

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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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: 24 V DC

The figure shows version REL-IR4/LDP- 24DC/4X21



### **Key Commercial Data**

Packing unit	10 STK
Minimum order quantity	10 STK
GTIN	4 046356 758833
GTIN	4046356758833

#### Technical data

#### **Dimensions**

Width	21.2 mm
Height	35.6 mm
Depth	27.5 mm

#### Ambient conditions

Ambient temperature (operation)	-40 °C 70 °C
Ambient temperature (storage/transport)	-40 °C 85 °C

#### Coil side

Nominal input voltage U <sub>N</sub>	24 V DC
Input voltage range in reference to $U_{N}$	see diagram
Typical input current at U <sub>N</sub>	42 mA
Typical response time	13 ms
Typical release time	14 ms
Protective circuit	Damping diode
Status display	Yellow LED



### Technical data

### Coil side

Power dissipation for nominal condition	1.01 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	5 V (At 24 mA)
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.	0.12 W

## 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 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)
	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.)
Test voltage PDT/PDT	2 kV <sub>rms</sub> (50 Hz, 1 min.)
Operating mode	100% operating factor



### Technical data

### General

Degree of protection	RTI
Mechanical service life	Approx. 2x 10 <sup>7</sup> cycles
Mounting position	any

### Standards and Regulations

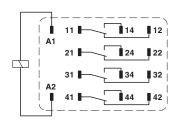
Connection in acc. with standard	CSA
Standards/regulations	IEC 60664
	IEC 61810
Rated insulation voltage	250 V AC
Rated surge voltage	2.5 kV
Insulation	Basic insulation
Degree of pollution	2
Overvoltage category	II

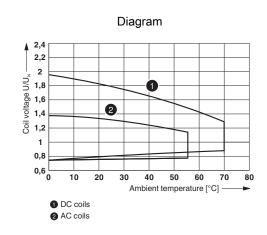
### **Environmental Product Compliance**

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

### **Drawings**

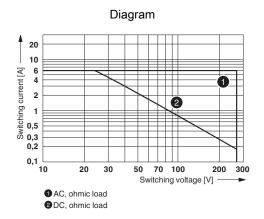
#### Circuit diagram

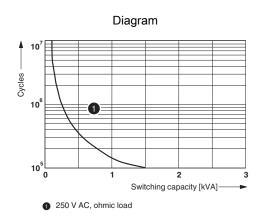




Operating voltage range



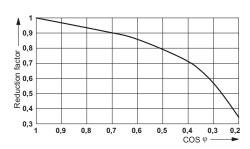




Interrupting rating

Electrical service life

### Diagram



Service life reduction factor

### Approvals

Approvals

Approvals

 ${\sf CSA\,/\,UL\,Recognized\,/\,cUL\,Recognized\,/\,VDE\,Zeichengenehmigung\,/\,EAC\,/\,cULus\,Recognized}$ 

Ex Approvals

Approval details

CSA



http://www.csagroup.org/services/testing-and-certification/certified-product-listing/

2554095



### Approvals

UL Recognized

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

FILE E 172140

cUL Recognized



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

FILE E 172140

VDE Zeichengenehmigung



http://www.vde.com/en/Institute/OnlineService/ VDE-approved-products/Pages/Online-Search.aspx

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cULus Recognized



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

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