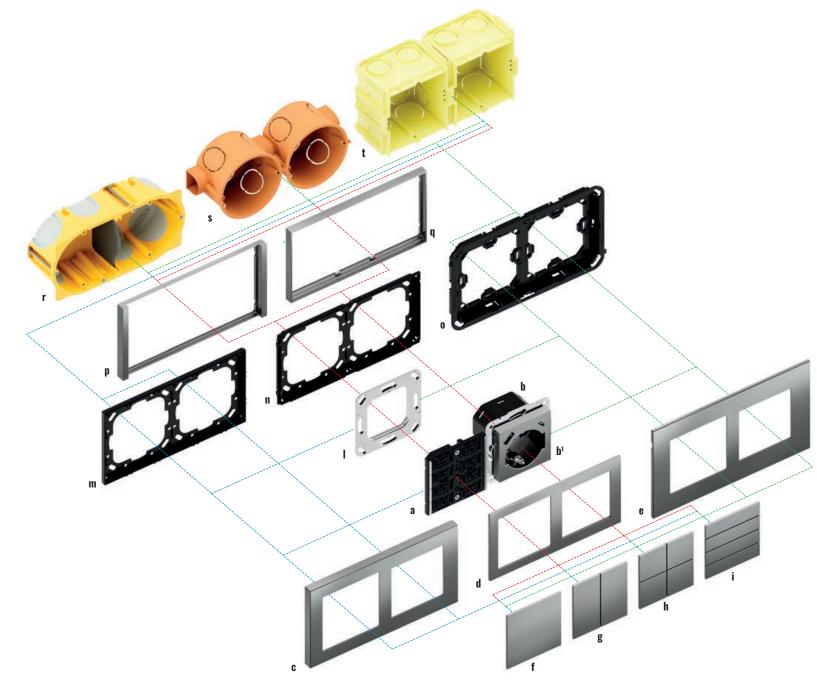
Double installation with centre distance // min (2000iti series)		
Description	Code	Page
a) Pushbutton - 20venti series	EK-E20-TP	30
<b>b)</b> Power socket (window 55 x 55 mm)	EK-PWS-IT or EK-PWS-IT-USB	146
	EK-PWS-DE or EK-PWS-DE-USB	147
L1) Front cours	EK-PSC-IT or EK-PSC-IT-USB	146
<b>b1)</b> Front cover	EK-PSC-DE or EK-PSC-DE-USB	147
c) Deep double plate*	EK-D2G	175
d) Surface double plate*	EK-S2G	179

Description	Code	Page
e) Horizontal rectangular keys (8)	EK-T4R-20-BT	162
f) Metal mounting support	EK-SMQ-71-1	183
g) Double adapter for frame-free installation	EK-A71-1-NF	177
h) Double adapter for Surface double plate	EK-TAS-D-1	181
i) Double box for mobile walls	not delivered by Ekinex®	-
I) Single boxes for masonry walls	not delivered by Ekinex®	-
m) Single boxes for masonry walls	not delivered by Ekinex®	-
*) 60 x 60 mm + 55 x 55 mm window		









# Triple installation with centre distance 71 mm (20venti series)

Description	Code	Page
a) Pushbutton 20venti series	EK-E20-TP	30
<b>b)</b> Power socket (window 55 x 55 mm)	EK-PWS-IT or EK-PWS-IT-USB	146
	EK-PWS-DE or EK-PWS-DE-USB	147
<b>b1)</b> Front cover	EK-PSC-IT or EK-PSC-IT-USB	146
	EK-PSC-DE or EK-PSC-DE-USB	147
c) Deep triple plate*	EK-D3S	178

Description	Code	Page
<b>d)</b> Deep triple plate**	EK-D3P	178
e) Metal mounting support	EK-SMQ-71-1	183
f) Horizontal rectangular keys (8)	EK-T4R-20-BT	162
g) Triple plate adapter - Deep version	EK-B71-1-NF	178
h) Single boxes for masonry walls	not delivered by Ekinex®	-
*) 60 x 60 mm window **) 55 x 55 mm window		

# Double installation with centre distance 71 mm (71 series)

Code	Page
EK-E12-TP o EK-E22-TP	84-86
EK-PWS-IT or EK-PWS-IT-USB	146
EK-PWS-DE or EK-PWS-DE-USB	147
EK-PSC-IT or EK-PSC-IT-USB	146
EK-PSC-DE or EK-PSC-DE-USB	147
EK-D2G	175
EK-P2G	174
EK-S2G	179
EK-T1Q	
EK-T2R	166
EK-T4Q	
	EK-E12-TP o EK-E22-TP EK-PWS-IT or EK-PWS-IT-USB EK-PWS-DE or EK-PWS-DE-USB EK-PSC-IT or EK-PSC-IT-USB EK-PSC-DE or EK-PSC-DE-USB EK-D2G EK-P2G EK-T1Q EK-T2R

Description	Code	Page
i) Rectangular horizontal rockers (4)	EK-T4R	166
I) Metal mounting support	EK-SMQ-71-1	183
m) Double adapter for frame-free installation	EK-A71-1-NF	177
<b>n)</b> Adapter for double plate with a Form or Flank frame	EK-A71	181
o) Double adapter for Surface double plate	EK-TAS-D-1	
<b>p)</b> Flank version double frame	EK-FL2	171
<b>q)</b> Form version double frame	EK-F02	
r) Double box for mobile walls	not delivered by Ekinex®	-
s) Single boxes for masonry walls	not delivered by Ekinex®	-
t) Single boxes for masonry walls	not delivered by Ekinex®	-
*) 60 x 60 mm + 55 x 55 mm window		

# **Electrical and USB power sockets**

WALL-MOUNT DEVICES









Ekinex has paid particular attention to this detail with a special painting process that allows the socket to be colour matched to the other wall elements in its range.

The inclusion of a USB output responds to the increasingly pressing need to connect to numerous

Essential: this is the most suitable adjective to describe the electrical socket. From the first one invented in America by Hubbel in 1904 to the German-made Schuko dated 1926, the socket has come down to us as the silent player in our electrical systems. Ekinex has given them a new lease of life with a colourful edition that matches keyboards and touch panels. The need to connect to the electricity network has increased in recent years; the list of devices that require a power supply is virtually endless. Ekinex electrical sockets come to your rescue with an extensive range for the Italian and international markets. Ekinex electric sockets are also equipped with USB type A and C ports and can be used to recharge all electronic devices in homes and offices. The many colours are in perfect family feeling with the FF, 71 and 20VENTI series and can be combined with Fenix NTM, metal and plastic finishes.

# Triple installation with centre distance 71 mm (71 series)

The mountain that control and and the control of th		
Description	Code	Page
a) Pushbutton - 71 series	EK-E12-TP o EK-E22-TP	78-80
b) Dawar analyst (window EE v EE mm)	EK-PWS-IT or EK-PWS-IT-USB	146
<b>b)</b> Power socket (window 55 x 55 mm)	EK-PWS-DE or EK-PWS-DE-USB	147
h1) Front cover	EK-PSC-IT or EK-PSC-IT-USB	146
<b>b1)</b> Front cover	EK-PSC-DE or EK-PSC-DE-USB	147
c) Deep triple plate - 71 series	EK-D3S	— 178
<b>d)</b> Deep triple plate - 71 series	EK-D3P	1/6
e) Metal mounting support	EK-SMQ-71-1	183

Description	Code	Page
f) Square rocker (1)	EK-T1Q	
g) Rectangular vertical rockers (2)	EK-T2R	100
h) Square rockers (4)	EK-T4Q	- 166
i) Rectangular horizontal rockers (4)	EK-T4R	_
l) Triple plate adapter - Deep version*	EK-B71-1-NF	178
m) Single boxes for masonry walls	not delivered by Ekinex®	-
n) Single boxes for masonry walls	not delivered by Ekinex®	-
*) 60 x 60 mm window **) 55 x 55 mm window		









# **Power socket and USB A-C Italian version**

WALL-MOUNT DEVICES





# **Power socket and USB A-C Schuko version**

WALL-MOUNT DEVICES

# Description

The Ekinex model EK-PWS-IT-USB and EK-PWS-IT universal italian standard sockets are 2P+T 16 A universal type devices for wall installation, for 2P 2.5 A europlugs. 2P and 2P + E 10 A and 16 A Italian standard plugs, 2P+T 16 A German standard plugs, for powering household appliances. The EK-PWS-IT-USB model is equipped with a USB power unit, both type-A and type-C, for charging mobile phones and in general all electronic devices that can be recharged via USB sockets of the same type. Charging of two devices at the same time is allowed.

## Main features

- Connection of home devices with AC 250 V ~ voltage
- Contacts protected by shutters
- Mounting on a round or square wall box
- Terminals for cables with section up to 2.5 mm<sup>2</sup>
- USB Type-A and Type-C ports for charging electronic devices such as smartphones, tablets, etc. (only for EK-PWS-EN-EN-USB) (only for EK-PWS-IT-USB)

# Technical data

- Max. rated input voltage: AC 250 V ~
- Max rated input current: 16 A
- Network frequency: 50/60 Hz
- USB output voltage (only for EK-PWS-IT-USB): DC 5 V
- USB output current (only for EK-PWS-IT-USB): 3.4 A
- Standby power (only for EK-PWS-IT-USB): ≤ 50mW
- Energy efficiency (only for EK-PWS-IT-USB): 83%
- Operating temperature: -10 ... +40 ° C (indoor use)
- Storage / transport temperature: -20 ... +50 ° C
- Protection degree : IP 20
- Safety class 2 (double insulation)
- Connection type: solid or stranded cable with 1.5 ... 2.5 mm<sup>2</sup> section
- Connection type: screw
- Mounting depth: min. 40 mm
- Housing in plastic material
- Dimensions: 70 x 70 x 44 mm (LxHxP)

Code	Туре	Code	Туре
EK-PWS-IT	power socket - italian	EK-PWS-IT-USB	power socket - italian USB
EK-PSC-IT	rough white cover	EK-PSC-IT-USB	rough white cover
EK-PSC-IT	painted cover	EK-PSC-IT-USB	painted cover

# Delivery

Plastic adapters, plates and frames are available for mounting on round or square flush-mounted boxes with fixing holes 60 mm apart, or on combinable round flushmounted boxes with 71 mm centre-to-centre distance.

# Accessories

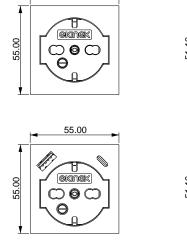
The following accessories are available for completion and must be ordered

• square and double frame Form or Flank version

55.00

• square, double and triple plate with 55 x 55 mm window

# **Dimensions** [mm]



For more information see the technical documentation





# **Description**

The Ekinex model EK-PWS-DE-USB and EK-PWS-DE Schuko® sockets (German standard) are 2P + T 16 A type wall installation devices, for powering household appliances. The EK-PWS-DE-USB model is equipped with a USB power unit, both type-A and type-C, for charging mobile phones and in general all electronic devices that can be recharged via USB sockets of the same type. Charging of two devices at the same time is allowed.

# Main features

- Connection of home devices with AC 250 V ~ voltage
- Contacts protected by shutters
- Mounting on a round or square wall box
- Terminals for cables with section up to 2.5 mm<sup>2</sup>
- USB Type-A and Type-C ports for charging electronic devices such as smartphones, tablets, etc. (only for EK-PWS-DE-USB)

# Technical data

- Max. rated input voltage: AC 250 V ~
- Max rated input current: 16 A
- Network frequency: 50/60 Hz
- USB output voltage (only for EK-PWS-DE-USB): DC 5 V
- USB output current (only for EK-PWS-DE-USB): 3.4 A
- Standby power (only for EK-PWS-DE-USB): ≤ 50mW
- Energy efficiency (only for EK-PWS-DE-USB): 83%
- Operating temperature: -10 ... +40 ° C (indoor use)
- Storage / transport temperature: -20 ... +50 ° C
- Protection degree : IP 20
- Safety class 2 (double insulation)
- Connection type: solid or stranded cable with 1.5 ... 2.5 mm<sup>2</sup> section
- Connection type: screw
- Mounting depth: min. 40 mm
- Housing in plastic material
- Dimensions: 70 x 70 x 44 mm (LxHxP)

Code	Туре	Code	Туре
EK-PWS-DE	power socket - Schuko	EK-PWS-DE-USB	power socket - Schuko USB
EK-PSC-DE	rough white cover	EK-PSC-DE-USB	rough white cover
EK-PSC-DE	painted cover	EK-PSC-DE-USB	painted cover

# **Delivery**

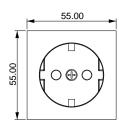
Plastic adapters, plates and frames are available for mounting on round or square flush-mounted boxes with fixing holes 60 mm apart, or on combinable round flushmounted boxes with 71 mm centre-to-centre distance.

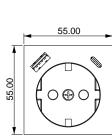
# Accessories

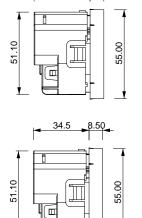
The following accessories are available for completion and must be ordered

- square and double frame Form or Flank version
- square, double and triple plate with 55 x 55 mm window

# **Dimensions** [mm]









For more information see the technical documentation. download from www.ekinex.com







03 18 229 297 311 315 321 331 335 Introduction Wall-mount devices DIN-Rail mount modules Supervision Tools Sales kit Technical section General terms of sale General inde



# Sistema Keystone

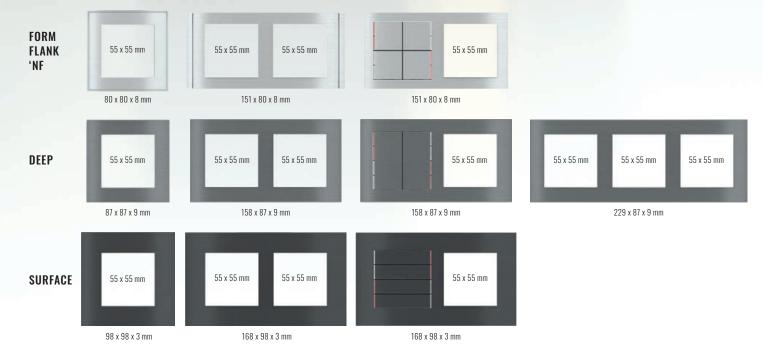
WALL-MOUNT DEVICES
COMING SOON

**Il sistema Keystone** è un sistema modulare versatile di connessione che può essere usato per numerose applicazioni. Ekinex presenta diversi moduli quali cavi HDMI, prese tipo RJ45 8/8, SAT/Antenna, etc. che possono risolvere qualsiasi esigenza di collegamento.

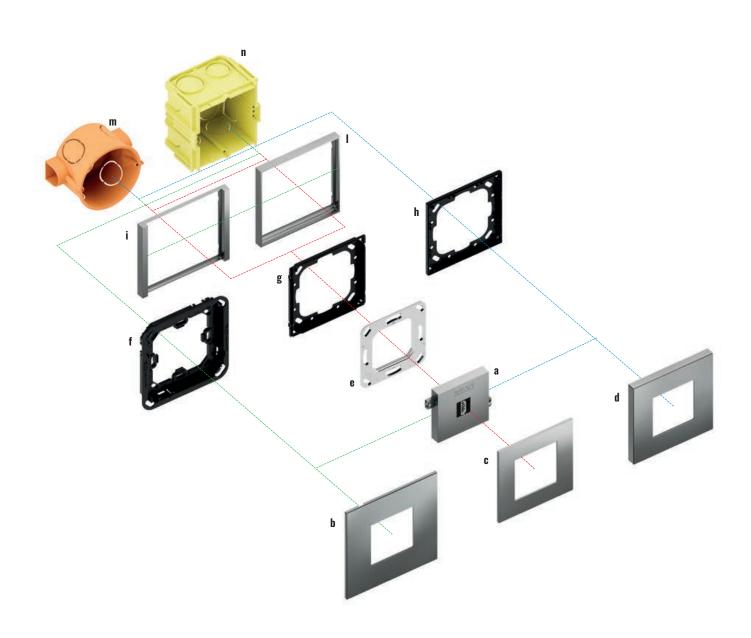
# Available colour solution

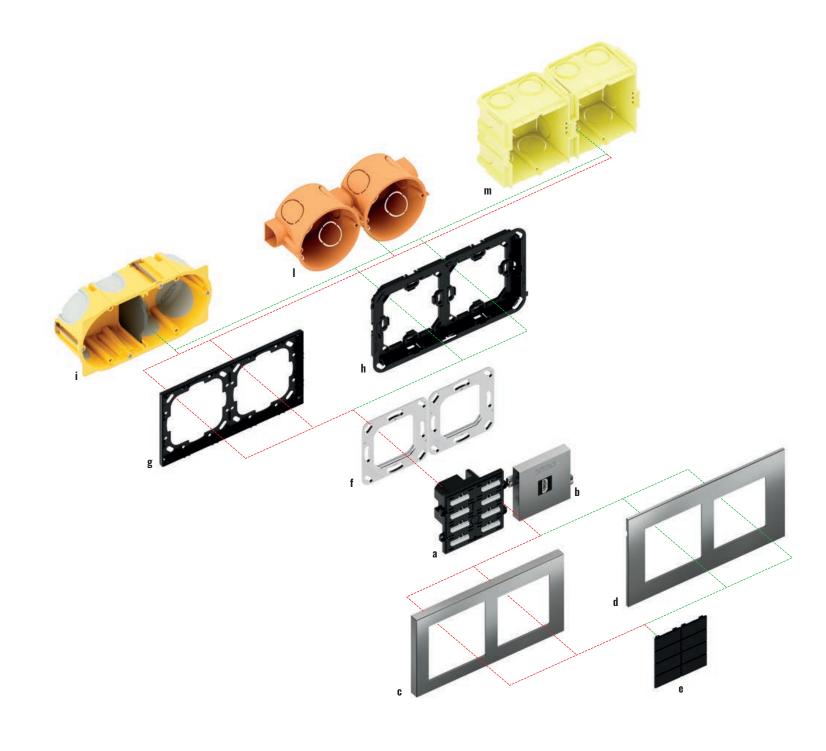
	Form	Flank	'NF	Deep	Surface	Keystone system
	Fra	mes		Plates		Front cover*
Raw plastic	-	-	-	-	-	•
Plastic		•	•	•	-	•
Metal	•	•	•	•	•	•
Metal HT	-	-	-	•	•	•
Fenix NTM®	-	-	•	•	•	•

<sup>\*</sup> The metal or Fenix NTM® colour effect is achieved by painting For more information see page 196









# Single installation

Description	Code	Page
a) Keystone system (55 x 55 mm module)	EK-KS	158
b) Surface square plate*	EK-SQG	179
c) Square plate*	EK-PQG	172
d) Deep square plate*	EK-DQG	175
e) Metal mounting support	EK-SMQ-71-1	183
f) Adapter for square Surface plate	EK-TAS-Q-1	179
g) Adapter for square plate - Form or Flank frames	EK-TAQ-1	172

Description	Code	Page
g) Adapter for square plate 'NF and Deep version	EK-TAQ-1-NF	172-175
h) Square frame of Flank version	EK-FLQ	170
i) Square frame of Form version	EK-FOQ	169
I) Round built-in box	not delivered by Ekinex®	-
m) Square built-in box	not delivered by Ekinex®	-
*) 55 x 55 mm window		

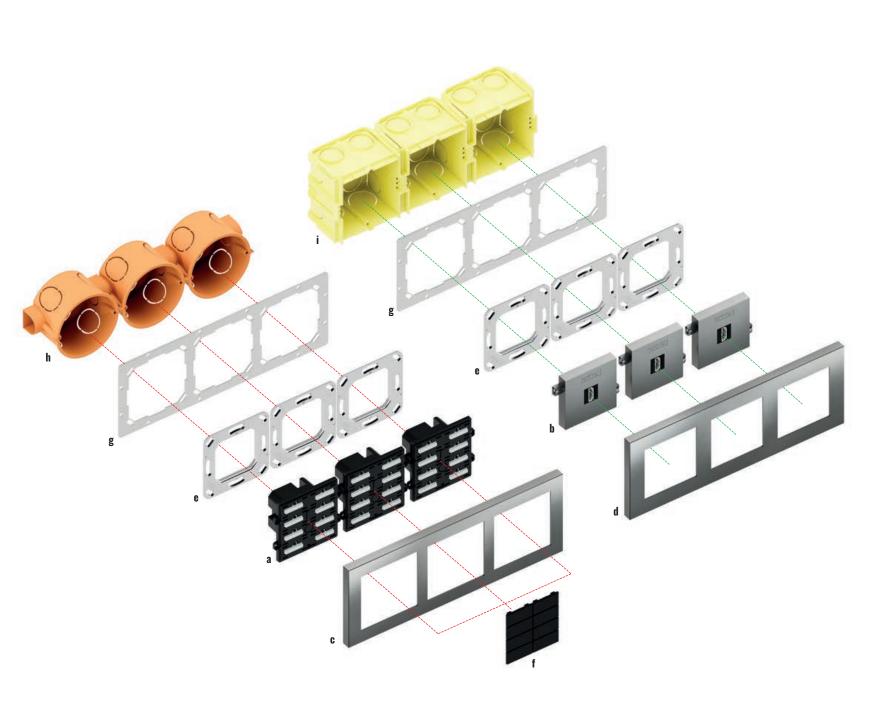
# Double installation with centre distance 71 mm (20venti series)

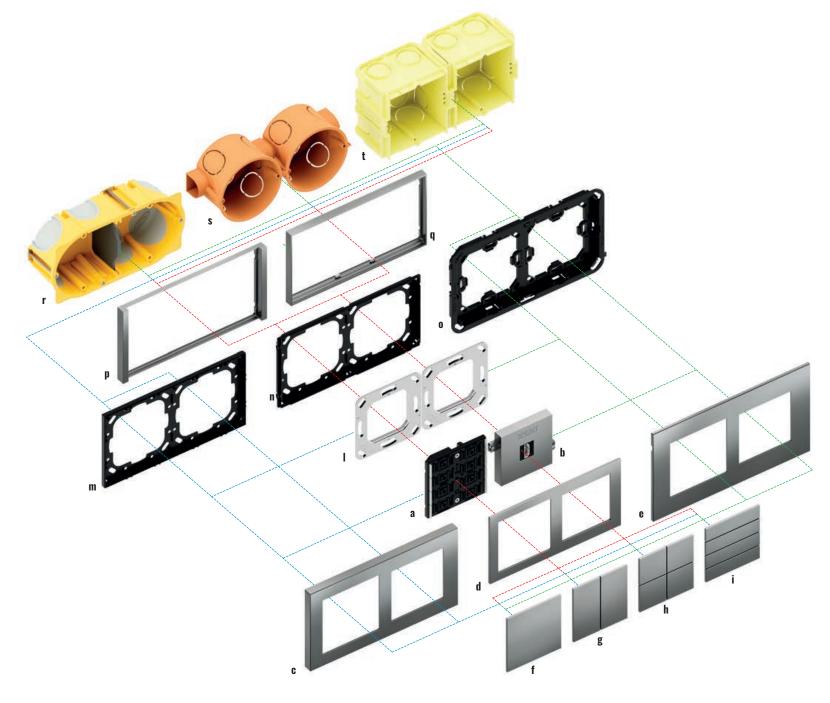
Description	Code	Page
a) 20venti pushbutton	EK-E20-TP	30
<b>b)</b> Keystone system (55 x 55 mm module)	EK-KS	158
c) Deep double plate*	EK-D2G	175
d) Surface double plate*	EK-S2G	179
e) Horizontal rectangular keys (8)	EK-T4R-20-BT	162
f) Metal mounting support	EK-SMQ-71-1	183

Description	Code	Page
g) Double adapter for frame-free installation	EK-A71-1-NF	177
<b>h)</b> Double adapter for Surface double plate	EK-TAS-D-1	181
i) Double box for mobile walls	not delivered by Ekinex®	-
1) Single boxes for masonry walls	not delivered by Ekinex®	-
m) Single boxes for masonry walls	not delivered by Ekinex®	-
*) 60 x 60 mm + 55 x 55 mm window		









# Triple installation with centre distance 71 mm (20venti series)

	(2010)	
Description	Code	Page
a) Pushbutton 20venti series	EK-E20-TP	30
<b>b)</b> Keystone system (55 x 55 mm module)	EK-KS	158
c) Deep triple plate*	EK-D3S	178
d) Deep triple plate**	EK-D3P	1/0
e) Metal mounting support	EK-SMQ-71-1	183
f) Horizontal rectangular keys (8)	EK-T4R-20-BT	162

Description	Code	Page
g) Triple plate adapter - Deep version	EK-B71-1-NF	178
h) Single boxes for masonry walls	not delivered by Ekinex®	-
i) Single boxes for masonry walls	not delivered by Ekinex®	-
*) 60 x 60 mm window **) 55 x 55 mm window	not delivered by Ekillex	

# Double installation with centre distance 71 mm (71 series)

Description	Code	Page
a) Pushbutton - 71 series	EK-E12-TP o EK-E22-TP	84-86
<b>b)</b> Keystone system (55 x 55 mm module)	EK-KS	158
c) Deep double plate	EK-D2G	175
d) Double plate	EK-P2G	174
e) Surface double plate	EK-S2G	179
f) Square rocker (1)	EK-T1Q	
g) Rectangular vertical rockers (2)	EK-T2R	100
h) Square rockers (4)	EK-T4Q	— 166
i) Rectangular horizontal rockers (4)	EK-T4R	
I) Metal mounting support	EK-SMQ-71-1	183

Description	Code	Page
m) Double adapter for frame-free installation	EK-A71NF	177
<b>n)</b> Adapter for double plate with a Form or Flank frame	EK-A71	181
o) Double adapter for Surface double plate	EK-TAS-D	101
<b>p)</b> Flank version double frame	EK-FL2	171
<b>q)</b> Form version double frame	EK-F02	171
r) Double box for mobile walls	not delivered by Ekinex®	-
s) Single boxes for masonry walls	not delivered by Ekinex®	-
t) Single boxes for masonry walls	not delivered by Ekinex®	-
*) 60 x 60 mm + 55 x 55 mm window		

# **Keystone System**

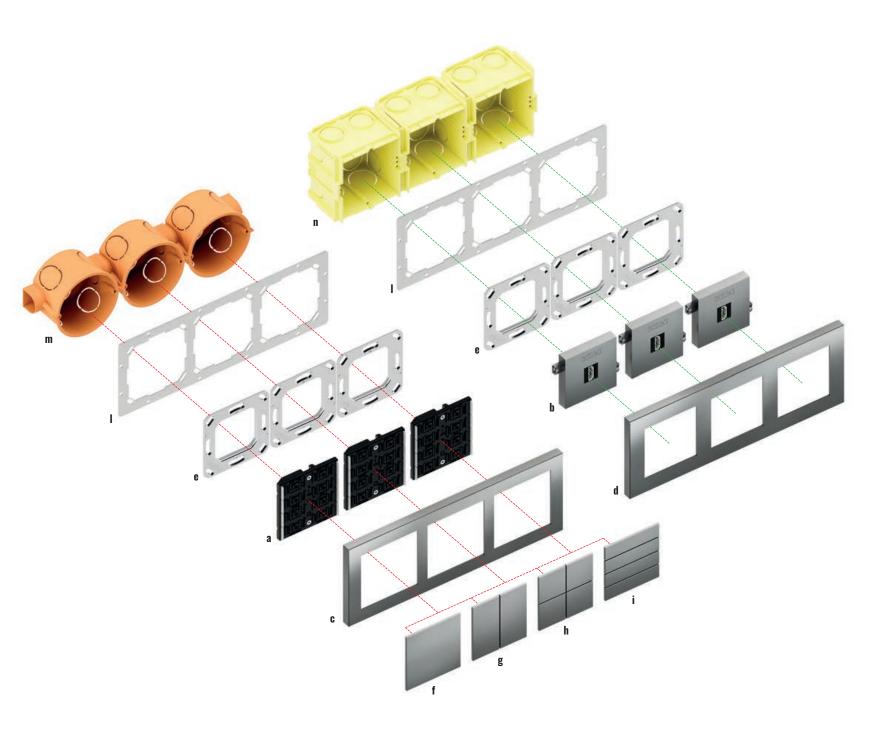
WALL-MOUNT DEVICES

COMING SOON



Keystone modules compatible with Ekinex civil series. Wide range of devices to integrate network systems, multimedia systems and antenna systems. The front covers can be declined in the various colors available, thanks to a special painting process that allows them to be chromatically matched to the other wall devices.

Keystone modules are compatible with Ekinex civil series and offer the possibility of numerous customizations, able to meet the most different needs. A wide range of devices is available to integrate network, multimedia and antenna systems. The standard dimensions allow an easy installation. They are completed with a square, double or triple plate with window dimension 55 x 55 mm, able to accommodate one or more modules. Plates are available in plastic material, in numerous color and finish variations. Plastic caps are available to cover unused spaces.

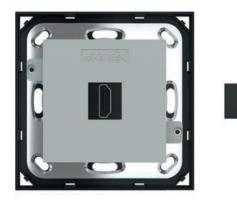


# Triple installation with centre distance 71 mm (71 series)

· ·		
Description	Code	Page
a) Pushbutton - 71 series	EK-E12-TP o EK-E22-TP	84-86
<b>b)</b> Keystone system (55 x 55 mm module)	EK-KS	158
c) Deep triple plate - 71 series	EK-D3S	170
<b>d)</b> Deep triple plate - 71 series	EK-D3P	—— 178
e) Metal mounting support	EK-SMQ-71-1	183
f) Square rocker (1)	EK-T1Q	100
g) Rectangular vertical rockers (2)	EK-T2R	<del></del> 166

Description	Code	Page
h) Square rockers (4)	EK-T4Q	100
i) Rectangular horizontal rockers (4)	EK-T4R	- 166
l) Triple plate adapter - Deep version*	EK-B71-1-NF	178
m) Single boxes for masonry walls	not delivered by Ekinex®	-
n) Single boxes for masonry walls	not delivered by Ekinex®	-
*) 60 x 60 mm window **) 55 x 55 mm window		





# **Keystone System**

WALL-MOUNT DEVICES

COMING SOON

# Description

Keystone modules compatible with Ekinex civil series. Wide range of devices to integrate network systems, multimedia systems and antenna systems.

# Main features

- Usage: indoor
- IP Protection: IP20
- Material: Plastic

# **Technical data**

- Dimensions (WxDxH): approx. 29.7 x 21.9 x 17.4 mm
- Operating temperature -10° to +60°.
- Packaging temperature -40° to +70° C
- Permissible humidity 10 to 90
- Certificates: CE & RoHS

# Delivery

Adapter frames, plates and frames are available for mounting on round or square flush-mounting boxes with 60 mm fixing holes, or on round flush-mounting boxes that can be combined with devices with 71 mm spacing.

# Accessories

The following accessories are available to complete and to be ordered separately:

- Square and double frame Form or Flank version
- Square, double and triple plate with 55 x 55 mm window









HDMI (white or black colour)

lack colour) SAT (white or black colour)



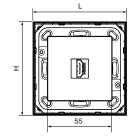


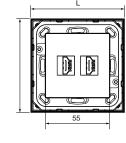


ETHERNET RJ45 (white or black colour)

ANTENNA (white or black colour)

# Dimensions [mm]







Mounting with frame: 81 x 77 (L x H) Mounting without frame ('NF): 80 x 80 (L x H)

# Order information

	Code	Туре	Color	Code	Туре	Color
	EK-KSC-1K	1 connector cover	Raw White	EK-KSC-1K	1 connector cover	Painted
	EK-KSC-2K	2 connectors cover	Raw White	EK-KSC-2K	2 connectors cover	Painted
	EK-KSM-HDMI-WH	HDMI female/female	White	EK-KSM-RJ45-WH	RJ45 connector cat.6	White
	EK-KSM-HDMI-BL	connector	Black	EK-KSM-RJ45-BL	UTP	Black
	EK-KSM-TVF-WH	TV-SAT coaxial socket	TV-SAT coaxial socket White EK-KSM-TVM-WH Coaxia	Coaxial TV socket IEC	White	
	EK-KSM-TVF-BL	F female connector	Black	EK-KSM-TVM-BL	male connector	Black
_	EK-KSM-PLUG-WH	Blind plug	White	EK-KSM-PLUG	Blind plug	Painted



# Documentation

For more information see the technical documentation, download from **www.ekinex.com** 







# **Accessories**

WALL-MOUNT DEVICES

Ekinex has developed a series of accessories for the mounting of its KNX wall and panel mounting products such as: frames, rockers and plates, adapter frames, mounting brackets, templates, bus cables and clamps.

# Available colour solutions

Available 00	ioui ooiutio	110						
	Form	Flank	'NF	Deep	Surface	FF	71	20vent
	Fra	mes		Plates			Rockers	
Plastic	•	•	•	•	-	•	•	•
Metal	•	•	•	•	•	•	•	-
Metal HT	-	-	-	•	•	•	•	-
Fenix NTM®	-	-	•	•	•	•	•	-

For more information see page 196



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# Rockers for pushbuttons 20venti series

WALL-MOUNT DEVICES





# Rockers for 4-fold pushbuttons - FF series

WALL-MOUNT DEVICES

# **Description**

Rockers for use as operation surface for pushbuttons of 20venti series. Rockers are available in several colour and material variations and are passive components.

## Versions

• rectangular with 30 x 15 mm modularity

# **Main features**

- In plastic material
- Snap-on mounting
- Customizable with symbols and text backlit by RGB LED

# Order information

Code	Modularity * L x H [mm]	For use with	Package
EK-T4R-20-BT	rectangular 30 x 15 symbol/text backlit RGB		4
EK-T4R-20-BT-MA09	rectangular 30 x 15 status led backlit RGB	pushbutton 20venti series	4 pcs.
EK-T2B-20-BT	rectangular 30 x 15 dimmer RGB	-	1 pcs.

<sup>\*)</sup> The modularity indicated also takes into account the distance between the rockers and between rockers and light-guides and, therefore, differs slightly from the actual size of the single rockers

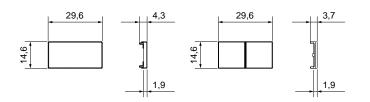


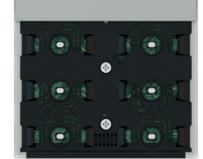
162

# Order

Base-codes must be completed by adding extensions for material, colour and finishing (3 characters) plus symbols and text (3 characters).

# Dimensions [mm]





# **Description**

Rockers for use as operation surface for 4-fold pushbuttons of FF series. They can perform two independent functions by acting on either its upper or lower zones (square and vertical rectangular versions) or on either its left or right zones (horizontal rectangular versions). Rockers are available in several colour and material variations and are passive components.

# Versions

- square with 40 x 40 mm modularity
- horizontal rectangular with 80 x 20 mm modularity
- vertical rectangular with 40 x 80 mm modularity

# Order information

Code	Modularity * L x H [mm]	For use with **	Package
EK-TQQ	square 40 x 40		4 pcs.
EK-TRV	vertical rectangular 40 x 80	4-fold pushbutton FF series	2 pcs.
EK-TRO	horizontal rectangular 80 x 20	-	4 pcs.

\*) The modularity indicated also takes into account the distance between the rockers and between rockers and light guides and, therefore, differs slightly from the actual size of the single rockers \*\*) The actual functioning as pushbutton with 2 or 4 channels depends on the configuration of the device parameters carried out with ETS



# Main features

- In plastic material, aluminium or Fenix NTM®
- Snap-on mounting
- Customizable with symbols and text

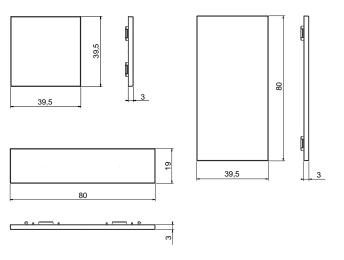
# Delivery

Delivery includes a tool for rockers removal.

# Order

Base-codes must be completed by adding extensions for material, colour and finishing (3 characters) plus symbols and text (3 characters).

# Dimensions [mm]





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# Rockers for 6-fold pushbuttons and Touch&See - FF series

WALL-MOUNT DEVICES

# **Description**

Rockers for use as operation surface for 6-fold pushbuttons and Touch&See with 2-fold pushbutton of FF series. They can perform two independent functions by pressing on either its upper or lower zones. Rockers are available in several colour and material variations and are passive components.

# **Versions**

• square with 40 x 40 mm modularity

# Main features

- In plastic material, aluminium or Fenix NTM®
- Snap-on mounting
- Customizable with symbols and text

# Order information

Code	Modularity [mm]	For use with	Package
EK-TQQ	square 40 x 40 —	6-fold pushbutton of FF series	4 pcs.
		Touch&See of FF series	4 pcs.



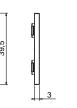
# Delivery

Delivery includes a tool for rockers removal.

## Orde

Base-codes must be completed by adding extensions for material, colour and finishing (3 characters) plus symbols and text (3 characters).

# Dimensions [mm]





# **Description**

Set rockers for use as operation surface for room thermostats of FF series. They can perform two independent functions by acting on either its upper or lower zones. Rockers are available in several colour and material variations and are passive components.

# **Versions**

• square with 40 x 40 mm modularity

# Main features

- In plastic material, aluminium or Fenix NTM®
- Snap-on mounting
- Customized with symbols for room thermostat functions

# Order information

Code	Modularity [mm]	For use with	Package.
EK-TQQEP2	square 40 x 40	room thermostats of FF series	2 pcs.



# **Set 2 rockers for room thermostats - FF series**

WALL-MOUNT DEVICES

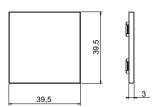
## Neliver

Delivery includes a tool for rockers removal.

# Order

Base-codes must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]





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# Description

Rockers for use as operation surface for pushbuttons of 71 series. They can perform two independent functions by acting on either its upper or lower zones (square and vertical rectangular versions) or on either its left or right zones (horizontal rectangular versions). Rockers are available in several colour and material variations and are passive components.

# Versions

- square with 60 x 60 mm or 30 x 30 mm modularity
- rectangular with 30 x 60 mm or 60 x 15 mm modularity

# **Main features**

- In plastic material, aluminium or Fenix NTM®
- Snap-on mounting
- Customizable with symbols and text

# Order information

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Code	Modularity * L x H [mm]	For use with **	Package
EK-T1Q	square 60 x 60		1 pcs.
EK-T2R	vertical rectangular 30 x 60		2 pcs.
EK-T4Q	square 30 x 30	— pushbuttons of 71 series	4 pcs.
EK-T4R	horizontal rectangular 60 x 15	_	4 pcs.

\*) The modularity indicated also takes into account the distance between the rockers and between rockers and light-guides and, therefore, differs slightly from the actual size of the single rockers

\*\*) The actual functioning as pushbutton with 1, 2 or 4 channels depends on the configuration of the device parameters carried out with ETS

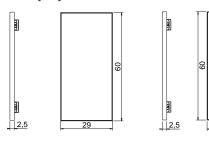
# Orde

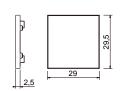
Base-codes must be completed by adding extensions for material, colour and finishing (3 characters) plus symbols and text (3 characters).

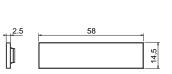
# Note

Finishing off a 71 series pushbutton with a square rocker with  $60 \times 60 \text{ mm}$  modularity does not allow the use of the integrated brightness sensor.

# Dimensions [mm]









# Full front cover for ET2 Multisensor

WALL-MOUNT DEVICES

# Description

Front cover for Multisensor EK-ET2-TP available in several colour and material variations.

# **Versions**

• square with 60 x 60 mm modularity

# Main features

- In plastic material, aluminium or Fenix NTM®
- Snap-on mounting

# Order information

Code	Modularity * L x H [mm]	For use with	Package
EK-T1QET2	square 60 x 60	Multisensor EK-ET2-TP	1 pcs.

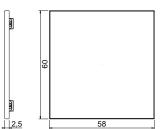
\*) The modularity indicated also takes into account the distance between the front cover and light-guides and, therefore, differs slightly from the actual size of the cover



# Order

Base-codes must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]





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# Full front cover for ES2 Multisensor

WALL-MOUNT DEVICES



# **Square frame - Form version**

WALL-MOUNT DEVICES

# Description

Front cover for MultisensorEK-ES2-TP available in several colour and material variations.

# **Versions**

• square with 60 x 60 mm modularity

# **Main features**

- In plastic material, aluminium or Fenix NTM®
- Snap-on mounting

# Order information

Code	Modularity * L x H [mm]	For use with	Package
EK-T1QES2	square 60 x 60	Multisensor EK-ET2-TP	1 pcs.

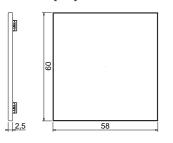
\*) The modularity indicated also takes into account the distance between the front cover and lightguides and, therefore, differs slightly from the actual size of the cover



## Order

Base-codes must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]



# Description

Square frame of Form version for finishing Ekinex® devices of FF and 71 series. Available in several colours and materials.

# **Main features**

- In plastic material or aluminium or Fenix NTM®
- Snap-on mounting

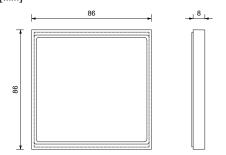
## Order informati

Code	Dimensions L x H x P [mm]	For use with	Package
EK-FOQ	86 x 86 x 8	devices of FF and 71 series	1 pcs.

# Order

Base-codes (EK-FOQ) must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]



# **Rectangular frame - Form version**

WALL-MOUNT DEVICES



# **Description**

Rectangular frame of Form version for finishing Ekinex® devices of FF and 71 series. Available in several colours and materials.

# Main features

- In plastic material or aluminium or Fenix NTM®
- Snap-on mounting

# Order information

Code	Dimensions L x H x P [mm]	For use with	Package
EK-FOR	126 x 86 x 8	devices of FF and 71 series	1 pcs.

# Order

Base-codes (EK-FOR) must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]



**Double frame - Form version** 

WALL-MOUNT DEVICES



# **Square frame - Flank version**

WALL-MOUNT DEVICES

# Description

Square frame of Flank version for finishing Ekinex® devices of FF and 71 series. Available in several colours and materials.

# Main features

- In plastic material or aluminium
- Snap-on mounting

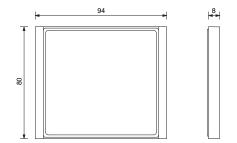
## Order information

Code	Dimensions L x H x P [mm]	For use with	Package
EK-FLQ	94 x 80 x 8	devices of FF and 71 series	1 pcs.

# Order

Base-codes (EK-FLQ) must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]



# **Rectangular frame - Flank version**

WALL-MOUNT DEVICES

# Description

Rectangular frame of Flank version for finishing Ekinex® devices of FF and 71 series. Available in several colours and materials.

# Main features

- In plastic material or aluminium
- Snap-on mounting

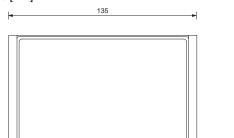
# Order information

Code	Dimensions L x H x P [mm]	For use with	Package
EK-FLR	135 x 80 x 8	devices of FF and 71 series	1 pcs.

# Orde

Base-codes (EK-FLR) must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]





Double frame of Form version for finishing Ekinex® devices of 71 series. Available in several colours and materials.

# **Main features**

Description

- In plastic material or aluminium
- Snap-on mounting

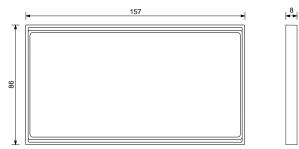
# **Order information**

Code	Dimensions L x H x P [mm]	For use with	Package
EK-F02	157 x 86 x 8	devices of 71 series	1 pcs.

# Order

Base-codes (EK-FO2) must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]



# **Double frame - Flank version**

WALL-MOUNT DEVICES

# Description

Double frame of Flank version for finishing Ekinex® devices of 71 series. Available in several colours and materials.

# **Main features**

- In plastic material or aluminium
- Snap-on mounting

# Order information

Code	Dimensions L x H x P [mm]	For use with	Package
EK-FL2	165 x 80 x 8	devices of 71 series	1 pcs.

# Orde

Base-codes (EK-FL2) must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]





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# Square plate

WALL-MOUNT DEVICES



# Rectangular plate

WALL-MOUNT DEVICES

# **Description**

Square plate for finishing Ekinex® devices of 71 series or market-standard flush-mounted inserts. Available in several colours and materials. To be used in combination with a square frame of the Form or Flank version. The plate can be also mounted without frame in combination with an adapter of the 'NF version.

