

#### **ELKO EP, s.r.o.** Palackého 493

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Made in Czech Republic 02-6/2017 Rev.: 0



# MR-41 MR-42

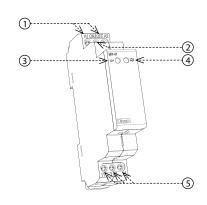
## Memory relay

# **∌** ⊠ EHI 🗘 C €

## Characteristics

- memory (impulse) switches, controlled by buttons for light switching from more
  places, are a practical replacement for three-way switches (No.6) and cross-bar
  switches (No.7)
- thanks to control by buttons (unlimited number, connected in parallel by 2 wires), installation gets more transparent and faster for mounting
- relay MR-41/42 remembers its state after re-energization in a way that it is always switched off, after energization it automatically returns into its state before deenergization
- MR-41 output contact: 1x changeover / SPDT 16 A
- MR-42 options 2x parallel contacts or the other relay is latching
  - function selected via external jumper between B1 B2
  - output contact: 2x changeover / DPDT 16 A
- supply voltage AC 230 V or AC/DC 12 240 V
- 1-MODULE version, DIN rail mounting, controlling by buttons

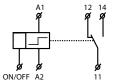
### **Description**



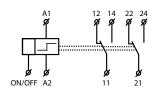
- 1. Supply voltage terminals
- 2. Control input
- 3. Supply indication
- 4. Output indication
- 5. Output contacts

## Symbol

MR-41

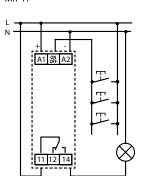


MR-42

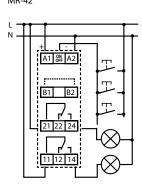


### Connection

MR-41



MR-42



| Type of load                                      | cos φ ≥ 0.95 AC1 | —M—<br>AC2        | —(M)—<br>AC3      | ≠[]‡<br>AC5a<br>uncompensated | 型 纪<br>和 纪<br>AC5a<br>compensated         | HAL230V<br>SAC5b | AC6a             | <br>AC7b         | AC12       |
|---|------------------|-------------------|-------------------|-------------------------------|---|------------------|------------------|------------------|------------|
| Mat. contacts AgSnO <sub>2</sub> ,<br>contact 16A | 250V / 16A       | 250V / 5A         | 250V / 3A         | 230V / 3A (690VA)             | 230V / 3A (690VA)<br>to max. input C=14uF | 1000W            | х                | 250V / 3A        | х          |
| Type of load                                      | <b>₩</b>         | -₩-               | <u>-</u> ₩        |                               | -M-                                       | -M-              |                  | - <del></del>    | <u>-</u> ₩ |
| Mat. contacts AgSnO <sub>2</sub> ,<br>contact 16A | AC13             | AC14<br>250V / 6A | AC15<br>250V / 6A | DC1<br>24V / 10A              | DC3<br>24V / 3A                           | DC5<br>24V / 2A  | DC12<br>24V / 6A | DC13<br>24V / 2A | DC14<br>x  |

Electrical life (AC1):

|                                | MR-41                               | MR-42                 |  |  |  |
|--------------------------------|-------------------------------------|-----------------------|--|--|--|
| Number of functions:           | 1                                   | 2                     |  |  |  |
| Supply terminals:              | A1 - A2                             |                       |  |  |  |
| Voltage range:                 | AC/DC 12 - 240 V (AC 50 - 60 Hz)    |                       |  |  |  |
| Power input:                   | ut: AC 0.17 - 3 VA / DC 0.1 - 1.2 W |                       |  |  |  |
| Voltage range: ♀               | AC 230 V /                          | / 50 - 60 Hz          |  |  |  |
| Power input (apparent / loss): | AC max. 12 VA / 1.2 W               | AC max. 12 VA / 1.9 W |  |  |  |
| Supply voltage tolerance:      | -15 %; +10 %                        |                       |  |  |  |
| Supply indication:             | green LED                           |                       |  |  |  |

