

Fast relay module

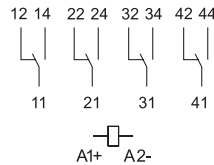
RR.14 35 mm rail (EN 60715) mount
RR.24 11 pin socket type 90.21 mount

- 4 pole changeover or 3 NO + 1 changeover contacts
- DC voltage
- Operate time ≤ 3 ms
- LED command status indication
- 35 mm rail (EN 60715) mount
- 11 pin socket type 90.21 mount

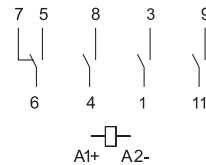
RR.14/24
Screw terminal



RR.14



RR.24



For outline drawings see page 5

Contact specification			
Contact configuration		4 CO (4PDT)	3 NO (SPST-NO) + 1 CO (SPDT)
Rated current/Maximum peak current	A	8/15	8/15
Rated voltage/ Maximum switching voltage	V AC (50/60 Hz)	250/400	250/400
Rated load AC1	VA	2000	2000
Rated load AC15	VA	400	400
Single phase motor rating (230 V AC)	kW	0.3	0.3
Breaking capacity DC1: 30/110/220 V	A	8/0.3/0.12	8/0.3/0.12
Minimum switching load	mW (V/mA)	300 (5/5)	300 (5/5)
Standard contact material		AgCdO	AgCdO
Coil specification			
Nominal voltage (U_N)	V DC	24 - 48 - 110...125 - 220...250	24 - 110...125 - 220...250
Rated power DC	W	< 5	< 3
Operating range	V DC	(0.8...1.1) U_N	(0.8...1.1) U_N
Technical data			
Mechanical life AC/DC	cycles	$10 \cdot 10^6$	$10 \cdot 10^6$
Electrical life at rated load AC1	cycles	$100 \cdot 10^3$	$100 \cdot 10^3$
Operate/release time	ms	2.9/2.5	3/5
Insulation between coil and contacts (1.2/50 μ s)	kV	6 (8 mm)	4 (8 mm)
Dielectric strength between open contacts	V AC	1000	1000
Ambient temperature range	$^{\circ}$ C	-40...+55	-40...+55
Protection category		IP 20	IP 20
Approvals relay (according to type)		CE EAC	

Ordering information

Example: RR series, fast relay module, 4 CO, 125 V DC coil, 35 mm rail (EN 60715) mount.

A

RR.14.9.125.0000

Series
RR

Type
1 = Modular version

No. of poles
4 = 4 CO

Coil version
9 = DC

Coil voltage
024 = 24 V DC
048 = 48 V DC
125 = 110...125 V DC
220 = 220 V DC
250 = 250 V DC

Options
0000 = Modular version 35 mm rail (EN 60715)

Codes/supply voltages
RR.14.9.024.0000
RR.14.9.048.0000
RR.14.9.125.0000
RR.14.9.220.0000
RR.14.9.250.0000

Example: RR series, fast relay module, 3 NO + 1 CO, 125 V DC coil, 11 pin socket type 90.21 mount.

RR.24.9.125.9021

Series
RR

Type
2 = Plug-in version

No. of poles
4 = 3 NO + 1 CO

Coil version
9 = DC

Coil voltage
024 = 24 V DC
125 = 110...125 V DC
250 = 220...250 V DC

Options
9021 = Relay + 90.21 sockets
0000 = Only Relay

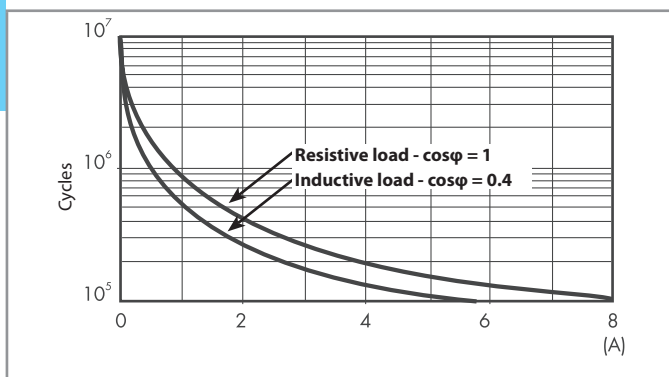
Codes/supply voltages
RR.24.9.024.0000
RR.24.9.024.9021
RR.24.9.125.0000
RR.24.9.125.9021
RR.24.9.250.0000
RR.24.9.250.9021