# **Main features**

- In plastic material or aluminium or Fenix NTM®
- Snap-on mounting

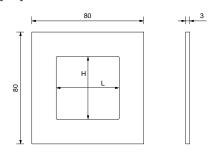
# Order information

Code	Window L x H [mm]	For use with*	Package
EK-PQP	45 x 45	standard flush-mounted inserts	
EK-PQG	55 x 55	standard hush-modified filserts	1 pcs.
EK-PQS	60 x 60	devices of 71 series	_

# Order

Base-codes must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]



# Description

Rectangular plate for finishing market-standard flush-mounted inserts. Available in several colours and materials. To be used in combination with a rectangular frame of the Form or Flank version. The plate can be also mounted without frame in combination with an adapter of the 'NF version.

# **Main features**

- In plastic material or aluminium or Fenix NTM®
- Snap-on mounting

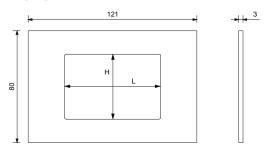
## Order information

Code	Window L x H [mm]	For use with*	Package	
EK-PRP*	66 x 44	-tdd florbt-d :t-		
EK-PRG	68 x 45	standard flush-mounted inserts	1 pcs.	
EK-PRS	60 x 60	devices of 71 series	_	

# Order

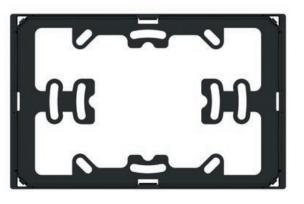
Base-codes must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]



# **Adapter for square plate**

WALL-MOUNT DEVICES



# Adapter for rectangular plate

WALL-MOUNT DEVICE

# Description

Adapter for snap-on mounting of a square plate.

# Main features

- Plastic material
- Mounting onto round or square mounting box with fixing holes 60 mm apart

# Order information

Code	For use with	Side profile	Package
EK-TAQ-1	square plate with a Form or Flank frame	black	
EK-TAQ-1-NF	(NF)	black	1 pcs.
EK-TAQ-1-NFW	<ul> <li>square plate without frame ('NF version)</li> </ul>	white	

# Description

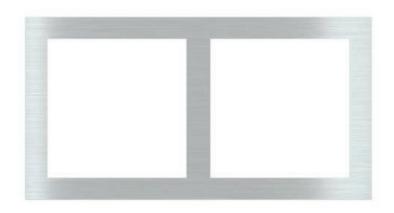
Adapter for snap-on mounting of a rectangular plate.

# Main features

- Plastic material
- Mounting onto round or square mounting box with fixing holes 60 mm apart or onto rectangular mounting box with fixing holes 83,5 mm apart

# Order information

Order information			
Code	For use with	Side profile	Package
EK-TAR-1	rectangular plate and Form or Flank frame	black	
EK-TAR-1-NF	rectangular plate without frame	black	1 pcs.
EK-TAR-1-NFW	('NF version)	white	



# **Double plate**

WALL-MOUNT DEVICES

# Description

Double plate for finishing standard flush-mounting inserts and/or Ekinex® devices of 71 series. Available in several colours and materials. To be used in combination with a double frame of the Form or Flank version. The plate can be also mounted without frame in combination with an adapter of the 'NF version.

# **Main features**

- In plastic material or aluminium or Fenix NTM®
- Snap-on mounting

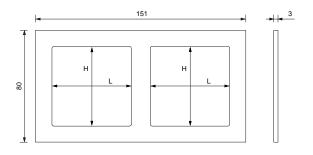
## **Order information**

Code	Windows L x H [mm]	For use with*	Package
EK-P2E*	45 x 45 (2)	two devices installed 71 mm apart (bus devices of 71 series and/or flush-mounting inserts)	
EK-P2F*	45 x 45 (1), 60 x 60 (1)		
EK-P2P	55 x 55 (2)		1 pcs.
EK-P2G	55 x 55 (1), 60 x 60 (1)		
EK-P2S	60 x 60 (2)		
*) Not availal	nle in nlastic		

# Order

Base-codes must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]



# Adapter for double plate

WALL-MOUNT DEVICES

# Description

Adapter for snap-on mounting of a double plate.

# **Main features**

- In plastic material
- For mounting onto round modular flush-mounting boxes (71 mm apart)

# Order information

Code	For use with	Side profile	Package	
EK-A71	double plate with a Form or Flank frame	black		
EK-A71-1-NF	double plate of 71 series without frame	black	1 pcs.	
EK-A71-1-NFW	('NF version)	white		





# Deep square plate

WALL-MOUNT DEVICES

# Description

Deep version square plate for finishing Ekinex® devices of 20venti and 71 series or market-standard flush-mounted inserts. Available in several colours and materials.

# **Main features**

- For use on round mounting box with fixing holes 60 mm apart
- In plastic material, aluminium, Metal HT or Fenix NTM®
- Snap-on mounting on adapter

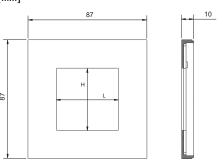
## Order information

Code	Window L x H [mm]	For use with	Package
EK-DQP	45 x 45	standard flush-mounted inserts	
EK-DQG	55 x 55	standard flush-mounted inserts	1 000
EK-DQT*	30 x 60	devices of 20venti series (4 rockers)	1 pcs.
EK-DQS	60 x 60	devices of 20venti and 71 series	
*) Not availab	le in plastic		

# Order

Base-codes must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]



# Adapter for Deep square plate

WALL-MOUNT DEVICES

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# Description

Adapter for snap-on mounting of a Deep square plate.

# Main features

- Plastic material
- Mounting onto round or square mounting box with fixing holes 60 mm apart

# Order informatio

Code	For use with	Side profile	Package
EK-TAQ-1-NF	Deep square plate	black	1 pcs.

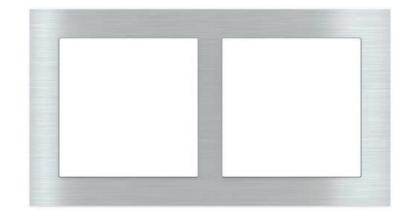


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# Deep rectangular plate

WALL-MOUNT DEVICES



# Deep double plate

WALL-MOUNT DEVICES

# Description

Deep version rectangular plate for finishing Ekinex® devices of 20venti and 71 series or market-standard flush-mounted inserts. Available in several colours and materials.

## Main features

- Mounting onto rectangular 3 seater mounting box according to the Italian installation standard provided with fixing holes 83,5 mm apart
- In plastic material, aluminium, Metal HT or Fenix NTM®
- Snap-on mounting on adapter

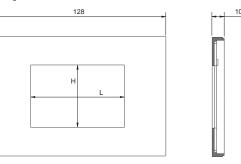
## Order information

Code	Window L x H [mm]	For use with	Package
EK-DRG	68 x 45	standard flush-mounted inserts	1 000
EK-DRS	60 x 60	devices of 20venti and 71 series	- 1 pcs.

## Order

Base-codes must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]



# Description

Deep version double plate for finishing standard flush-mounting inserts and/or Ekinex® devices of 20venti and 71 series. Available in several colours and materials.

## Main features

- For mounting onto mounting boxes with fixing holes 71 mm apart
- In plastic material, aluminium, Metal HT or Fenix NTM®
- Snap-on mounting on adapter

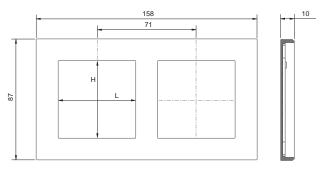
## Order information

Code	Windows L x H [mm]	For use with	Package
EK-D2E	45 x 45 (2)		
EK-D2F	45 x 45 (1), 60 x 60 (1)	two devices installed 71 mm apart	
EK-D2P	55 x 55 (2)	(bus devices of 20venti and 71 series and/or flush-mounting	1 pcs.
EK-D2G	55 x 55 (1), 60 x 60 (1)	inserts)	
EK-D2S	60 x 60 (2)		

# Order

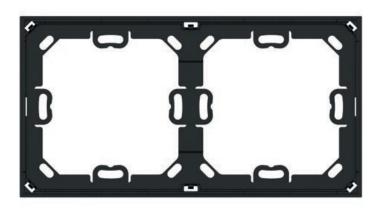
Base-codes must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]



# Adapter for Deep rectangular plate

WALL-MOON! DEVICES



# Adapter for Deep double plate

WALL-MOUNT DEVICES

# Description

Adapter for snap-on mounting of a Deep rectangular plate.

# **Main features**

- Plastic material
- Mounting onto round or square mounting box with fixing holes 60 mm apart or onto rectangular mounting box with fixing holes 83,5 mm apart

# Order information

Code	For use with	Side profile	Package
EK-TAR-1-NF	Deep rectangular plate	black	1 pcs.

# Description

Adapter for snap-on mounting of a Deep double plate.

# **Main features**

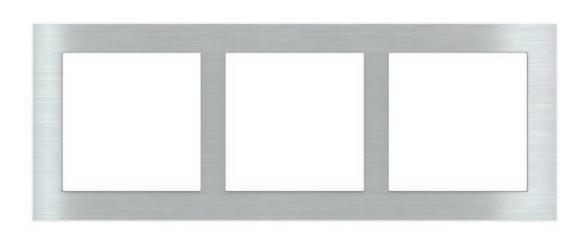
- In plastic material
- For mounting onto round modular flush-mounting boxes (71 mm apart)

# Order informatio

Code	For use with	Side profile	Package
EK-A71-1-NF	Deep double plate	black	1 pcs.







# **Deep triple plate**

WALL-MOUNT DEVICES

# Description

Deep version triple plate for finishing standard flush-mounting inserts and/or Ekinex® devices of 20venti and 71 series. Available in several colours and materials.

## Main foature

- For mounting onto mounting boxes with fixing holes 71 mm apart
- In aluminium, Metal HT or Fenix NTM®
- Snap-on mounting on adapter
- Customisation of windows on aluminium or Fenix NTM® plates on request

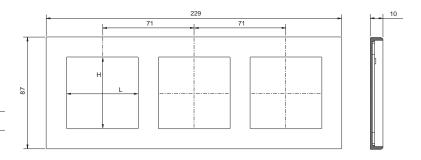
## Order informatio

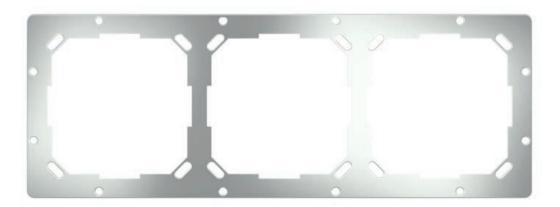
	Code	Windows L x H [mm]	For use with	Package
	EK-D3P	55 x 55 (3)	three devices installed 71 mm apart (bus devices of 20venti and 71	1 noo
-	EK-D3S	60 x 60 (3)	series and/or flush-mounting inserts)	1 pcs.

# Order

Base-codes must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]





# Adapter for Deep triple plate

WALL-MOUNT DEVICES

# Description

Adapter for snap-on mounting of a Deep triple plate.

# Main features

- In aluminium
- For mounting onto round modular flush-mounting boxes (71 mm apart)

# Order information

Code	For use with	Side profile	Package
EK-B71-1-NF	Deep triple plate	black	1 pcs.





# Surface square plate

WALL-MOUNT DEVICES

# Description

Surface version square plate for finishing Ekinex® devices of 20venti and 71 series or market-standard flush-mounted inserts. Available in several colours and materials.

## Main features

- For use on round mounting box with fixing holes 60 mm apart
- In aluminium, Metal HT or Fenix NTM®
- Snap-on mounting on adapter

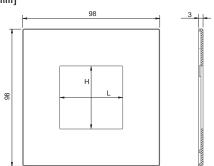
## rder information

Code	Window L x H [mm]	For use with	Package
EK-SQP	45 x 45	standard flush-mounted inserts	
EK-SQG	55 x 55	standard flush-mounted inserts	1
EK-SQT	30 x 60	devices of 20venti series (4 rockers)	1 pcs.
EK-SQS	60 x 60	devices of 20venti and 71 series	

# Order

Base-codes must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]



# Adapter for Surface square plate

WALL-MOUNT DEVICES

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-		

# Description

Adapter for mounting of a Surface square plate.

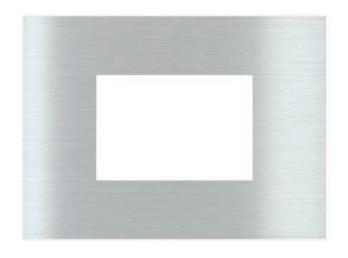
# Main features

- Plastic material
- With fixing ties for plasterboard and movable walls
- Mounting onto round or square mounting box with fixing holes 60 mm apart

# Order informatio

Code	For use with	Side profile	Package
EK-TAS-Q-1	Surface square plate	black	1 pcs.





# Surface rectangular plate

WALL-MOUNT DEVICES

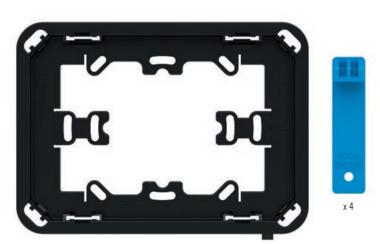
# **Description**

Surface version rectangular plate for finishing Ekinex® devices of 20venti and 71 series or market-standard flush-mounted inserts. Mounting on 3 seater rectangular boxes. Available in several colours and materials.

# Main features

- Mounting onto rectangular 3 seater mounting box according to the Italian installation standard provided with fixing holes 83,5 mm apart
- In aluminium, Metal HT or Fenix NTM®
- Snap-on mounting on adapter

Code	Window L x H [mm]	For use with	Package
EK-SRG	68 x 45	standard flush-mounted inserts	1 200
FK-SRS	60 x 60	devices of 20venti and 71 series	– 1 pcs.



# Adapter for Surface rectangular plate

WALL-MOUNT DEVICES

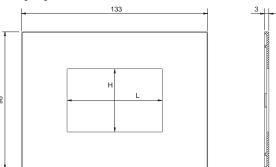
# Accessories (included in the delivery)

Adapter for mounting of a Surface rectangular plate.

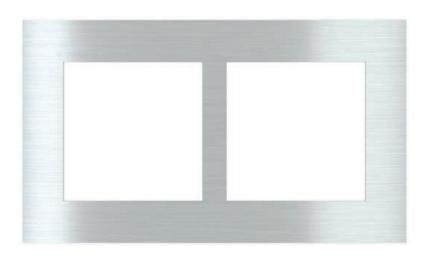
- Plastic material
- With fixing ties for plasterboard and movable walls
- Mounting onto rectangular 3 seater mounting box according to the Italian installation standard provided with fixing holes 83,5 mm apart

Base-codes must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]



Code	For use with	Side profile	Package
EK-TAS-R-1	Surface rectangular plate	black	1 pcs.



# Surface double plate

WALL-MOUNT DEVICES

# Description

Surface version double plate for finishing standard flush-mounting inserts and/or Ekinex® devices of 20venti and 71 series. Available in several colours and materials.

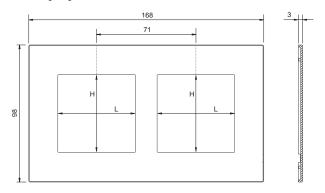
- For mounting onto mounting boxes with fixing holes 71 mm apart
- In aluminium, Metal HT or Fenix NTM®
- Snap-on mounting on adapter

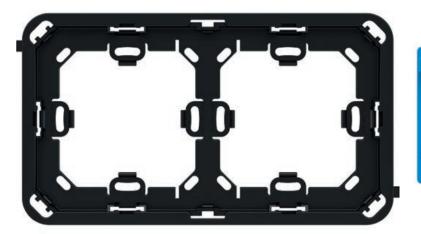
Code	Windows L x H [mm]	For use with	Package
EK-S2E	45 x 45 (2)		
EK-S2F	45 x 45 (1), 60 x 60 (1)	two devices installed 71 mm apart	
EK-S2P	55 x 55 (2)	(bus devices of 20venti and 71 series and/or flush-mounting	1 pcs.
EK-S2G	55 x 55 (1), 60 x 60 (1)	inserts)	
EK-S2S	60 x 60 (2)		

# Order

Base-codes must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]





# Adapter for Surface double plate WALL-MOUNT DEVICES

# **Description**

Adapter for mounting of a Surface double plate.

# Main features

- Plastic material
- With fixing ties for plasterboard and movable walls
- For mounting onto mounting boxes with fixing holes 71 mm apart

Code	For use with	Side profile	Package
EK-TAS-D-1	Surface double plate	black	1 pcs.



# Template for Surface plates WALL-MOUNT DEVICES





Template for making holes during wall plastering in order to mount a Surface plate-adapter bundle.

# Main features

- Plastic material
- With spirit level for perfect horizontal alignment
- Mounting onto round or square mounting box with fixing holes 60 mm apart

The template (EK-DPS-...) for mounting the Surface adapter-plate assembly must be ordered separately.

order information			
Code	Dimensions L x H x P [mm]	For use with	Package
EK-DPS-Q-N-1	87 x 87 x 10	Template for square plate	
EK-DPS-R-N-1	122 x 87 x 10	Template for rectangular plate	1 pcs.
EK-DPS-D-N-1	157 x 87 x 10	Template for double plate	



# Description

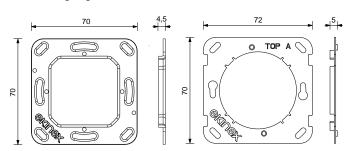
Square metallic support for mounting Ekinex® devices onto round or square mounting boxes with fixing holes 60 mm apart. Fixing screws are provided.

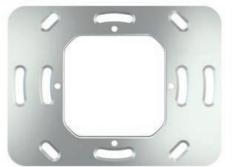
A mounting support is delivered with each Ekinex® device.

Code	Dimensions L x H x P [mm]	For use with	Package
EK-SMQ-1	72 x 70 x 5	thermostats and Touch&See FF series	
EK-SMQ-71-1	70 x 70 x 4,5	devices of 20venti or 71 series and 4-fold pushbutton of FF series	1 pcs.

# **Square mounting support** WALL-MOUNT DEVICES

# Dimensions [mm]







# Rectangular mounting support

WALL-MOUNT DEVICES

# Description

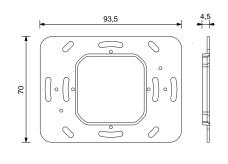
Rectangular metallic support for mounting Ekinex® devices onto round or square mounting boxes with fixing holes 60 mm apart or onto rectangular, 3-seater mounting box with fixing holes 85 mm apart. Fixing screws are provided.

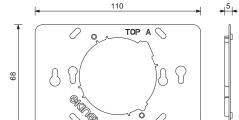
A mounting support is delivered with each Ekinex® device.

# Order information

110 x 68 x 5	Touch&See with 2-fold pushbutton of FF series	1 nas
93,5 x 70 x 4,5	devices of 20venti or 71 series and 4/6-fold pushbutton of FF series	1 pcs.
		of FF series  93.5 x 70 x 4.5  devices of 20venti or 71 series

# Dimensions [mm]







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# Template for side-by-side mounting of FF series with Form frames

WALL-MOUNT DEVICES

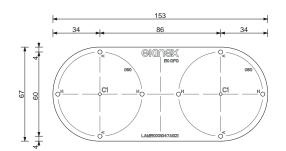
# Description

Template for horizontal or vertical double-mounting of two Ekinex® devices of FF series with square frame of the Form version. Made of zinc-plated metal sheet, 1 mm thick. Employ depends on wall type (brick or panels).

# Order information

Code	Frames	For use with	Package
EK-DFO	Form	2 devices of FF series completed with square Form frames	5 pcs.

# Dimensions [mm]





# Template for side-by-side mounting of FF series with Flank frames

WALL-MOUNT DEVICES

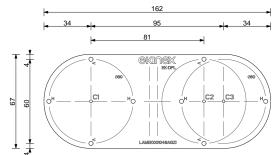
# Description

Template for horizontal or vertical double-mounting of two Ekinex® devices of FF series with square frame of the Flank version. Made of zinc-plated metal sheet, 1 mm thick. Employ depends on wall type (brick or panels).

# Order informatio

Code	Frames	For use with	Package
EK-DFL	Flank	2 devices of FF series completed with square Flank frames	5 pcs.

# Dimensions [mm]



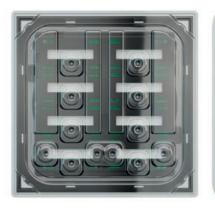




# Thermoformed protection for Ekinex pushbuttons

WALL-MOUNT DEVICES

COMING SOON







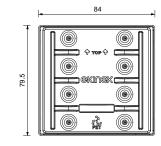
# Description

Building site protection in transparent thermoformed plastic material for Ekinex® pushbuttons FF, 71, 20venti series. The use of the protection prevents soiling of the devices caused by painting. The reliefs in correspondence with each rocker allow the pushbutton to be operated even with the protection present.

## Orde

Included in the delivery of Ekinex® Series FF, 71, 20venti pushbuttons

# Dimensions [mm] - serie FF

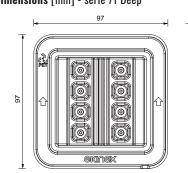


Dimensions [mm] - serie 20venti Deep

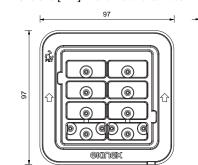
# 7.1,

# Dimensions [mm] - serie 71

# Dimensions [mm] - serie 71 Deep



# Dimensions [mm] - serie 20venti Surface



# **Solutions for the Swiss market**

WALL-MOUNT DEVICES



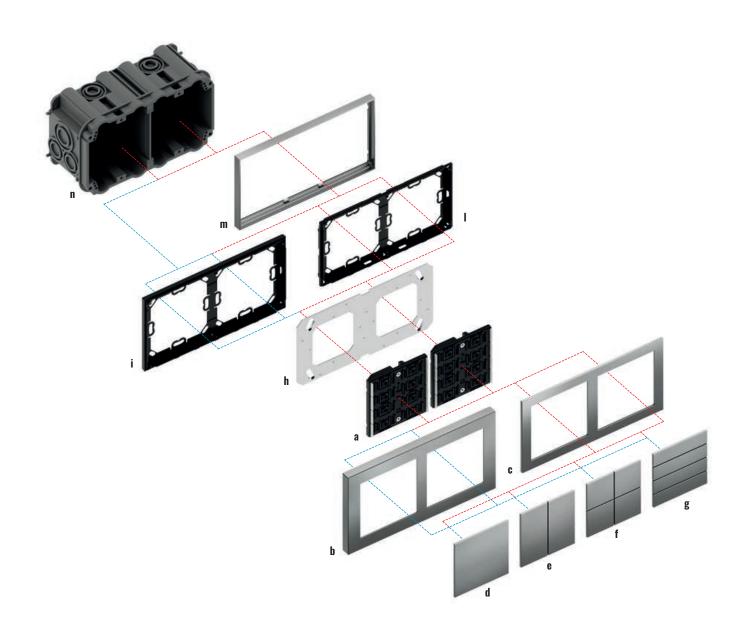
# The following components are used for the Swiss market:

- Double plate with 60 x 60 mm windows that allows the side-by-side installation of an Ekinex® device from 20venti or 71 series and a power socket (Feller) with 60 x 60 mm modularity or two power sockets (Feller) with 60 x 60 mm modularity with 68 mm spacing.
- Double plate with 60 x 60 mm windows that allows two Ekinex® devices from 20venti or 71 series to be mounted side by side with a distance between centres of 71 mm.
- Square plate with  $60 \times 60 \text{ mm}$  windows allowing the mounting of a power socket (Feller) with  $60 \times 60 \text{ mm}$  modularity.
- Single and double metal mounting supports for horizontal/vertical installation

The plate can be mounted without frame ('NF or Deep) or with double frame Form version. The double plate with 68 x 68 mm window is available in aluminium or Fenix NTM®. Installation can be done horizontally or vertically using the mounting supports.

# Requirements for the flush mount box(es)

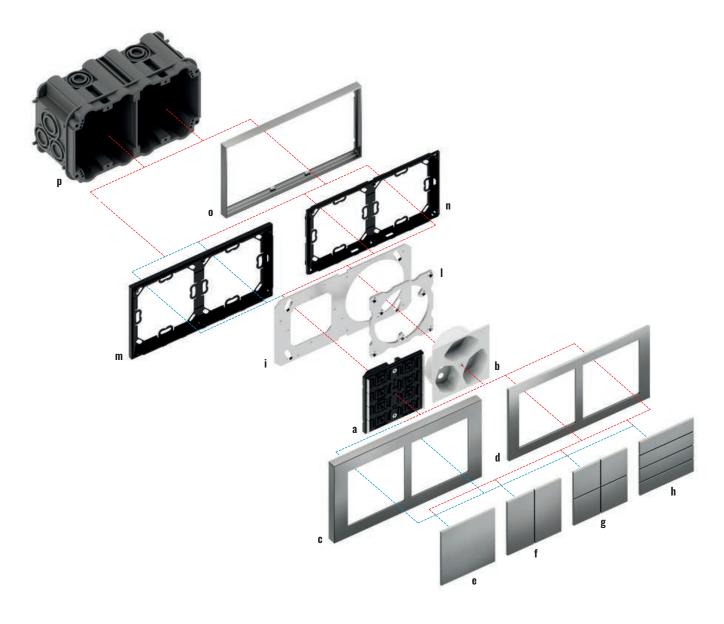
• Fixing holes in corner position



# Oouble pushbutton installation 71 series

Double hasubatton installation /1 series		
Description	Code	Page
a) Pushbutton - 71 series	EK-E12-TP o EK-E22-TP	84-86
<b>b)</b> Deep double plate*	EK-D2S	177
c) Double plate*	EK-P2S	164
<b>d)</b> Square rocker (1)	EK-T1Q	
e) Rectangular vertical rockers (2)	EK-T2R	100
f) Square rockers (4)	EK-T4Q	166
g) Rectangular horizontal rockers (4)	EK-T4R	
h) Metal mounting support**	EK-SM2-CHX	193

Description	Code	Page
i) Double adapter for frame-free installation	EK-A71-1-NF	177
1) Adapter for double plate with a Form or Flank frame	EK-A71	174
m) Form version double frame	EK-F02	171
n) Double box for masonry walls (centre distance 60 mm)	not delivered by Ekinex®	-
*) 60 x 60 mm windows		
**) Available for horizontal or vertical mounting		





Code	Page
EK-E12-TP or EK-E22-TP	84-86
not delivered by Ekinex®	-
EK-D2H	194
EK-P2H	194
EK-T1Q	
EK-T2R	166
EK-T4Q	100
EK-T4R	
EK-SM2-CHY	193
	EK-E12-TP or EK-E22-TP not delivered by Ekinex®  EK-D2H  EK-P2H  EK-T1Q  EK-T2R  EK-T4Q  EK-T4R

Description	Code	Page
I) Metal mounting support**	EK-SM1-CHT	193
m) Double adapter for frame-free installation	EK-A71-1-NF	177
n) Adapter for double plate with a Form or Flank frame	EK-A71	164
o) Form version double frame	EK-F02	171
<b>p)</b> Double box for masonry walls (centre distance 60 mm)	not delivered by Ekinex®	-
*) 60 x 60 mm windows		
**) Available for horizontal or vertical mounting		

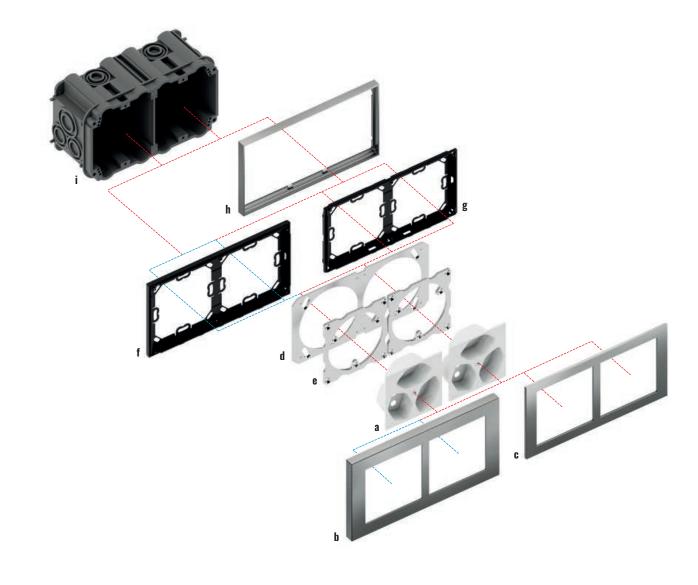


# Double pushbutton installation 20venti series

•		
Description	Code	Page
a) Pushbutton - 20venti series	EK-E20-TPP	30
<b>b)</b> Deep double plate*	EK-D2S	177
c) Rectangular horizontal rockers	EK-T4R-20-BT	166
d) Metal mounting support**	EK-SM2-CHX	193

Description	Code	Page
e) Double adapter for frame-free installation	EK-A71-1-NF	177
f) Double box for masonry walls (centre distance 60 mm)	non di fornitura Ekinex®	-
*) 60 x 60 mm windows		
**) Available for horizontal or vertical mounting		





# Nouble nuchhutton installation 20venti series + newer secket (60 v 60 mm)

Description	Code	Page
a) Pushbutton - 20venti series	EK-E20-TPP	30-31
<b>b)</b> Power socket 60 x 60 mm	not delivered by Ekinex®	-
c) Deep double plate*	EK-D2H	194
d) Rectangular horizontal rockers	EK-T4R-20-BT	166
e) Metal mounting support**	EK-SM2-CHY	193

Description	Code	Page
f) Metal mounting support**	EK-SM1-CHT	193
g) Double adapter for frame-free installation	EK-A71-1-NF	177
h) Double box for masonry walls (centre distance 60 mm)	not delivered by Ekinex®	-
*) 60 x 60 mm windows		
**) Available for horizontal or vertical mounting		

# Double power sockets installation (60 x 60 mm)

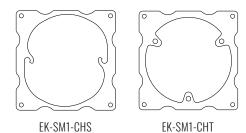
Description	Code	Page
a) Power socket 60 x 60 mm	not delivered by Ekinex®	-
<b>b)</b> Deep double plate*	EK-D2H	10.4
c) Double plate*	EK-P2H	— 194
d) Metal mounting support**	EK-SM2-CHZ	100
e) Metal mounting support**	EK-SM1-CHT	— 193
f) Double adapter for frame-free installation	EK-A71-1-NF	177

Description	Code	Page
<b>g)</b> Adapter for double plate with a Form or Flank frame	EK-A71	174
h) Form version double frame	EK-F02	171
i) Double box for masonry walls (centre distance 60 mm)	not delivered by Ekinex®	-
*) 60 x 60 mm windows		
**) Available for horizontal or vertical mounting		

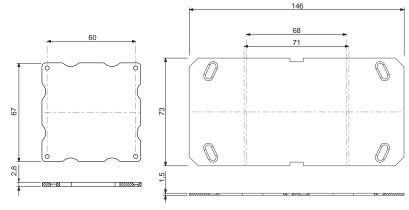


# Single mounting supports (horizontal/vertical)

Single replacement metal support for mounting of single or triple socket (Feller). Fixing screws included.



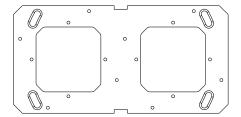
# Dimensions [mm]



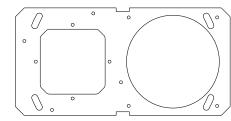
# Mounting supports WALL-MOUNT DEVICES

# Double mounting supports (horizontal/vertical)

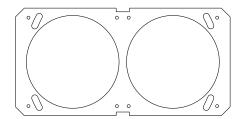
Double metal support for mounting two power sockets (Feller), one Ekinex® device from 20venti or 71 series and one power sockets (Feller), two Ekinex® devices from 20venti or 71 series. Fixing screws included.



EK-SM2-CHX (centre distance 71 mm)



EK-SM2-CHY (centre distance 68 mm)



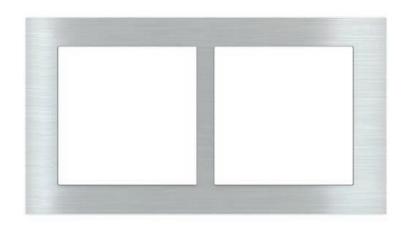
EK-SM2-CHZ (centre distance 68 mm)

Tonor oconoc motaniation (oo x c	, o)	
Description	Code	Page
a) Power socket 60 x 60 mm	not delivered by Ekinex®	-
<b>b)</b> Deep square plate*	EK-D2C	177
c) Square plate*	EK-P2C	174

d) Adapter for square plate	EK-TAQ-1-CH	193
e) Form version double frame	EK-F02	171
f) Double box for masonry walls (centre distance 60 mm)	not delivered by Ekinex®	-
*) 60 x 60 mm windows		

oraci information		
Code	Installation	Description
EK-SM1-CHS	oinglo	Replacement metal support for (Feller 60 x 60 mm) single socket
EK-SM1-CHT	— single	Replacement metal support for (Feller 60 x 60 mm) triple socket
EK-SM2-CHX		2 seats for Ekinex® 20venti or 71 series devices
EK-SM2-CHY	— double horizontal — vertical	1 seat for Ekinex® 20venti or 71 series device 1 seat for 1 single socket (Feller 60 x 60 mm)
EK-SM2-CHZ	- 101000	2 seats for sockets (Feller 60 x 60 mm)





# Double plate with 68 or 71 mm centre distance window

WALL-MOUNT DEVICES

# **Description**

Double plate with 60 x 60 mm windows for mounting two power sockets (Feller) at 68 mm centre distance, an Ekinex® 20venti or 71 series device and a power socket (Feller) and for mounting two Ekinex® 20venti or 71 series devices at 71 mm centre distance. Round box components must be 60 x 60 mm in size.

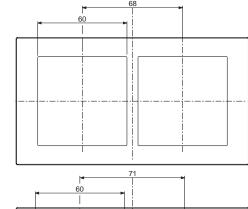
# **Main features**

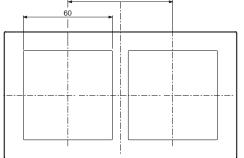
- In aluminium, Metal HT or Fenix NTM®
- Snap-on mounting on adapter\*

Code	Windows L x H [mm]	For use with	Package
EK-P2H ('NF)**		mounting with centre	
EK-D2H (Deep)	- 60 x 60	distancee 68 mm	1 pcs.
EK-P2S ('NF)		mounting with centre distance	
EK-D2S (Deep)		71 mm	

Base-codes must be completed by adding extensions for material, colour and finishing (3 characters).

# Dimensions [mm]







# Adapter for square plate and power socket (Feller) WALL-MOUNT DEVICES

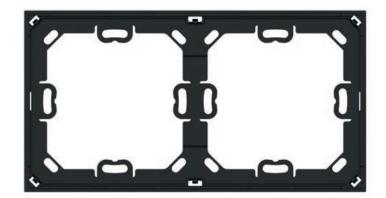
# Description

Adapter for snap-on mounting of a square plate together with a power socket (Feller).

# Main features

• In plastic material

Code	For use with	Side profile	Package
EK-TAQ-1-CH	square plate with Form or Flank frame or without frame ('NF or Deep version) and a power socket (Feller)	black	1 pcs.



Adapter for snap-on mounting of a double plate.

# Main features

In plastic material

# **Adapter for double plate**

WALL-MOUNT DEVICES

Code	For use with	Side profile	Package
EK-A71	double plate with a Form or Flank frame		10 pcs.
EK-A71-1-NF	double plate of 71 series without frame ('NF or Deep version)	black	1 pcs.

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# **Material and finishes**

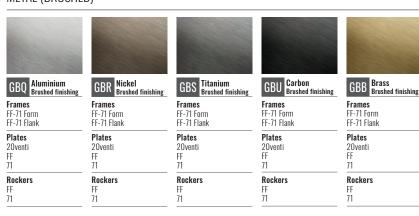
WALL-MOUNT DEVICES

# METAL HT



The range finishes shown on the left are the result of a company stylistic choice. Additional finishes in Fenix NTM® and metal are also available upon request (non-standard processes may be subject to limitation).

# METAL (BRUSHED)



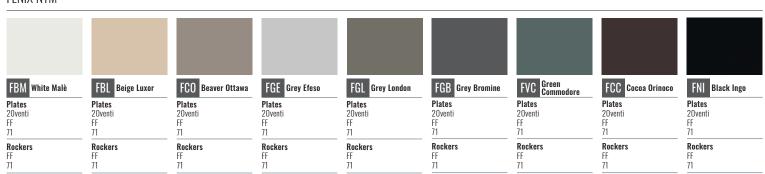
# PLASTIC

GAA White	GAE Intense black	GAG Silver metallic plastic
Frames FF-71 Form FF-71 Flank	Frames FF-71 Form FF-71 Flank	Frames FF-71 Form FF-71 Flank
Plates 20venti Deep FF 'NF and Deep 71 'NF and Deep	Plates 20venti Deep FF 'NF and Deep 71 'NF and Deep	Plates 20venti Deep FF 'NF and Deep 71 'NF and Deep
Rockers 20venti FF	Rockers 20venti FF	Rockers 20venti FF

# PLASTIC ON REQUEST

				100	
GAB Ice white* Soft-touch finish	GAC Fire white*	GAD Fire white* Soft-touch finish	GAF Intense black* Soft-touch RAL 9005	GAI Hematite*	GAL Graphite*
Frames	Frames	Frames	Frames	Frames	Frames
FF-71 Form	FF-71 Form	FF-71 Form	FF-71 Form	FF-71 Form	FF-71 Form
FF-71 Flank	FF-71 Flank	FF-71 Flank	FF-71 Flank	FF-71 Flank	FF-71 Flank
Plates	Plates	Plates	Plates	Plates	Plates
20venti Deep	20venti Deep	20venti Deep	20venti Deep	20venti Deep	20venti Deep
FF 'NF and Deep	FF 'NF and Deep	FF 'NF and Deep	FF 'NF and Deep	FF 'NF and Deep	FF 'NF and Deep
71 'NF and Deep	71 'NF and Deep	71 'NF and Deep	71 'NF and Deep	71 'NF and Deep	71 'NF and Deep
<b>Rockers</b>	<b>Rockers</b>	Rockers	Rockers	<b>Rockers</b>	<b>Rockers</b>
FF	20venti	FF	FF	20venti	20venti
71	FF - 71	71	71	FF - 71	FF - 71

# FENIX NTM®



# **Ekinex chooses Fenix NTM®**

WALL-MOUNT DEVICES

A super opaque nanotech material, is an innovative interior design product, that combines elegant aesthetic solutions with state-of-theart technological performance.

Fenix NTM® is an innovative interior design product, that combines elegant aesthetic solutions with state-of-the-art technological performance. The external surface involves the use of nanotechnology and it is characterized by next generation acrylic resins, hardened and fixed with Electron Beam Curing process opening up new avenues in the field of interior design. With low light reflectivity, its surface is extremely opaque, anti-fingerprint and features a very pleasant soft touch.

More information:

ekinex.com/materiali-e-finiture/fenix-ntm.html



Low light reflectivity





Resistance

to dry heat

Easy to clean



Resistance to impact



Thermal healing of microscratches



High resistance to acid solvents and household reagents



Mold-resistant



Lightfastness



Anti-fingerprint



Enhanced anti-bacterial properties



Antistatic



**Excellent intensity** 

and colour depth



Soft touch



Hygienic



Hydro-repellent



Rub resistance



Resistance to scratches and abrasion



Suitable for contact with food



Dimensional stability even at high temperature changes



Self-supporting (only for 10 and 12 mm)

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Rockers for devices of 20venti, FF and 71 series can be customized with symbols from the library on the following pages. Upon request, it is also possible to customize rockers with symbols and text provided by the customer.

# Square rockers

The code extension includes 3 characters identifying material, colour and finishing and 3 more characters identifying symbols. Within the last 3-character group, the first character identifies a double symbol, while the second and third characters identify a single symbol.

# Single symbol

The single symbol is reproduced in the central part of the square rocker, centred both horizontally and vertically. If the second and third characters of the extension-code equal "0", the rocker has no single symbol.

# Double symbol

The double symbol is reproduced in the upper and lower part of the square rocker, both centred horizontally. If the first character in the extension-code equals "0", the rocker has no double symbol.

# Vertical rectangular rockers

The code extension includes 3 characters identifying material, colour and finishing and 3 more characters identifying symbols. Within the last 3-character group, the first character identifies a double symbol, while the second and third characters identify a single symbol.

# Single symbol

The single symbol is reproduced in the central part of the rectangular rocker, centred both horizontally and vertically. If the second and third characters of the extension-code equal "O", the rocker has no single symbol.

# Double symbol

The double symbol is reproduced in the upper and lower part of the rectangular rocker, both centred horizontally. If the first character in the extension-code equals "O", the rocker has no double symbol.

# Horizontal rectangular rockers

The code extension includes 3 characters identifying material, colour and finishing and 3 more characters identifying symbols. Within the last 3-character group, the first character identifies a double symbol, while the second and third characters identify a single symbol.

# Single symbo

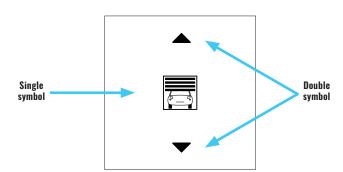
The single symbol is reproduced in the central part of the rectangular rocker, centred both horizontally and vertically. If the second and third characters of the extension-code equal "O", the rocker has no single symbol.

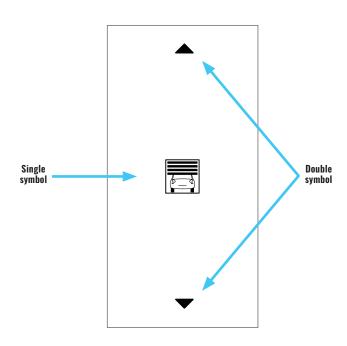
# Double symbo

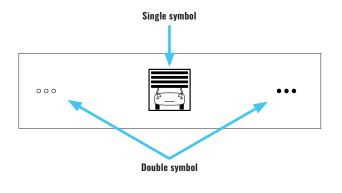
The double symbol is reproduced on the left and right sides of the rectangular rocker, vertically centred. If the first character in the extension-code equals "0", the rocker has no double symbol.

