

Features

2 Pole relay range

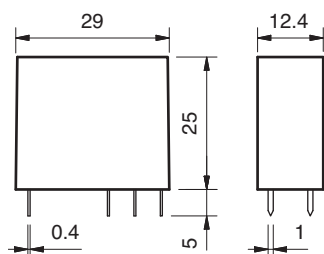
44.52 - 2 Pole 6 A (5 mm pin pitch)

44.62 - 2 Pole 10 A (5 mm pin pitch)

PCB mount - direct or via PCB socket

35 mm rail mount - via screw and screwless sockets

- High physical separation between adjacent contacts
- DC coils (Standard or sensitive)
- Cadmium Free contact materials
- 8 mm, 6 kV (1.2/50 μ s) isolation, coil-contacts
- UL Listing (certain relay/socket combinations)
- Flux proof: RT II
- 95 series sockets
- Coil EMC suppression
- Timer accessories 86 series

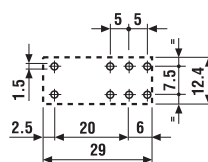
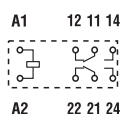


FOR UL HORSEPOWER AND PILOT DUTY RATINGS
SEE "General technical information" page V

44.52



- 2 Pole, 6 A
- 5 mm contact pin pitch
- PCB or 95 series sockets

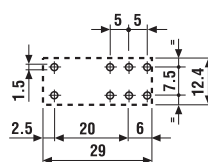
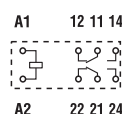


Copper side view

44.62



- 2 Pole, 10 A
- 5 mm contact pin pitch
- PCB or 95 series sockets



Copper side view

Contact specification

Contact configuration	2 CO (DPDT)	2 CO (DPDT)
Rated current/Maximum peak current A	6/10	10/20
Rated voltage/Maximum switching voltage V AC	250/400	250/400
Rated load AC1 VA	1,500	2,500
Rated load AC15 (230 V AC) VA	250	500
Single phase motor rating (230 V AC) kW	0.185	0.37
Breaking capacity DC1: 30/110/220 V A	6/0.3/0.13	10/0.3/0.13
Minimum switching load mW (V/mA)	300 (5/5)	300 (5/5)
Standard contact material	AgNi	AgNi

Coil specification

Nominal voltage (U_N) V AC (50/60 Hz)	—	—
V DC	6 - 9 - 12 - 14 - 24 - 28 - 48 - 60 - 110 - 125	—
Rated power AC/DC/sens. DC VA (50 Hz)/W/W	—/0.65/0.5	—/0.65/0.5
Operating range AC	—	—
DC/sens. DC	(0.73...1.5) U_N /(0.73...1.7) U_N	(0.73...1.5) U_N /(0.8...1.7) U_N
Holding voltage AC/DC	—/0.4 U_N	—/0.4 U_N
Must drop-out voltage AC/DC	—/0.1 U_N	—/0.1 U_N

