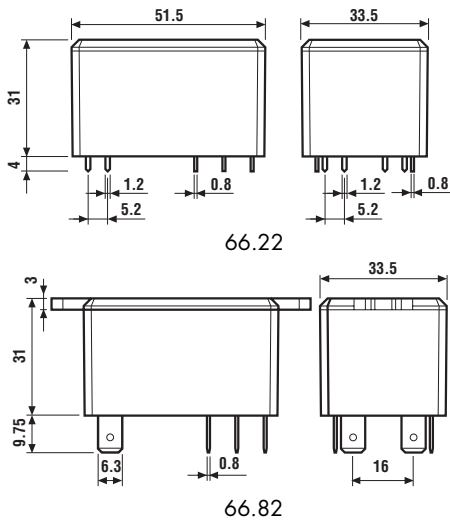
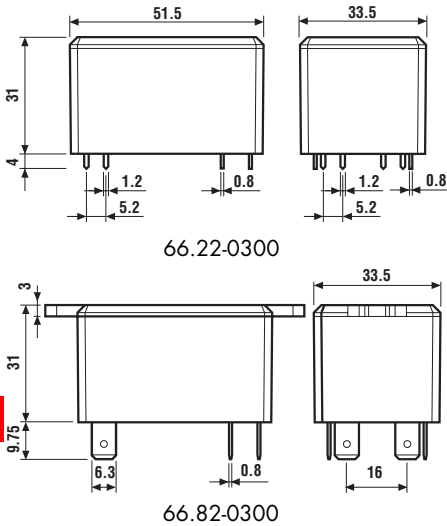


- P.C.B. or top flange mount with Faston 250
- AC or DC coil versions
- Double insulation between coil and contacts according to EN 60335-1 (VDE 0700), with safe separation and 8 mm clearance and creepage distance



	66.22	66.82
	- 2 pole - P.C.B. mounting with bifurcated terminals	- 2 pole - Faston 250 (6.3x0.8 mm) with top flange mount
	Copper side view	
<b>Contact specifications</b>		
Contact configuration	2 CO (DPDT)	2 CO (DPDT)
Rated current/Maximum peak current A	30/50 (NO) - 10/20 (NC)	30/50 (NO) - 10/20 (NC)
Rated voltage/Maximum switching voltage V AC	250/440	250/440
Rated load in AC1 VA	7,500 (NO) - 2,500 (NC)	7,500 (NO) - 2,500 (NC)
Rated load in AC15 (230 V AC) VA	1,200 (NO)	1,200 (NO)
Single phase motor rating (230 V AC) kW	1.5 (NO)	1.5 (NO)
Breaking capacity in DC1: 30/110/220 V A	25/0.7/0.3 (NO)	25/0.7/0.3 (NO)
Minimum switching load mW (V/mA)	1,000 (10/10)	1,000 (10/10)
Standard contact material	AgCdO	AgCdO
<b>Coil specifications</b>		
Nominal voltage (U <sub>N</sub> )	V AC (50/60 Hz)	6 - 12 - 24 - 110/115 - 120/125 - 230 - 240
	V DC	6 - 12 - 24 - 110 - 125
Rated power AC/DC VA (50 Hz)/W	3.6/1.7	3.6/1.7
Operating range	AC	(0.8...1.1)U <sub>N</sub>
	DC	(0.8...1.1)U <sub>N</sub>
Holding voltage AC/DC	0.8 U <sub>N</sub> /0.5 U <sub>N</sub>	0.8 U <sub>N</sub> /0.5 U <sub>N</sub>
Must drop-out voltage AC/DC	0.2 U <sub>N</sub> /0.1 U <sub>N</sub>	0.2 U <sub>N</sub> /0.1 U <sub>N</sub>
<b>Technical data</b>		
Mechanical life AC/DC cycles	10 · 10 <sup>6</sup>	10 · 10 <sup>6</sup>
Electrical life at rated load AC1 cycles	100 · 10 <sup>3</sup>	100 · 10 <sup>3</sup>
Operate/release time ms	8/15	8/15
Insulation according to EN 61810-1 ed. 2	6 - 4 kV/3	6 - 4 kV/3
Insulation between coil and contacts (1.2/50 μs) kV	6 (8 mm)	6 (8 mm)
Dielectric strength between open contacts V AC	1,500	1,500
Ambient temperature range °C	-40...+70	-40...+70
Environmental protection	RT II	RT II
<b>Approvals:</b> (according to type)		

- P.C.B. or top flange mount with Faston 250
- AC or DC coil versions
- Double insulation between coil and contacts according to EN 60335-1 (VDE 0700), with safe separation and 8 mm clearance and creepage distance