# Symbols for rockers customization

WALL-MOUNT DEVICES





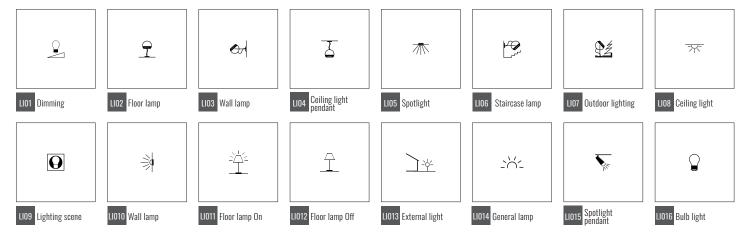




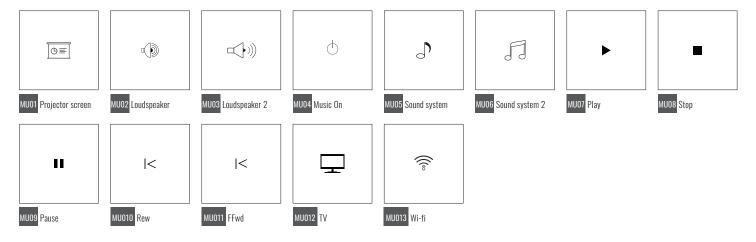
# **Single symbols**



# Lighting



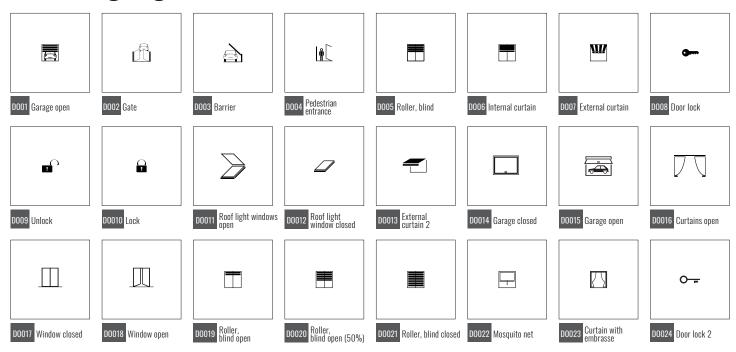
# Multimedia



# **Health** and care



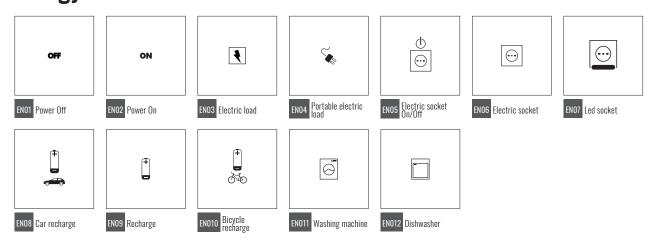
# **Door and garage**



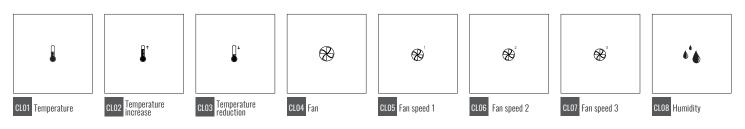
# Hotel



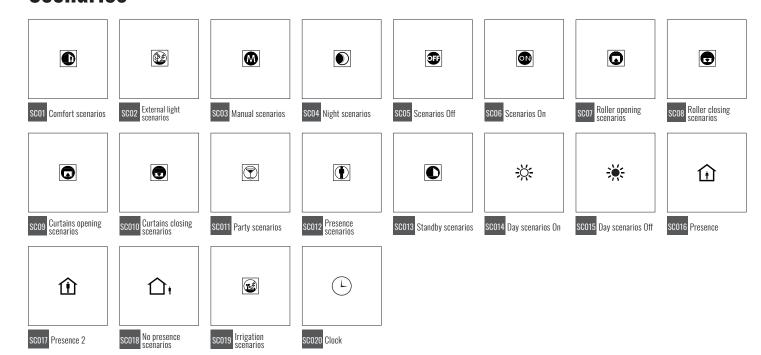
# **Energy**



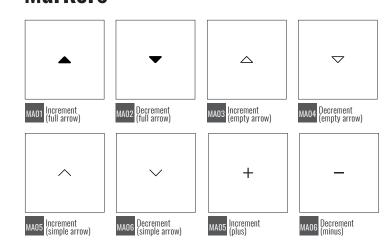
# **Climate**



# **Scenarios**



# **Markers**



# **Status Led (20venti)**



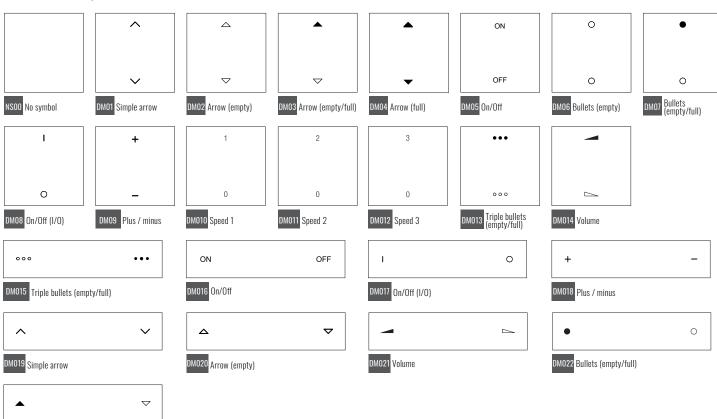
**Note.** For convenience, all the symbols in this page are shown as they appear on square rockers. The same symbols may also be requested for rectangular rockers. The symbols shown here can be replaced by customised symbols or text on request.

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<sup>\*</sup> Not available for 20venti series with backlit texts and symbols



# **Double symbols**



# **Customization with text**

WALL-MOUNT DEVICES

DM023 Arrow (empty/full)

Square rockers can be customized with text to be shown in the upper, central or lower areas. Texts must be specified at order time.

Abcdefghilmn Abcdefghilmn Abcdefghilmn Abcdefghilmn Abcdefghilmn Text added to both Text added to central Text added to Text added to upper and lower areas upper area only (max 12 characters) lower area only (max. 12 characters) area only (1 or 2 lines,

(max. 12 chars each)

Horizontal rectangular rockers can be customized by means of text in their central area.

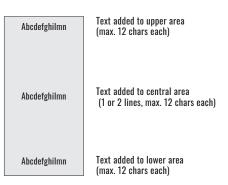
Abcdefghilmn

Text added to central area only (1 or 2 lines, max. 12 chars each) Abcdefghil

Text added to central area only (max. 11 chars each) 20venti series only

max. 12 chars each)

Vertical rectangular rockers can be customized with text to be shown in the upper, central or lower areas.



# **Rockers for pushbuttons 20venti series**

WALL-MOUNT DEVICES

# Rockers for 4-fold pushbutton 20venti series.

The ordering code of a rocker is formed by a fixed part (EK-T) plus a variable part which represents modularity, material, colour, finishing and customization codes as shown in symbol library.

# **PLASTIC MATERIAL**

Modularity	Colour	Finishing	Code
	white	normal	EK-T4R-20-BT-GAA
	fire white	normal*	EK-T4R-20-BT-GAC
rectangular	intense black RAL 9005	normal	EK-T4R-20-BT-GAE
backlit text/symbols	silver	normal	EK-T4R-20-BT-GAG
(4 rockers 30 x 15 mm)	hematite	normal*	EK-T4R-20-BT-GAI
	graphite	normal*	EK-T4R-20-BT-GAL
	white	normal	EK-T2B-20-BT-GAA
	fire white	normal*	EK-T2B-20-BT-GAC
rectangular dimmer (1 rocker 30 x 15 mm)	intense black RAL 9005	normal	EK-T2B-20-BT-GAE
	silver	normal	EK-T2B-20-BT-GAG
	hematite	normal*	EK-T2B-20-BT-GAI
	graphite	normal*	EK-T2B-20-BT-GAL

<sup>\*)</sup> Version on request

# **Rockers for pushbuttons FF series**

WALL-MOUNT DEVICES

# Rockers for 4-fold pushbutton FF series.

The ordering code of a rocker is formed by a fixed part (EK-T) plus a variable part which represents modularity, material, colour, finishing and customization codes as shown in symbol library.

# PLASTIC MATERIAL

Modularity	Colour	Finishing	Code
	white	normal	EK-TQQ-GAA
	ice white	soft-touch*	EK-TQQ-GAB
	fine milita	normal*	EK-TQQ-GAC
$\Box$	fire white	soft-touch*	EK-TQQ-GAD
	intense black	normal	EK-TQQ-GAE
	RAL 9005	soft-touch*	EK-TQQ-GAF
square	silver	normal	EK-TQQ-GAG
	hematite	normal*	EK-TQQ-GAI
	graphite	normal*	EK-TQQ-GAL
	white	normal	EK-TRV-GAA
	ice white	soft-touch*	EK-TRV-GAB
	6 10	normal*	EK-TRV-GAC
	fire white	soft-touch*	EK-TRV-GAD
LLI.	intense black	normal	EK-TRV-GAE
rectangular (vertical)	RAL 9005	soft-touch*	EK-TRV-GAF
(10.1.001)	silver	normal	EK-TRV-GAG
	hematite	normal*	EK-TRV-GAI
	graphite	normal*	EK-TRV-GAL
	white	normal	EK-TRO-GAA
	ice white	soft-touch*	EK-TRO-GAB
	6 19	normal*	EK-TRO-GAC
	fire white	soft-touch*	EK-TRO-GAD
	intense black	normal	EK-TRO-GAE
rectangular (horizontal)	RAL 9005	soft-touch*	EK-TRO-GAF
	silver	normal	EK-TRO-GAG
	hematite	normal*	EK-TRO-GAI
	graphite	normal*	EK-TRO-GAL

<sup>\*)</sup> Version on request

Modularity	Colour	Finishing	Code
	Chrome		EK-TQQ-CRO
	Black Metal		EK-TQQ-CBM
	Copper		EK-TQQ-COP
square	Champagne	-	EK-TQQ-CHA
	Chrome	chrome plated	EK-TRV-CRO
	Black Metal		EK-TRV-CBM
rectangular	Copper		EK-TRV-COP
(vertical)	Champagne		EK-TRV-CHA
	Chrome	-	EK-TRO-CRO
rectangular (horizontal)	Black Metal		EK-TRO-CBM
	Copper	-	EK-TRO-COP
	Champagne	-	EK-TRO-CHA

Modularity	Colour	Finishing	Code
aluminium nickel	aluminium		EK-TQQ-GBQ
	nickel		EK-TQQ-GBR
	titanium		EK-TQQ-GBS
	carbon		EK-TQQ-GBU
square	brass		EK-TQQ-GBB
	aluminium		EK-TRV-GBQ
	nickel		EK-TRV-GBR
	titanium	brushed	EK-TRV-GBS
rectangular (vertical)	carbon		EK-TRV-GBU
,	brass		EK-TRV-GBB
rectangular (horizontal)	aluminium		EK-TRO-GBQ
	nickel		EK-TRO-GBR
	titanium		EK-TRO-GBS
	carbon		EK-TRO-GBU
	brass		EK-TRO-GBB

Code

EK-TQQ-FBM

EK-TRO-FNI

# FENIX NTM® Modularity

malè white

black ingo

	beige luxor	EK-TQQ-FBL
	beaver ottawa	EK-TQQ-FCO
	cocoa orinoco	EK-TQQ-FCC
	grey efeso	EK-TQQ-FGE
	grey london	EK-TQQ-FGL
square	grey bromine	EK-TQQ-FGB
	green commodore	EK-TQQ-FVC
	black ingo	EK-TQQ-FNI
	malè white	EK-TRV-FBM
	beige luxor	EK-TRV-FBL
	beaver ottawa	EK-TRV-FCO
	cocoa orinoco	EK-TRV-FCC
rantangular	grey efeso	EK-TRV-FGE
rectangular verticale	grey london	EK-TRV-FGL
	grey bromine	EK-TRV-FGB
	green commodore	EK-TRV-FVC
	black ingo	EK-TRV-FNI
	malè white	EK-TRO-FBM
	beige luxor	EK-TRO-FBL
	beaver ottawa	EK-TRO-FCO
rectangular orizzontale	cocoa orinoco	EK-TRO-FCC
	grey efeso	EK-TRO-FGE
	grey london	EK-TRO-FGL
ONZZONICIO	grey bromine	EK-TRO-FGB

# Kit 2 rockers for room thermostats FF series

WALL-MOUNT DEVICES

# **PLASTIC MATERIAL**

Modularity	Colour	Finishing	Code
	white	normal	EK-TQQ-GAA-EP2
	ice white	soft-touch*	EK-TQQ-GAB-EP2
	fire white	normal*	EK-TQQ-GAC-EP2
+	iire wiiite	soft-touch*	EK-TQQ-GAD-EP2
	intense black	normal	EK-TQQ-GAE-EP2
square	RAL 9005	soft-touch*	EK-TQQ-GAF-EP2
	silver	normal	EK-TQQ-GAG-EP2
	hematite	normal*	EK-TQQ-GAI-EP2
	graphite	normal*	EK-TQQ-GAL-EP2

# **METAL HT**

Modularity	Colour	Finishing	Code
	Chrome		EK-TQQ-CRO-EP2
	Black Metal	ahrama platad	EK-TQQ-CBM-EP2
square	Copper	chrome plated	EK-TQQ-COP-EP2
oquaio	Champagne		EK-TQQ-CHA-EP2

Note. The kit includes 2 rockers customized with symbols for the control of thermostats functions.

Modularity	Colour	Finishing	Code
square	aluminium		EK-TQQ-GBQ-EP2
	nickel		EK-TQQ-GBR-EP2
	titanium	brushed	EK-TQQ-GBS-EP2
	carbon		EK-TQQ-GBU-EP2
	brass		EK-TQQ-GBB-EP2

Note. The kit includes 2 rockers customized with symbols for the control of thermostats functions.

# FENIX NTM®

Modularity	Colour	Code
	malè white	EK-TQQ-FBM-EP2
	beige luxor	EK-TQQ-FBL-EP2
	beaver ottawa	EK-TQQ-FCO-EP2
	cocoa orinoco	EK-TQQ-FCC-EP2
square	grey efeso	EK-TQQ-FGE-EP2
-1	grey london	EK-TQQ-FGL-EP2
	grey bromine	EK-TQQ-FGB-EP2
	green commodore	EK-TQQ-FVC-EP2

Note. The kit includes 2 rockers customized with symbols for the control of thermostats functions.

<sup>\*)</sup> Version on request Note. The kit includes 2 rockers customized with symbols for the control of thermostats functions.

# Rockers for pushbuttons 71 series

WALL-MOUNT DEVICES

# Rockers for 4-fold pushbutton 71 series.

The ordering code of a rocker is formed by a fixed part (EK-T) plus a variable part which represents modularity, material, colour, finishing and customization codes as shown in symbol library.

# **PLASTIC MATERIAL**

Modularity	Colour	Finishing	Code
	white	normal	EK-T1Q-MAA
_	ice white	soft-touch*	EK-T1Q-GAB
	fire white -	normal*	EK-T1Q-GAC
	ille willte –	soft-touch*	EK-T1Q-GAD
square	intense black	normal	EK-T1Q-MAL
(1 rocker 60 x 60 mm)	RAL 9005	soft-touch*	EK-T1Q-GAF
_	silver	normal	EK-T1Q-GAG
_	hematite	normal*	EK-T1Q-GAI
_	graphite	normal*	EK-T1Q-GAL
	white	normal	EK-T2R-MAA
_	ice white	soft-touch*	EK-T2R-GAB
-	f:b:1-	normal*	EK-T2R-GAC
	fire white –	soft-touch*	EK-T2R-GAD
rectangular vertical	intense black	normal	EK-T2R-MAL
(2 rockers 30 x 60 mm)	RAL 9005	soft-touch*	EK-T2R-GAF
=	silver	normal	EK-T2R-GAG
-	hematite	normal*	EK-T2R-GAI
-	graphite	normal*	EK-T2R-GAL
	white	normal	EK-T4Q-MAA
-	ice white	soft-touch*	EK-T4Q-GAB
=	fire white –	normal*	EK-T4Q-GAC
		soft-touch*	EK-T4Q-GAD
square -	intense black	normal	EK-T4Q-MAL
(4 rockers 30 x 30 mm)	RAL 9005	soft-touch*	EK-T4Q-GAF
_	silver	normal	EK-T4Q-GAG
=	hematite	normal*	EK-T4Q-GAI
-	graphite	normal*	EK-T4Q-GAL
	white	normal	EK-T4R-MAA
-	ice white	soft-touch*	EK-T4R-GAB
-		normal*	EK-T4R-GAC
	fire white -	soft-touch*	EK-T4R-GAD
rectangular horizontal	black	normal	EK-T4R-MAL
(4 rockers - 60 x 15 mm)	intense black RAL 9005	soft-touch*	EK-T4R-GAF
	silver	normal	EK-T4R-GAG
-	hamatita	normal*	EK-T4R-GAI
	hematite	HUHHAH	LIN-14IN-UAI

<sup>\*)</sup> Version on request

# METAL

Modularity	Colour	Finishing	Code
	aluminium		EK-T1Q-GBQ
_	nickel	_	EK-T1Q-GBR
square	titanium	_	EK-T1Q-GBS
(1 rocker 60 x 60 - mm)	carbon	_	EK-T1Q-GBU
_	brass	_	EK-T1Q-GBB
	aluminium		EK-T2R-GBQ
	nickel		EK-T2R-GBR
rectangular vertical	titanium	_	EK-T2R-GBS
(2 rockers 30 x 60	carbon	_	EK-T2R-GBU
_	brass		EK-T2R-GBB
	aluminium	— brushed	EK-T4Q-GBQ
	nickel		EK-T4Q-GBR
square	titanium	_	EK-T4Q-GBS
(4 rockers 30 x 30 mm)	carbon	_	EK-T4Q-GBU
_	brass	_	EK-T4Q-GBB
	aluminium		EK-T4R-GBQ
_	nickel		EK-T4R-GBR
rectangular horizontal	titanium	_	EK-T4R-GBS
(4 rockers 60 x 15 $^-$ mm)	carbon	_	EK-T4R-GBU
_	brass	_	EK-T4R-GBB

# **METAL HT**

Modularity	Colour	Finishing	Code
	Chrome		EK-T1Q-CRO
-	Black Metal		EK-T1Q-CBM
square (1 rocker 60 x 60	Copper		EK-T1Q-COP
mm)	Champagne		EK-T1Q-CHA
	Chrome		EK-T2R-CRO
-	Black Metal		EK-T2R-CBM
rectangular vertical - (2 rockers 30 x 60	Copper		EK-T2R-COP
mm)	Champagne		EK-T2R-CHA
	Chrome	— chrome plated	EK-T4Q-CRO
	Black Metal		EK-T4Q-CBM
square - (4 rockers 30 x 30	Copper		EK-T4Q-COP
mm)	Champagne		EK-T4Q-CHA
	Chrome		EK-T4R-CRO
	Black Metal		EK-T4R-CBM
rectangular horizontal - (4 rockers 60 x 15	Copper	<del></del>	EK-T4R-COP
mm)	Champagne		EK-T4R-CHA

# FENIX NTM®

Modularity	Colour	Code
	malè white	EK-T1Q-FBM
	beige luxor	EK-T1Q-FBL
	beaver ottawa	EK-T1Q-FCO
	cocoa orinoco	EK-T1Q-FCC
square	grey efeso	EK-T1Q-FGE
(1 rocker 60 x 60 mm)	grey london	EK-T1Q-FGL
	grey bromine	EK-T1Q-FGB
	green commodore	EK-T1Q-FVC
	black ingo	EK-T1Q-FNI
	malè white	EK-T2R-FBM
	beige luxor	EK-T2R-FBL
	beaver ottawa	EK-T2R-FCO
	cocoa orinoco	EK-T2R-FCC
	grey efeso	EK-T2R-FGE
rectangular vertical (2 rockers 30 x 60 mm)	grey london	EK-T2R-FGL
	grey bromine	EK-T2R-FGB
	green commodore	EK-T2R-FVC
	black ingo	EK-T2R-FNI
	malè white	EK-T4Q-FBM
	beige luxor	EK-T4Q-FBL
	beaver ottawa	EK-T4Q-FCO
	cocoa orinoco	EK-T4Q-FCC
square	grey efeso	EK-T4Q-FGE
(4 rockers 30 x 30 mm)	grey london	EK-T4Q-FGL
	grey bromine	EK-T4Q-FGB
	green commodore	EK-T4Q-FVC
	black ingo	EK-T4Q-FNI
	malè white	EK-T4R-FBM
	beige luxor	EK-T4R-FBL
	beaver ottawa	EK-T4R-FCO
	cocoa orinoco	EK-T4R-FCC
rectangular horizontal	grey efeso	EK-T4R-FGE
(4 rockers 60 x 15 mm)	grey london	EK-T4R-FGL
	grey bromine	EK-T4R-FGB
	green commodore	EK-T4R-FVC
	black ingo	EK-T4R-FNI



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# **Multisensors**

WALL-MOUNT DEVICES

# Front cover - Multisensors ET2/ES2.

The ordering code of a rocker is formed by a fixed part (EK-T) plus a variable part which represents modularity, material, colour, finishing and model.

# PLASTIC MATERIAL

Modularity	Colour	Finishing	Code	
	white	normal	EK-T1Q-GAA-ET2	EK-T1Q-GAA-ES2
	ice white	soft-touch*	EK-T1Q-GAB-ET2	EK-T1Q-GAB-ES2
	fire white	normal*	EK-T1Q-GAC-ET2	EK-T1Q-GAC-ES2
	ille willte —	soft-touch*	EK-T1Q-GAD-ET2	EK-T1Q-GAD-ES2
Front cover	intense black	normal	EK-T1Q-GAE-ET2	EK-T1Q-GAE-ES2
ET2 / ES2 (60 x 60 mm)	RAL 9005	soft-touch*	EK-T1Q-GAF-ET2	EK-T1Q-GAF-ES2
- - -	silver	normal	EK-T1Q-GAG-ET2	EK-T1Q-GAG-ES2
	hematite	normal*	EK-T1Q-GAI-ET2	EK-T1Q-GAI-ES2
	graphite	normal*	EK-T1Q-GAL-ET2	EK-T1Q-GAL-ES2

<sup>\*)</sup> Version on request

# **METAL HT**

Modularity	Colour	Finishing	Code	
Front cover ET2 / ES2 (60 x 60 mm)	Chrome	chrome plated	EK-T1Q-CRO-ET2	EK-T1Q-CRO-ES2
	Black Metal		EK-T1Q-CBM-ET2	EK-T1Q-CBM-ES2
	Copper		EK-T1Q-COP-ET2	EK-T1Q-COP-ES2
	Champagne		EK-T1Q-CHA-ET2	EK-T1Q-CHA-ES2

# METAL

Modularity	Colour	Finishing	Code	
Front cover ET2 / ES2_(60 x 60 mm)	aluminium	brushed .	EK-T1Q-GBQ-ET2	EK-T1Q-GBQ-ES2
	nickel		EK-T1Q-GBR-ET2	EK-T1Q-GBR-ES2
	titanium		EK-T1Q-GBS-ET2	EK-T1Q-GBS-ES2
	carbon		EK-T1Q-GBU-ET2	EK-T1Q-GBU-ES2
	brass		EK-T1Q-GBB-ET2	EK-T1Q-GBB-ES2

# FENIX NTM®

Modularity	Colour	Finishing	Code
Front cover FT2 / FS2	malè white	EK-T1Q-FBM-ET2	EK-T1Q-FBM-ES2
	beige luxor	EK-T1Q-FBL-ET2	EK-T1Q-FBL-ES2
	beaver ottawa	EK-T1Q-FCO-ET2	EK-T1Q-FCO-ES2
	cocoa orinoco	EK-T1Q-FCC-ET2	EK-T1Q-FCC-ES2
	grey efeso	EK-T1Q-FGE-ET2	EK-T1Q-FGE-ES2
(60 x 60 mm)	grey london	EK-T1Q-FGL-ET2	EK-T1Q-FGL-ES2
	grey bromine	EK-T1Q-FGB-ET2	EK-T1Q-FGB-ES2
	green commodore	EK-T1Q-FVC-ET2	EK-T1Q-FVC-ES2
	black ingo	EK-T1Q-FNI-ET2	EK-T1Q-FNI-ES2

# **Voice assistant**

WALL-MOUNT DEVICES
COMING SOON

# Front cover - Eséguo voice assistant.

The ordering code of a rocker is formed by a fixed part (EK-T) plus a variable part which represents modularity, material, colour and finishing.

# **PLASTIC MATERIAL**

Modularity	Colour	Finishing	Code
	white	normal	EK-T1Q-GAA-VA2
	ice white	soft-touch*	EK-T1Q-GAB-VA2
	fire white	normal*	EK-T1Q-GAC-VA2
Front cover	fire white	soft-touch*	EK-T1Q-GAD-VA2
	intense black	normal	EK-T1Q-GAE-VA2
Voice assistant (60 x 60 mm)	RAL 9005	soft-touch*	EK-T1Q-GAF-VA2
	silver	normal	EK-T1Q-GAG-VA2
	hematite	normal*	EK-T1Q-GAI-VA2
	graphite	normal*	EK-T1Q-GAL-VA2

<sup>\*)</sup> Version on request

# METAL

Modularity	Colour	Finishing	Code
Front cover Voice assistant (60 x 60 mm)	aluminium		EK-T1Q-GBQ-VA2
	nickel		EK-T1Q-GBR-VA2
	titanium	brushed	EK-T1Q-GBS-VA2
	carbon		EK-T1Q-GBU-VA2
	brass		EK-T1Q-GBB-VA2

# FENIX NTM®

Modularity	Colour	Code
Front cover	malè white	EK-T1Q-FBM-VA2
	beige luxor	EK-T1Q-FBL-VA2
	beaver ottawa	EK-T1Q-FCO-VA2
	cocoa orinoco	EK-T1Q-FCC-VA2
	grey efeso	EK-T1Q-FGE-VA2
Voice assistant (60 x 60 mm)	grey london	EK-T1Q-FGL-VA2
	grey bromine	EK-T1Q-FGB-VA2
	green commodore	EK-T1Q-FVC-VA2
	black ingo	EK-T1Q-FNI-VA2



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# **Power sockets**

WALL-MOUNT DEVICES

# Power socket - Italian and Schuko version

The ordering code for the coloured cover of an electrical socket is formed by a fixed part (EK-PSC) and a variable part depending on the version (Italian or Schuko) and the colour. The ordering code for the power socket body only is EK-PWS-. (IT or DE).

# **PLASTIC MATERIAL**

Version	Dimensions	Colour	Finishing	Code
		white		EK-PSC-IT-GAA
Italian	55 x 55 mm	intense black RAL 9005	normal	EK-PSC-IT-GAE
		silver		EK-PSC-IT-GAG

# PLASTIC MATERIAL

Version	Dimensions	Colour	Finishing	Code
	Schuko 55 x 55 mm	white	normal	EK-PSC-DE-GAA
Schuko		intense black RAL 9005	norma	EK-PSC-DE-GAE
		silver	normal	EK-PSC-DE-GAG

# **METAL-EFFECT PAINTING**

Version	Dimensions	Colour	Code
	55 x 55 mm	aluminium	EK-PSC-IT-GBQ
		nickel	EK-PSC-IT-GBR
Italian		titanium	EK-PSC-IT-GBS
		carbon	EK-PSC-IT-GBU
		brass	EK-PSC-IT-GBB

# **METAL-EFFECT PAINTING**

Version	Dimensions	Colour	Code
	aluminium	EK-PSC-DE-GBQ	
	55 x 55 mm	nickel	EK-PSC-DE-GBR
Schuko		titanium	EK-PSC-DE-GBS
		carbon	EK-PSC-DE-GBU
		brass	EK-PSC-DE-GBB

# **METAL HT**

Modularity	Dimensions	Colour	Finishing	Code
	55 x 55 mm	Chrome		EK-PSC-IT-CRO
Italian		Black Metal	chrome plated	EK-PSC-IT-CBM
Italian		Copper		EK-PSC-IT-COP
		Champagne		EK-PSC-IT-CHA

# **METAL HT**

Modularity	Dimensions	Colour	Finishing	Code
	55 x 55 mm	Chrome		EK-PSC-DE-CRO
Cabulta		Black Metal	chrome plated	EK-PSC-DE-CBM
Schuko		Copper		EK-PSC-DE-COP
		Champagne		EK-PSC-DE-CHA

# FENIX NTM®-EFFECT PAINTING

Version	Dimensions	Colour	Code
		malè white	EK-PSC-IT-FBM
		beige luxor	EK-PSC-IT-FBL
	55 x 55 mm	beaver ottawa	EK-PSC-IT-FCO
		cocoa orinoco	EK-PSC-IT-FCC
Italian		grey efeso	EK-PSC-IT-FGE
		grey london	EK-PSC-IT-FGL
		grey bromine	EK-PSC-IT-FGB
		green commodore	EK-PSC-IT-FVC
		black ingo	EK-PSC-IT-FNI

# FFNIX NTM®-FFFFCT PAINTING

FENIA NIMIS-EFFEGI FAINTING			
Version	Dimensions	Colour	Code
		malè white	EK-PSC-DE-FBM
		beige luxor	EK-PSC-DE-FBL
		beaver ottawa	EK-PSC-DE-FCO
		cocoa orinoco	EK-PSC-DE-FCC
Schuko	()	grey efeso	EK-PSC-DE-FGE
	55 x 55 mm	grey london	EK-PSC-DE-FGL
		grey bromine	EK-PSC-DE-FGB
		green commodore	EK-PSC-DE-FVC
		black ingo	EK-PSC-DE-FNI

# **Power sockets USB**

WALL-MOUNT DEVICES

# Power socket USB - Italian and Schuko version

The ordering code for the coloured cover of an electrical socket is formed by a fixed part (EK-PSC) and a variable part depending on the version (Italian or Schuko) and the colour. The ordering code for the power socket USB body only is EK-PWS-..-USB (IT or DE).

# **PLASTIC MATERIAL**

Version	Dimensions	Colour	Finishing	Code
	55 x 55 mm	white	normal	EK-PSC-IT-USB-GAA
Italian		intense black RAL 9005	normal	EK-PSC-IT-USB-GAE
		silver	normal	EK-PSC-IT-USB-GAG

# **PLASTIC MATERIAL**

Version	Dimensions	Colour	Finishing	Code
		white	normal	EK-PSC-DE-USB-GAA
Schuko	uko 55 x 55 mm	intense black RAL 9005	normal	EK-PSC-DE-USB-GAE
		silver	normal	EK-PSC-DE-USB-GAG

# **METAL-EFFECT PAINTING**

Version	Dimensions	Colour	Code
	55 x 55 mm	aluminium	EK-PSC-IT-USB-GBQ
		nickel	EK-PSC-IT-USB-GBR
Italian		titanium	EK-PSC-IT-USB-GBS
		carbon	EK-PSC-IT-USB-GBU
		brass	EK-PSC-IT-USB-GBB

# **METAL-EFFECT PAINTING**

Version	Dimensions	Colour	Code
		aluminium	EK-PSC-DE-USB-GBQ
	000	nickel	EK-PSC-DE-USB-GBR
Schuko	(00)	titanium	EK-PSC-DE-USB-GBS
	55 x 55 mm	carbon	EK-PSC-DE-USB-GBU
		brass	EK-PSC-DE-USB-GBB

# **METAL HT**

Modularity	Dimensions	Colour	Finishing	Code
Italian	55 x 55 mm	Chrome		EK-PSC-IT-USB-CRO
		Black Metal	- chrome plated -	EK-PSC-IT-USB-CBI
		Copper		EK-PSC-IT-USB-COI
		Champagne		EK-PSC-IT-USB-CH/

# METAL HT

	Modularity	Dimensions	Colour	Finishing	Code
		55 x 55 mm	Chrome		EK-PSC-DE-USB-CRC
	Cabulta		Black Metal	chrome plated	EK-PSC-DE-USB-CBN
	Schuko		Copper		EK-PSC-DE-USB-COP
			Champagne		EK-PSC-DE-USB-CHA

# FENIX NTM®-EFFECT PAINTING

Version	Dimensions	Colour	Code
		malè white	EK-PSC-IT-USB-FBM
		beige luxor	EK-PSC-IT-USB-FBL
		beaver ottawa	EK-PSC-IT-USB-FCO
	0,00	cocoa orinoco	EK-PSC-IT-USB-FCC
Italian	55 x 55 mm	grey efeso	EK-PSC-IT-USB-FGE
		grey london	EK-PSC-IT-USB-FGL
		grey bromine	EK-PSC-IT-USB-FGB
		green commodore	EK-PSC-IT-USB-FVC
		black ingo	EK-PSC-IT-USB-FNI

# FENIX NTM®-EFFECT PAINTING

Version	Dimensions	Colour	Code
		malè white	EK-PSC-DE-USB-FBI
		beige luxor	EK-PSC-DE-USB-FBI
		beaver ottawa	EK-PSC-DE-USB-FC
	000	cocoa orinoco	EK-PSC-DE-USB-FC
Schuko	()	grey efeso	EK-PSC-DE-USB-FG
	55 x 55 mm	grey london	EK-PSC-DE-USB-FG
		grey bromine	EK-PSC-DE-USB-FG
		green commodore	EK-PSC-DE-USB-FV
		black ingo	EK-PSC-DE-USB-FNI
			*



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# How to order a frame

WALL-MOUNT DEVICES

# Frame - Form version

WALL-MOUNT DEVICES

# Form and Flank frames for devices of FF and 71 series.

The ordering number of a frame includes a fixed part (EK-) and a variable part which depends on the series (Form or Flank), shape (square, rectangular or double), material, colour and finishing.

# **PLASTIC MATERIAL**

Series	Modularity	Colour	Finishing	Code
		white	normal	EK-FOQ-GAA
	-	ice white	soft-touch *	EK-FOQ-GAB
		fire white	normal *	EK-FOQ-GAC
		THE WHITE	soft-touch *	EK-FOQ-GAD
		intense black	normal	EK-FOQ-GAE
	square	RAL 9005	soft-touch *	EK-FOQ-GAF
	-	silver	normal	EK-FOQ-GAG
		hematite	normal *	EK-FOQ-GAI
		graphite	normal *	EK-FOQ-GAL
		white	normal	EK-FOR-GAA
		ice white	soft-touch *	EK-FOR-GAB
		fire white	normal *	EK-FOR-GAC
		ille wille	soft-touch *	EK-FOR-GAD
FF - 71		intense black RAL 9005	normal	EK-FOR-GAE
	rectangular		soft-touch *	EK-FOR-GAF
		silver	normal	EK-FOR-GAG
		hematite	normal *	EK-FOR-GAI
		graphite	normal *	EK-FOR-GAL
		white	normal	EK-F02-GAA
		ice white	soft-touch *	EK-F02-GAE
		fire white	normal *	EK-F02-GAG
		fire white	soft-touch *	EK-F02-GAA
		intense black	normal	EK-FO2-GAB
	double	RAL 9005	soft-touch *	EK-FO2-GAC
		silver	normal	EK-F02-GAD
		hematite	normal *	EK-F02-GAE
		graphite	normal *	EK-F02-GAF

<sup>\*)</sup> Version on request

# METAL

Series	Modularity	Colour	Finishing	Code
		aluminium		EK-FOQ-GBQ
		nickel		EK-FOQ-GBR
		titanium		EK-FOQ-GBS
	square	carbon	_	EK-FOQ-GBU
		brass	_	EK-FOQ-GBB
		aluminium	<del></del>	EK-FOR-GBQ
		nickel		EK-FOR-GBR
FF - 71	rectangular	titanium	brushed	EK-FOR-GBS
		carbon		EK-FOR-GBU
		brass	_	EK-FOR-GBB
		aluminium	<del>_</del>	EK-F02-GBQ
		nickel	-	EK-F02-GBR
		titanium	_	EK-F02-GBS
	double	carbon	_	EK-F02-GBU
		brass	_	EK-F02-GBB

# Frame codes - Flank version

WALL-MOUNT DEVICES

# PLASTIC MATERIAL

Series	Modularity	Colour	Finishing	Code
		white	normal	EK-FLQ-GAA
	square	ice white	soft-touch *	EK-FLQ-GAB
		fire white	normal *	EK-FLQ-GAC
		Tire willte	soft-touch *	EK-FLQ-GAD
		intense black	normal	EK-FLQ-GAE
		RAL 9005	soft-touch *	EK-FLQ-GAF
		silver	normal	EK-FLQ-GAG
		hematite	normal *	EK-FLQ-GAI
		graphite	normal *	EK-FLQ-GAL
		white	normal	EK-FLR-GAA
		ice white	soft-touch *	EK-FLR-GAB
		f:	normal *	EK-FLR-GAC
	rectangular	fire white	soft-touch *	EK-FLR-GAD
FF - 71		intense black	normal	EK-FLR-GAE
		RAL 9005	soft-touch *	EK-FLR-GAF
		silver	normal	EK-FLR-GAG
		hematite	normal *	EK-FLR-GAI
		graphite	normal *	EK-FLR-GAL
		white	normal	EK-FL2-GAA
		ice white	soft-touch *	EK-FL2-GAB
		fire white	normal *	EK-FL2-GAC
		Tire willte	soft-touch *	EK-FL2-GAD
		intense black	normal	EK-FL2-GAE
	double	RAL 9005	soft-touch *	EK-FL2-GAF
		silver	normal	EK-FL2-GAG
		hematite	normal *	EK-FL2-GAI
		graphite	normal *	EK-FL2-GAL
		<del></del>		

<sup>\*)</sup> Version on request

Series	Modularity	Colour	Finishing	Code
		aluminium		EK-FLQ-GBQ
		nickel		EK-FLQ-GBR
		titanium	_	EK-FLQ-GBS
	square	carbon	_	EK-FLQ-GBU
		brass	_	EK-FLQ-GBB
	rectangular	aluminium	_	EK-FLR-GBQ
		nickel	brushed	EK-FLR-GBR
FF - 71		titanium		EK-FLR-GBS
		carbon		EK-FLR-GBU
		brass		EK-FLR-GBB
		aluminium	_	EK-FL2-GBQ
		nickel	-	EK-FL2-GBR
		titanium		EK-FL2-GBS
	double	carbon	_	EK-FL2-GBU
		brass	_	EK-FL2-GBB



# **How to order a plate**

WALL-MOUNT DEVICES

# Square plate WALL-MOUNT DEVICES

# Plates for devices of 71 series and flush-mounting inserts.

The ordering code of a plate consists of a fixed part (EK-P) and a variable part depending on shape (square or rectangular), window size (small or large), material, colour and finishing.

# METAL

Series	Modularity	Colour	Finishing	Code
		aluminium		EK-PQP-GBQ
		nickel		EK-PQP-GBR
		titanium		EK-PQP-GBS
	45 x 45 mm	carbon		EK-PQP-GBU
		brass		EK-PQP-GBB
		aluminium	_	EK-PQG-GBQ
	55 x 55 mm	nickel	_	EK-PQG-GBR
FF - 71		titanium	brushed	EK-PQG-GBS
		carbon	_	EK-PQG-GBU
		brass	_	EK-PQG-GBB
		aluminium	_	EK-PQS-GBQ
		nickel	_	EK-PQS-GBR
		titanium	_	EK-PQS-GBS
	60 x 60 mm	carbon	_	EK-PQS-GBU
		brass	_	EK-PQS-GBB

# PLASTIC MATERIAL

Series	Window	Colour	Finishing	Code
		white	normal	EK-PQP-GAA
	- 45 x 45 mm	ice white	soft-touch *	EK-PQP-GAB
		f:b:k-	normal *	EK-PQP-GAC
		fire white	soft-touch *	EK-PQP-GAD
		intense black	normal	EK-PQP-GAE
		RAL 9005	soft-touch *	EK-PQP-GAF
		silver	normal	EK-PQP-GAG
		hematite	normal *	EK-PQP-GAI
		graphite	normal *	EK-PQP-GAL
		white	normal	EK-PQG-GAA
		ice white	soft-touch *	EK-PQG-GAB
		finebike	normal *	EK-PQG-GAC
		fire white	soft-touch *	EK-PQG-GAD
FF - 71		intense black	normal	EK-PQG-GAE
	55 x 55 mm	RAL 9005	soft-touch *	EK-PQG-GAF
		silver	normal	EK-PQG-GAG
		hematite	normal *	EK-PQG-GAI
		graphite	normal *	EK-PQG-GAL
		white	normal	EK-PQS-GAA
		ice white	soft-touch *	EK-PQS-GAB
		finebib.	normal *	EK-PQS-GAC
		fire white	soft-touch *	EK-PQS-GAD
		intense black	normal	EK-PQS-GAE
	60 x 60 mm	RAL 9005	soft-touch *	EK-PQS-GAF
		silver	normal	EK-PQS-GAG
		hematite	normal *	EK-PQS-GAI
		graphite	normal *	EK-PQS-GAL

# FENIX NTM®

Series	Window	Colour	Code
		malè white	EK-PQP-FBM
		beige luxor	EK-PQP-FBL
		beaver ottawa	EK-PQP-FCO
		cocoa orinoco	EK-PQP-FCC
		grey efeso	EK-PQP-FGE
	45 x 45 mm	grey london	EK-PQP-FGL
		grey bromine	EK-PQP-FGB
		green commodore	EK-PQP-FVC
		black ingo	EK-PQP-FNI
		malè white	EK-PQG-FBM
		beige luxor	EK-PQG-FBL
FF - 71		beaver ottawa	EK-PQG-FCO
		cocoa orinoco	EK-PQG-FCC
		grey efeso	EK-PQG-FGE
	55 x 55 mm	grey london	EK-PQG-FGL
		grey bromine	EK-PQG-FGB
		green commodore	EK-PQG-FVC
		black ingo	EK-PQG-FNI
		malè white	EK-PQS-FBM
		beige luxor	EK-PQS-FBL
		beaver ottawa	EK-PQS-FCO
		cocoa orinoco	EK-PQS-FCC
		grey efeso	EK-PQS-FGE
	60 x 60 mm	grey london	EK-PQS-FGL
		grey bromine	EK-PQS-FGB
		green commodore	EK-PQS-FVC
		black ingo	EK-PQS-FNI

# \*) Version on request

# Rectangular plate

WALL-MOUNT DEVICES

# PLASTIC MATERIAL

Series	Window	Colour	Finishing	Code
		white	normal	EK-PRG-GAA
		ice white	soft-touch *	EK-PRG-GAB
		fire white	normal *	EK-PRG-GAC
		ille wille	soft-touch *	EK-PRG-GAD
		intense black	normal	EK-PRG-GAE
	68 x 45 mm	RAL 9005	soft-touch *	EK-PRG-GAF
	-	silver	normal	EK-PRG-GAG
		hematite	normal *	EK-PRG-GAI
FF - 71		graphite	normal *	EK-PRG-GAL
ΓΓ - <i>1</i> I		white	normal	EK-PRS-GAA
		ice white	soft-touch *	EK-PRS-GAB
		fire white	normal *	EK-PRS-GAC
			soft-touch *	EK-PRS-GAD
		intense black	normal	EK-PRS-GAE
	60 x 60 mm	RAL 9005	soft-touch *	EK-PRS-GAF
		silver	normal	EK-PRS-GAG
		hematite	normal *	EK-PRS-GAI
	-	graphite	normal *	EK-PRS-GAL

<sup>\*)</sup> Version on request

# METAL

MEIAL				
Series	Window	Colour	Finishing	Code
		aluminium		EK-PRG-GBQ
	68 x 45 mm 71 60 x 60 mm	nickel		EK-PRG-GBR
		titanium		EK-PRG-GBS
		carbon	_	EK-PRG-GBU
FF 71		brass	— 	EK-PRG-GBB
FF - 71		aluminium	— brushed	EK-PRS-GBQ
		nickel		EK-PRS-GBR
		titanium	_	EK-PRS-GBS
		carbon		EK-PRS-GBU
		brass		EK-PRS-GBB

# FENIX NTM®

Series	Window	Colour	Code
		malè white	EK-PRP-FBM
		beige luxor	EK-PRP-FBL
		beaver ottawa	EK-PRP-FCO
		cocoa orinoco	EK-PRP-FCC
		grey efeso	EK-PRP-FGE
	66 x 44 mm	grey london	EK-PRP-FGL
		grey bromine	EK-PRP-FGB
		green commodore	EK-PRP-FVC
		black ingo	EK-PRP-FNI
		malè white	EK-PRG-FBM
		beige luxor	EK-PRG-FBL
		beaver ottawa	EK-PRG-FCO
		cocoa orinoco	EK-PRG-FCC
FF - 71		grey efeso	EK-PRG-FGE
	68 x 45 mm	grey london	EK-PRG-FGL
		grey bromine	EK-PRG-FGB
		green commodore	EK-PRG-FVC
		black ingo	EK-PRG-FNI
		malè white	EK-PRS-FBM
		beige luxor	EK-PRS-FBL
		beaver ottawa	EK-PRS-FCO
		cocoa orinoco	EK-PRS-FCC
		grey efeso	EK-PRS-FGE
	60 x 60 mm	grey london	EK-PRS-FGL
		grey bromine	EK-PRS-FGB
		green commodore	EK-PRS-FVC
		black ingo	EK-PRS-FNI



03 | 18 | 229 | 297 | 311 | 315 | 321 | 331 | 315 | 321 | 331 | 315 | 321 | 331 | 331 | 331 | 331 | 331 | 331 | 333 | 333 | 334 | 334 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 33

# Double plate WALL-MOUNT DEVICES

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PLA	1911	ь	NAI	EK	IAI

Series	Window	Colour	Finishing	Code
		white	normal	EK-P2P-GAA
		ice white	soft-touch *	EK-P2P-GAB
		fire white	normal *	EK-P2P-GAC
		ille willte	soft-touch *	EK-P2P-GAD
		intense black	normal	EK-P2P-GAE
	55 x 55 mm (2)	RAL 9005	soft-touch *	EK-P2P-GAF
		silver	normal	EK-P2P-GAG
		hematite	normal *	EK-P2P-GAI
		graphite	normal *	EK-P2P-GAL
		white	normal	EK-P2G-GAA
		ice white	soft-touch *	EK-P2G-GAB
		finelette	normal *	EK-P2G-GAC
		fire white	soft-touch *	EK-P2G-GAD
		intense black RAL 9005	normal	EK-P2G-GAE
	55 x 55 mm (1) 60 x 60 mm (1)		soft-touch *	EK-P2G-GAF
		silver	normal	EK-P2G-GAG
		hematite	normal *	EK-P2G-GAI
FF 71		graphite	normal *	EK-P2G-GAL
FF - 71		white	normal	EK-P2S-GAA
		ice white	soft-touch *	EK-P2S-GAB
		fire white	normal *	EK-P2S-GAC
			soft-touch *	EK-P2S-GAD
		intense black	normal	EK-P2S-GAE
	60 x 60 mm (2)	RAL 9005	soft-touch *	EK-P2S-GAF
		silver	normal	EK-P2S-GAG
		hematite	normal *	EK-P2S-GAI
		graphite	normal *	EK-P2S-GAL
		white	normal	EK-P2H-GAA
		ice white	soft-touch *	EK-P2H-GAB
		fire white	normal *	EK-P2H-GAC
		fire white	soft-touch *	EK-P2H-GAD
	CO v CO (O)	intense black	normal	EK-P2H-GAE
	60 x 60 mm (2) swiss market	RAL 9005	soft-touch *	EK-P2H-GAF
		silver	normal	EK-P2H-GAG
		hematite	normal *	EK-P2H-GAI
		graphite	normal *	EK-P2H-GAL

# METAL

Series	Window	Colour	Finishing	Code
	·	aluminium	<u> </u>	EK-P2E-GBQ
		nickel		EK-P2E-GBR
		titanium		EK-P2E-GBS
	45 x 45 mm (2)	carbon	_	EK-P2E-GBU
		brass	_	EK-P2E-GBB
		aluminium		EK-P2F-GBQ
		nickel	<del></del>	EK-P2F-GBR
	AF :: 45 ::::: (1)	titanium	_	EK-P2F-GBS
	45 x 45 mm (1) 60 x 60 mm (1)	carbon	_	EK-P2F-GBU
		brass	_	EK-P2F-GBB
		aluminium	_	EK-P2P-GBQ
		nickel		EK-P2P-GBR
		titanium	_	EK-P2P-GBS
	55 x 55 mm (2)	carbon	_	EK-P2P-GBU
FF 74		brass	_	EK-P2P-GBB
FF - 71		aluminium	brushed	EK-P2G-GBQ
		nickel	_	EK-P2G-GBR
		titanium	_	EK-P2G-GBS
	55 x 55 mm (1) 60 x 60 mm (1)	carbon		EK-P2G-GBU
		brass	_	EK-P2G-GBB
		aluminium	_	EK-P2S-GBQ
		nickel	_	EK-P2S-GBR
		titanium	_	EK-P2S-GBS
	60 x 60 mm (2)	carbon	_	EK-P2S-GBU
-		brass	_	EK-P2S-GBB
		aluminium	_	EK-P2H-GBQ
		nickel		EK-P2H-GBR
	0000 (0)	titanium		EK-P2H-GBS
	60 x 60 mm (2) swiss market	carbon		EK-P2H-GBU
		brass		EK-P2H-GBB

# Double plate WALL-MOUNT DEVICES

FENIX NT	®			FENIX NT	M®		
Series	Finestre	Colour	Code	Series	Finestre	Colour	Code
		malè white	EK-P2E-FBM			malè white	EK-P2G-FBM
		beige luxor	EK-P2E-FBL			beige luxor	EK-P2G-FBL
		beaver ottawa	EK-P2E-FC0			beaver ottawa	EK-P2G-FCO
		cocoa orinoco	EK-P2E-FCC			cocoa orinoco	EK-P2G-FCC
		grey efeso	EK-P2E-FGE		55 x 55 mm (1)	grey efeso	EK-P2G-FGE
	45 x 45 mm (2)	grey london	EK-P2E-FGL		60 x 60 mm (1)	grey london	EK-P2G-FGL
		grey bromine	EK-P2E-FGB			grey bromine	EK-P2G-FGB
		green commodore	EK-P2E-FVC			green commodore	EK-P2G-FVC
		black ingo	EK-P2E-FNI			black ingo	EK-P2G-FNI
		malè white	EK-P2F-FBM			malè white	EK-P2S-FBM
		beige luxor	EK-P2F-FBL			beige luxor	EK-P2S-FBL
		beaver ottawa	EK-P2F-FC0			beaver ottawa	EK-P2S-FCO
		cocoa orinoco	EK-P2F-FCC			cocoa orinoco	EK-P2S-FCC
FF - 71	45 x 45 mm (1)	grey efeso	EK-P2F-FGE	FF - 71		grey efeso	EK-P2S-FGE
	60 x 60 mm (1)	grey london	EK-P2F-FGL		60 x 60 mm (2)	grey london	EK-P2S-FGL
		grey bromine	EK-P2F-FGB			grey bromine	EK-P2S-FGB
		green commodore	EK-P2F-FVC			green commodore	EK-P2S-FVC
		black ingo	EK-P2F-FNI			black ingo	EK-P2S-FNI
		malè white	EK-P2P-FBM			malè white	EK-P2H-FBM
		beige luxor	EK-P2P-FBL			beige luxor	EK-P2H-FBL
		beaver ottawa	EK-P2P-FC0			beaver ottawa	EK-P2H-FC0
		cocoa orinoco	EK-P2P-FCC			cocoa orinoco	EK-P2H-FCC
		grey efeso	EK-P2P-FGE		60 x 60 mm (2)	grey efeso	EK-P2H-FGE
	55 x 55 mm (2)	grey london	EK-P2P-FGL		swiss market	grey london	EK-P2H-FGL
		grey bromine	EK-P2P-FGB			grey bromine	EK-P2H-FGB
		green commodore	EK-P2P-FVC			green commodore	EK-P2H-FVC
		black ingo	EK-P2P-FNI	. —		black ingo	EK-P2H-FNI

<sup>\*)</sup> Version on request

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# **How to order a Deep plate**

WALL-MOUNT DEVICES

218

**Deep plates for devices of 20venti and 71 series.** The ordering code of a Deep plate consists of a fixed part (EK-D) and a variable part depending on shape (square or rectangular), window size (small or large), material, colour and finishing.

