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Impulse switch ESW12DX-UC

Only skilled electricians may install this electrical equipment otherwise there is the risk of fire or electric shock!

Temperature at mounting location:
-20°C up to +50°C.
Storage temperature: -25°C up to +70°C.
Relative humidity:
annual average value <75%.

1 NO contact potential free 16 A/250 V AC with tungsten pre-contact. The pre-run contact closes before the main contact and thus handles the inrush current of LED lamps that occurs over a few ms. Max. inrush current 500A/2ms. No standby loss.

Modular device for DIN-EN 60715 TH35 rail mounting. 1 module = 18 mm wide, 58 mm deep.

State-of-the-art hybrid technology combines advantages of nonwearing electronic control with high capacity of special relays.

With the patented Eltako Duplex technology (DX) the normally potential-free contacts can still switch in zero passage when switching 230 V AC 50 Hz and therefore drastically reduce wear. Simply connect the neutral conductor to the terminal (N) and L to 1(L) for this. This gives an standby consumption of only 0.1 Watt.

Universal control voltage 12 to 230 V UC.

Low switching noise.

No permanent power supply necessary, therefore no standby loss.

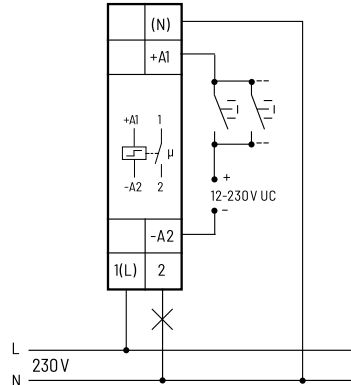
By using a bistable relay coil power loss and heating is avoided even in the on mode.

The relay contact can be open or closed when putting into operation. It will be synchronised at first operation.

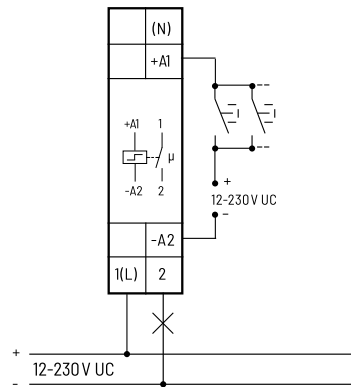
The electronics does not have an internal power supply and therefore no power is

consumed in any contact position. A control current flows only during a short control impulse of 0.2 seconds. This activates the microcontroller, reads the last switching state from the non-voltage memory, switches the bistable relay to its opposite state accordingly and rewrites the new switching state to memory.

Typical connections



with zero passage switching



without zero passage switching

Technical data

230 V LED lamps	up to 200 W ²⁾ with DX up to 600 W ²⁾ I on ≤ 500 A/5 ms
Control voltage UC	12..230 V
Rated switching capacity	16 A/250 V AC
Incandescent lamp load and halogen lamp load ¹⁾ 230 V	3300 W ³⁾
Fluorescent lamp load with KVG* in lead-lag circuit or non compensated	1000 VA
Fluorescent lamps with KVG* shunt-compensated or with EVG*	500 VA
Standby loss	none

* EVG = electronic ballast units;
KVG = conventional ballast units

¹⁾ For lamps with 150 W max.

²⁾ Due to different lamp electronics and depending on the manufacturer, the maximum number of lamps may be limited, especially if the wattage of the individual lamps is very low (e.g. with 2 W LEDs).

³⁾ Up to 2x10⁴ switching cycles at 1 s on, 9 s off.



The strain relief clamps of the terminals must be closed, that means the screws must be tightened for testing the function of the device. The terminals are open ex works.

Manuals and documents in further languages:



<http://eltako.com/redirect/ESW12DX-UC>



Must be kept for later use!

We recommend the housing for operating instructions GBA14.

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