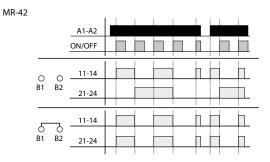
| Supply voltage tolerance: | -15 %; +10 %                               |  |  |  |  |  |
|---------------------------|--|--|--|--|--|--|
| Supply indication:        | green LED                                  |  |  |  |  |  |
| Output                    |  |  |  |  |  |  |
| Number of contacts:       | 1x changeover / SPDT (AgSnO <sub>2</sub> ) | 2x changeover / DPDT (AgSnO <sub>2</sub> ) |  |  |  |  |
| Current rating:           | 16 A / AC1                                 |  |  |  |  |  |
| Breaking capacity:        | 4000 VA / AC1, 384 W / DC                  |  |  |  |  |  |
| Inrush current:           | 30 A / < 3 s                               |  |  |  |  |  |
| Switching voltage:        | 250 V AC1 / 24 V DC                        |  |  |  |  |  |
| Output indication:        | red LED                                    |  |  |  |  |  |
| Mechanical life:          | 3x10 <sup>7</sup>                          |  |  |  |  |  |

0.7x10<sup>5</sup>

| Control                   |   |  |  |  |
|---------------------------|---|--|--|--|
| Consumption of input:     | AC 0.025 - 0.2 VA / DC 0.1 - 0.7 W (UNI), AC 0.53 VA (AC 230 V) |  |  |  |
| Load between A2-ON/OFF:   |   |  |  |  |
|                           | Yes   |  |  |  |
| Control. terminals:       | A1 - ON/OFF   |  |  |  |
| Glow tubes connetions:    | No (UNI), Yes (230 V)   |  |  |  |
| Max. amount of glow lamps | UNI - glow lamps cannot connected,                              |  |  |  |
| connected to controlling  | 230 V - max. amount 5 pcs                                       |  |  |  |
| input:                    | (measured with glow lamp 0.68 mA / 230 V AC)                    |  |  |  |
| Impulse length:           | min. 25 ms / max. unlimited                                     |  |  |  |

| Other information      |  |                         |  |  |  |
|------------------------|--|-------------------------|--|--|--|
| Operating temperature: | -20 °C to +55 °C (-4 °F to 131 °F)     |                         |  |  |  |
| Storage temperature:   | -30 °C to +70 °C (-22 °F to 158 °F)    |                         |  |  |  |
| Electrical strength:   | 4 kV (supply - output)                 |                         |  |  |  |
| Operating position:    | any                                    |                         |  |  |  |
| Mounting:              | DIN rail I                             | EN 60715                |  |  |  |
| Protection degree:     | IP40 from front panel / IP20 terminals |                         |  |  |  |
| Overvoltage category:  | III.                                   |                         |  |  |  |
| Pollution degree:      | 2                                      |                         |  |  |  |
| Max. cable size (mm²): | solid wire max. 1x 2.5 or 2x 1.5 /     |                         |  |  |  |
|                        | with sleeve max. 1x 2.5 (AWG 12)       |                         |  |  |  |
| Dimensions:            | 90 x 17.6 x 64 mm                      | (3.5" x 0.7" x 2.5")    |  |  |  |
| Weight:                | (UNI) - 62 g / 2.2 oz.,                | (UNI) - 89 g / 3.1 oz., |  |  |  |
|                        | (230) - 60 g / 2.1 oz.                 | (230) - 85 g / 3 oz.    |  |  |  |
| Standards:             | EN 61810-1,                            | 10-1, EN 61010-1        |  |  |  |

| MR-41 |        |   |  |     |  |
|-------|--------|---|--|-----|--|
|       |        |   |  |     |  |
|       | A1-A2  |   |  |     |  |
|       | -      |   |  |     |  |
|       | ON/OFF |   |  |     |  |
|       |        | 1 |  | 1 1 |  |
|       | 11-14  |   |  |     |  |
|       |        |   |  |     |  |



### Warning

Device is constructed for connection in 1-phase main alternating current 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  $transportation, storing\ and\ handling.\ In\ case\ of\ any\ signs\ of\ destruction,\ deformation,\ non-configuration,\ deformation,\ deforma$ 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.