

# MRC series

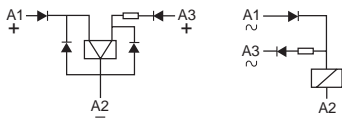
## C3-R2x

### 11-pin remanence relays, 2-pole, according to IEC 67-I-18a

|   |   |                        |                 |
|---|---|------------------------|-----------------|
| <b>Type</b>                             | <b>C3-R2x/ ... V</b><br>Remanence plug-in relays,<br>2 change-over contacts |                        |                 |
| <b>Maximum contact load</b>             | <b>10 A/250 V AC1</b>   | <b>0,5 A/110 V DC1</b> |                 |
|   | <b>10 A/30 V DC1</b>  | <b>0,2 A/220 V DC1</b> |                 |
| <b>Recommended minimum contact load</b> | <b>1 mA/10 V</b> (with 10 µm Au)<br><b>10 mA/10 V</b> (standard contact)    |                        |                 |
| <b>Contacts</b>                         |   |                        |                 |
| Material                                | Standard  | Code 0                 | AgNi            |
|   | Optional  | Code 8                 | AgNi + 10 µ Au  |
|   | Optional  | Code 9                 | AgNi + 0,2 µ Au |
| Rated current                           | 10 A  |                        |                 |
| Switch-on current max. (20 ms)          | 30 A  |                        |                 |
| Switching voltage max.                  | 250 V   |                        |                 |
| AC load                                 | 2,5 kVA   |                        |                 |
| DC load                                 | see Fig. 2  |                        |                 |

|                 |                             |  |  |
|-----------------|-----------------------------|--|--|
| <b>Coil</b>     |                             |  |  |
| Coil resistance | see table; tolerance ± 10 % |  |  |
| ON pulse power  | 1,5 VA/W                    |  |  |
| OFF pulse power | 0,5 VA/W                    |  |  |

**Internal Diagram:**



**Coil table**

| VAC | Ω  | mA  | VDC | Ω   | mA  |
|-----|----|-----|-----|-----|-----|
| 24  | 75 | 12  | 12  | 125 | 41  |
| 48  | 38 | 6   | 24  | 63  | 21  |
| 115 | 16 | 2,5 | 48  | 31  | 10  |
| 230 | 8  | 1,3 | 110 | 14  | 4,5 |

|                                |                 |
|--------------------------------|-----------------|
| <b>Insulation</b>              | Volt rms, 1 min |
| Contact open                   | 1000 V          |
| Contact/contact                | 2,5 kV          |
| Contact/coil                   | 2,5 kV          |
| Insulation resistance at 500 V | ≥1 GΩ           |
| Insulation, IEC 61810-5        | 2,5 kV/3        |

**Specifications**

|                                       |  |
|---------------------------------------|--|
| Ambient temperature operation/storage | -40 (no ice)...60 °C / -40 ... 80 °C             |
| Minimum pulse length for ON/OFF       | 50 ms  |
| Mechanical life                       | 10 Mill. switching cycles AC, 20 Mill. DC-Relais |
| AC voltage endurance at rated load    | ≥100000 switching cycles                         |
| Switching frequency at rated load     | ≤ 1200/h   |
| Protection class                      | IP40   |
| Weight                                | 95 g   |

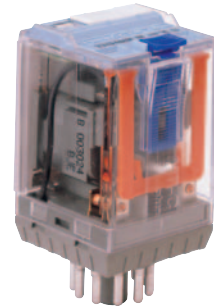
**Standard types**

|   |                        |                        |                        |
|---|------------------------|------------------------|------------------------|
| <b>AC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240)</b> | <b>C3-R20/AC ... V</b> | <b>C3-R28/AC ... V</b> | <b>C3-R29/AC ... V</b> |
| <b>DC 24, 48, 110, 220</b>                          | <b>C3-R20/DC ... V</b> | <b>C3-R28/DC ... V</b> | <b>C3-R29/DC ... V</b> |

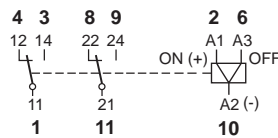
"..." Enter the voltage for full type designation

**Accessories**

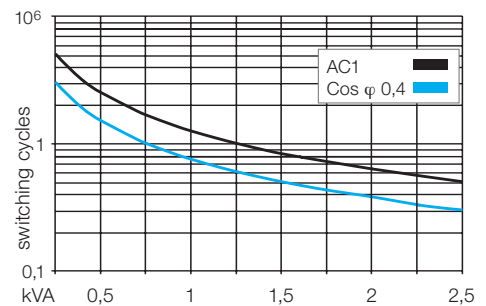
|  |                                      |
|--|--------------------------------------|
| Socket:                                  | <b>S3-B, S3-S, S3-L, S3-P, S3-P0</b> |
| Operational accessories (blanking plug): | <b>SO-NP, SO-OP</b>                  |



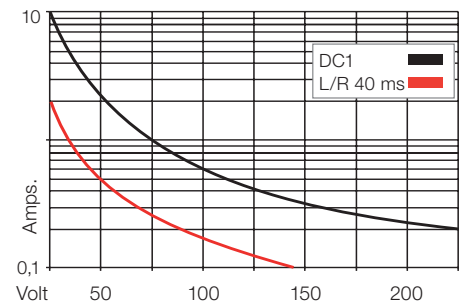
**Connection diagram**



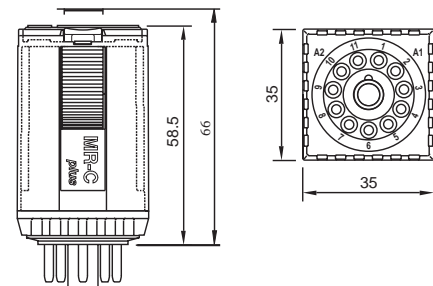
**Fig. 1 AC voltage endurance**



**Fig. 2 DC load limit curve**



**Dimensions [mm]**



**Technical approvals, conformities**



IEC 61810; EN 60947