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**

F0149-B

Applications

Domestic appliances, heating control, emergency lighting, modems

Approvals

VDE REG.-Nr. 6106, cULus E214025, BEAB 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

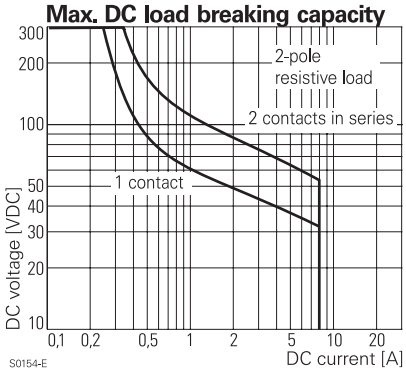
Rated coil voltage range DC coil	5...110 VDC
AC coil	24...230 VAC
Coil power DC coil	typ 400 mW
AC coil	typ 0,75 VA
Operative range	2
Coil insulation system according UL1446	class F

Coil versions, DC-coil

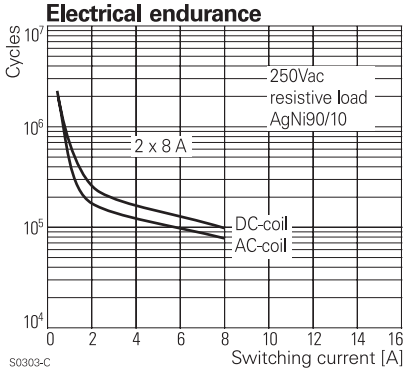
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω	Rated coil power mW
005	5	3.5	0.5	62±10%	403
006	6	4.2	0.6	90±10%	400
012	12	8.4	1.2	360±10%	400
024	24	16.8	2.4	1440±10%	400
048	48	33.6	4.8	5520±10%	417
060	60	42.0	6.0	8570±12%	420
110	110	77.0	11.0	28800±12%	420

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

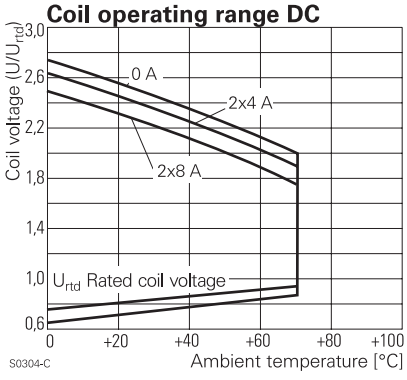
Max. DC load breaking capacity



Electrical endurance



Coil operating range DC



Datasheet
Issued 01/2005
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Specifications subject to change.

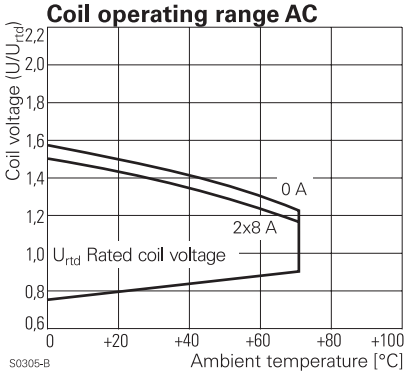
Power PCB Relay RT2 (Continued)

Coil versions, AC-coil 50Hz

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

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

Coil operating range AC



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		≥ 10 / 10 mm
adjacent contact circuits		≥ 3 / 4 mm
Material group of insulation parts		≥ 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	2
Rated voltage system	240 V	400 V
Overvoltage category		III

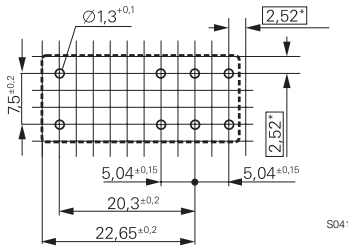
Other data

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 ≤ 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

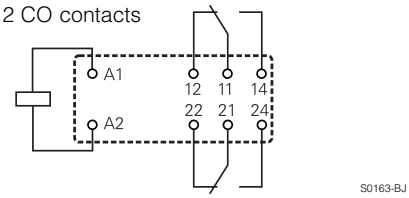
Accessories

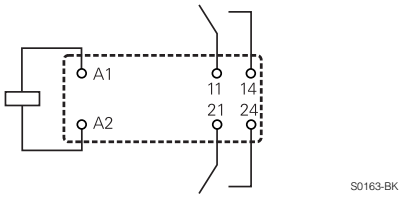
For details see datasheet	accessories RT

PCB layout / terminal assignment
Bottom view on solder pins

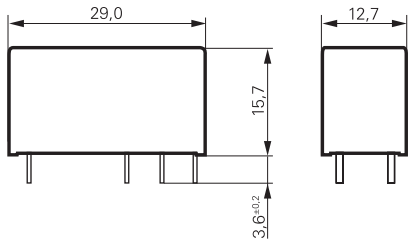


*) With the recommended PCB hole sizes a grid pattern from 2.5 mm to 2.54 mm can be used.





Dimensions



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Power PCB Relay RT2 (Continued)

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	2 CO contacts	AgNi 90/10	DC-coil	5 VDC	5-1393243-9
RT424006	pinning 5 mm				6 VDC	6-1393243-1
RT424012	flux proof				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	DC-coil	5 VDC	8-1393243-0
RT425012			gold plated		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	2 CO contacts			5 VDC	0-1393243-1
RTE24006	pinning 5 mm				6 VDC	0-1393243-2
RTE24012	wash tight				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	DC-coil	5 VDC	1-1393243-9
RTE25012			gold plated		12 VDC	2-1393243-0
RTE25024					24 VDC	2-1393243-1

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