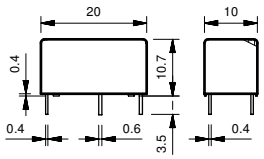
Order code	Manufacturer code	Description
60-4086	n/a	32.21 5V DC MINIATURE SPDT 6A RELAY RC

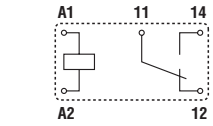
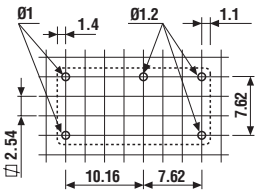
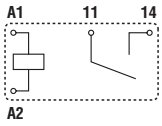
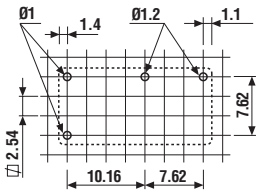
Sales: 01206 751166
Sales@rapidelec.co.uk
Technical: 01206 835555
Tech@rapidelec.co.uk
Fax: 01206 751188
www.rapidonline.com

Features

Printed circuit mount 6 A relay

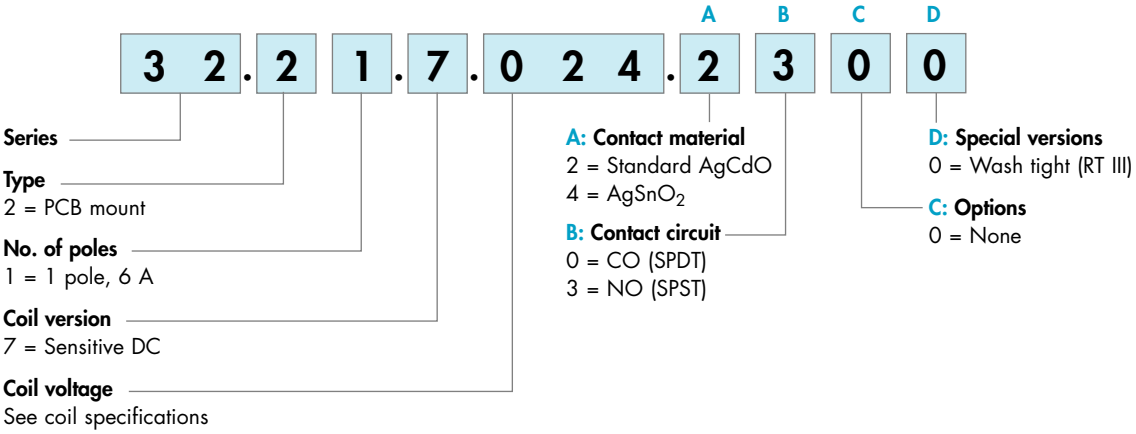
- 1 Pole changeover contacts or 1 Pole normally open contact
- Subminiature, low profile package
- Sensitive DC coil - 200 mW
- Wash tight: RT III
- Cadmium Free contact material option



	32.21-x000	32.21-x300
		
	• 1 CO (SPDT), 6 A • Low coil power • PCB mount	• 1 NO (SPST-NO), 6 A • Low coil power • PCB mount
	  Copper side view	  Copper side view
Contact specification		
Contact configuration	1 CO (SPDT)	1 NO (SPST-NO)
Rated current/Maximum peak current A	6/15	6/15
Rated voltage/Maximum switching voltage V AC	250/400	250/400
Rated load AC1 VA	1,500	1,500
Rated load AC15 (230 V AC) VA	250	250
Single phase motor rating (230 V AC) kW	0.185	0.185
Breaking capacity DC1: 30/110/220 V A	3/0.35/0.2	3/0.35/0.2
Minimum switching load mW (V/mA)	500 (10/5)	500 (10/5)
Standard contact material	AgCdO	AgCdO
Coil specification		
Nominal voltage (U_N) V AC (50/60 Hz)	—	—
V DC	5 - 12 - 24 - 48	5 - 12 - 24 - 48
Rated power AC/DC VA (50 Hz)/W	—/0.2	—/0.2
Operating range AC	—	—
DC	(0.78...1.5)U_N	(0.78...1.5)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	100 · 10^3	100 · 10^3
Operate/release time ms	6/4	6/2
Insulation between coil and contacts (1.2/50 µs) kV	5	5
Dielectric strength between open contacts V AC	1,000	1,000
Ambient temperature range °C	–40...+85	–40...+85
Environmental protection	RT III	RT III
Approvals (according to type)		

Ordering information

Example: 32 series PCB, 1 NO (SPDT-NO) - 6 A contacts, 24 V sensitive DC coil.



