

Ordering information

Electromechanical relay (EMR)

Example: 34 series slim electromechanical relay, 1 CO (SPDT) 6 A contacts, 24 V sensitive DC coil.

3 4 . 5 1 . 7 . 0 2 4 . 0 0 1 0

Series — 34

Type — 5 = Electromechanical type

No. of poles — 1 = 1 pole, 6 A

Coil version — 7 = Sensitive DC

Coil voltage — See coil specifications

A: Contact material
 0 = Standard AgNi
 4 = AgSnO₂
 5 = AgNi + Au

B: Contact circuit
 0 = CO (SPDT)
 3 = NO (SPST)

C: Options
 1 = None

D: Special versions
 0 = Flux proof (RT II)
 9 = Flat version

Selecting features and options: only combinations in the same row are possible.

Preferred selections for best availability are shown in **bold**.

Type	Coil version	A	B	C	D
34.51	sens. DC	0 - 4 - 5	0 - 3	1	0
34.51	sens. DC	0 - 4 - 5	0	1	9

Solid state relay (SSR)

Example: 34 series SSR relay, 2 A output, 24 V DC supply.

3 4 . 8 1 . 7 . 0 2 4 . 9 0 2 4

Series — 34

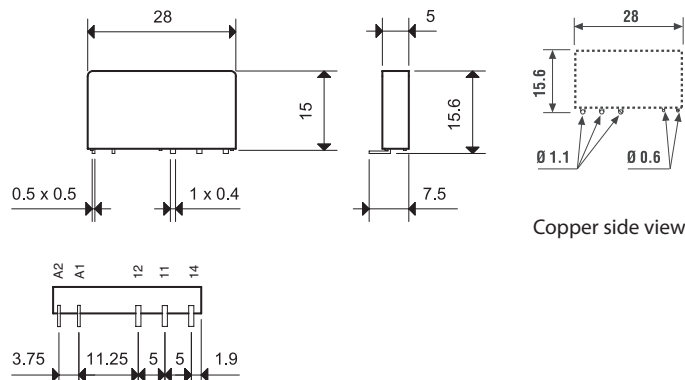
Type — 8 = SSR type

Output — 1 = 1 NO (SPST-NO)

Input circuit — See input specifications

Output circuit
 9024 = 2 A - 24 V DC
 7048 = 0.1 A - 48 V DC
 8240 = 2 A - 240 V AC

Flat pack version



Option = 34.51.7xxx.x019

Environmental protection RT I

Electromechanical relay

Technical data

A

Insulation according to EN 61810-1

Nominal voltage of supply system	V AC	230/400	
Rated insulation voltage	V AC	250	400
Pollution degree		3	2

Insulation between coil and contact set

Type of insulation		Reinforced	
Overvoltage category		III	
Rated impulse voltage	kV (1.2/50 μ s)	6	
Dielectric strength	V AC	4000	

Insulation between open contacts

Type of disconnection		Micro-disconnection	
Dielectric strength	V AC/kV (1.2/50 μ s)	1000/1.5	

Conducted disturbance immunity

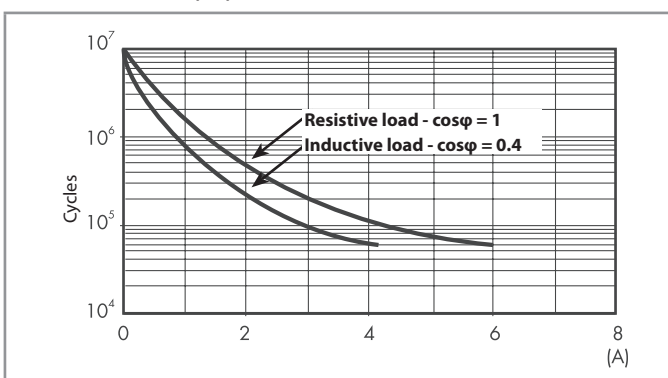
Burst (5...50)ns, 5 kHz, on A1 - A2	EN 61000-4-4	level 4 (4 kV)
Surge (1.2/50 μ s) on A1 - A2 (differential mode)	EN 61000-4-5	level 3 (2 kV)

Other data

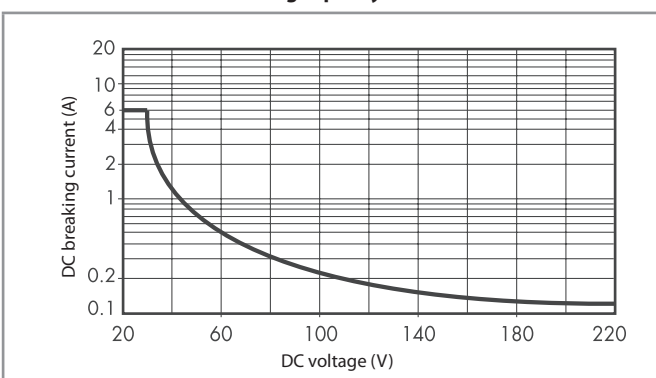
Bounce time: NO/NC	ms	1/6
Vibration resistance (5...55)Hz: NO/NC	g	10/5
Shock resistance	g	20/14
Power lost to the environment	without contact current W	0.2
	with rated current W	0.5
Recommended distance between relays mounted on PCB	mm	≥ 5

Contact specification

F 34 - Electrical life (AC) v contact current



H 34 - Maximum DC1 breaking capacity



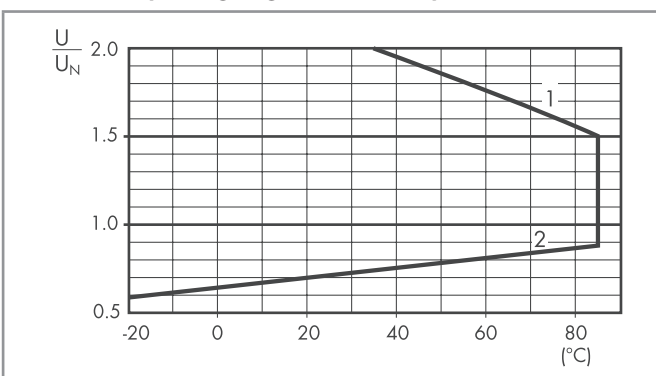
- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of $\geq 60 \cdot 10^3$ can be expected.
- In the case of DC13 loads, the connection of a diode in parallel with the load will permit a similar electrical life as for a DC1 load.
Note: the release time for the load will be increased.

Coil specifications

DC coil data

Nominal voltage U_N	Coil code	Operating range		Resistance	Rated coil consumption
V		U_{min}	U_{max}	R	I at U_N
V		V	V	Ω	mA
5	7.005	3.5	7.5	130	38.4
12	7.012	8.4	18	840	14.2
24	7.024	16.8	36	3350	7.1
48	7.048	33.6	72	12300	3.9
60	7.060	42	90	19700	3

R 34 - DC coil operating range v ambient temperature



- 1 - Max. permitted coil voltage.
- 2 - Min. pick-up voltage with coil at ambient temperature.