

Power PCB Relay RT2 bistable

- 2 pole 8A, 2 form C (CO) contacts
- Polarized bistable version with 1 or 2 coils
- 5kV/10mm coil-contact
- **■** Reinforced insulation

Typical applications

Battery powered equipment or applications with "memory function"





F0219-C

Approvals
VDE REGNr. 6106, UL E214025, cCSAus 14385
Technical data of approved types on request

Contact Data		
Contact arrangement	2 form C (CO)	
Rated voltage	250VAC	
Max. switching voltage	400VAC	
Rated current	8A, UL: 10A	
Limiting continuous current	8A, UL: 10A	
Limiting making current, max. 4s, duty factor	or 10% 15A	
Breaking capacity max.	2000VA	
Contact material	AgNi 90/10	
Frequency of operation, with/without load	900/72000h ⁻¹	
Operate/Reset time max.	10/5ms	
Bounce time max., form A/form B	4/9ms	

Contact ratings

Туре	Contact	Load	Cycles
IEC 61810)		
RT444	A (NO)	8A, 250VAC resistive, 85°C	100x10 ³
RT424	C (CO)	8A, 250VAC resistive, 85°C	30x10 ³
UL 508			
RT424	A/B (NO/NC)	10A, 250VAC, general purpose, 85°C	20x10 ³
RT424	A/B (NO/NC)	1/2hp, 240VAC ,85°C	1x10 ³
RT424	A/B (NO/NC)	Pilot duty, B300, R300, 85°C	6x10 ³

Mechanical endurance >2x10 ⁶ operations	S
--	---

Coil Data, bistable coils	1 coil 2 coils			
Magnetic system	polarized, bistable			
Coil voltage range	3 to 24VDC			
Operative range, IEC 61810	2			
Limiting voltage, % of rated coil voltage	je 120% 150%			
Min./Max. energization duration	30ms/1min at <10% duty factor			
Coil insulation system according UL	class F			

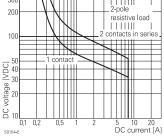
Coil versions, bistable coil								
Coil	Rated	Set	Reset	Coil	Rated coil			
code	voltage	voltage	voltage	resistance	power			
	VDC	VDC	VDC	Ω±10%	mW			
bistable	1 coil							
A03	3	2.1	1.7	21	429			
A05	5	3.5	2.8	62	403			
A06	6	4.2	3.3	90	400			
A12	12	8.4	6.6	360	400			
A24	24	16.8	13.2	1440	400			
bistable	2 coils							
F03	3	2.1	1.7	15	600			
F05	5	3.5	2.8	42	595			
F06	6	4.2	3.3	55	655			
F12	12	8.4	6.6	240	600			
F24	24	16.8	13.2	886	650			

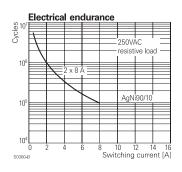
All figures are given for coil without pre-energization, at ambient temperature +23°C. Other coil voltages on request.

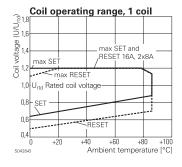
Bistable coils - operation

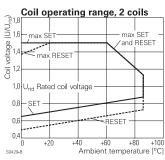
Version	1	coil	2 coils
Coil terminals	A1	A2	A1 A3 A2
Operate	+	-	+ -
Reset	-	+	- +
Contact position not defined at delivery			

Max. DC load breaking capacity 200











Power PCB Relay RT2 bistable (Continued)

Insulation Data	
Initial dielectric strength	
between open contacts	1000V _{rms}
between contact and coil	5000V _{rms}
between adjacent contacts	2500V _{rms}
Clearance/creepage	
between contact and coil	≥10/10mm
between adjacent contacts	≥ 3/4mm
Material group of insulation parts	Illa
Tracking index of relay base	PTI 250V

Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter

Ambient temperature bistable 1 coil bistable 2 coils Category of environmental protection

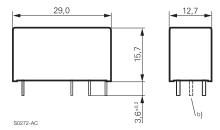
-10 to 85°C -40 to 85°C

RTII - flux proof

IEC 61810 Vibration/shock resistance (functional),

opening B contact 3/5g opening closed A contact 6/15g Shock resistance (destructive) 100g

Dimensions



position while or after coil energization with reset

b) for 2 coil version only

Other Data (continued) Terminal type PCB-THT, plug-in¹⁾ Weight 13g Resistance to soldering heat THT IEC 60068-2-20 270°C/10s Packaging/unit tube/20 pcs., box/500 pcs

Accessories

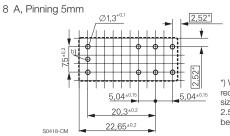
For 1 coil version,

details see datasheet Accessories Industrial Power Relay RT

NOTE: indicated contact ratings and electrical endurance data for direct wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.

PCB layout / terminal assignment

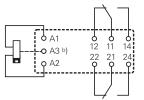
Bottom view on solder pins



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

F24





RT

4

S0163-DL

2

a)

Product code structure Typical product code Type RT Power PCB Relay RT2 bistable Version 8A, pinning 5mm, flux proof

Contact configuration

2 2 form C (CO) contacts

Contact material

AgNi 90/10

Coil

Coil code: please refer to coil versions table

Product code	Version	Contacts	Contact material	Coil version	Coil	Part number
RT424A05	8A,	2 form C (CO)	AgNi 90/10	Bistable 1coil	5VDC	4-1393243-4
RT424A12	pinning 5mm,	contacts			12VDC	4-1393243-6
RT424F05	flux proof			Bistable 2 coils	5VDC	5-1393243-2
RT424F12	·				12VDC	5-1393243-4
RT424F24					24VDC	5-1393243-6

This list represents the most common types and does not show all variants covered by this datasheet. Other types on request

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