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DIM－2

## Staircase switch with dimming

## Characteristics

－designated for dimming el．bulbs，halogen lights and halogen lights with winding transformers
－intelligent control of halogen lights，function of gradual switching on and dim－ ming
－controlling inputs for push button and switch
－values are set by potentiometers on front panel of the product，adjustable：
－maximum dim－up
－speed（fluency）of dim－up
－speed（fluency）of dim－down
－time for which a light is on with maximum dim－up
－all time intervals can be adapted according to a request
－output without contact：1x triac
－load AC 5b（el．bulbs） 500 W
－clamp terminals
－parallel connection of controlling pushbuttons is possible
－protection against over－temperature inside the product－switches output off＋ signalizes overheating by LED flashing
－1－MODULE，DIN rail mounting
－Note：possibility of start and finish adjustment up on 1 hour，device has descrip－ tion DIM－2－1h

## Description



## 1．Output

2．Supply voltage terminal
3．Control input for push button－is a service switch（possibility to switch a light on permanently）
4．Output indication－red LED： －start－LED flashes in medium pace
－delay－LED is on
－end－LED slowly flashes
－temperature overload－output dis－ connected，LED flashes quickly
5．Supply voltage indication
6．－brightness setting：10－100\％
7．t1－dim－up time setting：1－40 s
8．t3－dim－down time setting：1－40 s
9．t2－time dwell setting： $0 \mathrm{~s}-20 \mathrm{~min}$
10．Supply terminals
11．Controlling input for switch－to control dimmers（for example in staircases）．This input is protected against undesired button blocking（for example by a match）．Length of button pressing doesn＇t influence length of cycle．

## Symbol



## Connection



T 2．5 A－ballast protection recommended
When load is above 300 VA it is necessary to ensure sufficient cooling．
Recommendation for mounting：leave a gap of min． 0.5 module（approx． 9 mm ）on side of the device to ensure better cooling of the device．

## Product loadability

| a | b | c | d | e | f |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\overbrace{R}^{(M)}$ | $\boldsymbol{F}_{-}^{-1 I L}$ | に上こと | (4) <br> 230 VAC $\qquad$ | $\begin{gathered} \text { 낙 } \\ \mathrm{x} \end{gathered}$ | $\Omega_{\mathrm{xx}}$ | $\Omega_{\mathrm{xxx}}$ |
| $\bullet$ | $\bullet$ | － | － | － | $\bullet$ | － |

a）lamp，halogen light
b）low－voltage el．bulbs $12 / 24 \mathrm{~V}$ wound transformers
c）low－voltage el．bulbs $12 / 24 \mathrm{~V}$ electronic transformers d）LED bulbs
e）saving fluorescent lamps
f）switching management
$x$－dimmable
$x x$－incline edge
xxx－descending edge

DIM-2

| Supply terminals: | A1-A2 |
| :---: | :---: |
| Supply voltage: | AC $230 \mathrm{~V} / 50 \mathrm{~Hz}$ |
| Consumption: | max. 5 VA |
| Supply voltage tolerance: | -15\%; +10\% |
| Supply indication: | green LED |
| Time setting: | potentiometers |
| Time deviation: | $10 \%$ - mechanical setting |
| Repeat accuracy: | $5 \%$ - set value stability |
| Temperature coefficient: | $0.01 \% /{ }^{\circ} \mathrm{C}$, at $=20^{\circ} \mathrm{C}$ |
| Reset time: | max. 80 ms |
| Controlling T1 |  |
| Control terminals: | T1-A1 |
| Control voltage: | AC 230 V |
| Power on control input: | max. 1.5 VA |
| Impulse length: | min. $100 \mathrm{~ms} / \mathrm{max}$. unlimited |
| Glow-lamps: | yes |
| Max. amount of glow lamps connected to controlling input: | max. amount 50 pcs <br> (measured with glow lamp $0.68 \mathrm{~mA} / 230 \mathrm{~V} \mathrm{AC}$ ) |

Controlling T2

| Control terminals: | T2-A1 |
| :--- | :---: |
| Control voltage: | AC 230 V |
| Power on control input: | 0.1 VA |
| Impulse length: | $\mathrm{min} .100 \mathrm{~ms} / \mathrm{max}$. unlimited |

## Output

| Rated current: | 2 A |
| :--- | :---: |
| Resistance load: | $10-500 \mathrm{VA}$ |
| Inductive load: | $10-250 \mathrm{VA}$ |


| Other information |  |
| :--- | :---: |
| Operating temperature: | $-20^{\circ} \mathrm{C}$ to $+55^{\circ} \mathrm{C}\left(-4^{\circ} \mathrm{F}\right.$ to $\left.131^{\circ} \mathrm{F}\right)$ |
| Storage temperature: | $-30^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}\left(-22^{\circ} \mathrm{F}\right.$ to $\left.158^{\circ} \mathrm{F}\right)$ |
| Operating position: | any |
| Mounting: | DIN rail EN 60715 |
| Protection degree: | IP40 from front paneI / IP10 terminals |
| Overvoltage cathegory: | III. |
| Pollution degree: | 2 |
| Max. cable size $\left(\mathrm{mm}^{2}\right):$ | solid wire max. $2 \times 2.5$ or $1 \times 4 /$ |
|  | with sleeve max. $1 \times 2.5$ or $2 \times 1.5(\mathrm{AWG} 12)$ |
| Dimensions: | $90 \times 17.6 \times 64 \mathrm{~mm}\left(3.5^{\prime \prime} \times 0.7^{\prime \prime} \times 2.5^{\prime}\right)$ |
| Weight: | $65 \mathrm{~g} \mathrm{(2.3} \mathrm{oz})$. |
| Standards: | EN 60669-2-1; EN $61010-1$ |



- brightness

T1, T2 - controlling input
t1-dim-up time
Controlled via input T1 (button)
Dim-up delay-down is started by a button.
Cycle extension - by re-pressing button (during the cycle).

t2-time delay
t3-dim-down time
Controlled via input T2 (switch)
The switch starts the cycle and it stops on max.set brightness. After the switch is off, the cycle will continue until completed.

## Warning

Device is constructed for connection in 1-phase main AC and must be installed according to norms valid in the state of application. Connection according to the details in this direction. Installation, connection, setting and servicing should be installed by qualified electrician staff only, who has learnt these instruction and functions of the device. This device contains protection against overvoltage peaks and disturbancies in supply. For correct function of the protection of this device there must be suitable protections of higher degree ( $A, B, C$ ) installed in front of them. According to standards elimination of disturbancies must be ensured. Before installation the main switch must be in position "OFF" and the device should be de-energized. Don't install the device to sources of excessive electro-magnetic interference. By correct installation ensure ideal air circulation so in case of permanent operation and higher ambient temperature the maximal operating temperature of the device is not exceeded. For installation and setting use screw-driver cca 2 mm . The device is fully-electronic - installation should be carried out according to this fact. Non-problematic function depends also on the way of transportation, storing and handling. In case of any signs of destruction, deformation, non-function or missing part, don't install and claim at your seller. After the product exceeds lifetime, it should be removed and placed in protected dump. Important advice and warning: Dimmer is designated for managing brightness of el. bulbs, in case of low-voltage halogen lights with separating ferromagnetic transformer. It is not suitable for connecting electronic transformers.
Important instructions and cautions - dimmer is not designated for controlling of motors or other inductive loads. HDO warning signals and other similar signals spreaded by main, can cause interruption of dimmer. Interruption is active only during transmitting of these signals.

