

MRC series

R3-N3xD

11-pin, special relay, 3-pole, according to IEC 67-I-18a

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

Type	R3-NxD/ ... V Relays for Railway application 3 change-over contacts special wide range voltage			
Maximum contact load	6 A 250 V AC1	6 A 30 V DC1		
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 + 0,2 μ Au
	Optional	Code 8	AgNi + 10 μ Au
Rated current	6 A		
Switch-on current max. (20 ms)	15 A		
Switching voltage max.	250 V		
Max. AC load	see Fig. 1		
DC load	see Fig. 2		

Coil

Contact open	see table; tolerance $\pm 10\%$
Operation range	0,7 U _N ... 1,25 U _N
Nominal power	1,07 W

Coil table

VDC	Ω	mA
24	525	46
48	2150	22
72	4930	15
110	12900	9

Insulation

Pollution grade	PD3
With pulse (1,2 / 50 μ s)/Dielectric strength (1Minute/V rms)	
Contact/coil	4 kV / 2220 V
Contact/contact	4 kV / 2220 V
Between contact and the same pole	1550 kV / 850 V

Specifications

Ambient temperature operation/storage	-25 (no ice) ... 70 °C / -40 ... 80 °C
Number of mechanical operations	> 10 millions
Thermic class	B (130 °C)
Vibration : category / class	1 / B Body mounted 5 - 150 Hz (3 axes)
Shock	5 g (3 axes)
Pick-up time/bounce time	18 ms \leq 3 ms
Release time/bounce time	35 ms \leq 1 ms
Weight	95 g
Weight avg. Relay + Socket (S3-B)	150 g
Protection class	IP 40

Standard types

DC 24, 48, 72, 110

Free wheeling diode

LED

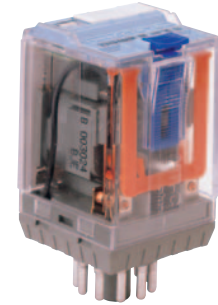
LED + free wheeling diode

R3-N30/DC ... V	R3-N34/DC ... V	R3-N38/DC ... V
R3-N30D/DC ... V	R3-N34D/DC ... V	R3-N38D/DC ... V
R3-N30X/DC ... V	R3-N34X/DC ... V	R3-N38X/DC ... V
R3-N30DX/DC ... V	R3-N34DX/DC ... V	R3-N38DX/DC ... V*

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

Accessories

Socket:	S3-B, S3-S, S3-L, S2-P, S3-P0
Operational accessories (blanking plug):	SO-NP, SO-OP



Connection diagram

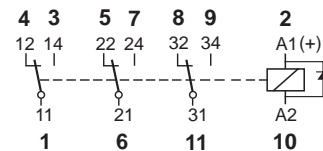


Fig. 1 AC voltage endurance

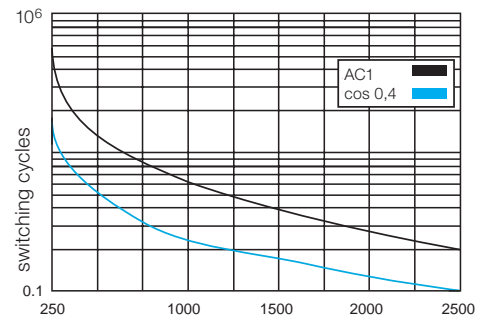
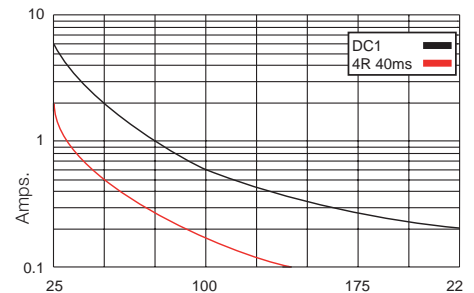
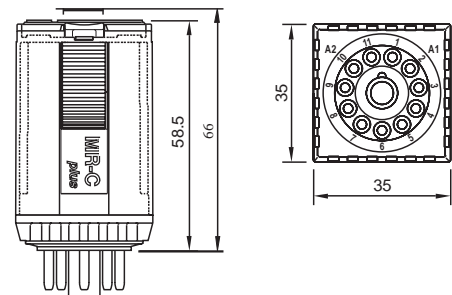


Fig. 2 DC load limit curve



Dimensions [mm]



Technical approvals, conformities



IEC 60077/EN60077-1-2/99; EN6/373/99