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**

F0149-C

Applications

Domestic appliances, heating control, emergency lighting, modems

Approvals

VDE REG.-Nr. 6106, cULus E214025, CSA 14385, 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 voltage / max. switching voltage AC	250 / 400 VAC
Rated current	8 A, UL: 10 A
Limiting continuous current	8 A, 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, $AgSnO_2$
Rated frequency of operation DC coil with / without load	6 / 1200 min-1
AC coil with / without load	6 / 600 min-1
Operate- / release time DC coil	max 8 / 6 ms
Bounce time DC coil NO / NC contact	max 4 / 10 ms

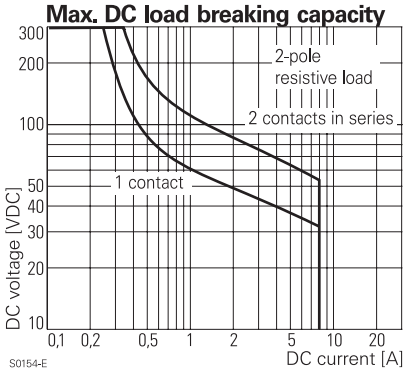
Contact ratings

Type	Contact	Load	Ambient temp. [°C]	Cycles
IEC 61810				
RT424 DC coil	CO	8 A, 250 VAC, cosφ=1	85°C	$10x10^3$
RT444 AC coil	NO	8 A, 250 VAC, cosφ=1	70°C	$50x10^3$
RT424 AC coil	CO	8 A, 250 VAC, cosφ=1	70°C	$30x10^3$
UL 508				
RT424 DC coil	NO / NC	10 A, 250 VAC, general purpose	85°C	$20x10^3$
RT424 DC coil	NO / NC	1/2 hp, 240 VAC	85°C	$1x10^3$
RT424 DC coil	NO / NC	Pilot duty, B300, R300	85°C	$6x10^3$
EN60947-5-1				
RTE24 DC coil	NO / NC	AC15, 250 VAC, 3A		6.050
RTE24 DC coil	NO / NC	DC13, 24 VDC, 2A		6.050
RTE24 DC coil	NO / NC	DC13, 250V DC, 0.2A		6.050
EN60730-1				
RT424 DC coil	NO / NC	6(2) A, 250 VAC	85°C	$100x10^3$

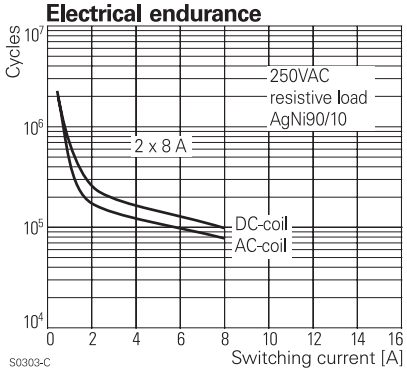
Coil data

Rated coil voltage range DC coil	5...110 VDC
AC coil	24...230 VAC
Operative range to IEC 61810	2
Coil insulation system according UL1446	class F

Max. DC load breaking capacity



Electrical endurance



Datasheet Rev. HK1
Issued 2008/11
www.tycoelectronics.com
www.schrackrelays.com

Dimensions are in mm unless otherwise specified and are shown for reference purposes only.

Product specification according to IEC 61810-1. Product data, technical parameters, test conditions and processing information only to be used together with the 'Definitions' section in the catalogue or at schrackrelays.com in the 'Schrack' section.

Specifications subject to change.

Power PCB Relay RT2 (Continued)

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

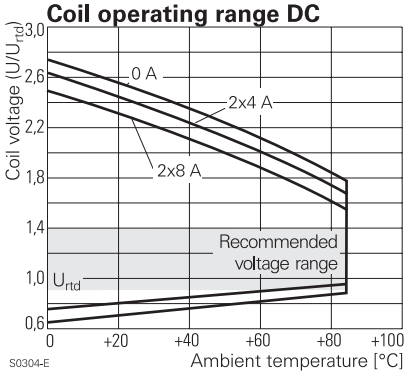
All figures are given for coil without preenergization, at ambient temperature +23°C
Other coil voltages on request