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

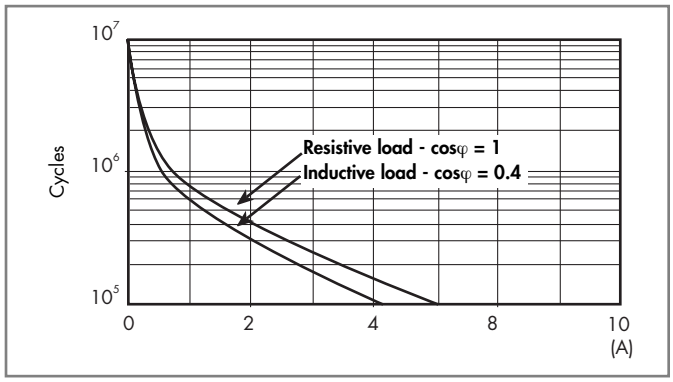
Type	Coil version	A	B	C	D
32.21	sens. DC	**2** - 4	**0 - 3**	**0**	**0**

Technical data

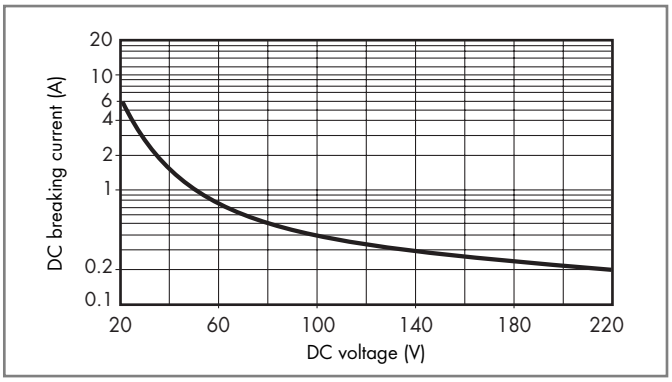
Insulation according to EN 61810-1:2004				
Nominal voltage of supply system		V AC	230/400	
Rated insulation voltage		V AC	250	
Pollution degree			2	
Insulation between coil and contact set				
Type of insulation			Basic	
Overvoltage category			III	
Rated impulse voltage		kV (1.2/50 µs)	4	
Dielectric strength		V AC	4,000	
Insulation between open contacts				
Type of disconnection			Micro-disconnection	
Dielectric strength		V AC/kV (1.2/50 µs)	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				
Bounce time: NO/NC		ms	2/10 (changeover)	2/— (normally open)
Vibration resistance (5...55)Hz: NO/NC		g	10/10 (changeover)	10/— (normally open)
Shock resistance		g	20	
Power lost to the environment	without contact current	W	0.2	
	with rated current	W	0.5	
Recommended distance between relays mounted on PCB		mm	≥ 5	

Contact specification

F 32 - Electrical life (AC) v contact current



H 32 - Maximum DC1 breaking capacity



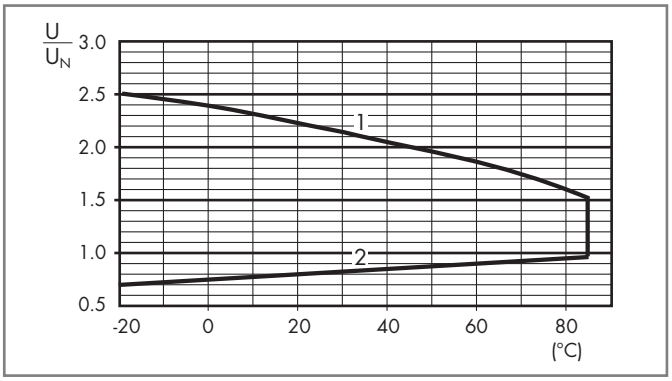
- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of ≥ $100 \cdot 10^3$ can be expected.
- In the case of DC13 loads, the connection of a diode in parallel with the load will permit a similar electrical life as for a DC1 load.
  Note: the release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

Coil specifications

DC coil data - 0.2 W sensitive

Nominal voltage U_N	Coil code	Operating range U_{min}	Operating range U_{max}	Resistance R	Rated coil consumption I at U_N
V		V	V	Ω	mA
5	**7**.005	3.9	7.5	125	40
12	**7**.012	9.4	18	720	16
24	**7**.024	18.7	36	2,880	8.3
48	**7**.048	37.4	72	11,520	4

R 32 - DC coil operating range v ambient temperature



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