LIGHTING DIMMER DIM-20

INSTRUCTION MANUAL

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DESCRIPTION

The device DIM-20 is used to control the lighting level of chosen light sources described in “Load capacity” table. Single or double monostable “light” push-buttons are responsible for the control. The buttons connected in a parallel way enable lighting operating from different places. The device has the function of switching on/off and of smooth brightening/dimming the light. DIM-20 enables intelligent lighting system control and gives comfort and economy in use.

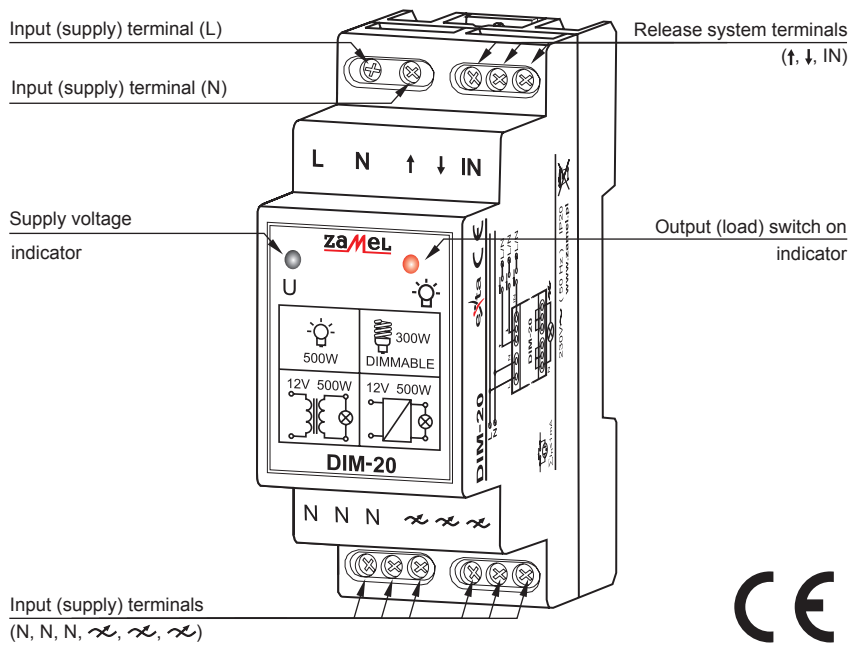
FEATURES

- Intelligent lighting control,
- bulb light brightness level control,
- halogen light brightness level control supplied by means of toroidal or electronic transformer,
- energy-saving fluorescent lamp (compact) light brightness level control, used to cooperate with a dimmer,
- energy saving in stand-by position,
- cooperation with control push-buttons equipped with neon light,
- maximum power load – 500 W,
- input rated voltage indicator,
- output (load) switch on indicator,
- double-module casing,
- TH 35 DIN rail installation.

TECHNICAL PARAMETERS

	DIM-20
Input (supply) terminals:	L, N
Input rated voltage:	230 V AC
Input voltage tolerance:	-15 ÷ +10 %
Nominal frequency:	50 Hz
Rated power consumption:	10 mA
Supply voltage control indicator:	LED green
Release terminals:	IN, IN, IN
Lighting control:	single monostable „light” push-button double monostable “light” push-button
Output (load) terminals:	N, ⌁
Output switch on indicator:	LED red
Output (load) power:	30 ÷ 500 W
Control element:	MOS transistor
Numer of terminal clamps:	11
Section of connecting cables:	0,2 ÷ 2,50 mm^2
Ambitne temperature range:	-20 ÷ +45 °C
Operating position:	free
Mounting:	rail TH35 (EN 60715)
Protection degree:	IP20 (EN 60529)
Protective class:	II
Overvoltage category:	II
Pollution degree:	2
Rated impulse withstand voltage:	2 kV (EN 60669-2-1), 1 kV (EN 61000-4-5)
Dimensions (height / width / depth):	double-module (35 mm) 90x35x66 mm
Weight:	0,135 kg
Reference standards:	EN 60669-1; EN 60669-2-1 EN 61000-4-2,3,4,5,6,11

APPEARANCE



CAUTION

The device is designed for single-phase installation and must be installed in accordance with standards valid in a particular country. The device should be connected according to the details included in this operating manual. Installation, connection and control should be carried out by a qualified electrician staff, who act in accordance with the service manual and the device functions. Disassembling of the device is equal with a loss of guarantee and can cause electric shock. Before installation make sure the connection cables are not under voltage. The cruciform head screwdriver 3,5 mm should be used to instal the device. Improper transport, storage, and use of the device influence its wrong functioning. It is not advisable to instal the device in the following cases: if any device part is missing or the device is damaged or deformed. In case of improper functioning of the device contact the producer.

The symbol means selective collecting of electrical and electronic equipment. It is forbidden to put the used equipment together with other waste.

MOUNTING, FUNCTIONING

1. Disconnect the power supply from the mains by the phase fuse, the circuit-breaker or the switch-disconnector that are joined to the proper circuit.
2. Check if there is no voltage on connection cables by means of a special measure equipment.
3. Install DIM-20 device in the switchboard on TH-35 DIN rail.
4. Connect the cables with the terminals according to installing diagram.
5. Switch on the power supply from the mains.

