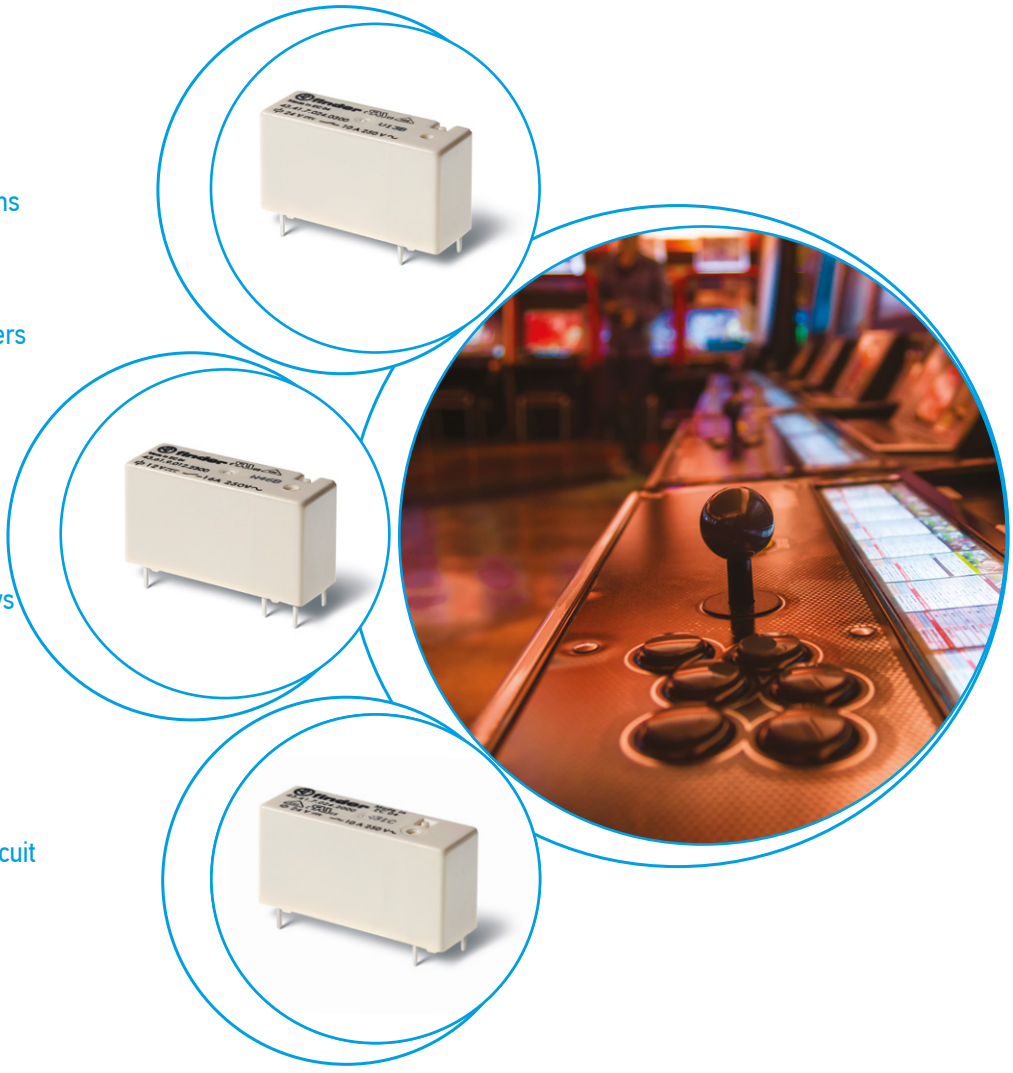
finder
SWITCH TO THE FUTURE

43
SERIES

Low profile PCB relays
10 - 16 A

- Medical and dentistry
- Alarm systems
- Air conditioners
- Burners, boilers and furnaces
- Electric and electronic toys and games
- Door and gate openers
- Electronic circuit boards
- Vending machines



sales@prom-elec.com / ООО ПРОМЭЛЕКТРОНИКА

Prices, features, specifications, capabilities, appearance and availability of our products and services are subject to change without notice.
FINDER assumes no responsibility for the presence of possible errors or insufficient information in this document.
In case of discrepancies between the printed and online versions, the latter prevails.

