

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)



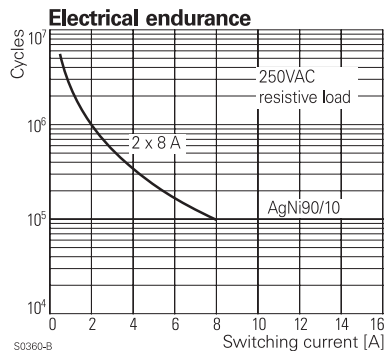
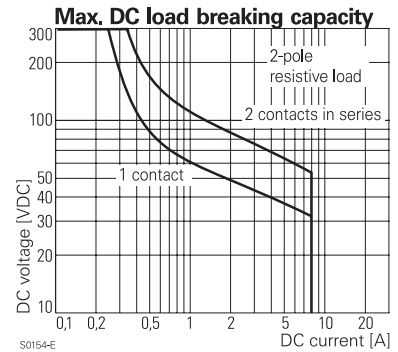
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Approvals

REG.-Nr. 6106, US E214025, 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 ⁶ cycles
Rated frequency of operation with / without load	15 / 1200 min ⁻¹



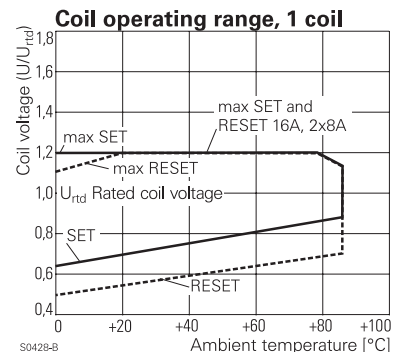
Coil data

	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
bistable, 1 coil					
A05	5	3.5	2.8	62 ± 10%	403
A06	6	4.2	3.3	90 ± 10%	400
A12	12	8.4	6.6	360 ± 10%	400
A24	24	16.8	13.2	1440 ± 10%	400
bistable, 2 coils					
F05	5	3.5	2.8	42 ± 10%	595
F06	6	4.2	3.3	55 ± 10%	655
F12	12	8.4	6.6	240 ± 10%	600
F24	24	16.8	13.2	886 ± 10%	650

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 _{rms}			
open contact circuit	1000 V _{rms}			
adjacent contact circuits	2500 V _{rms}			
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	functional			
adjacent contact circuits	basic			
Rated insulation voltage	250 V			
Pollution degree	3			
Rated voltage system	240 V		2	400 V
Overvoltage category	III			

Other data

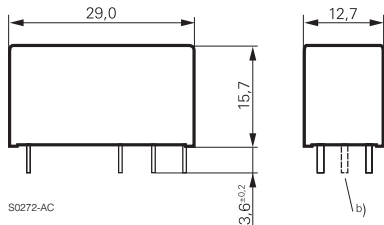
RoHS - Directive 2002/95/EC	compliant as per product date code 0413	
Flammability class according to UL94	V-0	
Ambient temperature range	-40...+85°C	
Operate- / release time	typ 5 / 3 ms	
Bounce time NO / NC contact	typ 1 / 4 ms	
Vibration / shock resistance (function) opening NC contact	3 / 5 g	
opening 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

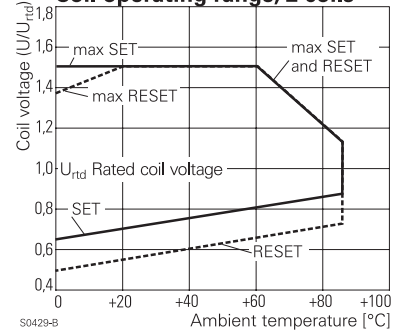
For 1-coil version, details see datasheet	accessories RT
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Dimensions



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

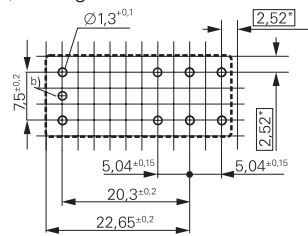
Coil operating range, 2 coils



PCB layout / terminal assignment

Bottom view on solder pins

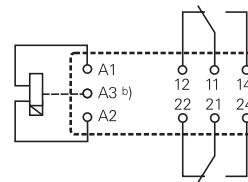
8 A, Pinning 5 mm



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

2 CO contacts

a)



Power PCB Relay RT2 bistable (Continued)

Product key

Type	R	T	4	2	4			
Version	4 8 A, pinning 5 mm, flux proof							
Contact configuration	2 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