

# Single relay - REL-IR4/LDP-110DC/4X21AU - 2903673

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Plug-in industrial relay with power contacts and additional hard gold plating, 4 PDTs, test key, status LED, freewheeling diode, mechanical switch position indicator, polarity: A1+, A2-, coil voltage: 110 V DC



## Key Commercial Data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	 4 046356 758864
GTIN	4046356758864
Weight per Piece (excluding packing)	34.340 g
Custom tariff number	85364900
Country of origin	Poland

## 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

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## Technical data

### Coil side

Typical release time	14 ms
Protective circuit	Damping diode
Status display	Yellow LED
Power dissipation for nominal condition	0.88 W

### Contact side

Contact type	4 PDTs
Type of switch contact	Single contact
Contact material	AgNi, hard gold-plated
Note	If the specified maximum values for multi-layer contact relays are exceeded, the gold plating is destroyed. The maximum values of the power contact relay are then valid. This can result in a shorter service life than with a pure power contact.
Maximum switching voltage	30 V AC 36 V DC
Minimum switching voltage	2 V (At 24 mA)
Min. switching current	2 mA (24 V DC)
Maximum inrush current	50 mA
Limiting continuous current	50 mA
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)
Switching capacity min.	48 mW
Motor load according to UL 508	1/3 HP, 240 V AC

### Contact side (with destroyed gold layer)

Contact material	AgNi
Note	the following values are applicable if a gold layer is destroyed
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (At 24 mA)
Limiting continuous current	6 A
Maximum inrush current	16 A (20 ms, N/O contact)
Min. switching current	5 mA (at 24 V)
Interrupting rating (ohmic load) max.	144 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)
Switching capacity	1500 VA (for 250 V AC) 2 A (at 24 V, DC13) 0.22 A (at 120 V, DC13) 0.11 A (at 250 V, DC13) 1.5 A (at 24 V, AC15) 1.5 A (at 120 V, AC15) 1 A (at 240 V, AC15)

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### Technical data

#### General

Test voltage relay winding/relay contact	2.5 kV <sub>rms</sub> (50 Hz, 1 min.)
Test voltage PDT/PDT	2 kV <sub>rms</sub> (50 Hz, 1 min.)
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	2.5 kV
Insulation	Basic insulation
Pollution degree	2
Overvoltage category	II

