

# Single relay - REL-IR/L- 24AC/2X21 - 2834054

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Plug-in industrial relays with power contacts, 2 changeover contacts, test button, status LED, mechanical switching position indicator, input voltage: 24 V AC

The figure shows version: REL-IR/L-230AC/2X21

## Your advantages

- With detectable manual operation
- Integrated status LED
- Mechanical switch position indicator
- DC types with integrated freewheeling diode



## Key Commercial Data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	
GTIN	4017918941642

## Technical data

### Ambient conditions

Ambient temperature (operation)	-55 °C ... 70 °C
Ambient temperature (storage/transport)	-55 °C ... 70 °C

### Coil side

Nominal input voltage $U_N$	24 V AC
Mains frequency	50/60 Hz
Typical input current at $U_N$	54 mA (at 50 Hz)
	46 mA (At 60 Hz)
Typical response time	4 ms ... 10 ms (AC, depending on phase relation)
Typical release time range	3 ms ... 12 ms (AC, depending on phase relation)

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## Technical data

### Coil side

Coil resistance	180 Ω ±15 % (at 20 °C)
Power dissipation for nominal condition	1.3 W

### Contact side

Contact type	2 changeover contacts
Type of switch contact	Single contact
Contact material	Ag
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V
Min. switching current	1 mA
Maximum inrush current	20 A (15 ms)
Limiting continuous current	10 A
Interrupting rating (ohmic load) max.	2500 VA (for 250 V AC)

### General

Test voltage	2 kV AC (50 Hz, 1 min., winding/contact)
	2 kV AC (50 Hz, 1 min., contact/contact)
Operating mode	100% operating factor
Mechanical service life	5x 10 <sup>7</sup> cycles
Service life, electrical	see diagram
Mounting position	any
Assembly instructions	On relay base PR2

### Connection data input side

Connection name	Coil side
Connection method	Plug / solder connection

### Connection data output side

Connection name	Contact side
Connection method	Plug / solder connection

### Standards and Regulations

Standards/regulations	DIN EN 61810-1
	VDE 0435-201
	EN 50178
Pollution degree	3
Overvoltage category	II

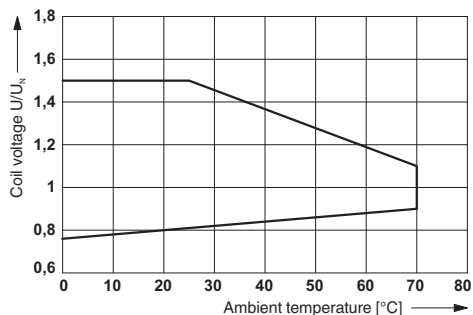
### Environmental Product Compliance

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

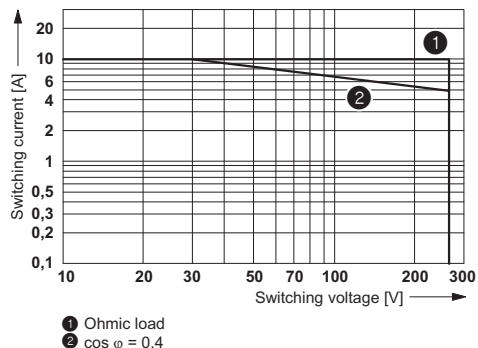
## Drawings

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Diagram



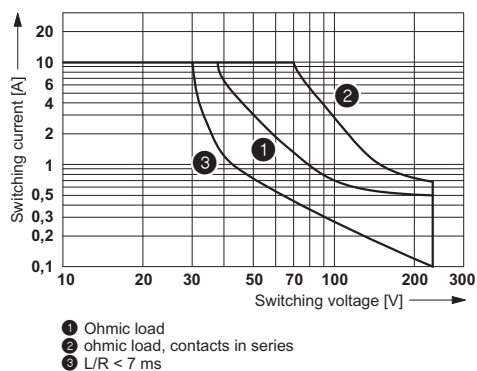
Diagram



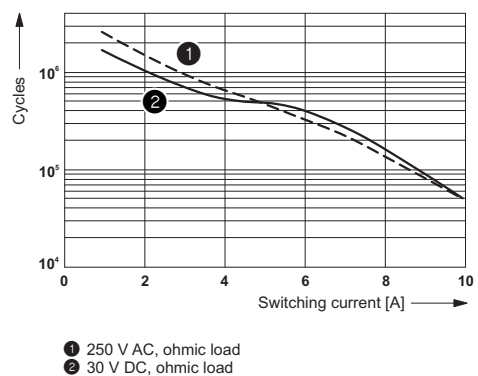
Operating voltage range

AC interrupting rating

Diagram



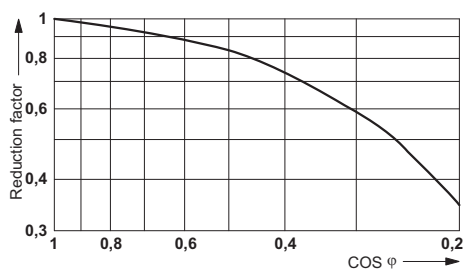
Diagram



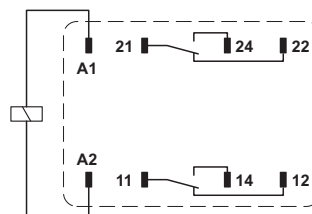
DC interrupting rating

Electrical service life

Diagram



Circuit diagram



Shown without LED and damping diode.  
Contacts 21, 22, 24 are led onto relay base connections 41, 42, 44.

Service life reduction factor

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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 9.0	27371601

### ETIM

ETIM 2.0	EC001437
ETIM 3.0	EC001437
ETIM 4.0	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

UL Listed / cUL Listed / EAC / VDE Gutachten mit Fertigungsüberwachung / cULus Listed

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#### Ex Approvals

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### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm</a>	FILE E 172140
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## Approvals

cUL Listed		<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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VDE Gutachten mit Fertigungsüberwachung		<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>	40026798
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cULus Listed			
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## Accessories

### Additional products

Relay base - PR2-BSC2/4X21 - 2833563



Relay base PR2-B, for industrial relay REL-IR with 2 or 4 changeover contacts, 2/2-level design, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

Relay base - PR2-BSC3/4X21 - 2833576



Relay base PR2-B, for industrial relay REL-IR with 2 or 4 changeover contacts, 1/3-level design, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

Relay base - PR2-BSP3/4X21 - 2833589



Relay base PR2-B, for industrial relay REL-IR with 2 or 4 changeover contacts, 1/3-level design, spring-cage connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

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