

**QRC series**  
**C9-E2x**  
**14-pin, miniature relay, 2-pole, plug-in, faston**

<b>Type</b>	<b>C9-E2x/ ... V</b> Sensitive relay 2 change-over contacts		
<b>DC operating range</b>	<b>0,8 ... 1,7 x U<sub>N</sub></b>		
<b>Maximum contact load</b>	<b>5 A/250 V AC1</b>	<b>5 A/30 V</b>	<b>DC1</b>
<b>Recommended minimum contact load</b>	<b>1 mA/10 V</b> (with 10 μ Au) <b>10 mA/10 V</b> (standard contact)		

<b>Contacts</b>			
Material	Standard	Code 1	AgNi + 0,2 μ Au
	Optional,	Code 2	AgNi + 10 μ Au
Rated current	5 A		
Switch-on current max. (2,5 ms)	15 A		
Switching voltage max.	250 V		
AC load	1200 VA		
DC load	see fg. 2		

<b>Coil</b>			
Coil resistance	see table; tolerance ± 10 %		
Pick-up voltage	≥ 0,8 x U <sub>N</sub>		
Release voltage	≥ 0,1 x U <sub>N</sub>		
Nominal power	0,8 VA (AC)/0,5 W (DC)		

<b>Coil table</b>					
VAC	Ω	mA	VDC	Ω	mA
24	1K1	21	12	288	42
48	4K6	10	24	1K1	21
115	5K9	7	48	4K6	10
230	23K9	3,5	110	24K2	4,5

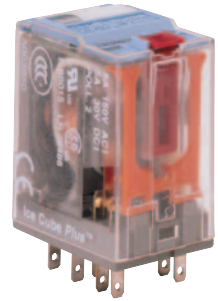
<b>Insulation</b>		Volt rms, 1 min
Contact open	1000 V	
Contact/contact	2,5 kV	
Contact/coil	2,5 kV	
Insulation resistance at 500 V	≥ 1 GΩ	
Insulation, IEC 61810-5	2,5 kV/3	

<b>Specifications</b>	
Ambient temperature operation/storage	-40 (no ice)...60 °C /-40 ... 80 °C
Pick-up time/bounce time	10 ms/≤ 3 ms
Release time/bounce time	6 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	40 g

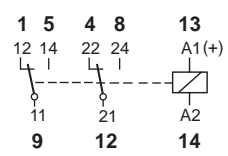
<b>Standard types</b>		
<b>AC 50 Hz/60 Hz: 24, 48, 115, 230, (240)</b>	<b>C9-E21/AC ... V</b>	<b>C9-E22/AC ... V</b>
<b>LED</b>	<b>C9-E21X/AC ... V</b>	<b>C9-E22X/AC ... V</b>
<b>DC 24, 48, 110, 220</b>	<b>C9-E21/DC ... V</b>	<b>C9-E22/DC ... V</b>
<b>LED</b>	<b>C9-E21X/DC ... V</b>	<b>C9-E22X/DC ... V</b>
<b>Free wheeling diode</b>	<b>C9-E21DX/DC ... V</b>	<b>C9-E22DX/DC ... V</b>
<b>Polarity and free wheeling diode</b>	<b>C9-E21FX/DC ... V</b>	<b>C9-E22FX/DC ... V</b>
<b>AC/DC bridge rectifier 24 V, 48 V, 60 V</b>	<b>C9-E21BX/UC ... V</b>	<b>C9-E22BX/UC ... V</b>

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

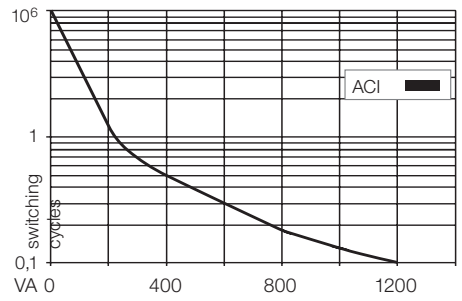
<b>Accessories</b>	
Socket:	<b>S9-M, S9-L, S9-P, S9-P0</b>
Operational accessories (blanking plug):	<b>S9-NP, S9-OP</b>



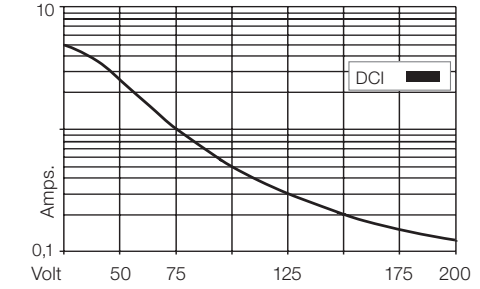
**Connection diagram**



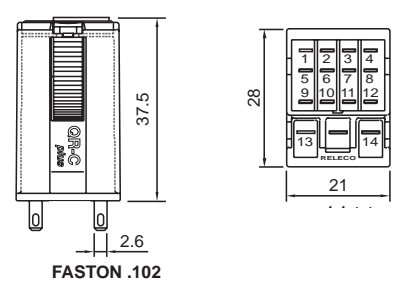
**Fig. 1 AC voltage endurance**



**Fig. 2 DC load limit curve**



**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)