

# Power PCB Relay RT2 bistable

2 pole 8 A, polarized bistable version



## Features

- 2 C/O contacts
- Bistable with 1 or 2 coils
- 5 kV / 10 mm coil-contact
- Height 15.7 mm
- Cadmium-free contacts
- Protection class II

## Applications

Battery powered equipment or applications with "memory function" (e.g. mains failure)

F0219-B



Technical data of approved types on request

### Contact data

Configuration	2 C/O contact
Type of contact	single contact
Rated current	8 A
Rated voltage / max. breaking voltage AC	250 Vac / 440 Vac
Maximum breaking capacity AC	2000 VA
Make current (max. 4 s at duty cycle 10%)	15 A
Contact material	AgNi 90/10

### Coil data

	1 coil	2 coils
Nominal voltage	5...24 Vdc	
Nominal coil power	typ. 400 mW	typ. 600 mW
Minimum energization time	30 ms	
Information on reduced pulse duration with higher energization voltages on demand		
Max. energization time for version with 2 coils	1 min at <10% duty cycle	
Reset voltage min.	70 % U <sub>nom</sub>	70 % U <sub>nom</sub>
Reset voltage max.	120 % U <sub>nom</sub>	150 % U <sub>nom</sub>

### Coil versions, bistable

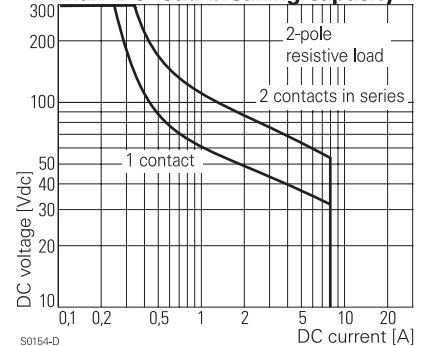
Coil code	Nominal voltage Vdc	Pull-in voltage Vdc	Reset voltage Vdc	Coil resistance Ω	Coil current mA
<b>bistable, 1 coil</b>					
A05	5	3.5	3.5	62 ± 10%	80.0
A06	6	4.2	4.2	90 ± 10%	66.7
<b>A12</b>	<b>12</b>	<b>8.4</b>	<b>8.4</b>	<b>360 ± 10%</b>	<b>33.3</b>
<b>A24</b>	<b>24</b>	<b>16.8</b>	<b>16.8</b>	<b>1440 ± 10%</b>	<b>16.7</b>
<b>bistable, 2 coils</b>					
F05	5	3.5	3.5	42 ± 10%	120.0
F06	6	4.2	4.2	55 ± 10%	110.0
<b>F12</b>	<b>12</b>	<b>8.4</b>	<b>8.4</b>	<b>240 ± 10%</b>	<b>50.0</b>
<b>F24</b>	<b>24</b>	<b>16.8</b>	<b>16.8</b>	<b>886 ± 10%</b>	<b>27.0</b>

All figures are given for coil without preenergization, at ambient temperature +20°C  
Other coil voltages on request

### Coils - operation

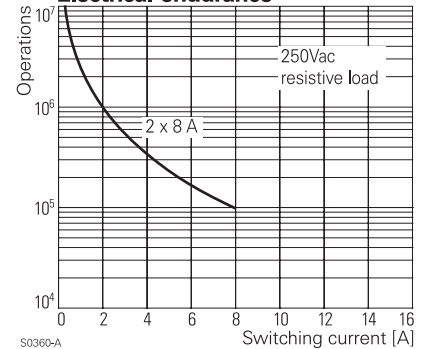
Version	1 coil		2 coils		
Coil terminals	A1	A2	A1	A3	A2
Pull-in	+	-		+	-
Reset	-	+	-	+	
Contact position not defined at delivery					

