

## Features

### Fast relay module

**RR.14** 35 mm rail (EN 60715) mount

**RR.24** 11 pin socket type 90.21 mount

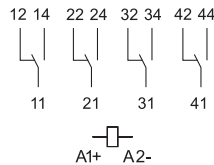
- 4 pole changeover or 3 NO + 1 changeover contacts
- DC voltage
- Operate time  $\leq 3$  ms
- LED command status indication
- 35 mm rail (EN 60715) mount
- 11 pin socket type 90.21 mount

RR.14/24

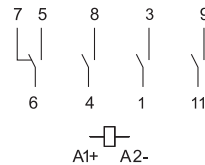
Screw terminal



### RR.14



### RR.24

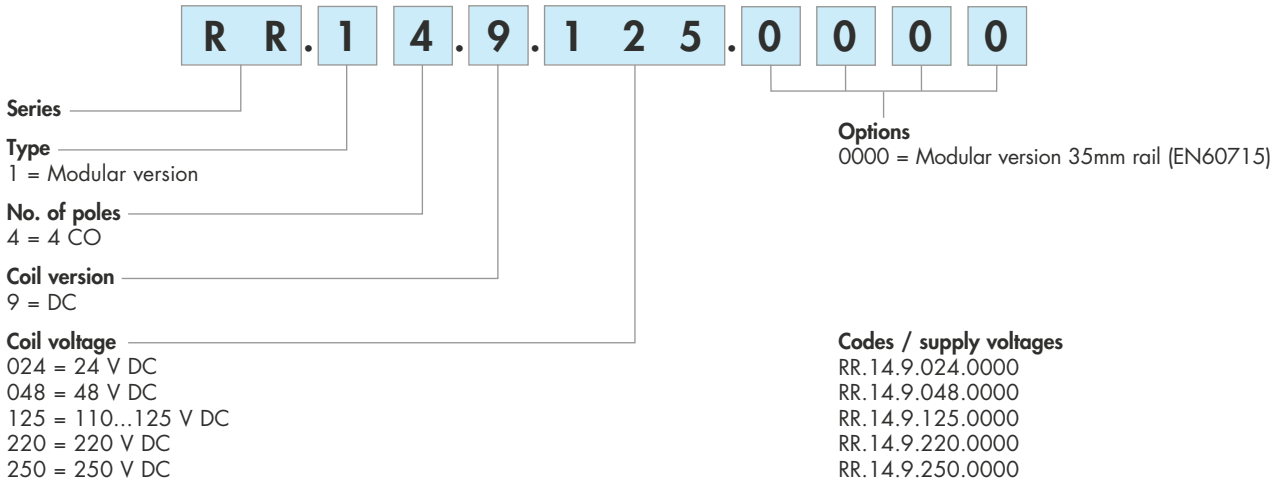


For outline drawings see page 4

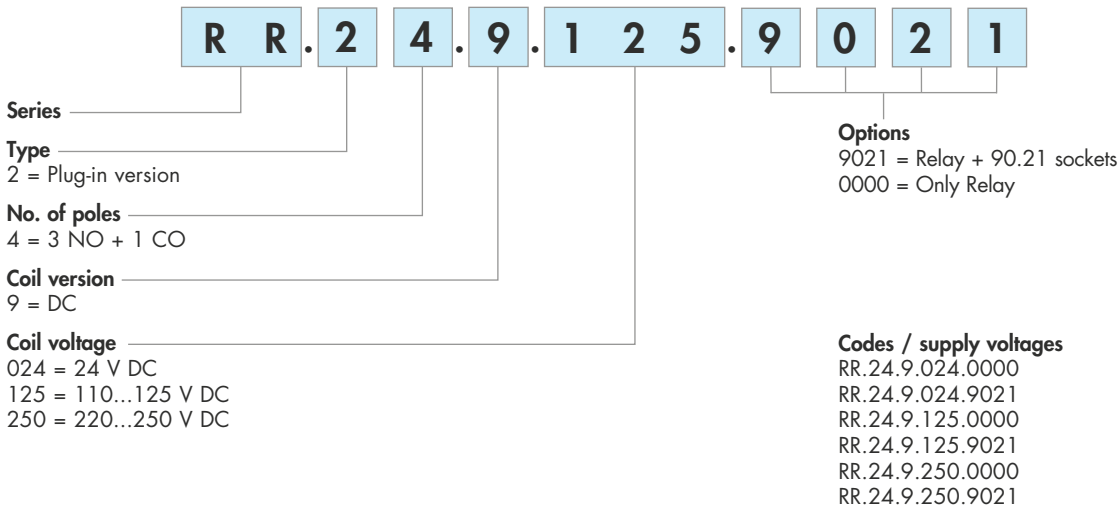
<b>Contact specification</b>			
Contact configuration		4 CO (4PDT)	3 NO (SPST-NO) + 1 CO (SPDT)
Rated current/Maximum peak current	A	8/15	8/15
Rated voltage/Maximum switching voltage	V AC (50/60 Hz)	250/400	250/400
Rated load AC1	VA	2,000	2,000
Rated load AC15	VA	400	400
Single phase motor rating (230 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
<b>Coil specification</b>			
Nominal voltage ( $U_N$ )	V DC	24 - 48 - 110...125 - 220 - 250	24 - 110...125 - 220...250
Rated power DC	W	< 4	< 4
Operating range	V DC	(0.8...1.1) $U_N$	(0.8...1.1) $U_N$
<b>Technical data</b>			
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 $\mu$ s)	kV	6 (8 mm)	4 (8 mm)
Dielectric strength between open contacts	V AC	1,000	1,000
Ambient temperature range	$^{\circ}$ C	-40...+55	-40...+55
Protection category		IP 20	IP 20
<b>Approvals</b> (according to type)		<b>CE EAC</b>	

