

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

	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
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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

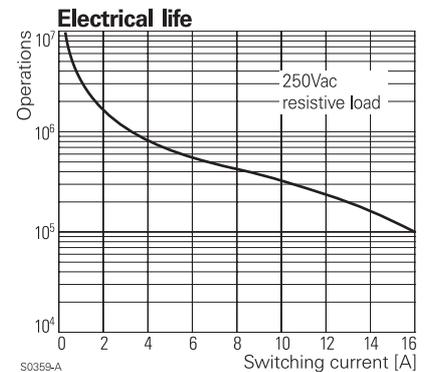
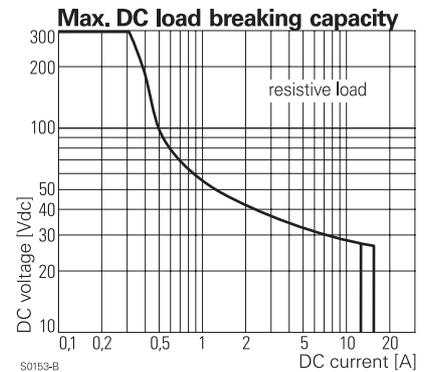
F05	5	3.5	3.5	$42 \pm 10\%$	120.0
F06	6	4.2	4.2	$55 \pm 10\%$	110.0
F12	12	8.4	8.4	$240 \pm 10\%$	50.0
F24	24	16.8	16.8	$886 \pm 10\%$	27.0

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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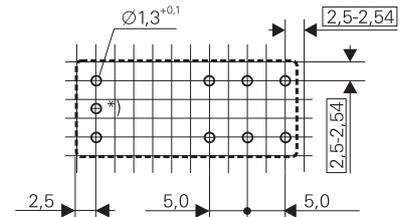
1 pole 16 A, polarized bistable version

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

PCB layout / terminal assignment

View on solder pins
Dimensions in mm

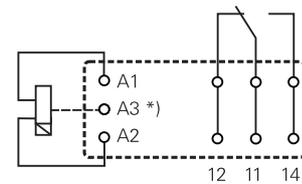
16 A, pinning 5 mm



S0163-CM

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	

1 C/O contact



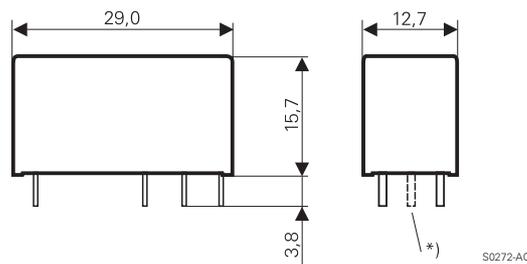
S0163-BI

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

*) for 2 coil version only

Dimensions

Dimensions in mm



S0272-AC

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

