Technical data

Insulation according to EN 61810-1

|		1 pole		2 pole	
Nominal voltage of supply system	V AC	230/400		230/400	
Rated insulation voltage	V AC	250	400	250	400
Pollution degree		3	2	3	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		6	
Dielectric strength	V AC	4,000		4,000	
Insulation between adjacent contacts					
Type of insulation		—		Basic	
Overvoltage category		—		III	
Rated impulse voltage	kV (1.2/50 µs)	—		4	
Dielectric strength	V AC	—		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 4 (4 kV)	
Surge (1.2/50 µs) on A1 - A2 (differential mode)		EN 61000-4-5		level 3 (2 kV)	
Other data		**46.61**		**46.52**	
Bounce time: NO/NC	ms	2/6		1/4	
Vibration resistance (10…150)Hz: NO/NC	g	20/12		20/15	
Shock resistance	g	20		20	
Power lost to the environment — without contact current	W	0.6		0.6	
Power lost to the environment — with rated current	W	1.6		2	
Recommended distance between relays mounted on PCB	mm	≥ 5			

Contact specification

F 46 - Electrical life (AC) v contact current
Type 46.52
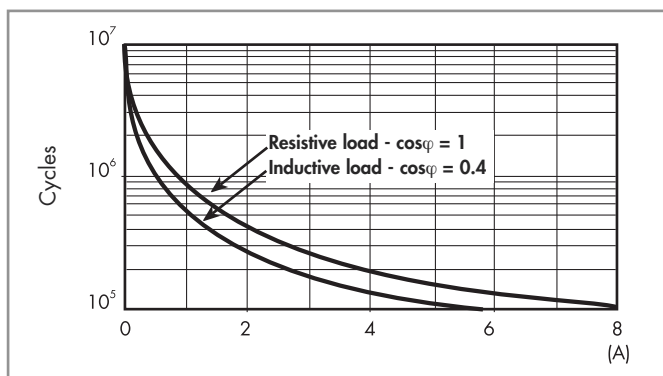
F 46 - Electrical life (AC) v contact current
Type 46.61
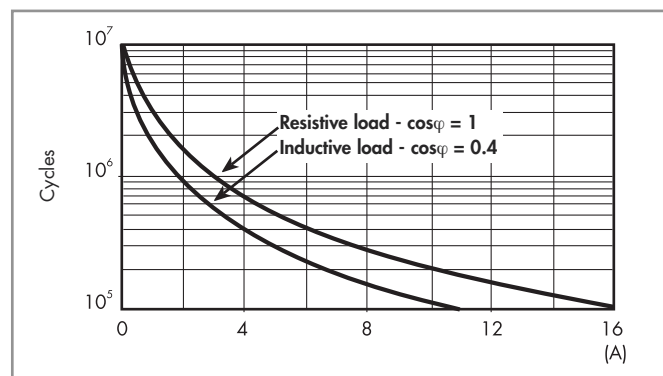
H 46 - Maximum DC1 breaking capacity
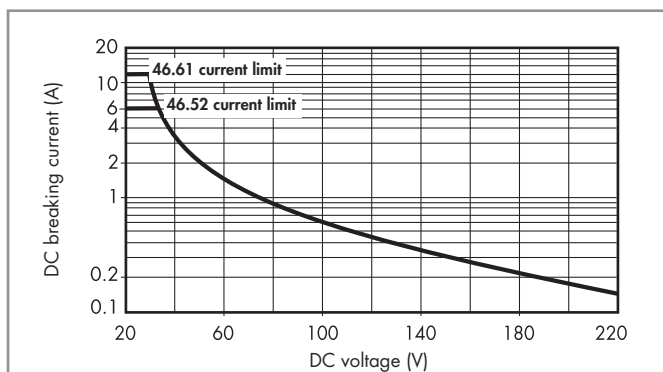
- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of ≥ $100 \cdot 10^3$ can be expected.
- In the case of DC13 loads, the connection of a diode in parallel with the load will permit a similar electrical life as for a DC1 load.
  Note: the release time for the load will be increased.
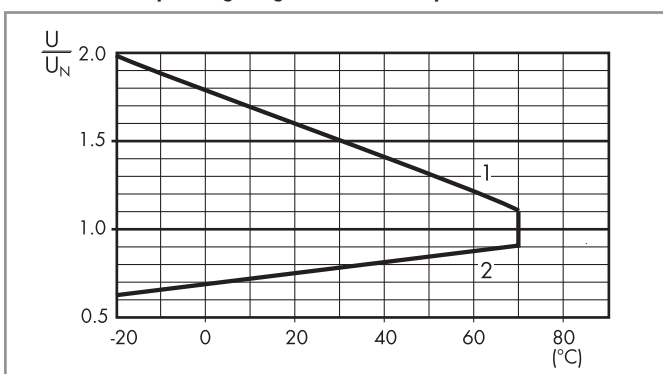
Coil specifications