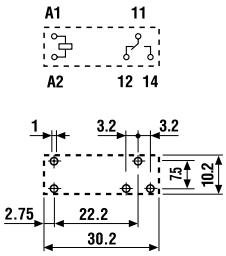
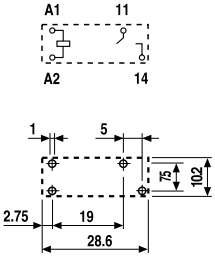
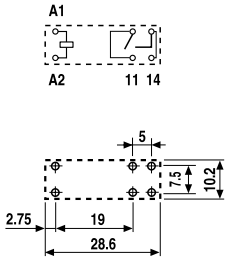
1 Pole - Low profile (15.4 mm height)
Type 43.41
- 1 Pole, 10 A (3.2 mm pin pitch)

Type 43.41-0300
- 1 Pole NO, 10 A (5 mm pin pitch)

Type 43.61-0300
- 1 Pole NO, 16 A (5 mm pin pitch)

PCB mount - direct or via PCB socket (43.41 version)

- Sensitive DC coil:
  - 250 mW (10 A version)
  - 400 mW (16 A version)
- Very high coil-contact isolation 10 mm, 6 kV (1.2/50 µs)
- Cadmium Free contacts (preferred version)
- Flux proof: RT II standard, (RT III option)

	43.41	43.41-0300	43.61-0300
	• 3.2 mm contact pin pitch • 1 Pole CO, 10 A • PCB direct or via socket	• 5.0 mm contact pin pitch • 1 Pole NO, 10 A • PCB mount	• 5.0 mm contact pin pitch • 1 Pole NO, 16 A • PCB mount
			
For UL ratings see: "General technical information" page V			
For outline drawing see page 5	Copper side view	Copper side view	Copper side view
Contact specification			
Contact configuration	1 CO (SPDT)	1 NO (SPST-NO)	1 NO (SPST-NO)
Rated current/Maximum peak current — A	10/15	10/15	16/25
Rated voltage/ Maximum switching voltage — V AC	250/400	250/400	250/400
Rated load AC1 — VA	2500	2500	4000
Rated load AC15 (230 V AC) — VA	500	500	750
Single phase motor rating (230 V AC) — kW	—	—	—
Breaking capacity DC1: 24/110/220 V — A	10/0.3/0.12	10/0.3/0.12	16/0.3/0.12
Minimum switching load — mW (V/mA)	300 (5/5)	300 (5/5)	300 (5/5)
Standard contact material	AgNi	AgNi	AgNi
Coil specification			
Nominal voltage (U_N) — V AC (50/60 Hz)	—	—	—
V DC	3 - 6 - 9 - 12 - 18 - 24 - 36 - 48	3 - 6 - 9 - 12 - 18 - 24 - 36 - 48	12 - 24 - 48
Rated power AC/DC — VA (50 Hz)/W	—/0.25	—/0.25	—/0.4
Operating range — AC	—	—	—
DC	(0.7…1.5)U_N	(0.7…1.5)U_N	(0.7…1.2)U_N
Holding voltage — AC/DC	—/0.4 U_N	—/0.4 U_N	—/0.4 U_N
Must drop-out voltage — AC/DC	—/0.05 U_N	—/0.05 U_N	—/0.05 U_N
Technical data			
Mechanical life AC/DC — cycles	—/10 · 10^6	—/10 · 10^6	—/10 · 10^6
Electrical life at rated load AC1 — cycles	100 · 10^3	100 · 10^3	50 · 10^3
Operate/release time — ms	6/4	6/2	6/2
Insulation between coil and contacts (1.2/50 µs) — kV	6 (10 mm)	6 (10 mm)	6 (10 mm)
Dielectric strength between open contacts — V AC	1000	1000	1000
Ambient temperature range — °C	–40…+85	–40…+85	–40…+85
Environmental protection	RT II	RT II	RT II
Approvals (according to type)			

A

Ordering information

Example: 43 series low-profile PCB relay, 1 CO (SPDT), 24 V DC coil.