### Max. DC load breaking capacity



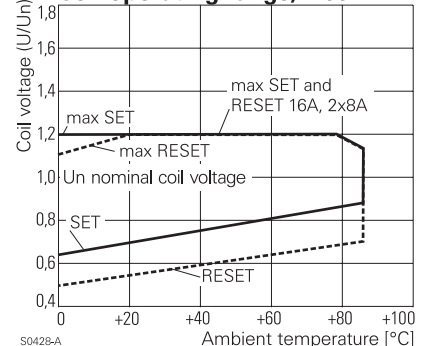
S0154-D

### Electrical endurance



S0360-A

### Coil operating range, 1 coil



S0428-A

# Power PCB Relay RT2 bistable

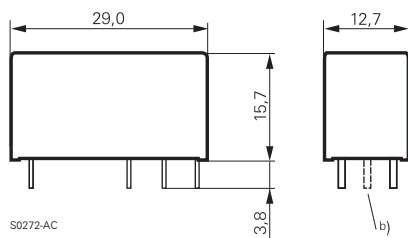
2 pole 8 A, polarized bistable version

Insulation		
Dielectric strength	coil-contacts	5000 V <sub>rms</sub>
	open contact circuit	1000 V <sub>rms</sub>
	adjacent contacts	2500 V <sub>rms</sub>
Clearance / creepage		10 / 10 mm
Insulation to IEC 60664		
Voltage rating		250 V
Pollution degree		3
Overvoltage category		III
Insulation to VDE 0110b (2/79)		
Insulation category / reference voltage		C / 250

Other data		
Flammability class according to UL 94		V-0
Coil insulation system according to UL 1446		Class F
Ambient temperature	1 coil	-10...+85 °C
	2 coils	-40...+85 °C
Mechanical life		2x10 <sup>6</sup> operations
Max. switching rate at rated- / minimum load		6 min <sup>-1</sup> / 600 min <sup>-1</sup>
Operate- / release time		typ. 5 / 3 ms
Bounce time N/O contact/N/C contact		typ. 1 / 4 ms
Vibration resistance / shock resistance		
opening N/C contact		3 / 5 g
opening closed N/O contact		6 / 15 g
Shock resistance (destruction)		100 g
Category of protection (IEC 61810)		RT II - flux proof
Relay weight		13 g
Packaging unit	1 coil	20 / 500 pcs.
	2 coils	25 / 100 pcs.
Accessories		see accessories RT

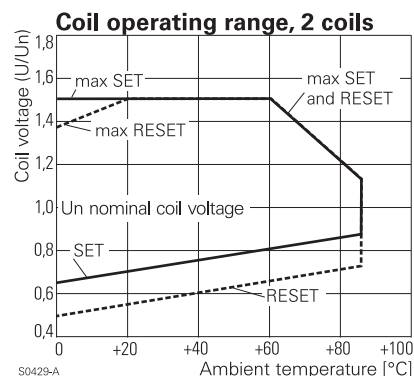
## Dimensions

Dimensions in mm



a) Indicated contact position while or after coil energization with reset voltage.

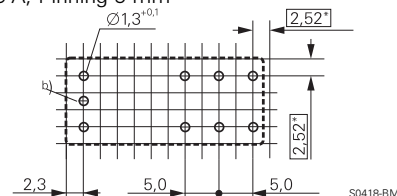
b) for 2 coil version only



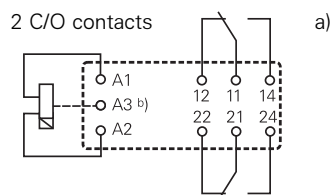
## PCB layout / terminal assignment

View on solder pins  
Dimensions in mm

8 A, Pinning 5 mm



\*) With the recommended PCB hole sizes a grid pattern from 2.5 mm to 2.54 mm can be used.



## Product key

Type

Version

**4** 8 A, pinning 5 mm, flux proof

Contacts

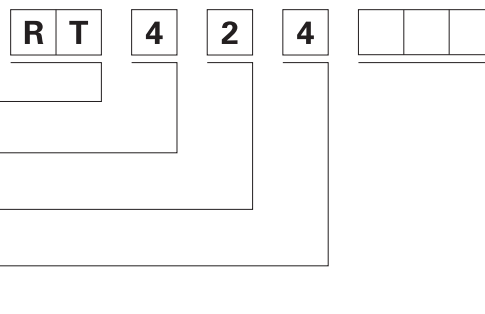
**2** 2 C/O contacts

Contact material

**4** AgNi 90/10

Coil

Coil code: please refer to coil versions table, preferred types in bold print



Product key	Version	Contacts	Cont. material	Coil	Coil	Part number
RT424A12	8 A	2 C/O contacts	AgNi 90/10	bistable	12 Vdc	4-1393243-6
RT424A24	pinning 5 mm			1 coil	24 Vdc	4-1393243-7
RT424F12	flux proof			bistable	12 Vdc	5-1393243-4
RT424F24				2 coils	24 Vdc	5-1393243-6