

# Capacity enhancer LUD12

**for universal dimmer switches**



Power MOSFET up to 500W and ESL up to 100W. 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 EUD12Z, EUD12M, SUD12 (1-10V input) and FUD12/800W. By this the switching capacity for **one lamp** will be increased according to the below mentioned table depending on ventilation conditions up to 500, 350 or 300W or **alternatively for additional lamps** up to 500W per each capacity enhancer. When energy saving lamps ESL are used only suitable with **additional lamps** since the limit of 100W per lamp may not be exceeded.

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

Automatic detection of load R+L or R+C in the circuit "Increase of capacity with **additional lamps**".

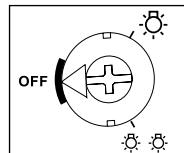
Supply voltage 230V.

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.**

## Rotary switch

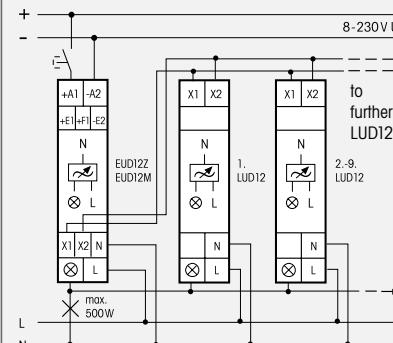


The switching mode "one lamp" (⊗) or "additional lamps" (⊗⊗) is set with a rotary switch on the front.

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

## Switching mode

### Increase of capacity for one lamp (⊗)



### Table of increases of capacity, not energy saving lamps ESL

#### EUD12Z, EUD12M and SUD12:

- |             |              |
|-------------|--------------|
| 1. LUD12    | + 500 W      |
| 2.-5. LUD12 | + 350 W each |
| 6.-9. LUD12 | + 300 W each |

#### FUD12/800 W:

- |             |              |
|-------------|--------------|
| 1.-4. LUD12 | + 350 W each |
| 5.-9. LUD12 | + 300 W each |

Attention should be paid to the different connection example according to the FUD12/800W operation manual!

## Technical data

Incandescent and halogen lamps 230V (R) up to 500 W<sup>1)</sup>

Inductive transformers (L) up to 500 W<sup>1)(2)(3)</sup>

Electronic transformers (C) up to 500 W<sup>1)(2)(3)</sup>

Dimmable energy saving lamps ESL<sup>5)</sup> up to 100 W

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

Standby loss (activ power) 0.1 W

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

<sup>2)</sup> 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. 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!

<sup>3)</sup> 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.

<sup>4)</sup> Affects the max. switching capacity.

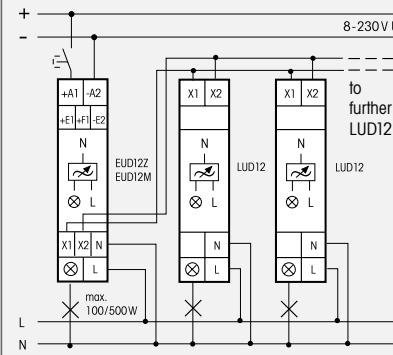
<sup>5)</sup> In the positions ESL it is not allowed to dim inductive (wound) transformers.



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.

## Switching mode

### Increase of capacity with additional lamps (⊗⊗)



### Capacity increases for energy saving lamps ESL

up to 100W for every additional lamp. Otherwise, up to 500W for every additional lamp.

Attention should be paid to the different connection example according to the FUD12/800W operation manual!

## Warning !

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