4	3	.	4		1	.	7	.	0	2	4	.	0	0	0	0
													A	B	C	D

Series

Type
4 = PCB - 3.2 mm pinning (CO/SPDT, 10 A)
PCB - 5 mm pinning (NO/SPST-NO, 10 A)
6 = PCB - 5 mm pinning (NO/SPST-NO, 16 A)

No. of poles
1 = 1 pole

Coil version
7 = Sensitive DC (only for 43.41)
9 = DC (only for 43.61)

Coil voltage
See coil specifications

A: Contact material
0 = AgNi
4 = $AgSnO_2$
5 = AgNi + Au

B: Contact circuit
0 = CO (SPDT) - (for 43.41 only)
3 = NO (SPST)

C: Options
0 = None

D: Special versions
0 = Flux proof (RT II)
1 = Wash tight (RT III)

Selecting features and options: only combinations in the same row are possible.
Preferred selections for best availability are shown in **bold**.

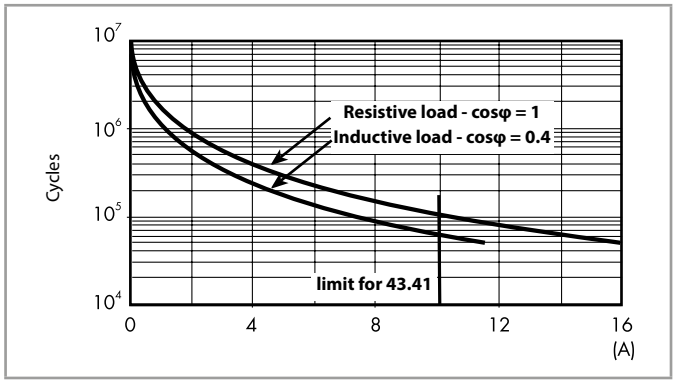
Type	Coil version	A	B	C	D
43.41	sensitive DC	**0** - 4 - 5	**0** - 3	**0**	**0** - 1
43.61	DC	**0** - 4	**3**	**0**	**0**

Technical data

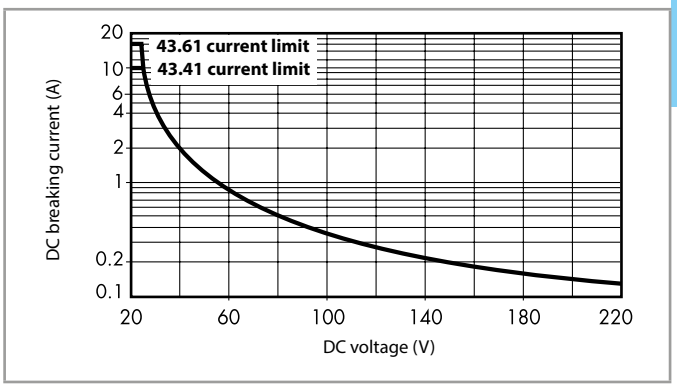
Insulation according to EN 61810-1				
Nominal voltage of supply system		V AC	230/400	
Rated insulation voltage		V AC	250	400
Pollution degree			3	2
Insulation between coil and contact set				
Type of insulation			Reinforced (10 mm)	
Overvoltage category			III	
Rated impulse voltage		kV (1.2/50 µs)	6	
Dielectric strength		V AC	4000	
Insulation between open contacts				
Type of disconnection			Micro-disconnection	
Dielectric strength		V AC/kV (1.2/50 µs)	1000/1.5	
Insulation between coil terminals				
Rated impulse voltage (surge) differential mode (according to EN 61000-4-5)		kV (1.2/50 µs)	2	
Other data				
Bounce time: NO/NC		ms	3/6	
Vibration resistance (5…55)Hz: NO/NC		g	15/3	
Shock resistance		g	15	
Power lost to the environment	without contact current	W	0.25 (43.41)	0.4 (43.61)
	with rated current	W	1.3 (43.41)	2 (43.61)
Recommended distance between relays mounted on PCB		mm	≥ 5	

Contact specification

F 43 - Electrical life (AC) v contact current



H 43 - Maximum DC1 breaking capacity



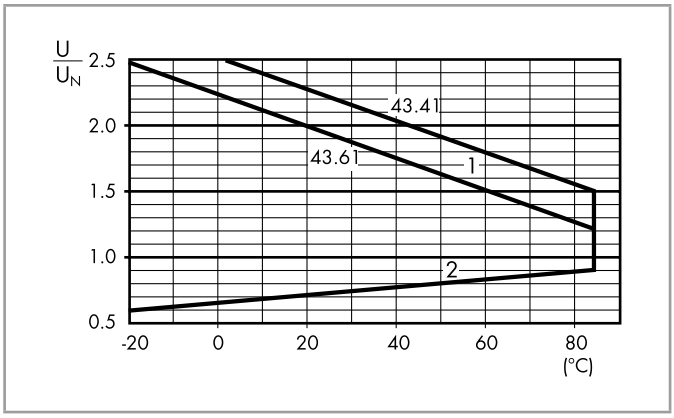
- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of ≥ 100 · 10^3 for 43.41 and ≥ 50 · 10^3 for 43.61 can be expected.
- In the case of DC13 loads, the connection of a diode in parallel with the load will permit a similar electrical life as for a DC1 load.
  Note: the release time for the load will be increased.

