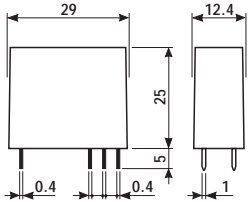


- DC and sensitive DC available
- 8 mm, 6 kV (1.2/50 μs) between coil and contacts
- Ambient temperature +85°C
- Sockets and accessories: see 95, 99 and 86 series

44



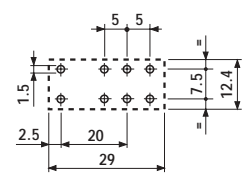
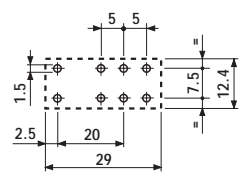
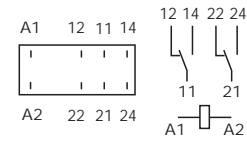
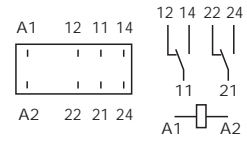
\* for 400 V applications, requirements for pollution degree 2 are met.

### 44.52

### 44.62



- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>- 2 pole, 6 A</li> <li>- 5 mm pinning</li> <li>- P.C.B./ for use with 95 series sockets</li> </ul> | <ul style="list-style-type: none"> <li>- 2 pole, 10 A</li> <li>- 5 mm pinning</li> <li>- P.C.B./ for use with 95 series sockets</li> </ul> |
|---|--|



Copper side view

Copper side view

Contact specifications			
Contact configuration		2 CO	2 CO
Rated current/Maximum peak current	A	6/10	10/20
Rated voltage/Maximum switching voltage	V AC	250/400*	250/400*
Rated load in AC1	VA	1,500	2,500
Rated load in AC15 (230 VAC)	VA	250	500
Single phase motor rating (230 VAC)	kW	0.185	0.37
Breaking capacity in DC1: 30/110/220V	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 specifications			
Nominal voltage (U <sub>N</sub> )	V AC (50/60 Hz)	—	—
	V DC	6 · 9 · 12 · 14 · 24 · 28 · 48 · 60 · 110	
Rated power AC/DC/sens. DC	VA (50 Hz)/W	—/0.65/0.5	—/0.65/0.5
Operating range	AC (50 Hz)	—	—
	DC/sens. DC	(0.73...1.5)U <sub>N</sub> /(0.73...1.7)U <sub>N</sub> (0.73...1.5)U <sub>N</sub> /(0.8...1.7)U <sub>N</sub>	
Holding voltage	AC/DC	—/0.4 U <sub>N</sub>	—/0.4 U <sub>N</sub>
Must drop-out voltage	AC/DC	—/0.1 U <sub>N</sub>	—/0.1 U <sub>N</sub>
Technical data			
Mechanical life AC/DC	cycles	—/20 · 10 <sup>6</sup>	—/20 · 10 <sup>6</sup>
Electrical life at rated load AC1	cycles	150 · 10 <sup>3</sup>	100 · 10 <sup>3</sup>
Operate/release time (bounce included)	ms	10/12 · (15/12 sens)	10/12 · (15/12 sens)
Insulation according to EN 61810-5		3.6 kV/3	3.6 kV/3
Insulation between coil and contacts (1.2/50μs)	kV	6 (8mm)	6 (8mm)
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: a 44 series P.C.B. relay with 2 CO 10 A contacts, coil rated 24 V DC.

**Series** — 44

**Type** — 5

5 = P.C.B. - 5 mm pinning  
6 = P.C.B. - 5 mm pinning

**No. of poles** — 2

2 = 2 pole for  
44.52, 6 A  
44.62, 10 A

**Coil version** — 9

7 = Sensitive DC  
9 = DC

**Coil voltage** — 024

see coil specifications

**A: Contact material**

0 = Standard AgNi  
4 = AgSnO<sub>2</sub>  
for 44.62 only

**B: Contact circuit**

0 = CO

**C: Options**

0 = None

**D: Special versions**

0 = Flux proof (RT II)

Only combinations in the same row are possible

Preferred versions

	coil version	A	B	C	D
44.52	DC - sens. DC	0	0	0	0
44.62	DC - sens. DC	0	0	0	0

All versions

	coil version	A	B	C	D
44.62	DC - sens. DC	0 - 4	0	0	0

## TECHNICAL DATA

### INSULATION

INSULATION according to EN 61810-5	insulation rated voltage	V	250
	rated impulse withstand voltage	kV	3.6
	pollution degree		3
	overvoltage category		III

