### Product data sheet Characteristics

## RPF2BBD

power relay plug-in - Zelio RPF - 2 CO - 24 V DC - 30 A



#### Main

Mani	
Range of product	Zelio Relay
Series name	Power
Product or component type	Plug-in relay
Device short name	RPF
Contacts type and composition	2 C/O
Control circuit voltage	24 V DC
Control type	Without lockable test button
Shape of pin	Flat
Contacts material	Silver tin oxide
[Ithe] conventional en- closed thermal current	30 A at -4055 °C for 13 mm gap between two relays 25 A at -4055 °C for relays side by side without a gap
Resistive rated load	30 A at 250 V AC 25 A at 28 V DC
Utilisation coefficient	10 %

#### Complementary

Complementary		
Mounting support	DIN rail	
	Panel	
Control circuit voltage limits	19.226.4 V	
[le] rated operational current	3 A at 28 V DC (for NC) conforming to IEC 3 A at 250 V AC (for NC) conforming to IEC 3 A at 28 V DC (for NC) conforming to UL 3 A at 277 V AC (for NC) conforming to UL 25 A at 28 V DC (for NO) conforming to IEC 30 A at 250 V AC (for NO) conforming to IEC 20 A at 28 V DC (for NO) conforming to UL 30 A at 277 V AC (for NO) conforming to UL	
[Ui] rated insulation voltage	300 V conforming to UL 250 V conforming to IEC	
[Uimp] rated impulse withstand voltage	4 kV 1.2/50 μs	
Maximum switching voltage	250 V conforming to IEC	
Maximum switching capacity	7500 VA/700 W	
Operating rate	<= 18000 cycles/hour no-load <= 1200 cycles/hour under load	
Mechanical durability	5000000 cycles	
Electrical durability	100000 cycles for resistive load	
Average coil consumption	1.7 W	
Drop-out voltage threshold	>= 0.1 Uc	
Operate time	25 ms	
Release time	25 ms	
Average resistance	350 Ohm (tolerance +/- 10 %) at 20 °C	
Safety reliability data	B10d = 100000	
Protection category	RT II	
Operating position	Any position	
Product weight	0.082 kg	

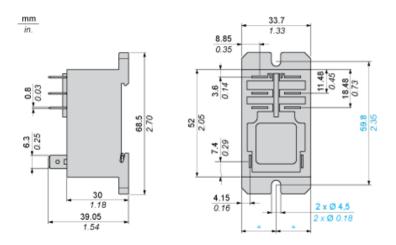
### Environment

Dielectric strength	1500 V AC between contacts with micro disconnection insulation 4000 V AC between coil and contact with reinforced insulation 2000 V AC between poles with basic insulation
Standards	EN/IEC 61810-1 UL 508 CSA C22.2 No 14
Product certifications	CE CSA GOST UL
Ambient air temperature for storage	-4085 °C
Ambient air temperature for operation	-4055 °C
Vibration resistance	10 gn (+/- 1 mm, f = 10150 Hz) 5 cycles not operating 3 gn (+/- 1 mm, f = 10150 Hz) 5 cycles in operation
IP degree of protection	IP40 conforming to EN/IEC 60529
Shock resistance	30 gn not operating 10 gn in operation
Pollution degree	3



# RPF2BBD

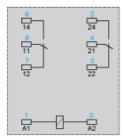
### **Dimensions**



## Product data sheet Connections and Schema

# RPF2BBD

### Wiring Diagram



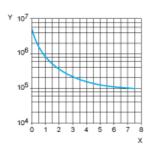
Symbols shown in blue correspond to Nema marking.

# Product data sheet Performance Curves

### RPF2BBD

#### **Electrical Durability of Contacts**

#### AC Resistive load

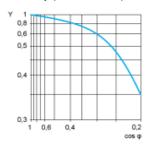


X Switching capacity (kVA)

Y Durability (number of operating cycles)

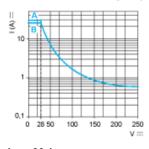
### AC Reduction coefficient for inductive load (depending on power factor cos φ)

Durability (inductive load) = durability (resistive load) x reduction coefficient.



Y reduction coefficient

### Maximum switching capacity on DC resistive load



A 30 A B 25 A

Note: These are typical curves, actual durability depends on load, environment, duty cycle, etc.