

## ELKO EP, s.r.o

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Made in Czech Republic
02-6/2017 Rev.: 1
MR-41
MR-42

## Memory relay

## Characteristics

- memory (impulse) relays, for switching lights from several places, replace threeway switches (No.6) and cross-bar switches (No.7)
- thanks to control by push buttons (unlimited number, connected in parallel by 2 -wires), installation gets more transparent and faster for mounting
- relays MR-41 and MR-42 memorize its state after re-energization in a way that it is always switched off, after energization it automatically returns into its state before de-energization
- MR-41 - output contact: 1x changeover / SPDT 16 A
- MR-42 - choice: $2 x$ parallel contact or second step relay
- the function is selected with a switch on the front panel
- output contact: $2 x$ changeover / DPDT 16 A
- supply voltage: AC 230 V or AC/DC $12-240 \mathrm{~V}$


## Description



1. Supply voltage terminals
2. Control input (ON/OFF)
3. Supply voltage indication
4. Output indication
5. Function settings
6. Output contacts 2
7. Output contacts 1

## Connection

MR-41


## Symbol

MR-41


MR-42


| Type of load | $\widetilde{\square}$ <br> AC1 |  |  | $\square$ <br> AC5a uncompensated | compensated | $\underset{\mathrm{AC} 5 \mathrm{~b}}{(\mathrm{M})}$ |  | $\cdots$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mat. contacts $\mathrm{AgSnO}_{2}$ contact 16A | 250V / 16A | 250V / 5A | 250V/3A | 230V / 3A (690VA) | $230 \mathrm{~V} / 3 \mathrm{~A}$ (690VA) to max. input $\mathrm{C}=14 \mathrm{uF}$ | 1000W | x | 250V / 3A | x |
| Type of load |  | $\bar{m}$ <br> AC14 |  | $\qquad$ |  |  |  | $\bar{m}$ <br> DC13 | $\bar{m}$ <br> DC14 |
| Mat. contacts $\mathrm{AgSnO}_{2}$ contact 16A | x | 250V / 6A | 250V / 6A | 24V/10A | 24V/3A | 24V/2A | 24V/6A | 24V/2A | x |


|  | MR-41 | MR-42 |
| :---: | :---: | :---: |
| Number of functions: | 1 | 2 |
| Supply terminals: | A1-A2 |  |
| Voltage range: $\overline{\text { z }}$ | AC/DC $12-240 \mathrm{~V}$ ( $\mathrm{AC} 50-60 \mathrm{~Hz}$ ) |  |
| Power input (max.): | AC 0.17-3 VA / DC 0.1-1.2 W | AC 0.17-12 VA / DC 0.11-1.9 W |
| Voltage range: | AC $230 \mathrm{~V} / 50-60 \mathrm{~Hz}$ |  |
| Power input (max.): | AC max. $12 \mathrm{VA} / 1.2 \mathrm{~W}$ | AC max. $12 \mathrm{VA} / 1.9 \mathrm{~W}$ |
| Max. dissipated power <br> (Un + terminals): | 3 W | 4.5 W |
| Supply voltage tolerance: | -15 \%; +10 \% |  |
| Supply indication: | green LED |  |

Output

| Number of contacts: | $1 \times$ changeover / SPDT $\left(\mathrm{AgSnO}_{2}\right)$ |
| :--- | :---: |
| Current rating: | $2 \times$ changeover / DPDT $\left(\mathrm{AgSnO}_{2}\right)$ |
| Breaking capacity: | $16 \mathrm{~A} / \mathrm{AC1}$ |
| Inrush current: | $4000 \mathrm{VA} / \mathrm{AC} 1,384 \mathrm{~W} / \mathrm{DC}$ |
| Switching voltage: | $30 \mathrm{~A} /<3 \mathrm{~s}$ |
| Output indication: | $250 \mathrm{~V} \mathrm{AC} \mathrm{/} 24 \mathrm{~V} \mathrm{DC}$ |
| Mechanical life: | red LED |
| Electrical life $(\mathrm{AC} 1):$ | 10.000 .000 operations |

## Control

| Load between A2-ON/OFF: |  |
| :--- | :---: |
|  | Yes |
| Control. terminals: | A1 - ON/OFF |
| Glow tubes connetions: | No (UNI), Yes (230 V) max. - 4 pcs |
| Impulse length: | min. $25 \mathrm{~ms} /$ max. unlimited |

Other information

| Operating temperature: | $-20 . .+55^{\circ} \mathrm{C}$ |  |
| :---: | :---: | :---: |
| Storage temperature: | $-30 . .+70^{\circ} \mathrm{C}$ |  |
| Dielectric strength: <br> supply - output 1 <br> supply - output 2 <br> output 1 - output 2 |  | $\begin{aligned} & 3 \mathrm{kV} \\ & 4 \mathrm{kV} \end{aligned}$ |
| Operating position: | any |  |
| Mounting: | DIN rail EN 60715 |  |
| Protection degree: | IP40 from front panel / IP20 terminals |  |
| Overvoltage category: | III. |  |
| Pollution degree: | 2 |  |
| Max. cable size ( $\mathrm{mm}^{2}$ ): | solid wire max. $1 \times 2.5$ or $2 \times 1.5$ / <br> with sleeve max. 1x 2.5 (AWG 12) |  |
| Dimensions: | $90 \times 17.6 \times 64 \mathrm{~mm}$ ( $3.5^{\prime \prime} \times 0.7^{\prime \prime} \times 2.55^{\prime \prime}$ ) |  |
| Weight: | (UNI) - 59 g | (UNI) - 80 g |
|  | (230) - 53 g | (230) - 70 g |
| Standards: | EN 60669-1, EN 60669-2-1 |  |

## Function

MR-41


MR-42


## LED indication

MR-42


## Warning

The device is constructed for 1-phase main installation of AC 230 V or AC/DC $12-240 \mathrm{~V}$ and must be installed in accordance with regulations and standards applicable in the country of use. 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 ( $\mathrm{A}, \mathrm{B}, \mathrm{C}$ ) 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 $t$ is possible to dismount the device after its lifetime, recycle, or store in protective dump.

