

Universal dimmer switch

EUD12NPN-UC

Power MOSFET 500 W. Standby loss 0.1 watt only.

Modular device for DIN EN 60715 TH35 rail mounting.

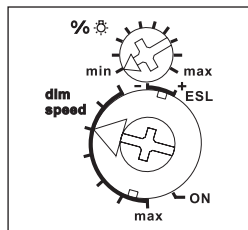
1 module = 18 mm wide, 58 mm deep.

Universal dimmer switch for R, L and C loads up to 500 watt, depending on ventilation conditions. Dimmable energy saving lamps ESL up to 100 watt. Automatic detection of load R+L oder R+C. ESL is manually settable.

Universal control voltage input 8 to 230V UC, electrically isolated from the 230V supply voltage and switching voltage.

Zero passage switching with soft start and soft OFF to protect lamps.

Function rotary switches



The minimum brightness level (completely dimmed down) can be adjusted **with the rotary switch %**, e.g. for dimmable energy saving lamps.

The dimming speed can be adjusted **with the dimming speed rotary switch**. Simultaneously the soft on and soft off period is changed.

The settings ESL consider the special conditions regarding dimmable energy saving lamps: The starting operation is optimized and the dimm speed changes logarithmically. 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.

Short-time control commands switch on/off, permanent control varies the brightness to the maximum level.

An interruption of control changes the direction of dimming. The setting of the brightness level is stored after switching off.

In case of a power failure the switching position and the brightness level are stored. If applicable the dimmer will be switched on at the stored brightness level after the supply voltage is recovered.

Glow lamp current 5 mA starting at 110 V.

Automatic electronic overload protection and over-temperature switch-off.

Switching operation for children's rooms:

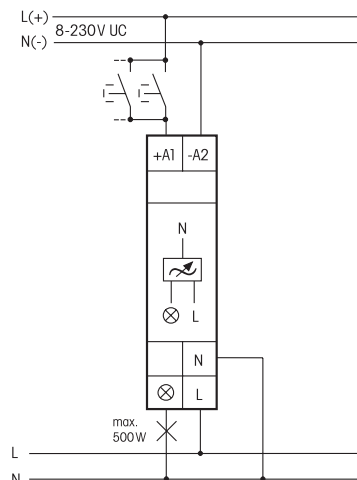
If the light is switched on by holding down the push-button, it starts at the lowest brightness level after approx. 1 second and dims up slowly as long as the pushbutton is held down without modifying the last stored brightness level.

Snooze function: With a double impulse the lighting is dimmed down from the current dimming position to the minimum brightness level and switched off. The current dimming position as well as the adjustable minimum brightness level determine the dimming time (max. = 60 minutes) which can be reduced as required. It can be switched off at any time by short-time control commands during the lighting is dimmed down. Holding down the push-button during the dimming down process dims up and stops the snooze function.

Mixing of L loads (inductive loads, e.g. wound transformers) and C loads (capacitive loads, e.g. electronic transformers) is not permitted. R loads (ohmic loads, e.g. 230V incandescent-lamps and halogen lamps) may be added anytime.

Mixing of L loads and C loads is possible with dimmer switches **EUD12Z** and **EUD12M** in connection with capacity enhancer **LUD12**.

Typical connection



Technical data

Incandescent and halogen lamps 230 V (R) up to 500 W ¹⁾

Inductive transformers (L) up to 500 W ¹⁾²⁾³⁾

Electronic transformers (C) up to 500 W ¹⁾³⁾

Dimmable energy saving lamps ESL ⁵⁾ up to 100 W

Max./min. temperature at mounting location +50°C/-20°C ⁴⁾

Standby loss (activ power) 0.1 W

¹⁾ At a load of more than 300W ventilation clearance of 1/2 module to adjacent devices must be maintained.

²⁾ Per dimmer it is only allowed to use max. 2 inductive (wound) transformers of the same type, furthermore no-load operation on the secondary part is not permitted. The dimmer might be destroyed. Therefore do not permit load breaking on the secondary part.

³⁾ **When calculating the load a loss of 20% for inductive (wound) transformers and a loss of 5% for capacitive (electronic) transformers must be considered in addition to the lamp load.**

⁴⁾ Affects the max. switching capacity.

⁵⁾ In the settings ESL no wound (inductive) transformer must be dimmed.



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.

Warning!

Only a trained electrician may install this equipment, otherwise there is a risk of fire or electric shock.