

# Single relay - REL-IR2/LDP-110DC/2X21 - 2903663


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Plug-in industrial relay with power contacts, 2 changeover contacts, test button, status LED, freewheeling diode, mechanical switching position indicator, polarity: A1+, A2-, input voltage: 110 V DC



## Key Commercial Data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	 4 046356 758161
GTIN	4046356758161

## Technical data

### Dimensions

Width	21.2 mm
Height	27.5 mm
Depth	35.6 mm

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Degree of protection	RT I

### Coil side

Nominal input voltage $U_N$	110 V DC
Input voltage range in reference to $U_N$	see diagram
Typical input current at $U_N$	8 mA
Typical response time	13 ms
Typical release time	14 ms
Protective circuit	Damping diode
Status display	Yellow LED

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## Technical data

### Coil side

Power dissipation for nominal condition	0.88 W
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### Contact side

Contact type	2 changeover contacts
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (At 24 mA)
Min. switching current	5 mA (at 24 V)
Maximum inrush current	30 A (20 ms, N/O contacts)
Limiting continuous current	12 A
Interrupting rating (ohmic load) max.	288 W (at 24 V DC)
	124 W (at 48 V DC)
	108 W (at 60 V DC)
	52 W (at 110 V DC)
	48 W (at 220 V DC)
	3000 VA (for 250 V AC)
Switching capacity min.	0.12 W
Motor load according to UL 508	1/2 HP, 240 V AC

### 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., changeover contact/changeover contact)
Operating mode	100% operating factor
Mechanical service life	approx. 2x 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
Rated insulation voltage	250 V AC
Rated surge voltage	4 kV
Insulation	Basic insulation
Pollution degree	3 (Rated voltage of 230 V)
	2 (Rated voltage of 400 V)
Overvoltage category	III

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## Technical data

### Conformance/approvals

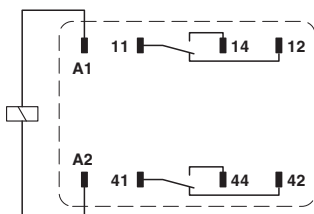
Designation	Corrosive gas test
Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

### Environmental Product Compliance

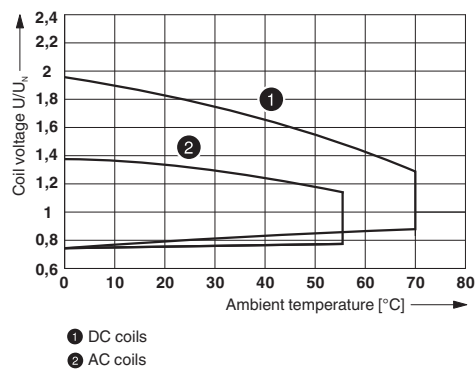
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Circuit diagram

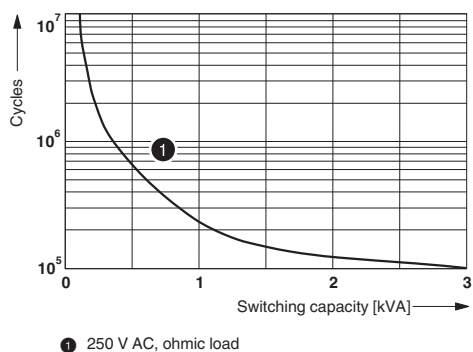


Diagram



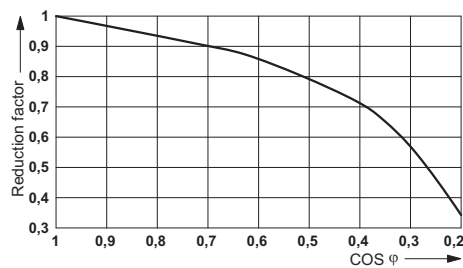
Operating voltage range

Diagram



Electrical service life

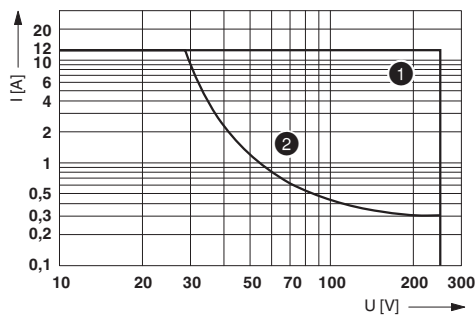
Diagram



Service life reduction factor

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Diagram



Interrupting rating  
 Curve 1: AC, ohmic load  
 Curve 2: DC, ohmic load

## 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
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

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## Classifications

### UNSPSC

UNSPSC 21.0	39122334
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## Approvals

### Approvals

### Approvals

CSA / UL Recognized / cUL Recognized / EAC / EAC / VDE Zeichengenehmigung / 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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EAC			TR_TS_D_00573_c
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EAC			RU*C-DE.*08.B.00010
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VDE Zeichengenehmigung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40040427
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cULus Recognized			
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### Accessories

#### Additional products

Relay base - RIF-2-BPT/4X21 - 2900934



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

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Relay base - RIF-2-BSC/4X21 - 2900932



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

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