**Ordering information**

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



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

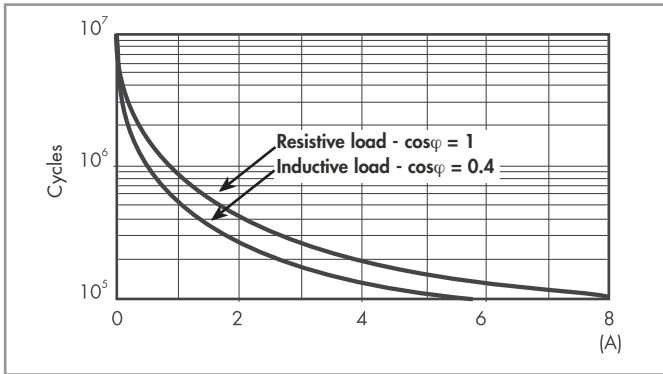


## Technical data

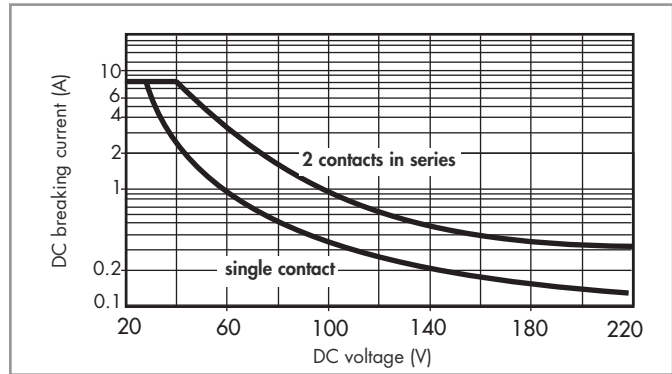
Insulation according to EN 61810-1		RR.14	RR.24
		4 CO	3 NO + 1 CO
Nominal voltage of supply system	V AC	230/400	230/400
Rated insulation voltage	V AC	250	250
Pollution degree		2	2
Insulation between coil and contact set			
Type of insulation		Reinforced (8 mm)	Reinforced (8 mm)
Overvoltage category		III	III
Rated impulse voltage	kV (1.2/50 µs)	6	4
Dielectric strength	V AC	3,500	2,000
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	2,000	2,000
Insulation between open contacts			
Type of disconnection		Micro-disconnection	Micro-disconnection
Dielectric strength	V AC/kV (1.2/50 µs)	1,000/1.5	1,000/1.5
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 <sup>2</sup>	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 $U_N$ V	Coil code	Operating range		Operate time V	Release time V	Rated power W	Rated coil consumption I at $U_N$ mA
		$U_{min}$ V	$U_{max}$ V				
24	9.024	19.2	26.4	15	2.8	2.4	100
48	9.048	38.4	52.8	30	3	3.8	79
110...125	9.125	88	137.5	80	12	3.7	29
220	9.220	176	242	150	20	3.9	18
250	9.250	200	275	160	22	3.8	15

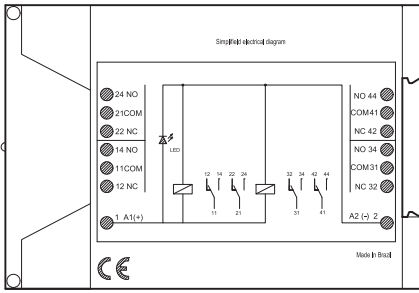
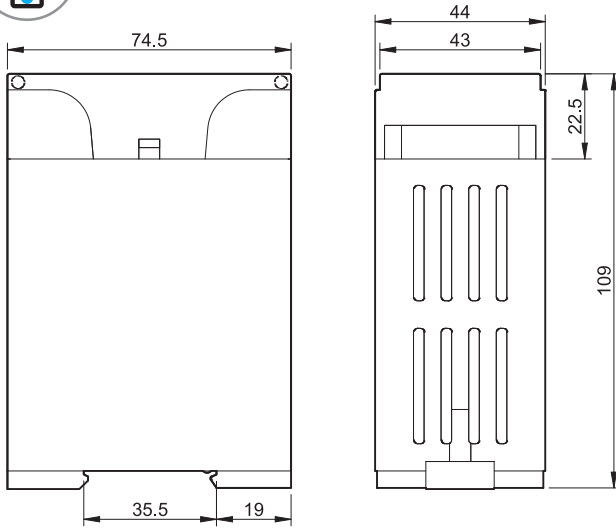
**Coil specifications - Type RR.24**

DC coil data

Nominal voltage $U_N$ V	Coil code	Operating range		Operate time V	Release time V	Rated power W	Rated coil consumption I at $U_N$ mA
		$U_{min}$ V	$U_{max}$ V				
24	9.024	19.2	26.4	14	2.4	2.3	95
110...125	9.125	88	137.5	80	12	3.7	29
220...250	9.250	176	275	150	20	3.9	18

**Outline drawings**

RR.14  
Screw terminal



RR.24  
Screw terminal

