

# **Power PCB Relay RZL**

- 1 pole 12/16 A, 1 form C (CO) or 1 form A (NO) contact
- DC coil 530 mW
- 5kV/10mm coil-contact, reinforced insulation
- Ambient temperature 70°C (special applications 85°C)

Typical applications Household appliances, boiler control, timers, garage door control

Approvals	
VDE Cert. No. 40023970, UL E214025, CQC 14001114367,	

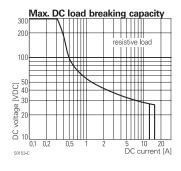
CQC 14002113865 Technical data of approved types on request

Contact Data	12A	16A	
Contact arrangement 1	form C (CO)	or 1 form A (NO)	
Rated voltage	250	OVAC	
Max. switching voltage	400	OVAC	
Rated current	12A	16A	
Limiting making current (form A contact)			
max. 4s, duty factor 10%	3	30A	
Breaking capacity max.	3000VA	4000VA	
Contact material	AgN	i 90/10	
Initial contact resistance	Initial contact resistance ≤100 mΩ at 1A/24Vdc		
Contact style	single	contact	
Frequency of operation, with/without loa	d 360/7	2000h <sup>-1</sup>	
Operate/release time max.	8/	6ms	
Bounce time max., form A/form B	4/	6ms	

_			_	
Со	nta	ct i	ratin	as

Contact ratin	gs		
Type	Contact	Load	Cycles
IEC 61810 <sup>1)</sup>			
RZL3-1A4.	A (NO)	16A, 250VAC, 85°C	50x10 <sup>3</sup>
RZL3-1C4.	C (CO)	16A, 250VAC, 85°C	10x10 <sup>3</sup>
RZL3-1A4.	A (NO)	16A, 250VAC, 70°C	100x10 <sup>3</sup>
RZL1-1A4	A (NO)	12A, 250VAC, 85°C	100x10 <sup>3</sup>
RZL1-1A4	A (NO)	16A, 250VAC, 70°C	100x10 <sup>3</sup>
RZL3-1A4.	A (NO)	8A, cosφ=0.4, 250VAC, 25°C	100x10 <sup>3</sup>
RZL3-1C4.	B (NC)	8A, 250VAC, 25°C	100x10 <sup>3</sup>
UL 508 <sup>1)</sup>			
RZL3-1A4.	A (NO)	16A, 250VAC, 85°C	50x10 <sup>3</sup>
RZL3-1C4.	C (CO)	16A, 250VAC, 85°C	10x10 <sup>3</sup>
RZL3-1A4.	A (NO)	16A, 250VAC, 70°C	100x10 <sup>3</sup>
RZL1-1A4	A (NO)	12A, 250VAC, 85°C	100x10 <sup>3</sup>
RZL1-1A4	A (NO)	16A, 250VAC, 70°C	100x10 <sup>3</sup>
RZL1/3-1A4.	A (NO)	1hp, 240VAC, 25°C	6x10 <sup>3</sup>
RZL1/3-1A4.	A (NO)	1/2hp, 120VAC, 70°C	6x10 <sup>3</sup>
Mechanical en	durance		10x10 <sup>6</sup>

<sup>1)</sup> Ratings only for RZL flux proof (R) version. Wash tight ratings on request







RP	F0305-
ac)	

Coil Data		
Coil voltage range	5 to 48VDC	
Operative range, IEC 61810	2	
Coil insulation system according UL1446	class F	

Coil vers	sions, DC co	il			
Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	Ω±10%	mW
L005	5	3,5	0,5	47	530
L006	6	4,2	0,6	67	530
L009	9	6,3	0,9	153	530
L012	12	8,4	1,2	272	530
L024	24	16,8	2,4	1086	530
L048	48	33,6	4,8	4347	530
A II C		200		Annual Control of the	0000

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

1000V <sub>rms</sub>
5000V <sub>rms</sub>
≥10/10mm
Illa
PTI250V

Other Data	
Material compliance: EU RoHS/ELV,	China RoHS compliance,
Ambient temperature	
standard version	-40 to 70°C
special applications	-40 to 85°C
Category of environmental protection	
IEC 61810	RTII - flux proof; RTIII wash tight
Vibration resistance (functional), 30 to	500Hz
closing form A contact	>15g
opening form A contact	>20g
opening form B contact	>5g
Shock resistance (destructive)	100g
Terminal type	PCB-THT
Mounting distance	
standard version	≥0mm
Weight	10g
Resistance to soldering heat THT	
IEC 60068-2-20	260°C/10s <sup>2)</sup>
Packaging/unit	tube/20 pcs., box/500 pcs.

