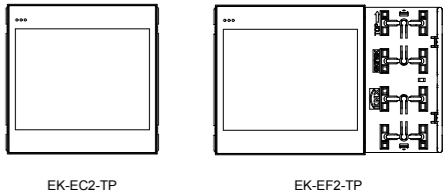


Control and visualization unit Touch&See

Code: EK-EC2-TP
Code: EK-EF2-TP (with 2-fold pushbutton)



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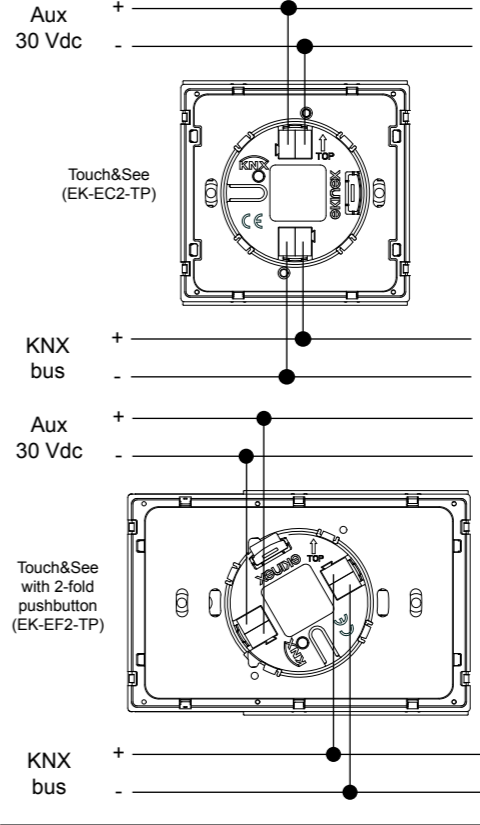
Warning! Incorrect disposal of this product may cause serious damage to the environment and human health. Please be informed about the correct disposal procedures for waste collecting and processing provided by local authorities.

Warnings

- Installation, electrical connection, configuration and commissioning of the device can only be carried out by qualified personnel in compliance with the applicable technical standards and laws of the respective countries
- Opening the housing of the device causes the immediate end of the warranty period
- In case of tampering, the compliance with the essential requirements of the applicable directives, for which the device has been certified, is no longer guaranteed
- ekinex® KNX defective devices must be returned to the manufacturer at the following address: SBS S.p.A. Via Circonvallazione s/n, I-28010 Miasino (NO) Italy

Other information

- The instruction sheet must be delivered to the end customer with the project documentation
- For further information on the product, please contact the ekinex® technical support at the e-mail address: support@ekinex.com or visit the website www.ekinex.com
- ekinex® is a registered trademark of SBS S.p.A.
- KNX® and ETS® are registered trademarks of KNX Association cvba, Brussels



Warning! The electrical connection of the device can be carried out only by qualified personnel. The incorrect installation may result in electric shock or fire. Before making the electrical connections, make sure the power supply has been turned off.

Configuration

For the configuration of the device parameters the corresponding application program or the whole ekinex® product database must be loaded in the ETS program. For detailed information on configuration options, refer to the application manual of the device available on the website www.ekinex.com.

Product code	Application software (## = release)	Communication objects (max nr.)	Group addresses (max nr.)
EK-EC2-TP	APEKEC2TP##.knxprod	320	320
EK-EF2-TP	APEKEF2TP##.knxprod	n.a.	n.a.

Commissioning

For commissioning the device the following activities are required:

- make the electrical connections as described above;
- turn on the bus power supply;
- switch the device operation to the programming mode by pressing the programming pushbutton located on the rear side of the housing. In this mode of operation, the programming LED is turned on;
- download into the device the physical address and the configuration with the ETS® program.

At the end of the download the operation of the device automatically returns to normal mode; in this mode the programming LED is turned off. Now the bus device is programmed and ready for use.

Marks

- KNX
- CE: the device complies with the Low Voltage Directive (2006/95/EC) and the Electromagnetic Compatibility Directive (2004/108/EC). Tests carried out according to EN 50491-5-1:2010 and EN 50491-5-2:2010

Maintenance

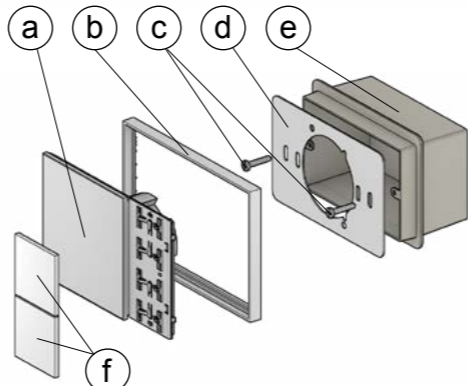
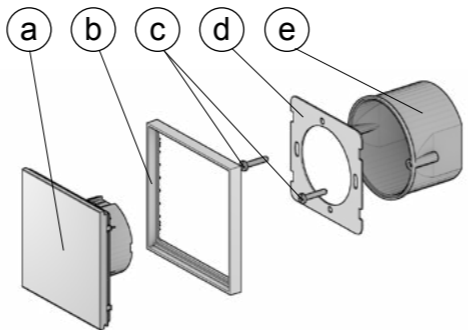
The device is maintenance-free. To clean use a dry cloth. It must be avoided the use of solvents or other aggressive substances.

Disposal

At the end of its useful life the product described in this datasheet is classified as waste from electronic equipment in accordance with the European Directive 2002/96/EC (WEEE), and cannot be disposed together with the municipal undifferentiated solid waste.

the wall box can also be ordered separately using the code shown in the table.

Code	Wall box	Distance between fixing holes	Support
EK-EC2-TP	round or square	60 mm	EK-SMQ
EK-EF2-TP	round or square	60 mm	EK-SMR
	rectangular	85 mm	



- a) Touch&See
- b) Frame of form or flank series (to be ordered separately)
- c) Screws for fixing the support on the wall box
- d) Mounting support for wall box
- e) Wall box
- f) Square rockers 40x40 mm (to be ordered separately)

Note. Programming pushbutton and LED are only accessible from the rear side of the device. It is better addressing the device before the final assembly of rockers and frame. Once the addressing has been performed, the device configuration can be later downloaded without pressing the programming pushbutton.

Switching and display elements

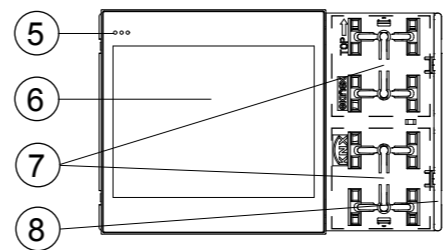
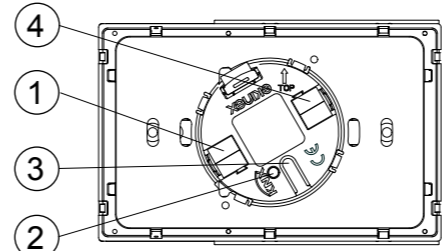
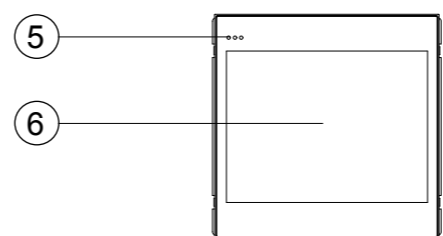
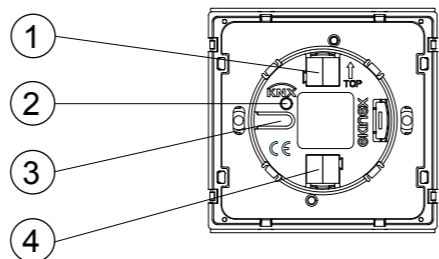
The device is equipped with a programming LED and a programming pushbutton, a control and visualisation surface (touch-screen) and a 2-fold pushbutton (only for EK-EF2-TP version) with four LED for each channel.

Switching elements

- Pushbutton (3) for switching between the normal and programming operating mode
- Touch-screen surface (6) with graphical page configurable for switching, controlling and displaying bus functions
- Mechanisms (7) for independent switching of single or group of loads to be completed with rockers (only EK-EF2-TP)

Display elements

- LED red (2) for indication of the active operating mode (on = programming, off = normal operation)
- Green and blue LED with light guide (8) freely programmable e.g. for feedback status and orientation nightlight



- 1) Connection terminal block for 30 Vdc auxiliary power supply
- 2) Programming LED
- 3) Programming pushbutton
- 4) Connection terminal block for KNX bus line
- 5) Brightness sensor
- 6) Active 3,5" surface (touch-screen)
- 7) Sede per fissaggio tasti
- 8) Light guide (LEDs)

Connection of the KNX bus line

The connection of the KNX bus line is made with the terminal block (black/red) included in delivery and inserted into the slot of the housing.

Characteristics of the KNX terminal block

- spring clamping of conductors
- 4 seats for conductors for each polarity
- terminal suitable for KNX bus cable with single-wire conductors and diameter between 0.6 and 0.8 mm
- recommended wire stripping approx. 5 mm
- color codification: red = + (positive) bus conductor, black = - (negative) bus conductor

Warning! In order to supply the KNX bus lines use only KNX bus power supplies (e.g. ekinex EK-AB1-TP or EK-AG1-TP). The use of other power supplies can compromise the communication and damage the devices connected to the bus.

Connection of the auxiliary power supply

The connection of the 30 Vdc auxiliary power supply is made with the terminal block (yellow/white) included in delivery and inserted into the slot of the housing.

Characteristics of the SELV terminal block

- spring clamping of conductors
- 4 seats for conductors for each polarity
- terminal suitable for cable with single-wire conductors and diameter between 0.6 and 0.8 mm
- recommended wire stripping approx. 5 mm
- color codification: yellow = + (positive) conductor, white = - (negative) conductor

Warning! The connection to the device of an auxiliary power supply with voltage different than 30 Vdc is not allowed.

Configuration and commissioning

Configuration and commissioning of the device require the use of the ETS® (Engineering Tool Software) program V4 or later releases. These activities must be carried out according to the design of the building automation system done by a qualified planner.

Note. The configuration and commissioning of KNX devices require specialized skills. To acquire these skills, you should attend the workshops at KNX certified training centers.

Description

ekinex® Touch&See (EK-EC2-TP) is a KNX S-Mode device for switching, controlling and displaying bus functions. It is equipped with an integrated KNX bus communication module and is designed for wall installation on flush mounting box. Through a 3,5" touch-screen and a user interface organized in a sequence of graphical pages, it is possible to control and monitor KNX actuators and display information received from KNX actuators and sensors in a simple and intuitive way. The device can also operate as a room temperature controller receiving values from a KNX temperature sensor. The device is powered by the KNX bus line and requires an auxiliary power supply 30 Vdc SELV.

The version EK-EF2-TP is provided with an integrated 2-fold pushbutton. Each channel can be freely programmed to carry out 1 or 2 bus functions and is equipped with four LED (2 blue, 2 green) programmable for example as status feedbacks or orientation nightlight. Pressing a rocker, the device sends on the bus a telegram, which is received and executed by one or more KNX actuators depending on the configuration.

Note. The set of functions that may be controlled as well as the information that may be visualized by the device depend on the KNX bus devices connected to the bus installation and the configuration carried out with the ETS software tool.

Graphical pages

The Touch&See unit offers a series of main graphical pages that can be used for switching, controlling, monitoring or displaying bus functions of the room in which it is installed or other rooms controlled by the same KNX installation. The following graphical pages are available:

- home;
- room thermostat;
- switching and control (2);
- clock / calendar;
- meteo information;
- multimedia;
- service functions (presence simulation, timer, alarms).

Sequential access

The transition from one page to the next is done by sliding a finger on the screen from left to right or vice versa.

Direct access

Each graphical page may be directly accessed through the home page whose icon is present in the vertical left stripe.



Main functional characteristics

Depending on the version, the device may be configured to carry out a set of different functions such as:

- room chronothermostat;
- ON/OFF switching of single loads or groups of loads;
- dimming of lighting devices;
- control of motor drives (for roller shutters, blinds, curtains, etc.);
- displaying of the status of auxiliary contacts (from safety/security devices, etc.);
- displaying of time and date of the internal clock or sent by a KNX timer;
- displaying of values sent by a KNX weather station such as temperature, wind speed, rain presence, brightness, etc.
- displaying of alarm messages;
- recalling and saving of scenes;
- sending on the bus of values (temperature, brightness, etc.);
- locking of the functions through password;
- temporary block for screen cleaning.

Other characteristics

- Housing in plastic materiale
- Integrated brightness sensor
- Wall mounting
- Protection degree IP20 (according to EN 60529)
- Classification climatic 3K5 and mechanical 3M2 (according to EN 50491-2)

Code	Weight [g]	Dimensions [mm]
EK-EC2-TP	100 (115*)	82 x 80 x 37
EK-EF2-TP	110 (130*)	122 x 80 x35

(*) Including mounting support

Technical data

- 30 Vdc power supply mediante bus KNX
- Current consumption from bus 18 mA
- SELV 30 Vdc auxiliary power supply

Environmental conditions

- Operating temperature: - 5 ... + 45°C
- Storage temperature: - 25 ... + 55°C
- Transport temperature: - 25 ... + 70°C
- Relative humidity: 95% not condensing

Completion of the device

The device has to be completed with a frame of the ekinex® form o flank series (to be ordered separately). A metallic support, a protection for construction site and the terminals for connection of the KNX bus line and the auxiliary power supply are delivered with the device. For its operation the integrated 2-fold pushbutton (only EK-EF2-TP version) has to be completed with two 40x40 mm square rockers (to be ordered separately).

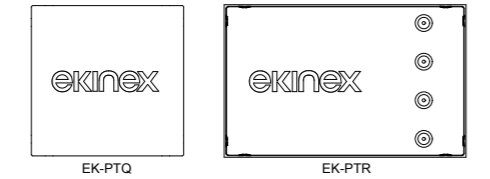
Note. Frame and rockers (only for EK-EF2-TP version) for the completion of the device have to be ordered separately. For further information about materials, colours and finishing available see also the ekinex® product catalog or browse www.ekinex.com.

Customization of rockers

The rockers can be customized with symbols and texts, for more information see also the standard library on the ekinex® catalog or the website www.ekinex.com. On request it is also possible a customization with symbols and texts chosen by the customer.

Protection for construction site

A protection for construction site is included in the delivery of the device. The protection is made of thermoformed transparent plastic and avoids the dirtying of the device caused by the painting of the walls. Two reliefs in correspondence of each rocker (EK-EF2-TP version) allow the operation of the channel also when the protection is applied on the pushbutton. If necessary, the protection for construction site can be ordered separately with the code given in the table.



Protection	Device
EK-PTQ	EK-EC2-TP (Touch&See)
EK-PTR	EK-EF2-TP (Touch&See with 2-fold pushbutton)

Mounting

The device has degree of protection IP20, and is therefore suitable for use in dry interior rooms. The installation of the device requires the following steps:

- fix the metallic support (d) with the screws supplied (c) on the wall box (e) provided with suitable fixing holes;
- snap a frame (b) of the form or flank series, inserting it from the rear of the device (a);
- insert the terminals for the bus (red/black) and the auxiliary power supply (yellow/white), previously connected to the related cables, in their slots on the rear side (see also: "Connection of the KNX bus line" and "Connection of the auxiliary power supply"). At this point it is recommended to carry out the commissioning of the device (see also "Configuration and commissioning") or at least the download of the physical address;
- mounting the device on the metallic support supplied (d) with the screws (b). For mounting the device follow also the indication TOP (arrow tip pointing up) on the rear side of the device.
- snap the two rockers (f) onto the device for the operation of the pushbutton (only EK-EF2-TP).

The Touch&See (EK-EC2-TP) can only be mounted on a round or square wall flush mounting box. The Touch&See with 2-fold pushbutton can be mounted on a round, a square or a rectangular wall flush mounting box. If necessary, the metallic support for mounting on