# Deep square plate

WALL-MOUNT DEVICES

## **PLASTIC MATERIAL**

Series	Window	Colour	Finishing	Code
		white	normal	EK-DQP-GAA
		ice white	soft-touch *	EK-DQP-GAB
		fire white	normal *	EK-DQP-GAC
		life willte	soft-touch *	EK-DQP-GAD
		intense black	normal	EK-DQP-GAE
	45 x 45 mm	RAL 9005	soft-touch *	EK-DQP-GAF
		silver	normal	EK-DQP-GAG
		hematite	normal *	EK-DQP-GAI
		graphite	normal *	EK-DQP-GAL
		white	normal	EK-DQG-GAA
		ice white	soft-touch *	EK-DQG-GAB
		#:	normal *	EK-DQG-GAC
20venti		fire white	soft-touch *	EK-DQG-GAD
FF		intense black	normal	EK-DQG-GAE
71	55 x 55 mm	RAL 9005	soft-touch *	EK-DQG-GAF
		silver	normal	EK-DQG-GAG
		hematite	normal *	EK-DQG-GAI
		graphite	normal *	EK-DQG-GAL
		white	normal	EK-DQS-GAA
		ice white	soft-touch *	EK-DQS-GAB
		fine white	normal *	EK-DQS-GAC
		fire white	soft-touch *	EK-DQS-GAD
		intense black	normal	EK-DQS-GAE
	60 x 60 mm	RAL 9005	soft-touch *	EK-DQS-GAF
		silver	normal	EK-DQS-GAG
		hematite	normal *	EK-DQS-GAI
		graphite	normal *	EK-DQS-GAL

<sup>\*)</sup> Version on request

# Deep square plate

WALL-MOUNT DEVICES

219

#### METAL

Series	Window	Colour	Finishing	Code
		aluminium		EK-DQT-GBQ
		nickel	_	EK-DQT-GBR
20venti (4 rockers)		titanium	_	EK-DQT-GBS
(11000013)	30 x 60 mm	carbon	_	EK-DQT-GBU
		brass	_	EK-DQT-GBB
		aluminium	_	EK-DQP-GBQ
		nickel		EK-DQP-GBR
		titanium		EK-DQP-GBS
	45 x 45 mm	carbon		EK-DQP-GBU
		brass		EK-DQP-GBB
		aluminium		EK-DQG-GBQ
20venti		nickel		EK-DQG-GBR
FF		titanium		EK-DQG-GBS
71	55 x 55 mm	carbon		EK-DQG-GBU
-		brass	_	EK-DQG-GBB
		aluminium	_	EK-DQS-GBQ
		nickel	_	EK-DQS-GBR
		titanium	_	EK-DQS-GBS
	60 x 60 mm	carbon	_	EK-DQS-GBU
		brass		EK-DQS-GBB

### **METAL HT**

Series	Window	Colour	Finishing	Code
		Chrome		EK-DQT-CRO
20venti		Black Metal	_	EK-DQT-CBM
(4 rockers)	30 x 60 mm	Copper	_	EK-DQT-COP
	30 X DO IIIIII	Champagne	_	EK-DQT-CHA
		Chrome	_	EK-DQP-CRO
		Black Metal		EK-DQP-CBM
	45 x 45 mm	Copper		EK-DQP-COP
	45 X 45 IIIII	Champagne		EK-DQP-CHA
		Chrome	_	EK-DQG-CRO
20venti FF		Black Metal		EK-DQG-CBM
71	55 x 55 mm	Copper		EK-DQG-COP
	וווווו ככ x ככ	Champagne		EK-DQG-CHA
		Chrome		EK-DQS-CRO
		Black Metal	_	EK-DQS-CBM
	60 x 60 mm	Copper	_	EK-DQS-COP
	וווווו טס ג טט	Champagne	_	EK-DQS-CHA

#### FENIX NTM®

Series	Window	Colour	Code
		malè white	EK-DQT-FBM
		beige luxor	EK-DQT-FBL
		beaver ottawa	EK-DQT-FCO
		cocoa orinoco	EK-DQT-FCC
20venti (4 rockers)		grey efeso	EK-DQT-FGE
(11001013)	30 x 60 mm	grey london	EK-DQT-FGL
		grey bromine	EK-DQT-FGB
		green commodore	EK-DQT-FVC
		black ingo	EK-DQT-FNI
		malè white	EK-DQP-FBM
		beige luxor	EK-DQP-FBL
		beaver ottawa	EK-DQP-FCO
		cocoa orinoco	EK-DQP-FCC
		grey efeso	EK-DQP-FGE
	45 x 45 mm	grey london	EK-DQP-FGL
		grey bromine	EK-DQP-FGB
		green commodore	EK-DQP-FVC
		black ingo	EK-DQP-FNI
	55 x 55 mm	malè white	EK-DQG-FBM
		beige luxor	EK-DQG-FBL
		beaver ottawa	EK-DQG-FCO
20venti		cocoa orinoco	EK-DQG-FCC
FF		grey efeso	EK-DQG-FGE
71		grey london	EK-DQG-FGL
		grey bromine	EK-DQG-FGB
		green commodore	EK-DQG-FVC
_		black ingo	EK-DQG-FNI
		malè white	EK-DQS-FBM
		beige luxor	EK-DQS-FBL
		beaver ottawa	EK-DQS-FCO
		cocoa orinoco	EK-DQS-FCC
		grey efeso	EK-DQS-FGE
	60 x 60 mm	grey london	EK-DQS-FGL
		grey bromine	EK-DQS-FGB
		green commodore	EK-DQS-FVC
		black ingo	EK-DQS-FNI



# **Deep rectangular plate**WALL-MOUNT DEVICES

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Series	Window	Colour	Finishing	Code
		white	normal	EK-DRG-GAA
		ice white	soft-touch *	EK-DRG-GAB
		fire white	normal *	EK-DRG-GAC
		fire white	soft-touch *	EK-DRG-GAD
		intense black	normal	EK-DRG-GAE
	68 x 45 mm	RAL 9005	soft-touch *	EK-DRG-GAF
		silver	normal	EK-DRG-GAG
		hematite	normal *	EK-DRG-GAI
20venti FF		graphite	normal *	EK-DRG-GAL
71		white	normal	EK-DRS-GAA
		ice white	soft-touch *	EK-DRS-GAB
		fire white	normal *	EK-DRS-GAC
		Tille willte	soft-touch *	EK-DRS-GAD
		intense black	normal	EK-DRS-GAE
	60 x 60 mm	RAL 9005	soft-touch *	EK-DRS-GAF
		silver	normal	EK-DRS-GAG
		hematite	normal *	EK-DRS-GAI
		graphite	normal *	EK-DRS-GAL

#### \*) Version on request

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Window	Colour	Finishing	Code
	aluminium		EK-DRG-GBQ
	nickel	•	EK-DRG-GBR
	titanium	•	EK-DRG-GBS
68 x 45 mm	carbon	EK-DRG-GBB	EK-DRG-GBU
	brass		EK-DRG-GBB
	aluminium	- ninzuen	EK-DRS-GBQ
	nickel		EK-DRS-GBR
	titanium		EK-DRS-GBS
60 x 60 mm	carbon		EK-DRS-GBU
	brass	•	EK-DRS-GBB
	68 x 45 mm	aluminium  nickel titanium  68 x 45 mm carbon brass aluminium nickel titanium carbon	aluminium nickel titanium 68 x 45 mm carbon brass aluminium nickel titanium 60 x 60 mm carbon

## FENIX NTM®

Series	Window	Colour	Code
		malè white	EK-DRG-FBM
		beige luxor	EK-DRG-FBL
		beaver ottawa	EK-DRG-FCO
		cocoa orinoco	EK-DRG-FCC
		grey efeso	EK-DRG-FGE
	68 x 45 mm	grey london	EK-DRG-FGL
		grey bromine	EK-DRG-FGB
		green commodore	EK-DRG-FVC
20venti FF		black ingo	EK-DRG-FNI
71		malè white	EK-DRS-FBM
	60 x 60 mm	beige luxor	EK-DRS-FBL
		beaver ottawa	EK-DRS-FCO
		cocoa orinoco	EK-DRS-FCC
		grey efeso	EK-DRS-FGE
		grey london	EK-DRS-FGL
		grey bromine	EK-DRS-FGB
		green commodore	EK-DRS-FVC
		black ingo	EK-DRS-FNI

## **METAL HT**

Series	Window	Colour	Finishing	Code
		Chrome		EK-DRG-CRO
		Black Metal	_	EK-DRG-CBM
		Copper		EK-DRG-COP
20venti	Champagne		EK-DRG-CHA	
	1 Chrome Black Metal Copper	Chrome	<ul> <li>chrome plated</li> </ul>	EK-DRS-CRO
		_	EK-DRS-CBM	
		Copper	_	EK-DRS-COP
	60 x 60 mm	Champagne	_	EK-DRS-CHA

# **PLASTIC MATERIAL**

Series	Window	Colour	Finishing	Code
		white	normal	EK-D2P-GAA
		ice white	soft-touch *	EK-D2P-GAB
		fire whit-	normal *	EK-D2P-GAC
		fire white	soft-touch *	EK-D2P-GAD
		intense black	normal	EK-D2P-GAE
	55 x 55 mm (2)	RAL 9005	soft-touch *	EK-D2P-GAF
		silver	normal	EK-D2P-GAG
		hematite	normal *	EK-D2P-GAI
		graphite	normal *	EK-D2P-GAL
		white	normal	EK-D2F-GAA
		ice white	soft-touch *	EK-D2F-GAB
			normal *	EK-D2F-GAC
		fire white	soft-touch *	EK-D2F-GAD
		intense black	normal	EK-D2F-GAE
	45 x 45 mm (1)	RAL 9005	soft-touch *	EK-D2F-GAF
	60 x 60 mm (1)	silver	normal	EK-D2F-GAG
		hematite	normal *	EK-D2F-GAI
		graphite	normal *	EK-D2F-GAL
		white	normal	EK-D2G-GAA
		ice white	soft-touch *	EK-D2G-GAB
20venti FF		fire white	normal *	EK-D2G-GAC
	55 x 55 mm (1)		soft-touch *	EK-D2G-GAD
		intense black RAL 9005	normal	EK-D2G-GAE
71			soft-touch *	EK-D2G-GAF
	60 x 60 mm (1)	silver	normal	EK-D2G-GAG
		hematite	normal *	EK-D2G-GAI
		graphite	normal *	EK-D2G-GAL
		white	normal	EK-D2S-GAA
		ice white	soft-touch *	EK-D2S-GAB
			normal *	EK-D2S-GAC
		fire white	soft-touch *	EK-D2S-GAD
		intense black	normal	EK-D2S-GAE
	60 x 60 mm (2)	RAL 9005	soft-touch *	EK-D2S-GAF
	30 X 00 XIIII (L)	silver	normal	EK-D2S-GAG
		hematite	normal *	EK-D2S-GAI
		graphite	normal *	EK-D2S-GAL
	-	white	normal	EK-D2H-GAA
		ice white	soft-touch *	EK-D2H-GAB
			normal *	EK-D2H-GAC
		fire white	soft-touch *	EK-D2H-GAD
		intanas blask	normal	EK-D2H-GAE
	60 x 60 mm (2)	intense black RAL 9005	soft-touch *	EK-D2H-GAF
	swiss market	silver	normal	EK-D2H-GAG
		hematite	normal *	EK-D2H-GAI
			nomial	LIV DZII-UAI

# Deep double plate WALL-MOUNT DEVICES

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Series	Window	Colour	Finishing	Code
		aluminium		EK-D2E-GBQ
		nickel	-	EK-D2E-GBR
		titanium		EK-D2E-GBS
	45 x 45 mm (2)	carbon		EK-D2E-GBU
		brass		EK-D2E-GBB
		aluminium		EK-D2F-GBQ
		nickel	_	EK-D2F-GBR
		titanium		EK-D2F-GBS
	45 x 45 mm (1) 60 x 60 mm (1)	carbon		EK-D2F-GBU
	(1)	brass		EK-D2F-GBB
		aluminium		EK-D2P-GBQ
		nickel		EK-D2P-GBR
		titanium		EK-D2P-GBS
	55 x 55 mm (2) carbon		EK-D2P-GBU	
F - 71		brass	- brushed	EK-D2P-GBB
T - /I		aluminium	- DI USIIGU	EK-D2G-GBQ
		nickel		EK-D2G-GBR
		titanium		EK-D2G-GBQ EK-D2G-GBR EK-D2G-GBS
	55 x 55 mm (1) 60 x 60 mm (1)	carbon		EK-D2G-GBU
	00 x 00 mm (1)	brass		EK-D2G-GBB
		aluminium		EK-D2S-GBQ
		nickel		EK-D2S-GBR
		titanium		EK-D2S-GBS
	60 x 60 mm (2)	carbon		EK-D2S-GBU
		brass		EK-D2S-GBB
		aluminium		EK-D2H-GBQ
		nickel		EK-D2H-GBR
		titanium		EK-D2H-GBS
	60 x 60 mm (2) swiss market	carbon		EK-D2H-GBU
		brass		EK-D2H-GBB



# Deep double plate WALL-MOUNT DEVICES

#### **METAL HT**

Series	Window	Colour	Finishing	Code
		Chrome		EK-D2E-CRO
		Black Metal		EK-D2E-CBM
	45 45 (0)	Copper		EK-D2E-COP
	45 x 45 mm (2)	Champagne		EK-D2E-CHA
		Chrome	-	EK-D2F-CRO
		Black Metal	-	EK-D2F-CBM
	45 x 45 mm (1)	Copper	-	EK-D2F-COP
	60 x 60 mm (1)	Champagne		EK-D2F-CHA
		Chrome	-	EK-D2P-CRO
	55 x 55 mm (2)	Black Metal		EK-D2P-CBM
		Copper		EK-D2P-COP
20venti FF		Champagne	- ahrama nlatad	EK-D2P-CHA
71		Chrome	chrome plated	EK-D2G-CRO
		Black Metal		EK-D2G-CBM
	55 x 55 mm (1)	Copper		EK-D2G-COP
	60 x 60 mm (1)	Champagne		EK-D2G-CHA
		Chrome		EK-D2S-CRO
		Black Metal		EK-D2S-CBM
	00 00 (0)	Copper		EK-D2S-COP
	60 x 60 mm (2)	Champagne		EK-D2S-CHA
		Chrome	-	EK-D2H-CRO
		Black Metal	-	EK-D2H-CBM
	60 x 60 mm (2)	Copper		EK-D2H-COP
	swiss market	Champagne	-	EK-D2H-CHA

## FENIX NTM®

Series	Finestre	Colour	Code
		malè white	EK-D2E-FBM
		beige luxor	EK-D2E-FBL
	_	beaver ottawa	EK-D2E-FCO
		cocoa orinoco	EK-D2E-FCC
		grey efeso	EK-D2E-FGE
	45 x 45 mm (2)	grey london	EK-D2E-FGL
	_	grey bromine	EK-D2E-FGB
	_	green commodore	EK-D2E-FVC
_		black ingo	EK-D2E-FNI
	_	malè white	EK-D2F-FBM
	_	beige luxor	EK-D2F-FBL
		beaver ottawa	EK-D2F-FCO
		cocoa orinoco	EK-D2F-FCC
	AF AF (1) =	grey efeso	EK-D2F-FGE
	45 x 45 mm (1) = 60 x 60 mm (1) = =	grey london	EK-D2F-FGL
	_	grey bromine	EK-D2F-FGB
	_	green commodore	EK-D2F-FVC
=		black ingo	EK-D2F-FNI
	_	malè white	EK-D2P-FBM
	-	beige luxor	EK-D2P-FBL
		beaver ottawa	EK-D2P-FC0
		cocoa orinoco	EK-D2P-FCC
		grey efeso	EK-D2P-FGE
	55 x 55 mm (2)	grey london	EK-D2P-FGL
	-	grey bromine	EK-D2P-FGB
20venti	-	green commodore	EK-D2P-FVC
FF -		black ingo	EK-D2P-FNI
71	-	malè white	EK-D2G-FBM
	-	beige luxor	EK-D2G-FBL
		beaver ottawa	EK-D2G-FC0
		cocoa orinoco	EK-D2G-FCC
	55 x 55 mm (1)	grey efeso	EK-D2G-FGE EK-D2G-FGL
	60 x 60 mm (1) –	grey london	EK-D2G-FGB
	-	grey bromine green commodore	EK-D2G-FGB EK-D2G-FVC
	-	black ingo	EK-D2G-FVI
-		malè white	EK-D2G-FRM
	-	beige luxor	EK-D2S-FBL
	_	beaver ottawa	EK-D2S-FCO
		cocoa orinoco	EK-D2S-FCC
		grey efeso	EK-D2S-FGE
	60 x 60 mm (2)	grey london	EK-D2S-FGL
	-	grey bromine	EK-D2S-FGB
	-	green commodore	EK-D2S-FVC
	-	black ingo	EK-D2S-FNI
_		malè white	EK-D2H-FBM
	-	beige luxor	EK-D2H-FBL
	_	beaver ottawa	EK-D2H-FC0
		cocoa orinoco	EK-D2H-FCC
		grey efeso	EK-D2H-FGE
	60 x 60 mm (2)	grey london	EK-D2H-FGL
	swiss market –	grey bromine	EK-D2H-FGB
	_	green commodore	EK-D2H-FVC
	_	black ingo	EK-D2H-FNI

# Deep triple plate WALL-MOUNT DEVICES

## **ALUMINIUM**

Series	Window	Colour	Finishing	Code
		aluminium		EK-D3P-GBQ
		nickel	-	EK-D3P-GBR
		titanium	_	EK-D3P-GBS
	55 x 55 mm (3)	carbon	_	EK-D3P-GBU
20venti FF		brass	- - brushed	EK-D3P-GBB
71		aluminium	- ninzuen	EK-D3S-GBQ
		nickel	-	EK-D3S-GBR
		titanium	-	EK-D3S-GBS
	60 x 60 mm (3)	carbon	-	EK-D3S-GBU
		brass	-	EK-D3S-GBB

	1) 1.11	
	malè white	EK-D3P-FBM
-	beige luxor	EK-D3P-FBL
-	beaver ottawa	EK-D3P-FC0
	cocoa orinoco	EK-D3P-FCC
	grey efeso	EK-D3P-FGE
55 x 55 mm (3)	grey london	EK-D3P-FGL
-	grey bromine	EK-D3P-FGB
-	green commodore	EK-D3P-FVC
-	black ingo	EK-D3P-FNI
	malè white	EK-D3S-FBM
	beige luxor	EK-D3S-FBL
	beaver ottawa	EK-D3S-FCO
	cocoa orinoco	EK-D3S-FCC
	grey efeso	EK-D3S-FGE
60 x 60 mm (3)	grey london	EK-D3S-FGL
-	grey bromine	EK-D3S-FGB
-	green commodore	EK-D3S-FVC
-	black ingo	EK-D3S-FNI
		beaver ottawa  cocoa orinoco grey efeso grey london grey bromine green commodore black ingo malè white beige luxor beaver ottawa cocoa orinoco grey efeso grey london grey bromine green commodore

## **METAL HT**

Series	Window	Colour	Finishing	Code
		Chrome		EK-D3P-CRO
		Black Metal		EK-D3P-CBM
	[[ [ [ (2)	Copper		EK-D3P-COP
20venti FF	55 x 55 mm (3)	Champagne	ahrama platad	EK-D3P-CHA
71		Chrome	chrome plated -	EK-D3S-CRO
		Black Metal	·	EK-D3S-CBM
	0000(0)	Copper		EK-D3S-COP
	60 x 60 mm (3)	Champagne	_	EK-D3S-CHA



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# How to order a Surface plate

WALL-MOUNT DEVICES

**Surface plates for devices of 20venti, 71 series and flush-mounting inserts.** The ordering code of a Surface plate consists of a fixed part (EK-S) and a variable part depending on shape (square or rectangular), window size (small or large), material, colour and finishing.

# **Surface square plate**

WALL-MOUNT DEVICES

		-	٠		١
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Series	Window	Colour	Finishing	Code
		aluminium		EK-SQT-GBQ
		nickel	_	EK-SQT-GBR
20venti (4 rockers)		titanium	_	EK-SQT-GBS
(4 rockers) [	30 x 60 mm	carbon	_	EK-SQT-GBU
		brass		EK-SQT-GBB
	aluminium		EK-SQP-GBQ	
	45 x 45 mm	nickel		EK-SQP-GBR
		titanium		EK-SQP-GBS
		carbon		EK-SQP-GBU
		brass	- brushed	EK-SQP-GBB
		aluminium	มเนรแซน	EK-SQG-GBQ
20venti		nickel	_	EK-SQG-GBR
FF		titanium	_	EK-SQG-GBS
71	55 x 55 mm	carbon	_	EK-SQG-GBU
		brass	_	EK-SQG-GBB
_		aluminium	_	EK-SQS-GBQ
		nickel	_	EK-SQS-GBR
		titanium	_	EK-SQS-GBS
	60 x 60 mm	carbon	_	EK-SQS-GBU
		brass		EK-SQS-GBB

#### **METAL HT**

Series	Window	Colour	Finishing	Code
20venti		Chrome		EK-SQT-CRO
		Black Metal	_	EK-SQT-CBM
(4 tasti)		Copper	_	EK-SQT-COP
	30 x 60 mm	Champagne	_	EK-SQT-CHA
		Chrome	_	EK-SQP-CRO
	45 x 45 mm	Black Metal		EK-SQP-CBM
		Copper	_	EK-SQP-COP
		Champagne		EK-SQP-CHA
		Chrome	— cnrome piated	EK-SQG-CRO
20venti FF		Black Metal		EK-SQG-CBM
71		Copper	Champagne Chrome Black Metal Copper Champagne Chrome Black Metal	EK-SQG-COP
	55 x 55 mm	Champagne	_	EK-SQG-CHA
		Chrome	_	EK-SQS-CRO
		Black Metal	_	EK-SQS-CBM
	60 x 60 mm	Copper	_	EK-SQS-COP
	וווווו טס ג טס	Champagne	_	EK-SQS-CHA

# **Surface square plate**

WALL-MOUNT DEVICES

#### FFNIX NTM®

Series	Window	Colour	Code
		malè white	EK-SQT-FBM
		beige luxor	EK-SQT-FBL
		beaver ottawa	EK-SQT-FCO
		cocoa orinoco	EK-SQT-FCC
20venti (4 rockers)		grey efeso	EK-SQT-FGE
(11000010)	30 x 60 mm	grey london	EK-SQT-FGL
		grey bromine	EK-SQT-FGB
		green commodore	EK-SQT-FVC
		black ingo	EK-SQT-FNI
		malè white	EK-SQP-FBM
		beige luxor	EK-SQP-FBL
		beaver ottawa	EK-SQP-FCO
		cocoa orinoco	EK-SQP-FCC
		grey efeso	EK-SQP-FGE
	45 x 45 mm	grey london	EK-SQP-FGL
		grey bromine	EK-SQP-FGB
		green commodore	EK-SQP-FVC
		black ingo	EK-SQP-FNI
		malè white	EK-SQG-FBM
		beige luxor	EK-SQG-FBL
		beaver ottawa	EK-SQG-FCO
00		cocoa orinoco	EK-SQG-FCC
20venti FF		grey efeso	EK-SQG-FGE
71	55 x 55 mm	grey london	EK-SQG-FGL
		grey bromine	EK-SQG-FGB
		green commodore	EK-SQG-FVC
		black ingo	EK-SQG-FNI
		malè white	EK-SQS-FBM
		beige luxor	EK-SQS-FBL
		beaver ottawa	EK-SQS-FCO
		cocoa orinoco	EK-SQS-FCC
		grey efeso	EK-SQS-FGE
	60 x 60 mm	grey london	EK-SQS-FGL
		grey bromine	EK-SQS-FGB
		green commodore	EK-SQS-FVC

# Surface rectangular plate

WALL-MOUNT DEVICES

#### FENIX NTM®

Series	Window	Colour	Code
		malè white	EK-SRG-FBM
		beige luxor	EK-SRG-FBL
		beaver ottawa	EK-SRG-FCO
		cocoa orinoco	EK-SRG-FCC
		grey efeso	EK-SRG-FGE
	68 x 45 mm	grey london	EK-SRG-FGL
		grey bromine	EK-SRG-FGB
		green commodore	EK-SRG-FVC
20venti FF		black ingo	EK-SRG-FVC
71		malè white	EK-SRS-FBM
		beige luxor	EK-SRS-FBL
		beaver ottawa	EK-SRS-FCO
		cocoa orinoco	EK-SRS-FCC
		grey efeso	EK-SRS-FGE
	60 x 60 mm	grey london	EK-SRS-FGL
		grey bromine	EK-SRS-FGB
		green commodore	EK-SRS-FVC
		black ingo	EK-SRS-FVC

## METAL

Series	Window	Colour	Finishing	Code
		aluminium		EK-SRG-GBQ
		nickel		EK-SRG-GBR
		titanium		EK-SRG-GBS
20venti FF – 71	68 x 45 mm	carbon	_	EK-SRG-GBU
		brass	— hwyshod	EK-SRG-GBB
		aluminium	— brushed	EK-SRS-GBQ
		nickel		EK-SRS-GBR
		titanium		EK-SRS-GBS
	60 x 60 mm	carbon	_	EK-SRS-GBU
		brass	<del>_</del>	EK-SRS-GBB

#### **METAL HT**

Series	Window	Colour	Finishing	Code
		Chrome		EK-SRG-CRO
		Black Metal	_	EK-SRG-CBM
	00.45	Copper	_	EK-SRG-COP
20venti	68 x 45 mm	Champagne		EK-SRG-CHA
FF 71		Chrome	— chrome plated	EK-SRS-CRO
		Black Metal	_	EK-SRS-CBM
	00 00	Copper	_	EK-SRS-COP
	60 x 60 mm	Champagne	_	EK-SRS-CHA



03 | 18 | 229 | 297 | 311 | 315 | 321 | 331 | 315 | 321 | 331 | 315 | 321 | 331 | 331 | 331 | 331 | 331 | 331 | 333 | 333 | 334 | 334 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 33

# Surface double plate WALL-MOUNT DEVICES

WEIAL	
Series	

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Window	Colour	Finishing	Code
	aluminium	_	EK-S2E-GBQ
	nickel	_	EK-S2E-GBR
	titanium	_	EK-S2E-GBS
45 x 45 mm (2)	carbon	_	EK-S2E-GBU
	brass		EK-S2E-GBB
	aluminium		EK-S2F-GBQ
	nickel	_	EK-S2F-GBR
	titanium	_	EK-S2F-GBS
	carbon	_	EK-S2F-GBU
55 x 55 mm (2)	brass	_	EK-S2F-GBB
	aluminium	_	EK-S2P-GBQ
	nickel	_	EK-S2P-GBR
	titanium	brushed -	EK-S2P-GBS
	carbon		EK-S2P-GBU
	brass		EK-S2P-GBB
	aluminium	_	EK-S2G-GBQ
	nickel	-	EK-S2G-GBR
	titanium	_	EK-S2G-GBS
55 x 55 mm (1)	carbon	-	EK-S2G-GBU
00 x 00 111111 (1)	brass	_	EK-S2G-GBB
	aluminium	_	EK-S2S-GBQ
	nickel	_	EK-S2S-GBR
	titanium	_	EK-S2S-GBS
60 x 60 mm (2)	carbon	_	EK-S2S-GBU
• •	brass	_	EK-S2S-GBB
	45 x 45 mm (1) 60 x 60 mm (1) 55 x 55 mm (2) 55 x 55 mm (1) 60 x 60 mm (1)	aluminium nickel titanium 45 x 45 mm (2) carbon brass aluminium nickel titanium 45 x 45 mm (1) 60 x 60 mm (1) carbon brass aluminium nickel titanium nickel titanium carbon brass aluminium nickel titanium carbon brass aluminium nickel titanium carbon brass aluminium carbon brass aluminium nickel titanium carbon brass aluminium	aluminium nickel titanium 45 x 45 mm (2) carbon brass aluminium nickel titanium 45 x 45 mm (1) 60 x 60 mm (1) carbon brass aluminium nickel titanium brushed carbon brass aluminium nickel titanium nickel titanium nickel titanium nickel titanium s55 x 55 mm (1) 60 x 60 mm (1) carbon brass aluminium nickel titanium carbon brass aluminium nickel titanium carbon brass aluminium nickel titanium nickel titanium nickel titanium nickel

# **METAL HT**

Series	Window	Colour	Finishing	Code
		Chrome		EK-S2E-CRO
		Black Metal		EK-S2E-CBM
	45 x 45 mm (2)	Copper		EK-S2E-COP
	45 X 45 IIIIII (2)	Champagne		EK-S2E-CHA
		Chrome		EK-S2F-CRO
		Black Metal		EK-S2F-CBM
	45 x 45 mm (1)	Copper		EK-S2F-COP
	60 x 60 mm (1)	Champagne		EK-S2F-GBB
		Chrome		EK-S2P-CRO
		Black Metal	chrome plated - - - - -	EK-S2P-CBM
	55 x 55 mm (2)	Copper		EK-S2P-COP
		Champagne		EK-S2P-CHA
		Chrome		EK-S2G-CRO
		Black Metal		EK-S2G-CBM
	55 x 55 mm (1)	Copper		EK-S2G-COP
	60 x 60 mm (1)	Champagne	-	EK-S2G-CHA
		Chrome	-	EK-S2S-CRO
		Black Metal	-	EK-S2S-CBM
	C0 v C0 mm (2)	Copper	-	EK-S2S-COP
	60 x 60 mm (2)	Champagne	-	EK-S2S-GBB

# Surface double plate WALL-MOUNT DEVICES

#### FENIX NTM®

Series	Finestre	Colour	Code
		malè white	EK-S2E-FBM
		beige luxor	EK-S2E-FBL
		beaver ottawa	EK-S2E-FC0
		cocoa orinoco	EK-S2E-FCC
		grey efeso	EK-S2E-FGE
	45 x 45 mm (2)	grey london	EK-S2E-FGL
		grey bromine	EK-S2E-FGB
		green commodore	EK-S2E-FVC
		black ingo	EK-S2E-FNI
		malè white	EK-S2F-FBM
		beige luxor	EK-S2F-FBL
		beaver ottawa	EK-S2F-FC0
20venti		cocoa orinoco	EK-S2F-FCC
FF		grey efeso	EK-S2F-FGE
71	45 x 45 mm (1) 60 x 60 mm (1)	grey london	EK-S2F-FGL
	(.,	grey bromine	EK-S2F-FGB
		green commodore	EK-S2F-FVC
		black ingo	EK-S2F-FNI
		malè white	EK-S2P-FBM
		beige luxor	EK-S2P-FBL
		beaver ottawa	EK-S2P-FC0
		cocoa orinoco	EK-S2P-FCC
		grey efeso	EK-S2P-FGE
	55 x 55 mm (2)	grey london	EK-S2P-FGL
		grey bromine	EK-S2P-FGB
		green commodore	EK-S2P-FVC
		black ingo	EK-S2P-FNI

## FENIX NTM®

Series	Finestre	Colour	Code
		malè white	EK-S2G-FBM
		beige luxor	EK-S2G-FBL
		beaver ottawa	EK-S2G-FC0
		cocoa orinoco	EK-S2G-FCC
		grey efeso	EK-S2G-FGE
	55 x 55 mm (1) 60 x 60 mm (1)	grey london	EK-S2G-FGL
	00 x 00 (1)	grey bromine	EK-S2G-FGB
		green commodore	EK-S2G-FVC
		black ingo	EK-S2G-FNI
		malè white	EK-S2S-FBM
		beige luxor	EK-S2S-FBL
		beaver ottawa	EK-S2S-FCO
		cocoa orinoco	EK-S2S-FCC
		grey efeso	EK-S2S-FGE
	60 x 60 mm (2)	grey london	EK-S2S-FGL
		grey bromine	EK-S2S-FGB
		green commodore	EK-S2S-FVC
		black ingo	EK-S2S-FNI





# **Power supply units**

DIN-RAIL MOUNT MODULES

	EK-AB1-TP <b>640 mA bus power</b> supply	EK-AG1-TP 640 mA bus power supply with 30 Vdc auxiliary output	EK-AM1-TP 1280 mA bus power supply
	To the late of the	10 m	1.2 (1.0) (2.4 (2.0) (2.0) (3.4 (2.0) (2.0) (4.4 (2.0) (2.0)
Max. number of KNX devices that can be connected on KNX bus supply line	64	64	256
Reset of the connected bus line through pushbutton	•	•	•
LED for output voltage on KNX bus	•	•	•
LED for overload / short circuit on KNX bus	•	•	•
Integrated decoupling choke	•	•	•
Power supply 230 Vac	•	•	•
Power supply 176 ~ 280 Vdc	-	-	•
Output for auxiliary power supply 30 Vdc	-	•	•
Mounting on standard 35 mm rail (EN 60715)	•	•	•

# **System modules**

DIN-RAIL MOUNT MODULES

	EK-TM1-TP Time / astronomical digital switch	EK-BD1-TP USB interface	EK-BA1-TP Line / area coupler	EK-BB1-TP IP interface	EK-BC1-TP IP router
	THE STATE OF THE S	19			
Suppress device configuration on the sub line	-	-	•	•	•
Enable or disable filtering of group messages and suppress device oriented messages	-	-	•	•	•
Trace the traffic on the sub line and reduced number of retransmissions	-	-	•	•	•
Function pushbutton	•	-	•	•	•
Status LED for KNX bus line	-	•	•	•	•
Status LED for Ethernet	-	-	-	•	•
Mounting on standard 35 mm rail (EN 60715)	•	•	•	•	•
Plug in program	•		-	-	-
Programming pushbutton	-	•	-	•	•
Connection of a PC or laptop to the KNX bus system	-	-	-	•	•
Time programming (daily, weekly, monthly or yearly) or astronomical	•	-	-	-	-
Control of 9 channels on bus	•	-	-	-	-
Channel 1 can be replicated on the relay on board	•	-	-	-	-
LCD-display	•	_	-	-	-
Backup battery	•	-	-	-	-
Connection of an optional GPS module	•	-	-	-	-





# 640 mA bus power supply POWER SUPPLY UNITS

#### Description

The Ekinex® 640 mA KNX bus power supply supplies and monitors the 30 Vdc voltage required by the KNX bus for operation. An integrated choke provides for decoupling power supply and bus line. On a bus line powered by a 640 mA power supply unit may be connected a maximum of 64 bus devices. Output is protected from overload and short-circuit. The EK-AG1-TP version is provided with an additional 30 Vdc output can be used as auxiliary power supply for other devices requiring SELV voltage (Safety Extra Low Voltage). The total current provided by the two outputs (KNX bus line and auxiliary power supply) cannot exceed 640 mA. The device supports short network voltage interruptions (max. 200 ms).

#### Main features

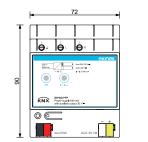
- Plastic casing
- Connection to bus line with KNX terminal block
- Connection of auxiliary output with dedicated terminal block (only EK-AG1-TP)
- Connection of 230 Vac power supply with screw terminals
- Classification climatic 3K5 and mechanical 3M2 (according to EN 50491-2)
- Pollution degree 2 (according to IEC 60664-1)
- Safety class II
- Installation on 35 mm rail (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- IP20 protection grade (installed device)
- Weight 150 g (EK-AB1-TP), 165 g (EK-AG1-TP)

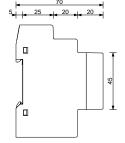
#### Technical data

- Input voltage: 230 Vac, 50/60 Hz
- Power absorption 22 W
- Loss < 3 W</li>
- Output voltage (KNX bus): 30 Vdc
- Output voltage (auxiliary output): 30 Vdc (only EK-AG1-TP)
- Nominal current (output total): 640 mA
- Buffer time: 200 ms

Delivery includes one terminal blocks for connection to the bus; the EK-AG1-TP version is delivered with a second terminal block for connection to the auxiliary

#### Dimensions [mm]





Terminal block for auxiliary output (white/yellow) only on EK-AG1-TP version

Code	Version	Package
EK-AB1-TP		1 pcs.
EK-AG1-TP	with 30 Vdc auxiliary output	1 pcs.





For more information see the technical documentation. download from www.ekinex.com







# 1280 mA bus power supply

POWER SUPPLY UNITS

COMING SOON

#### **Description** Tec

The Ekinex® EK-AM1-TP power supply produces and monitors the 30 Vdc voltage required for operation of the KNX bus system. A coil integrated in the device decouples the power supply from the bus line. The output has overload and short-circuit protection. It has an additional 30 Vdc output that can be used for auxiliary supply of other SELV devices. The total current provided by the two outputs (KNX bus line and auxiliary power supply) cannot exceed 1280 mA. The device is capable of supporting short mains voltage interruptions (max. 200 ms).

#### Main features

- Plastic housing
- Connection to bus line via KNX terminal
- Auxiliary power connection via dedicated screw terminals
- Power supply connection via screw terminals
- Degree of protection IP 20 (device installed)
- Climatic classification 3K5 and mechanical classification 3M2 (according to EN 50491-2)
- Pollution degree 2 (according to IEC 60664-1)
- Safety class I
- Mounting on 35 mm profile rail (according to EN 60715)
- Device with 4 modular units (1 UM = 18 mm)
- Weight 320 g

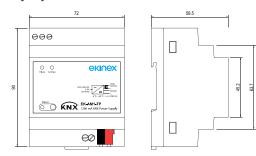
#### Technical data

- Supply voltage 230 Vac, 50/60 Hz
- Power consumption 39 W
- Losses < 3 W</li>
- Voltage on bus line: 30 Vdc +1/-2 Vdc SELV
- Voltage on auxiliary output: 30 Vdc
- Nominal current: 1280 mA
- Buffer time: 200 ms

#### Delivery

Delivery includes one terminal blocks for connection to the bus.

#### Dimensions [mm]



#### Order information

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Code	Package
EK-AM1-TP	1 pcs.



For more information see the technical documentation, download from **www.ekinex.com** 







# Time / astronomical digital switch

SYSTEM DEVICE

#### **Description**

The EK-TM1-TP electronic digital time switch is a KNX device for the management over time of the electrical devices. It allows time programming (periodicity: daily, weekly or annual) or astronomical programming. The device can pilot 9 different channels on KNX bus. The relay on the device replicates the channel 1 programming. Each channel can be associated with a different programming (time or astronomical). It is possible to connect via bus the EK-GPS-1 module (to be ordered separately), that captures the time and the position through the satellite system, ensuring a greater accuracy over time. The backup battery keeps the settings even in case of power failure and can be replaced through the cover (sealable).

#### **Main features**

- Plastic casing
- LCD with backlight (active only with AC power supply)
- Password lockable keyboard
- 450 storable programs (900 events) divisible on 9 channels
- Daily/weekly/monthly/yearly + astronomical programming
- On/off, pulse, holiday, random, night (astronomical) programmes
- Programming resolution 1 minute
- Actions type 1B
- Automatic update of daylight saving time (configurable)
- Connection to bus line with KNX terminal block
- Screw terminal blocks for connecting 230 Vac, output and GPS module  $\,$
- Lithium backup battery: 3V, CR14250 type (5-years life, replaceable)

• Reinforced insulation between accessible parts (front) and all the other terminals

- Protection degree IP20 (device installed)
- Mounting on 35 mm standard DIN-rail (according to EN 60715)
- 3 modular units (1 UM = 18 mm)

#### Technical data

- Power supply: 115 ÷ 230 Vac (-15% ÷ +10%) 50/60 Hz
- Power consumption: 7 VA (2.6 W)

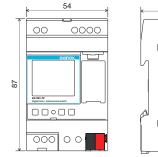
#### <u>Outpu</u>

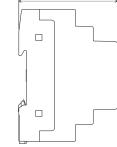
• 1 monostable switching relay 16(10) A at 250 Vac

#### Delivery

Delivery includes a terminal block for connection to the bus. The optional module EK-GPS-1 has to be ordered separately.