**66.22-0300**
**66.82-0300**

- 2 NO (DPST-NO) - P.C.B. mounting with bifurcated terminals	- 2 NO (DPST-NO) - Faston 250 (6.3x0.8 mm) with top flange mount
Copper side view	

Contact specifications			
Contact configuration		2 NO (DPST-NO)	2 NO (DPST-NO)
Rated current/Maximum peak current	A	30/50	30/50
Rated voltage/Maximum switching voltage	V AC	250/440	250/440
Rated load in AC1	VA	7,500	7,500
Rated load in AC15 (230 V AC)	VA	1,200	1,200
Single phase motor rating (230 V AC)	kW	1.5	1.5
Breaking capacity in DC1: 30/110/220 V	A	25/0.7/0.3	25/0.7/0.3
Minimum switching load	mW (V/mA)	1,000 (10/10)	1,000 (10/10)
Standard contact material		AgCdO	AgCdO
Coil specifications			
Nominal voltage (U <sub>N</sub> )	V AC (50/60 Hz)	6 - 12 - 24 - 110/115 - 120/125 - 230 - 240	
	V DC	6 - 12 - 24 - 110 - 125	
Rated power AC/DC	VA (50 Hz)/W	3.6/1.7	3.6/1.7
Operating range	AC	(0.8...1.1)U <sub>N</sub>	(0.8...1.1)U <sub>N</sub>
	DC	(0.8...1.1)U <sub>N</sub>	(0.8...1.1)U <sub>N</sub>
Holding voltage	AC/DC	0.8 U <sub>N</sub> /0.5 U <sub>N</sub>	0.8 U <sub>N</sub> /0.5 U <sub>N</sub>
Must drop-out voltage	AC/DC	0.2 U <sub>N</sub> /0.1 U <sub>N</sub>	0.2 U <sub>N</sub> /0.1 U <sub>N</sub>
Technical data			
Mechanical life AC/DC	cycles	10 · 10 <sup>6</sup>	10 · 10 <sup>6</sup>
Electrical life at rated load AC1	cycles	100 · 10 <sup>3</sup>	100 · 10 <sup>3</sup>
Operate/release time	ms	8/10	8/10
Insulation according to EN 61810-1 ed. 2		6 - 4 kV/3	6 - 4 kV/3
Insulation between coil and contacts (1.2/50 μs)	kV	6 (8 mm)	6 (8 mm)
Dielectric strength between open contacts	V AC	1,500	1,500
Ambient temperature range	°C	-40...+70	-40...+70
Environmental protection		RT II	RT II
Approvals: (according to type)			

## ORDERING INFORMATION

Example: a 66 series relay, Faston 250 (6.3x0.8mm) with top flange mount, 2 CO (DPDT) contacts 30 A, with a 24 V DC coil.

6
6
.
8
.
2
.
9
.
0
2
4
.
0
0
0
0

**Series** \_\_\_\_\_

**Type** \_\_\_\_\_  
 2 = P.C.B.  
 8 = Faston 250 (6.3x0.8 mm) with top flange mount

**No. of poles** \_\_\_\_\_  
 2 = 2 CO (DPDT) 30 A

**Coil version** \_\_\_\_\_  
 8 = AC (50/60 Hz)  
 9 = DC

**Coil voltage** \_\_\_\_\_  
 see coil specifications

**A: Contact material**  
 0 = Standard AgCdO

**B: Contact circuit**  
 0 = CO (nPDT)  
 3 = NO (nPST)

**C: Options**  
 0 = None

**D: Special versions**  
 0 = Standard  
 1 = Wash tight (RT III)  
 7 = Top 35 mm rail (EN 50022) mount

**Only combinations in the same row are possible**

Preferred versions

	coil version	A	B	C	D
62.22	AC-DC	0	0	0	1
62.82	AC-DC	0	0	0	0

All versions

	coil version	A	B	C	D
62.22	AC-DC	0	0 - 3	0	1
62.82	AC-DC	0	0 - 3	0	0 - 7

## TECHNICAL DATA

### INSULATION

Insulation according to EN 61810-1 ed. 2	insulation rated voltage	V	440
	rated impulse withstand voltage	kV	4
	pollution degree		3
	overvoltage category		III
Dielectric strength between adjacent contacts	V AC		2,500