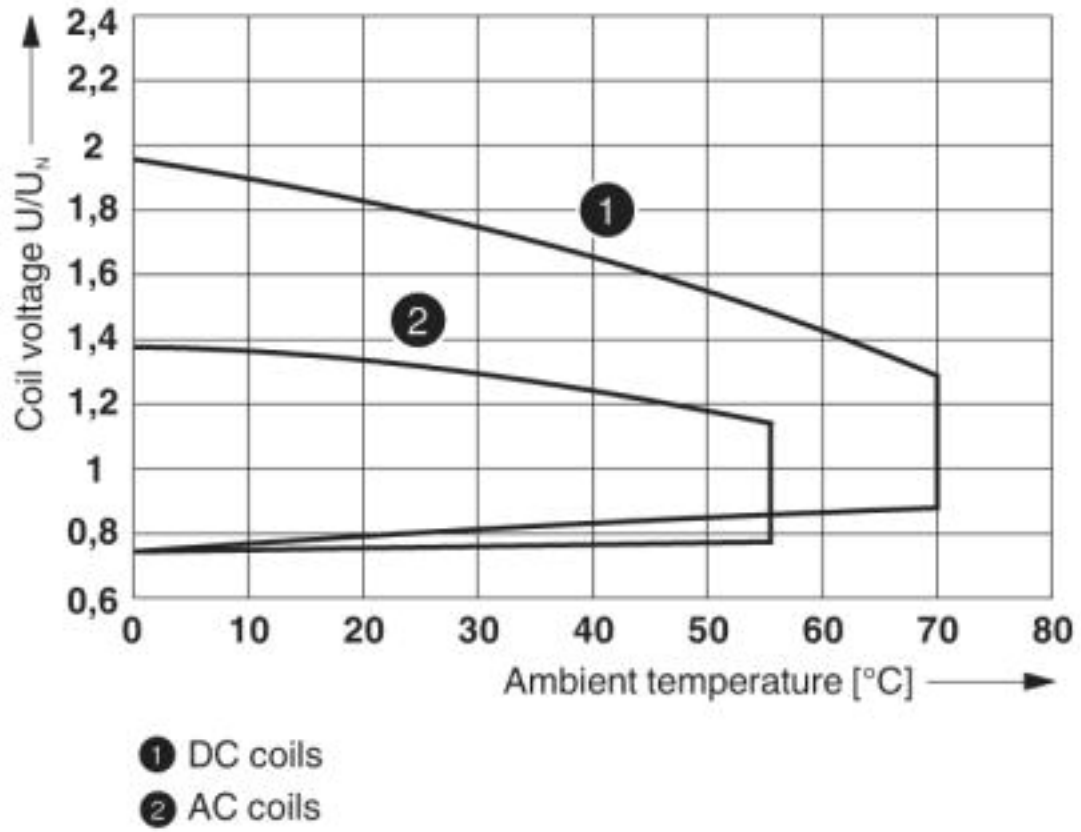
#### Environmental Product Compliance

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

### Drawings

# Single relay - REL-IR4/LDP-110DC/4X21AU - 2903673

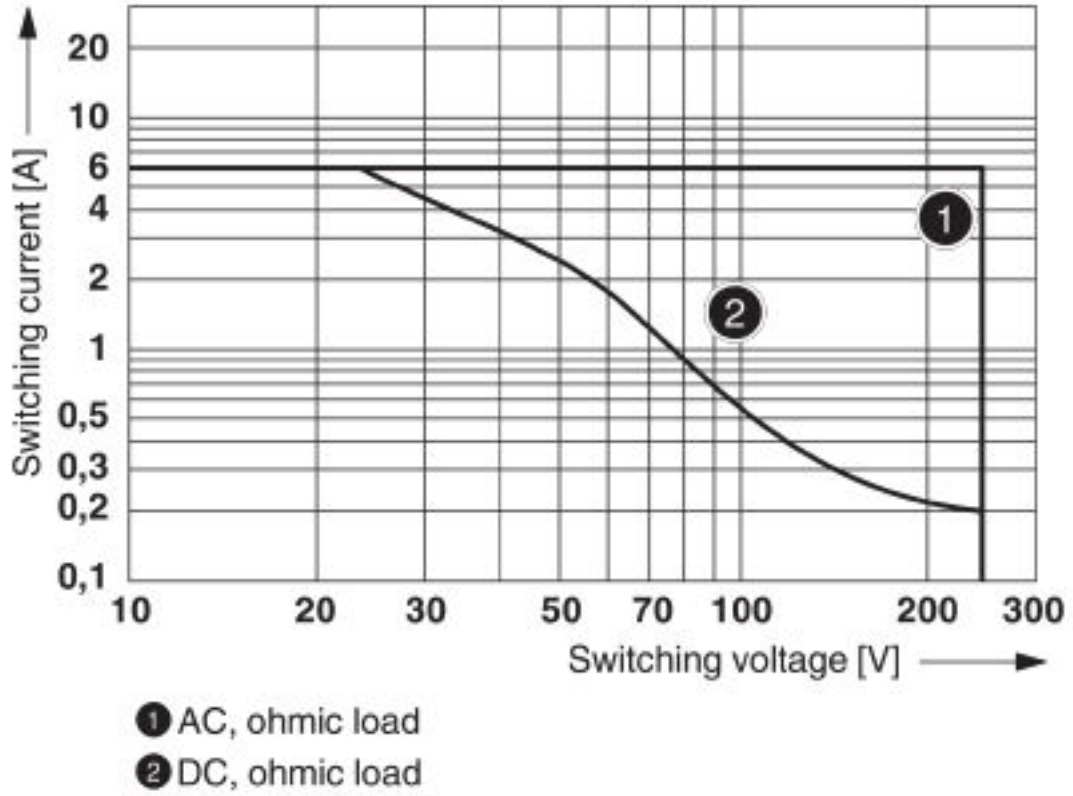
Diagram



Operating voltage range

# Single relay - REL-IR4/LDP-110DC/4X21AU - 2903673

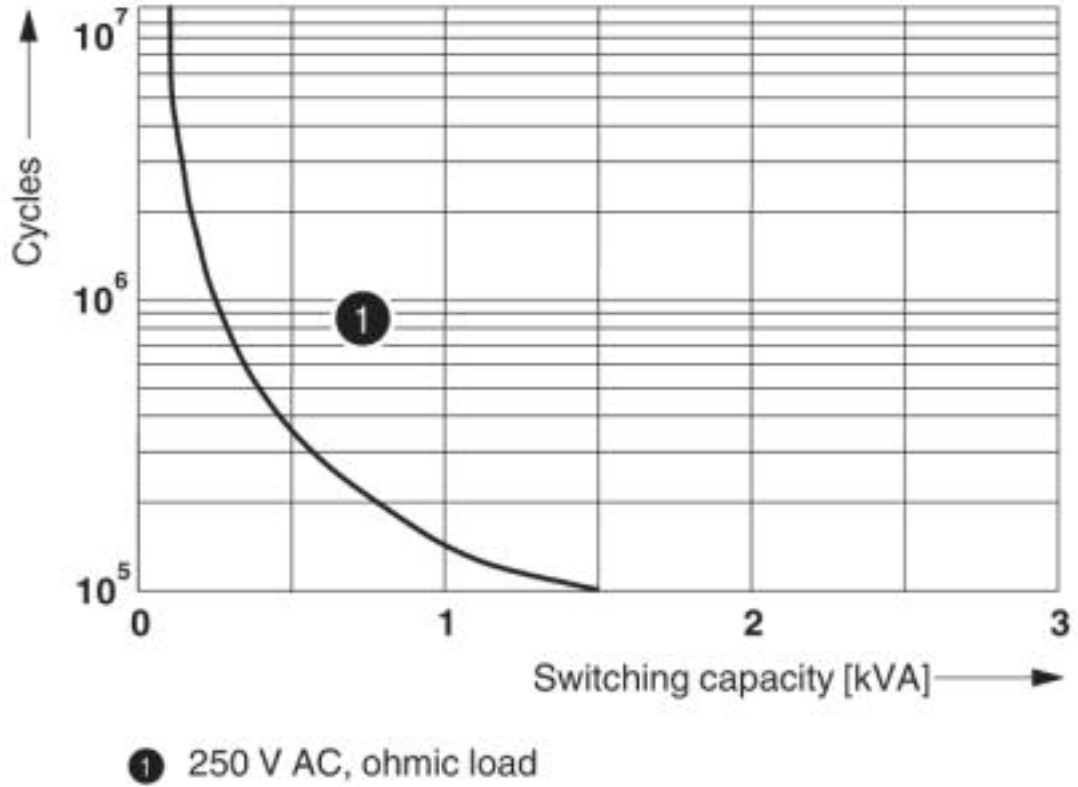
Diagram



Interrupting rating

# Single relay - REL-IR4/LDP-110DC/4X21AU - 2903673

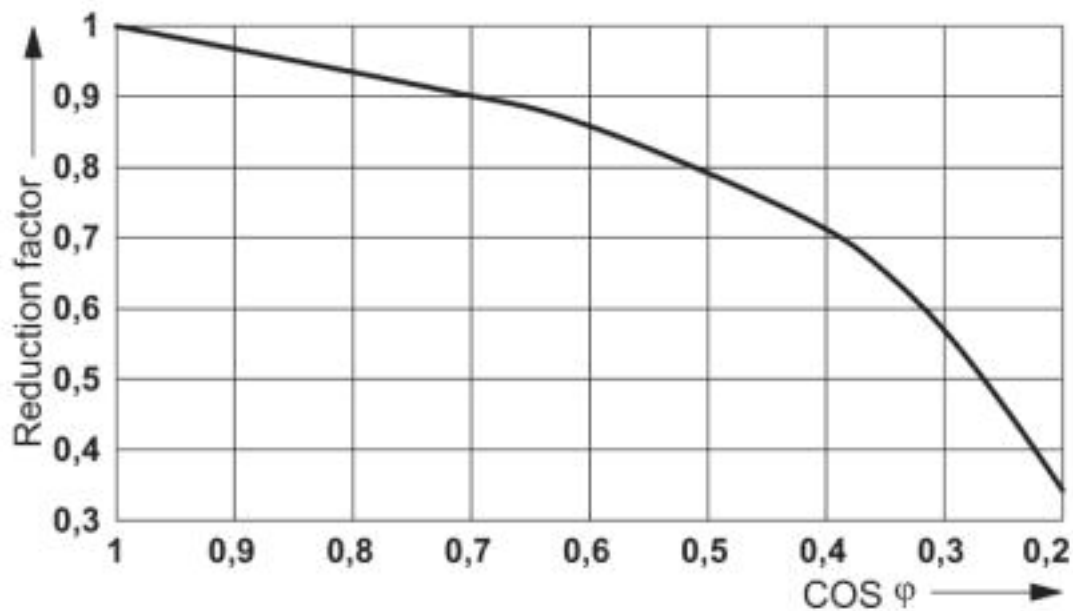
Diagram



Electrical service life

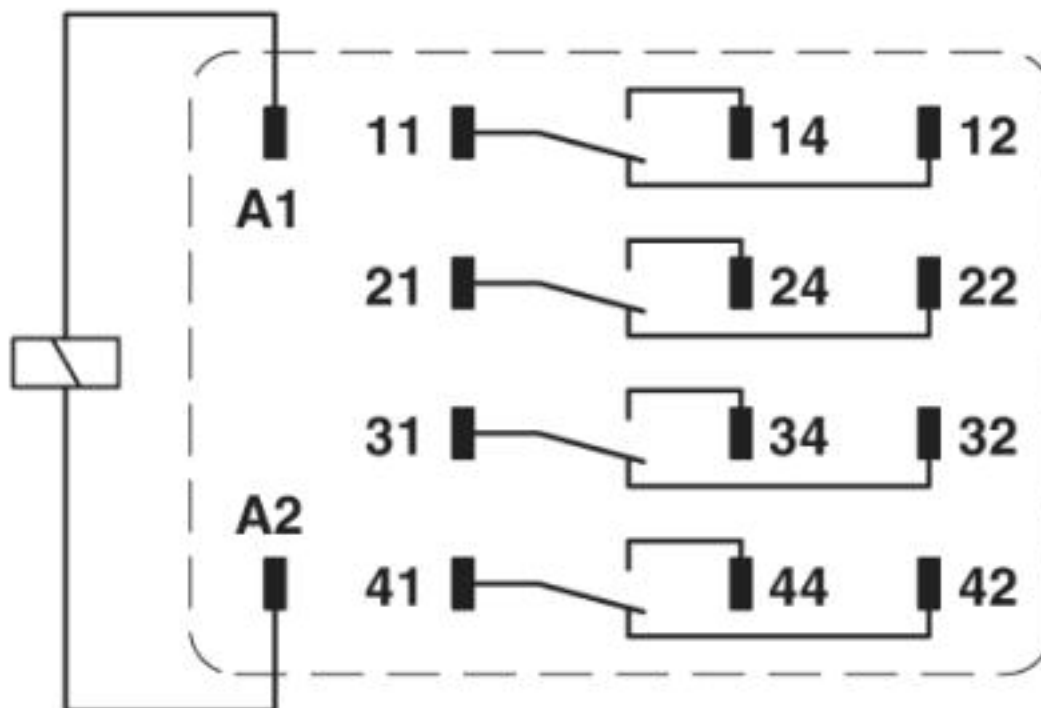
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Diagram



Service life reduction factor

Circuit diagram



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## Classifications

### eCl@ss

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 8.0	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
UNSPSC 21.0	39122334

## Approvals

### Approvals

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#### Approvals

CSA / UL Recognized / cUL Recognized / VDE Zeichengenehmigung / EAC / EAC / cULus Recognized

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#### Ex Approvals

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### Approval details



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## Approvals

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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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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EAC			TR_TS_D_00573_c
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EAC			TR_TS_S_00010_c
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cULus Recognized			
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## Accessories

### Additional products

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



RIF-2... relay base, for industrial relay with 2 or 4 PDTs, push-in connection, plug-in option for input/suppressor modules, for mounting on NS 35/7,5

## Single relay - REL-IR4/LDP-110DC/4X21AU - 2903673

### Accessories

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