#### Dimensions [mm]





#### **Order information**

Code	Package	
EK-TM1-TP	1 pcs.	
EK-GPS-1	1 pcs.	



#### Configuration and commissioning

By means of E1S5 software or later versions
Application program: APEKTM1TP##.knxprod
(## = version, downloadable from www.ekinex.com)





Documentation

For more information see the technical documentation, download from www.ekinex.com







# **USB** interface

SYSTEM MODULES

## **Description**

The Ekinex® USB interface EK-BD1-TP allows a bidirectional data connection between a PC and a KNX bus system. The device handles the addressing, parameter setting, display, protocol management and diagnosis of KNX bus devices. The device integrates a KNX bus communication module and is realized for mounting on a standard 35 mm DIN-rail.

#### Main features

- Plastic casing
- LEDs indicators for data transmission on USB and KNX bus status
- Connection to bus line with KNX terminal block
- Connection to PC with USB type B connector
- Installation on 35 mm rail (according to EN 60715)
- 2 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 100 g

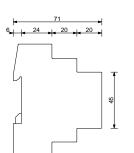
#### Technical data

- Power supply (bus side): 30 Vdc SELV, current consumption: max. 10 mA
- Power supply (PC side): from USB, current consumption: max. 20 mA

Delivery includes a terminal block for connection to the bus.

#### **Dimensions** [mm]





Code	Package	
FK-RD1-TP	1 ncs	



Not necessary; the application program **APEKBD1TP##.vd4** (download from www.ekinex.com) is available for an ETS project.





For more information see the technical documentation,





#### Description

The Ekinex® line / area coupler EK-BA1-TP can be used as a line coupler to connect a secondary line to a main line, as an area coupler to connect a main line to a backbone line or as a repeater. The device assures galvanic insulation between the two connected lines and filters the traffic based on installation position or on filter tables in case of group-oriented communications. The frontal LEDs indicate the status of each bus line and facilitate the tracing of communication problems due to bus load or to re-transmission on both lines. The device integrates a KNX bus communication module and is realized for mounting on a standard 35 mm DIN-rail.

#### Main features

- Plastic casing
- Frontal programming pushbutton and LED
- LEDs indicators for status of KNX bus lines
- Pushbutton for activating special functions
- Connection to bus lines with KNX terminal blocks
- Installation on 35 mm rail (according to EN 60715)
- 2 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 100 g

#### Technical data

- 30 Vdc power supply by KNX bus
- · Current consumption (from main bus line) ca.10 mA

# Line / area coupler SYSTEM MODULES

#### **Functions**

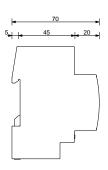
- Suppress device configuration on the sub line
- Enable or disable filtering of group messages
- Suppress device oriented messages
- Trace the traffic on the sub line
- Reduced number of retransmissions

#### Delivery

Delivery includes two terminal blocks for connection to the bus lines.

#### Dimensions [mm]





Code	Package
FK-BA1-TP	1 nes



By means of ETS5 software or later versions Application program APEKBA1TP##.vd4 (download from www.ekinex.com)





For more information see the technical documentation,





# **IP** interface

SYSTEM MODULES



# **IP** router

SYSTEM MODULES

## Description

The Ekinex® EK-BB1-TP IP interface realizes the bidirectional data connection between a PC or a laptop and a KNX bus system through a LAN network. The IP interface supports the tunneling protocol and allows the adressing, parameter setting, display, protocol management and diagnosis of KNX bus devices with ETS. The device integrates a KNX bus communication module and is realized for mounting on a standard 35 mm DIN-rail. The device is powered by a 8...24 Vac or 12...35 Vdc voltage.

#### **Main features**

- Plastic casing
- Frontal programming pushbutton and LED
- LEDs indicators for status and data traffic of KNX bus line and Ethernet network
- Pushbutton for activating special functions
- Connection to bus line with KNX terminal block
- Connection to an Ethernet network with a RJ45 connector
- Installation on 35 mm rail (according to EN 60715)
- 2 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 70 g

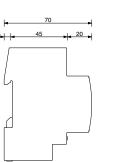
#### **Technical data**

- 30 Vdc power supply by KNX bus
- Current consumption max. 38 mA

Delivery includes a terminal block for connection to the bus.

#### **Dimensions** [mm]





#### **Description**

The Ekinex® EK-BC1-TP IP router realizes the bidirectional data connection between a PC or a laptop and a KNX bus system through a LAN network. The IP router supports the tunneling protocol and allows the adressing, parameter setting, display, protocol management and diagnosis of KNX bus devices with ETS. The IP router integrates also the line coupling function; through the device telegrams can be exchanged between KNX TP lines on a TCP / IP backbone line. The device integrates a KNX bus communication module and is realized for mounting on a standard 35 mm DIN-rail. The device is powered by the KNX bus and does not require auxiliary power supply.

#### Main features

- Plastic casing
- Frontal programming pushbutton and LED
- LEDs indicators for status and data traffic of KNX bus line and Ethernet
- Pushbutton for activating special functions
- Connection to bus line with KNX terminal block
- Connection to an Ethernet network with a RJ45 connector
- Installation on 35 mm rail (according to EN 60715)
- 2 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 70 g

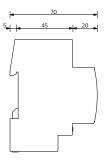
#### **Technical data**

- 30 Vdc power supply by KNX bus
- Current consumption max. 38 mA

Delivery includes a terminal block for connection to the bus.

#### Dimensions [mm]





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Code	Package
EK-BB1-TP	1 pcs.



By means of ETS5 software or later versions Application programs APEKBB1TP##.knxprod (download from www.ekinex.com)





For more information see the technical documentation, download from www.ekinex.com



Code	Package
EK-BC1-TP	1 pcs.



By means of ETS5 software or later versions Application programs APEKBC1TP##.knxprod (download from www.ekinex.com)





For more information see the technical documentation. download from www.ekinex.com



# **Universal interfaces**

RAIL AND FLUSH-MOUNTING DEVICES

	EK-LM2-TP 4 in	EK-CC2-TP 2 IN / 2 OUT	EK-CD2-TP 4 in / 4 out	EK-CG2-TP 4 IN conf. Al for NTC probes or DI / 4 OUT	EK-CE2-TP 4 IN conf. / 2 OUT relay 5A	EK-CF2-TP for load monitoring and control
		1000 miles	No. Color	March of the state	**************************************	
Input channels [DI]	4	2	4	-	3	-
Channels configurable as input [DI] or output [DO] for low-consumption LEDs	-	-	-		-	-
Input channels configurable as [AI] for NTC probes or [DI]	-	-	-	4	1	-
Input channels for current transformers EK-TA	-	-	-	-	-	3
Output channels for low-consumption LEDs	-	2	4	4	-	-
Output channels relay (5A)	-	-	-	-	2	-
ON/OFF command of single or grouped loads	-	•	•	•	•	-
Dimming command of lighting devices	-	•	•	•	•	-
Actuator command of shutters, blinds, venetians, etc.	-	•	•	•	•	-
Detection of the status of the indication contacts	•	•	•	•	•	-
Sending and storing of scenes	-	•	•	•	•	-
Logic functions (AND, OR or XOR), 4 channels	•	•	•	•	•	•
Room thermostat function	-	-	-	•	•	-
Pulse and actuator counting	-	•	•	•	•	-
Mounting on 35 mm standard DIN rail (EN 60715) through support EK-SMG-35	•	•	•	•	•	•



# **Configurable logical module**

UNIVERSAL INTERFACES

#### Description

The configurable logical module Ekinex® EK-LM2-TP is a KNX S-mode device that can be used to perform logic and data processing functions on data exchanged on the KNX bus. The device is suitable for mounting in wall box or on 35 mm rail (EN 60715) with the support EK-SMG-35 included in the delivery. To be used in KNX installations for home and building automation. The device is powered by the KNX bus line with a SELV voltage 30 Vdc and does not require auxiliary power.

#### Main features

- Housing in plastic material
- Wall installation in flush mounting box or, with a mounting support, on 35 mm rail (according to EN 60715)
- Protection degree IP20 (installed device)
- Classification climatic 3K5 and mechanical 3M2 (according to EN 50491-2)
- Pollution degree 2 (according to IEC 60664-1)
- Weight 20 g

#### **Functions**

The device implements independent blocks of the below listed types:

- Logic: Combines a number of boolean inputs according to logic operations.
- Arithmetic: Performs mathematical computations on one or more input values.
- Range: Performs a scaling of the input value to a different range of values, or a boundary limit.
- Mapping: Translates a set of input values (up to 8 points) to a different set of output values.
- **Conversion:** Converts a KNX communication object to another one with a different KNX data type (DPT).
- Timer: Implements a one-shot (monostable) or freerunning (astable) timer, with configurable on- and offdelay times.
- **Compare:** Returns the result of a comparison (equal, larger, smaller etc.) between two input values
- Multiplexer: Copies the value of one input object to either 1 of N output objects, or to all objects selected in the output set.

Code	Version	Package
EK-LM2-TP	4 IN	1 pcs.

Each function can be configured in different ways by means of parameters in the ETS application. There are several independent instances available for each type of block, therefore the device can be used to fulfill many requirements or to solve a large number of contingencies in the same installation. An additional terminal block allows the connection of up to 4 dry contacts for simple external inputs.

#### Power supply

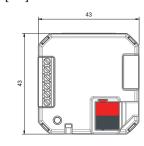
- 30 Vdc power supply by KNX bus
- Current consumption from bus < 10 mA

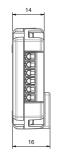
#### Delivery

Delivery includes a terminal block for connection to the bus.

Support for mounting on a standard 35 mm DIN-rail (code EK-SMG-35) and spring for snapping on the back of  $\mathsf{Ekinex}^{\circledast}$  wall-mount devices (code  $\mathsf{EK}\text{-}\mathsf{MAR}\text{-}...)$  to be ordered separately.

#### **Dimensions** [mm]





By means of ETS5 software or later versions Application program **APEKLM2TP##.knxprod** (download from www.ekinex.com)





For more information see the technical documentation, download from www ekinex com





# **Universal** interface 2 (4) IN, 2 (4) OUT



# **Universal** interface 4 configurable IN, 4 OUT

UNIVERSAL INTERFACES

## **Description**

The Ekinex® universal interface is a KNX device which can be used as input and/or output module. The device is equipped with:

6666

- inputs to connect the KNX bus to switches, pushbuttons or classic sensors (normally not communicating on the KNX bus) or any binary signals from other devices, in order to control KNX bus functions;
- control outputs for low consumption LEDs.

The voltage for polling the inputs is supplied within the device. The device integrates a KNX bus communication module and is realized for flush-mounting or for mounting on a standard 35 mm DIN-rail. The device is powered by the KNX bus and does not require auxiliary power supply.

### Main features

- Plastic casing
- Programming pushbutton and LED on the case
- Connection to bus line with KNX terminal block
- Screw terminal blocks for connecting inputs and outputs
- IP20 protection degree (installed device)
- Weight 20 g

#### Power supply

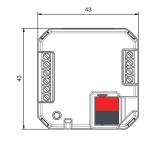
- 30 Vdc power supply by KNX bus
- Current consumption from bus < 10 mA

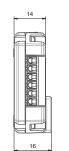
Delivery includes a terminal block for connection to the bus.

#### Accessories

Support for mounting on a standard 35 mm DIN-rail (code EK-SMG-35) and spring for snapping on the back of Ekinex® wall-mount devices (code EK-MAR-...) to be ordered separately.

#### **Dimensions** [mm]





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Code	Version	Package
EK-CC2-TP	2 IN / 2 OUT	1 pcs.
EK-CD2-TP	4 IN / 4 OUT	1 pcs.

By means of ETS5 software or later versions Application program **APEKCC2TP##.knxprod** (EK-CC2-TP) or APEKCD2TP##.knxprod (EK-CD2-TP) (download from www.ekinex.com)



For more information see the technical documentation,



EK-CC2-TP EK-CD2-TP

#### **Description**

The Ekinex® EK-CG2-TP pushbutton interface is a KNX device which can be used as input and/or output module. The device is equipped with 4 configurable inputs and 4 control outputs for low consumption LEDs.

Inputs can be independently configured to connect the KNX bus to:

- switches, pushbuttons, classic sensors (normally not communicating on the KNX bus ) or any binary signals from other devices, in order to control KNX bus functions; - passive temperature sensors (NTC 10  $k\Omega$  at 25°C). The environment air mass temperature value, measured by those sensors, can be sent onto the bus or be used to control a room or zone temperature through the integrated thermostat function. The voltage for polling the inputs is supplied within the device. The device integrates a KNX bus communication module and is realized for flush-mounting or for mounting on a standard 35 mm DIN-rail. The device is powered by the KNX bus and does not require auxiliary power supply.

#### Main features

- Plastic casing
- Programming pushbutton and LED on the case
- Connection to bus line with KNX terminal block
- Screw terminal blocks for connecting inputs and outputs
- IP20 protection degree (installed device)

#### Power supply

Weight 20 g

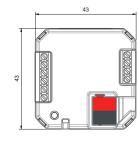
- 30 Vdc power supply by KNX bus
- Current consumption from bus < 10 mA

#### **Delivery**

Delivery includes a terminal block for connection to the bus. The NTC temperature sensors (page 231) for those channels configured as [Al] must be ordered separately.

Support for mounting on a standard 35 mm DIN-rail (code EK-SMG-35) and spring for snapping on the back of Ekinex® wall-mount devices (code EK-MAR-...) to be ordered separately.

#### **Dimensions** [mm]





Code	Version	Package
FK-CG2-TP	4 IN / 4 NIIT	1 nes



By means of ETS5 software or later versions Application program APEKCG2TP##.knxprod (download from www.ekinex.com)





For more information see the technical documentation,





# **Universal** interface 4 IN, 2 OUT (relay 5A)

UNIVERSAL INTERFACES



# **Load monitoring** and control interface

UNIVERSAL INTERFACES

## **Description**

The Ekinex® universal interface is a KNX device which can be used as input and/or output module. The device is equipped with:

- 4 inputs to connect the KNX bus to switches, pushbuttons or classic sensors (normally not communicating on the KNX bus) or any binary signals from other devices, in order to control KNX bus functions. In addition, one input is configurable as analog to connect a NTC temperature sensor (10 k $\Omega$  a 25 °C);
- 2 5A relay outputs to be used as electrical load control (independent) or paired for shutter and blind actuator control.

The voltage for polling the inputs is supplied within the device. The device integrates a KNX bus communication module and is realized for flush-mounting or for mounting on a standard 35 mm DIN-rail. The device is powered by the KNX bus and does not require auxiliary power supply.

#### Main features

- Plastic casing
- Programming pushbutton and LED on the case
- Connection to bus line with KNX terminal block
- Screw terminal blocks for connecting inputs and outputs
- IP20 protection degree (installed device)
- Weight 35 g

## Power supply

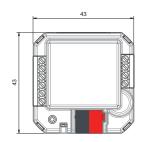
• 30 Vdc power supply by KNX bus

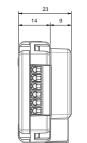
• Current consumption from bus < 10 mA

Delivery includes a terminal block for connection to the bus. The NTC temperature sensors (page 231) for those channels configured as [Al] must be ordered separately.

Support for mounting on a standard 35 mm DIN-rail (code EK-SMG-35) and spring for snapping on the back of Ekinex® wall-mount devices (code EK-MAR-...) to be ordered separately.

#### **Dimensions** [mm]





Code	Package
EK-CE2-TP	1 pcs.



By means of ETS5 software or later versions Application program APEKCE2TP##.knxprod (download from www.ekinex.com))





For more information see the technical documentation,



#### Description

The Ekinex® EK-CF2-TP interface for load monitoring and control is a KNX devices which can be used to:

- measure the instantaneous current absorbed by (up to) three single-phase or one three-phase electrical circuits;
- control electrical loads with priority disconnection and reconnection.

The current measurement is performed by means of max three Ekinex® EK-TA-... current transformers. The device is powered by the KNX bus and does not require auxiliary power supply. Flush-mounting or mounting on a standard 35 mm DIN-rail by means of a support included in the delivery.

#### **Main features**

- Plastic casing
- Programming pushbutton and LED on the case
- Connection to bus line with KNX terminal block
- Connection to current transformers by means of a 6-wire screw terminal block
- IP20 protection degree (installed device)
- Weight 20 g

#### **Functional characteristics**

- Connection to current transformers EK-TA-... by means of 3 physical inputs
- Possibility to measure (up to) three single-phase or one three-phase lines;
- Possibility to receive power values from bus
- 8 general purpose power thresholds
- 4 4-channel logic functions (AND, OR or XOR)

#### Load monitoring

- Direct measurement of instantaneous current by means of transformers EK-TA-...
- Calculation of instantaneous power
- Total electricity metering
- Sending on the bus of measured current, power and energy values

#### Order information

	Code	Package	
	FK-CF2-TP	1 ncs	

#### Load control

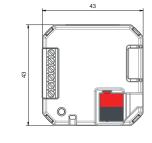
- Possibility to independently handle up to 8 loads for each channel
- Configurable power threshold for load control and related hysteresis
- Sending on the bus of an indication when the threshold is reached
- Possibility to exclude loads from the bus
- Disconnection and reconnection delay independently configurable for each channel

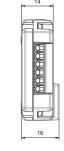
#### Power supply

- 30 Vdc power supply by KNX bus
- Current consumption from bus < 10 mA

Delivery includes a terminal block for connection to the bus and a support for mounting on a standard 35 mm DIN-rail. Current transformers EK-TA-... (page 151) must be ordered separately.

#### **Dimensions** [mm]





# Configuration and commission

By means of ETS5 software or later versions

Application program APEKCF2TP##.knxprod (download from www.ekinex.com))





For more information see the technical documentation,









# Current transformer (TA) for EK-CF2-TP interface

ACCESSORIES FOR UNIVERSAL INTERFACES

Current transformer (TA) to used in combination with an Ekinex® EK-CF2-TP load monitoring and control interface.

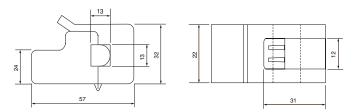
#### **Main features**

- Plastic casing
- Ferrite core
- 1,5 m connecting cable with free ends
- Weight: 55 g

#### **Technical data**

- Nominal voltage: 0...1 Vac
- Precision: ±1 %
- Linearity: ≤ 0,2 %
- Operation frequency: 50...1KHz
- Dielectric resistance (50 Hz, 1 min): 3 KV • Fire resistance: UL 94-V0

#### Dimensions [mm]



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Code	Nominal current [A]	Package
EK-TA-05A	05	1 pcs.
EK-TA-20A	020	1 pcs.
EK-TA-30A	030	1 pcs.
EK-TA-40A	040	1 pcs.
EK-TA-50A	050	1 pcs.
EK-TA-60A	060	1 pcs.



The device does not require any configuration. The used version must be set in the application program of the EK-CF2-TP interface.



For more information see the technical documentation, download from www.ekinex.com





# **Support for DIN-rail mounting**

ACCESSORIES FOR UNIVERSAL INTERFACES

#### Description

Support for mounting universal interfaces (except EK-CB2-TP) on a standard 35  $\mbox{\sc mm}$ 

Code	Package
EK-SMG-35-1	1 pcs.
EK-SMG-35-5	5 pcs.





# Spring for snapping on wall-mount devices

ACCESSORIES FOR UNIVERSAL INTERFACES

#### Description

Spring for snapping universal interfaces (except EK-CB2-TP) on the back of Ekinex® wall-mount devices.

Code	Package
EK-MAR-1	1 pcs.
EK-MAR-5	5 pcs.



# Inputs

DIN-RAIL MOUNT MODULES

EK-CA1-TP 8-fold binary input

ON / OFF switching of individual loads or groups of loads	•
Dimming control for lighting devices	•
Operating control for shutters and roller blinds	•
Detecting the status of signaling contacts	•
Recalling and saving of scenes	•
Pushbutton for toggling between manual and automatic operation	•
Pushbuttons for forced operation of the inputs	•
Counting of impulses and switching cycles	•
Mounting on standard 35 mm rail (EN 60715)	•



The Ekinex® EK-CA1-TP binary input has 8 independent input channels for connecting to the KNX bus commands and sensors of traditional type, having potential-free contacts. Thanks to the binary input, it is possible to command and control bus functions with standard switches, pushbuttons or sensors (not natively communicating with the KNX bus) or binary signals made available by other devices. The query voltage of input channels is produced within the device. The device integrates a KNX bus communication module and is realized for mounting on a standard 35 mm DIN-rail. The device is supplied by the KNX bus and does not require auxiliary power supply.

#### **Main features**

Description

- Plastic casing
- Frontal programming pushbutton and LED
- Membrane keyboard with LED's for status indication
- Pushbutton for switching operating mode (normal / programming)
- Connection to bus line with KNX terminal block
- Connection of inputs with screw terminals
- Installation on 35 mm rail (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 145 g

#### Technical data

#### Power supply

- Voltage 30 Vdc by KNX bus
- Current consumption from bus < 13 mA
- Power on bus 320 mW

# 8-fold binary input

INPUIS

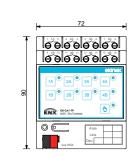
#### <u>Inputs</u>

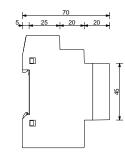
- Number: 8
- Query voltage: < 11 V
- Query current: < 5 mA

#### Delivery

Delivery includes a terminal block for connection to the bus.

#### Dimensions [mm]





#### Order information

Code	Package
EK-CA1-TP	1 pcs.



#### Configuration and commissioni

By means of ETS5 software or later versions Application program **APEKCA1TP##.knxprod** (download from www.ekinex.com)





#### **Documentation**

For more information see the technical documentation, download from **www.ekinex.com** 



4-fold binary output

**ACTUATORS** 

# **Actuators**

DIN-RAIL MOUNT MODULES

	EK-FA1-TP 4-fold binary output	EK-FB1-TP <b>8-fold</b> binary output	EK-FE1-TP 8-fold binary output / 4-fold blind actuator	EK-FF1-TP 16-fold binary output / 8-fold blind actuator
	1111		- Char	
ON / OFF switching of individual loads or groups of loads	•	•	•	•
Configurable as normally open or normally closed switch	•	•	•	•
Logical gates and forced mode for each channel	•	•	•	•
Manual control by membrane pushbuttons	-	-	•	•
Manual control by levers (also without bus voltage)	•	•	-	-
Status feedback of output channels through the position of the levers	•	•	-	-
Status feedback of output channels through LEDs	-	-	•	•
Switching pushbutton manual / automatic mode	-	-	•	•
Block function for each channel	-	-	•	•
Auxiliary power supply	-	-	•	•
Time scheduling: switching delay for on and off, staircase lighting function	•	•	•	•
Management of scenarios	•	•	•	•
Operating hours counter configurable via bus	•	•	•	•
Shutters / blinds operation mode	-	-	•	•
Automatic control for protection against direct sunlight	-	-	•	•
Automatic control for protection against weather conditions (rain, wind, frost)	-	-	•	•
Mounting on standard 35 mm rail (EN 60715)	•	•	•	•



does not require auxiliary power supply.

Frontal programming pushbutton and LED

• Connection of outputs with screw terminals • Overvoltage class III (according to EN 60664-1)

• Connection to bus line with KNX terminal block

• Pollution degree 2 (according to IEC 60664-1)

• 4 modular units (1 MU = 18 mm)

• IP20 protection degree (installed device)

• Installation on 35 mm rail (according to EN 60715)

Description

**Main features** 

Plastic casing

Weight 205 g

#### Power supply

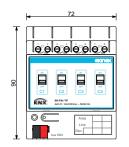
- 30 Vdc voltage by KNX bus

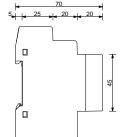
- Switched power: 1000W @100Vac 2200 W @230Vac

#### Delivery

Delivery includes a terminal block for connection to the bus.

#### Dimensions [mm]





Code	Package
EK-FA1-TP	1 pcs.



By means of ETS5 software or later versions Application program APEKFA1TP##.knxprod (download from www.ekinex.com)





For more information see the technical documentation,



250

251

The Ekinex® EK-FA1-TP binary output allows to command 4 groups of loads

independently; to this purpose, the device has outputs fitted with potential-free

relays. The device's latching relays guarantee the upkeep of command status even

in the case of bus power failures. The front levers indicate the status of each output

channel and, in case of emergency, allow manual command (by means of a tool) of the loads. The device integrates a KNX bus communication module and is realized for

mounting on a standard 35 mm DIN-rail. The device is supplied by the KNX bus and

• Classification climatic 3K5 and mechanical 3M2 (according to EN 50491-2)

Technical data

- Current consumption from bus < 12 mA
- Power from bus 360 mW
- <u>Outputs</u>
- 4 latch relays
- Nominal voltage (U<sub>n</sub>): 100-230Vac, 50/60Hz
- Nominal current (I<sub>n</sub>): max 10 A (both @100Vac and @230Vac)





# 8-fold binary output

ACTUATORS

## Description

The Ekinex® EK-FB1-TP binary output allows to command 8 groups of loads independently; to this purpose, the device has outputs fitted with potential-free relays. The device's latching relays guarantee the upkeep of command status even in the case of bus power failures. The front levers indicate the status of each output channel and, in case of emergency, allow manual command (by means of a tool) of the loads. The device integrates a KNX bus communication module and is realized for mounting on a standard 35 mm DIN-rail. The device is supplied by the KNX bus and does not require auxiliary power supply

#### **Main features**

- Plastic casing
- Frontal programming pushbutton and LED
- Connection to bus line with KNX terminal block
- Connection of outputs with screw terminals
- Overvoltage class III (according to EN 60664-1)
- Classification climatic 3K5 and mechanical 3M2 (according to EN 50491-2)
- Pollution degree 2 (according to IEC 60664-1)
- Installation on 35 mm rail (according to EN 60715)
- 8 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 385 g

#### Technical data

#### Power supply

- 30 Vdc voltage by KNX bus
- Current consumption from bus < 12 mA
- Power from bus 360 mW

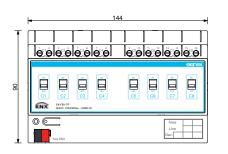
#### <u>Outputs</u>

- 4 latch relays
- Nominal voltage (U<sub>n</sub>): 100-230Vac, 50/60Hz
- Nominal current (I\_): max 10 A (both @100Vac and @230Vac)
- Switched power: 1000W @100Vac 2200 W @230Vac

#### Deliver

Delivery includes a terminal block for connection to the bus.

#### Dimensions [mm]



# 70 5 | 25 | 20 | 20 |

#### Order information

252

Code	Package
EK-FB1-TP	1 pcs.

#### Con

#### Configuration and commissioning

By means of ETS5 software or later versions Application program **APEKFB1TP##.knxprod** (download from www.ekinex.com)





#### **Jocumentation**

For more information see the technical documentation, download from **www.ekinex.com** 





#### Description

The Ekinex® EK-FE1-TP binary output / blind actuator allows to command 8 groups of loads or control 4 drives for motorised blinds independently. The device is fitted with membrane pushbuttons for manual command (even in the absence of bus power) and LED's for status indication; a pushbutton allows to switch between automatic and manual operation modes. The device integrates a KNX bus communication module and is realized for mounting on a standard 35 mm DIN-rail. The device is supplied by the KNX bus and requires an additional 230 Vac power supply to operate.

#### Main features

- Plastic casing
- Frontal programming pushbutton and LED
- Membrane keyboard with LED's for status indication
- Pushbutton for switching operating mode (normal / programming)
- Connection to bus line with KNX terminal block
- Connection of outputs and 230 Vac power supply with screw terminals
   Overvoltage class III (according to EN 60664-1)
- Classification climatic 3K5 and mechanical 3M2 (according to EN 50491-2)
- Pollution degree 2 (according to IEC 60664-1)
- I didition degree 2 (according to 120 of
- Installation on 35 mm rail (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 315 g

# 8-fold binary output/ 4-fold blind actuator

ACTUATOR

#### Technical data

#### Power supply

- Voltage auxiliary 100-230 Vac 50/60 Hz
- Voltage control section 30 Vdc by KNX bus
- Current consumption from bus < 10 mA
- Power on bus < 240 mW

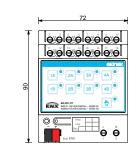
#### <u>Outpu</u>

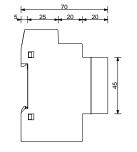
- Number: 8 or 4 independent channels (depending on device use)
- Nominal voltage (U<sub>p</sub>): 100-230 Vac 50/60Hz
- Nominal current (I<sub>n</sub>): max 16 (10) A (both @100Vac and @230Vac)
- Max. switched power: max 4000 VA @250Vac

#### Delivery

Delivery includes a terminal block for connection to the bus.

#### Dimensions [mm]





#### Order information

Code	Package
EK-FE1-TP	1 pcs.



#### Configuration and commissioning

By means of ETS5 software or later versions Application program **APEKFE1TP##.knxprod** (download from www.ekinex.com)





#### Documentation

For more information see the technical documentation, download from **www.ekinex.com** 





03 18 229 297 311 315 321 331 335 Introduction Wall-mount devices DIN-Rail mount modules Supervision Tools Sales kit Technical section General terms of sale General index

EK-HU1-TP

EK-H01-TP



# 16-fold binary output/ 8-fold blind actuator

ACTHATORS

#### Description

The Ekinex® EK-FF1-TP binary output / blind actuator allows to command 16 groups of loads or control 8 drives for motorised blinds independently. The device is fitted with membrane pushbuttons for manual command (even in the absence of bus power) and LED's for status indication; a pushbutton allows to switch between automatic and manual operation modes. The device integrates a KNX bus communication module and is realized for mounting on a standard 35 mm DIN-rail. The device is supplied by the KNX bus and requires an additional 230 Vac power supply to operate.

#### Main features

- Plastic casing
- Frontal programming pushbutton and LED
- Membrane keyboard with LED's for status indication
- Pushbutton for switching operating mode (normal / programming)
- Connection to bus line with KNX terminal block
- Connection of outputs and 230 Vac power supply with screw terminals
- Overvoltage class III (according to EN 60664-1)
- Classification climatic 3K5 and mechanical 3M2 (according to EN 50491-2)
- Pollution degree 2 (according to IEC 60664-1)
- Installation on 35 mm rail (according to EN 60715)
- 8 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 595 g

#### Technical data

#### Power supply

- Voltage auxiliary 100-230 Vac 50/60 Hz
- Voltage control section 30 Vdc by KNX bus
- Current consumption from bus < 10 mA
- Power on bus < 240 mW</li>

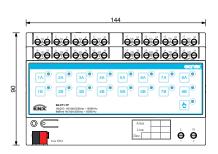
#### <u>Outputs</u>

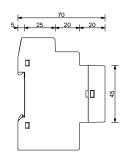
- Number: 16 or 8 independent channels (depending on device use)
- Nominal voltage (U<sub>n</sub>): 100-230 Vac 50/60Hz
- Nominal current (I<sub>n</sub>): max 16 (10) A (both @100Vac and @230Vac)
- Max. switched power: max 4000 VA @250Vac

#### **Delivery**

Delivery includes a terminal block for connection to the bus.

#### Dimensions [mm]





#### Order information

254

Code	Package
EK-FF1-TP	1 pcs.

# 0

#### **Configuration and commissioning**

By means of ETS5 software or later versions Application program **APEKFF1TP##.knxprod** (download from www.ekinex.com)





#### Documentation

For more information see the technical documentation, download from **www.ekinex.com** 



# I/O modules

DIN-RAIL MOUNT MODULES

	Input/output module for office applications	Input/output module for hotel applications
30 Vdc power supply from bus	•	•
Auxiliary power supply 230 Vac 50/60 Hz	•	•
Analog Inputs	1	1
Freely programmable inputs as analogue or binary inputs	1	1
Binary inputs	3	9
Relay outputs 5 (3) A	2	4
Relay outputs 5 (3) A, for fan control	3	3
Relay outputs 16 (10) A, for heating and cooling valve control	-	2
Relay outputs for electric lock control	1	1
Relay outputs 16 (10) A	-	6
O-10 Vdc output	1	1
Membrane keypad for manual control of outputs	•	•
Function for ON/OFF lighting control	1	6
Function for roller shutters / awnings control	1	2
Function for electric strike control	-	•
Temperature control function	•	•
Switch-off scenarios and courtesy lights function	-	•
Logical functions	•	•



# Input/output module for office applications

I/O MODULES

### Description

The Ekinex® EK-HU1-TP module allows to manage all functions of an office or a open-space zone: lighting, temperature control, shades and input/output indications. The device is equipped with membrane keys for manual control and status indication LEDs; a pushbutton allows to switch mode from automatic to manual and vice versa. The device integrates a KNX bus communication module and is intended for mounting on a 35 mm standard DIN-rail. It is supplied by the KNX bus; in order to be operational it also requires a 230 Vac voltage.

#### **Main features**

- Plastic casing
- Frontal programming pushbutton and LED
- Membrane keypad with LED indication of the input status
- Pushbutton for automatic/manual mode switch
- Connection to bus line with KNX terminal block
- Screw terminal blocks for connecting inputs, outputs and 230 Vac power supply
- 3K5 climatic and 3M2 mechanic classification (according to EN 50491-2)
- Overvoltage class III (according to EN 60664-1)
- Pollution level 2 (according to IEC 60664-1)
- Mounting on 35 mm standard DIN-rail (according to EN 60715)
- 8 modular units (1 UM = 18 mm)
- Protection degree IP20 (device installed)
- Weight 595 g

#### Technical data

#### Power supply

- $\bullet$  Load power supply 230 Vac 50/60 Hz; electrical lock 12-24 V
- Power supply (electronics) 30 Vdc via KNX bus
- Current consumption by bus < 10 mA
- Power on bus < 240 mW

#### Order information

Code	Package
EK-HU1-TP	1 pcs.

#### **Inputs**

- 1 analog for NTC temperature sensor (thermostat function)
- 4 digital

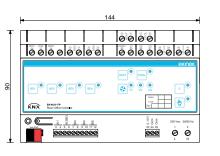
#### <u>Outputs</u>

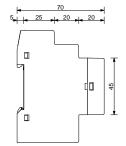
- 10 digital of which:
- 3 general purpose
- 2 (paired) for blind or shade control
- 5 fancoil: 3 for fan speed (3 speeds) and 2 for controlling electrothermal actuators on hot/cold valves
- 1 analog 0-10V for fan speed control

#### Delivery

Delivery includes a terminal block for connection to the bus.

## Dimensions [mm]







#### **Configuration and commissioning**

By means of ETS5 software or later versions Application program: **APEKHU1TP##.knxprod** (## = version, downloadable from www.ekinex.com)





#### **Documentation**

For more information see the technical documentation, download from **www.ekinex.com** 





# Input/output module for hotel applications

I/O MODULE

#### Description

The Ekinex® EK-HO1-TP module allows to manage all functions of a hotel room: lighting, temperature control, shades and input/output indications. The device is equipped with membrane keys for manual control and status indication LEDs; a pushbutton allows to switch mode from automatic to manual and vice versa. The device integrates a KNX bus communication module and is intended for mounting on a 35 mm standard DIN-rail. It is supplied by the KNX bus; in order to be operational it also requires a 230 Vac voltage.

#### **Main features**

- Plastic casing
- Frontal programming pushbutton and LED
- Membrane keypad with LED indication of the input status
- Pushbutton for automatic/manual mode switch
- Connection to bus line with KNX terminal block
- Screw terminal blocks for connecting inputs, outputs and 230 Vac power supply
- 3K5 climatic and 3M2 mechanic classification (according to EN 50491-2)
- Overvoltage class III (according to EN 60664-1)
- Pollution level 2 (according to IEC 60664-1)
- Mounting on 35 mm standard DIN-rail (according to EN 60715)
- 8 modular units (1 UM = 18 mm)
- Protection degree IP20 (device installed)
- Weight 595 g

#### Technical data

#### Power supply

- Load power supply 230 Vac 50/60 Hz; electrical lock 12-24 V
- Power supply (electronics) 30 Vdc via KNX bus
- Current consumption by bus < 10 mA
- Power on bus < 240 mW

#### Order information

Code	Package
EK-H01-TP	1 pcs.

#### <u>Inputs</u>

- 1 analog for NTC temperature sensor (thermostat function)
- 1 configurable as analog or digital
- 10 digital of which:
- 4 general purpose
- 2 door or window opening contact
- 1 pushbutton with pulling call for assistance/emergency
- 1 badge contact
- 2 pushbuttons «Do not disturb» e «Please make room»

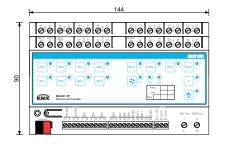
#### **Outputs**

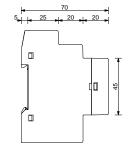
- 15 digital of which:
- 3 general purpose
- 3 for indications: «guest in the room», «room assigned», busy room or emergency»
- 2 (paired) for blind or shade control
- 1 for courtesy light control
- 5 for fancoil: 3 for fan speed (3 speeds) and 2 for controlling electrothermal actuators on hot/cold valves
- 1 digital room contactor and auxiliaries
- 1 powered at 12/24 Vac for controlling an electric lock
- 1 analog 0-10 V for fan speed control

# Delivery

Delivery includes a terminal block for connection to the bus.

#### Dimensions [mm]





# O

#### Configuration and commissioning

By means of ETS5 software or later versions
Application program: **APEKHO1TP##.knxprod**(## = version, downloadable from www.ekinex.com)



#### Documentation

For more information see the technical documentation,



# **Dimmers**

DIN-RAIL MOUNT MODULES

	EK-GA1-TP 2-fold dimming actuator	EK-GC1-TP <b>4-fold RGBW LED</b> dimmer	EK-GF1-TP <b>4-fold 0-10 V</b> actuator
	N. W.		
ON/OFF switching of single or groups of lighting device	•	•	•
Brightness regulation and adjusting the light intensity	•	•	•
Logical gates and forced mode for each channel	•	•	•
Manual control by membrane pushbuttons	•	•	•
Status feedback of output channels through LEDs	•	•	•
Block function for each channel	•	•	•
Without auxiliary power supply	•	•	•
Time scheduling: switching delay for on and off, staircase lighting function	•	•	•
Integration in scenarios	•	•	•
Operating hours counter configurable via bus	•	•	•
Fade adjustable ramps	•	•	•
RGB / HSV operating mode	-	•	•
Mounting on standard 35 mm rail (EN 60715)	•	•	•

# **DALI Dimmers**

DIN-RAIL MOUNT MODULES

	EK-GH1-DL 1 channel DALI Dimmer	EK-GL1-DL 4 channels DALI Dimmer	EK-G01-DL 4 channels DALI Dimmer 230 Vac
Memory function	•	•	•
Brightness adjustment until complete switch-off	•	•	•
Local control input	•	•	-
D-PWM modulation with adjustable frequency (300 / 600 / 1200 Hz)	•	•	•
Adjustable dimming curve: linear / quadratic / exponential	•	•	•
Smooth switching on and off	•	•	•
Optimised output curve	•	•	•
Screw terminals for DALI bus, control, power supply and LED source	•	•	•
Device power supply: 10.8 Vdc (min) 52.8 Vdc (max)	•	•	-
Device power supply: 230 Vac 50 Hz	-	-	•
Device power supply: 10.8 Vdc (min) 26.4 Vdc (max)	-	-	-



#### Description

The Ekinex® EK-GA1-TP dimming actuator allows to command and regulate the light intensity of 2 groups of lighting devices. The device is suitable for the control of resistive, inductive and capacitive loads powered with 230 Vac. Different types of loads can be connected to different channels. The device is fitted with membrane pushbuttons for manual command and LEDs for status indication; a pushbutton allows the switching between automatic or manual operation modes. The device integrates a KNX bus communication module and is realised for mounting on a standard 35 mm DIN-rail. The device is powered by the KNX bus and requires an additional 230 Vac power supply to operate the loads.

#### **Main features**

- Plastic casing
- Frontal programming pushbutton and LED
- Membrane keyboard with LEDs for status indication of outputs
- Pushbutton for switching operating mode (normal / programming)
- Connection to bus line with KNX terminal block
- Connection of outputs and 230 Vac power supply with screw terminals
- Installation on 35 mm rail (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 160 g

# 2-fold dimming actuator

DIMMERS

#### Technical data

#### Power supply

- Voltage (loads): 230 Vac 50/60 Hz
- Voltage (electronics): 30 Vdc by KNX bus
- Current consumption from bus: < 13 mA
- Max. power from bus: 320 mW

#### <u>Outputs</u>

Number: 2

Max. controlled power: 300 W

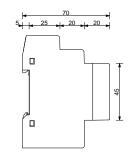
• Min. controlled power: 10 W

#### Delivery

Delivery includes a terminal block for connection to the bus.

#### Dimensions [mm]





#### Order information

Code	Package
EK-GA1-TP	1 pcs.



#### Configuration and commissioning

By means of ETS5 software or later versions Application program **APEKGA1TP##.knxprod** (download from www.ekinex.com)





#### **Documentation**

For more information see the technical documentation, download from www.ekinex.com



# .......

# 4-fold RGBW LED dimmer

DIMMERS

## Description

The Ekinex® EK-GC1-TP 4-fold RGBW LED dimmer allows to regulate independently the light intensity emitted by 4 LED strips at 12/24 Vdc or, alternatively, to regulate the light intensity and the colour emitted by a RGB or RGBW LED strip. The device is suitable for use with LED strips powered at constant voltage. The selection of the colour can be made optionally in HSV or RGB mode. Scenarios, predefined sequences, sequence repetition and random functions are available; the dimming speed and the holding time are programmable. The device is fitted with membrane pushbuttons for manual command and LEDs for status indication; a pushbutton allows the switching between automatic or manual operation modes. The device integrates a KNX bus communication module and is realised for mounting on a standard 35 mm DIN-rail. The device is powered by the KNX bus and requires an additional 12...30 Vdc to supply the controlled loads.

#### Main features

- Plastic casing
- Frontal programming pushbutton and LED
- Membrane keyboard with LEDs for status indication of outputs
- Pushbutton for switching operating mode (normal / programming)
- CH pushbutton for individual or simultaneous channels control
- HSV / RGB pushbutton colour control mode
- Auxiliary dry contact to disconnect load power supply during standby
- Connection to bus line with KNX terminal block
- Connection of outputs and 12-30 Vdc power supply with screw terminals
- Installation on 35 mm rail (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)

#### Technical data

#### Power supply

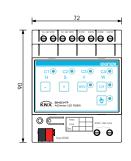
- Voltage (strip LED): max 30 Vdc, 16 A
- Voltage (control): 30 Vdc by KNX bus

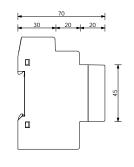
#### <u>Outputs</u>

- Number: 4
- · Load current for each channel: 4 A

Delivery includes a terminal block for connection to the bus.

#### Dimensions [mm]





Code	Package
EK-GC1-TP	1 pcs.

By means of ETS5 software or later versions

Application program APEKGC1TP##.knxprod





For more information see the technical documentation,



# ....... KNX - EK-GP1.TP 4xCommon RCGW/G .10V

#### Description

The Ekinex® 4-fold O-10 V actuator EK-GF1-TP can be used as O-10 V control output device or, alternatively, for controlling dimmerable LED power supply units. When used for LED controlling, the selection of the colour can be made optionally in HSV or RGB mode. Scenarios, predefined sequences, sequence repetition and random functions are available; the dimming speed and the holding time are programmable. The device is fitted with membrane pushbuttons for manual command and LEDs for status indication; a pushbutton allows the switching between automatic or manual operation modes. The device integrates a KNX bus communication module and is realised for mounting on a standard 35 mm DIN-rail. The device is powered by the KNX bus.

### Main features

- Plastic casing
- Frontal programming pushbutton and LED
- Membrane keyboard with LEDs for status indication of outputs
- Pushbutton for switching operating mode (normal / programming)
- CH pushbutton for individual or simultaneous channels control
- HSV / RGB pushbutton colour control mode
- Connection to bus line with KNX terminal block
- Connection of outputs with screw terminals
- Installation on 35 mm rail (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)

# 4-fold 0-10 V actuator

Technical data

#### Power supply

- Voltage (control): 30 Vdc by KNX bus
- Rated output stage supply voltage: 100-230Vac, 50/60Hz max 5W

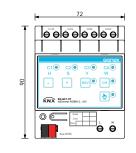
#### <u>Outputs</u>

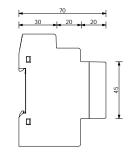
- Number: 4
- Range: 0-10 V or 1-10V
- · Max. current for each channel: 50 mA

#### Delivery

Delivery includes a terminal block for connection to the bus and a terminal block for connection to the auxiliary power supply.

