

# **Power PCB Relay RX1**

- 1 pole 12A or 16A, 1 form C (CO) or 1 form A (NO) contact
- **■** DC or AC coil
- Reinforced insulation
- **■** Transparent cover optional

Typical applications

Domestic appliances, heating control, emergency lighting, automatic doors



S0271-A



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

Contact Data	12A	16A
Contact arrangement	1 form C (CO) o	or 1 form A (NO)
Rated voltage	250	VAC
Max. switching voltage	400	VAC
Rated current	12A	16A
Limiting making current		
max 4s, duty factor 10%	25A	25A
Breaking capacity max.	3000VA	4000VA
Contact material	AgNi	90/10
Frequency of operation, with/without	load 360/36	6000h <sup>-1</sup>
Operate/release time max., DC coil	8/6	ms
Bounce time max., form A/form B	4/6	ms

Contact ratings

Ouritact rating	3		
Туре	Contact	Load	Cycles
IEC 61810			
RX114 DC coil	C (CO)	12A, 250VAC resistive, 85°C	$30x10^3$
RX134 DC coil	A (NO)	12A, 250VAC resistive, 85°C	100x10 <sup>3</sup>
RX114 AC coil	C (CO)	12A, 250VAC resistive, 70°C	$30x10^3$
RX134 AC coil	A (NO)	12A, 250VAC resistive, 70°C	100x10 <sup>3</sup>
RX334	A (NO)	16A, 250VAC resistive, 70°C	50x10 <sup>3</sup>
UL 508			
RX114	A/B (NO/NC)	12A, 250VAC, gen. purpose, 85°C	30x10 <sup>3</sup>
RX314	B (NC)	16A, 250VAC, resistive, 85°C	25x10 <sup>3</sup>

Mechanical endurance

DC coil	>5x10 <sup>6</sup> operations
AC coil	>1x10 <sup>6</sup> operations



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

Coil versions, DC coil

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

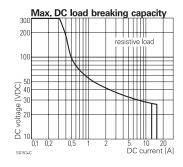
All figures are given for coil without pre-energization, at ambient temperature +23°C.

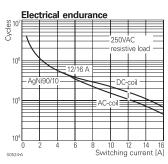
Coil versions, AC coil, 50Hz

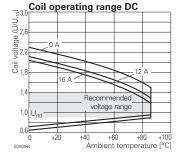
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	Coil	Rated	Operate	Release	Coil	Rated coil
	code	voltage	voltage	voltage	resistance	power
		VAC	VAC	VAC	$\Omega \pm 15\%^{1)}$	VA
	524	24	18.0	3.6	350 <sup>1)</sup>	0.76
	615	115	86.3	17.3	8100	0.76
	730	230	172.5	34.5	32500	0.74

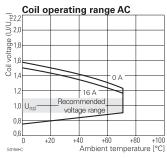
1) Coil resistance ±10%.

All figures are given for coil without pre-energization, at ambient temperature +23°C, 50 Hz.











# Power PCB Relay RX1 (Continued)

Insulation Data	
Initial dielectric strength	
between open contacts	1000V <sub>rms</sub>
between contact and coil	4000V <sub>rms</sub>
Clearance/creepage	
between contact and coil	≥8/8mm
Material group of insulation parts	Illa
Tracking index of relay base	PTI250V

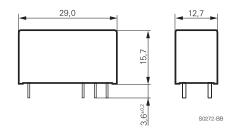
#### **Other Data**

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter

Other Data (continued)	
Terminal type	
standard version (white cover)	PCB-THT, plug-in
transparent version	PCB-THT
Mounting distance	
standard version (white cover)	≥2.5mm
transparent version	≥5mm
Weight	14g
Resistance to soldering heat THT	
IEC 60068-2-20	270°C/10s
Packaging/unit	tube/20 pcs., box/500 pcs.

### **Dimensions**

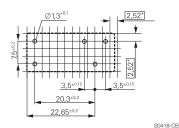
S0163-BG



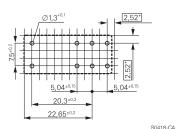
## PCB layout / terminal assignment

Bottom view on solder pins

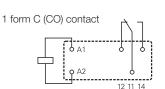
12A, pinning 3.5mm

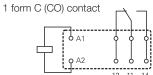


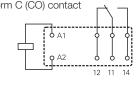
16A, pinning 5mm

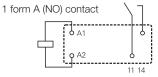


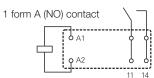
With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.











#### S0163-BF **Product code structure** RX 3 024 1 Typical product code Type RX Power PCB Relay RX1 Version 12A, pinning 3.5mm, flux proof 16A, pinning 5mm, flux proof Contact configuration 1 form C (CO) contact 1 form A (NO) contact 3 **Contact material** AgNi 90/10 Coil

Cover

C

Coil code: please refer to coil versions table Blank standard cover (white) transparent cover (clear)

S0163-BE