

# Single relay - REL-IR4/LDP- 48DC/4X21AU - 2903671


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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: 48 V DC



## Key Commercial Data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	 4 046356 758840
GTIN	4046356758840

## 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 $U_N$	48 V DC
Input voltage range in reference to $U_N$	see diagram
Typical input current at $U_N$	22 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	1.06 W
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### 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)
	1500 VA (for 250 V AC)
Switching capacity	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)

### General

Test voltage relay winding/relay contact	2.5 kV <sub>rms</sub> (50 Hz, 1 min.)
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## Technical data

### General

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

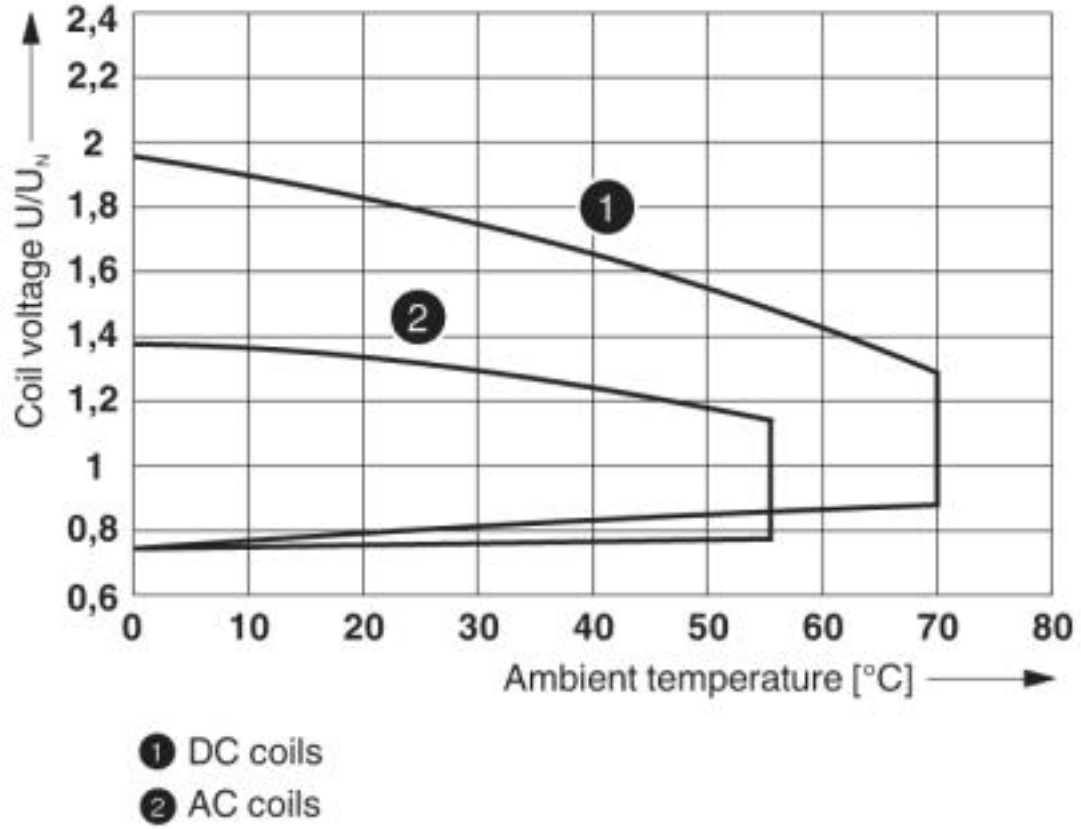
### Environmental Product Compliance

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- 48DC/4X21AU - 2903671

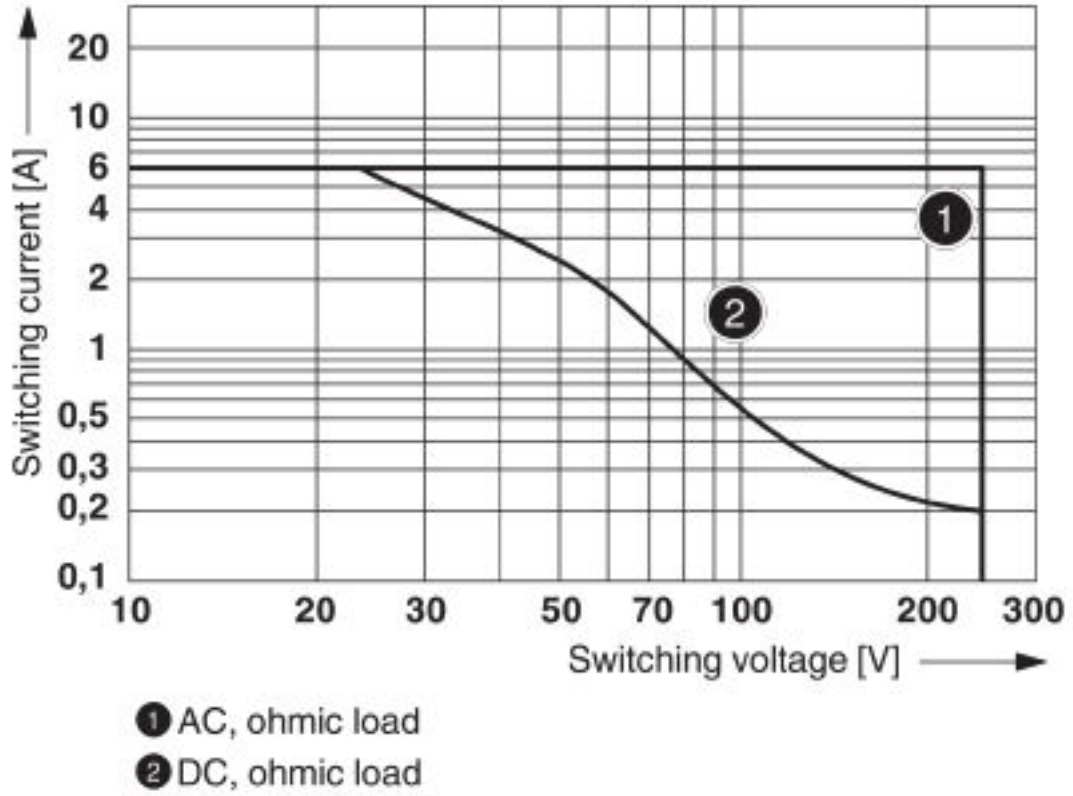
Diagram



Operating voltage range

# Single relay - REL-IR4/LDP- 48DC/4X21AU - 2903671

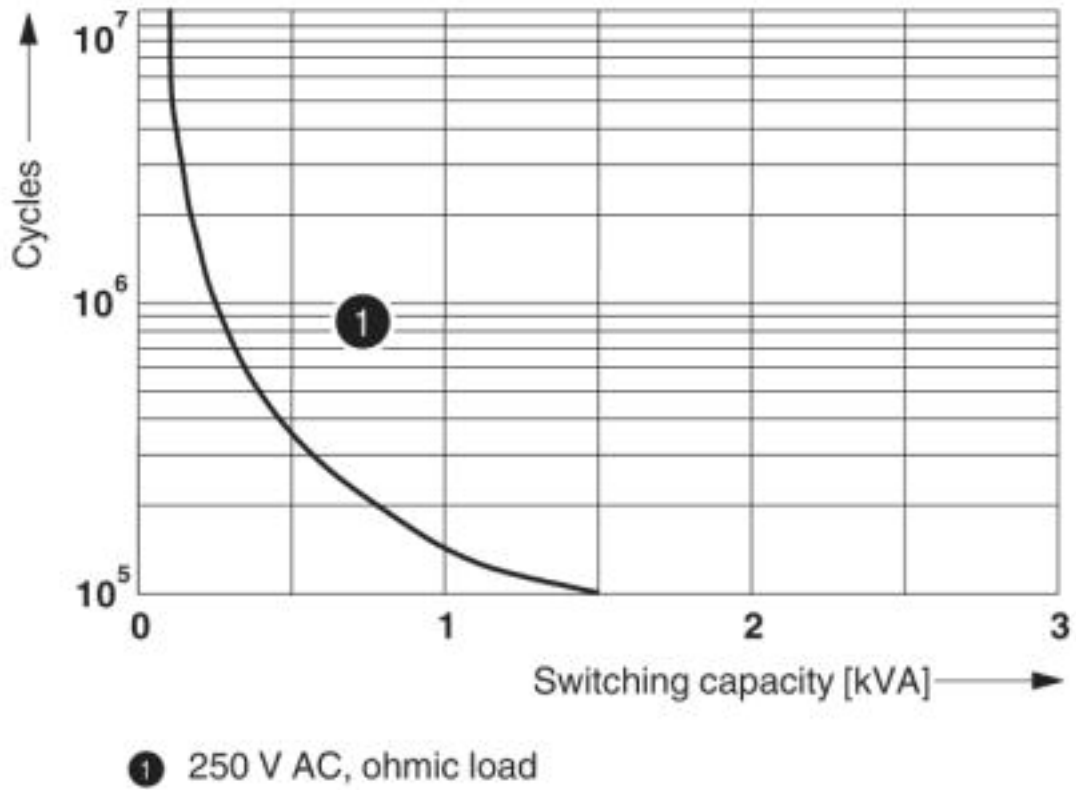
Diagram



Interrupting rating

# Single relay - REL-IR4/LDP- 48DC/4X21AU - 2903671

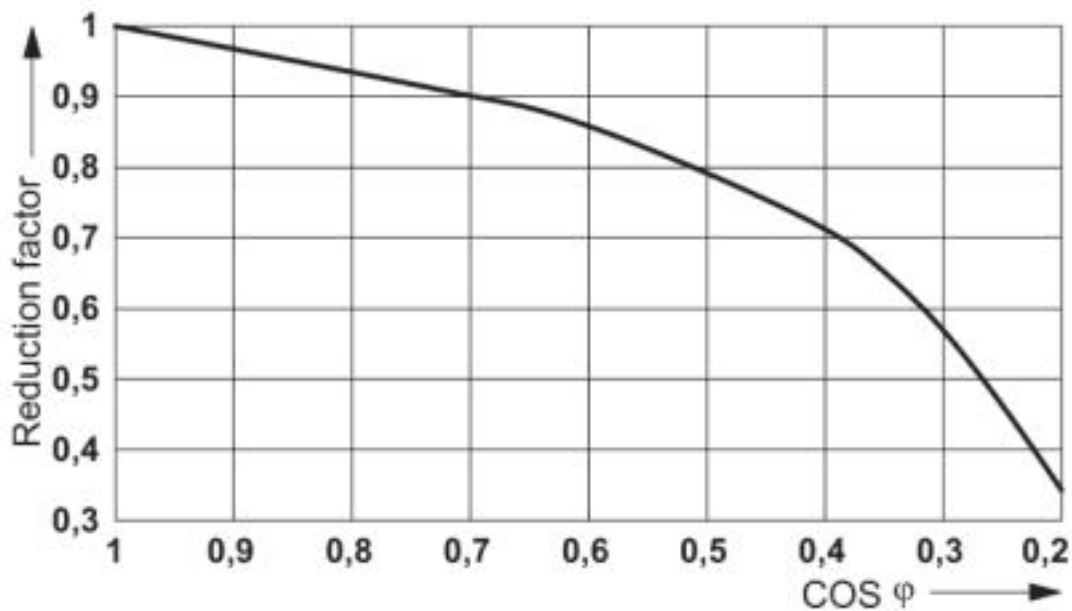
Diagram



Electrical service life