A

DC coil data

Nominal voltage U_N	Coil code	Operating range		Resistance	Rated coil consumption
		U_{min}	U_{max}	R	I at U_N
V		V	V	Ω	mA
12	**9**.012	8.8	13.2	300	40
24	**9**.024	17.5	26.4	1,200	20
48	**9**.048	35	52.8	4,800	10
110	**9**.110	80	121	23,500	4.7
125	**9**.125	91.2	138	32,000	3.9

AC coil data

Nominal voltage U_N	Coil code	Operating range		Resistance	Rated coil consumption
		U_{min}	U_{max}	R	I at U_N
V		V	V	Ω	mA
12	**8**.012	9.6	13.2	80	90
24	**8**.024	19.2	26.4	320	45
48	**8**.048	38.4	52.8	1,350	21
110	**8**.110	88	121	6,900	9.4
120	**8**.120	96	132	9,000	8.4
230	**8**.230	184	253	28,000	5
240	**8**.240	192	264	31,500	4.1

R 46 - DC coil operating range v ambient temperature

R 46 - AC coil operating range v ambient temperature

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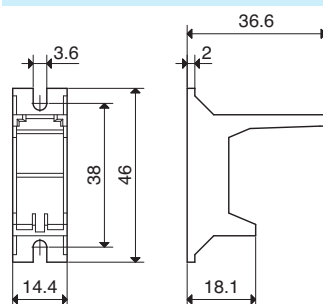**2** - Min. pick-up voltage with coil at ambient temperature.
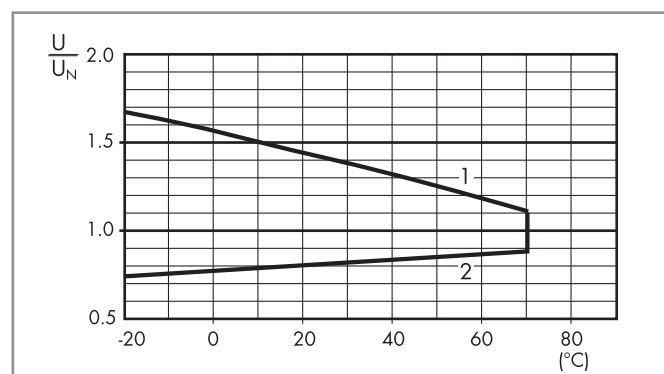
1 - Max. permitted coil voltage.
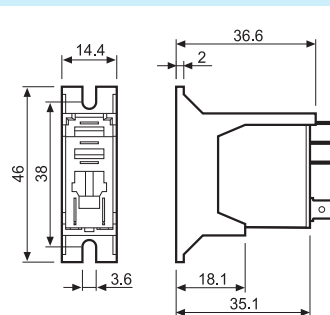**2** - Min. pick-up voltage with coil at ambient temperature.

Accessories

046.05

046.05 with relay

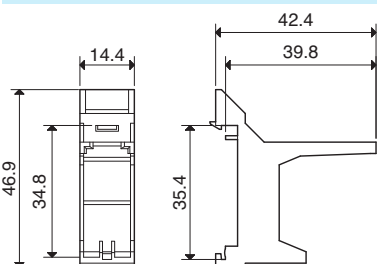| **Flange mount adaptor** for relays types 46.52 and 46.61	046.05

046.05

046.05 with relay

046.07

046.07 with relay

35 mm rail adaptor for relays types 46.52 and 46.61	046.07

046.07
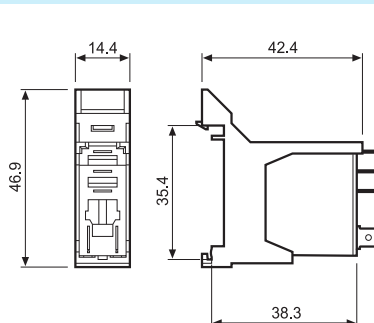
046.07 with relay

060.72

Sheet of marker tags for relays types 46.52 and 46.61 (72 tags), 6x12mm	060.72