



21 100 805 - 3



Capacity enhancer for universal dimmer switches

LUD12-230V

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%.

Capacity enhancer for universal dimmer switches. Power MOSFET up to 400 W. Standby loss 0.1 watt only.

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

Capacity enhancers LUD12-230V can be connected to the universal dimmer switches EUD12D, SUD12 (1-10 V input) and to the multi-function time relay MFZ12PMD. This increases the switching capacity **of a lamp** by up to 200 W, and **of additional lamps** by up to 400 W depending on the capacity enhancer and the ventilation conditions.

Dimmable energy saving lamps and dimmable 230 V LED lamps are additionally dependent on the lamps electronics.

Both switching modes for increase of capacity can be executed simultaneously.

Automatic lamp detection in switching 'capacity enhancement with additional lamps'.

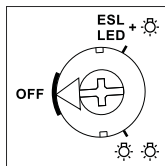
Supply voltage 230 V.

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

In the mode 'Increase of capacity with additional lamps' the kind of load of a capacity enhancer LUD12-230V can vary from the kind of load of the universal impulse dimmer switch.

Therefore it is possible to mix L-loads and C-loads.

Function rotary switch



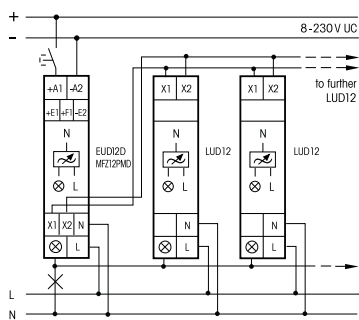
The switching mode 'one lamp' (☀) or 'additional lamps' (☀☀) is set with a rotary switch on the front.

This setting must be same as the actual installation, otherwise there is a risk of destruction of the electronics!

Different setting for ESL and 230 V-LED, if the universal dimmer switch is operated in the comfort positions ESL and LED.

Capacity enhancement with capacity enhancers LUD12 for dimmable energy saving lamps ESL and dimmable 230 V LED lamps in the comfort settings ESL and LED.

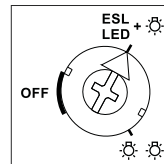
Increase of capacity for one lamp (☀) - not ESL and LED



EUD12D and MFZ12PMD:

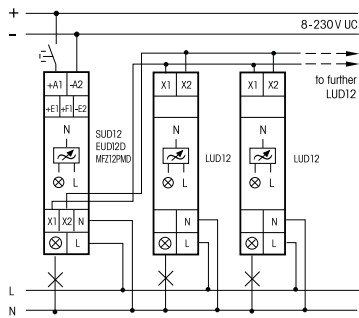
1.-9. LUD12 + up to 200 W each

Function rotary switch



This setting must be set on the front of ESL and 230 V LED lights when the universal dimmer switch is operated in the comfort settings ESL and LED. Also for capacity enhancement with additional lamps. Also with power increase with additional lamps. **Otherwise there is a risk of destruction of the electronics!**

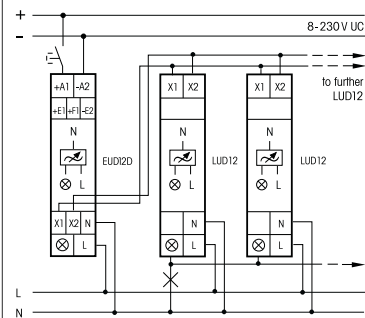
Increase of capacity with additional lamps (☀☀) - not ESL and LED



EUD12D, SUD12 and MFZ12PMD:

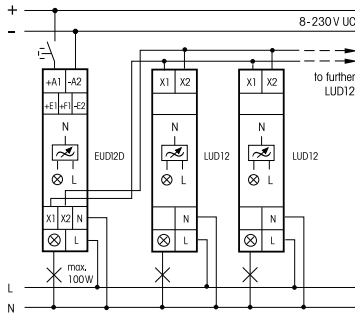
1.-8. LUD12 + up to 400 W each

Increase of capacity for one lamp, ESL and 230 V LED



1.-9. LUD + up to 100 W each

Increase of capacity with additional lamps, ESL and 230 V LED



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.

Technical data

| | |
|---|--|
| Dimmable 230 V LED lamps | Trailing edge up to 400 W ⁵⁾⁶⁾ |
| | Leading edge up to 100 W ⁵⁾⁶⁾ |
| Incandescent and halogen lamps ¹⁾ 230 V (R) | up to 400 W ⁶⁾ |
| Inductive transformers (L) | up to 400 W ²⁾³⁾⁶⁾ |
| Electronic transformers (C) | up to 400 W ²⁾³⁾⁶⁾ |
| Dimmable energy saving lamps ESL | up to 400 W ⁵⁾⁶⁾ |
| Max./min. temperature at mounting location | +50°C/-20°C ⁴⁾ |
| Standby loss (activ power) | 0.1W |

¹⁾ For lamps with a maximum of 150 W.

²⁾ Per dimmer or capacity enhancer 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. Possibly the dimmer switch will be destroyed! No load-switching-off on the secondary part is allowed. The parallel operation of inductive (wound) and capacitive (electronic) transformers is not allowed!

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

⁴⁾ Affects the maximum switching power.

⁵⁾ Usually applies for dimmable energy saving lamps and dimmable 230 V LEDs. Due to differences in the lamps electronics, there may be limited dimming range, switch on and off problems dependent on the manufacturer and a restriction on the maximum number of lamps; especially if the connected load is very low (for 5 W-LEDs). If the universal dimmer switch is operated in the comfort settings ESL and LED, it only gives a maximum power up to 100 W.

⁶⁾ With a load of more than 200 W, a ventilation distance of ½ module to adjacent devices must be maintained.

Must be kept for later use!

We recommend the housing for operating instructions GBA14.

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