

# Single relay - REL-PR2-120AC/2X21 - 2903700

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Plug-in high-power relay with power contacts, 2 PDTs, coil voltage: 120 V AC

The figure shows version REL-PR2-24DC/2X21



## Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 759120
GTIN	4046356759120

## Technical data

### Dimensions

Width	38.6 mm
Height	45.5 mm
Depth	36.1 mm

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

### Coil side

Nominal input voltage $U_N$	120 V AC
Input voltage range in reference to $U_N$	see diagram
Mains frequency	50 Hz 60 Hz
Typical input current at $U_N$	23 mA
Typical response time	5 ms ... 25 ms (depending on phase relation)
Typical release time range	5 ms ... 20 ms (depending on phase relation)
Power dissipation for nominal condition	2.76 W

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## Technical data

### Contact side

Contact type	2 PDT
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	440 V AC
	250 V DC
Minimum switching voltage	10 V (At 24 mA)
Min. switching current	10 mA (at 24 V)
Maximum inrush current	50 A (20 ms, N/O contact)
Limiting continuous current	16 A
Interrupting rating (ohmic load) max.	384 W (at 24 V DC)
	124 W (at 48 V DC)
	108 W (at 60 V DC)
	52 W (at 110 V DC)
	70 W (at 220 V DC)
	4000 VA (for 250 V AC)
	4000 VA (At 440 V AC)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (at 24 V, DC13)
	0.22 A (at 120 V, DC13)
	0.11 A (at 250 V, DC13)
	3 A (at 120 V, AC15)
	1.5 A (at 240 V, AC15)
Single-phase motor load	800 W (at 230 V, AC3)
Motor load according to UL 508	1/3 HP, 120 V AC (single-phase AC motor)
	1/2 HP, 240 V AC (single-phase AC motor)

### General

Test voltage relay winding/relay contact	2.5 kV <sub>rms</sub> (50 Hz, 1 min.)
Test voltage relay contact/relay contact	2.5 kV <sub>rms</sub> (50 Hz, 1 min.)
Test voltage PDT/PDT	2.5 kV <sub>rms</sub> (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	RT I
Mechanical service life	Approx. 10 <sup>7</sup> cycles
Mounting position	any

### Standards and Regulations

Connection in acc. with standard	CSA
Standards/regulations	IEC 60664
	IEC 61810
Rated insulation voltage	250 V AC
Rated surge voltage	4 kV
Insulation	Basic insulation

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## Technical data

### Standards and Regulations

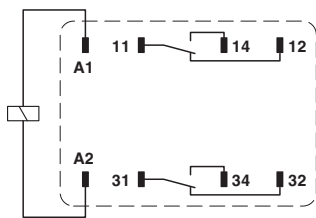
Degree of pollution	3
Overvoltage category	III

### Environmental Product Compliance

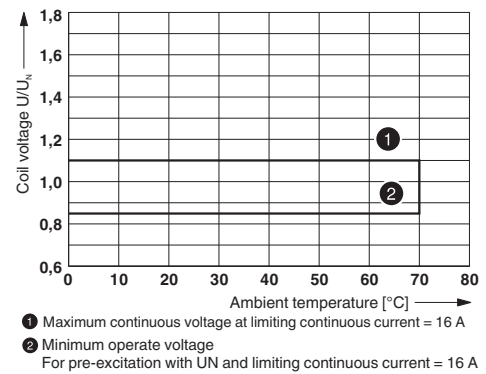
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Circuit diagram

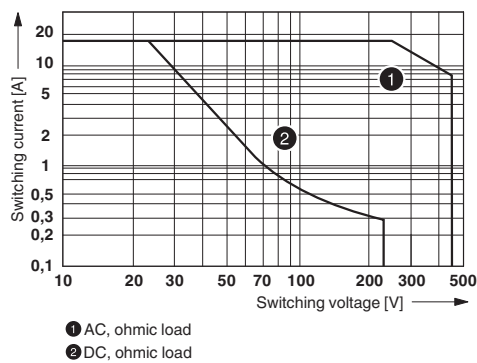


Diagram



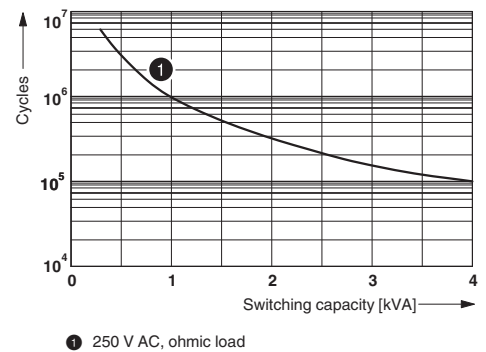
### Operating voltage range

Diagram



### Interrupting rating

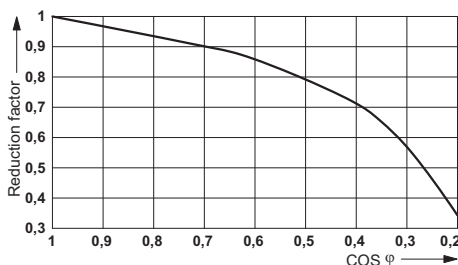
Diagram



### Electrical service life

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Diagram



Service life reduction factor

## Approvals

Approvals

Approvals

CSA / UL Recognized / cUL Recognized / EAC / cULus Recognized

Ex Approvals

## Approval details

CSA		<a href="http://www.csagroup.org/services/testing-and-certification/certified-product-listing/">http://www.csagroup.org/services/testing-and-certification/certified-product-listing/</a>	2554095
UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 172140
cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 172140
EAC			RU C-DE.A*30.B.01082

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### Approvals

cULus Recognized



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

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