#### **Dimensions** [mm]





#### Order information

Code	Package
EK-GF1-TP	1 pcs.



#### **Configuration and commission**

By means of ETS5 software or later versions Application program APEKGF1TP##.knxprod (download from www.ekinex.com)





For more information see the technical documentation,



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# Dimmer 230V~ 50Hz

DIMMERS

**COMING SOON** 

# **DALI Dimmers**

DIN RAIL MOUNT MODULES

	EK-GD2-DL-1-LV <b>DALI Dimmer</b> <b>12</b> / <b>48 Vdc</b>	EK-GD2-DL-2-LV  DALI Dimmer 12 /48 Vdc 2 channels	EK-GD2-DL-1-HV Dali Dimmer 230V~50Hz	EK-GD1-DL-4-LV Dali Dimmer 12/48V dc 4 channels	EK-GD1-DL-4-HV  Dali Dimmer 230V~ 4 channels
	seese - Fig. 199	teneral control of the control of th	STORY OF THE STORY		
Memory function	•	•	•	•	•
Brightness adjustment until complete switch-off	•	•	•	•	•
Local control input	•	-	-	-	-
PWM modulation with settable frequency (300 / 600 / 1200 Hz)	-	-	-	•	-
Settable dimming curve: linear / logarithmic	•	•	•	•	•
Smooth switching on and off	•	•	•	•	•
Optimised output curve	•	•	•	•	•
Screw terminals for DALI bus, control, power supply and LED source	•	•	•	•	•
Device power supply: 10.8 Vdc (min) 52.8 Vdc (max)	•	•	-	•	-
Device power supply: 230 Vac 50 Hz	-	-	•	-	•

#### Description

The single-channel phase cut dimmer EK-GD2-1-HV allows the brightness control of LED and halogen sources with a voltage of 80-230V AC 50/60Hz for up to 220W. Normally open push-button control.

#### Main features

- Plastic housing
- Device for free installation in junction boxes or wall
- Mounting on 35 mm profile rail (by means of code holder included)
- IP10 degree of protection (device installed)

#### **Functions**

- Dimming up to complete switch-off (dim-to-dark)
- Minimum brightness level: 1%
- Optimised output curve

#### Connections

• Screw terminals for control, supply and loads

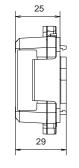
#### Technical data

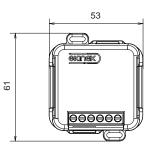
- Single-channel dimmer with phase-cut output
- Supply range: 80-230V AC 50/60Hz
- Maximum output power 230W
- Control inputs: Non-isolated button
- Maximum resistive load 1A.
- Conductor diameter 12-30 AWG (0.05-2.5 mmq)
- Storage temperature Min: -40°C Max: 60°C

#### Note

For electronic loads and/or LEDs consider maximum power halved from nominal

#### Dimensions [mm]





#### Order information

Code	Channels	Packaging
EK-GD2-1-HV	1	1 pcs.



**Documentation** 

For more information see the technical documentation, download from **www.ekinex.com** 







# DALI Dimmer 12/48 Vdc

DALI DIMMERS **COMING SOON** 



The DALI-2 1-channel dimmer EK-GD2-DL-1-LV allows the brightness control of low voltage LED sources from 12 to 48Vdc by means of PWM dimming. DALI-2 bus input reference IEC 62386. The 2-channel DALI-2 dimmer EK-GD2-DL-2-LV allows the control of brightness and colour temperature of low-voltage LED sources from 12 to 48Vdc by means of PWM dimming. Dynamic white temperature control TW DALI DT8, 2 independent channels (2 DALI addresses) or a single DALI DT6 channel. Functions can be set by means of a selector switch. Bus input DALI-2 reference IEC 62386.

#### Main features

**Description** 

- Plastic housing
- Free-standing device for installation in junction boxes or walls
- Mounting on 35 mm profile rail (using special bracket code included)
- IP10 degree of protection (device installed)

#### **Functions**

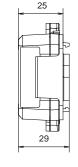
- Memory function settable by DALI
- Dimming up to complete switch-off (dim-to-dark)
- Minimum brightness level: 0.1%
- PWM modulation flicker free (2000 Hz)
- DALI-settable dimming curve: linear or logarithmic
- Switch-on and switch-off times settable by DALI
- Optimised output curve

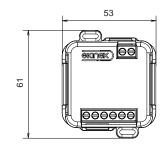
- Screw terminals for DALI bus, control, power supply and LED source
- Max. connection length between dimmer-driver and control < 10 m

#### Technical data

- Device power supply: 10.8 Vdc (min)... 52.8 Vdc (max)
- Max. power: 240W
- Control: BUS DALI or local button

### Dimensions [mm]





Main features Plastic housing

## **Functions**

• Dimming up to complete switch-off (dim-to-dark)

• IP10 degree of protection (device installed)

• Device for free installation in junction boxes or wall

• Mounting on 35 mm profile rail (by means of code holder included)

220Watts. Input Bus DALI-2 reference IEC 62386 standard.

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**Description** 

EK-GD2-DL-1-HV IN: 230 VAC 50Hz

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- Minimum brightness level: 1%
- Optimised output curve

• Screw terminals for DALI bus, control, power supply and LED source

The single-channel phase cut dimmer EK-GD2-DL-1-HV allows the brightness control

of LED and halogen sources with a voltage of 80-230V AC 50/60Hz for up to

# DALI Dimmer 230V~ 50Hz

DALI DIMMERS



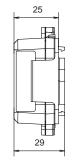
#### **Technical data**

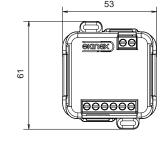
- Single-channel dimmer with phase-cut output
- Supply range: 80-230V AC 50/60Hz
- Maximum output power 230W
- Control inputs: Non-isolated button
- Maximum resistive load 1A.
- For electronic and/or LED loads the power is halved
- Conductor diameter 12-30 AWG (0.05-2.5 mmg)
- Storage temperature Min: -40°C Max: 60°C

#### Note

For electronic loads and/or electronic LEDs consider maximum power halved from nominal value.

#### **Dimensions** [mm]





Code	Channels	Packaging
EK-GD2-DL-1-LV	1	1 000
EK-GD2-DL-2-LV	2	1 pcs.



For more information see the technical documentation,







1 CHANNEL 2 CHANNELS

#### **Order information**

Code	Channels	Packaging
EK-GD2-DL-1-HV	1	1 pcs.



For more information see the technical documentation,





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# DALI Dimmer 12/48Vdc 4 canali

DALI DIMMERS
COMING SOON



#### Description

The 4-channel DALI-2 dimmer allows control of brightness, temperature and RGBW colour of low-voltage LED sources. Power supply from 12 to 48Vdc, PWM dimming. Compliant with the new FLICKER-FREE standard. Input Bus DALI-2 reference IEC 62386 standard.

#### Main features

- Plastic housing
- Device with 4 modular units
- IP20 degree of protection (device installed)

#### **Functions**

- Memory function
- Brightness adjustment until complete switch-off (dim-to-dark)
- Minimum brightness level: 0.1% (1% in push)
- PWM modulation with settable frequency (300/600/1200/2000Hz)
- Settable dimming curve: linear / quadratic / exponential
- Smooth switching on and off
- Optimised output curve

#### Connections

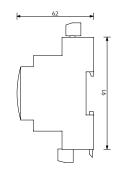
- Dip-switch for setting operating mode, frequency dimming connections
- Removable terminals for easy application

#### Technical data

- Device power supply: 10.8 Vdc (min)... 52.8 Vdc (max)
- Power consumption (at 40°C): 480 Watts total
- Dali absorption 1.53mA

#### Dimensions [mm]





### Description

The 4-channel DALI-2 dimmer allows brightness control of LED and halogen sources with voltage 80-230V AC 50/60Hz for up to 200Watts on 4 channels each. Input Bus DALI-2 reference IEC 62386 standard.

#### **Main features**

- Plastic housing
- Device with 4 modular units
- Mounting on 35 mm profile rail (according to EN 60715)

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• IP20 degree of protection (device installed)

#### **Functions**

- Memory function, fade time, minimum and maximum level settable via DALI software
- Dimming up to complete switch-off (dim-to-dark)
- Minimum brightness level: 0.1%
- Dimming curve: linear / logarithmic settable by DALI
- Electronic short-circuit and overload protection

# DALI Dimmer 230V~ 4 canali

COMING SOON



#### Connections

Removable terminals for easy application

#### Technical data

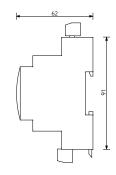
- 4-channel dimmer with phase cut output
- Power supply range: 80-230V AC 50/60Hz
- Maximum power output 200W per channel
- For electronic loads and/or electronic LEDs the power is halved
- Conductor diameter 12-30 AWG (0.05-2.5 mmg)
- Storage temperature Min: -40°C Max: 60°C

#### Note

For electronic loads and/or electronic LEDs consider maximum power halved from nominal value.

#### **Dimensions** [mm]





#### Order information

Code	Channels	Packaging
EK-GD1-DL-4-LV	4	1 pcs.



For more information see the technical documentation, download from **www.ekinex.com** 



#### Order information

Code	Channels	Packaging
EK-GD1-DL-4-HV	4	1 pcs.



For more information see the technical documentation, download from **www.ekinex.com** 



# **Thermoregulation**

DIN-RAIL MOUNT MODULES

	EK-HA1-TP Fan-coil actuator / controller 3-speed fan control			8-fold actuator / controller for electrothermal valve drives	EK-HH1-TP Mixing actuator
		***************************************		********	
Power 30 Vdc from KNX bus	•	•	•	•	•
Auxiliary power supply 230 Vac 50/60 Hz	•	•	•	•	•
Analog input (passive temperature sensors 10 k $\Omega$ NTC at 25°C)	•	•	•	-	•
Digital input (potential-free)	•	•	•	-	•
Output relays	•	•	•	-	•
Output triac relays	-	-	-	•	•
Output O-10V (high impedence signal control)	-	•	•	-	•
Membrane keyboard for manual/automatic control with status indication LEDs	-	-	•	-	•
LCD-display	-	-	-	-	•
2-pipe hydraulic distribution systems applications	•	•	•	•	-
4-pipe hydraulic distribution systems applications	-	-	•	•	-
Actuator	•	•	•	•	-
Internal controller	•	•	•	•	•
Air flow terminal: ventilation	•	•	•	-	-
Air flow terminal: convector	•	•	•	-	-
Air flow terminal: fan-coil	•	•	•	-	-
Air flow terminal: fan-coil + 2° electrical stage	-	-	•	-	-
Underfloor and ceiling systems distribution	-	-	-	•	•
Underfloor and ceiling mixing valve systems	-	-	-	-	•
Mounting on standard 35 mm rail (EN 60715)	•	•	•	•	•

EK-BO1-TP-RMA

Modbus / KNX interface for RDZ
air handling units

EK-HE1-TP





#### Description

The Ekinex® EK-HA1-TP fancoil actuator / controller allows to control a fan coil unit for the air conditioning of a room. The device can perform the function of simple actuator in combination with a KNX room thermostat or that of actuator / controller with acquisition of the temperature value by a KNX room sensor or a probe connected to an analog input. The device is suitable for 2-pipe hydraulic distribution systems with ON / OFF control of one electrothermal shut-off valve actuator and a 3-speed fan. The outputs not used to control the fan coil unit can be configured as binary output channels for different functions. The device is equipped with 2 inputs freely configurable as analog or digital. The device integrates a KNX bus communication module and is realized for mounting on a standard 35 mm DIN-rail. The device is supplied by the KNX bus and requires an additional 230 Vac power supply to operate.

#### Main features

- Plastic casing
- Frontal programming pushbutton and LED
- Connection to bus line with KNX terminal block
- Connection of inputs, outputs and 230 Vac power supply with screw terminals
- Classification climatic 3K5 and mechanical 3M2 (according to EN 50491-2)
- Overvoltage class III (according to EN 60664-1)
- Pollution degree 2 (according to IEC 60664-1)
- 35 mm rail mounting (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 175 g

# Fancoil actuator / controller 3-speed fan control

THERMOREGULATIO

#### **Technical data**

#### Power supply

- Voltage (loads) 230 Vac 50/60 Hz
- Voltage (electronics) 30 Vdc by KNX bus

#### Inputs

• 2 freely configurable for passive temperature sensors (10 k $\Omega$  NTC at 25°C) or as potential-free binary inputs

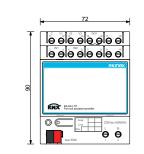
#### <u>Outpu</u>

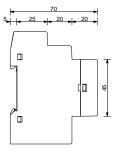
- 3 interlocked relay outputs to control a 3-speed fan (or configurable as binary outputs for different applications)
- 1 relay SPST (single pole, single throw) to control an ON / OFF valve (in 2-pipe hydraulic distribution systems)

#### Delivery

Delivery includes a terminal block for connection to the bus.

#### Dimensions [mm]





#### Order information

Code	Package
FK-HA1-TP	1 nes



By means of ETS5 software or later versions Application program **APEKHA1TP##.knxprod** (download from www.ekinex.com)





Documentation

For more information see the technical documentation, download from www.ekinex.com



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# **Fancoil actuator / controller** 0-10 V fan control

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#### Description

The Ekinex® EK-HB1-TP fancoil actuator / controller allows to control a fan coil unit for the air conditioning of a room. The device can perform the function of simple actuator in combination with a KNX room thermostat or that of actuator / controller with acquisition of the temperature value by a KNX room sensor or a probe connected to an analog input. The device is suitable for 2-pipe hydraulic distribution systems with ON / OFF control of one electrothermal shut-off valve actuator and a fan with brushless motor. The outputs not used to control the fan coil unit can be configured as binary output channels for different functions. The device is equipped with 2 inputs freely configurable as analog or digital. The device integrates a KNX bus communication module and is realized for mounting on a standard 35 mm DIN-rail. The device is supplied by the KNX bus and requires an additional 230 Vac power supply to operate.

#### Main features

- Plastic casing
- Frontal programming pushbutton and LED
- Connection to bus line with KNX terminal block
- Connection of inputs, outputs and 230 Vac power supply with screw terminals
- Classification climatic 3K5 and mechanical 3M2 (according to EN 50491-2)
- Overvoltage class III (according to EN 60664-1)
- Pollution degree 2 (according to IEC 60664-1)
- 35 mm rail mounting (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 175 g

Code	Package
FK-HB1-TP	1 ncs

#### Technical data

#### Power supply

- Voltage (loads) 230 Vac 50/60 Hz
- Voltage (electronics) 30 Vdc by KNX bus

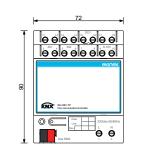
• 2 freely configurable for passive temperature sensors (10 k $\Omega$  NTC at 25°C) or as potential-free binary inputs

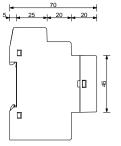
- 1 to control a brushless motor driven fan with 0-10 V signal
- 1 relay SPST (single pole, single throw) to control an ON / OFF valve (in 2-pipe hydraulic distribution systems)

#### Delivery

Delivery includes a terminal block for connection to the bus.

#### Dimensions [mm]





Application program APEKHB1TP##.knxprod





For more information see the technical documentation download from www.ekinex.com





## Description

The Ekinex® EK-HC1-TP fancoil actuator / controller allows to control a fan coil unit for the air conditioning of a room. The device can perform the function of simple actuator in combination with a KNX room thermostat or that of actuator / controller with acquisition of the temperature value by a KNX room sensor or a probe connected to an analog input. The device is suitable for 2 or 4-pipe hydraulic distribution systems with ON / OFF control of one or two electrothermal shut-off valve actuators and a 3-speed fan or a brushless motor driven fan. The outputs not used to control the fan coil unit can be configured as binary output channels for different functions. The device is equipped with 3 inputs freely configurable as analog or digital. The device is fitted with membrane pushbuttons for manual command and LED's for status indication; a pushbutton allows to switch between automatic and manual operation modes. The device integrates a KNX bus communication module and is realized for mounting on a standard 35 mm DIN-rail. The device is supplied by the KNX bus and requires an additional 230 Vac power supply to operate.

#### **Main features**

- Plastic casing
- Frontal programming pushbutton and LED
- · Membrane keyboard with LED's for status indication
- Pushbutton for switching operating mode (normal / programming)
- Connection to bus line with KNX terminal block
- Connection of inputs, outputs and 230 Vac power supply with screw terminals
- Classification climatic 3K5 and mechanical 3M2 (according to EN 50491-2)
- Overvoltage class III (according to EN 60664-1)
- Pollution degree 2 (according to IEC 60664-1)
- 35 mm rail mounting (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 205 g

# **Fancoil actuator / controller** full version

THERMOREGUI ATION

#### Technical data

#### Power supply

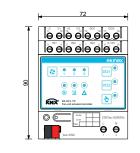
- Voltage (loads) 230 Vac 50/60 Hz
- Voltage (electronics) 30 Vdc by KNX bus

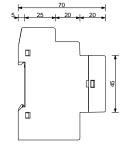
• 3 freely configurable for passive temperature sensors (10 k $\Omega$  NTC at 25°C) or as potential-free binary inputs

- 1 to control a brushless motor driven fan with 0-10 V signal
- 3 interlocked relay outputs to control a 3-speed fan (or configurable as binary outputs for different applications)
- 2 relay SPST (single pole, single throw) to control two ON / OFF valves (in 2 or 4-pipe hydraulic distribution systems)

Delivery includes a terminal block for connection to the bus.

#### **Dimensions** [mm]





#### **Configuration and commiss**

By means of ETS5 software or later versions Application program APEKHC1TP##.knxprod



Code	Package
EK-HC1-TP	1 pcs.

For more information see the technical documentation. download from www.ekinex.com



# 

# 8-fold actuator / controller for electrothermal valve drives

THERMOREGULATION

## Description

The Ekinex® EK-HE1-TP actuator / controller allows to control electrothermal actuators or servomotors in hydronic systems for room heating and / or cooling. The device can perform the function of simple actuator in combination with one or more KNX room thermostats or that of actuator / controller with acquisition of the temperature value by one or more KNX sensors. The device is suitable for 2 or 4-pipe hydraulic distribution systems with ON / OFF control of electrothermal shut-off valve actuators. The device is fitted with membrane pushbuttons for manual command and LED's for status indication; a pushbutton allows to switch between automatic and manual operation modes. The device integrates a KNX bus communication module and is realized for mounting on a standard 35 mm DIN-rail. The device is supplied by the KNX bus and requires an additional 230 Vac power supply to operate.

#### Main features

- Plastic casing
- Frontal programming pushbutton and LED
- Membrane keyboard with LED's for status indication
- Pushbutton for switching operating mode (normal / programming)
- Connection to bus line with KNX terminal block
- Connection of outputs and 230 Vac power supply with screw terminals
- Classification climatic 3K5 and mechanical 3M2 (according to EN 50491-2)
- Overvoltage class III (according to EN 60664-1)
- Pollution degree 2 (according to IEC 60664-1)
- 35 mm rail mounting (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 160 g

#### Technical data

#### Power supply

- Voltage (loads) 230 Vac 50/60 Hz
- Voltage (electronics) 30 Vdc by KNX bus

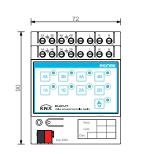
#### Outputs

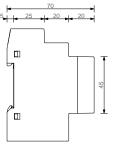
• 8 TRIAC relays to control ON / OFF zone valve drives

#### Deliver

Delivery includes a terminal block for connection to the bus.

#### Dimensions [mm]





#### Order information

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Code	Package
EK-HE1-TP	1 pcs.

#### Configuration and commissioni

By means of ETS5 software or later versions Application program **APEKHE1TP##.knxprod** (download from www.ekinex.com)





#### **Jocumentation**

For more information see the technical documentation, download from www.ekinex.com



# 

#### Description

The Ekinex® EK-HH1-TP mixing actuator allows the control of 3 floating points or 0-10 V servo-motor for mixing valves. The flow temperature of the conveying fluid can be set at a fixed point, with external climatic compensation and with external climatic compensation plus internal conditions recalibration. The regulation modes are selectable separately for heating and cooling. The device is particularly suitable for underfloor or ceiling heating and cooling radiant panels applications in combination with Ekinex® room thermostats with integrated temperature and humidity sensor. A 0-10 V output allows the remote setting of a heat pump temperature setpoint value. The startup function enables a radiant floors drying concrete phase according to EN 1264 standard. The membrane keyboard allows the manual command and includes LED's for status indication; the LCD-display allows displaying / setting of the main working parameters. The device integrates a KNX bus communication module and is realized for mounting on a standard 35 mm DIN-rail. The device is supplied by the KNX bus and requires an additional 230 Vac power supply to operate.

#### Main features

- Plastic casing
- Frontal programming pushbutton and LED
- · Membrane keyboard with LED's for status indication
- Pushbutton for switching operating mode (normal / programming)
- Connection to bus line with KNX terminal block
- Connection of inputs, outputs and 230 Vac power supply with screw terminals
- Classification climatic 3K5 and mechanical 3M2 (according to EN 50491-2)
- Overvoltage class III (according to EN 60664-1)
- Pollution degree 2 (according to IEC 60664-1)
- 35 mm rail mounting (according to EN 60715)
- 8 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 380 g

#### Order information

Code	Package
FK-HH1-TP	1 nes

# **Mixing actuator**

THERMOREGULATION

#### Technical data

#### Power supply

- Voltage (loads) 230 Vac 50/60 Hz
- Voltage (electronics) 30 Vdc by KNX bus

#### Inputs

- 3 analogic exclusively for connection of NTC temperature sensors 10 k $\Omega$  at 25°C
- 2 configurable as analogic (exclusively for NTC temperature sensors 10  $k\Omega$  at 25°C) or digital (potential free)

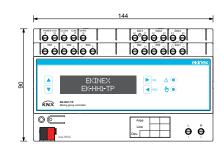
#### <u>Outputs</u>

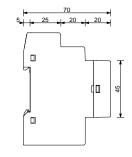
- 1 for control of a 3 point floating servomotor, 1 A, 250 Vac
- 1 for control of a servomotor with O-10 V signal connection of high impedance input
- 3 for additional functions, relays 10(5) A, 250 Vac

## Delivery

Delivery includes a terminal block for connection to the bus.

#### Dimensions [mm]





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#### Configuration and commissioning

By means of ETS5 software or later versions Application program **APEKHH1TP##.knxprod** (download from www.ekinex.com)

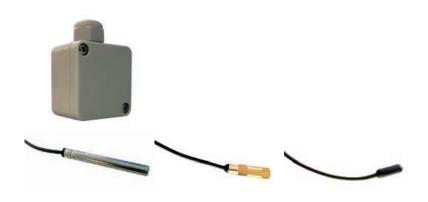




#### Documentation

For more information see the technical documentation download from **www.ekinex.com** 





# $\begin{array}{c} \text{NTC 10 } \text{k}\Omega \\ \text{temperature sensors} \end{array}$

TEMPERATURE CONTROL

#### **Description**

Temperature sensors with NTC (Negative Temperature Coefficient,  $10 \text{ k}\Omega$  ±1% a 25 °C,  $\beta$  = 3435) sensitive element for temperature measurement, to be used in combination with Ekinex® KNX devices equipped with an analog input (or configurable as [AI]) for temperature measurement.

#### **Characteristics and Technical data**

Outdoor version (EK-STE-10K-3435)

- Sensitive element with high IP protection degree casing
- Cable gland (connecting cable not included in delivery)
- Working conditions:
- operating temperature: -40°C...+100°C
- relative humidity: 0...100%

#### Immersion version (EK-STI-10K-3435)

- Sensitive element with INOX cylinder casing
- Two-wire connecting cable (length 1,5 m)
- Operating temperature: -40°C...+105°C

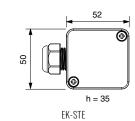
#### Contact version (EK-STC-10K-3435)

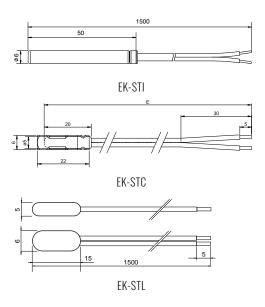
- Brass toecap
- Two-wire connecting cable (length 1,5 m)
- Operating temperature: -40°C...+100°C

#### Air mass version (EK-STL-10K-3435)

- Sensor printed directly on the connecting cable
- Two-wire connecting cable (length 1,5 m)
- Operating temperature: -50°C...+105°C

# Dimensions [mm]





#### **Order information**

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Code	Version	Package
EK-STE-10K-3435	outdoor	
EK-STI-10K-3435	immersion	1 000
EK-STC-10K-3435	contact	1 pcs.
EK-STL-10K-3435	air mass	

# Ö

#### **Configuration and commissioning**

The configuration is necessary for the Ekinex® KNX device connected to the temperature sensor.



#### ocumentation

For more information see the technical documentation, download from www.ekinex.c









# A B OKIOOX KNX Indian Print D TX Indian Print D

#### Description

The Ekinex® EK-BO1-TP-RMA interface is a modular KNX S-mode device that allows bidirectional communication between the RDZ air handling units, equipped with control board with RS-485 Modbus communication port, and the KNX system (TP). Thanks to the interface, the functions performed by the air handling units can be controlled and monitored by KNX devices. The unit has an integrated KNX bus communication module and is realized for mounting on a 35 mm rail. Power is supplied via the KNX bus.

#### Main features

- Housing in plastic material
- Mounting on 35 mm rail (according to EN 60715)
- Protection degree IP20 (installed device)
- Safety class II
- Weight 70 g
- 2 modular units (1 unit = 18 mm)
- Dimensions 36 x 94 x 71 mm (WxHxD)

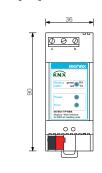
#### Technical data

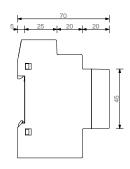
#### Power supply

- 30 Vdc voltage by KNX bus
- Current consumption (from main bus line) < 13 mA

# Modbus / KNX interface for RDZ air handling units

**Dimensions** [mm]





Code	Package
EK-BO1-TP-RMA	1 pcs.



#### Configuration and commissioning

By means of ETS5 software or later versions
Application program APEKBO1TPRMA##.knxprod
(download from www.ekinex.com)





Documentation

For more information see the technical documentation,



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# Gateway

DIN-RAIL MOUNT MODULES

	EK-BH1-TP-485 Gateway Modbus RS485-KNX	EK-BH1-TP-TCP Gateway Modbus TCP/IP-KNX	EK-BJ1-TP-IP Gateway BACnet IP-KNX	EK-BJ1-TP-MSTP Gateway BACnet MS/TP-KNX	EK-BK1-TP Gateway DMX-KNX	EK-BM1-TP-xx Gateway M-Bus-KNX	EK-BN1-TP Gateway PROFINET-KNX	EK-BG1-TP Gateway DALI-KNX
							The state of the s	XX XX
Auxiliary power supply	•	•	•	•	•	•	•	•
Electrically insulated RS485 serial communication port	•	-	-	•	•	-	-	-
1-way DIP switch to activate the line terminator (120 Ohm)	•	-	-	-	•	-	-	-
Modbus master RTU (Remote Terminal Unit) communication	•	•	-	-	-	-	-	-
BACnet slave communication	-	-	•	-	-	-	-	-
BACnet communication	-	-	-	-	-	-	-	-
PROFINET slave communication	-	-	-	-	-	-	•	-
BACnet records exchange	-	-	•	-	-	-	-	-
PROFINET records exchange	-	-	-	-	-	-	•	-
DMX master communication	-	-	-	-	•	-	-	-
250 kbaud communication speed	-	-	-	-	•	-	-	-
From 1200 to 115200 baud communication speed	•	-	-	•	-	-	-	-
from 3000 to 38400 baud communication speed	-	-	-	-	-	•	-	-
Ethernet (IEEE 802.3) communication port, RJ45 connector	-	•	•	-	-	-	•	•
M-Bus communication port	-	-	-	-	-	•	-	-
Device addressing from 1 to 250	-	-	-	-	-	•	-	-
Device addressing from 0 to 250	•	•	-	-	-	-	-	-
Device addressing from 0 to 512	-	-	-	-	•	-	-	-
Register exchange of Coil, Input, and Input Register Holding Register type	•	•	-	-	-	-	-	-
Reading and writing of single and multiple registers	•	•	-	-	-	-	-	-
1 byte register writing on a maximum of 512 DMX devices	-	-	-	-	•	-	-	-
Volatile support memory with "image Modbus" of 1440 byte	•	•	-	-	-	-	-	-
Volatile support memory with"image BACnet" of 1440 byte	-	-	•	•	-	-	-	-
Volatile support memory with "image M-Bus" of 1440 byte	-	-	-	-	-	•	-	-
Volatile support memory with "image PROFINET " of 1440 byte	-	-	-	-	-	-	•	-
KNX TP (twisted pair) 9600 baud communication port	•	•	•	•	•	•	•	•
Volatile support memory with "image KNX" of 1440 byte	•	•	•	•	•	•	•	•
Additional plug-in program	•	•	•	•	•	•	•	•
Mounting on standard 35 mm rail (EN 60715)	•	•	•	•	•	•	•	•
DALI communication protocol	-	-	-	-	-	-	-	•
Ballast addressing to 64 devices	-	-	-	-	-	-	-	•



# Gateway Modbus RS485 - KNX

GATEWAYS

#### Description

The Ekinex® Modbus RS485 - KNX Gateway performs a protocol conversion between a serial RS485 Modbus RTU and a KNX TP network. The device works as Modbus master. The device integrates a KNX bus communication module and it is suitable for mounting on a 35 mm DIN rail; it requires an auxiliary power supply.

#### Main features

- Plastic casing
- Connection to bus line with KNX terminal block
- Installation on 35 mm rail (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 145 g

#### Technical data

- Power supply: 8...24 Vac or 12...35 Vdc
- Absorption at 24 Vdc: 3,5 VA

#### Communication

#### KNX side

- KNX TP (Twisted Pair) communication port electrically isolated from power supply
- 1440-byte volatile support "KNX image" memory buffer

#### Modbus RS485 side

- RS485 serial communication port, electrically isolated from power supply, 120 ohm termination resistance pluggable by a 1-way microswitch
- Modbus master RTU (Remote Terminal Unit) communication
- Selectable baud rate from 1200 to 115200 baud
- Device addressing from 0 to 250
- Coil, Input, Holding Register e Input Register data exchange
- Single and multiple register reading/writing
- 1440-byte volatile support "Modbus image" memory buffer

#### **Configuration**

• Ethernet communication port (IEEE 802.3), RJ45 connector, minimum cable category: 5E

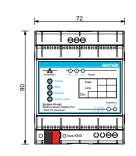
#### Deliver

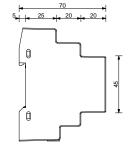
The delivery includes the device and terminal blocks to connect to the KNX bus.

#### Other information

Modbus<sup>®</sup> is an open source, standard communication protocol suitable for master / slave data exchange between smart devices in various applications, such as industrial production, infrastructure, transportation and energy management.

#### Dimensions [mm]





# Configuration and commission

By means of software tool **CGEKBH1TP485.exe** (download from www.ekinex.com)



#### Order informatio

Code	Application	Package
EK-BH1-TP-485	protocol conversion KNX - Modbus RTU	1 pcs.



For more information see the technical documentation, download from www.ekinex.com





# **Gateway Modbus TCP/IP - KNX**

**GATEWAYS** 

## **Description**

The Ekinex® Modbus TCP/IP - KNX Gateway performs a protocol conversion between a Modbus RTU over TCP / IP and a KNX TP network. The device works as Modbus master. The device integrates a KNX bus communication module and it is suitable for mounting on a 35 mm DIN rail; it requires an auxiliary power supply.

#### Main features

- Plastic casing
- Connection to bus line with KNX terminal block
- Installation on 35 mm rail (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 145 g

#### Technical data

- Power supply: 8...24 Vac or 12...35 Vdc
- Absorption at 24 Vdc: 3,5 VA

#### Communication

#### KNX side

- KNX TP (Twisted Pair) communication port electrically isolated from power supply
- 1440-byte volatile support "KNX image" memory buffer

#### Modbus TCP/IP side

- Ethernet communication port (IEEE 802.3), RJ45 connector, minimum cable category: 5E.Communication Modbus master RTU (Remote Terminal Unit)
- Device addressing from 0 to 250
- Coil, Input, Holding Register e Input Register data exchange
- Single and multiple register reading/writing
- 1440-byte volatile support "Modbus image" memory buffer

#### **Configuration**

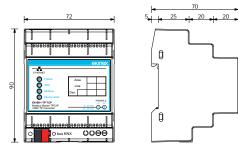
• Ethernet communication port (IEEE 802.3), RJ45 connector, minimum cable category: 5E.

The delivery includes the device and terminal blocks to connect to the KNX bus.

#### Other information

Modbus® is an open source, standard communication protocol suitable for master/ slave data exchange between smart devices in various applications, such as industrial production, infrastructure, transportation and energy management.

#### Dimensions [mm]



By means of software tool CGEKBH1TPTCP.exe (download from www.ekinex.com)



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Code	Application	Package
EK-BH1-TP-TCP	protocol conversion KNX - Modbus RTU	1 pcs.

For more information see the technical documentation,



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#### **Description**

The Ekinex® BACnet - KNX Gateway performs a protocol conversion between a BACnet and a KNX TP network. Two versions are available: BACnet MS/TP (masterslave / token-passed) over serial RS485 network and BACnet IP over Ethernet. The device integrates a KNX bus communication module and it is suitable for mounting on a 35 mm DIN rail; it requires an auxiliary power supply.

#### Main features

- Plastic casing
- Connection to bus line with KNX terminal block
- Installation on 35 mm rail (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 145 g

#### Technical data

- Power supply: 8...24 Vac or 12...35 Vdc
- Absorption at 24 Vdc: 3,5 VA

#### Communication

#### KNX side

- KNX TP (Twisted Pair) communication port electrically isolated from power supply
- 1440-byte volatile support "KNX image" memory buffer

#### BACnet (MS/TP version) side

- RS485 serial communication port, electrically isolated from power supply, 120 ohm termination resistance pluggable by a 1-way microswitch
- BACnet communication
- Selectable baud rate from 1200 to 115200 baud
- BACnet objects exchange
- 1440-byte volatile support "BACNet image" memory buffer

# **Gateway BACnet - KNX GATEWAYS**

#### BACnet side (IP version)

- Ethernet communication port (IEEE 802.3), RJ45 connector, minimum cable category: 5E.Communication BACnet slave
- BACnet objects exchange
- 1440-byte volatile support "BACNet image" memory buffer

• Ethernet communication port (IEEE 802.3), RJ45 connector, minimum cable category: 5E.

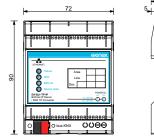
#### Delivery

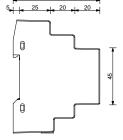
The delivery includes the device and terminal blocks to connect to the KNX bus.

#### Other information

BACnet® is an ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) trademark.

#### **Dimensions** [mm]





By means of software tool **CGEKBJ1TP.exe** (download from www.ekinex.com)



#### Order information

Code	Version	Application	Package
EK-BJ1-TP-IP	IP over Ethernet	protocol conversion	1 pcs.
EK-BJ1-TP-MSTP	MS / TP over RS485	KNX - BACnet	1 pcs.



For more information see the technical documentation,





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# **Gateway DMX - KNX**

GATEWAYS

## Description

The Ekinex® DMX - KNX Gateway performs a protocol conversion between a serial RS485 DMX and a KNX TP network. The device works as DMX master. The device integrates a KNX bus communication module and it is suitable for mounting on a 35 mm DIN rail; it requires an auxiliary power supply.

#### Main features

- Plastic casing
- Connection to bus line with KNX terminal block
- Installation on 35 mm rail (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 145 g

#### Technical data

- Power supply: 8...24 Vac or 12...35 Vdc
- Absorption at 24 Vdc: 3,5 VA

#### Communication

#### KNX side

- KNX TP (Twisted Pair) communication port electrically isolated from power supply
- 1440-byte volatile support "KNX image" memory buffer

#### DMX sid

- RS485 serial communication port, electrically isolated from power supply, 120 ohm termination resistance pluggable by a 1-way microswitch
- DMX master communication
- Baud rate 250 kbaud
- Device addressing from 0 to 512
- 1-byte register writing on max 512 DMX devices

#### **Configuration**

• Ethernet communication port (IEEE 802.3), RJ45 connector, minimum cable category: 5E

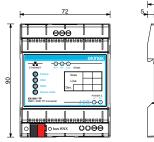
#### Delivery

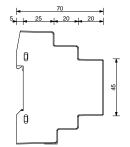
The delivery includes the device and terminal blocks to connect to the KNX bus.

#### Other information

DMX512 is a standard for asynchronous serial transmission of digital data between controllers, devices and accessories for the light industry, approved by ANSI (American National Standards Institute) and supported by ESTA (Entertainment Services and Technology Association).

#### Dimensions [mm]





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#### Configuration and commissioning

By means of software tool **CGEKBK1TP.exe** (download from www.ekinex.com)



#### **Order information**

Code	Application	Package
EK-BK1-TP	protocol conversion KNX - DMX512	1 pcs.

#### Documentation

For more information see the technical documentation, download from **www.ekinex.com** 



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#### Description

The Ekinex® M-Bus - KNX Gateway performs a protocol conversion between an M-Bus and a KNX TP network. The device acts as M-Bus master. Versions for networks with a maximum number of 20, 40, 80 and 160 connected M-Bus slave devices are available. The device integrates a KNX bus communication module and it is suitable for mounting on a 35 mm DIN rail; it requires an auxiliary power supply.

#### Main features

- Plastic casing
- Connection to bus line with KNX terminal block
- Installation on 35 mm rail (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 145 g

#### Technical data

- Power supply: from M-Bus network
- Absorption at 24 Vdc: 3,5 VA (without load);
- 4, 5, 8 or 14 VA (resp. with 20, 40, 80 or 160 M-Bus devices)

#### Communication

#### KNX side

- KNX TP (Twisted Pair) communication port electrically isolated from power supply
- Baud rate 9600 baud
- 1440-byte volatile support "KNX image" memory buffer

#### M-Bus side

- M-Bus communication port (wired version, two-pole cable)
- Selectable baud rate from 300 to 9600 baud
- Device addressing from 1 to 250
- Variable reading through M-Bus slave device mapping
- 1440-byte volatile support "M-Bus image" memory buffer

#### Order information

Code	Version	Package
EK-BM1-TP-20	max 20 slave devices	1 pcs.
EK-BM1-TP-40	max 40 slave devices	1 pcs.
EK-BM1-TP-80	max 80 slave devices	1 pcs.
EK-BM1-TP-160	max 160 slave devices	1 pcs.

# Configuration

 Ethernet communication port (IEEE 802.3), RJ45 connector, minimum cable category: 5E

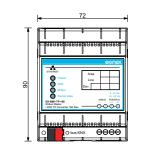
#### Deliver

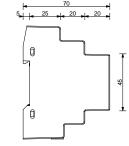
The delivery includes the device and terminal blocks to connect to the KNX bus.

#### Other information

M-Bus (Meter-Bus) is a standard protocol for remote reading of data acquired from thermal energy, electricity, gas and water meters. M-Bus is fully compliant with EN 13757: Communication Systems for remote meter reading, parts 2 (Physical and connection layer) and 3 (Application layer).

#### Dimensions [mm]





**Gateway M-Bus - KNX** 

#### Configuration and commissioning

By means of software tool **CGEKBM1TP.exe** (download from www.ekinex.com)





For more information see the technical documentation,





# **Gateway PROFINET - KNX**

**GATEWAYS** 

## Description

The Ekinex® PROFINET - KNX Gateway performs a protocol conversion between a PROFINET and a KNX TP network. The device acts as slave of PROFINET communication. The device integrates a KNX bus communication module and it is suitable for mounting on a 35 mm DIN rail; it requires an auxiliary power supply.

#### **Main features**

- Plastic casing
- Connection to bus line with KNX terminal block
- Installation on 35 mm rail (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)
- Weight 145 g

#### Technical data

- Power supply: 8...24 Vac or 12...35 Vdc
- Absorption at 24 Vdc: 3,5 VA

#### Communication

#### KNX side

- KNX TP (Twisted Pair) communication port electrically isolated from power supply
- 1440-byte volatile support "KNX image" memory buffer

#### PROFINET side

- Ethernet communication port (IEEE 802.3), RJ45 connector, minimum cable category: 5E.Communication PROFINET slave
- PROFINET data exchange
- 1440-byte volatile support "PROFINET image" memory buffer

# **Configuration**

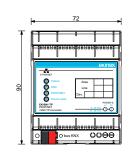
• Ethernet communication port (IEEE 802.3), RJ45 connector, minimum cable category: 5E.

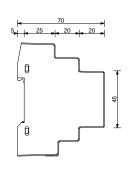
The delivery includes the device and terminal blocks to connect to the KNX bus.

#### Other information

PROFINET (Process Field Net) is an open source, Ethernet based (IEEE 802.xx) standard communication protocol, suitable for data exchange between field devices in industrial and process automation applications. The standard is supported by PROFIBUS & PROFINET International (PI) association.

#### Dimensions [mm]





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Code	Application	Package
EK-BN1-TP	protocol conversion KNX - PROFINET	1 pcs.

By means of software tool **CGEKBN1TP.exe** (download from www.ekinex.com)





For more information see the technical documentation



# DALI

#### **Description**

The Ekinex® DALI - KNX Gateway allows the control of the devices present in a DALI network from a KNX TP network. The device has an integrated KNX bus communication module and integrates the power supply stage for the DALI bus.

#### Main features

- Connection to the KNX bus line with standard KNX terminal block
- Plastic casing
- Installation on 35 mm rail (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- IP20 protection degree (installed device)

#### **DALI functions**

- Control of up to 64 DALI devices in up to 16 groups
- Up to 16 light Scenes
- Broadcast function
- Individual, group or central addressing
- Suitable for operation in emergency lighting systems
- Readout of DALI device status via KNX (e.g. brightness or device error)

#### Configuration

- Application program for ETS v.5 for the configuration of the KNX functions
- PC application program for the configuration of the device and of DALI appliances

#### Connections

- KNX port with standard connector
- Screw terminals (doubled) for the DALI bus
- Ethernet port (IEEE 802.3), RJ45 connector, category 5E cable (or higher)

Code	Application	Package		
EK-BG1-TP	protocol conversion KNX - DALI	1 pcs.		

# **Gateway DALI - KNX**



#### Technical data

- Device power supply: 230 Vac
- Power supply output for the DALI bus: 12 VDC 250mA

The delivery includes the device and terminal blocks to connect to the KNX bus.

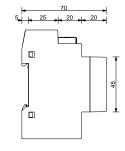
#### Other information

DALI® (Digital Addressable Lighting Interface) is a worldwide standard protocol for lighting control interfacing systems, whose data exchange protocol is compliant with IEC 62386. DALI is a trademark of ZVEI (Zentralverband Elektrotechnik- und Elektronikindustrie e.V.).

## DALI2 version available with firmware update 2.5.

#### **Dimensions** [mm]





By means of the PC software **CGEKBG1TP.exe** and the ETS v.5 application program APEKBG1TP##.knxprod (download both from www.ekinex.com)





For more information see the technical documentation,





03 18 **229** 297 311 315 321 331 335 Introduction Wall-mount devices **DIN-Rail mount modules** Supervision Tools Sales kit Technical section General terms of sale General index



# **Voice control interface - KNX**

GATEWAY

## Description

Device with interface function between a KNX network (TP, twisted pair) and home speakers equipped with Amazon Alexa or Google Assistant. The interface, connected to Ekinex cloud services, is suitable for the control by voice commands of light, climate and motorization of a modern KNX standard building. The product is designed for installation on DIN profile rail and occupies 2 modules. The 12-24 Vdc power supply is external (power supply not included in the supply). The product with hardware based on embedded operating system, has a KNX TP node (twisted pair) and can therefore be connected directly to the bus network of KNX devices. The external connectivity is realized through the Ethernet port that connects the device directly to the home router.