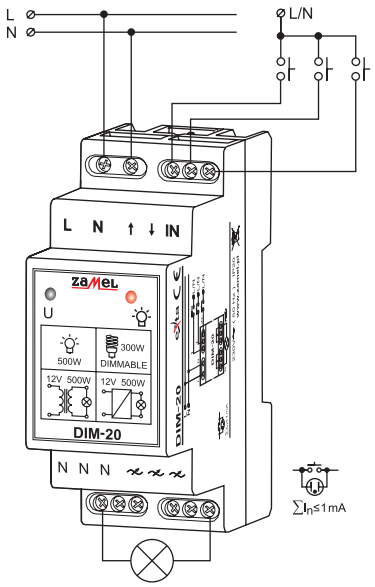
The device is used to control the lighting with a total power that does not exceed 500 W. Monostable "light" push-buttons are responsible for the control. The buttons can be connected in a parallel way to enable lighting operating from different places. Short pressing and releasing the button (for about <0,8 sec.) causes the light switches on or off. Holding the button for a longer time (>0,8 sec.) causes smooth light dimming or brightening. DIM-20 has the function to memorize the preset light brightness level.

• To memorize the brightness level, press the control push-button (control input IN or ↑) and hold it for a longer time to obtain the demanded brightness level.

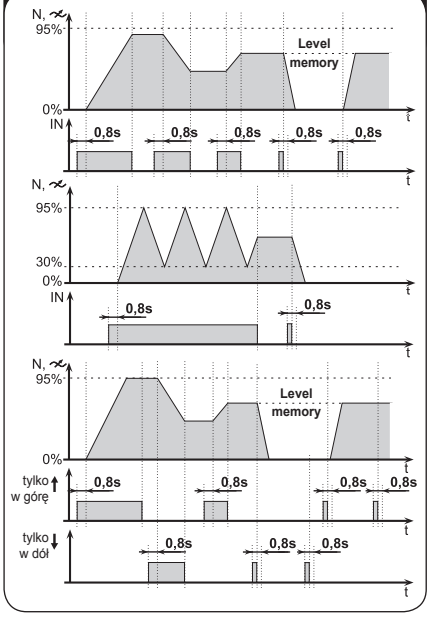
• To memorize the lowest brightness level, again push the button (control input IN or ↓) and hold it for a longer time to obtain a new demanded brightness level.

The adjusted brightness level is remembered in the inner memory of the device and will operate with the next switching on / off the light. **Even in case of power supply failure the adjusted brightness level is remembered.**

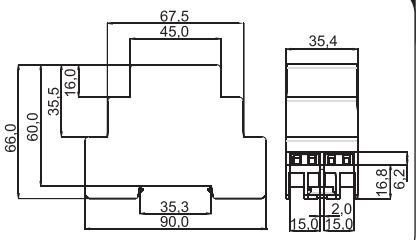
CONNECTING



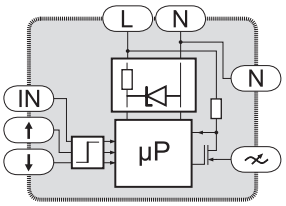
TIME COURSES



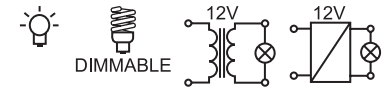
DIMENSIONS



INNER DIAGRAM



RELAY CAPACITY



PRODUCT FAMILY

DIM-20 light dimmer belongs to DIx light dimmers

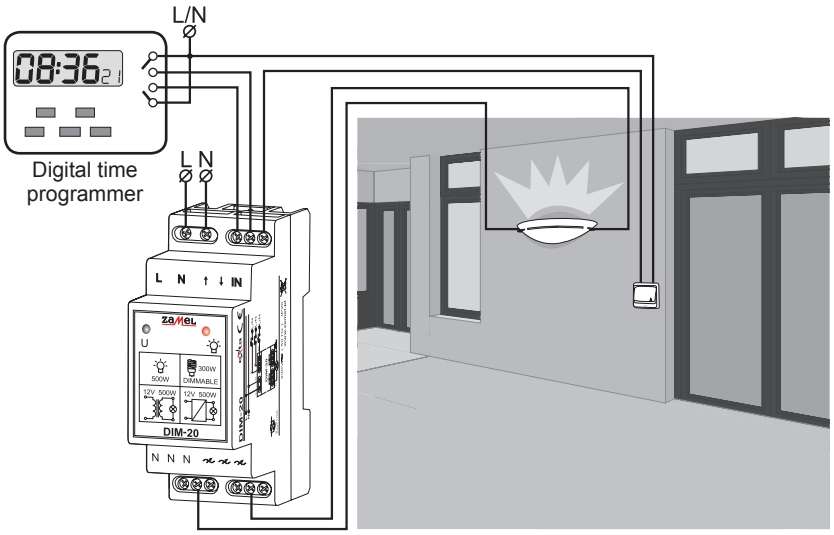
DIX-xx

Device type:
- 01 – serial, basic
- 02 – serial, with memory
- 10 – basic, modular
- 20 – modular with memory, *only for DIM-20 device*

Casing type:
- M – modular
- P – flush junction box

Device symbol

TYPICAL APPLICATION



WARRANTY CARD

There is 24 months guarantee on the product

Salesman stamp and signature, date of sale

1. ZAMEL provides a two-year warranty for its products.
2. The ZAMEL warranty does not cover: a) mechanical defects resulting from transport, loading / unloading or other circumstances b) defects resulting from incorrect installation or operation of ZAMEL products; c) defects resulting from any changes made by CUSTOMERS or third parties, to products sold or equipment necessary for the correct operation of products sold; d) defects resulting from force majeure or other aleatory events for which ZAMEL is not liable; e) power supply (batteries) to be equipped with a device in the moment of sale (if they appear);
3. All complaints in relation to the warranty must be provided by the CUSTOMER in writing to the retailer after discovering a defect.;
4. ZAMEL will review complaints in accordance with existing regulations.;
5. The way a complaint is settled, e.g. replacement of the product, repair or refund, is left to the discretion of ZAMEL.
6. Guarantee does not exclude, does not limit, nor does it suspend the rights of the PURCHASER resulting from the discrepancy between the goods and the contract.

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