Technical data

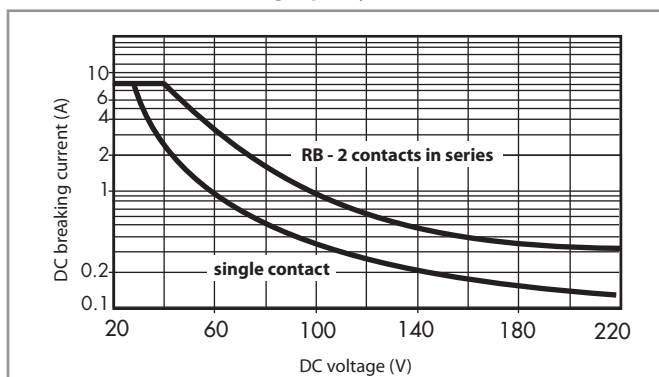
Insulation according to EN 61810-1		RR.14	RR.24
		4 CO	3 NO + 1 CO
Nominal voltage of supply system	V AC	230/400	230/400
Rated insulation voltage	V AC	250	250
Pollution degree		2	2
Insulation between coil and contact set			
Type of insulation		Reinforced (8 mm)	Reinforced (8 mm)
Overvoltage category		III	III
Rated impulse voltage	kV (1.2/50 µs)	6	4
Dielectric strength	V AC	3500	2000
Insulation between adjacent contacts			
Type of insulation		Basic	Basic
Overvoltage category		II	II
Rated impulse voltage	kV (1.2/50 µs)	2.5	2.5
Dielectric strength	V AC	2000	2000
Insulation between open contacts			
Type of disconnection		Micro-disconnection	Micro-disconnection
Dielectric strength	V AC/kV (1.2/50 µs)	1000/1.5	1000/1.5
Conducted disturbance immunity			
Burst (5...50)ns, 5 kHz, on A1 - A2		EN 61000-4-4	level 3 (2 kV)
Surge (1.2/50 µs) on A1 - A2 (differential mode)		EN 61000-4-5	level 3 (2 kV)
Other data			
Bounce time: NO/NC	ms	1.3/5.1	
Vibration resistance (5...55)Hz: NO/NC	g	15/3	
Shock resistance	g	13	
Terminals		Screw terminal	
		Solid and stranded cable	
Max. wire size	mm ²	1 x 2.5 / 2 x 1.5	
	AWG	1 x 14 / 2 x 16	

Contact specification

RR - Electrical life (AC) v contact current



RR - Maximum DC1 breaking capacity



- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of $\geq 100 \cdot 10^3$ can be expected.
- In the case of DC13 loads, the connection of a diode in parallel with the load will permit a similar electrical life as for a DC1 load.
Note: the release time for the load will be increased.

Coil specifications - Type RR.14

DC coil data

Nominal voltage U_N	Coil code	Operating range		Operate time	Release time	Rated power	Rated coil consumption I at U_N
		U_{min}	U_{max}				
V		V	V	V	V	W	mA
24	9.024	19.2	26.4	15	2.8	4.8	200
48	9.048	38.4	52.8	30	3	3.8	80
110...125	9.125	88	137.5	80	12	3.8	30
220	9.220	176	242	150	20	4.0	18
250	9.250	200	275	160	22	3.8	15

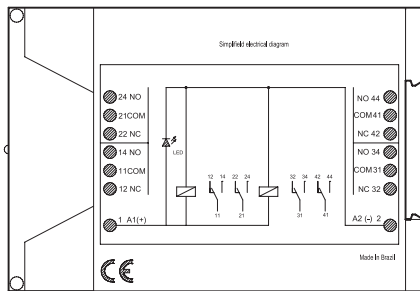
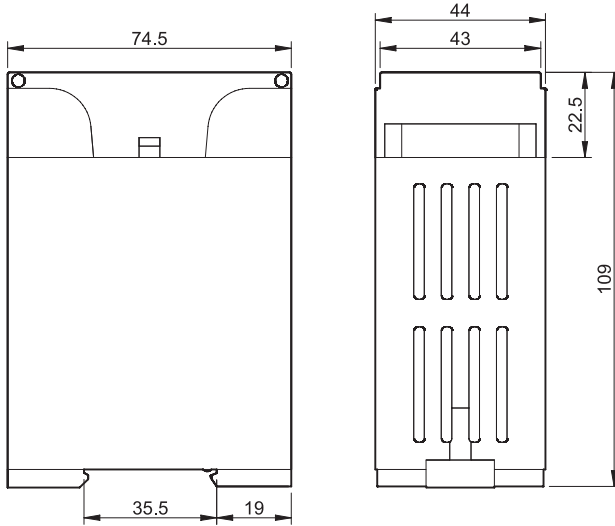
Coil specifications - Type RR.24

DC coil data

Nominal voltage U_N	Coil code	Operating range		Operate time	Release time	Rated power	Rated coil consumption I at U_N
		U_{min}	U_{max}				
V		V	V	V	V	W	mA
24	9.024	19.2	26.4	14	2.4	2.9	120
110...125	9.125	88	137.5	80	12	2.5	20
220...250	9.250	176	275	150	20	1.8	8

Outline drawing

RR.14
Screw terminal



RR.24
Screw terminal