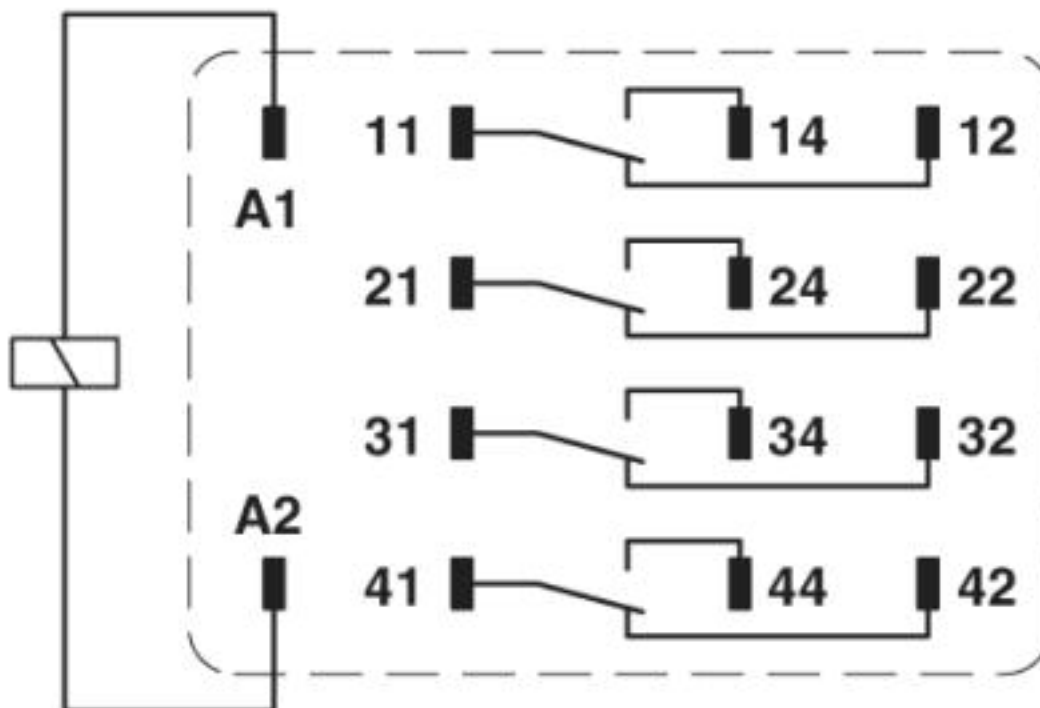
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Diagram



Service life reduction factor

Circuit diagram



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## Approvals

### Approvals

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#### Approvals

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

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#### Ex Approvals


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### 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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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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