

**Power PCB Relay RT2 bistable**

- 2 pole 8 A, 2 CO contacts
- Polarized bistable version with 1 or 2 coils
- 5 kV / 10 mm coil-contact
- Reinforced insulation
- RoHS compliant (Directive 2002/95/EC) as per product date code 0413

**Applications**

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



F0219-B

**Approvals**

VDE REG.-Nr. 6106, **UL** us E214025, **SP** us 14385  
 Technical data of approved types on request

**Contact data**

Contact configuration	2 CO
Contact set	single contact
Type of interruption	micro disconnection
Rated current	8 A, UL: 10 A
Rated voltage / max. switching voltage AC	240/400 VAC
Limiting continuous current	UL: 10 A
Maximum breaking capacity AC	2000 VA
Limiting making capacity, max 4 s, duty factor 10%	15 A
Contact material	AgNi 90/10
Mechanical endurance	> 2 x 10 <sup>6</sup> cycles
Rated frequency of operation with / without load	15 / 1200 min <sup>-1</sup>

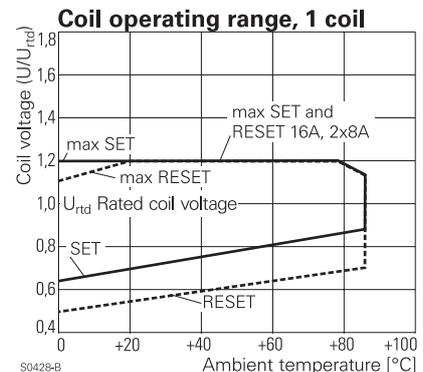
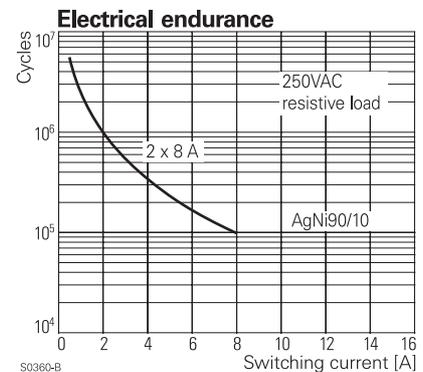
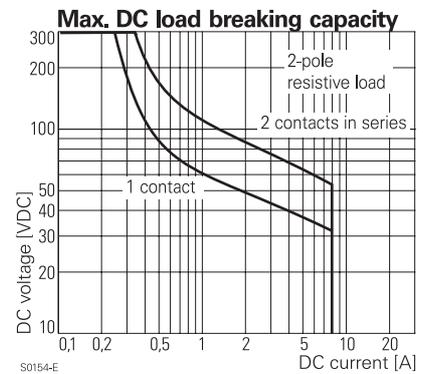
**Coil data**

	1 coil	2 coils
Rated coil voltage range	5...24 VDC	
Coil power	typ 400 mW	typ 600 mW
Operative range	2	
Limiting voltage, % of rated coil voltage	120%	150%
Minimum energization duration	30 ms	
Maximum energization duration	1 min at < 10% DF	
Coil insulation system according UL1446	class F	

**Coil versions, bistable DC-coil**

Coil code	Rated voltage VDC	Operate voltage VDC	Reset voltage VDC	Coil resistance Ω	Rated coil power mW
<b>bistable, 1 coil</b>					
A05	5	3.5	2.8	62 ± 10%	403
A06	6	4.2	3.3	90 ± 10%	400
<b>A12</b>	<b>12</b>	<b>8.4</b>	<b>6.6</b>	<b>360 ± 10%</b>	<b>400</b>
<b>A24</b>	<b>24</b>	<b>16.8</b>	<b>13.2</b>	<b>1440 ± 10%</b>	<b>400</b>
<b>bistable, 2 coils</b>					
F05	5	3.5	2.8	42 ± 10%	595
F06	6	4.2	3.3	55 ± 10%	655
<b>F12</b>	<b>12</b>	<b>8.4</b>	<b>6.6</b>	<b>240 ± 10%</b>	<b>600</b>
<b>F24</b>	<b>24</b>	<b>16.8</b>	<b>13.2</b>	<b>886 ± 10%</b>	<b>650</b>