Coil versions, AC-coil 50Hz

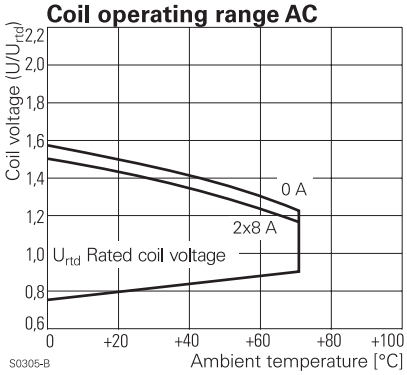
Coil code	Rated voltage VAC	Operate voltage 50 Hz VAC	Release voltage 50 Hz VAC	Coil resistance Ω	Rated coil power 50 Hz VA
524	24	18.0	3.6	350±10%	0.76
615	115	86.3	17.3	8100±15%	0.76
620	120	90.0	18.0	8800±15%	0.75
700	200	150.0	30.0	24350±15%	0.76
730	230	172.5	34.5	32500±15%	0.74

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

Coil operating range DC



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	micro disconnection
	adjacent contact circuits	basic
Rated insulation voltage		250 V
Pollution degree	3	2
Rated voltage system	240 V	230 / 400 V
Overvoltage category		III

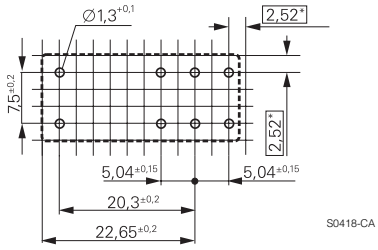
Other data

Mechanical endurance DC coil	> 30 x 10^6 cycles
AC coil	> 5 x 10^6 cycles
Material	
RoHS - Directive 2002/95/EC	compliant as per product date code 0413
Resistance to heat and fire, WG version	according EN60335, par30.
Environment	
Ambient temperature range	-40...+85°C
max. ambient temperature AC coil	70°C
max. ambient temperature AgSnO contacts	70°C
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
Procesing	
Mounting	pcb or on socket
Mounting distance DC / AC coil	≥ 0 / ≥ 2.5 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

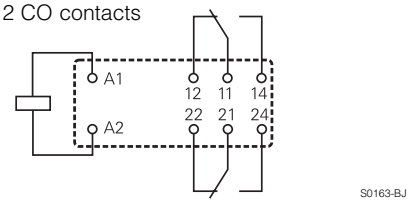
For details see datasheet	accessories RT

PCB layout / terminal assignment
Bottom view on solder pins

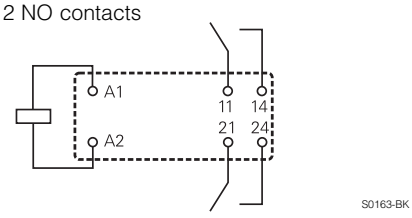


*) With the recommended PCB hole sizes a grid pattern from 2.5 mm to 2.54 mm can be used.

2 CO contacts



2 NO contacts



Datasheet Rev. HK1
Issued 2008/11
www.tycoelectronics.com
www.schrackrelays.com

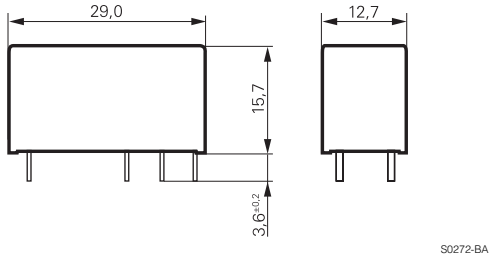
Dimensions are in mm unless otherwise specified and are shown for reference purposes only.

Product specification according to IEC 61810-1. Product data, technical parameters, test conditions and processing information only to be used together with the 'Definitions' section in the catalogue or at schrackrelays.com in the 'Schrack' section.

Specifications subject to change.

Power PCB Relay RT2 (Continued)

Dimensions



Product key — Typical product key: **RT 4 2 4 024**

Type
- **RT** Power PCB Relay RT2

Version
- **4** **8 A, pinning 5 mm, flux proof**
- **E** 8 A, pinning 5 mm, wash tight

Contact configuration
- **2** **2 CO contacts (2 form C)**
- **4** 2 NO contacts (2 form A)

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
RT423012	8 A	2 CO contacts	AgSnO	DC-coil	12 VDC	4-1419136-3
RT423024	pinning 5 mm				24 VDC	4-1393243-2
RT424005	flux proof		AgNi 90/10		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	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	1393243-1
RTE24006	pinning 5 mm				6 VDC	1393243-2
RTE24012	wash tight				12 VDC	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

Datasheet Rev. HK1
Issued 2008/11
www.tycoelectronics.com
www.schrackrelays.com

Dimensions are in mm unless otherwise specified and are shown for reference purposes only.

Product specification according to IEC 61810-1. Product data, technical parameters, test conditions and processing information only to be used together with the 'Definitions' section in the catalogue or at schrackrelays.com in the 'Schrack' section.

Specifications subject to change.