

Power PCB Relay RT1 bistable

1 pole 16 A, polarized bistable version



- 1 C/O contact
- Bistable with 1 or 2 coils
- 5 kV / 10 mm coil-contact
- Height 15.7 mm
- Cadmium-free contacts
- Protection class II (VDE 0700)

Applications

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

F0176-B



Technical data of approved types on request

Contact data

Configuration	1 C/O contact
Type of contact	single contact
Rated current	16 A
Rated voltage / max. breaking voltage	250 Vac / 440 Vac
Rated breaking capacity	4000 VA
Make current (max. 4 s at duty cycle 10%)	30 A
Contact material	AgNi 90/10

Coil data

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		
Reset voltage max.	120 % U _{nom}	150 % U _{nom}

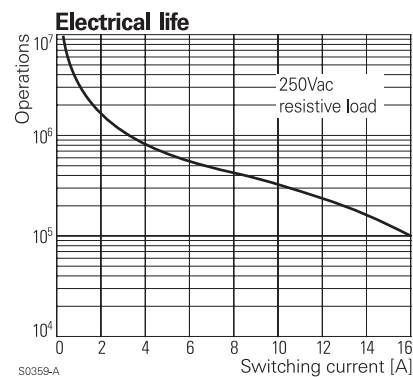
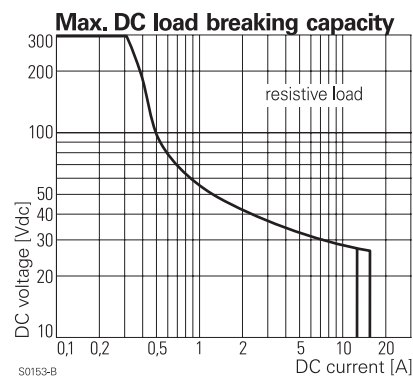
Coil versions, bistable

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

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					



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Insulation

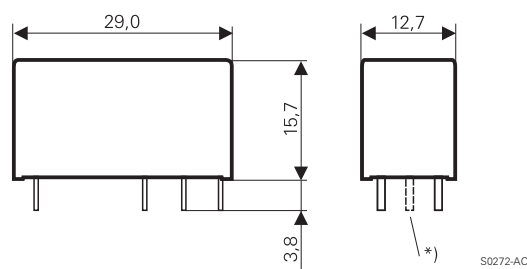
Dielectric strength	coil-contacts	5000 V _{rms}
	open contact circuit	1000 V _{rms}
Clearance / creepage		10 / 10 mm
Insulation to IEC 664/VDE 0110 (1/89)		
	Voltage rating	250 V
	Pollution degree	3
	Overvoltage category	III
Insulation to VDE 0110b (2/79)		
	Insulation category / reference voltage	C / 250
Tracking resistance of relay base		CTI 250

Other data

Flammability class UL	V-0	
Ambient temperature	-40...+85 °C	
Mechanical life	5x10 ⁶ operations	
Max. switching rate at rated- / minimum load	6 min ⁻¹ / 600 min ⁻¹	
Operate- / release time	typ. 5 / 4 ms	
Bounce time N/O contact/N/C contact	typ. 1 / 3 ms	
Vibration resistance / shock resistance		
open N/O contact	3 / 5 g	
closed N/C contact	6 / 15 g	
Shock resistance (destruction)	100 g	
Protection category	IP40	
Relay weight	13 g	
Packaging unit	1 coil	20 / 500pcs.
	2 coils	25 / 100pcs.
Accessories	see accessories RT	

Dimensions

Dimensions in mm



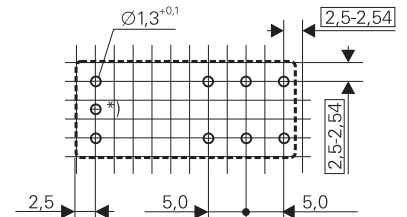
S0272-AC

PCB layout / terminal assignment

View on solder pins

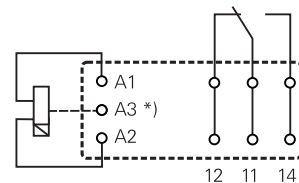
Dimensions in mm

16 A, pinning 5 mm



S0163-CM

1 C/O contact



S0163-BI

Indicated contact position during or after coil energization with reset voltage.

*) for 2 coil version only

Ordering key

Type

Version

3 16 A, pinning 5 mm, flux-tight

Contacts

1 1 C/O contact

Contact material

4 AgNi 90/10

Coil

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

R	T	3	1	4			
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