### IMMUNITY

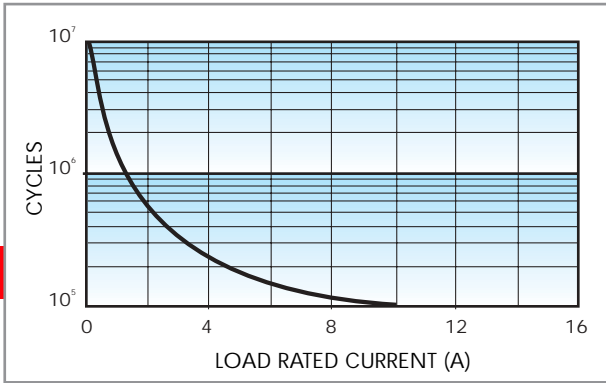
CONDUCTED DISTURBANCE IMMUNITY	BURST (according to EN 61000-4-4) level 4 (4kV)
	SURGE (according to EN 61000-4-5) level 3 (2kV)

### OTHER DATA

VIBRATION RESISTANCE (10...55Hz): NO/NC	g/g	3/3
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 P.C.B.s	mm	≥5

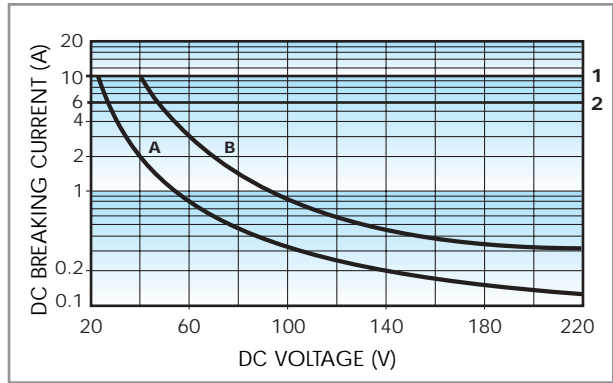
## CONTACT SPECIFICATIONS

### F 44



Electrical life vs AC1 load.

### H 44



Breaking capacity for DC1 load.

- 1** - Type 44.62
- 2** - Type 44.52
- A** - Load applied to 1 contact
- B** - Load applied to 2 contacts in series

- When switching a resistive load (DC1) having voltage and current values under the curve the expected electrical life is  $\geq 100 \cdot 10^3$  cycles.
- In case of DC13 loads the connection of a diode in parallel with the load will permit the same electrical life as for a DC1 load.

**Note:** the release time of load will be increase.

## COIL SPECIFICATIONS

### DC VERSION DATA (0.65 W standard)

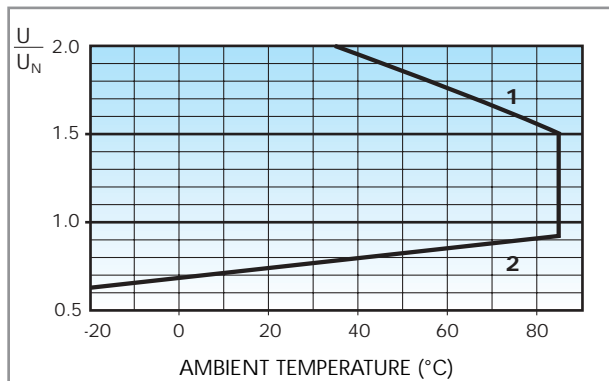
Nominal voltage $U_N$ V	Coil code	Operating range		Resistance R $\Omega$	Rated coil consumption I at $U_N$ mA
		$U_{min}$ V	$U_{max}$ V		
6	9.006	4.4	9	55	109
9	9.009	6.6	13.5	125	72
12	9.012	8.8	18	220	55
14	9.014	10.2	21	300	47
24	9.024	17.5	36	900	27
28	9.028	20.5	42	1,200	23
48	9.048	35	72	3,500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

### DC VERSION DATA (0.5 W sensitive)

Nominal voltage $U_N$ V	Coil code	Operating range		Resistance R $\Omega$	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

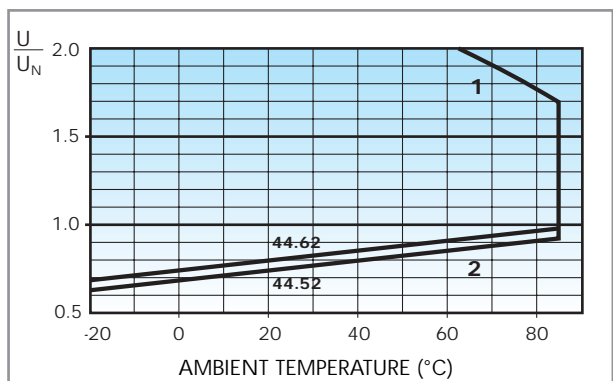
\* $U_{min} = 0.8 U_N$  for 44.62

### R 44 DC



Operating range (DC version) vs ambient temperature.  
**1** - Max coil voltage permitted.  
**2** - Min pick-up voltage with coil at ambient temperature.

### R 44 sens. DC



Operating range (sensitive DC version) vs ambient temperature.  
**1** - Max coil voltage permitted.  
**2** - Min pick-up voltage with coil at ambient temperature.