



21 200 002 - 1, 21 100 002 - 1,  
21 110 002 - 1



## Impulse switches

### ES12DX-UC

### ES12-200-UC

### ES12-110-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%.

## 230 V LED lamps up to 200 W (ES12DX-UC up to 600 W), incandescent lamp load up to 2000 W. No standby loss.

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

Either universal control voltage 12 to 230 V UC at the control input +A1/A2 or 230 V with glow lamp current up to 5 mA at the control input (L)/-A2(N).

The simultaneous use of two potentials at the control inputs is not permitted.

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

### ES12DX-UC: 1 NO contact potential free 16 A/250 V AC.

**With the 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 a standby consumption of only 0.1 Watt.**

If the contact is used for controlling switching devices which do not perform zero passage switching themselves, (N) should not be connected because the additional closing delay otherwise causes the opposite effect. Same terminal connection as the electro-mechanical impulse switch S12-100-.

### ES12-200-UC: 2 NO contacts potential free 16 A/250 V AC.

Maximum current across both contacts 16 A for 230V.

Same terminal connection as the electro-mechanical impulse switch S12-200-.

### ES12-110-UC:

### 1 NO contact + 1 NC contact potential free 16 A/250 V AC.

Same terminal connection as the electro-mechanical impulse switch S12-110-.

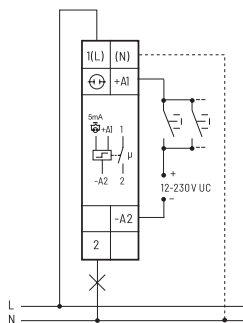
**If one of these impulse switches is in a circuit, which is monitored by a FR12-230V mains disconnection relay, no additional base load is required. However, the monitoring voltage of the FR12-230V must be set to 'max'.**

**ES12DX-UC: Then control only through A1-A2.**

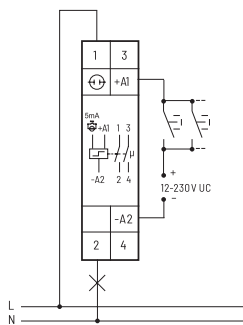
## Typical connections

Either universal control voltage 12 to 230 V UC

**ES12DX-UC:** If N is connected, the zero passage switching is active.

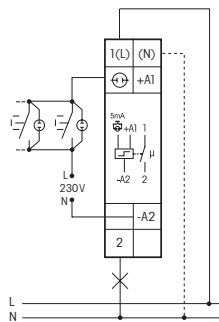


## ES12-200/110-UC

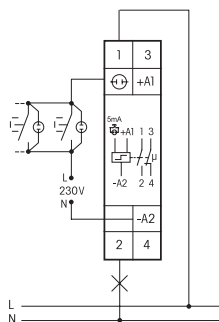


or control voltage 230V with glow lamp current up to 5 mA

**ES12DX-UC:** If N is connected, the zero passage switching is active.



## ES12-200/110-UC



## Technical data

230 V LED lamps	up to 200 W <sup>4)</sup> with DX up to 600 W <sup>4)</sup> I on ≤ 120 A/5 ms
Control voltage UC	12..230 V
Rated switching capacity	16 A/250 V AC
Incandescent lamp load and halogen lamp load <sup>1)</sup> 230 V	2000 W
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
Compact fluorescent lamps with EVG* and energy saving lamps	
ES12DX-UC	15x7 W, 10x20 W <sup>2)</sup>
ES12-200/110-UC	I on ≤ 70 A/10 ms <sup>3)</sup>
Standby loss	none

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

<sup>1)</sup> For lamps with 150 W max.

<sup>2)</sup> If zero passage switching is activated, otherwise same as for ES12-200/110-UC.

<sup>3)</sup> For electronic ballast gears a 40fold inrush current has to be calculated. For steady loads of 1200 W or use the current-limiting relay SBR12.

<sup>4)</sup> 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).



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/ES12DX-UC\\_ES12-200-UC\\_ES12-110-UC](http://eltako.com/redirect/ES12DX-UC_ES12-200-UC_ES12-110-UC)



## Must be kept for later use!

We recommend the housing for operating instructions GBA14.

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