All figures are given for coil without preenergization, at ambient temperature +23°C  
 Other coil voltages on request



**Power PCB Relay RT2 bistable (Continued)**

**Coils operation**

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

**Insulation**

Dielectric strength coil-contact circuit	5000 V <sub>rms</sub>	
open contact circuit	1000 V <sub>rms</sub>	
adjacent contact circuits	2500 V <sub>rms</sub>	
Clearance / creepage coil-contact circuit	≥ 10 / 10 mm	
adjacent contact circuits	≥ 3 / 4 mm	
Material group of insulation parts	IIIa	
Tracking index of relay base	PTI 250 V	
Insulation to IEC 60664-1		
Type of insulation coil-contact circuit	reinforced	
open contact circuit	micro disconnection	
adjacent contact circuits	basic	
Rated insulation voltage	250 V	
Pollution degree	3	2
Rated voltage system	250 V	400 V
Overvoltage category	III	

**Other data**

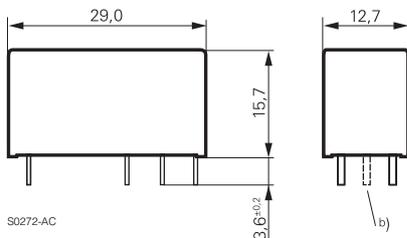
RoHS - Directive 2002/95/EC	compliant as per product date code 0413
Ambient temperature range	-40...+85°C
Operate- / release time	typ 5 / 3 ms
Bounce time NO / NC contact	typ 1 / 4 ms
Vibration / shock resistance (function) opening NC contact	3 / 5 g
opening closed NO contact	6 / 15 g
Shock resistance (destruction)	100 g
Category of protection	RTII - flux-proof
Mounting	pcb or on socket *)
Mounting distance DC / AC coils	0 mm
Resistance to soldering heat	270°C / 10 s
Relay weight	13 g
Packaging unit DC coil, bistable 1 coil	20 / 500 pcs
bistable 2 coils	100 pcs

\*) socket available for 1 coil version only, see Accessories

**Accessories**

For 1-coil version, details see datasheet	accessories RT
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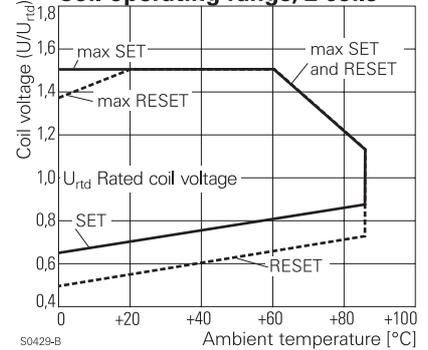
**Dimensions**



S0272-AC

- a) Indicated contact position while or after coil energization with reset voltage.
- b) for 2 coil version only

**Coil operating range, 2 coils**

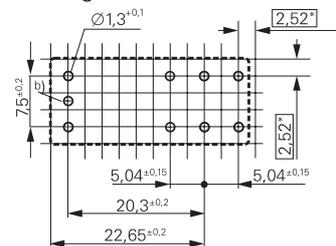


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**PCB layout / terminal assignment**

Bottom view on solder pins

8 A, Pinning 5 mm

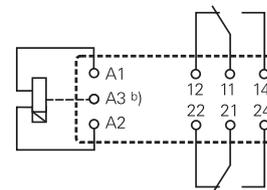


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\*) With the recommended PCB hole sizes a grid pattern from 2.5 mm to 2.54 mm can be used.

2 CO contacts

a)



S0163-CL

**Power PCB Relay RT2 bistable** (Continued)

**Product key**

Type	<b>R</b>	<b>T</b>	<b>4</b>	<b>2</b>	<b>4</b>			
Version	8 A, pinning 5 mm, flux proof							
Contact configuration	2 CO 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 CO contacts	AgNi 90/10	bistable	12 VDC	4-1393243-6
RT424A24	pinning 5 mm			1 coil	24 VDC	4-1393243-7
RT424F12	flux tight			bistable	12 VDC	5-1393243-4
RT424F24				2 coils	24 VDC	5-1393243-6