

# Relay Interfaces

## R500 pluggable relay modules



DIN 3

Pluggable relay : 1 SPDT high level contact 10 mA to 6 A - 5.08 mm .200" spacing

### Characteristics

Relay characteristics	D 2,5/5-R121	D 2,5/5-R121L	D 2,5/5-R121AL				D 2,5/5-R121BL	
<b>COIL</b>								
Rated voltage $\pm 20\%$ , $-15\%$ DC, $\pm 15\%$ AC	24 V DC	24 V DC	24 V AC	24 V DC	48 V AC	48 V DC	110 V AC	230 V AC
Frequency			50 / 60 Hz		50 / 60 Hz		50 / 60 Hz	50 / 60 Hz
Power	0.17 W	0.3 W	0.35 VA	0.35 W	0.44 VA	0.47 W	1.08 VA	2.13 VA
Rated current	7 mA	12 mA	12.4 mA	10 mA	7.6 mA	6.8 mA	8.4 mA	8 mA
Drop-out voltage at 20°C	2.4 V	2.4 V	4.8 V	4.8 V	10 V	10 V	25 V	45 V
Status device					green LED			

### CONTACT

Type	1 SPDT							
Voltage switching range min./max.	12 V / 250 V AC							
Current switching range min./max.	10 mA / 6 A							
Load switching range	0.6 VA / 1500 VA (ohmic load)							
AC1 min. / max.	0.6 W / 140 W							
DC1 min. / DC13 max.	10 <sup>5</sup> in AC15							
Number of on-load operations	10 x 10 <sup>5</sup>							
Number of off-load operations	10 x 10 <sup>5</sup>							
Pull-in time (delay time)	5 ms	5 ms	5 ms	5 ms	5 ms	5 ms	5 ms	5 ms
Drop-out time (delay time)	8 ms	8 ms	15 ms	15 ms	15 ms	15 ms	15 ms	15 ms
Bounce time	1.5 ms							
Insulation coil / contacts	4000 V RMS							
Breakdown voltage coil / contacts	4000 V RMS							
Insulation contacts/contacts	1000 V RMS							
Storage ambient temperature	- 40°C to + 80°C							
Operating ambient temperature	See derating curves							

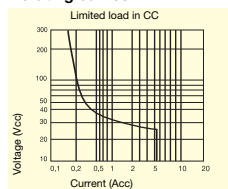
### Other characteristics

Body material	grey	UL 94 V0
Wire	Solid wire	0.2-4 mm <sup>2</sup> / 24-12 AWG
Wire size	Stranded wire	0.22-2.5 mm <sup>2</sup> / 24-12 AWG
Rated wire size		2.5 mm <sup>2</sup> / 12 AWG
Wire stripping length		10 mm .394"
Recommended screwdriver		3.5 mm .137"
Protection		IP 20 NEMA 1
Recommended torque		0.4-0.6 Nm 3.5-5.3 lb.in
Approvals		

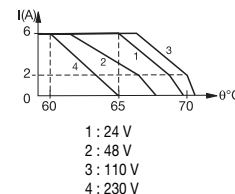
### Reference standards

CEI 947-7-1 / CEI 947-1 / CEI 1131-2 (in relevant parts) / CEI 60664-1 / CEM : IRC 1000-4-2, 3, 4, 5, 6.

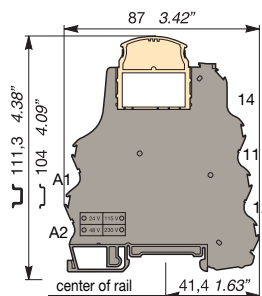
### Derating curves



	DC12	AC12	DC13	AC15
24 V	6 A	6 A	1 A	3 A
110/120 V	0,3 A	6 A	0,2 A	3 A
220/230 V	0,2 A	6 A	0,1 A	3 A

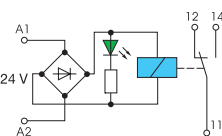


D 2,5/5-R121

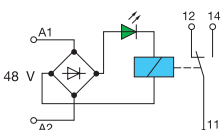


D 2,5/5-R121

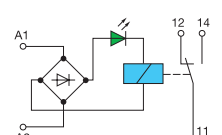
D 2,5/5-R121L



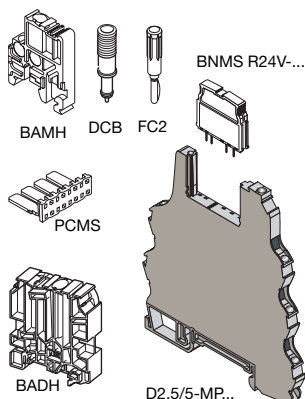
D 2,5/5-R121AL-24V



D 2,5/5-R121AL-48V



D 2,5/5-R121BL



### Order codes

Description	Type	Order P/N	Packaging	Weight kg
Relay module 1 SPDT high level	D 2,5/5-R121-24VDC	1SNA 607 217 R0200	10	0.032
Relay module with LED 1 SPDT high level	D 2,5/5-R121L-24VDC	1SNA 607 201 R1300	10	0.032
Relay module with LED 1 SPDT high level	D 2,5/5-R121AL-24VAC/DC	1SNA 607 231 R0000	10	0.04
Relay module with LED 1 SPDT high level	D 2,5/5-R121AL-48VAC/DC	1SNA 607 232 R0100	10	0.04
Relay module with LED 1 SPDT high level	D 2,5/5-R121BL-110VAC	1SNA 607 264 R1100	10	0.04
Relay module with LED 1 SPDT high level	D 2,5/5-R121BL-230VAC	1SNA 607 265 R1200	10	0.04

### Accessories

High end stop	BAMH 9,1 mm	1SNA 114 836 R0000	50	
	BAMH V0 9,1 mm	1SNA 194 836 R0100	50	
	BADH 12 mm	1SNA 116 900 R2700	50	
Comb type jumper bar 2 to 22 poles		consult us		
Jumper bar 10 poles grey	PCMS V0	1SNA 205 523 R2200	8	
Relay / Opto base	D 2,5/5-MP	1SNA 607 224 R0100	10	0.028
Relay / Opto base with LED 24 VDC	D 2,5/5-MP-24VDC	1SNA 607 222 R0700	10	0.028
Relay / Opto base with LED 24 VAC/VDC	D 2,5/5-MP-24VAC/DC	1SNA 607 260 R2100	10	0.036
Relay / Opto base with LED 48 VAC/VDC	D 2,5/5-MP-48VAC/DC	1SNA 607 261 R1600	10	0.036
Relay / Opto base with LED 110 VAC	D 2,5/5-MP-110VAC	1SNA 607 266 R1300	10	0.036
Relay / Opto base with LED 230 VAC	D 2,5/5-MP-230VAC	1SNA 607 267 R1400	10	0.036
Plug relay 24 V 1 SPDT 10 mA to 6 A	BNMS R24V-1	1SNA 031 820 R1400	4	
Plug relay 24 V 1 SPDT 1 mA to 6 A	BNMS R24V-2	1SNA 031 847 R1300	4	
Test device	blue DCB (1)	1SNA 105 028 R2100	10	
Test plug	DIA. 2 mm FC2	1SNA 007 865 R2600	10	
Marking method	RC55	see marking		

(1) Only on top decks.