

MRC series

C3-X1x

11-pin power relay, 1-pole, double make, according to IEC 67-I-18a

| | | | | |
|--------------------------------|--|------------------------|------|--|
| Type | C3-X1x/ ... V Power relays for DC application 1 pole, NO, double make | | | |
| Maximum contact load | 10 A/250 V AC 1 | 7 A/110 V DC1 | | |
| | 10 A/30 V DC 1 | 1,2 A/220 V DC1 | | |
| Contacts | | | | |
| Material | Standard | Code 0 | AgNi | |
| 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 $\pm 10\%$ | | | |
| Pick-up voltage | $\geq 0,8 \times U_N$ | | | |
| Release voltage | $\geq 0,1 \times U_N$ | | | |
| Nominal power | 2,4 VA (AC)/1,3 W (DC) | | | |

| | | | | | | |
|-------------------|------------|----------------------------|-----------|------------|----------------------------|-----------|
| Coil table | VAC | Ω | mA | VDC | Ω | mA |
| | 24 | 65 | 100 | 24 | 443 | 54 |
| | 48 | 286 | 50 | 48 | 1K7 | 27 |
| | 115 | 1K7 | 21 | 110 | 9K2 | 12 |
| | 230 | 6K8 | 10 | 220 | 36K1 | 6 |

| | |
|--------------------------------|--------------------------|
| Insulation | Volt rms, 1 min |
| Contact open | 2500 V |
| Contact/contact | 2,5 kV |
| Contact/coil | 2,5 kV |
| Insulation resistance at 500 V | $\geq 1 \text{ G}\Omega$ |
| Insulation, IEC 61810-5 | 2,5 kV/3 |

| | |
|---------------------------------------|--|
| Specifications | |
| Ambient temperature operation/storage | -40 (no ice)...60 °C / -40 ... 80 °C |
| Pick-up time/bounce time | 20 ms/ ≤ 3 ms |
| Release time/bounce time | 10 ms/ ≤ 1 ms |
| Mechanical life | AC: 10 Mill./DC: 20 Mill. switching cycles |
| AC voltage endurance at rated load | ≥ 100000 switching cycles |
| Switching frequency at rated load | ≤ 1200 /h |
| Protection class | IP40 |
| Weight | 90 g |

Standard types
AC 50 Hz/60 Hz: 24, 48, 115, (120), 230, (240)
LED
RC Suppressor

DC 24, 48, 110, 220
LED
Free wheeling diode
Polarity and free wheeling diode

AC/DC bridge rectifier 24 V, 48 V, 60 V

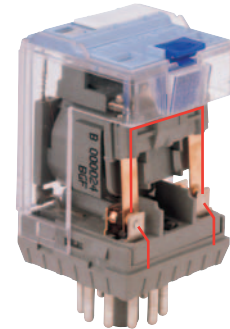
C3-X10/AC ... V
C3-X10X/AC ... V
C3-X10R/AC ... V

C3-X10/DC ... V
C3-X10X/DC ... V
C3-X10DX/DC ... V
C3-X10FX/DC ... V

C3-X10BX/UC ... 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

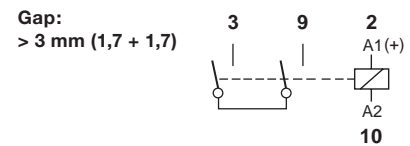


Fig. 1 AC voltage endurance

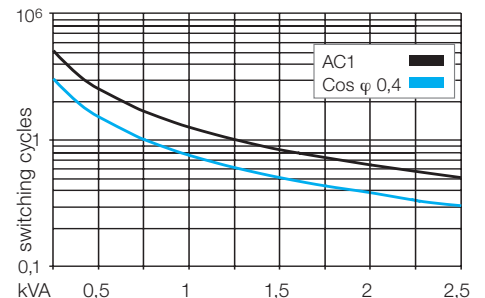
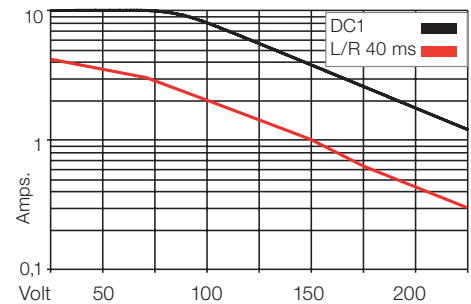
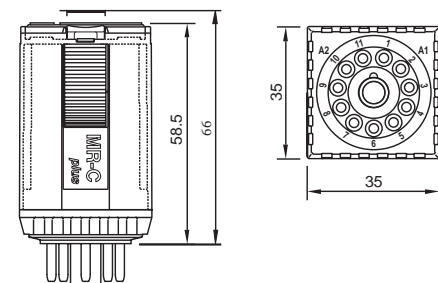


Fig. 2 DC load limit curve



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