

Universal dimmer switch for mains disconnection switching EUD12F

valid for devices from production week 49/08

(see bottom side of housing)

Power MOSFET 300W. Standby loss 0.1 watt only.

Modular device for DIN EN 60715 TH35 rail mounting.

1 module = 18mm wide, 58mm deep.

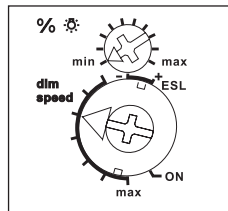
Universal dimmer switch for R, L and C loads up to 300 watt, depending on ventilation conditions. Dimmable energy saving lamps ESL up to 100 watt. Automatic detection of load R+L oder R+C. ESL is manually settable. Supply voltage and switching voltage 230V.


With integrated switching-off relay for the mains disconnection of switched circuits.

The control push-button(s) of the room are connected via low voltage control wires to the terminals T1 and T2 of the EUD12F (field-free internal DC voltage). The permanent power supply must be connected directly to a phase conductor **ahead** of the mains disconnection relay FR12-230V. Due to this, the complete function remains but the leads to the lamps is disconnected by means of the switching-off relay. A glow lamp current is not permitted.

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.

A 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.

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

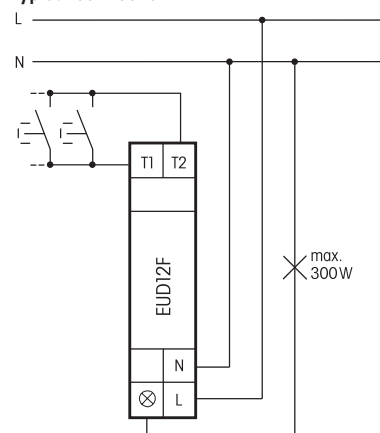
With switching operation for children's rooms:

If the light is switched on by holding down the push-button, it starts at the lowest brightness level after approx. 1 second and it is dimmed up slowly 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.

Typical connection



Tecnical data

Incandescent and halogen lamps 230 V (R)	up to 300 W ¹⁾
Inductive transformers (L)	up to 300 W ¹⁾²⁾³⁾
Electronic transformers (C)	up to 300 W ¹⁾²⁾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 100W ventilation clearance of ½ 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. Operation in parallel of inductive (wound) and capacitive (electronic) transformers is not permitted!

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 factory.

Warning!

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