

Power PCB Relay RT2

- 2 pole 8 A, 2 CO or 2 NO contacts
- DC- or AC-coil
- Sensitive coil 400 mW
- Reinforced insulation
- WG version: Product in accordance to IEC60335-1
- RoHS compliant (Directive 2002/95/EC) as per product date code 0413

Applications

Domestic appliances, heating control, emergency lighting, modems



F0149-B

Approvals

VDE REG.-Nr. 6106, **CE** us E214025, **REAR** C0786
Technical data of approved types on request

Contact data

Contact configuration	2 CO or 2 NO
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, AgNi 90/10 gold plated, AgSnO ₂
Mechanical endurance DC coil	> 30 x 10 ⁶ cycles
AC coil	> 5 x 10 ⁶ cycles
Rated frequency of operation with / without load	6 / 1200 min-1

Contact ratings

Type	Load	Cycles
RT424	8A, 250VAC, NO contact, 70°C, EN61810-1	100x10 ³
RT444	6(3)A, 250VAC, NO contact, 85°C; EN60730-1	100x10 ³
RT424	6(2)A, 250VAC, NO/NC contact, 85°C; EN60730-1	100x10 ³
RT424	10A, 250VAC, CO contact, 70°C; General purpose, UL508	30x10 ³
RT424	1/2hp @ 240VAC, 1/4hp @ 120VAC, UL508	
RT424	Pilot duty B300, UL508	
RT424	8A, 30VDC, General Purpose, UL508	
RT424	4A, 230VAC, cosφ=0,6, gas burner	150x10 ³

Coil data

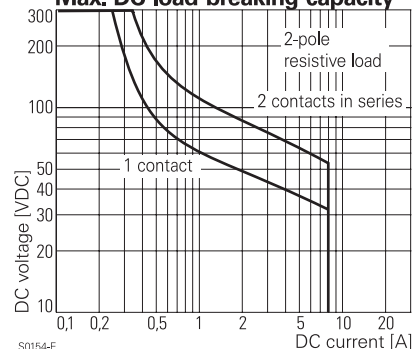
Rated coil voltage range DC coil	5...110 VDC
AC coil	24...230 VAC
Coil power DC coil	typ 400 mW
AC coil	typ 0,75 VA
Operative range	2
Coil insulation system according UL1446	class F

Coil versions, DC-coil

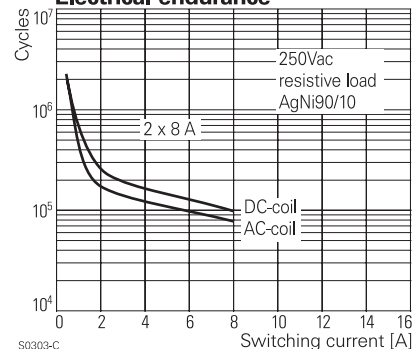
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω	Rated coil power mW
005	5	3.5	0.5	62 ± 10%	403
006	6	4.2	0.6	90 ± 10%	400
012	12	8.4	1.2	360 ± 10%	400
024	24	16.8	2.4	1440 ± 10%	400
048	48	33.6	4.8	5520 ± 10%	417
060	60	42.0	6.0	8570 ± 12%	420
110	110	77.0	11.0	28800 ± 12%	420

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

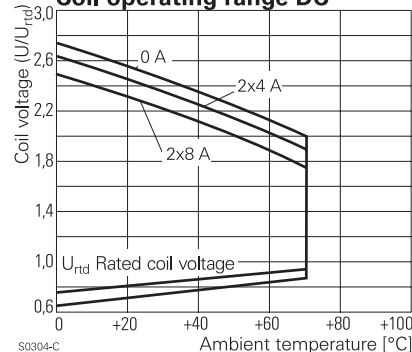
Max. DC load breaking capacity



Electrical endurance



Coil operating range DC



Power PCB Relay RT2 (Continued)

Coil versions, AC-coil 50Hz

Coil code	Rated voltage	Operate voltage	Release voltage	Coil resistance	Rated coil power
	VAC	50 Hz	50 Hz	Ω	50 Hz
524	24	18.0	3.6	$350 \pm 10\%$	0.76
615	115	86.3	17.3	$8100 \pm 15\%$	0.76
700	200	150.0	30.0	$24350 \pm 15\%$	0.76
730	230	172.5	34.5	$32500 \pm 15\%$	0.74

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

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	$\geq 10 / 10$ mm
adjacent contact circuits	$\geq 3 / 4$ mm
Material group of insulation parts	$\geq IIIa$
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
Overvoltage category	III

