# MRC series
# C3-R2x
# 11-pin remanence relays, 2-pole, according to IEC 67-I-18a

| | |
|---|---|
| **Type** | **C3-R2x/ ... V**<br>Remanence plug-in relays,<br>2 change-over contacts |
| **Maximum contact load** | **10 A/250 V AC1** **0,5 A/110 V DC1**<br>**10 A/30 V DC1** **0,2 A/220 V DC1** |
| **Recommended minimum contact load** | **1 mA/10 V** (with 10 µm Au)<br>**10 mA/10 V** (standard contact) |

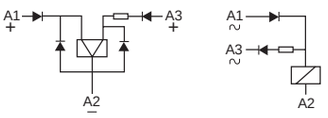
**Contacts**

| | | | |
|---|---|---|---|
| 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 |

**Coil**

| | |
|---|---|
| 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 |

**Insulation**

| | |
|---|---|
| | 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**

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

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

**Accessories**

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

**Connection diagram**

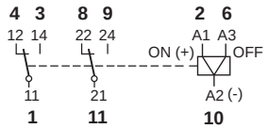



**Fig. 1 AC voltage endurance**

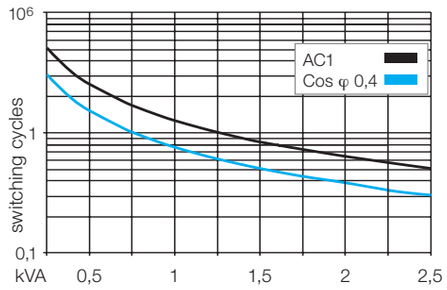
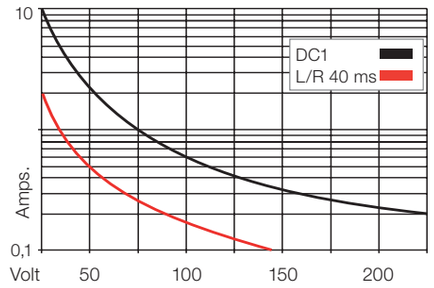
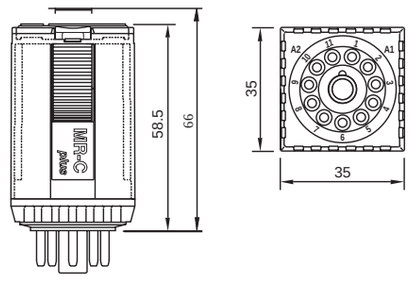



**Fig. 2 DC load limit curve**




**Dimensions [mm]**




**Technical approvals, conformities**

IEC 61810; EN 60947

Kühn Controls AG

**Notes:**

**You want more information about this product, please call us: tel: +49 (0)7082-940000 or send us a fax: +49 (0)7082-940001, or email: sales@kuehn-controls.de or visit our Website: www.kuehn-controls.de**