Power PCB Relay RX1

- **1 pole 12 or 16 A, 1 CO or 1 NO**
- **DC- or AC-coil**
- **Reinforced insulation**
- **Transparent cover optional**
- **RoHS compliant (Directive 2002/95/EC) as per product date code 0413**

Applications

Domestic appliances, heating control, emergency lighting, automatic doors

S0271-A

Approvals

VDE REG.-Nr. A651, c UL us E214025
Technical data of approved types on request

Contact data

Contact configuration	1 CO or 1 NO	
Contact set	single contact	
Type of interruption	micro disconnection	
Rated current	12 A	16 A
Rated voltage / max.switching voltage AC	240/400 VAC	
Maximum breaking capacity AC	3000 VA	4000 VA
Limiting making capacity, max 4 s, duty factor 10%	25 A	
Contact material	AgNi 90/10	
Mechanical endurance DC coil	> 5 x 10^6 cycles	
AC coil	> 1 x 10^6 cycles	
Rated frequency of operation with / without load	6 / 600 min^{-1}	

Contact ratings

Type	Load	Cycles
RX1	12 A, 250 VAC, DC coil, NO contact, 85°C, EN61810-1	1x10^5
RX1	12 A, 250 VAC, AC coil, NO contact, 70°C, EN61810-1	1x10^5
RX3	16 A, 250 VAC, NO contact, 70°C, DF 50%, EN61810-1	5x10^4
RX3	16 A, 250 VAC, NO contact, 85°C, DF 10%, UL508	5x10^4

Coil data

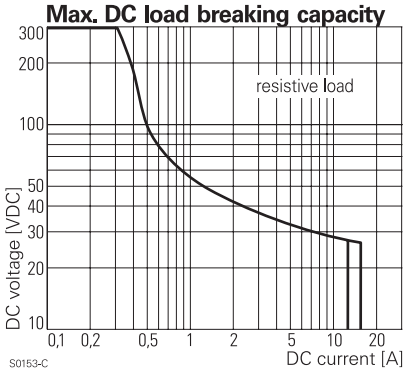
Rated coil voltage range DC coil	5...110 VDC
AC coil	24...230 VAC
Coil power DC coil	520 mW
AC coil	typ 0,75 VA
Operative range	2
Coil insulation system according UL1446	class F

Coil versions, DC-coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ohm	Rated coil power mW
005	5	3.5	0.5	50±10%	500
006	6	4.2	0.6	68±10%	529
012	12	8.4	1.2	274±10%	526
024	24	16.8	2.4	1095±10%	526
048	48	33.6	4.8	4380±10%	526
060	60	42.0	6.0	6845±10%	526
110	110	77.0	11.0	23010±10%	526

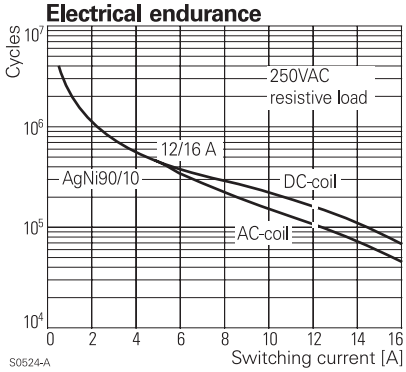
All figures are given for coil without preenergization, at ambient temperature +23°C

Max. DC load breaking capacity



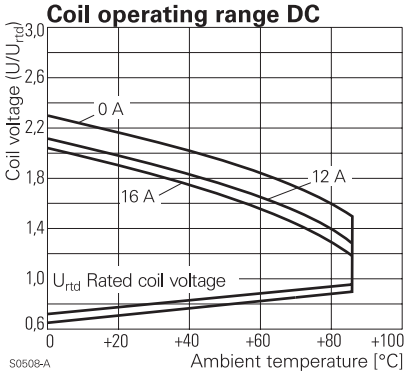
S0153-C

Electrical endurance



S0524-A

Coil operating range DC



S0508-A

Datasheet Rev. GG1
Issued 2007/07
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' at schrackrelays.com in the 'Schrack' section.

Specifications subject to change.

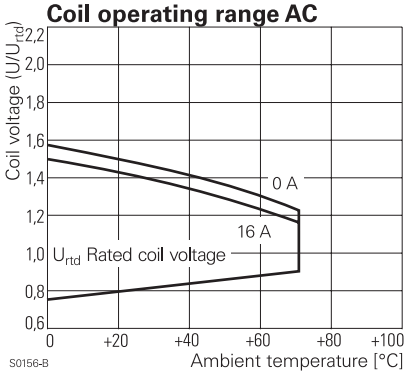
Power PCB Relay RX1 (Continued)