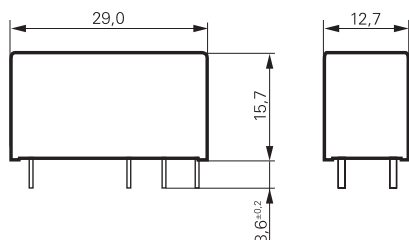
Other data

RoHS - Directive 2002/95/EC	compliant as per product date code 0413
Flammability class according to UL94	V-0
For WG version: GWFI to IEC 60335-1	> 850°C
GWT to IEC 60335-1 current $\leq 0,2$ A	> 650°C
current > 0,2 A	> 750°C
Ambient temperature range	-40...+70°C
Operate- / release time DC coil	typ 7 / 2 ms
Bounce time DC coil NO / NC contact	typ 1 / 3 ms
Vibration resistance (function) NO / NC contact	20 / 5 g, 30 ... 300 Hz
Shock resistance (destruction)	100 g
Category of protection	RTII - flux proof, RTIII - wash tight
Mounting	pcb or on socket
Mounting distance DC / AC coils	0 mm
Resistance to soldering heat flux-proof version	270°C / 10 s
wash-tight version	260°C / 5 s
Relay weight	13 g
Packaging unit	20 / 500 pcs

Accessories

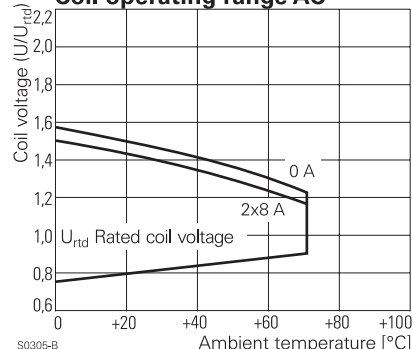
For details see datasheet accessories RT

Dimensions



S0272-BA

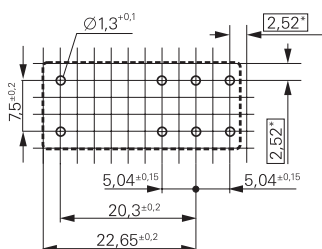
Coil operating range AC



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PCB layout / terminal assignment

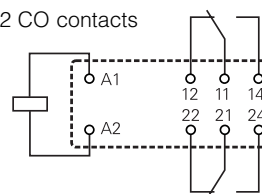
Bottom view on solder pins



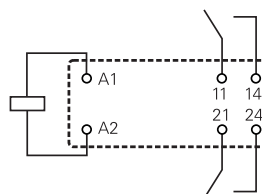
S0418-CA

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

2 CO contacts



S0163-BJ



S0163-BK

Power PCB Relay RT2 (Continued)

Product key

Product key		R	T	4					
Type									
Version									
4	8 A, pinning 5 mm, flux proof								
E	8 A, pinning 5 mm, wash tight								
Contact configuration									
2	2 CO contacts				4	2 NO contacts			
Contact material									
3	AgSnO ₂								
4	AgNi 90/10				5	AgNi 90/10 gold plated			
Coil									
Coil code: please refer to coil versions table									
Version									
Blank	Standard version								
WG	Product in accordance with IEC 60335-1 (domestic appliances)								
Preferred types in bold print									

Product key	Version	Contacts	Cont. material	Coil	Coil	Part number			
RT424005	8 A pinning 5 mm flux proof	2 CO contacts	AgNi 90/10	DC-coil	5 VDC	5-1393243-9			
RT424006					6 VDC	6-1393243-1			
RT424012					12 VDC	6-1393243-3			
RT424024					24 VDC	6-1393243-8			
RT424048					48 VDC	7-1393243-0			
RT424060					60 VDC	7-1393243-3			
RT424110							110 VDC	7-1393243-5	
RT424524						AC-coil	24 VAC	7-1393243-6	
RT424615							115 VAC	7-1393243-8	
RT424730							230 VAC	7-1393243-9	
RT425005					AgNi 90/10 gold plated	DC-coil	5 VDC	8-1393243-0	
RT425012								12 VDC	8-1393243-2
RT425024								24 VDC	8-1393243-5
RT425524							AC-coil	24 VAC	9-1393243-1
RT425615				115 VAC	9-1393243-2				
RT425730				230 VAC	9-1393243-3				
RT444012		2 NO contacts	AgNi 90/10	DC-coil	12 VDC	9-1393243-7			
RT444024						24 VDC	9-1393243-9		
RTE24005	8 A pinning 5 mm wash tight	2 CO contacts			5 VDC	0-1393243-1			
RTE24006					6 VDC	0-1393243-2			
RTE24012					12 VDC	0-1393243-4			
RTE24024					24 VDC	1-1393243-0			
RTE24048					48 VDC	1-1393243-1			
RTE24060					60 VDC	1-1393243-3			
RTE24110						110 VDC	1-1393243-4		
RTE24524						AC-coil	24 VAC	1-1393243-5	
RTE24615							115 VAC	1-1393243-7	
RTE24730							230 VAC	1-1393243-8	
RTE25005						AgNi 90/10 gold plated	DC-coil	5 VDC	1-1393243-9
RTE25012								12 VDC	2-1393243-0
RTE25024								24 VDC	2-1393243-1