

# MRC series

## C3-M1x

### 11-pin power relay, 1-pole, magnetic blow out, according to IEC 67-I-18a

<b>Type</b>	<b>C3-M1x/ ... V</b> Power relays, DC, 1 pole, magnetic blow out	
<b>Maximum contact load</b>	<b>10 A 250 V AC1</b> <b>3,6 A 220 VDC13</b>	<b>10 A 220 V DC1</b> <b>2 A 220 V</b>

<b>Contacts</b>			
Material	Standard	Code 0	AgNi
Rated current			10 A
Switch-on current max. (20 ms)			30 A
Switching voltage max. (Verschmutzungsgrad 3)			250 V
Switching voltage max. (Verschmutzungsgrad 2)			250 V
AC load			2,5 kVA
DC load			see Fig. 2

<b>Coil</b>	
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)

<b>Coil table</b>					
VAC	$\Omega$	mA	VDC	$\Omega$	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

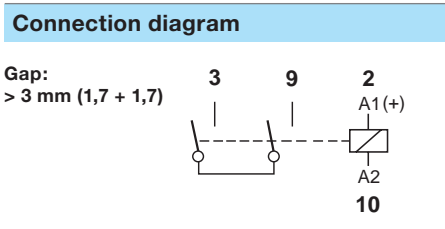
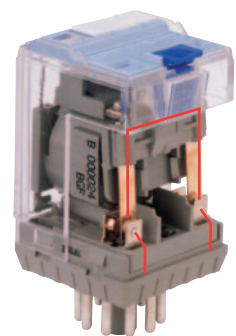
<b>Insulation</b>	
	Volt rms, 1 min
Contact open	2500 V
Contact/contact	2,5 kV
Contact/coil	2,5 kV
Insulation resistance at 500 V	$\geq 1 \text{ G}\Omega$
Insulation, IEC 61810-5:	2,5 KV / 3

<b>Specifications</b>	
Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Nominal coil power	2,4 VA (AC), 1,3 W (DC)
Pick-up time/bounce time	20 ms $\leq$ 3 ms
Release time/bounce time	10 ms $\leq$ 1 ms
Isolation: EN 60947, pollution rate 3, Gr C	250 V
Dielectric strength, Contact/Coil	2,5 kV

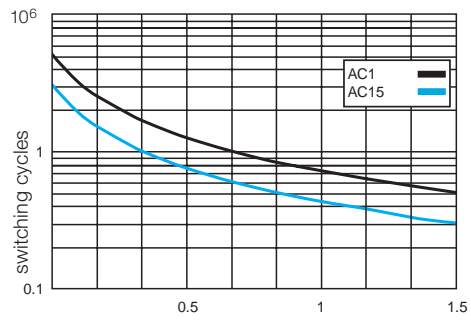
<b>Standard types</b>	
<b>AC 24, 48, 115, (120), 230</b>	<b>C3-M10/AC ... V</b>
<b>LED</b>	<b>C3-M10X/AC ... V</b>
<b>RC Suppressor</b>	<b>C3-M10R/AC ... V</b>
<b>DC 24, 48, 110, 220</b>	<b>C3-M10/DC ... V</b>
<b>LED</b>	<b>C3-M10X/DC ... V</b>
<b>Free wheeling diode</b>	<b>C3-M10DX/DC ... V</b>
<b>Polarity and free wheeling diode</b>	<b>C3-M10FX/DC ... V</b>
<b>AC/DC bridge rectifier 24 V, 48 V, 60 V</b>	<b>C3-X10BX/UC ... V</b>

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

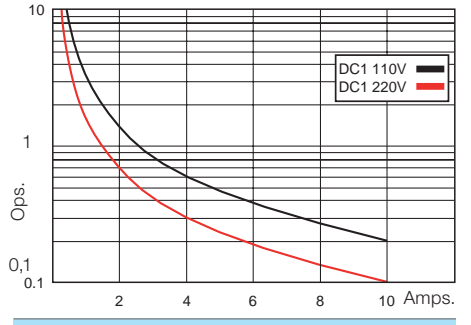
<b>Accessories</b>	
Socket:	<b>S3-B, S3-S, S3-L, S3-P, S3-P0</b>
Operational accessories (blanking plug):	<b>SO-NP, SO-OP</b>



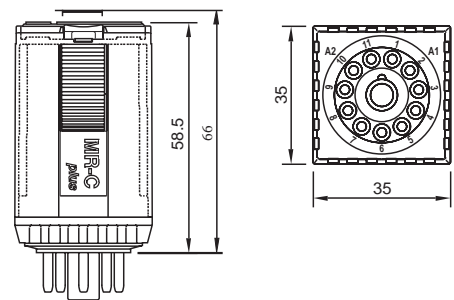
**Fig. 1 AC voltage endurance**



**Fig. 2 DC voltage endurance**



**Dimensions [mm]**



**Technical approvals, conformities**





**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](mailto:sales@kuehn-controls.de) or visit our Website: [www.kuehn-controls.de](http://www.kuehn-controls.de)