Coil specifications

DC coil data - 0.25 W sensitive (type 43.41)

Nominal voltage	Coil code	Operating range		Resistance	Rated coil consumption
U_N		U_{min}	U_{max}	R	I at U_N
V		V	V	Ω	mA
3	**7**.003	2.2	4.5	36	83.5
6	**7**.006	4.2	9	150	40
9	**7**.009	6.5	13.5	324	27.7
12	**7**.012	8.4	18	580	20.7
18	**7**.018	13	27	1300	13.8
24	**7**.024	16.8	36	2200	10.9
36	**7**.036	25.2	54	5200	6.9
48	**7**.048	33.6	72	9200	5.2

R 43 - DC coil operating range v ambient temperature



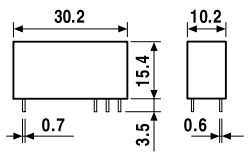
1 - Max. permitted coil voltage.
2 - Min. pick-up voltage with coil at ambient temperature.

DC coil data - 0.4 W standard (type 43.61)

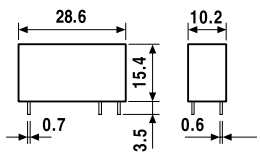
Nominal voltage	Coil code	Operating range		Resistance	Rated coil consumption
U_N		U_{min}	U_{max}	R	I at U_N
V		V	V	Ω	mA
12	**9**.012	8.4	14.4	360	33.3
24	**9**.024	16.8	28.8	1400	17.1
48	**9**.048	33.6	57.6	5760	8.3

Outline drawings

Type 43.41



Types 43.41-0300/43.61-0300

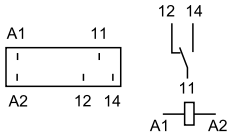


A

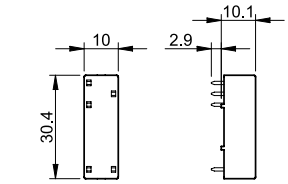
95.23

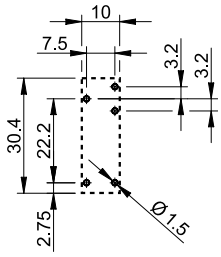
Approvals (according to type):

PCB socket (for changeover contacts only)	**95.23 (blue)**	**95.23.0 (black)**
For relay type	43.41	43.41
Accessories		
Metal retaining clip (supplied with socket - packaging code SNA)	095.43	
Technical data		
Rated values	10 A - 250 V	
Insulation	6 kV (1.2/50 µs) between coil and contacts	
Protection category	IP 20	
Ambient temperature °C	–40…+70	



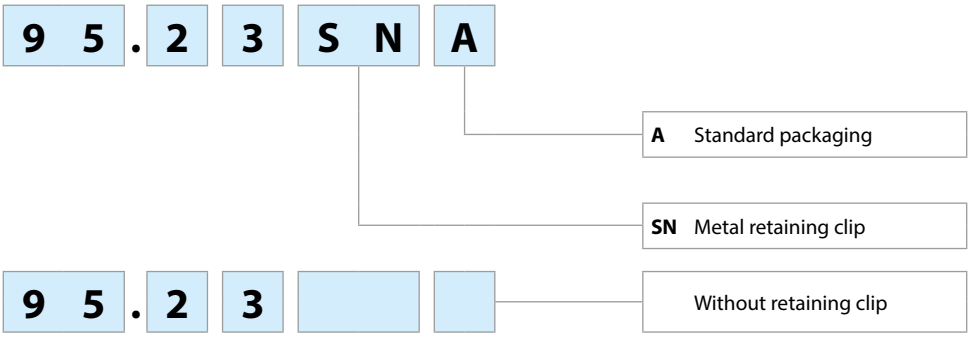
43.41





Copper side view

Packaging codes

How to code and identify retaining clip and packaging options for sockets.

Example: