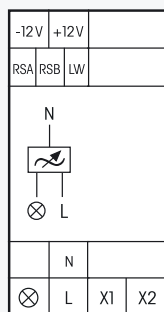


## FUD12/800W-12V DC



**Universal dimming actuator 1 channel, power MOSFET up to 800W, energy saving lamps ESL up to 100W and LED up to 100W. Only 0.3 watt standby loss. With adjustable minimum or maximum brightness and dimming speed. With switching operation for light alarm clocks, children's rooms and snooze function. Also with light scene control by PC or wireless pushbuttons.**

Modular device for DIN-EN 60715 TH35 rail mounting. 2 modules = 36mm wide, 58mm deep. Universal dimming actuator for R, L and C loads up to 800 watts, depending on ventilation conditions. Automatic detection of load R+L or R+C. ESL and LED is manually settable. Dimmable energy saving lamps ESL up to 100 watts and dimmable 230V LED lamps up to 100 watts.

**Up to 3400W with capacity enhancers LUD12-230V** (for description see next page) at terminals X1 and X2.

**Zero passage switching with soft ON and soft OFF to protect lamps.**

Switching voltage 230V. No minimum load required.

The 12V DC supply voltage of the complete RS485 bus is mainly powered at 6W, 12W or 24W by a switch mode power supply unit SNT12-12V DC that is only 1 or 2 pitch units wide. The power consumption of the 12V DC power supply is only 0.05W.

The brightness level is stored on switch-off (memory).

In case of a power failure the switch position and the brightness stage are stored and may be switched on when the power supply is restored.

Automatic electronic overload protection and overtemperature switch-off.

**Connection to the Eltako RS485 Bus, terminals RSA and RSB.**

**Up to a total of 128 actuators can be added in this way.**

**The top rotary switch LA/LRN** is first required for teach-in and in operation, it defines what load type the dimming curve should be set to.

**Position R, L, C** is the setting for all load types except for ESL and LED. In particular for 230V glow and halogen lamps. The load type, inductive or capacitive, is detected automatically.

**The settings +ESL and -ESL** consider the special conditions regarding dimmable energy saving lamps: The starting operation is optimized and adapted to the dimming curve. In these settings the special switching operation for children's rooms is not possible and no wound (inductive) transformer must be dimmed. In position -ESL Memory is switched off. This can be of advantage for energy saving lamps because cold energy saving lamps require a higher minimum brightness as it will possibly be stored in Memory for warmer energy saving lamps.

**The position LEDs** take account of special conditions with dimmable 230V LED lamps: A number of different dimming curves are available. An updated list with dimming curve assignment for commercially available dimmable 230V LED lamps is ready for downloading at [www.eltako.com/dimming\\_curve/LED\\_gb.pdf](http://www.eltako.com/dimming_curve/LED_gb.pdf). In these settings no wound (inductive) transformer must be dimmed.

The minimum brightness (fully dimmed down) or maximum brightness (fully dimmed up) is adjustable **with the top % rotary switch**. In the setting LRN up to 30 pushbuttons can be assigned, of which one or more central pushbuttons.

The dimming speed is adjustable using the **bottom dimming speed rotary switch**. At the same time, the soft ON and soft OFF periods are changed.

**The pushbuttons can be taught-in either as direction switches or universal switches:**

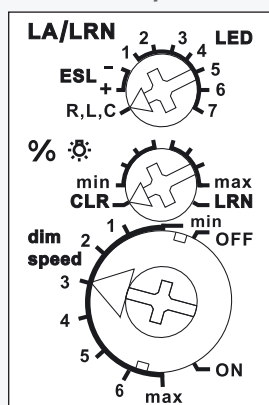
**When installed as a direction switch**, one side is then 'switch on and dim up' and the other side is 'switch off and dim down'. A double-click on the switch-on side activates automatic dim-up to full brightness at dim speed. A double click on the switch-off side activates the snooze function. The children's room function is implemented on the switch-on side.

**As a universal switch**, change the direction by briefly releasing the pushbutton. With switching operation for children's rooms and snooze function.

Functions **switching for light alarm clocks, switching operation for children's rooms, snooze function, light scenes on PC and light scenes by wireless pushbuttons** same as FUD12NPN.

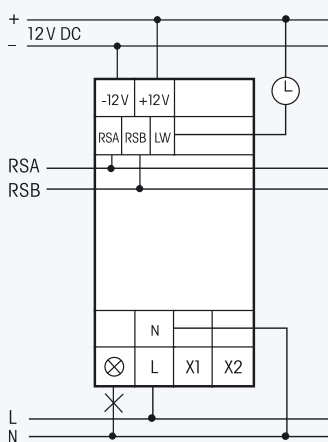
**The LED** below the upper function rotary switch performs during the teach-in process according to the operation manual. It shows control commands by short flickering during operation.

### Function rotary switches



Standard setting ex works.

### Typical connection



Connection example page 4-0.  
Technical data, see page T-0.

Housing for operating instructions  
GBA12 page Z-4.

**FUD12/800W-12V DC**

RS485 bus universal dimming actuator

EAN 4010312302347

**87,50 €/pc.**

Recommended retail prices excluding VAT.