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	Ohm	VA
524	24	18.0	3.6	350±10%	0.76
615	115	86.3	17.3	8100±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		4000 V_{rms}	
open contact circuit		1000 V_{rms}	
Clearance / creepage coil-contact circuit		≥ 8 / 8 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	
Rated insulation voltage		250 V	
Pollution degree 12 A version		3	3
16 A version		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 [1])
Ambient temperature range DC coil	-40...+85°C [2])
AC coil	-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 / 4 g, 10 ... 150 Hz
Shock resistance (destruction)	100 g
Category of protection	RTII - flux proof
Mounting standard version (white cover)	pcb or on socket
transparent version	pcb
Mounting distance	2,5 mm [3])
Resistance to soldering heat flux-proof version	270 °C / 10 s
Relay weight	14 g
Packaging unit	500 pcs

[1]) Version with transparent cover: V-2
[2]) Version with transparent cover: -40...+70°C
[3]) Version with transparent cover: 5 mm

Accessories

For standard version (white cover), details see datasheet	accessories RT

Datasheet Rev. GG1
Issued 2007/07
www.tycoelectronics.com
www.schrackrelays.com

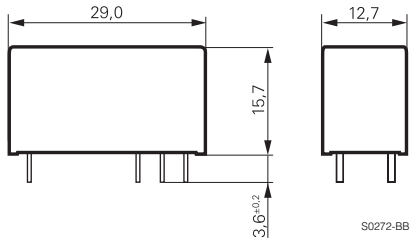
Dimensions are in mm unless otherwise specified and are shown for reference purposes only.

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

Specifications subject to change.

Power PCB Relay RX1 (Continued)

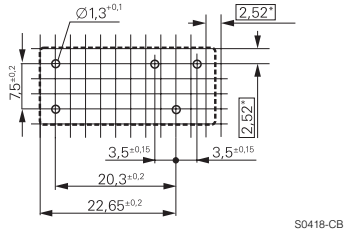
Dimensions



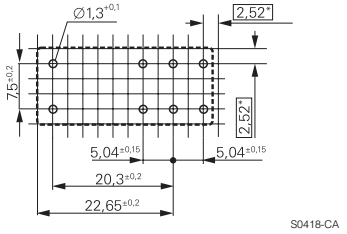
PCB layout / terminal assignment
Bottom view on solder pins

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

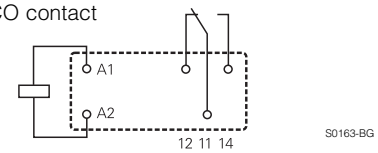
12 A, pinning 3.5 mm



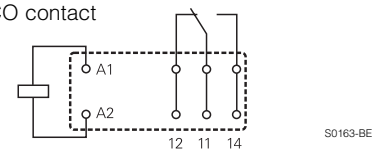
16 A, pinning 5 mm



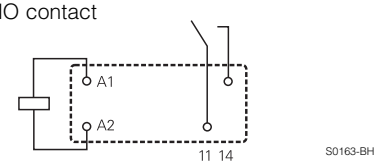
1 CO contact



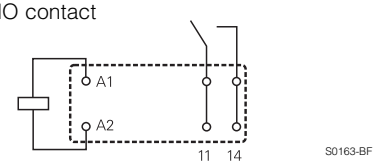
1 CO contact



1 NO contact



1 NO contact



Product key

R	X			4				

Type

Version
- **1** 12 A, pinning 3.5 mm, flux proof
- **3** 16 A, pinning 5 mm, flux proof

Contact configuration
- **1** 1 CO contact
- **3** 1 NO contact

Contact material
- **4** AgNi 90/10

Coil
- Coil code: please refer to coil versions table

Cover
- **Blank** standard cover (white)
- **C** transparent cover (clear)

Datasheet Rev. GG1
Issued 2007/07
www.tycoelectronics.com
www.schrackrelays.com

Power PCB Relay RX1 (Continued)

Product key	Version	Contacts	Cont. material	Coil	Cover	Part number
RX114012	12 A	1 CO contact	AgNi 90/10	12 VDC	white	6-1415502-1
RX114012C	pinning 3.5mm				transparent	1-1415503-1
RX114024	flux proof			24 VDC	white	7-1415502-1
RX114024C					transparent	2-1415503-1
RX114730				230 VAC	white	8-1415502-1
RX114730C					transparent	5-1415503-1
RX134012		1 NO contact		12 VDC	white	9-1415502-1
RX134024				24 VDC		1415503-1
RX314012	16 A	1 CO contact		12 VDC		1-1415502-1
RX314012C	pinning 5mm				transparent	3-1415503-1
RX314024	flux proof			24 VDC	white	2-1415502-1
RX314024C					transparent	4-1415503-1
RX314730				230 VAC	white	3-1415502-1
RX314730C					transparent	6-1415503-1
RX334012		1 NO contact		12 VDC	white	4-1415502-1
RX334024				24 VDC		5-1415502-1

Datasheet Rev. GG1
Issued 2007/07
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' at schrackrelays.com in the 'Schrack' section.

Specifications subject to change.