### Description

The DS400 electronic dimmer is to be built in conventional fuse boxes containing DIN-rain mounting possibilities. It can replace older dimmer electronics but it is also suitable for new installations. The conventional filament bulbs connected to the dimmer can be switched on and off by a normal push switch (open-close) or their light intensity can be controlled.

### Warnings

While changing the internal fuse in the dimmer, disconnect it from the mains by switching the mains circuit breaker or fuse off! Always use replacement fuse with identical rating (1,6AmT) and characteristics! The total power of the loads connected to the dimmer can not exceed 300W! Any loads connected to the dimmer must be earthed or linked with the protective earth according to the VDE regulations! It is forbidden to disconnect the dimmer from the lighting circuitry! Please check all the cabling before connecting the dimmer, look for faults in the isolation or connections.

## Type B:

The dimmer stores the last set light-intensity before switching the lights off and it restores it when the lights are switched on again.

# Type C:

The same as type B, with the exception that lights start at max. intensity upon switch-on but at min. intensity upon regulation. This function will be reversed upon repeated regulation.

This equipment was tested according to the EMVG Directives (EG Directives 89/336/EWG / Electromagnetic emission and protection) and it received the CE Mark accordingly. Any changes in the circuitry or using different components will void the CE Marking!

### Installation

Please keep VDE regulations during the installation! Disconnect the mains voltage from the dimmer before starting with the installation (by using mains circuit breaker). This electronic dimmer will not disconnect galvanically from the light bulb circuitry, the wiring, which leads to the light bulbs are under voltage even when the dimmer is switched off. The connection must be done by following the diagram printed on the dimmer housing. The incoming voltage (Line phase) must be connected in the terminal marked by "Ph". When installing in a closed fuse box, the internal temperature must not exceed 35 °C.

### **Specifications**

Mains voltage: 230V / 50...60Hz

Power of light bulbs: 40...300W (only conventional light bulbs)

Noise: N grade Fuse: 1,6AmT Screw terminal:  $Max. 4 mm^2$ 

Enclosure: Polistirol, grey RAL 7035 Dimensions:  $70 \times 35 \times 71.5 \text{ mm}$ 

Mounting: On DIN-rail according to EN 50 022 Standard

 $-35 \times 7.5 \text{ mm}$ 

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# **INSTRUCTION MANUAL**



# DS400 electronic dimmer for DIN-rail mounting Type B and C - 230Vac/300W max.

Dear Customer,

Thank you for buying our product. Please make sure to read this manual carefully before putting the unit into operation.

### Appropriate usage

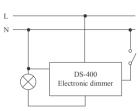
The DS400 dimmer was designed to control filament light bulbs which nominal power is rated between 40 ... 300W. Any other application is not allowed!

With the help of the DS-400 electronic dimmer the light intensity of 230V conventional light bulbs can be regulated or simply the light bulbs switched on and off. It is perfectly sufficient to use also conventional momentary light switch for remote-controlling the lights.

This elegant light-intensity regulation possibility, which does not require a special switch, makes the DS-400 suitable for new installations as well as for electrical refurbishments

### Using the equipment

The controlling is done via one or more conventional push switch (open/close momentary switch). All functions can be controlled from several rooms (via several switches). During black-outs lasting less than 1 second all set values remain in the dimmer, during black-outs lasting longer than this all settings will be erased and the dimmer will switch off. Pressing the switch momentarily will switch the lights on or off, longer pressing time will begin to dim light intensity.



## Storing light intensity setting in memory (only with type B)

The DS-400 B type stores the last light intensity setting in its memory and recalls it when the lights are switched back again and automatically adjusts their light intensity accordingly. All other controlling function remains the same as with type C.

### **ATTENTION! Important safety instructions!**

- This unit operates from 230V alternating current, which is dangerous for human life and health if touched and must be kept away from children!
- The unit can only be connected to 230V / 50-60Hz.
- Operation under extreme conditions must be avoided, such as: in temperatures above 40°C, inflammable gas, solvents, vapour, dust, humidity over 80% non cond., etc.)
- The unit must be kept and operated in closed, dry area.
- As soon as you assume that safe operation of the unit is no longer possible, unplug it immediately and
  make sure that it cannot be switched back by somebody else. Operation has become unsafe when the unit
  does not show any signs of working or has been visibly damaged under transportation of after storing the
  unit in unfavourable conditions.
- Before connecting the unit, please make sure that all connecting cables are free of voltage and mains supply is switched off!
- Service and repair my only be carried out by authorized and qualified personnel.
- Check that the wires are fitted firmly as loose contacts can cause fire!
- The cross section of the wiring shall be chosen and secured in accordance with the relevant egulations.
- The device must not be used for 3-phase current.