Technical data

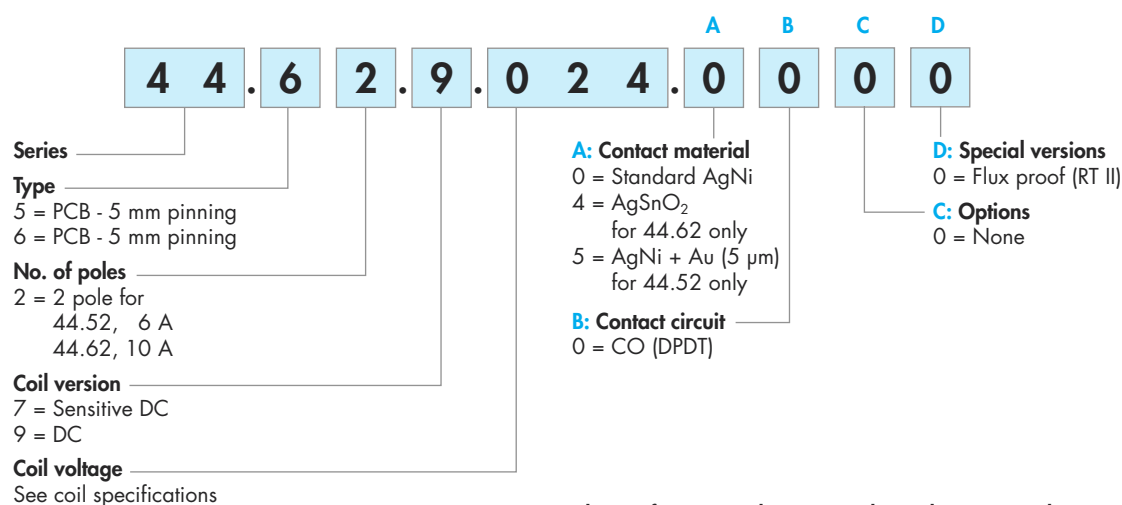
Mechanical life AC/DC cycles	—/20 · 10 ⁶	—/20 · 10 ⁶
Electrical life at rated load AC1 cycles	150 · 10 ³	100 · 10 ³
Operate/release time ms	8/5 - (12/5 sensitive)	8/5 - (12/5 sensitive)
Insulation between coil and contacts (1.2/50 μ s) kV	6 (8 mm)	6 (8 mm)
Dielectric strength between open contacts V AC	1,000	1,000
Ambient temperature range °C	−40...+85	−40...+85
Environmental protection	RT II	RT II

Approvals (according to type)



Ordering information

Example: 44 series PCB relay, 2 CO (DPDT) 10 A contacts, 24 V DC coil.



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
44.52	DC - sens. DC	0 - 5	0	0	0
44.62	DC - sens. DC	0 - 4	0	0	0

Technical data

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 (8 mm)
Overtoltage category	III
Rated impulse voltage	kV (1.2/50 μ s)
Dielectric strength	V AC
	4,000

Insulation between adjacent contacts

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

Insulation between open contacts

Type of disconnection	Micro-disconnection
Dielectric strength	V AC/kV (1.2/50 μ s)
	1,000/1.5

Conducted disturbance immunity

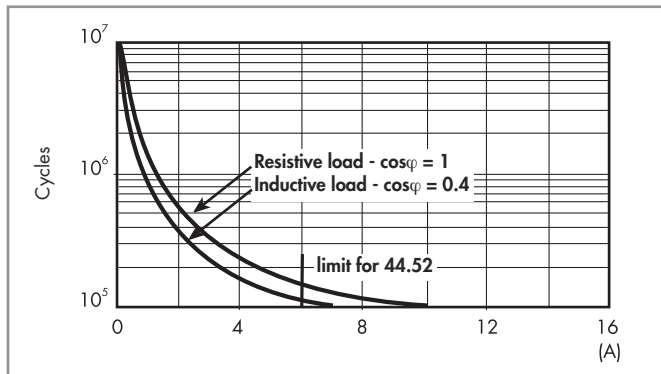
Burst (5...50)ns, 5 kHz, on A1 - A2	EN 61000-4-4	level 4 (4 kV)
Surge (1.2/50 μ s) on A1 - A2 (differential mode)	EN 61000-4-5	level 3 (2 kV)

Other data

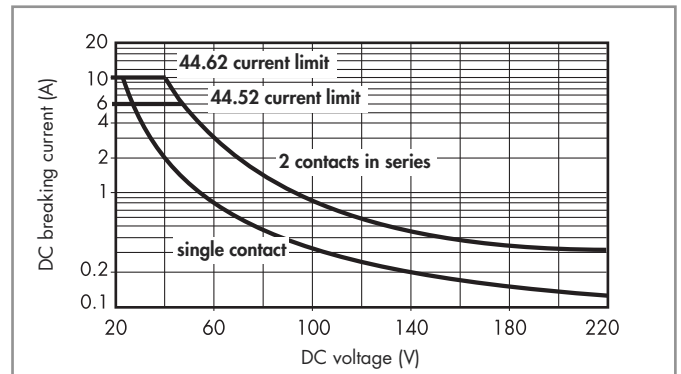
Bounce time: NO/NC		ms	4/4	
Vibration resistance (5...55)Hz: NO/NC		g	15/12	
Shock resistance		g	16	
Power lost to the environment	without contact current	W	0.6	
	with rated current	W	1.2 (44.52)	2.7 (44.62)
Recommended distance between relays mounted on PCB		mm	≥ 5	

