

# Single relay - REL-PR3-120AC/3X1 - 2903708


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Plug-in high-power relay with power contacts, 3 N/O contacts, coil voltage: 120 V AC



## Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 759205
GTIN	4046356759205

## Technical data

### Dimensions

Width	38.6 mm
Height	36.1 mm
Depth	45.5 mm

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Degree of protection	RT I

### Coil side

Nominal input voltage $U_N$	120 V AC
Input voltage range in reference to $U_N$	see diagram
Mains frequency	50/60 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

### Contact side

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## Technical data

### Contact side

Contact type	3 N/O contacts
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 contacts)
Limiting continuous current	16 A
Interrupting rating (ohmic load) max.	384 W (at 24 V DC)
	720 W (at 48 V DC)
	600 W (at 60 V DC)
	660 W (at 110 V DC)
	183 W (at 220 V DC)
	4000 VA (for 250 V AC)
	4000 VA (at 440 V AC)
Switching capacity	1 A (at 24 V, DC13)
	1 A (at 120 V, DC13)
	1 A (at 220 V, DC13)
	1.5 A (at 24 V, AC15)
	1.5 A (at 120 V, AC15)
	1.5 A (at 240 V, AC15)
3-phase motor load	1500 W (at 400 V, AC3)
Motor load according to UL 508	1/3 HP, 120 V AC (N/O contact)
	1/2 HP, 240 V AC (N/O contact)

### General

Test voltage	2.5 kV <sub>rms</sub> (50 Hz, 1 min., winding/contact)
	2.5 kV <sub>rms</sub> (50 Hz, 1 min., contact/contact)
	2.5 kV <sub>rms</sub> (50 Hz, 1 min., N/O contact / N/O contact)
Operating mode	100% operating factor
Mechanical service life	approx. 10 <sup>7</sup> cycles
Service life, electrical	see diagram
Mounting position	any

### Connection data

Connection method	Plug connection
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### Standards and Regulations

Connection in acc. with standard	CSA
Standards/regulations	IEC 60664
	IEC 61810

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## Technical data

### Standards and Regulations

Rated insulation voltage	250 V AC
Rated surge voltage	4 kV
Insulation	Basic insulation
Pollution degree	3
Overvoltage category	III

### Conformance/approvals

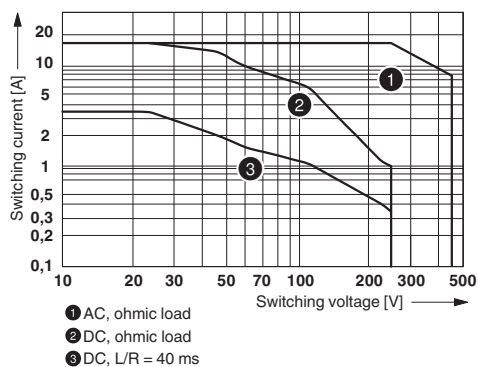
Designation	Corrosive gas test
Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

### Environmental Product Compliance

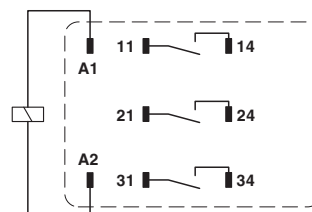
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

Diagram



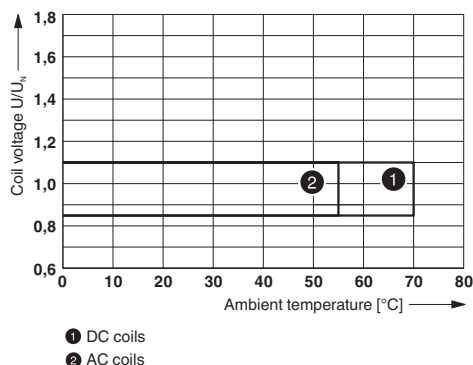
Circuit diagram



### Interrupting rating

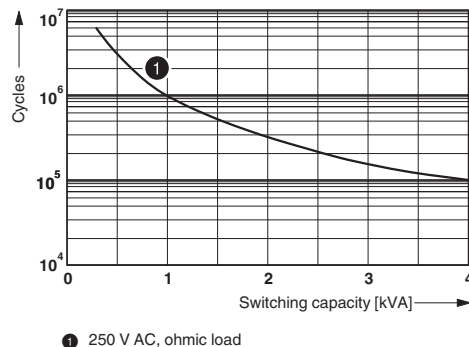
# Single relay - REL-PR3-120AC/3X1 - 2903708

Diagram



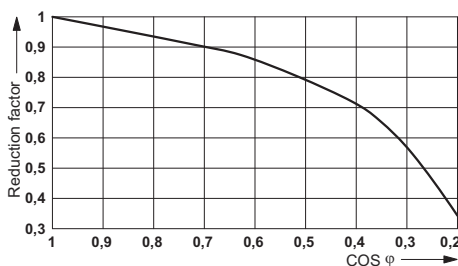
Operating voltage range

Diagram



Electrical service life

Diagram



Service life reduction factor

## Classifications

### eCl@ss

eCl@ss 10.0.1	27371601
eCl@ss 11.0	27371601
eCl@ss 4.0	27371100
eCl@ss 4.1	27371100
eCl@ss 5.0	27371600
eCl@ss 5.1	27371600
eCl@ss 6.0	27371600
eCl@ss 7.0	27371601
eCl@ss 9.0	27371601

### ETIM

ETIM 2.0	EC001437
ETIM 3.0	EC001437
ETIM 4.0	EC001437

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## Classifications

### ETIM

ETIM 5.0	EC001437
ETIM 6.0	EC001437
ETIM 7.0	EC001437

### UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121515
UNSPSC 11	39121515
UNSPSC 12.01	39121515
UNSPSC 13.2	39122334
UNSPSC 18.0	39122334
UNSPSC 19.0	39122334
UNSPSC 20.0	39122334
UNSPSC 21.0	39122334

## Approvals

### Approvals

#### Approvals

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

#### Ex Approvals

### Approval details


CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	2554095
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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
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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
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### Approvals

EAC		TR_TS_D_00573_c
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EAC		RU*C- DE.*08.B.00010
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cULus Recognized		
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### Accessories

#### Additional products

Relay base - RIF-4-BPT/3X21 - 2900961



Relay base RIF-4..., for high-power relay with 2 or 3 changeover contacts or 3 N/O contacts, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

Relay base - RIF-4-BSC/3X21 - 2900960



RIF-4... relay base, for high-power relay with 2 or 3 changeover contacts or 3 N/O contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

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