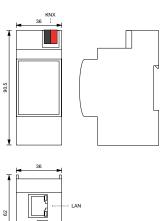
The integrated web server provides access to the configuration environment and provides the following functions:

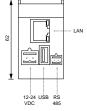
- Interface network settings
- Registration and subscription to Ekinex cloud services
- Automatic import of the ETS project and merging with previous imports
- Configuration of voice control accessories (max 150 accessories): lighting (on/off, dimmed and RGB), motorizations (open/close stop and position) and climate
- Configuration of action sequences on the KNX bus, which can be called up as scenarios by voice assistants
- Configuration of the IFTTT (If This Than That) cloud platform for the creation of association rules between events on the KNX bus and compatible services (e.g. sending e-mail)
- On the Amazon Alexa and Google Assistant apps, the Ekinex skill and action are available respectively for the complete configuration of the service.

#### Main features

- 12-24 Vdc power supply (absorption 240 mA at 12 Vdc) by means of a special plug-in terminal supplied. Power supply not included
- KNX TP bus (twisted pair) via red-black terminal provided
- 1 Ethernet port via cat. 5 or higher cable and standard RJ45 connector
- 2 frontal LEDs: POWER LED for signalling the presence of power supply; SERVICE LED for signalling particular operations in progress.
- 1 RESET button housed under the front cover on the back of the vertical card
- 1 RS485 port: not used
- 1 USB 2.0 port: not used

#### **Dimensions** [mm]





#### Order information

284

Code	Application	Package
EK-BW1-TP	Voice control	1 pcs.

#### **Configurat**i

Through internet browser configurable both locally and remotely via cloud access.

#### Documentation

For more information see the technical documentation, download from **www.ekinex.com** 





#### **Description**

Modular KNX S-mode device with advanced IP-KNX interface function and integrated webserver. It offers a range of connectivity and functional services to a Control4 supervision system in installations with Ekinex KNX devices.

#### Main features

- IP-KNX gateway
- ETS project import
- Sending/receiving commands from KNX devices within the Control4 system
- Programming of command sequences (scenes) and execution with simple connections in COMPOSER PRO using specific drivers
- Execution of logics that can be configured with a graphic editor and run in the background
- KNX diagnostics with notification sent to CONTROL4 in the event of malfunctions or configurable events on the KNX bus
- Load management and monitoring of electricity consumption with management dependent on global current absorption, using specific Control4 drivers

#### Technical data

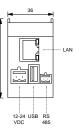
- Power supply 12/24 Vdc
- Power consumption 3W (240mA at 12V)
- Ethernet LAN connection port
- Plastic housing
- Design for 35 mm mounting rail (according to EN 60715)
- Degree of protection IP20 (according to EN 60529)
- Insulation class II (according to EN 60335-1)
- Weight 70 g
- 2 UM modular device (1 UM = 18 mm)
- Dimensions  $36 \times 94 \times 71 \text{ mm (W x H x D)}$

# Konnect4 - KNX

GATEWAY

#### **Dimensions** [mm]





#### Order information

Code	Application	Package			
EK-BR1-TP	KNX and/or Control4 interface	1 pcs.			



For more information see the technical documentation, download from www.ekinex.com









# **CoolMasterNet with** integrated KNX module

## Description

CoolMasterNet Ekinex® is a plug and play interface for bidirectional data exchange between the KNX home automation system and the bus communication system dedicated to air conditioning through VRV / VRF and splits. CoolMasterNet allows the KNX system to individually monitor and control all the units connected to the bus system dedicated to air conditioning. The LCD touch-screen also allows the direct control of every unit. Among the available\* controls there are:

- on/off
- mode (Cool, Heat, Auto, Fan)
- fan speed
- temperature setpoint
- room temperature feedback
- error code

The dedicated CoolRemote App allows the remote login via web through smartphone, tablet or PC to verify the status of the system and possible error codes (where available) and perform basic controls such as on/off (individual or collective), setup of the temperature setpoint, selection of the operating mode and fan speed. The device is equipped with communication lines for the following manufacturers: Mitsubishi Electric, Daikin, Toshiba, Panasonic, Sanyo, Hitachi, Mitsubishi Heavy Industries, LG, Samsung, and Gree. The device integrates a KNX bus communication module and is realized for wall-mounting. The device is powered by a SELV 12-24 Vdc voltage.

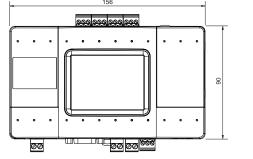
#### Main features

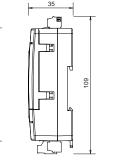
- Plastic material
- Colour LCD touch-screen display
- Green (on/off connection) and orange (Tx/Rx indication LED
- Connection to bus line with KNX terminal block
- RS232 (ASCII), RS485 (Modbus RTU), Ethernet (ASCII, Modbus IP), mini USB (maintenance) ports
- Wall-mounting
- Weight 270 g

#### **KNX** module

- Pre-installed in factory
- Activated through assignment of L3 communication line
- 128 default group addresses (expandable to 1.024)

#### Dimensions [mm]





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Code	Package
EK-B01-TP	1 pcs.



By means of application program Quickinstall download from www.ekinex.com)



For more information see the technical documentation,



	EK-ME1-MDB Network analyzer (basic)	EK-MEK-xx Kit network analyzer (enhanced) and Rogowski coils	EK-ME1-06T 6 A three-phase MID energy meter	EK-ME1-80M 80 A single- phase MID energy meter	EK-ME1-80T 80 A three- phase MID energy meter	EK-MC1-MD Modbus communication module	EK-MC1-TP KNX communication module
		1000				RE THE R	
Three-phase energy meter	•	•	•	-	•	-	-
Single-phase energy meter	-	-	-	•	-	-	-
Direct connection	-	-	•	•	•	-	-
Rogowski coil	•	•	-	-	-	-	-
Fully bi-directional four quadrants measurements for all energies and powers	•	•	•	•	•	-	-
Main electrical parameters measured and displayed for a cost-effective consumption analysis	•	•	-	-	-	-	-
For 3 / 4 wire networks with balanced or unbalanced load	•	•	•	-	•	-	-
Class B according to EN 50470-3	-	-	•	•	•	-	-
Tariff Input	-	-	•	•	•	-	-
2 SO outputs for energy pulse emission	-	-	•	•	•	-	-
1 configurable digital output	•	•	-	-	-	-	-
Possibility to record MIN / AVG / MAX values for all powers	•	•	-	-	-	-	-
LCD-Display	•	•	•	•	•	-	-
Optical port for communication	-	-	•	•	•	-	-
Sealable cover to prevent tampering	•	•	•	•	•	-	-
MID Certificate	-	-	•	•	•	-	-
Modbus RTU (8N1) and ASCII (7E2) protocol	•	•	-	-	-	•	-
- RS485 port	-	-	-	-	-	•	-
- Communication speed: 300 ÷ 115200 bps	-	-	-	-	-	•	-
- Termination resistor integrated in the module	-	-	-	-	-	•	-
- Optical port for communication	-	-	-	-	-	•	-
- Communication speed: 38400 bps	-	-	•	•	•	-	-
KNX protocol	-	-	-	-	-	-	•
- Communication speed: 9600 bps	-	-	-	-	-	-	•
Plug-in software	•	•	-	-	-	-	-
Mounting on standard 35 mm rail (EN 60715)	•	•	•	•	•	•	•





# **Network analyzer**

## **Description**

The Ekinex® network analyzer EK-ME1-MDB is a three-phase multifunctional instrument for measurement and recording of electrical parameters with separate inductive and capacitive counters. Delivery includes a digital output (DO) and a RS485 serial port for communication over Modbus RTU/ASCII protocol. Possibility to update the firmware version remotely is given. The device is suitable for mounting on a 35 mm DIN rail; it requires an auxiliary power supply.

#### **Functions**

- Fully bidirectional four quadrants measurements for all energies and powers
- Main electrical parameters measured and displayed for a cost effective consumption analysis
- Version for 1 or 5A CT
- 1 MB for data recording
- Possibility to record average values for active & reactive powers
- Modbus RTU / ASCII communication by RS485 port
- Possibility to manage the instrument in remote mode by WintoolNETME1 software

#### Main features

- Plastic casing
- Backlighted LCD-Display , 43 x 29 mm 3 rows, 4 digits + symbols
- Keyboard: 3 front buttons + 1 protected button
- Screw terminal blocks connection
- Installation on 35 mm DIN rail (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- Protection degree IP20 (installed device)
- Weight 310 g

#### **Technical data**

#### Power supply

- Voltage range: 85...265 Vac
- Max consumption: 1,6 VA 1 W

#### Voltage inputs

Voltage range: 3x10 / 17 ... 3x285 / 495 Vac, Cat III 300 V

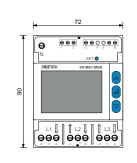
#### **Current inputs**

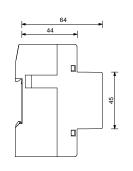
Maximum value: 6 A

#### Digital output (DO)

- Type: Passive optoisolated
- Maximum values (according to IEC / EN 62053-31): 27 Vdc 27 mA

## Dimensions [mm]





Code	Device	Package
FK-MF1-MDB	Network analyzer in enhanced version	1

By means of the software tool **WintoolNETME1** (download from www.ekinex.com)





For more information see the technical documentation



# Kit with network analyzer and Rogowski coils

#### **Description**

The kit Ekinex® EK-MEK includes a EK-ME1-MDE network analyzer (enhanced version) and three sensors for measurement and recording of Rogowski current. Sensors are available with the following lengths: 300, 450 and 700 mm.

## **Functions (network analyzer)**

- Fully bidirectional four quadrants measurements for all energies and powers
- Main electrical parameters measured and displayed for a cost effective consumption analysis
- Version for 1 or 5A CT
- 8 MB for data recording
- Possibility to record MIN / AVG / MAX for instantaneous parameters
- Possibility to record all energy counters
- Modbus RTU / ASCII communication by RS485 port
- Possibility to manage the instrument in remote mode by WintoolNETME1 software

## **Main features**

#### Network analyzer

- Plastic casing
- Backlighted LCD-Display , 43 x 29 mm 3 rows, 4 digits + symbols
- Keyboard: 3 front buttons + 1 protected button
- Screw terminal blocks connection
- Installation on 35 mm DIN rail (according to EN 60715)
- 4 modular units (1 MU = 18 mm)
- Protection degree IP20 (installed device)
- Weight 260 g

#### Rogowski coils

#### Transducer

- Coil length: 30, 45 or 70 cm
- Wire diameter: 8,3 ± 0,2 mm
- · Closing: bayonet
- Weight: from 150 to 500 g
- Material: thermoplastic UL94-VO

## Order information

Code (kit)	Device	Sensors
EK-MEK-30	501100	3 Rogowski coils 30 cm length
EK-MEK-45	Network analyzer (enhanced version)	3 Rogowski coils 45 cm length
EK-MEK-70	(dilitational vorsion)	3 Rogowski coils 70 cm length

## **Electrical features**

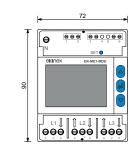
- Output level (RMS): 100 mV / 1 kA @50Hz (standard)
- Transducer resistance: from 70 to 900  $\Omega$
- Position error: less than  $\pm 1\%$  of reading (with wire diameter = 15 mm)
- Frequency: around 40 Hz at 20 kHz
- Operating voltage: 1000 VRMS CAT III, 600 VRMS CAT IV
- Pollution degree 2
- Test voltage: 7400 VRMS / 1 min

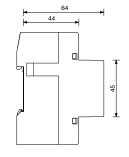
#### Connection wires

- Type: 2 x 0,15 mm shielded
- Length: 300 cm

Delivery includes a network analyzer and 3 Rogowski coils.

#### **Dimensions** [mm]







By means of the software tool **WintoolNETME1** (download from www.ekinex.com)





For more information see the technical documentation,





# **80 A MID single phase** energy meter

## **Description**

The 80 A single-phase compact energy meter Ekinex® EK-ME1-80M performs the measurement of energy and main electrical parameters in industrial and civilian application. The backlighted LCD allows to display energies and instantaneous powers. Delivery includes a tariff input and two SO outputs for energy pulse emission. The device is also equipped with an optical port for communication with other systems as well as Ekinex® Modbus RS485 (EK-MC1-MD) and KNX (EK-MC1-TP) communication modules. It has MID certification for billing, metrological LED on the front panel and lateral anti-effraction sealing. The device is suitable for mounting on a 35 mm DIN rail.

#### **Functions**

- Fully bidirectional four quadrants measurements for all energies and powers
- Direct connection up to 80 A

#### **Main features**

- Plastic casing
- Backlighted LCD-Display with 7 main digits
- Screw terminal blocks connection
- Installation on 35 mm DIN rail (according to EN 60715)
- Protection degree IP20 (installed device)
- 2 modular units (1 MU = 18 mm)
- Weight 200 g

#### Technical data

## Power supply

- Power supplied from the voltage circuit
- Nominal measurement voltage ± 20%
- Max consumption: 7,5 VA 0,5 W

#### <u>Voltage</u>

• 230...240 V 50 / 60 Hz (nominal values)

#### Order information

Code	Package
EK-ME1-80M	1 pcs.

#### <u>Current</u>

- Starting current I<sub>st</sub>: 20 mA
- Minimum current I<sub>min</sub>: 250 mA
- Transition current I,: 500 mA
- Reference current I (lb): 5 A • Maximum current I<sub>max</sub>: 80 A

- Active energy class B according to EN 50470-3
- Reactive energy class 2 according to IEC / EN 62053

## SO outputs

- 2 passive optoisolated
- Maximum values: 250 Vac-dc 100 mA
- Pulse length: 50 ± 2 ms ON time

## Tariff input

- Active optoisolated
- Voltage range for tariff 2: 80 ... 276 Vac-dc

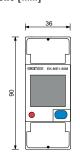
## Metrological LED

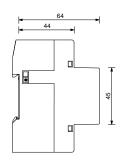
• Meter constant: 10000 imp / kWh

#### Delivery

Delivery includes a sealable cover for terminal blocks.

#### **Dimensions** [mm]





By means of the software tool Ekinex® Modbus Master





For more information see the technical documentation,





## **Description**

The 6 A three-phase compact energy meter Ekinex® EK-ME1-06T performs the measurement of energy and main electrical parameters in industrial and civilian application. The backlighted LCD allows to display energies and instantaneous powers. Delivery includes a tariff input and two SO outputs for energy pulse emission. The device is also equipped with an optical port for communication with other systems as well as Ekinex® Modbus RS485 (EK-MC1-MD) and KNX (EK-MC1-TP) communication modules. It has MID certification for billing, metrological LED on the front panel and lateral anti-effraction sealing. The device is suitable for mounting on a 35 mm DIN rail.

#### **Functions**

- Fully bidirectional four quadrants measurements for all energies and powers
- Version for 1 or 5A CT (programmable CT value)
- For 3 / 4 wire networks with balanced or unbalanced load

## **Main features**

- Plastic casing
- Backlighted LCD-Display with 8 main digits
- Screw terminal blocks connection
- Installation on 35 mm DIN rail (according to EN 60715)
- Protection degree IP20 (installed device)
- 4 modular units (1 MU = 18 mm)
- Weight 320 g

## Technical data

#### Power supply

- Power supplied from the voltage circuit
- Nominal measurement voltage ± 20%
- Max consumption: 7,5 VA 0,5 W
- CT burden (for each phase): 0,04 VA

## Voltage and frequency

3x230 / 400 3x240 / 415 V 50 / 60 Hz (nominal values)

Code	Package
EK-ME1-06T	1 pcs.

# **6 A MID three phase** energy meter

#### <u>Current</u>

- Starting current I<sub>st</sub>: 2 mA
- Minimum current I<sub>min</sub>: 10 mA
- Transition current I,: 50 mA
- Reference current I (Ib): 1 A
- Maximum current I 6 A

- Active energy class B according to EN 50470-3
- Reactive energy class 2 according to IEC / EN 62053

#### SO outputs

- 2 passive optoisolated
- Maximum values: 250 Vac-dc 100 mA
- Pulse length: 50 ± 2 ms

## Tariff input

- Active optoisolated
- Voltage range for tariff 2: 80 ... 276 Vac-dc

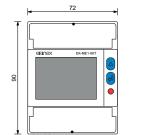
## Metrological LED

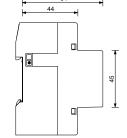
• Meter constant: 10000 imp / kWh

#### Delivery

Delivery includes a sealable cover for terminal blocks.

#### **Dimensions** [mm]







By means of the software tool Ekinex® Modbus Master





For more information see the technical documentation,



**Modbus communication module** 

# **80 A MID three phase** energy meter

## Description

The 80 A three-phase compact energy meter Ekinex® EK-ME1-80T performs the measurement of energy and main electrical parameters in industrial and civilian application. The backlighted LCD allows to display energies and instantaneous powers. Delivery includes a tariff input and two SO outputs for energy pulse emission. The device is also equipped with an optical port for communication with other systems as well as Ekinex® Modbus RS485 (EK-MC1-MD) and KNX (EK-MC1-TP) communication modules. It has MID certification for billing, metrological LED on the front panel and lateral anti-effraction sealing. The device is suitable for mounting on a 35 mm DIN rail.

#### **Functions**

- Fully bidirectional four quadrants measurements for all energies and powers
- Direct connection up to 80 A
- For 3 / 4 wire networks with balanced or unbalanced load

## Main features

- Plastic casing
- Backlighted LCD-Display with 8 main digits
- Tariff input
- 2 SO outputs for energy pulse emission
- Optical port for communication with external modules
- Screw terminal blocks connection
- Installation on 35 mm DIN rail (according to EN 60715)
- Protection degree IP20 (installed device)
- 4 modular units (1 MU = 18 mm)
- Weight 435 g

#### Technical data

#### Power supply

- Power supplied from the voltage circuit
- Nominal measurement voltage ± 20%
- Max consumption: 7,5 VA 0,5 W

#### Voltage and frequency

• 3x230 / 400 3x240 / 415 V 50 / 60 Hz (nominal values)

Code	Package
EK-ME1-80T	1 pcs.

#### <u>Current</u>

- Starting current I<sub>st</sub>: 20 mA
- Minimum current I<sub>min</sub>: 250 mA
- Transition current I,: 500 mA
- Reference current I (lb): 5 A
- Maximum current I<sub>max</sub>: 80 A

- Active energy class B according to EN 50470-3
- Reactive energy class 2 according to IEC / EN 62053

## SO outputs

- 2 passive optoisolated
- Maximum values: 250 Vac-dc 100 mA
- Pulse length: 50 ± 2 ms ON time

## Tariff input

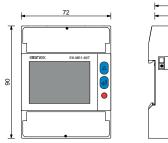
- Active optoisolated
- Voltage range for tariff 2: 80 ... 276 Vac-dc

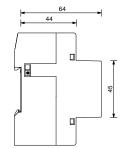
#### Metrological LED

• Meter constant: 10000 imp / kWh

Delivery includes a sealable cover for terminal blocks.

#### Dimensions [mm]





By means of the software tool Ekinex® Modbus Master

For more information see the technical documentation,





#### **Description**

The Ekinex® RS485 Modbus communication module EK-MC1-MD collects and transmits, through Modbus RTU or ASCII protocol, measurement data of Ekinex® single and three phase energy meters. Data transmission between meter and communication module is performed through the integrated optical port. Change of RS485 parameters is made directly on the combined meter or by sending the proper Modbus protocol commands to the module. The device is suitable for mounting on a 35 mm DIN rail.

#### Main features

- Plastic casing
- Set default pushbutton to restore all parameters to the factory settings
- Frontal LED for Power (POWER) and Communication (ACT / ERR) status
- Bus line connection through KNX terminal block
- Installation on 35 mm DIN rail (according to EN 60715)
- 1 modular unit (1 MU = 18 mm)
- Protection degree IP20 (installed device)
- Weight 65 g

#### Technical data

#### Power supply

- Nominal voltage: 230 Vac ± 20% / 50 Hz
- Max repetitive voltage: 300 Vac
- Max non repetitive voltage peak: 320 Vac (20 ms)
- Consumption: max 5 VA

## Modbus side

Communication

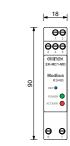
- Protocol: Modbus RTU (8N1) and ASCII (7E2)
- Port: RS485
- Communication speed: 300...115200 bps
- Termination resistor integrated in the module

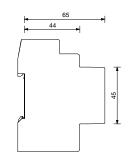
#### Meter side

- Type: serial, optical port
- Communication speed: 38400 bps

Delivery includes a terminal block for connecting the bus line.

#### Dimensions [mm]





Oradi illiorilla		
Code	Application	Package
EK-MC1-MD	Transmission over Modbus of data measured by Ekinex® meters	1 pcs.



By means of the software tool Ekinex® Modbus Master



For more information see the technical documentation,



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# **Terminal blocks**

ACCESSORIES

#### Description

Terminal block for the connection of KNX bus lines or SELV auxiliary power supply. It allows the connection of max. 4 pairs of wires. To be used also as distribution terminal in wall boxes.

#### Colour coding

- EK-MNR-TP: red = + (positive), black = (negative)
- EK-MGB-TP: yellow = + (positive), white = (negative)

## **Main features**

- 4 plug-in seats for each polarity
- Fast spring connection
- Suitable for solid wire diameter 0,6÷0,8 mm
- Mechanical coding for terminal block housing on devices
- Wire strip length (advised) 5-6 mm

#### Order information

Code	Colour coding	Use	Package
EK-MNR-TP	red/black	bus connection	50
EK-MGB-TP	yellow/white	SELV connection	50

#### Technical data

- Nominal voltage 100 V
- Nominal current 6 A

#### Delivery

Package of 50 pieces.

#### Note

A terminal block for the connection of KNX bus line (EK-MNR-TP) is supplied with every

Ekinex® device. A terminal block for the connection of SELV auxiliary power supply is supplied along with EK-AG1-TP power supply and Touch&See unit.

#### Dimensions [mm]









EK-MNR-TP EK-MGB-



#### Description

The bus cable LSHF (Low Smoke Halogen Free) is a twisted pair cable for the connection of KNX bus devices and the derivation of KNX bus lines. It is available with a single pair of wires with a diameter of 0.8 mm. Screen in aluminium foil. For use in dry interior.

#### **Main features**

- Cable for KNX based applications (TP)
- Single pair of wires Ø 0,8 mm
- Black/red wires for KNX bus line connection
- Yellow/white wires for auxiliary SELV or spare power supply

#### Order information

Code	Туре	Use	Package [m]
EK-112-TP	1 x 2 x 0,8	bus connection	100
EK-114-TP	2 x 2 x 0,8	bus connection and spare pair	100

# **Bus cable**

ACCESSORIES

#### Technical data

- Nominal voltage: 50 V
- Test voltage: 4 kV

#### Delivery

100 m bundle covered with cellophane.





112-TP FI

FK-114-T

# SUPERVISION

Ekinex Delégo: the system301Renewed graphic interface302Simplified configuration and maintenance305Complete versatility306Main features - Licenses307Delégo server308Delégo panel309





# Ekinex Delégo: the system

SUPERVISION

Delégo is a system for the supervision and control of a KNX home automation system. Developed with web-oriented technologies, it has a uniform interface with high graphical impact on every platform, both desktop (PC) and mobile (Apple iOS and Android devices), with both local and remote connection. The system consists of a compact server (based on Linux operating system) to be installed in an electrical box: the device connects directly to the KNX bus via twisted pair; the connection to the home router is made via the Ethernet port on your local network (LAN).

The user can interact with the system either by means of mobile devices, or with one or more fixed stations, by means of Delégo panel a touch-panel with elegant and minimal design, for wall installation, connected via Ethernet port on its local network (LAN). The Delégo supervision system is characterized by a simple and at the same time extremely complete configuration, thanks to the direct import of the ETS project file. The functional definition of the various imported domotic objects and the correspondence with a rich and customizable set of controls (widgets) for the user, is also very straightforward.

The renewed interface is simple and intuitive and allows the user to interact with the home automation system of his smarthome through the use of different devices, with absolute uniformity of use. The app allows you to remotely control lights, climate, automatisms, audio/video equipment, shutters and more with a simple touch, from a single device and from anywhere in the building reached by the Wi-Fi network, or remotely via web connection.



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# Renewed graphic interface

SUPERVISION

The redesigned visual interface can be accessed either via an app for smartphone and tablet (supported operating systems: Apple iOS and Android) or from a desktop PC workstation. All the devices can be interfaced with the server previously configured so that all the functions of the automation system can be controlled and viewed. The app, accessible from mobile devices (smartphones and tablets) or fixed devices (Delégo panel), is structured for the logical vision of the building, by areas or services. The supervision with desktop PC also allows the visualization with synoptic: the plan of the space can be associated, following the physical location, with the set of available services.

#### **VISUALIZATION BY AREAS**

The app will display a list of configured areas, each identified by an image inserted in the web configurator during the commissioning phase;

In each area set through the web configurator (for example: living room, bedroom, kitchen) the user can choose whether to turn on or off the lights, or to change the settings of the room thermostat and other settings for each of the available features; Simple navigation between the different areas configured with a touch of the display.

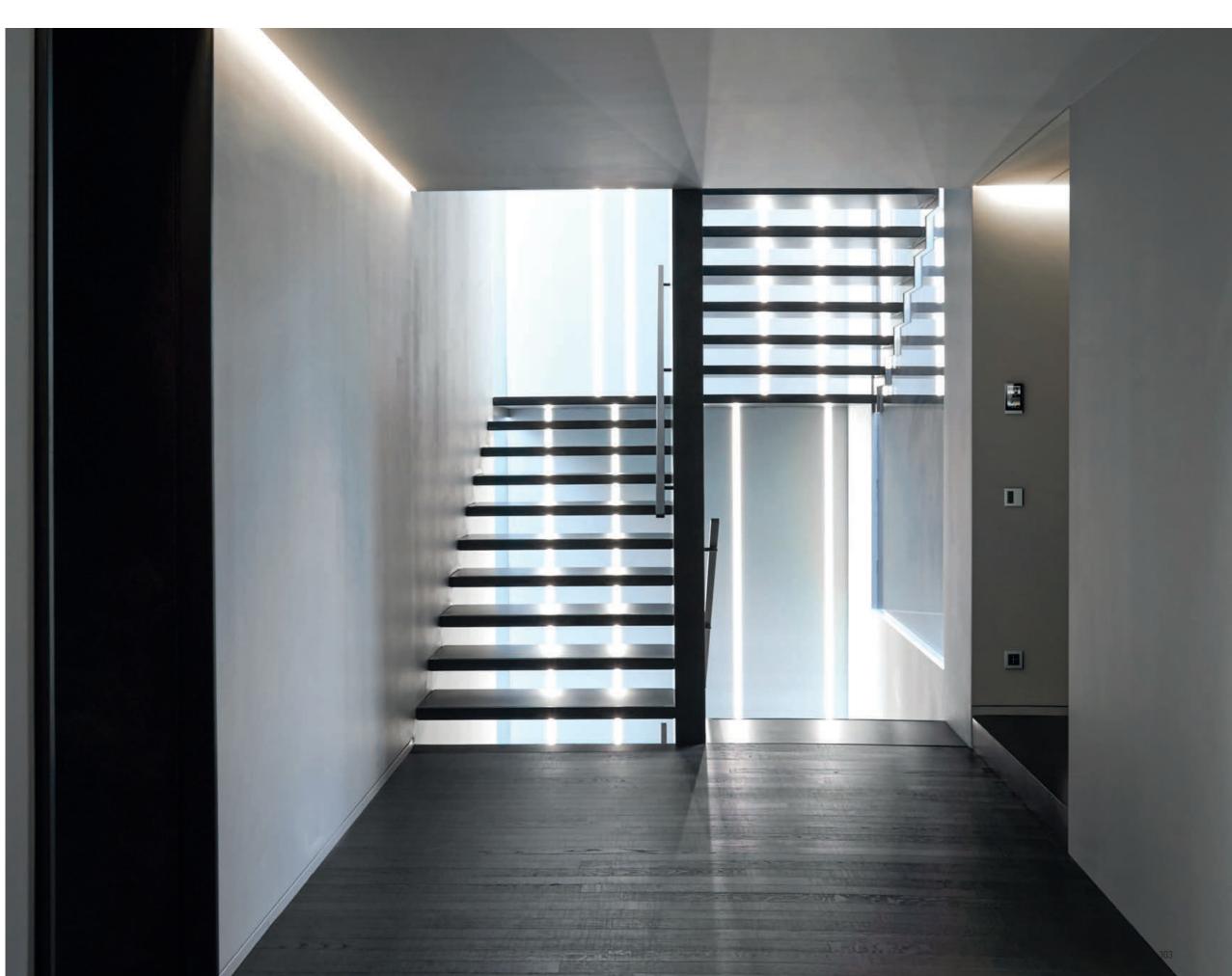
## **VISUALIZATION BY SERVICES**

The visualization of each area can be filtered through a toolbar that allows you to easily select the individual function available:

Lighting
Air conditioning
Shading and motorized automations
Scenarios

The app can be extended with the functions provided by the compatible video surveillance, intrusion detection and audio/video systems integrated in the Delégo





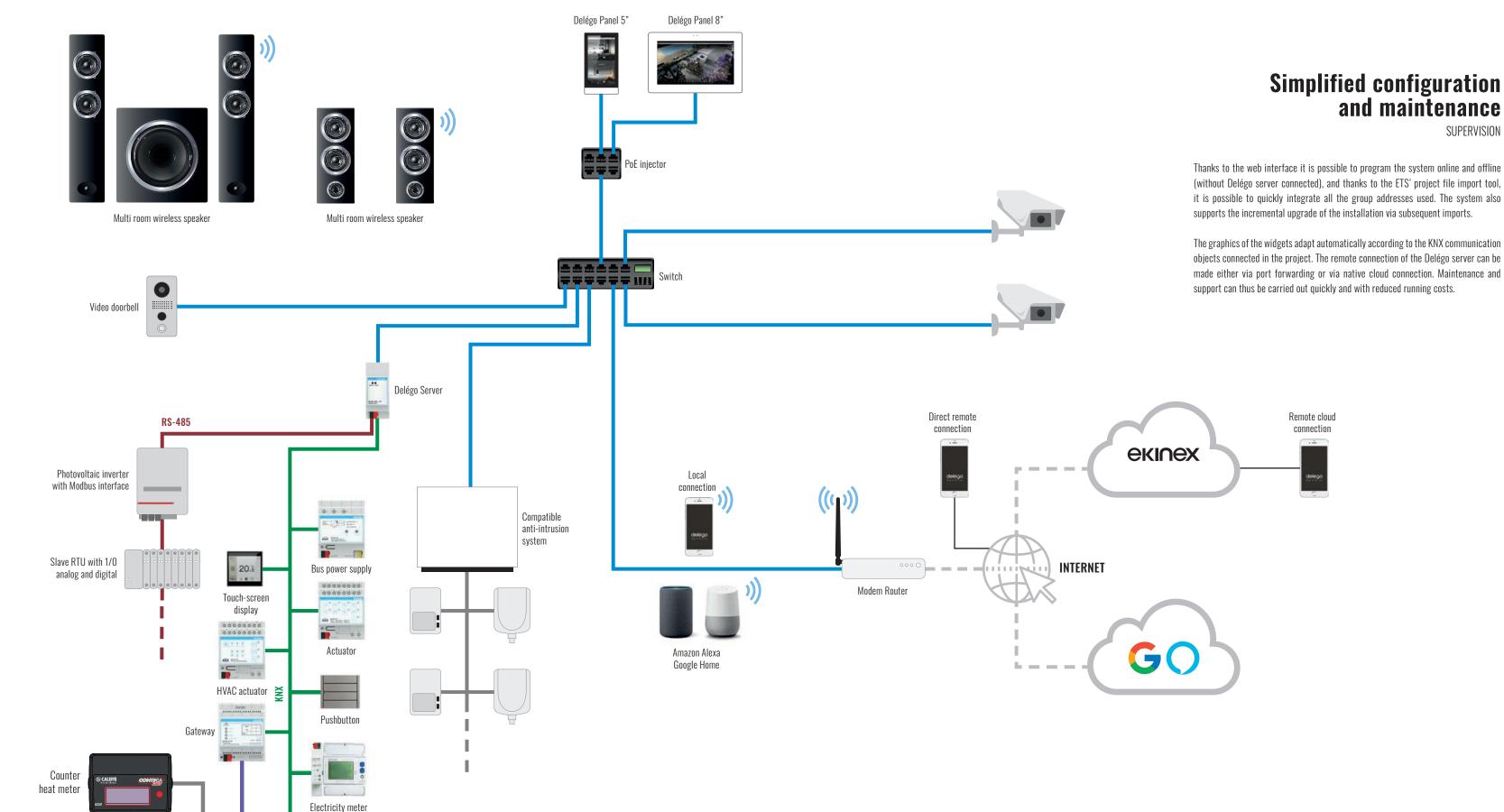


Hot water meter

304

with KNX interface





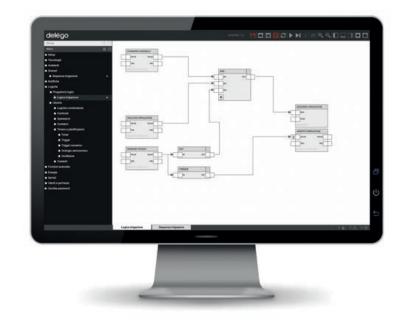
SUPERVISION



03 18 229 **297** 311 315 321 331 335 oduction Wall-mount devices DIN-Rail mount modules **Supervision** Tools Sales kit Technical section General terms of sale General index

# **Complete versatility**

SUPERVISION



## Multiplatform

Delégo server can be managed by PC, MAC, Touch-PC, smartphone and tablet through a common Internet browser or with a free dedicated app (available for Apple devices and Android).

#### Customizable

the graphics and automatic functions of Delégo server can be easily modified according to your needs, accessing the web pages with your PC of administration.

## Quick to configure

Delégo server proposes a set of ready-to-use functions typically used in the home automation supervisors and allows you to quickly import the structure of your own ETS building (KNX installation).

#### Multi-protocol

Delégo server can be connected directly to both the KNX bus in the twisted version pair, both to Modbus on RS485 network and via TCP/IP protocol via Ethernet port. Thanks to the multi-protocol management it is possible to connect intrusion detection systems, thermoregulation, multimedia systems and video surveillance.

#### Easy to install

Thanks to the size of only 2 modules on DIN rail, Delégo server can be easily installed directly into the electrical cabinet. The communication ports to the LAN, KNX bus and other technological subsystems do not require any additional external interfaces.

#### Reliable

The Delégo server is based on a Linux operating system that guarantees reliability and stability. of the platform for continuous use, as well as providing a high degree of safety on the net.

#### Also offline

It is possible to build the supervision project even without being connected to the webserver, working in "offline" mode directly on your PC or MAC.

## 100% Made in Italy

Hardware and software are designed, manufactured, assembled and tested entirely in Italy, to guarantee the highest quality of the product and after-sales service competent and helpful.

# **Main features**

SUPERVISION

Standard technologies	KNX RS-485 / TCP / UDP configurable Modbus RTU/TCP			
User Interface	Web / HTMLS (All operating systems) Dedicated app (iOS I Android)			
Number of users	Unlimited without additional licenses			
Synchronized connections	Up to 20 (scalable on request)			
Technological systems	Lighting Heating / air conditioning Motorized doors and windows Irrigation Thermal power plant I thermoregulation Technical alarms Consumption and energy management Load control Weather control IP Cameras / IP Video Intercoms Intrusion detection Audio/Video broadcasting			
Compatibility of operating systems	Microsoft Windows Apple iOS Apple Mac OSX Android Linux			
VISUALIZATION				
Layout	Graphics scalable by resolution Automatic recognition of mobile devices Full support for touch and multi-touch devices			
Navigation	Personalized graphic pages Multi-level environment navigation Navigation by functions Summary popups for the most complex functions			

Always accessible and customizable menu

Remote Accessibility, Weather Services, IFTTT

Scenarios, Calendar schedules

**Notifications and messages** Notifications on screen. Email. Push notifications

#### SETUP AND CONFIGURATION

SETUP AND CONFIGURATION	UN
Configuration mode	Online Offline via free downloadable tool
Environment of configuration	Integrated search engine Navigation tree for access to all functions Drag & drop Multi-tab for multiple simultaneous configuration functions
Setup and maintenance	Network Date and time Backup / stay configuration via browser Language selection Graphic Themes Selection and Layout Customization Software update via browser
Environments / graphic pages	Grid layout and graphic map Customizable background images Custom Object Sorting/Placement
Advanced Functions	Scenarios with timings Logics Comparison of values and levels Mathematical operations Custom functions via scripting
Planning and calendar	Unlimited number of daily profiles for each object Weekly and annual profiles Configuration accessible by end user
Energy Management	Support for KNX network analyzers, ModBus Integrated load control function Graphical visualization of consumption and production Real-time load absorption display Automatic comparisons and consumption indicators
Voice Control	Amazon Alexa - Google Assistant
Users and security	Unlimited number of users Unlimited access Secure SSL access via internet

 $30^{\circ}$ 

Customization

**Cloud Services** 





# Delégo server

SUPERVISION

#### **Description**

Web supervisor for home and building automation systems based on the KNX system. It allows to manage the functions present in the building through any type of device (PC/MAC, touch-PC, smartphone, tablet) as long as it is equipped with a web browser, both locally and remotely through internet. Customizable graphics suitable for any context and application, optimized for visualization on different fixed and mobile platforms. Simplified and fast configuration of KNX functions. Possibility to realize scenarios, time sequences, logics, conditions, operations mathematics, temporal planning through simple graphical tools and intuitive; reporting events and alarms on screen or via email. Configuration online or offilne via free downloadable PDF tool; does not require programming or HTML skills for supervision customization. Interfacing with other communication technologies and protocols by enabling additional modules.

## Main features

• Dimensions: 90.5 x 62 x 36 mm 2 DIN modules Power supply 12 - 24 VDC Plug-in terminal provided

 Absorption 240mA at 24V Connections LAN (RJ45)

KNX (standard red-black connector)

RS485 (terminal supplied)

USB

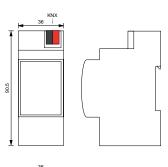
• LED Power

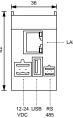
Service / Reset

• **Degree of protection** IP 20 (according to EN 60529) II (according to EN 60335-1) Insulation class

• Operating temperature +0°C ... +40°C • Storage temperature 10°C ... +70°C

#### **Dimensions** [mm]





For more information see the technical documentation,



Code	Composition	License version	KNX Addresses	Scenarios	Logics/Thresholds	Environments	Loads	Cameras	Package
EK-DEL-SRV-BAS-TP	Delégo server	BASIC	400	100	100	Unlimited	Unlimited	Unlimited	1 pcs.
EK-DEL-UPGR-BA	Unarada Liganoa	ADVANCED	1200	100	100	Unlimited	Unlimited	Unlimited	
EK-DEL-UPGR-BP	EK-DEL-UPGR-BP Upgrade License	PREMIUM	2500	100	100	Unlimited	Unlimited	Unlimited	
EK-DEL-VOIP	Voucher	Voucher to enable the	e module IP video interc	om					
EK-DEL-INTRDET	Voucher	Voucher to enable the	e module Intrusion dete	ction					
EK-DEL-MODBUS	Voucher	Voucher to enable the	e module Modbus (> 30	registers)					





# **Delégo panel** SUPERVISION

#### **Description**

The touch-panels of the Delégo series are a must-have instrument for the management of the modern connected building. Through these you can control all the automation functions of the premises: lights, roller shutters, burglar alarm, climate control, building management, etc. energy saving and multimedia system. Delégo touch-panels are available in two cuts, with 5" and 8" capacitive display, with black frame. The elegance of the minimalist design, the exceptional graphic of the HD display and the outstanding performances, make Delégo panel ideal for home, office, businesses, and any other area of installation.

#### Main features

• Overall dimensions (mm) 81 x 132 x 14 (5") - 224 x 149 x 16 (8") • Wall-mounting box (5") 2M wall-mounting box (Ex: Bticino mod. 502E) Round box diameter 60 (Ex: Gewiss mod. 24232)

3M wall-mounting box (e.g. BTicino mod. 503E) (\*)

• Wall-mounting box (8") Bticino mod. 16204

alternatively flush-mounted box type 504

(please contact Ekinex technical support for information)

 Orientation Portrait 5" or Landscape 8" Power Over Ethernet (POE) Power supply Typology LCD HD IPS 5" - LCD HD IPS 8"

 Resolution 1280 x 720

 Colours 16.7 million colours (true colour)

 Brightness 400 nits

 Touch screen Capacitive with multi-touch & gestures support High definition with built-in 2W amplifier Speakers Microphone Integrated high resolution with echo canceling

 Gyroscope Automatic orientation detection Integrated proximity detection Proximity Brightness Integrated ambient light sensor

 Connectivity LAN 100baseT

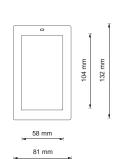
 Certifications CE / FCC class B / FCC part15 / ROHS / WEEE

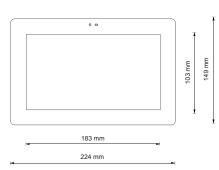
 Operating System Android 6

Possibility of customization through aluminium frame (5" version only)

Code	Composition	Package
EK-DEL-5PAN	Delégo panel 5" - black panel	1 pcs.
EK-DEL-8PAN	Delégo panel 8" - black panel	1 pcs.
EK-DEL-5FR	Aluminium frame for 5" Delégo panel	1 pcs.

## **Dimensions** [mm]





For more information see the technical documentation. download from www ekinex com



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# **Planner** TOOLS

#### Offer request

Planner is a great business tool. You can request this offer and conditions for devices of your project by clicking on the icon "Request a quote". The network of Ekinex® will contact you and will answer quickly and with the best offer for your project.

For further information contact: sales@ekinex.com

#### Description

PLANNER is a configuration software made available on its website from Ekinex®. This tool, from the easy to use and driven, allows the end user and the designer to identify products that are perfectly suited to the needs of the project. With PLANNER you can also choose and test different combinations of buttons and civil series finishes to get closer as possible to the desired result. PLANNER allows you to fill out a simple list of devices to be used or they can be placed in a preview of a useruploaded file, in order to recreate the actual conditions of the future installation. Finally, the software allows you to create a database of your projects with the ability to retrieve and modify projects at all times. When you finish using PLANNER allows you the chance to ask Ekinex® the best trade offer to the list of materials in your project

#### Use in 4 steps

#### 1) ADD A PROJECT

From the Ekinex® site, reach PLANNER by following this link: planner.ekinex.com/en/. At this point you can decide whether or not to insert a map (jpeg, gif, png, pdf image format); in any case you will be asked to give a name to your project, so that you can identify it later.

#### 2) SELECT DEVICES, MODELS AND FINISHING

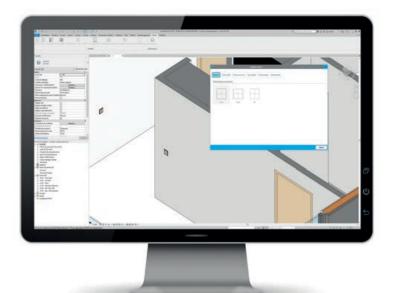
PLANNER guides you on the page where you can find a list of products and create a list of devices to be installed in the system. All the wall-mount devices and DIN-Rail mount modules can be placed on the image of the plan if previously inserted.

#### 3) GET THE LIST

PLANNER gives you the ability to export and manage the list of chosen devices, to be able to control the features chosen.

#### 4) SAVE THE PROJECT

By clicking on "save changes", you will save the positions and changes made. You can also print the project and export the list of products in pdf format.



#### Description

BIM stands for Building Information Modeling and indicates a methodology aimed at optimizing and managing the design and construction of a building.

The BIM is therefore used mainly in the construction sector to promote a working method that involves the generation of a building model that can also manage the data of the entire life cycle through multi-dimensional virtual models generated digitally by means of specific software.

A BIM can contain any information about the building and its parts. The most commonly collected information is geometry, technical and mechanical data, electrical data, material specifications, financial, energy and environmental assessments.

#### What are the benefits of bim in home automation and construction?

The role of BIM in the construction industry is to support collaboration between the different actors involved (designers, builders, architects, clients) and integrate the design and simulation processes into a single model that can manage all phases of the life cycle of the building.

The main benefit of adopting the BIM methodology is the 3D representation during the design phase, which speeds up processes, reduces delivery times and allows errors and inaccuracies to be detected first. The greater efficiency in sharing information and a more precise control over all the processes involved, also make it possible to contain costs and schedule in advance maintenance operations.

The fields of BIM related to technology allow the management of complex projects such as home automation and the willingness of the customer to control the building. During the design phase it is already possible to simulate the integration of the different systems and the control of the possible scenarios in a 3D environment, giving all the professionals involved the opportunity to work together without data or process conflicts.

