

# Datasheet

## SPDT PCB Mount Non-Latching Relay, 12V dc

RS Stock number [476-589](#)

Dimensions: mm



File No.: E134517



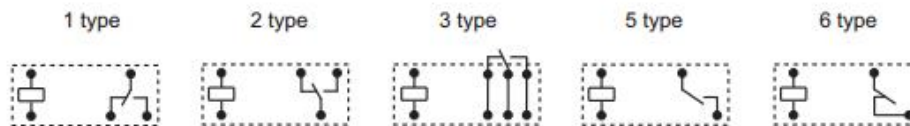
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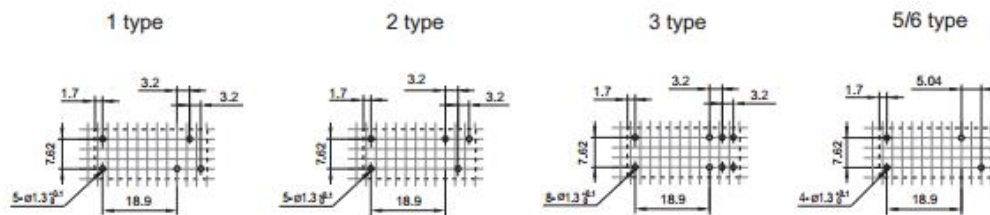
File No.:CQC04001011425



Wiring Diagram (Bottom view)

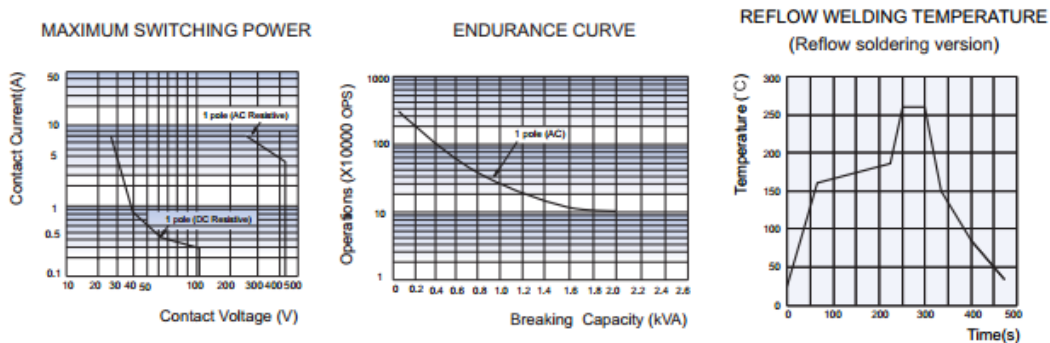


PCB Layout (Bottom view)



- Remark: 1) In case of no tolerance shown in outline dimension: outline dimension  $\leq 1\text{mm}$ , tolerance should be  $\pm 0.2\text{mm}$ ; outline dimension  $> 1\text{mm}$  and  $\leq 5\text{mm}$ , tolerance should be  $\pm 0.3\text{mm}$ ; outline dimension  $> 5\text{mm}$ , tolerance should be  $\pm 0.4\text{mm}$ .  
 2) The tolerance without indicating for PCB layout is always  $\pm 0.1\text{mm}$ .  
 3) The width of the gridding is 2.54mm.

## Characteristic Curves



## Features

- 10A switching capability
- 5kV dielectric strength (between coil and contacts)
- Low height: 12.5mm
- Creepage distance: >8mm
- Meeting VDE 0700, 0631 reinforce insulation
- Product in accordance to IEC 60335-1 available
- 1 pole configurations available
- Sockets available
- Wash tight and flux proofed types available
- Environmental friendly product (RoHS compliant)
- Outline dimensions: (28.5 x10.1 x 12.5) mm



## Contact Data

Contact arrangement: 1A, 1B, 1C  
Contact resistance: 100m  $\Omega$  max. (at 1A 6VDC)  
Contact rating (Res.load) 10A 250VAC / 30 VDC  
Max. switching voltage: 440VAC / 125VDC  
Max. switching current: 10A  
Max. switching power: 2500VA/ 300W  
Mechanical endurance: 1x10(7) OPS  
Electrical endurance: 1x10(5) OPS

## Characteristics

Insulation resistance: 1000M  $\Omega$  (at 500VDC)  
Dielectric Strength: Between coil & contacts 5000VAC 1min  
Between open contacts 1000VAC 1min  
Surge voltage(between coil & contacts) 10kV (1.2/ 50us)  
Operate time (at nomi. Volt.): 10ms max  
Release time (at nomi. Volt.): 5ms max  
Temperature rise (at nomi. Volt.): 55K max  
Shock resistance: Functional NC - 49m/s NO-98m/s  
Destructive 980m/s  
Vibration resistance: 10Hz to 55Hz 0.8mm DA  
Humidity: 35% to 85% RH  
Ambient temperature: -40degC to 85deg  
Termination: PBC  
Unit weight: Approx. 8g  
Construction: Wash tight  
Flux Proof

## Coil

Coil power: Approx. 220 to 290mW

**COIL DATA** at 23°C

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. Allowable Voltage VDC	Coil Resistance Ω
5	3.50	0.5	11.8	113 x (1±10%)
6	4.20	0.6	14.1	164 x (1±10%)
9	6.30	0.9	21.2	360 x (1±10%)
12	8.40	1.2	28.2	620 x (1±10%)
18	12.70	1.8	42.3	1295 x (1±10%)
24	16.80	2.4	56.4	2350 x (1±15%)
48	33.60	4.8	112.8	8000 x (1±15%)
60	42.00	6.0	141.0	12500 x (1±15%)

Notes: The max. allowable voltage in the COIL DATA is coil overdrive voltage, it is the instantaneous max. voltage which the relay coil could endure in a very short time.

**Safety Approval Ratings**

<b>UL&amp;CUL</b> (AgNi, AgSnO <sub>2</sub> )	version 1,2,3,5,6	10A 250VAC 10A 30VDC B300 R300 1/2HP 240VAC AgSnO <sub>2</sub> : 1/3HP 120VAC
<b>VDE</b> (AgNi, AgNi+Au)	1H (;S) (1;2;3;5;7) (-;G)	8A 250VAC at 85°C
	1D (;S) (1;2;3;6) (-;G)	8A 250VAC at 85°C
	1Z (-;S) (1;2;3) (-;G)	8A 250VAC at 85°C
<b>VDE</b> (AgSnO <sub>2</sub> , AgSnO <sub>2</sub> +Au)	1H (-;S) (1;2;3;5;7), T.(-;G)	8A 250VAC at 85°C
	1D (-;S) (1;2;3;6), T.(-;G)	8A 250VAC at 85°C
	1Z (-;S) (1;2;3), T.(-;G)	8A 250VAC at 85°C
	1H (-;S) (1;2;3;5;7), T.(-;G)	AC-15 (Make: 30A 250VAC COS Ø=0.7 at 85°C Break: 3A 250VAC COS Ø=0.4 at 85°C)
	1Z (-;S) (1;2;3), T.(-;G)	NO: AC-15 (Make: 30A 250VAC COS Ø=0.7 at 85°C Break: 3A 250VAC COS Ø=0.4 at 85°C)

Notes: Only some typical ratings are listed above. If more details are required, please contact us.