

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	10 mA/10 V	Code 0, 4		
	5 mA/5 V	Code 8		

Contacts

Material	Standard	Code 0	AgNi
	Optional	Code 4	AgNi + 0,2µ Au
	Optional	Code 8	AgNi + 10µ 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

Coil resistance	see table; tolerance ± 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	2133	22
72	4844	15
110	12900	9

Insulation

Pollution grade	PD3
With pulse (1,2 / 50 µs)/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/≤ 3 ms
Release time/bounce time (D version)	35 ms/≤ 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, S3-P, S3-P0, S3-MP, S3-MS
Optional accessories (blanking plug):	SO-NP, SO-OP



Connection diagram

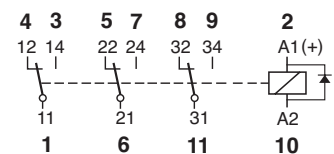


Fig. 1 AC voltage endurance

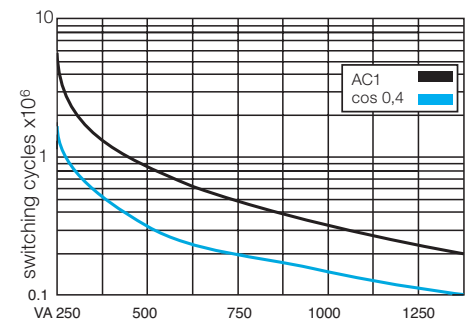
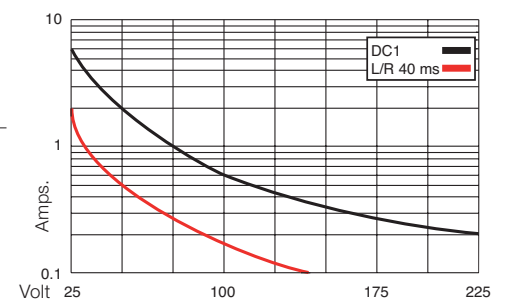
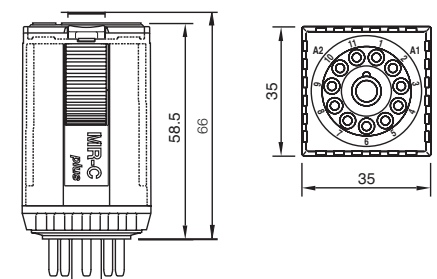


Fig. 2 DC load limit curve



Dimensions [mm]



Technical approvals, conformities



IEC 60077/EN60077-1-2/99; EN61373/99