



## Main

Range of product	Zelio Relay
Series name	Power
Product or component type	Plug-in relay
Device short name	RPF
Contacts type and composition	2 NO
Control circuit voltage	230 V AC
Shape of pin	Flat
Contacts material	Silver tin oxide
[I <sub>th</sub> ] conventional enclosed thermal current	30 A at -40...55 °C for 13 mm gap between two relays 25 A at -40...55 °C for relays side by side without a gap
Rated load (resistive)	30 A at 28 V DC for 13 mm gap between two relays 30 A at 250 V AC for 13 mm gap between two relays 25 A at 28 V DC for relays side by side without a gap 25 A at 250 V AC for relays side by side without a gap
Utilisation coefficient	10 %

## Complementary

Mounting support	DIN rail Panel
Control circuit voltage range	184...253 V AC
[I <sub>e</sub> ] rated operational current	20 A at 28 V DC (for NO) conforming to UL 30 A at 277 V AC (for NO) conforming to UL 30 A at 28 V DC (for NO) conforming to IEC 30 A at 250 V AC (for NO) conforming to IEC
[U <sub>i</sub> ] rated insulation voltage	300 V conforming to UL 250 V conforming to IEC
[U <sub>imp</sub> ] rated impulse withstand voltage	4 kV (1.2/50 µs)
Maximum switching voltage	250 V DC conforming to IEC 250 V AC conforming to IEC
Maximum switching capacity	7500 VA/840 W 13 mm gap between two relays 6250 VA/700 W relays side by side without a gap
Minimum recommended switching capacity	6000 mW (500 mA/12 V) for NO
Operating rate	<= 18000 cycles/hour no-load <= 1200 cycles/hour under load
Mechanical durability	5000000 cycles
Electrical durability	100000 cycles for resistive load
Average consumption	4 VA at 60 Hz
Drop-out voltage threshold	>= 0.15 U <sub>c</sub>
Operating time	25 ms
Release time	25 ms
Average resistance	15600 Ohm (tolerance: +/- 15 %) at 20 °C
Protection category	RT II
Operating position	Any position
Product weight	0.082 kg

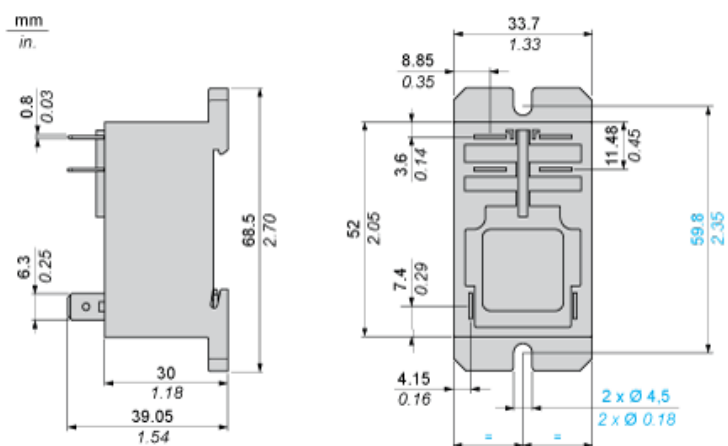
## Environment

Dielectric strength	1500 V AC between contacts, insulation: micro disconnection 2000 V AC between poles, insulation: basic 4000 V AC between coil and contact, insulation: reinforced
Standards	EN/IEC 61810-1 UL 508 CSA C22.2 No 14
Product certifications	CSA GOST UL
Ambient air temperature for storage	-40...85 °C
Ambient air temperature for operation	-40...55 °C
Vibration resistance	10 gn (+/- 1 mm, f = 10...150 Hz) 5 cycles not operating 3 gn (+/- 1 mm, f = 10...150 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

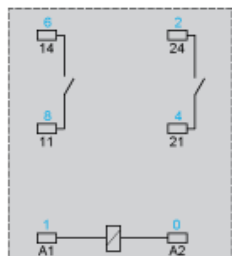
## Contractual warranty

Period	18 months
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Dimensions



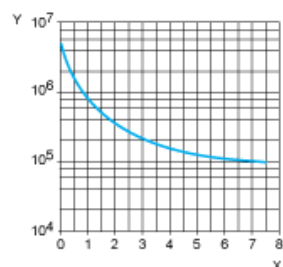
## Wiring Diagram



Symbols shown in blue correspond to Nema marking.

## Electrical Durability of Contacts

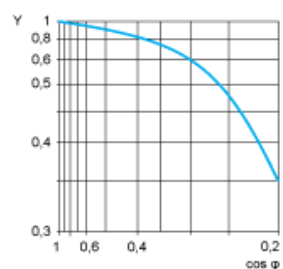
### AC Resistive load



X Switching capacity (kVA)  
Y Durability (number of operating cycles)

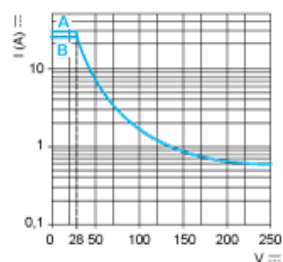
### AC Reduction coefficient for inductive load (depending on power factor $\cos \phi$ )

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.