Contact specification

F 44 - Electrical life (AC) v contact current



H 44 - 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

DC coil data - 0.65 W standard

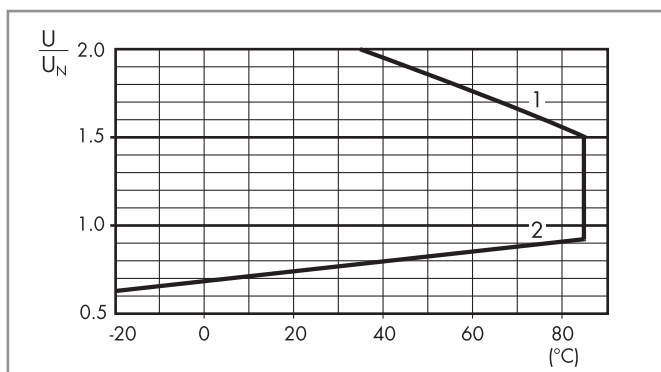
Nominal voltage U_N V	Coil code	Operating range		Resistance R Ω	Rated coil consumption I at U_N mA
		U_{min} V	U_{max} V		
6	9.006	4.4	9	55	109
9	9.009	6.6	13.5	125	72
12	9.012	8.8	18	220	55
14	9.014	10.2	21	300	47
24	9.024	17.5	36	900	27
28	9.028	20.5	42	1,200	23
48	9.048	35	72	3,500	14
60	9.060	43.8	90	5,500	11
110	9.110	80.3	165	18,000	6.2
125	9.125	91.2	188	23,500	5.3

DC coil data - 0.5 W sensitive

Nominal voltage U_N V	Coil code	Operating range		Resistance R Ω	Rated coil consumption I at U_N mA
		U_{min}^* V	U_{max} V		
6	7.006	4.4	10.2	75	80
9	7.009	6.6	15.3	160	56
12	7.012	8.8	20.4	300	40
14	7.014	10.2	23.8	400	35
24	7.024	17.5	40.8	1,200	20
28	7.028	20.5	47.6	1,600	17.5
48	7.048	35	81.6	4,800	10
60	7.060	43.8	102	7,200	8.4
110	7.110	80.3	187	23,500	4.7
125	7.125	100	219	32,000	3.9

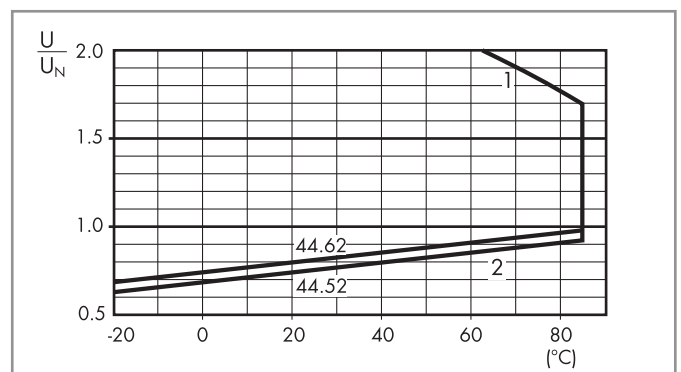
* $U_{min} = 0.8 U_N$ for 44.62

R 44 - DC coil operating range v ambient temperature
Standard coil



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

R 44 - DC coil operating range v ambient temperature
Sensitive coil



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