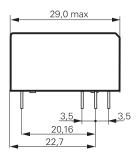
2) The use of foaming flux is not permitted.

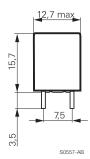


# Power PCB Relay RZL (Continued)

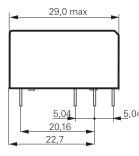
#### **Dimensions**

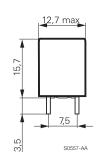
12A/16A, pinning 3.5mm <sup>2)</sup>





12A, 16A, pinning 5mm <sup>2)</sup>

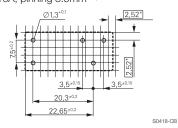




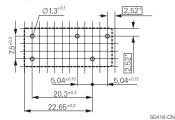
### PCB layout / terminal assignment

Bottom view on solder pins

12A/16A, pinning 3.5mm <sup>2)</sup>



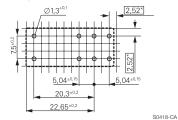
16A, pinning 5mm



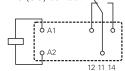
Recommended pcb hole for manual mounting: Ø1.3mm

For automated mounting please ask for detailed drawing.

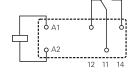
16A, pinning 5mm



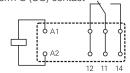
1 form C (CO) contact



1 form C (CO) contact

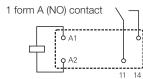


1 form C (CO) contact

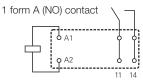


S0163-BE





S0163-BC

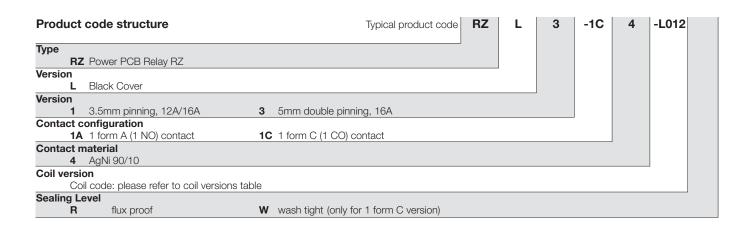


2) For 1 Form C type, subject to develop as market requirement

S0163-BG



# Power PCB Relay RZL (Continued)



Product code	Version	Contacts	Contact material	Coil	Part number
RZL1-1A4-L012-R	12A/16A, pinning 3.5mm, flux proof	1 form A (NO)	AgNi 90/10	12VDC	2158100-4
RZL3-1A4-L012-R	16A, pinning 5mm, flux proof	1 form A (NO)		12VDC	1-2158100-6
RZL3-1A4-L024-R		1 form A (NO)		24VDC	1-2158100-7
RZL3-1C4-L012-R		1 form C (CO)		12VDC	2-2158100-2
RZL3-1C4-L024-R		1 form C (CO)		24VDC	2-2158100-3
RZL3-1C4-L024-W	16A, pinning 5mm, wash tight	1 form C (CO)		24VDC	4-2158100-7

This list represents the most common types and does not show all variants covered by this datasheet.

Other types on request

Datasheets and product data is subject to the

terms of the disclaimer and all chapters of

the 'Definitions' section, available at

http://relays.te.com/definitions

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for General Purpose Relays category:

Click to view products by TE Connectivity manufacturer:

Other Similar products are found below:

PCN-105D3MH,000 59641F200 LY1SAC110120 5X827E 5X837F 5X840F 5X842F 5X848E LY2N-AC120 LY2S-AC220/240 LY2-US-AC120 LY3-US-AC120 LY4F-UA-DC12 LY4F-UA-DC24 LY4F-US-AC120 LY4F-US-AC240 LY4F-US-DC24 LY4F-VD-AC110 LYQ20DC12 M115C60 M115N010 M115N0150 6031007G 603-12D 61211T0B4 61212T400 61222Q400 61243B600 61243C500 61243Q400 61311BOA2 61311BOA6 61311BOA8 61311COA2 61311COA1 61311COA6 61311F0A2 61311QOA1 61311QOA4 61311T0B6 61311TOA6 61311TOA6 61311TOB3 61311TOB4 61311U0A6 61312Q600 61312T400 61312T600 61313U200 61313U400