

Power PCB Relay RT1 Inrush Power

- 1 pole 16 A, 1 NO contact (W pre-make contact + AgSnO₂)
- 10 A / 250 VAC making and breaking capacity acc. to IEC 60669-1
- 165 A / 20 ms inrush peak current
- Mono- or bistable coil
- 5 kV / 10 mm coil-contact
- Reinforced insulation
- Test tab (manual operator) optional

Applications

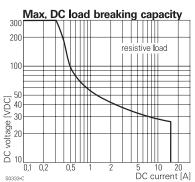
Lighting systems, movement sensors, filament and incandescent lamp loads, motors



F0272-B

Approvals

🚾 REGNr. 6106, c 🔁 us E214025, 😅	® _{us} 14385	
Technical data of approved types on request		
Contact data	RT.3T	RTS3L
Contact configuration	1 NO	
Contact set	pre-make contact s	ingle contact
Type of interruption	micro disconne	ection
Rated voltage / max. switching voltage AC	250 / 400 VA	чС
Rated current	16 A	
Limiting continuous current	16 A, UL: 20 A (F	RTS3L)
Maximum breaking capacity AC	4000 VA	
Limiting making capacity		
max 20 ms (incandescent lamps)	165 A	120 A
max 200 µs (fluorescent lamps)	800 A	-
	/ (pre-make cont.)+AgSnO ₂	
Rated frequency of operation with / without	load 6 / 60 min ⁻	1
Operate- / release time DC coil	max 10 / 5 r	ns
Operate- / reset time bistable	max 10 / 10	ms
Bounce time NO contact	max 4 ms	

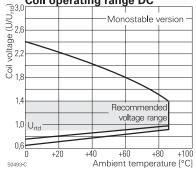


Contact ratings

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Туре	Contact	Load	Ambient	Cycles
			temp. [°C]	
IEC 61	810			
RTS3L	NO	20 A, 250 VAC, cosφ=1	70°C	20x10 ³
RTS3L	monostat	ble		
	NO	16 A, 250 VAC, cosφ=1	85°C	100x10 ³
RTS3T	NO	16 A, 250 VAC, cosφ=1	85°C	5x10 ³
UL 50	В			
RTS3L	NO	20 A, 250 VAC, general purpose	70°C	20x10 ³
RTS3L	NO	16 A, 250 VAC, resistive	85°C	50x10 ³
RTS3L	NO	TV8, 240 VAC	40°C	25x10 ³
RTS3L	NO	1.5 hp, 240 VAC	70°C	30x10 ³
RTS3T	NO	1200 W Tungsten, 120 VAC / 277 VAC, 60 Hz	50°C	6x10 ³
RTS3T	NO	620 W Discharge lamps (standard ballast),		
		120 VAC / 277VAC, 60 Hz	50°C	6x10 ³

Coil data	
Coil data, monostable coil	
Rated coil voltage range	5110 VDC
Operative range to IEC 61810	2
Coil insulation system according UL1446	class F





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Product specification according to IEC 61810-1. Product data, technical para-meters, test conditions and

processing information only to be used together with the 'Definitions' section in the cat-alogue or at schrackrelays.com in the 'Schrack' section.

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Specifications subject to change.

Power PCB Relay RT1 Inrush Power (Continued)

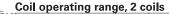
Coil vers	ions, monosta	able DC-coil			
Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDČ	VDČ	VDČ	Ω	mW
005	5	3.5	0.5	62±10%	403
006	6	4.2	0.6	90±10%	400
012	12	8.4	1.2	360±10%	400
024	24	16.8	2.4	1440±10%	400
048	48	33.6	4.8	5520±10%	417
060	60	42.0	6.0	8570±12%	420
110	110	77.0	11.0	28800±12%	420
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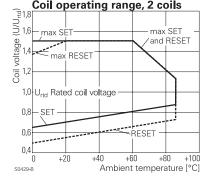
All figures are given for coil without preenergization, at ambient temperature +23°C Other coil voltages on request

Coil data, bistable coils	1 coil	2 coils		
Rated coil voltage range	324 VDC			
Operative range to IEC 61810				
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	clas	s F		

Coil versions, bistable 1 coil									
Coil	Rated	Operate	Reset	Coil	Rated coil				
code	voltage	voltage	voltage	resistance	power				
	VDC	VDC	VDC	Ω	mW				
A03	3	2.1	1.7	21±10%	429				
A12	12	8.4	6.6	360±10%	400				
A24	24	16.8	13.2	1440±10%	400				
Coil vers	Coil versions, bistable 2 coils								
F03	3	2.1	1.7	15±10%	600				
F12	12	8.4	6.6	240±10%	600				
F24	24	16.8	13.2	886±10%	650				
A 11 6	a sure allowing from	and the state and the second	a substant and the set	a la francia de la construcción de la del constru	0000				

Coil operating range, 1 coil Coil voltage (U/U_{rtd}) 1 9: 1 3: 1 max SET and RESET 16A, 2x8A max SE max RESE 1.0 U_{rtd} Rated coil voltage 08 SET 0,6 RESET ----0,4 40 +60 +80 +100 Ambient temperature [°C] 0 +20 +40S0428-B





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

Coils - operation

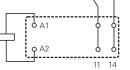
Version	1 (coil	2 coils
Coil terminals	A1	A2	A1 A3 A2
Pull-in	+	-	+ -
Reset	-	+	- +
Contact position not defined at delivery			

Insulation			
Dielectric strength coil-contact circuit	5000 Vrms		
open contact circuit	12	50 V _{rms}	
Clearance / creepage coil-contact circuit	≥ 10	/ 10 mm	
Material group of insulation parts		Illa	
Tracking index of relay base	PTI 250 V		
Insulation to IEC 61810-1			
Type of insulation coil-contact circuit	reinforced		
open contact circuit	micro disconnection		
Rated insulation voltage	250 V		
Pollution degree	3	2	
Rated voltage system	240 V	230 / 400 V	
Overvoltage category		111	

Terminal assignment Bottom view on solder pins

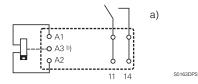
monostable version





S0163-BE

bistable version



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

b) for 2 coil version only

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Other data	RT.3T	RTS3L						
Mechanical endurance DC	> 5x10 ⁶ cycles	> 10x10 ⁶ cycles						
bistable	> 3x10 ⁶ cycles	> 5x10 ⁶ cycles						
tab manually operated	> 10 ³ cycles	-						
Material								
RoHS - Directive 2002/95/EC	con	npliant						
Environment								
Ambient temperature range monostable	-40+70°C	-40+85°C						
bistable: 1 coil	-10+70°C	-10+85°C						
bistable: 2 coils	-40+70°C	-40+85°C						
Vibration resistance (function) monostab	ole 10 g	20 g						
Shock resistance (destruction)	1(00 g						
Category of protection	RTII - flux proof							
Procesing								
Mounting	pcb or c	n socket*)						
Mounting distance	\geq () mm						
Resistance to soldering heat	270 °C / 10 s							
Relay weight with / without test tab	16 / 14 g	-/14 g						
Packaging unit with / without test tab 100 / 500 pcs - / 500 pcs								
*) RTT3T or bistable 2 coil version, pcb mounting only; see Accessories								

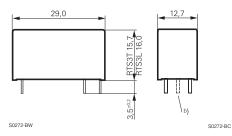
Accessories RTS3.

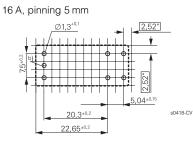
For details see datasheet

Accessories Power Relay RT

Dimensions / PCB layout

version without test tab

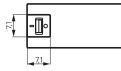


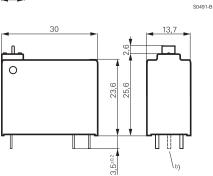


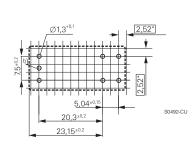
b) for 2 coil version only

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

version with test tab







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Power PCB Relay RT1 Inrush Power (Continued)

Prod	uct	key		Typical product key	RT	S	3	т	A12
Туре	RT	Power PCB Relay RT1 Inrush Power			I				
Versio	n S	without test tab	т	with test tab (manual operator) for contact material 'T' and bistable coil o	only				
Conta	ct co	onfiguration					-		
	3	1 NO contact (1 form A)							
Conta	ct m	aterial							
	L	AgSnO₂	т	Tungsten (W) pre-make + AgSnO ₂					
Coil	Coi	l code: please refer to coil versions tal	ble						

Product key	Version	Contacts	Cont. material	Coil	Coil	Part number
RTS3L005	without	1 NO contact	AgSnO ₂	monostable	5 VDC	1-1415898-8
RTS3L012	test tab			coil	12 VDC	1-1415898-9
RTS3L018					18 VDC	2-1415898-0
RTS3L024					24 VDC	1-1415898-4
RTS3L048					48 VDC	2-1415898-1
RTS3L060					60 VDC	2-1415898-2
RTS3LA12				bistable	12 VDC	2-1415898-3
RTS3LA24				1-coil	24 VDC	2-1415898-4
RTS3LF12				bistable	12 VDC	2-1415898-5
RTS3LF24				2-coils	24 VDC	2-1415898-6
RTS3T012			W pre-make +	monostable	12 VDC	1415898-0
RTS3T024			AgSnO ₂	coil	24 VDC	1415898-1
RTS3TA12			-	bistable	12 VDC	1415898-2
RTS3TA24				1-coil	24 VDC	1415898-3
RTS3TF03				bistable	3 VDC	1415898-4
RTS3TF12				2-coils	12 VDC	1415898-5
RTS3TF24					24 VDC	1415898-6
RTT3TA12	with			bistable	12 VDC	1415898-7
RTT3TA24	test tab			1-coil	24 VDC	1415898-8
RTT3TF12				bistable	12 VDC	1415898-9
RTT3TF24				2-coils	24 VDC	1-1415898-0

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