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Plug-in high-power relay with power contacts, 2 PDTs, coil voltage: 24 V AC



The figure shows version REL-PR2-24DC/2X21



## Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	34.0 GRM
Custom tariff number	85364190
Country of origin	Poland

### Technical data

### **Dimensions**

Width	38.6 mm
Height	45.5 mm
Depth	36.1 mm

#### Ambient conditions

Ambient temperature (operation)	-40 °C 55 °C
Ambient temperature (storage/transport)	-40 °C 85 °C

#### Coil side

Nominal input voltage U <sub>N</sub>	24 V AC
Input voltage range in reference to U <sub>N</sub>	(see diagram)
Nominal input current at U <sub>IN</sub>	116 mA
Typical response time	5 ms 25 ms (depending on phase relation)
Typical release time range	5 ms 20 ms (depending on phase relation)
Status display	Yellow LED



## Technical data

#### Contact side

Contact type	Single contact, 2-PDT
Contact material	AgNi
Maximum switching voltage	440 V AC
	250 V DC
Minimum switching voltage	10 V (At 24 mA)
Maximum inrush current	50 A (20 ms, N/O contact)
Min. switching current	10 mA (at 24 V)
Limiting continuous current	16 A
Interrupting rating (ohmic load) max.	384 W (at 24 V DC)
	124 W (at 48 V DC)
	108 W (at 60 V DC)
	52 W (at 110 V DC)
	70 W (at 220 V DC)
	4000 VA (for 250 V AC)
	4000 VA (At 440 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)
	3 A (at 120 V, AC15)
	1.5 A (at 240 V, AC15)
Single-phase motor load	800 W (bei 230 V, AC3)
Motor load according to UL 508	1/3 HP, 120 V AC (single-phase AC motor)
	1/2 HP, 240 V AC (single-phase AC motor)

#### General

Test voltage relay winding/relay contact	2.5 kV <sub>rms</sub> (50 Hz, 1 min.)
Test voltage relay contact/relay contact	2.5 kV <sub>rms</sub> (50 Hz, 1 min.)
Test voltage PDT/PDT	2.5 kV <sub>rms</sub> (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	RTI
Mechanical service life	Approx. 10 <sup>7</sup> cycles
Name	Air and creepage distances between the power circuits
Standards/regulations	IEC 60664
Rated insulation voltage	250 V AC
Pollution degree	3
Surge voltage category	III
Name	Standards/regulations



## Technical data

## General

Standards/regulations	IEC 61810
Mounting position	any

### Connection data

Connection method	Plug connection
	3

## Classifications

## eCl@ss

eCl@ss 4.0	27371104
eCl@ss 4.1	27371104
eCl@ss 5.0	27371001
eCl@ss 5.1	27371001
eCl@ss 6.0	27371001
eCl@ss 7.0	27371001
eCl@ss 8.0	27371001

#### **ETIM**

ETIM 3.0	EC000196
ETIM 4.0	EC000196
ETIM 5.0	EC000196

### UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121515
UNSPSC 11	39121515
UNSPSC 12.01	39121515
UNSPSC 13.2	39121515

## Approvals

### Approvals

Approvals

CSA / UL Recognized / cUL Recognized / cULus Recognized

Ex Approvals



Approvals
Approvals submitted
Approval details
CSA 1
UL Recognized <b>\$1</b>
cUL Recognized
cULus Recognized C S Us
Accessories
Accessories
Relay socket

Relay socket - RIF-4-BPT/3X21 - 2900961

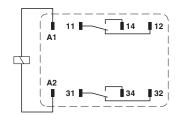


RIF-4... relay base, for high-power relay with 2 or 3 PDTs or 3 N/O contacts, push-in connection, plug-in option for input/suppressor modules, for mounting on NS 35/7,5

## Drawings



Circuit diagram



#### Diagram 1,8 1,6 Coil voltage U/U, 1,4 0 2 0,8 0,6 L 10 20 30 40 50 60 70 80 Ambient temperature [°C]

- Maximum continuous voltage at limiting continuous current = 16 A
- Minimum operate voltage
   For pre-excitation with UN and limiting continuous current = 16 A

#### Operating voltage range

Diagram

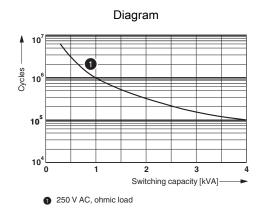
20
10
10
20
30
0,5
0,1
10
20
30
50
70
100
200
300
500

Interrupting rating

1 AC, ohmic load

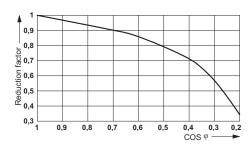
2DC, ohmic load

Switching voltage [V]



Electrical service life

#### Diagram



Service life reduction factor



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