# Bim 2100T

#### Software

The BIM library is available in Autodesk Revit® format, by installing our **Ekinex BIM** Content Creator software, a real advanced configurator of the product range that will be enriched with future updates and expansions.

For further information:

ekinex.com/en/bim/library-wall-mount.html









# **Pocket Box**

TOOLS



# **Color Box Pro**

100

## Description

Pocketbox is a small and versatile tool that allows you to present Ekinex products in their natural size. Inside the box there are 19 1:1 scale cardboard models complete with description and QR code. Pocketbox is a small and versatile tool that allows you to present Ekinex® products in their natural size.

For further information: sales@ekinex.com

#### **Order information**

Code	Package	Weight
EK-POC-BOX-EN	1 pcs.	0.109 Kg

# **Color Ring**



## Description

Color Ring is a ring equipped with rectangular keys made of plastic, metal and Fenix NTM® in real size that allows you to evaluate the chromatic combination between the button and the wall.

For further information: sales@ekinex.com

## Order information

Code	Finishing	Package	Weight
EK-CC-MET	Metal		0.152 Kg
EK-CC-FEN	Fenix NTM®	1 pcs.	0.117 Kg
EK-CC-PLA	Plastic		0.032 Kg

## Description

Color Box Pro is a finishing folder that contains a working KNX button equipped with 12 different materials, colours and button types. It is available in two versions: a folder is fully dedicated to the Fenix NTM® material, the other contains 6 plastic and 6 metal samples.

For further information: sales@ekinex.com

#### Order information

Code	Finishing	Package	Weight
EK-CBP-NTM	Fenix NTM®	1 200	1.332 Kg
EK-CBP-PLA-MET	Plastic and Metal	——— 1 pcs.	1.332 Kg



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**Style Box** 

# 8888

**Tech Case** 

## Description

Stylebox is a presentation box that contains one or more Ekinex devices declined in different colours and finishes to evaluate the different colour and aesthetic solutions available.

For further information: sales@ekinex.com

Code	Version	Package	Weight
EK-SB4-FF-FORM	Style Box FF series - Form		
EK-SB4-71-DEEP	Style Box 71 series - Deep		0.500 Kg
EK-SB4-71-SURFACE	Style Box 71 series - Surface		0.300 kg
EK-SB4-20VENTI	Style Box 20venti series		
EK-SB4-5PAN	Style Box Delégo panel 5"	1	1.500 Kg
EK-SB4-CRO-CBM	Style Box Metal HT (Chrome/Black metal)	1 pcs.	
EK-SB4-COP-CHA	Style Box Metal HT (Copper/Champagne)		
EK-SB4-PWS-MIT	Style Box Prese elettriche/USB (MIT)		0.500 Kg
EK-SB4-PWS-MES	Style Box Prese elettriche/USB (MES)		
EK-SB4-VA2	Style Box Eséguo		

Description

Tech Case is an ideal solution to support KNX training (basic, advanced, hvac) and product presentations. Tech Case is made of a shock-resistant housing and is equipped with an integrated trolley system that makes it suitable for business travels. Tech Case is delivered with connected Ekinex devices and preinstalled application programmes.

For further information: sales@ekinex.com

Code	Version	Package	Weight
EK-TCB-TP	basic	1	11.000 Kg
EK-TCA-TP	advanced	—— 1 pcs.	12.000 Kg



**Style Case** 

For further information: sales@ekinex.com

Style Case was thought to display the Ekinex® wall-mounting devices, appreciate the feel of materials and colours, test the effect on different wall backgrounds. It has four drawers for the different product lines (one of them is equipped with functioning devices) containing demo-versions of pushbutton and thermostats. Style Case also includes an array of pushbutton faceplates as a colour sampler; the front lid hosts a pouch for catalogues or note sheets. The suede leather belt provides for a convenient carrying handle.

Code	Package	Weight	
EK-SC3-01	1 pcs.	9,300 Kg	

Note: The composition of Ekinex devices may change depending on availability

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# **Projecting, configuration and commissioning**

TECHNICAL SECTION

The Ekinex® home and buildings automation system was developed in accordance with the KNX open standard; therefore, the planning and the commissioning of a system as well as the configuration of its devices can be carried out easily by means of a PC and the ETS® software. The software allows to program Ekinex® devices, as well as thousands of other interoperable devices produced by companies which are members of KNX Association. All is needed to use Ekinex® devices in a system project, is the download from the www.ekinex.com website of either the application programs general file, the Ekinex® product database containing software for all devices, or the single, specific-application program as necessary. After importing product data into the internal ETS® database, one may start laying out the home automation project.

The first activity required consists of assigning a name to the project, along with general descriptive information, which will permit to re-use the same project without problems, even after a long time. The next step is to define the building's structure and the topology required by the home automation project. The devices are looked up in the database, copied into the structure and assigned a unique id, corresponding to their physical address. At this point, each device may be configured independently, by setting a series of parameters, which vary according to the function to be performed. For example, independent function can be attributed to each different channel of a single push-button command, e.g. switching on or off an electrical appliance, a dimmer for a light source or the opening/closing control for a roll-up shutter. The next step is to define the interaction between multiple devices; unlike traditional installations, where this is achieved by physically laying cables, in a home automation system this action is performed by means of virtual connections generated by the ETS® program.

It is then possible to upload the application program to each device, thereby including all the settings required to perform the expected function within the system. ETS® also has utility functions for diagnoses and error search; for instance, it is possible to verify physical addresses and to check the status of each single devices on the connected bus. Lastly, the program can produce the necessary project documentation for the end user, so that it may be further expanded and adapted in the future. The constant attention of KNX towards the world of professionals developed into a wide offer of training courses. Courses for experts have been offered for years in numerous countries and KNX constantly monitors the activity of all certified training centres, where it is possible to become KNX Partners. The professional role of a KNX Partner is to guarantee a high level of system expertise in order to achieve the best results. Among KNX Partners are designers, installers and system integrators, who offer expert advice to plan, install, run and maintain a KNX-standard control system for homes and buildings.



In order to become KNX Partner, one must withstand a 40-hours theory and practise exam at a KNX-certified Training Centre. A complete list of KNX Partner is available on the website of KNX Association (www.knx.org).





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# **KNX technology**

TECHNICAL SECTION

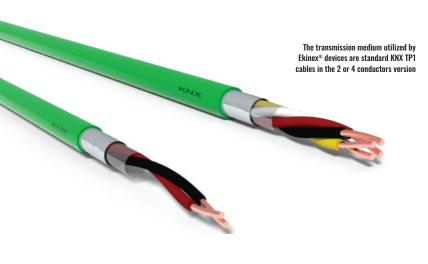
KNX systems realize decentralized building automation: therefore, neither a central unit nor a supervising PC for control are required. Each device is fitted with an electronic part, which allows bus communication with all other devices on the bus, processes the received information or transmits the stored working parameters and the logics required for the completion of its task.

#### Communication

Communication between KNX devices occurs in digital form, by means of serial transmissions of organized information, called "telegrams". A telegram includes the main information to be transmitted – e.g. a switch on or switch off command, a numerical value corresponding to a physical size detected by a sensor, etc. – and a series of accessory information required to guarantee an efficient, error-free communication. Any telegram, which is not duly received, can be repeated up to three times by the transmitting device. In order to avoid collisions between telegrams being sent out at the same time along the same bus from different devices, the CSMA/CA (Carrier Sense Multiple Access / Collision Avoidance) protocol is used. The information transmission speed occurs at 9600 bit/s, which makes it possible to avoid bus line resistor terminations.

#### **Transmission medium**

The family of Ekinex® TP bus devices uses twisted-pair signal cables to transmit data; the correct communication is guaranteed by employing bus cables with 1 or 2 conductor pairs made in accordance with KNX Association's TP1 specifications.



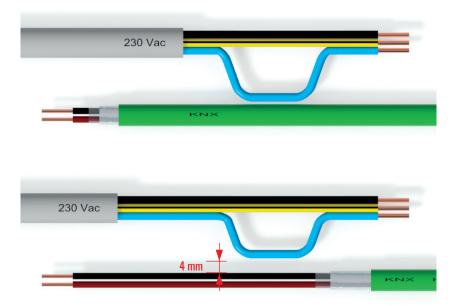
#### **Connecting the devices**

Ekinex® devices are connected to the signal bus cable by means of the KNX bus termination block. The termination block and the cable form part of a convenient, fast-connection system aimed at eliminating errors: the cable has rigid connectors and the termination block is fitted with holding springs (instead of screws); besides, the termination block is formed by two elements having the same colour-coding (black/red) of the conductors to be connected. Each stripped bus conductor will be simply inserted in place, where it will stay firm thanks to the provided holding spring. Each polarity has 4 connection areas and the termination block may be extracted from its seat: Thanks to these two characteristics, the removal of any device from the bus cabling does not determine the interruption of communications with the remaining devices. The termination block is also used for branching cable segments on the same bus.



#### Installation

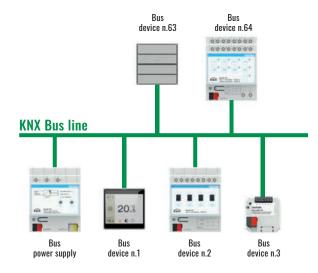
KNX bus cables can be laid underneath the 230 Vac power cables along the same duct, provided they are kept isolated. Should the insulating sheath be removed, a distance of at least 4 mm between cable types must be guaranteed.



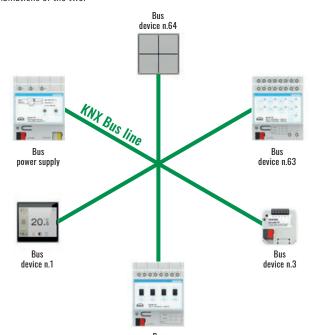
#### Topology

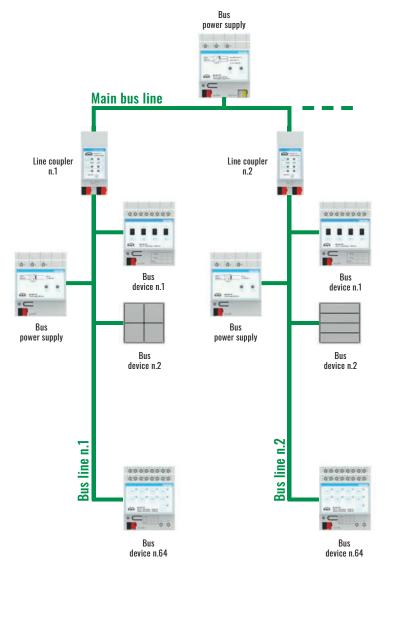
The smallest KNX system may include a single bus line along which up to 64 devices can be connected. The line must be equipped with the special bus power supply, which provides the necessary SELV voltage for the system to work. The effective number of bus devices that can be connected to the line is determined at project level and may vary depending on the voltage supplied by the bus power supply and on the electrical absorption of each device on the bus. Since each Ekinex® device can process multiple functions, a single-bus line can suffice to control an apartment, a detached house or even a larger building with a limited number of bus functions.

Adding line couplers, allows the system to expand to accommodate for larger buildings and/or higher numbers of required bus functions. Connecting more lines between them by means of couplers and a backbone line constitutes an area. An area is formed by a backbone line, up to 15 secondary lines and by all the devices connected along them. A unique number between 1 and 15 characterizes each secondary line. With little less than 1000 connectible KNX devices, an area permits the handling of a medium/large size system.



Next to a simple single-line configuration, a bus line can be subdivided into more segments, thus obtaining a star-shaped or a tree-shaped topology, or any combinations of the two.



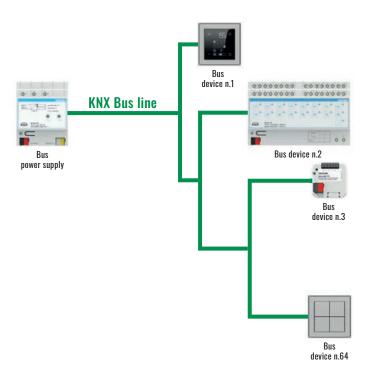


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# **KNX technology**

TECHNICAL SECTION

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It is necessary to respect KNX topology prescriptions while designing the system, in order to guarantee communication within the system:

- the maximum allowed line length is 1000 m, including all branches;
- up to 64 bus devices can be connected to one line;
- the maximum distance between 2 devices is 700 meters;
- no bus device may be more than 350 meters apart from a bus power supply;
- in case of high numbers of bus devices (> 30) along limited sections lengths (10m), a second bus power supply can be installed, provided it sits at least 200 meters away from the first.

Should the demand increase, a KNX system can be further extended by connecting one another up to 15 areas. The main lines of each single area are connected to a backbone line by means of area couplers. Areas and main lines are numbered 1 to 15, while the backbone line bears number 0. The most extended KNX system permits to connect tens of thousands of devices, thus satisfying the necessities of very large buildings.

## **Device addressing**

The bus is a shared communication medium and each connected device must be exclusively distinguished from all others. The ETS® program takes care of that by assigning a physical address to each device; the address is represented in the form "area.line.device". Thanks to that, the topology of the entire system is mirrored into the devices' physical addresses, making it easy to locate a device in the whole topology, by simply knowing its physical address. For instance:

# 3.5.12 is the physical address of the bus device number 12, installed along line 5 in area 3 $\,$

#### 7.11.4 is the physical address of bus device number 4 on line 11 in area 7

A line coupler connects a secondary line to the backbone line; the device forms an integral part of the secondary line and conventionally assumes the device number "O". The physical address of a line coupler can be, for instance:

# 3.5.0 is the physical address of the coupler connecting the secondary line n. 5 to the main line of area $\bf 3$

The area coupler connects an area's main line to the backbone line; the device is part of the main line and conventionally assumes device number "0" and line number "0". The physical address of an area coupler is, for example:

# 3.0.0 is the physical address of the coupler connecting the main line of area 3 to the system's backbone line

# **KNX** technology

TECHNICAL SECTION

The physical address of the transmitting device is always present in a telegram, working as the "source address" of the message.

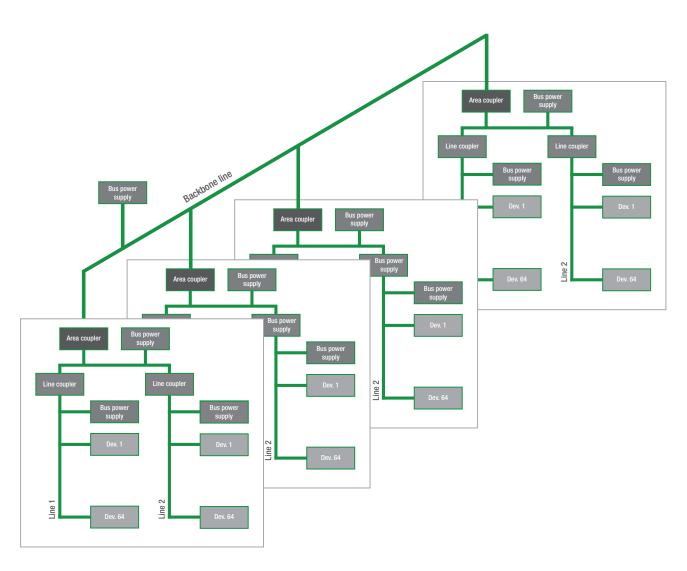
The physical address (area.line.device) is used when programming and diagnosing bus devices.

To coordinate the performance of several devices over a particular bus function, a so-called group address is used: this is represented by a two levels structure "main group/subgroup" (e.g. "2/15") or by a three level structure "main group/middle group/subgroup" (e.g. "2/6/54"). This type of address is almost exclusively used as a "destination" address for telegrams.

**2/6/54**The group address is used when commanding and controlling the bus devices.

#### Power supply

KNX systems work with the 30 Vdc SELV (Safety Extra Low Voltage) voltage, supplied by the bus power supply present on each line; this power feeds the electronic parts of the devices and provides for the transmission of information over the bus. Normally, KNX commands and sensors are exclusively connected to the bus line, while parts of KNX actuators require a separate 230 Vac power supply for commanding connected loads. Some devices may require an auxiliary SELV power supply for their operation.





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# **Normative references**

TECHNICAL SECTION

Norms are, by nature, voluntary application dispositions; anyhow, complying with norms constitutes the best guarantee in the choice of a product for designers, installers and end users. In fact, norms are "state-of-the-art" developments in their technology sector and precisely define quality, performance and safe conditions of use for a product. Beyond safety norms regarding all products, the systems for the control of houses and buildings are more often requested to integrate energetic

efficiency models, consistently abiding to recent tendencies aiming at global system-envelope system efficiency, more so than seek optimization of single parts. KNX represents an open and interoperable system for the automation of houses and buildings, normed at global level thanks to its conformity with international (ISO/IEC 14543-3), European (CENELEC EN 50090, CEN EN 13321-1 e 13321-2), Chinese (GB/Z 20965) and American (ANSI/ASHRAE 135) norms.

Norm	Title	Notes
ISO/IEC 14543-3	Information technology - Home electronic system (HES) architecture	In sight of the great interest towards KNX compatible products and the technology by them consolidated well beyond European markets, the KNX Association took all necessary steps to obtain approval of its own KNX standards at international levels. At the end of 2004, active CENELEC member countries proposed the European EN 50090 norm for ISO/IEC standardization. In November 2006, the KNX protocol and all transmission media (TP, PL, RF and IP) became approved and published under the international ISO/IEC 14543-3-x normative.
EN 50090	Home and Building Electronic Systems (HBES)	In December 2003, the KNX protocol and the two TP (twisted pair) and PL (power line) transmission media were approved by the European national committees and ratified by the CENELEC Bureau Technique under the European EN 50090 norm. The transmission medium KNX RF (radio frequency) was approved the month of may 2006.
CEN EN 13321-1	Open data communication in building automation, controls and building management. Home and building electronic system.  Product and system requirements	Since KNX supplies more and more technical specifications used not only for the automation of electrical devices, but also for HVAC (Heating, Ventilation and Air Conditioning) applications, the KNX Association submitted its specifications to CEN for publishing a European normative for building control systems. CEN accepted the proposal and KNX specifications where published by CEN as EN 13321-1 and EN 13321-2.
CEN EN 13321-2	Open data communication in building automation, controls and building management. Home and building electronic systems. KNXnet/IP Communication	
GB/Z 20965	Control network HBES technology specification - Home and building control	The great interest demonstrated by China for KNX products and technology was the main reason for the KNX Association to have the international ISO/IEC 14543 norm translated into Chinese. The Chinese standardization committee SAC TC 124 introduced the KNX standard into China and adopted it under the GB/Z 20965 norm in July 2007.
ANSI/ASHRAE 135	BACnet - A Data Communication Protocol for Building Automation and Control Networks (ANSI Approved)	Even the interfacing of KNX with other automation systems is now internationally standardized: the norms US ANSI/ASHRAE 135 and ISO 16484-5 support mapping between KNX and BACnet.
CEI EN IEC 63044-3	2018 Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS)	Part 3: Electrical safety requirements
CEI EN IEC 63044-5-1	2017 Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS)	Part 5-1: EMC requirements, conditions and test set-up

# **Normative references**

TECHNICAL SECTION

## The EN 50090 norm

The European EN 50090 norm "Home and Building Electronic Systems (HBES)" was developed at CENELEC from the TC 205 Technical Committee, specifically established in 1996 to write norms covering all relevant aspects of electronic systems dedicated to the control of homes and buildings. Parts of the norm were progressively released and published by the standard committee of several European countries giving birth to the national norms about the electronic systems for homes and buildings.

Beyond the requirements for the development of HBES systems and components, aimed at builders, the norm also defines the criteria for designing, installing and testing an HBES system. The KNX standard is entirely compliant with the EN 50090 norm

Part	Home and Building Electronic Systems (HBES) - Title of the part	Year
EN 50090-1	Part 1: Standardization structure	2011
EN 50090-2-1	Part 2-1: System overview - Architecture	1998
EN 50090-2-2/A2	Part 2-2/A2: System overview - General technical requirements	2008
EN 50090-2-3	Part 2-3: System overview - General functional safety requirements for products intended to be integrated in HBES	2006
EN 50090-3-1	Part 3-1: Aspects of application - Introduction to the application structure	1997
EN 50090-3-2	Part 3-2: Aspects of application - User process for HBES Class 1	2004
EN 50090-3-3	Part 3-3: Aspects of application - HBES Interworking model and common HBES data types	2010
EN 50090-4-1	Part 4-1: Media independent layers - Application layer for HBES Class 1	2006
EN 50090-4-2	Part 4-2: Media independent layers - Transport layer, network layer and general parts of data link layer for HBES Class 1	2005
EN 50090-4-3	Part 4-3: Media independent layers - Communication over IP	2008
EN 50090-5-1	Part 5-1: Media and media dependent layers - Power line for HBES Class 1	2005
EN 50090-5-2	Part 5-2: Media and media dependent layers - Network based on HBES Class 1, Twisted Pair	2005
EN 50090-5-3	Part 5-3: Media and media dependent layers - Radio frequency	2007
EN 50090-7-1	Part 7-1: System management - Management procedures	2005
EN 50090-8	Part 8: Conformity assessment of products	2001
EN 50090-9-1	Part 9-1: Installation requirements - Generic cabling for HBES Class 1 Twisted Pair	2005
CLC/TR 50090-9-2	Part 9-2: Installation requirements - Inspection and testing of HBES installation	2009

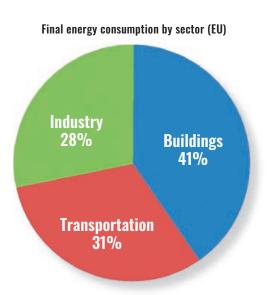


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# **Energy efficiency in buildings**

TECHNICAL SECTION

Based on the fact that buildings in Europe account for over 40% of total energy consumption, the European Union intensified its efforts over the last years so that buildings be projected and re-qualified, thereby restraining consumptions as much as possible. The declared objective is to reduce energy dependence and the emission of polluting and climate-changing gases. The starting point was the publishing of Directive 91 in 2002 about energy performance in building (known as EPBD – Energy Performance Building Directive) - a mandatory implementation for European Union countries – which introduced important new facts, such as the energy performance certification, aimed at informing users about the building's energy performance and leaving up to national measures the identification of the most appropriate interventions needed to increase energy efficiency. The innovative approach required coordinated interventions on the envelope-system integrated system.



#### The EN 15232 norm

Following the Directive 2002/91/EC, the next step is to pay attention to efficiency recovery in individual behaviours and to concentrate on the relationship between the rate of automation in a building's plan and the corresponding achievable energy saving. This has brought CENELEC to publish the EN 15232 norm, later acknowledged by the standard committee of several European countries. The norm evaluates the savings achievable through the adoption of growing automation levels – both during planning and energy verification operations – and to place buildings in one of four energy efficiency classes: from A (the most efficient) to D (the least efficient).

BACS: Building Automation Control System TBM: Technical Building Management System



#### A class

A class includes highly energy-efficient buildings, fitted with control and automation systems (BACS) and technical system management (TBM), characterized by high levels of precision and completeness in terms of automatic control.

#### B class

B class includes energetically advanced buildings, fitted with control and automation systems (BACS) and technical system management (TBM) allowing a centralized-type of control.

#### C class

C class includes buildings, which are standard from an energy point of view and are fitted with basic control and automation systems (BACS). This class is also used as a reference for the calculation of efficiency factors.

#### D class

D class includes buildings, which are not energy-efficient, having technical systems exclusively of a traditional type, lacking any kind of automation.

The EN 15232 norm also specifies:

- a structured list of regulation functions, automation and technical management which have a certain effect on the energy efficiency of buildings;
- a method to define minimal requirements to apply for regulation, automation and technical management of buildings of different complexity;
- detailed methods to evaluate the effects of such functions on a specific building;
- a simplified method to reach a first impact estimate of such functions on representative buildings.



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#### **Quality certification**

The Ekinex® products described in this catalogue are developed and built in conformity with the quality management system adopted by Ekinex S.p.A. and certified by DNV – Det Norske Veritas – in accordance ISO EN 9001:2008.

### Access through mobile devices

All QR\* codes appearing on product catalogue pages, provide quick access - at any time and from any place - to technical documentation or any other web content published at www.ekinex.com, by using mobile devices such as smart-phones or tablets. In order to decode QR, one simply must upload to his mobile device any freeware application found online.

(\*) QR Code® is a trademark registered by Denso Wave Incorporated



#### **Documentation on the Web**

All tech documents for Ekinex® devices are available for download from the www. ekinex.com website, without requiring any registration. The search is free, and products may be searched by their code, family or type. The same documentation can quickly be accessed from within the product pages, too.



#### **ETS** application software in several languages

All Ekinex  $^{\circledR}$  devices have ETS application software in 4 languages: English, German, French and Italian.

#### Single packaging

Ekinex® devices are individually protected against shock & dust by means of a dedicated packaging. The label clearly describes the contents and bears both an (EAN) bar-code and a QR. Inside the packaging, the instructions sheet supplies information for the installation of the product.

# **General terms of sale**

#### Valid for the Ekinex® product range.

#### 1. DEFINITIONS

- 1.1 In these General Terms and Conditions of Sale, the terms below shall have the following meaning:
- a) "Manufacturer": Ekinex S.p.A, with registered office in Vaprio d'Agogna (28010 NO), via Novara 37;
- b) "Purchaser": professional customer, sole proprietor or company, requesting the purchase of Ekinex® products:
- c) "Party" or "Parties": Ekinex S.p.A. and the Buyer;
- d) "Order" or "Orders": the order or purchase orders concerning Ekinex® products issued by the Purchaser to Ekinex S.p.A.;
- e) "Products": all Ekinex®-branded products for home and building control, which can be found in the Ekinex® product catalogue in printed and/or electronic form and on the website www.ekinex.com;
- f) "General Conditions": the general conditions of sale set out below.

#### 2. SCOPE OF APPLICATION

- 2.1. These General Terms and Conditions of Sale govern all purchase contracts concerning Ekinex® products concluded between the Parties;
- 2.2. The Buyer may not invoke or object to any conditions other than those contained in the General Conditions. Consequently, any conditions specified in writing shall have no validity. by the Buyer on the Order, or at any other stage of the contractual negotiation, and also after acceptance or knowledge of the General Conditions, as well as any other terms and conditions that the Buyer may have. General conditions of purchase of the Buyer. The execution, even partial, of the Order by Ekinex S.p.A. or any other fulfilment by Ekinex S.p.A. towards the Buyer is not valid and does not apply to the Buyer. Shall be construed as tacit or implicit acceptance of any general terms and conditions other than these Conditions, unless expressly accepted in writing by Ekinex S.p.A. Even in the event of derogations agreed upon in writing, these conditions shall continue to apply for the parts not expressly derogated.
- 2.3. The General Terms and Conditions are only valid for contractual relations between Ekinex S.p.A. and professional traders, and therefore Legislative Decree no. 206 of 6 September 2005shall not apply. (Consumer Code) and subsequent amendments.
- 2.4. Ekinex S.p.A. reserves the right to amend these General Terms and Conditions of Sale at any time, which shall be communicated to the customer without prior notice. Each contract shall be governed by the General Terms and Conditions of Sale in force at the time the order is placed by the Customer.

#### 3. FORMATION OF THE CONTRACT

- 3.1. The acceptance by the Buyer of the offer or the confirmation of the order by Ekinex S.p.A., in whatever manner, entails the application of these General Conditions of Sale.
- 3.2. The offers made by agents, representatives and commercial auxiliaries of Ekinex S.p.A. are not binding for Ekinex S.p.A. until they have been confirmed by Ekinex S.p.A. in writing. The offers of sale made by Ekinex S.p.A. are valid for 30 days from the date of their formulation and are limited to the complete supply of what is listed therein. After the expiry of this period, the offer to sell shall no longer be valid.
- 3.3. The Order sent by the Purchaser to Ekinex S.p.A. constitutes an irrevocable contractual proposal binding for a period of three months, starting from the moment Ekinex S.p.A. becomes aware of it.

  Within the aforementioned three months Ekinex S.p.A., at its sole discretion, reserves the right to accept or refuse the Order, informing the Buyer accordingly.
  - In the event that the order confirmation of Ekinex S.p.A., differs from the order sent by the Buyer with regard to the quantity of products, prices, discounts and delivery methods, this confirmation shall be considered as a counter proposal by Ekinex S.p.A., which must be expressly accepted by the Buyer in order for the contract to be considered concluded.
- 3.4. By sending the order, the Customer acknowledges and declares that he/she has read all the information provided to him/her during the purchase procedure and that he/she fully accepts these General Terms and Conditions of Sale.
- 3.5. Acceptance is expressed by a confirmation e-mail sent to the e-mail address indicated by the Customer. The confirmation message shall contain the date and time of the order and a 'Customer Order Number' to be used for any further communication with Ekinex S.p.A.. The customer may monitor the status of the order at any time by contacting Ekinex S.p.A. at the following telephone number +39 03211828980 or at the following e-mail address sales@ekinex.com.
- 3.6. If the Buyer cancels the Order before its acceptance or execution by Ekinex S.p.A., Ekinex S.p.A. may ask the Buyer to reimburse the costs of the Order.

#### 4. PRODUCT AVAILABILITY

- 4.1. Ekinex S.p.A. reserves the right to change the Ekinex® product catalogue and the technical characteristics of the products without prior notice.
- 4.2. If one of the requested products is not available, Ekinex S.p.A. undertakes to contact the Customer within 20 working days from the time of placing the order, communicating by e-mail, to the email address provided by the customer, the unavailability and possible alternative solutions. In this case, the customer can wait for the delivery of the order, if Ekinex S.p.A. believes that it can be found on the market. The product is not available or cancel the order and receive a refund of any price already paid.
- 4.3. Before purchasing each product, carefully check the installation requirements according to the regulations of the country where the installation will take place and compatibility according to the design specifications.



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# **General terms of sale**

#### 5. PAYMENT METHODS

5.1. The prices of the products refer to the price list in force at the time of acceptance of the sale offer by the Buyer or at the time Ekinex S.p.A. issues the order confirmation.

Ekinex S.p.A. reserves the right to modify the current price list at any time, after written notice to the Buyer, in the event of increases in the cost of raw materials,

labour costs or any other factor leading to a significant increase in production costs. The prices of the products are always Ex-Carrier (FCA Incoterms 2010) and therefore the risks related to

the supply shall pass to the Buyer at the time the products are handed over to the carrier, unless otherwise agreed upon in writing between the parties.

- 5.2. Payments must be made in accordance with the relevant information contained in the sales offer or order confirmation. Payments and any other sum due for any reason to Ekinex S.p.A. shall be made at its domicile and, unless otherwise agreed, in Euros.
- 5.3. Any delay or irregularity in payment gives Ekinex S.p.A. the right to
- a) suspend ongoing supplies, even if not related to the payment in question:
- b) vary the terms of payment and discount for subsequent supplies, including by requiring advance payment or the provision of additional guarantees;
- c) demand, from the due date for payment and without the need for formal notice, default interest on the sum still due, at the rate provided for by the rules of the law currently in force for commercial transactions (in particular Legislative Decree 231/2002 and subsequent additions), without prejudice in any case to the right of Ekinex S.p.A. to claim compensation for any additional costs incurred damage suffered. Moreover, in the above mentioned cases, any amount due to Ekinex S.p.A. for any reason whatsoever becomes immediately due. The Buyer shall be obliged to pay the products in full even if exceptions, disputes or controversies arise which will only be settled after payment of the amount due;
- d) terminate the contract pursuant to Article 1456 of the Italian Civil Code by notifying by registered letter with return receipt or certified e-mail the intention to exercise this right.

  The termination shall be effective for both parties from the date of receipt of the communication.

#### 6. TRANSPORT AND DELIVERY OF PRODUCTS

6.1. The delivery of the goods is Ex-Carrier (FC Incoterms) and therefore the risks relating to the supply pass to the Buyer at the moment the products are handed over to the carrier, unless otherwise stated written agreements between the parties.

The delivery terms, unless expressly agreed otherwise, are purely indicative. In the event that the execution of the order is prevented by the occurrence of circumstances of force majeure, by the failure to regularity of supplies of raw materials or other unforeseeable circumstances occurring, the delivery terms shall be deemed extended and new terms shall be determined by mutual agreement between the parties, without any compensation and/or damages being awarded for the delay in delivery.

6.2. Upon delivery of the goods by the courier, the Customer is obliged to check that the contents of the package delivered correspond to what was ordered and indicated in the invoice sent by email.

Any damage to the packaging and/or to the product or the mismatch between the number of packages and the invoice must be reported within 3 working days of delivery to customer service of Ekinex S.p.A. at the following e-mail address sales@ekinex.com. After the expiry of this period, the customer may no longer make any complaints about the external characteristics of the product delivered as well as on the number of packages received.

#### 7. FORCE MAJEURE

- 7.1 Force Majeure is the occurrence of an event or circumstance ("Force Majeure Event") which prevents a party from performing one or more of its contractual obligations if, and to the extent that, the party who suffers the event feels:
- (a) that such impediment is beyond its reasonable control;
- (b) the event could not reasonably have been foreseen at the time of the conclusion of the contract;
- (c) that the effects of the impediment could not reasonably have been avoided or overcome by the Interested Party.
- 7.2 Where a party fails to perform one or more of its contractual obligations because of the non-performance of a third party, entrusted by the party to perform all or part of the contract, that party may invoke force Majeure only to the extent that the requirements of paragraph 1 are met by both the party and the third party.
- 7.3 In the absence of proof to the contrary, the following events suffered by a party shall be presumed to satisfy the conditions of paragraph 1 of this clause and that party shall only have to prove the existence of the condition in paragraph 1.
- (a) war (whether declared or not), hostilities, invasion, acts of a foreign enemy, extensive military mobilisation;
- (b) civil war, riot, rebellion, revolution, military force or usurpation of power, insurrection, acts of terrorism, sabotage or piracy;
- (c) currency or trade restrictions, embargoes, sanctions;
- (d) acts of authority, whether lawful or unlawful, compliance with laws or governmental orders, regulations, expropriation, confiscation of property, requisition, nationalisation
- (e) plague, epidemic, natural catastrophe or extreme natural events;
- (f) explosion, fire, destruction of equipment, prolonged suspension of transport, telecommunications or power
- g) generalised social conflicts, such as, in particular, boycotts, strikes and lock-outs, white strikes, occupation of factories and buildings.
- 7.4 The Interested Party shall notify the other party without delay of the occurrence of the event.

# General terms of sale

- 7.5 The party who successfully invokes this Clause shall be released from its obligation to perform its contractual obligations, from any liability for damages or other contractual remedy for non-performance, from the time the event inhibits the performance of its contractual obligations, provided that it has been notified without delay. If notice of the event has not been given promptly, the release takes effect from the time when the notice reaches the other party. The other party may suspend performance of its obligations, if any, from the date of the notice.
- 7.6 If the effect of the impediment or event invoked is temporary, the consequences referred to in paragraph 5 shall occur only to the extent and for as long as the impediment or event invoked prevents the interested Party from performing its contractual obligations. The Interested Party shall inform the other Party as soon as the impediment ceases to prevent the performance of its contractual obligations.
- 7.7 The Interested Party shall take all reasonable steps to limit the effects of the invoked event on the performance of its contractual obligations.
- 7.8 If the duration of the invoked impediment has the effect of substantially depriving one or both parties to the contract of what they could reasonably expect under the contract, each party shall have the right to terminate the contract by giving notice to the other party within a reasonable period. The parties agree that, unless otherwise agreed, the contract may be terminated by either party if the duration of the impediment exceeds 120 days.
- 7.9 If paragraph 8 applies, and one of the parties has derived a benefit from the performance of the contract before its termination, it will be obliged to compensate the other party for the value of that benefit.

#### 8. GUARANTEES

- 8.1. Ekinex S.p.A. guarantees the conformity of the Ekinex® products with the legislation and technical standards in force in the EEC.
- 8.2. Ekinex S.p.A. guarantees that the quality and type of the delivered products correspond to the contract and that they are free from defects that could make them unsuitable for the use for which they are intended.

The guarantee for construction defects is limited to those defects of the products that are attributable to defects in the material used or to design and construction problems attributable to Ekinex S.p.A..

All Ekinex® products sold by Ekinex S.p.A. are covered by the warranty for good functioning and the warranty for defects and/or faults in design and manufacture for a period of 24 months and therefore also in accordance with the Consumer Code if the end user is a consumer.

8.3. The warranty operates from the date of delivery of the goods by Ekinex S.p.A., except for the parts that are subject to normal wear and tear. After the expiration of this period, the warranty ceases, even if the products have not been put into operation for any reason at the end user.

Please note that the warranty on the products purchased from Ekinex S.p.A. is subject to the full payment of the products.

- 8.4. The above mentioned warranty is effective on condition that the products have been stored and used in accordance with the instructions in the General Catalogue and the technical data sheets provided by Ekinex S.p.A., that no repairs, modifications or alterations have been carried out without the prior written consent of Ekinex S.p.A. and that the defects found have not been caused by chemical or electrical agents.
- 8.5. The Purchaser shall report any defects in writing no later than 8 days after the delivery of the products, while the report of any hidden defects and/or operating defects (that can only be detected after the use of the product) must be made within 8 days after the discovery of the defect.
- The warranty does not apply in the event of malfunctions of the software installed on the Product, which are due to overloads, electrical phenomena due to atmospheric events, interruptions and/or suspensions of electricity.
- 8.6. The notification of defects, including hidden defects, must be made in writing to Ekinex S.p.A. by sending a communication to support@ekinex.com within the prescribed period, indicating 1) the reference of the invoice with which the product was purchased, 2) the serial number of the product, 3) a brief technical report of the defects or non-conformities found and 4) if the end user is a consumer, the communication with which the latter has complained about the defect.
- 8.7. If the purchaser does not allow Ekinex S.p.A. to carry out any reasonable checks as requested by Ekinex S.p.A. and does not return the defective products to Ekinex S.p.A. within 60 days after delivery, the warranty right is forfeited.
- In order to return the defective products, Ekinex S.p.A. shall, unless otherwise agreed, collect the defective material at its own expense according to the instructions on the day and place agreed upon by the parties. After the return, the defective products shall become the exclusive property of Ekinex S.p.A..
- After the expiration of the above mentioned terms, Ekinex S.p.A. shall consider the latter as forfeited from the warranty and therefore invoice the products sent to replace the defective ones and consequently request the payment of the same.
- 8.8. Ekinex S.p.A., a) supply products of the same type (or equivalent) and quantity of those found to be defective free of charge at the registered office of the purchaser (DAP Incoterms 2010), subject to the return of the replaced products by the customer in the terms and conditions stated in paragraph 7. b) repair the defective products at the customer's premises, in accordance with the terms and conditions stated in paragraph 7. 7; b) repair the defective products if Ekinex S.p.A. does not find the necessity or urgency for an immediate replacement of the same; c) issue a credit note in favour of the Purchaser for an amount equal to the value indicated on the invoice of the returned products.

Ekinex S.p.A. shall only provide in the above ways if the purchaser has done everything within its competence.

Unless otherwise agreed between the Parties, it is understood that all the expenses related to the interventions carried out by the technical assistance of Ekinex S.p.A. shall be borne by the same.

Both in case of replacement and repair of defective products or components, the original warranty period shall continue to run, which shall not be renewed.

It should also be noted that once the correctness of the warranty request has been established Ekinex S.p.A. will only replace the defective products as indicated in this point 7.8, thus excluding that the customer may request the termination of the contract and/or compensation for damages.

8.9 In the event that the defects of the products are not attributable to Ekinex S.p.A., the costs of repair and replacement of the products will be charged to the customer.

The warranty referred to in this article is in lieu of the legal warranties for defects and conformity and excludes any other possible liability of Ekinex S.p.A. arising from the products supplied. In particular, the Purchaser may not make any other claims for damages and Ekinex S.p.A. shall not be held responsible for indirect or consequential damages.



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**General** index

# **General terms of sale**

#### 9. INDUSTRIAL PROPERTY

- 9.1. Ekinex S.p.A. remains the exclusive owner of the patents, drawings, projects and everything used for the manufacture of the Products, which the Purchaser therefore undertakes not to hand over to third parties, reproduce or use. If the manufacture of the Products is carried out by Ekinex S.p.A. upon the specific request and technical documentation of the Buyer, Ekinex S.p.A. shall not assume any responsibility for the infringement of industrial property rights of third parties, which shall instead be the exclusive responsibility of the Buyer, who undertakes to guarantee and keep Ekinex S.p.A. indemnified and unharmed against any claim made against it.
- 9.2. The Purchaser undertakes to use the trademarks of Ekinex S.p.A. only for the purpose of identifying, advertising and selling the Products, and shall refrain from depositing them or having them deposited without the prior written consent of Ekinex S.p.A..

#### 10. TERMINATION AND WITHDRAWAL

- 10.1 The buyer, in accordance with article 1454 of the Italian civil code, must give Ekinex S.p.A. a written notice to comply with the contract within a period of time that is not less than 30 days, before acting to terminate the contract due to non-fulfilment. If Ekinex S.p.A. has started to perform within this period, the buyer shall not be able to terminate the contract. (A termination period for Ekinex may also be included, but the termination for non-payment may be decided on the basis of the obligations imposed on the customer in addition to the payment).
- 10.2 Both parties may withdraw from the contract, however in addition to the provisions of Italian law Ekinex S.p.A. may also withdraw from the contract in the event of a force majeure event as specified in Article 7 of the general terms and conditions of sale prepared by Ekinex S.p.A.

Both parties must therefore communicate their intention to withdraw from the contract by registered letter or certified email and the withdrawal will take effect from the date of receipt of the communication.

#### 10. COMPENSATION FOR DAMAGES

10.1. The liability of Ekinex S.p.A., whether arising from the execution or non-execution of the contract, from the warranty, from an illegal act or from an objective liability, shall not in any case exceed the value of the product to which this liability relates. Under no circumstances shall Ekinex S.p.A. be liable for loss of profit or loss of use or downtime of the product or any associated machinery, for claims by the Buyer and/or third parties relating to the aforementioned damages or for any other indirect or consequential damages.

#### 11. CONFIDENTIALITY

11.1. The Purchaser agrees to (i) treat the information/data/documents/know how/documents received and/or learnt from Ekinex S.p.A. as confidential, (ii) limit the use of such confidential information/documents and the access to them for purposes related to the execution of the contract. Confidential information/documents may not be reproduced without the prior written consent of Ekinex S.p.A., and all copies of such information/documents shall be immediately returned upon request by Ekinex S.p.A..

The above provisions do not apply to information that: (i) is public or becomes public other than by disclosure by the Buyer, its employees or collaborators, or (ii) was in the possession of the Buyer before it was received by Ekinex S.p.A. or (iii) was disclosed by sources that are not subject to the restrictions to which the Buyer is subject regarding its use, or (iv) can be disclosed to third parties based on a written authorization of Ekinex S.p.A.

#### 12. APPLICABLE LAW AND PLACE OF JURISDICTION

12.1. These General Conditions and the related supply contracts shall be governed by Italian law.

The Court of Novara shall have exclusive jurisdiction over any dispute relating to or in any case connected to the contracts to which these General Conditions apply.

#### 13. COVID-19 CLAUSE

- 13.1 By signing this deed, the Purchaser declares that he is aware that the epidemiological emergency in progress due to the spread of the Coronavirus (Covid-19) and the regulations adopted to combat the aforementioned pandemic could have an effect on the fulfilment and execution of orders placed with Ekinex S.p.A..
- 13.2 Ekinex S.p.A. reserves the right to extend the terms, apply additional costs or amend these general terms and conditions of sale in the event that the condition referred to in the previous point occurs, after notifying the Purchaser.

#### 14. CONTATTI

14.1 Indicate Ekinex's contact details + addresses for any communications.

#### 15. VEXATIOUS CLAUSES

15.1 The customer expressly declares that he/she accepts and approves in accordance with articles 1341 and 1342 of the Civil Code the following clauses:

2. Applicable law and competent court; 5. Terms of payment; 6. Transport and delivery of products; 8. Guarantees; 10. Applicable law and competent court; 13 Covid-19 clause.

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## Ekinex® product catalogue - July 2022

The technical information included in this catalogue is to be deemed purely indicative. The company reserves the right to modify any piece of information with no advance notice.

For installation, connection and commissioning of Ekinex® devices, please refer to the related technical documentation.

For the availability of Ekinex® products on your market, please contact the Ekinex® sales department (sales@ekinex.com).

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Giorgio Possenti

Vito Corvasce

# **Contacts**

Ekinex S.p.A.

Via Novara, 37 I-28010 Vaprio d'Agogna NO - ITALY T+39 0321 1828980

info@ekinex.com www.ekinex.com

Ekinex is member of:













