

Florence Light switches

Florence frame

OneKeyElectro

DATA SHEET AND OPERATION MANUAL



Purpose of the product

This product is designed for switching single-phase electrical lighting loads for household and similar applications up to 250 V AC. The installation of the switch is carried in rooms with no special safety requirements or restrictions.

- General requirements according to EN 60669-1:2018
- Connection terminals according to EN 60669-1:2018

Technical specifications

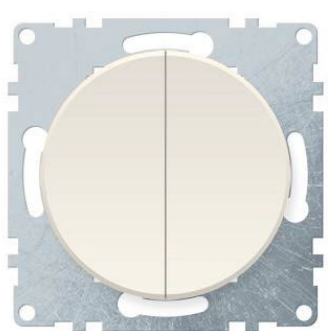
Rated voltage	250 V~
Rated current for fluorescent lights:	10 AX
Rated current for push switches:	10 A
Type of contacts	screwless
Number of wire entry holes per output	2
Connected wire cross section	1.5 mm ²
Degree of protection	IP20
Rocker/cover frame material	polycarbonate
Rocker colors	white beige gray black
Distance between fixing screws	60 mm
Dimensions	see below
Storage temperature	-5 °C ... +50 °C

Florence switch assembly

For devices 1E3130130x-E, 1E3140130x-E, 1E3150130x-E, 1E3160130x-E, 1E3170130x-E, 1E3180130x-E, 1E3190130x-E, 1E3145130x-E

To install the product, a switch device with rocker is required, as well as a cover frame (ordered separately). See the frame selection table below.

Switch layout examples:

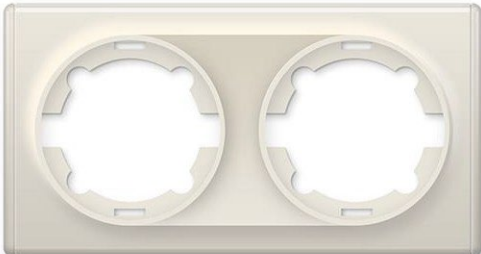
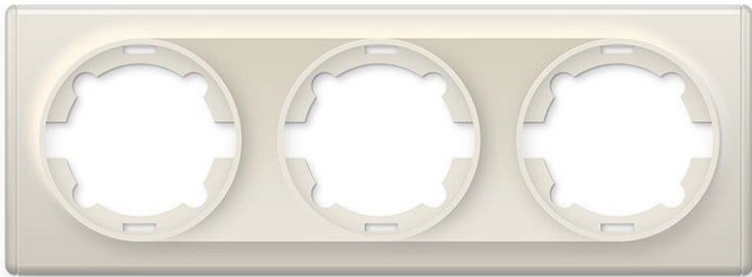
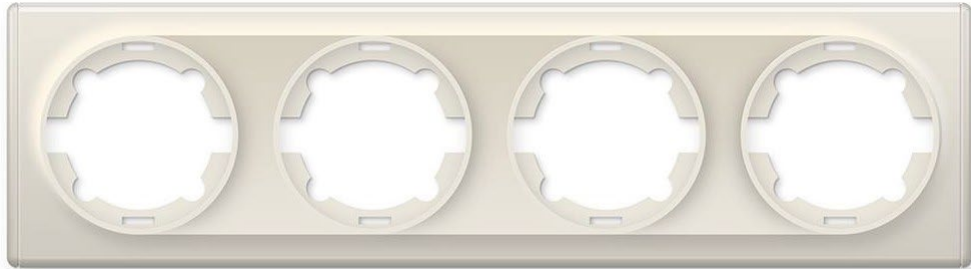
One gang switch, beige 1E31301301-E, 1E31401300-E	+	Beige cover frame 1E52101301-E	=	One gang (1 or 2-way) switch assembly
	+		=	
Two gang switch, beige 1E31501301-E, 1E31601301-E	+	Beige cover frame 1E52101301-E	=	Two gang switch (1 or 2-way) switch assembly
	+		=	

The product is designed for installation in standard flush-mounting boxes according to DIN 49073, Part 1, with a distance between the fixing screws of 60 mm and a minimum depth of 40 mm (not included in package).

To install the device in the wall plate, a metal support ring and claws, adjustable with screws, are used.

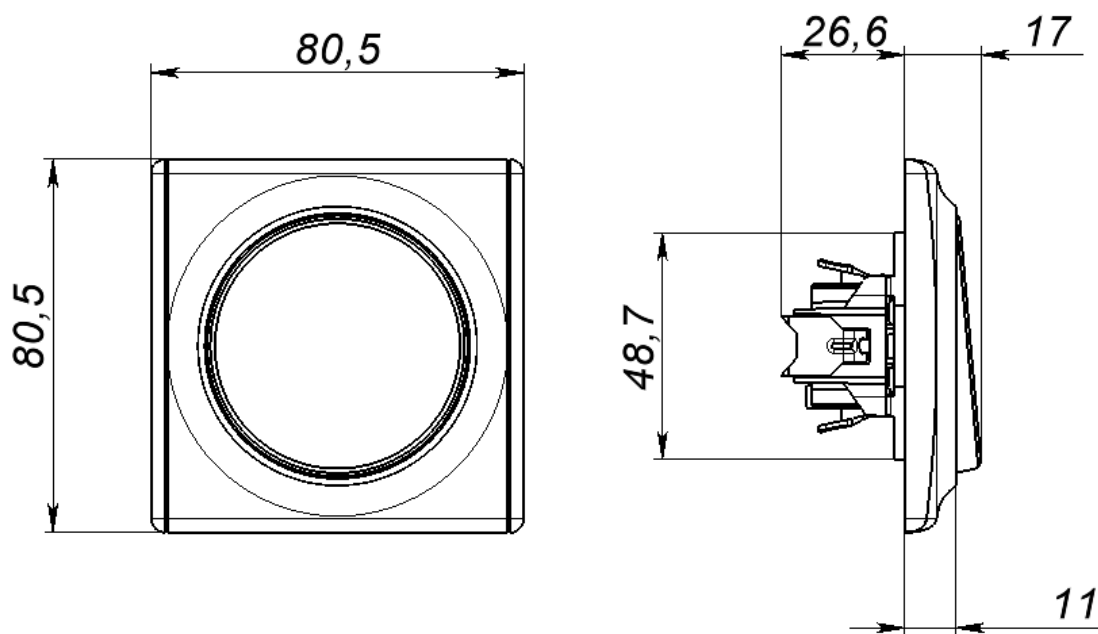
The plastic part of the switch has four latches in the front part, and the frame, respectively, has four semicircular grooves. This design allows the frame to be installed firmly to the device by simply snapping it into place, without screws.

If it is necessary to install up to five devices in a row, you can choose from the following Florence frames (to be ordered separately):

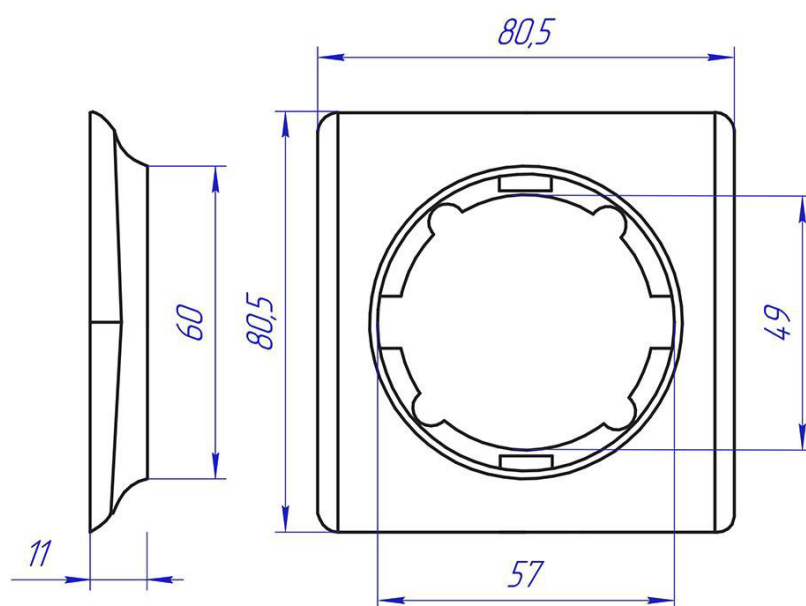
1-gang frame	
2-gang frame	
3-gang frame	
4-gang frame	
5-gang frame	

Installation dimensions of switches and frames

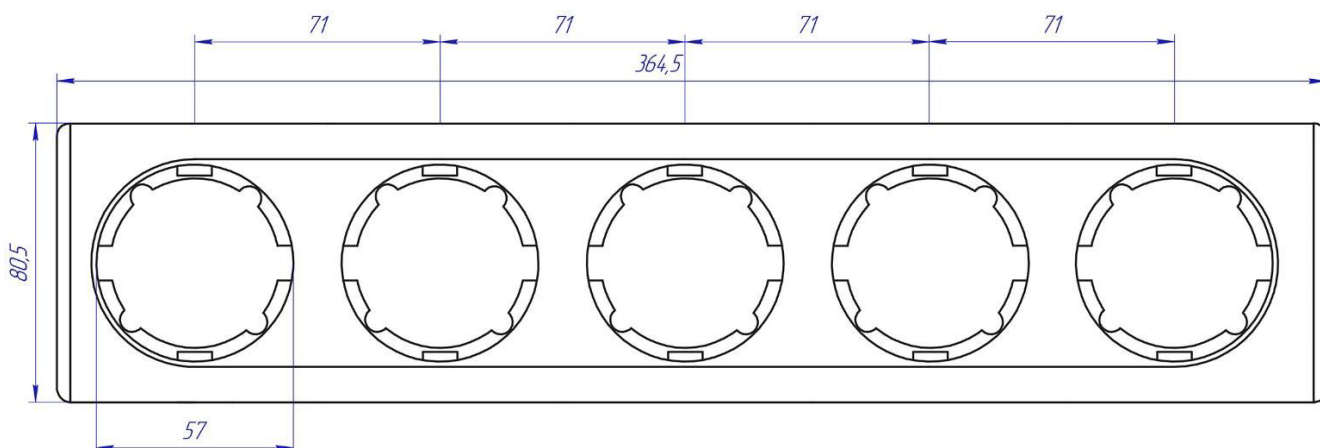
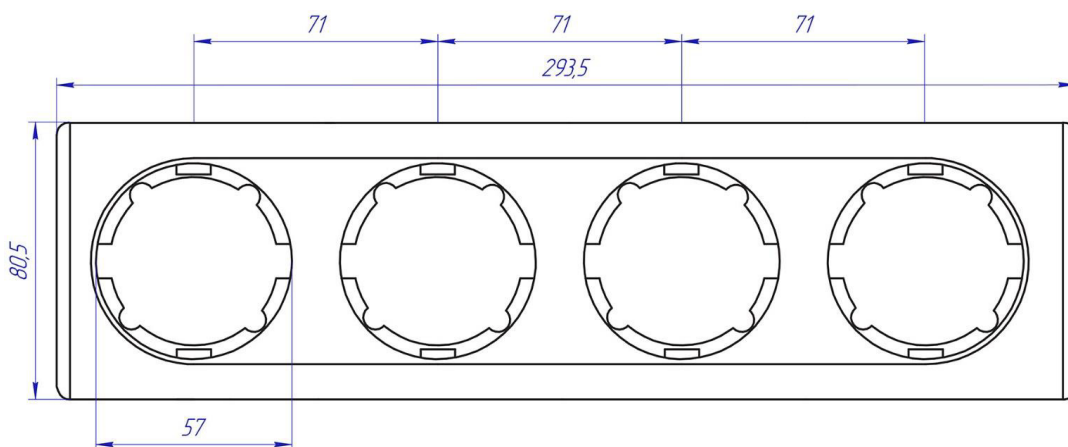
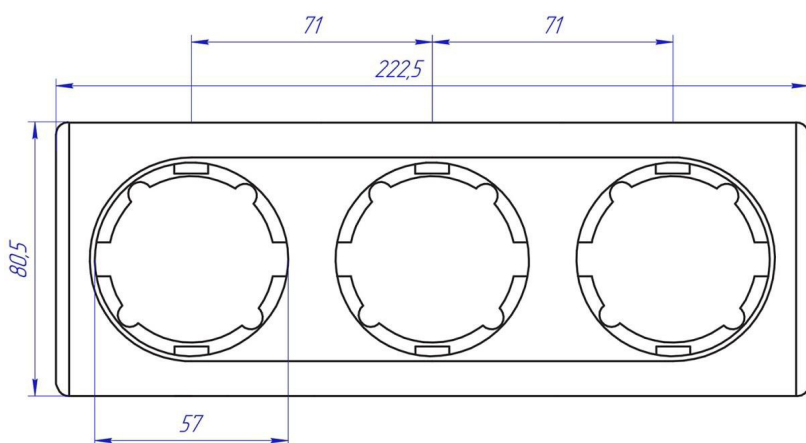
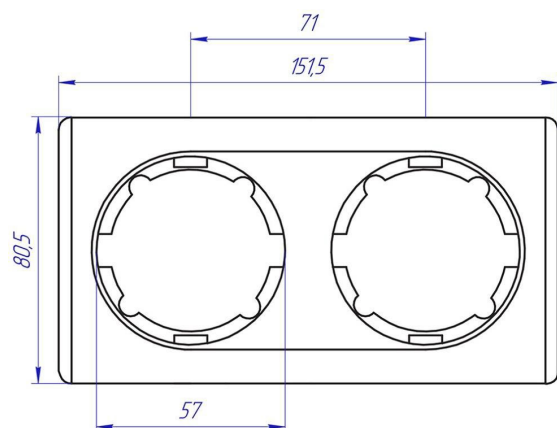
Switch with Florence frame (for 1E3130130x-E, 1E3140130x-E, 1E3150130x-E, 1E3160130x-E, 1E3170130x-E, 1E3180130x-E, 1E3190130x-E, 1E3145130x-E):



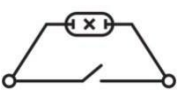
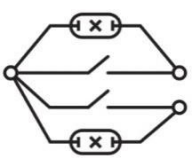
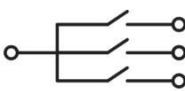
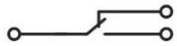
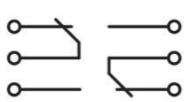
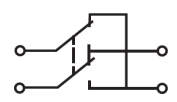
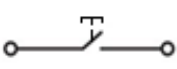
Installation dimensions of Florence frames



Frames for 2–5 devices are designed for horizontal installation. The design provides a center-to-center distance of 71 mm between the devices.



Order codes with a brief description

Name	Symbol	Features	Qty in pkg.	Color	Order code
1 gang 1-way switch		250V ~, 10AX	1	white	1E31301300-E
			1	beige	1E31301301-E
			1	gray	1E31301302-E
			1	black	1E31301303-E
2 gang 1-way switch		250V ~, 10AX	1	white	1E31501300-E
			1	beige	1E31501301-E
			1	gray	1E31501302-E
			1	black	1E31501303-E
1 gang 1-way switch with lighting		250V ~, 10AX	1	white	1E31701300-E
			1	beige	1E31701301-E
			1	gray	1E31701302-E
			1	black	1E31701303-E
2 gang 1-way switch with lighting		250V ~, 10AX	1	white	1E31801300-E
			1	beige	1E31801301-E
			1	gray	1E31801302-E
			1	black	1E31801303-E
3 gang 1-way switch		250V ~, 10AX	1	white	1E31901300-E
			1	beige	1E31901301-E
			1	gray	1E31901302-E
			1	black	1E31901303-E
1 gang 2-way switch		250V ~, 10AX	1	white	1E31401300-E
			1	beige	1E31401301-E
			1	gray	1E31401302-E
			1	black	1E31401303-E
2 gang 2-way switch		250V ~, 10AX	1	white	1E31601300-E
			1	beige	1E31601301-E
			1	gray	1E31601302-E
			1	black	1E31601303-E
Intermediate switch		250V ~, 10AX	1	white	1E31451300-E
			1	beige	1E31451301-E
			1	gray	1E31451302-E
			1	black	1E31451303-E
One gang push-switch		250V ~, 10A	1	white	1E31311300-E
			1	beige	1E31311301-E
			1	gray	1E31311302-E
			1	black	1E31311303-E

Frames for assembling finished products

The product is not equipped with a cover frame. The choice of frame depends on the number of devices installed in a row. It can be combined with other switches or sockets Florence 230V in one multi-gang frame. The choice of frame color depends on the interior design.

Order codes with a brief description

Name	Features	Colour	Order code
1-gang frame	80.5x80.5 mm	white beige gray black	1E52101300-E 1E52101301-E 1E52101302-E 1E52101303-E
2-gang frame	80.5x151.5 mm	white beige gray black	1E52201300-E 1E52201301-E 1E52201302-E 1E52201303-E
3-gang frame	80.5x222.5 mm	white beige gray black	1E52301300-E 1E52301301-E 1E52301302-E 1E52301303-E
4-gang frame	80.5x293.5 mm	white beige gray black	1E52401300-E 1E52401301-E 1E52401302-E 1E52401303-E
5-gang frame	80.5x364.5 mm	white beige gray black	1E52501300-E 1E52501301-E 1E52501302-E 1E52501303-E

Conditions for safe installation and operation



DANGER!

Risk of fatal injury from electric shock!

WARNING!

All work, including installation, operation and maintenance of the product should be performed by qualified electricians who have been instructed in safety precautions training for electrical installations up to 1000 V.

Electrical equipment may only be installed and assembled in accordance with the installation instructions and by qualified electricians in compliance with the applicable accident prevention regulations. Non-observance may result in damage to the device, fire or other hazards.

Danger from electric shock. Disconnect the device or load before working on it. Take into account all circuit breakers that supply dangerous voltages to the device or load.

All work should be carried out only when all current-carrying parts in the work area have been completely de-energized.

Improper installation and use may result in electric shock or fire.

No modifications or repair work may be carried out on the device.

The currently valid protective measures according to DIN VDE 0100 and the associated part must be observed and applied.

Before installation, it is necessary to carry out technical measures to ensure the safety of work performed with removal of voltage, in accordance with the above-mentioned norms and rules for labor safety.

Safety measures during installation, operation and maintenance of electrical installations must comply with national and local norms and rules.

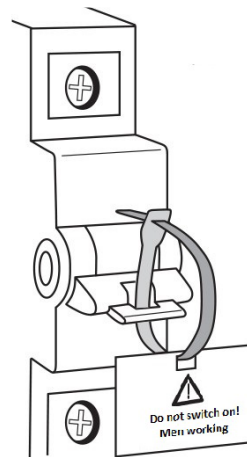
These instructions are part of the product and must remain with the end user or can be downloaded at any time from the manufacturer's website at the following link:

www.warm-on.com

Installation

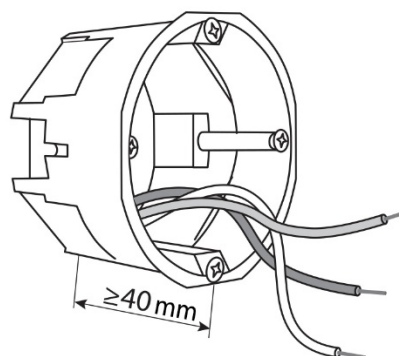
1.

- disconnect the voltage and block the switching device in the OFF position in order to exclude the supply of voltage to the place of work due to possible faulty or accidental activation of the switching device;
- hang a prohibition poster on the drive of the switching device



2. Make sure that the wall installation seat is prepared - a standard flush mounting box with a distance between the fixing screws of 60 mm and a depth of at least 40 mm (not included) with all wires in accordance with the electric lighting project.
The length of the brought-out ends should be about 10 cm.

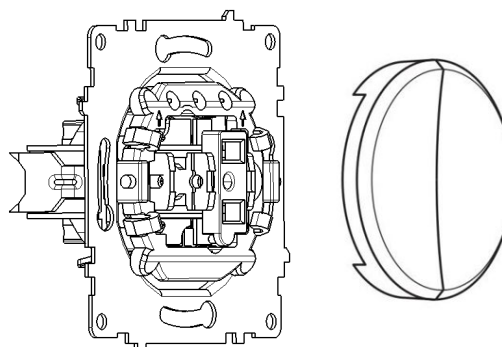
The design of the seat and the choice of the type of mounting box depends on the type of walls.



3. Make sure that there is no dangerous potential on the L (N and PE) wires and that there is no voltage between all conductors using a voltage indicator.
Carry out other protective measures in accordance with the above regulations.

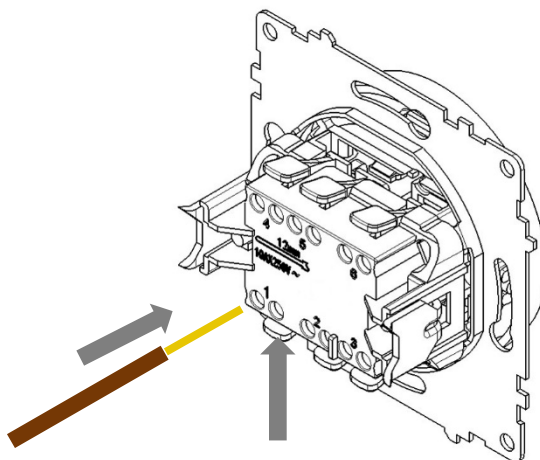


4. Remove the rocker (s) from the device;
For 3-rocker device (1E3190130x-E): first remove the central rocker and then the side rockers.



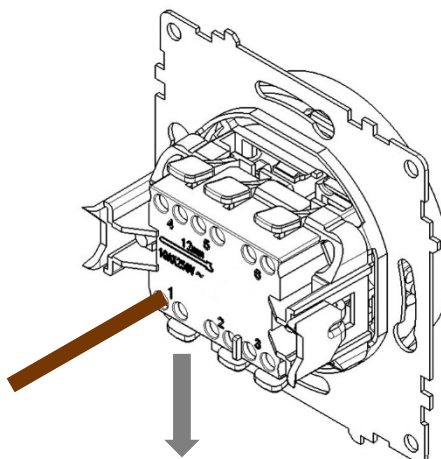
5. Insert the stripped ends of the wires (≈ 12 mm) into the terminal holes in the rear of the device by pressing the clamp button;

The bare parts of the wires must be recessed in the holes of the terminals up to the insulation in order to avoid possible contact.



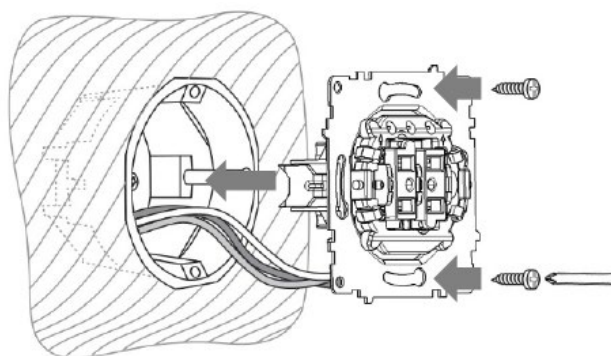
6. Release the clamp button of the terminal after the wire has been recessed properly.

Make sure the connection is tight by gently pulling each wire.

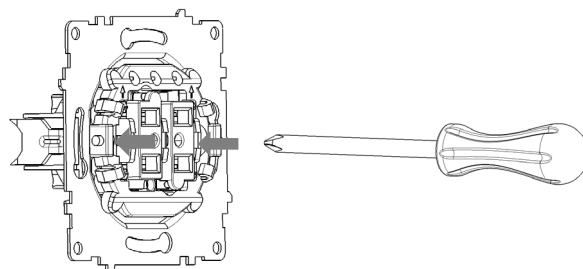


7. Insert the device (1 or 2-way switch) with connected wires into the junction box carefully so as not to damage wires and not disturb the reliability of their connection. Avoid kinks and jams in wires. The wires must lie freely in the box.

Press the metal ring of the device to the box and firmly fix with the screws included in the box.



8. When fixing the device with claws, tighten the screws on the sides of the front of the device. The claws must not touch or pinch the wires to avoid damaging the insulation of the wires.

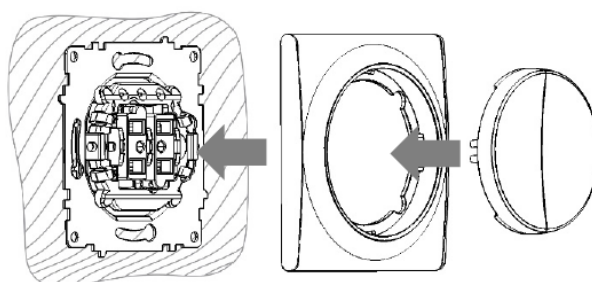


9. Make sure that the mounting ring on the back side is tight against the wall surface. Install the cover frame by snapping it onto the front of the device. The frame must not have a gap with the wall.

10. Insert rocker (s).

For three-rocker switches (1E3190130x-E): first insert the side rocker s, then the central one.

Attention: use the intermediate switch (1E3145130x-E) only with the standard single rocker included in package!



11. After installation, in order to check the correct functioning and connection, turn on the voltage and check the operation of the switch. In case of incorrect operation of the device, turn off the voltage and check connection for correct and reliable functioning of the relevant lines and devices. Eliminate any possible malfunctions. Ensure correct operation. The switch is then ready for use.

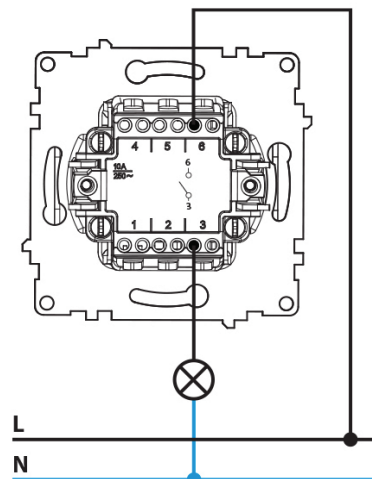
Maintenance

Preventive inspection of the electrical installation, as well as the replacement of switches that have failed, must be carried out only when the voltage is off.

Electrical connection of switches

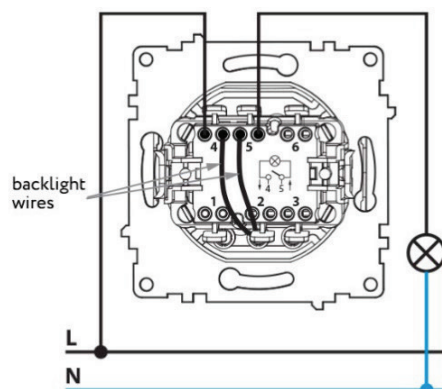
Wiring diagram for 1 gang one-way switch 1E3130130x-E

Location of terminals and connection
1E3130130x-E, rear view



1 gang one-way switch with lighting
1E3170130x-E

Location of terminals and connection
1E3170130x-E, rear view



The diagram shows a 3-phase 4-wire system. The supply lines are labeled L (Line) and N (Neutral). The load is a star-connected motor with terminals 1, 2, 3, 4, 5, and 6. The neutral line (N) is connected to the center point of the motor (terminal 5). The motor is shown with a star symbol inside, indicating it is a star-connected load.

backlight wires

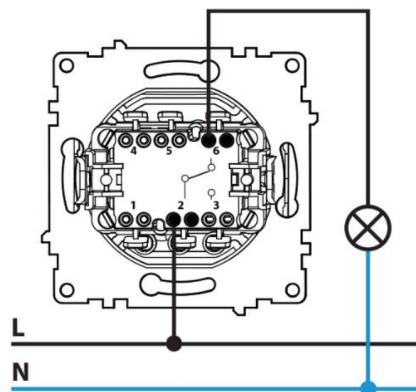
L

N

1E3130130x-E, 1E3140130x-E, 1E3150130x-E, 1E3160130x-E, 1E3170130x-E, 1E3180130x-E,
1E3190130x-E, 1E3145130x-E

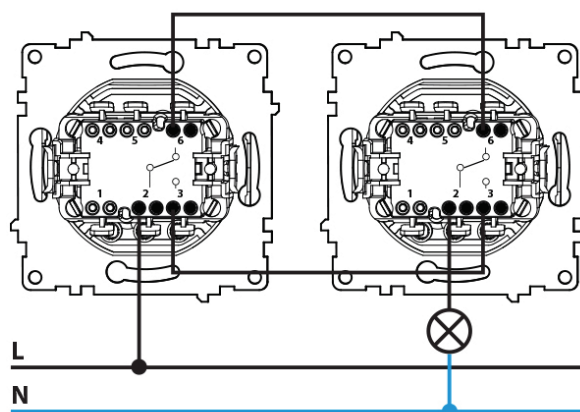
Sample of a wiring diagram for a 1-gang two-way switch 1E3140130x-E, used as 1-gang one-way switch (for turning on/off of a single light)

Diagram and location of terminals
1E3140130x-E, rear view



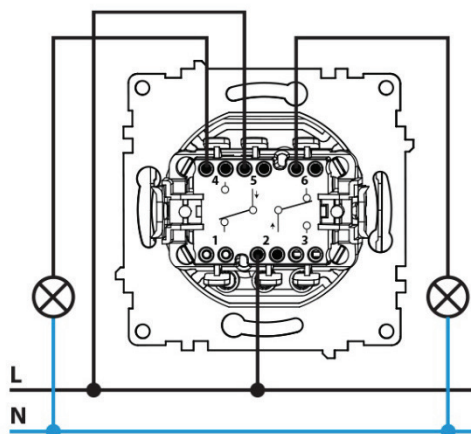
Schematic diagram of controlling one light from 2 locations using 1-gang two-way switches (two switches 1E3140130x-E are needed)

Diagram and location of the terminals
1E3140130x-E, rear view



Sample of a wiring diagram for 2-gang two-way switch 1E3160130x-E, used as 2-gang one-way switch (for turning on/off two single lights)

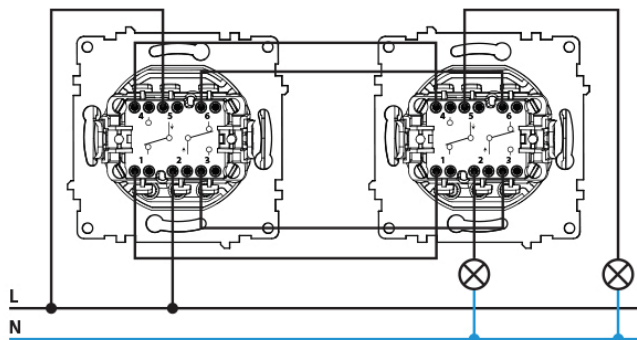
Diagram and location of terminals, rear view



1E3130130x-E, 1E3140130x-E, 1E3150130x-E, 1E3160130x-E, 1E3170130x-E, 1E3180130x-E,
1E3190130x-E, 1E3145130x-E

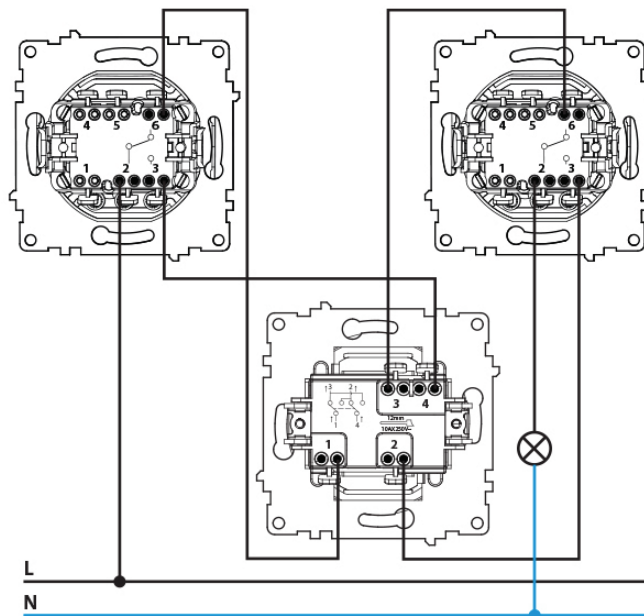
Schematic diagram of controlling two lights from 2 locations using 2-gang two-way switches (two switches 1E3160130x-E are needed)

Diagram and location of the terminals, rear view



Schematic diagram of controlling one light from 3 locations using one Intermediate switch 1E3145130x-E and two 1-gang 2-way switches 1E3140130x-E

Diagram and location of the terminals, rear view



Scope of supply

The switch (1E3130130x-E, 1E3140130x-E, 1E3150130x-E, 1E3160130x-E, 1E3170130x-E, 1E3180130x-E, 1E3190130x-E, 1E3145130x-E) includes a device with installed plastic rockers in accordance with the color-coding of the order code. The cover frame is not included in package and must be ordered separately (see frame selection table).

Order code	Included in package:	Qty	Factory number	Note
1E3130130x-E, 1E3140130x-E, 1E3145130x-E	Switch with a rocker, in accordance with the color-coding of the order code	1	Barcode on the product	In individual package. See "Packaging and Marking"
1E3170130x-E	Switch with installed neon lamp and a rocker, in accordance with the color-coding of the order code	1	Barcode on the product	In individual package. See "Packaging and Marking"
1E3150130x-E, 1E3160130x-E	Switch with 2 rockers, in accordance with the color-coding of the order code	1	Barcode on the product	In individual package. See "Packaging and Marking"
1E3180130x-E	Switch with installed 2 neon lights and 2 rockers, in accordance with the color-coding of the order code	1	Barcode on the product	In individual package. See "Packaging and Marking"
1E3190130x-E	Switch with 3 rockers, in accordance with the color-coding of the order code	1	Barcode on the product	In individual package. See "Packaging and Marking"
1E52y0130x-E	Molded plastic cover frame Florence. Gang quantity and color - in accordance with the order code (y is the gang quantity, x - color coding)	1	Barcode on the product	In individual package. See "Packaging and Marking"

Packaging and marking

Packaging

The product is packed in a thick plastic bag with the following information:

- product series
- trademark
- name and address of the manufacturer
- name and address of the importer in EU

as well as other necessary information in accordance with the manufacturer's instructions and local requirements.

The package has a cutout for hanging the goods in the package.

Marking

1E31401301-E

1 gang two-way switch

beige

Rated current: 10AX

Rated voltage: 250 V ~

IP20, polycarbonate, flush mounting

Package contents - 1 pc

Importer in the EU: Warm-On GmbH i. Park Tauberfranken 18 97922

Lauda-Königshofen, Germany, Tel: +49 09343-98090-65, warm-on.com

Manufacturer: Wenzhou Guipai Electric Co., Ltd No.16 Yulan Road, Wenzhou, 325025 China.

Made in China under control of Warm-On GmbH, Germany



Product marking is made by means of a marking label. The marking label contains the following product information:

- order code
- description
- rated current
- rated voltage
- degree of protection
- wiring diagram
- barcode

as well as other necessary information in accordance with the manufacturer's instructions and local requirements.

The marking label is located on the back of the package.



Florence Light switches

1E3130130x-E, 1E3140130x-E, 1E3150130x-E, 1E3160130x-E, 1E3170130x-E, 1E3180130x-E, 1E3190130x-E, 1E3145130x-E

Storage and transportation

The product may be transported in the manufacturer's original by any type of roofed transport that ensures the safety of the packaged products from mechanical damage, dirt and moisture.

The product may only be stored in the manufacturer's packaging, in rooms with natural ventilation at an ambient temperature of -5 to +50 °C.

Norms compliance and certification

Wenzhou Guipai Electric Co. Ltd. hereby declares that the products comply with the following guidelines:

- RoHS Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment and the extension by Directive 2015/863/EU
- LVD 2014/35/EU Low Voltage Directive

Disposal

NOTE ON ENVIRONMENTAL PROTECTION From the date of implementation of the European Directives 2012/19/ EU into national law, the following applies: Electrical and electronic equipment must not be disposed of with household waste. The consumer is legally obliged to return electrical and electronic equipment at the end of its service life to the public collection points set up for this purpose or to the point of sale. Details are regulated by the respective state law.

Switches fall under category 5 of Section 2 (1) of the Electrical and Electronic Equipment Act (ElektroG3) (Act on the Marketing, Return and Environmentally Sound Disposal of Electrical and Electronic Equipment of May 20, 2021, effective January 1, 2022).

The symbol on the product, the instructions for use or the packaging indicates these regulations. By recycling, material recovery or other forms of recovery of waste equipment/batteries, you are making an important contribution to protecting our environment.





Florence Light switches

1E3130130x-E, 1E3140130x-E, 1E3150130x-E, 1E3160130x-E, 1E3170130x-E, 1E3180130x-E, 1E3190130x-E, 1E3145130x-E

Warranty

We reserve the right to make technical and formal changes to the product in the interests of technical progress.

The manufacturer establishes a 2-year warranty period, calculated from the date of sale, provided the consumer complies with the rules for transporting, storage and operation of the product.

In case of a malfunction during the warranty period, the consumer must contact the place of purchase of the product.

The manufacturer reserves the right to refuse to meet the requirements of the consumer for warranty obligations, in the event of the following conditions:

- Any mechanical damage to the product;
- Product design changes
- Damage caused by misuse or improper use; moisture or lightning strikes.
- Damage caused by non-compliance with standards or technical regulations of power, cable or telecommunication networks;
- Unauthorized repair or opening of the product.

Limitation of Liability

The manufacturer is not responsible for:

- direct, indirect or consequential damages, loss of profits or commercial losses in any way related to the product;
- possible harm directly or indirectly caused by the product to people, pets, property, if this happened as a result of non-compliance with the rules and operating conditions, installation of the product, in violation of applicable standards and norms, or as a result of intentional or negligent actions of the buyer (consumer) or third parties.

The liability of the manufacturer cannot exceed the intrinsic value of the product.



Florence Light switches

1E3130130x-E, 1E3140130x-E, 1E3150130x-E, 1E3160130x-E, 1E3170130x-E, 1E3180130x-E,
1E3190130x-E, 1E3145130x-E

Importer in the EU:

warm-on GmbH, Rastatter Str. 30 | 75179 Pforzheim, Germany
Tel. +49 (0) 7231 4609161 (customer support), www.warm-on.com

Manufacturer:

Wenzhou Guipai Electric Co.,Ltd,
No.16, Yulan Road, Binhai Zone, Economic Technology
Development Zone, Wenzhou, 325025, China

Made in China under control of Warm-On GmbH, Germany

For more information about the products, visit warm-on.com
or call +49 (0) 7231 4609161

