

QRC series

R7-A2x

8-pin, miniature standard relay, 2-pole, plug-in

Relay approval: EN 60077-1-2/99 - EN 61373/99 for Railway application



Type	R7-A2x/DC ... V Railway application Sensitive, 2 change-over contacts
Maximum contact load:	10 A/250 V AC1 6 A/250 V AC5a/b
Recommended minimum contact load	1 mA/10 V (with 10 μ Au) 10 mA/10 V (standard contact)

Contacts			
Material	Standard	Code 0	AgNi
	Optional	Code 4	AgNi + 0,2μ Au
	Optional	Code 8	AgNi + 10μ Au
Rated current	10 A		
Switch-on current max. (20 ms)	30 A		
Switching voltage max.	250 V		
AC load	see fig. 1		
DC load	see fig. 2		

Coil	
Coil resistance	see table; tolerance ± 10 %
Contact open	0,7 U _N bei 1,25 U _N
Release voltage	≥ 0,1 x U _N
Nominal power	1,07 W

Coil table	Voltage	Ω ± 10%	mA
	24	535	45
	48	2004	24
	72	4750	15
	110	11337	10

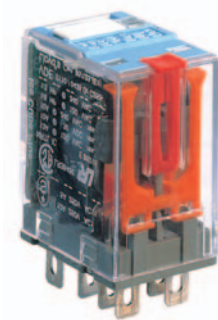
Insulation	Volt rms, 1 min
Pollution grade	PD3
Pulse (1,2 /50_s) Dielectric strenght (1Minute/V rms)	
Contact/coil	4KV / 2200V
Between different poles	4KV / 2200V
Between contact and the same pole	1550 / 850V

Specifications	
Ambient temperature operation/storage	-25 (no ice)...70 °C / -40 ... 80 °C
Number of mechanical operations	>20millions
Thermic class	B (130° C)
Vibration : category / class	1 / B Body mounted
Vibration	5-150Hz (3 axes)
Shock	5g (3 axes)
Operation (UN) / release time	10 ms/ 15 ms
Weight	35 g
Weight avg. Relay + Socket (S3-B)	75g
Protection class	IP40

Standard types			
DC 24, 48, 72, 110	R7-A20/DC ... V	R7-A24/DC ... V	R7-A28/DC ... V
LED	R7-A20X/DC ... V	R7-A24X/DC ... V	R7-A28X/DC ... V
Free wheeling diode	R7-A20D/DC ... V	R7-A24D/DC ... V	R7-A28D/DC ... V
LED + free wheeling diode	R7-A20DX/DC ... V	R7-A24DX/DC ... V	R7-A28DX/DC ... V

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

Accessories	
Socket:	S7-M, S7-I/O, S7-L, S7-P, S7-P0



Connection diagram

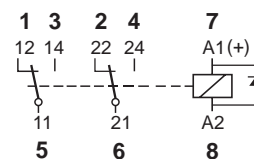


Fig. 1 AC voltage endurance

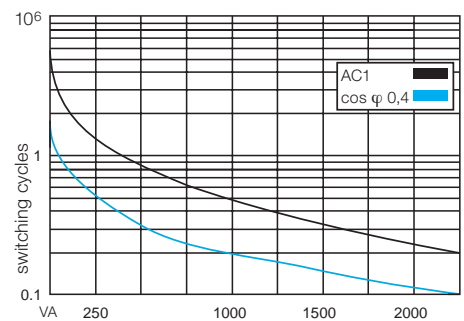
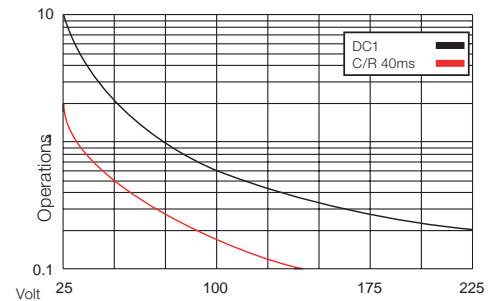
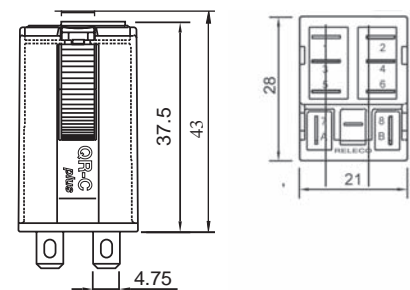


Fig. 2 DC load limit curve



Dimensions [mm]



Technical approvals, conformities



EN 60077-1-2; EN 61373/99