### CONDUCTED DISTURBANCE IMMUNITY

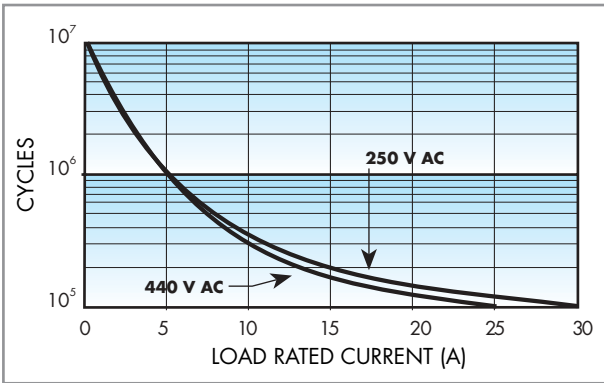
Burst (5...50)ns, 5 kHz, on A1 - A2	EN 61000-4-4	level 4 (4 kV)
Surge (1.2/50 µs) on A1 - A2 (differential mode)	EN 61000-4-5	level 4 (4 kV)

### OTHER DATA

Bounce time: NO/NC	ms	7/10	
Power lost to the environment	without contact current	W	2.3
	with rated current	W	5
Recommended distance between relays mounted on P.C.B.s	mm	20	

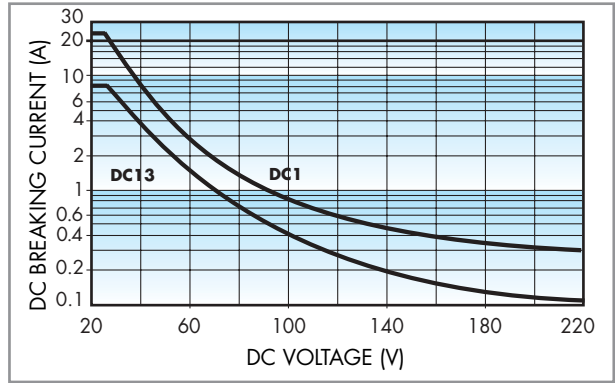
**CONTACT SPECIFICATIONS**

**F 66**



Electrical life vs AC1 load.

**H 66**



Breaking capacity for DC1 load and DC13 (L/R=100ms).

- 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**

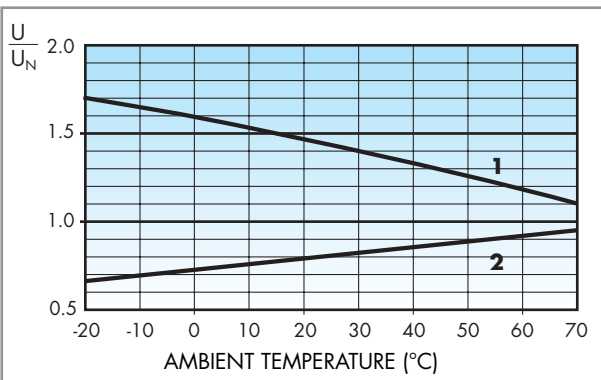
**DC VERSION DATA**

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	4.8	6.6	21	283
12	9.012	9.6	13.2	85	141
24	9.024	19.2	26.4	340	70.5
110	9.110	88	121	7,000	15.7
125	9.125	100	137.5	9,200	13.6

**AC VERSION DATA**

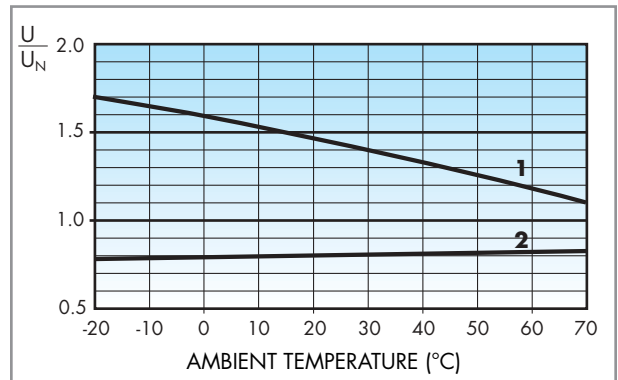
Nominal voltage $U_N$ V	Coil code	Operating range		Resistance R $\Omega$	Rated coil consumption I at $U_N$ (50Hz) mA
		$U_{min}$ V	$U_{max}$ V		
6	8.006	4.8	6.6	3	600
12	8.012	9.6	13.2	11	300
24	8.024	19.2	26.4	50	150
110/115	8.110	88	126	930	32.6
120/125	8.120	96	137	1,050	30
230	8.230	184	253	4,000	15.7
240	8.240	192	264	5,500	15

**R 66 DC**



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

**R 66 AC**



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