



## 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	24 V DC
Control type	Without lockable test button
Shape of pin	Flat
Contacts material	Silver tin oxide
[I <sub>th</sub> ] conventional enclosed thermal current	25 A at -40...55 °C for relays side by side without a gap 30 A at -40...55 °C for 13 mm gap between two relays
Load current	25 A at 28 V DC 30 A at 250 V AC
Utilisation coefficient	10 %

## Complementary

Mounting support	Panel DIN rail
Control circuit voltage limits	19.2...26.4 V
[I <sub>e</sub> ] rated operational current	30 A at 250 V AC (for NO) conforming to IEC 30 A at 277 V AC (for NO) conforming to UL 20 A at 28 V DC (for NO) conforming to UL 25 A at 28 V DC (for NO) conforming to IEC
[U <sub>i</sub> ] rated insulation voltage	250 V conforming to IEC 300 V conforming to UL
[U <sub>imp</sub> ] 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
Minimum 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	1.7 W
Drop-out voltage threshold	>= 0.1 U <sub>c</sub>
Operating time	25 ms
Reset 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

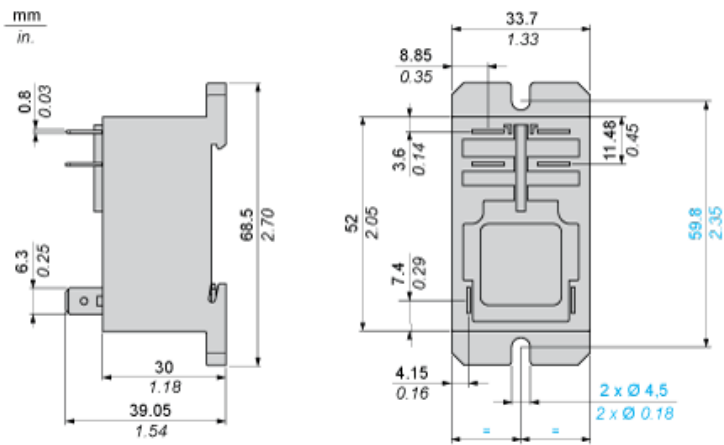
## Environment

Dielectric strength	2000 V AC between poles with basic insulation 1500 V AC between contacts with micro disconnection insulation 4000 V AC between coil and contact with reinforced insulation
Standards	EN/IEC 61810-1 CSA C22.2 No 14 UL 508
Product certifications	CSA GOST CE UL
Ambient air temperature for storage	-40...85 °C
Ambient air temperature for operation	-40...55 °C
Vibration resistance	3 gn (+/- 1 mm, f = 10...150 Hz) 5 cycles in operation 10 gn (+/- 1 mm, f = 10...150 Hz) 5 cycles not operating
IP degree of protection	IP40 conforming to EN/IEC 60529
Shock resistance	10 gn in operation 30 gn not operating
Pollution degree	3

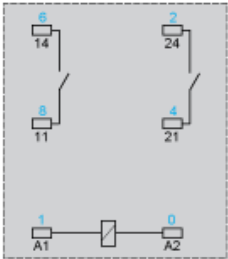
## Contractual warranty

Warranty period	18 months
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Dimensions



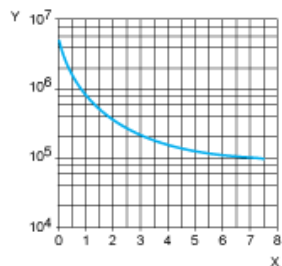
Wiring Diagram



Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

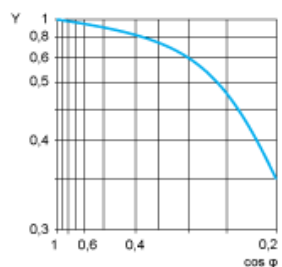
AC Resistive load



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

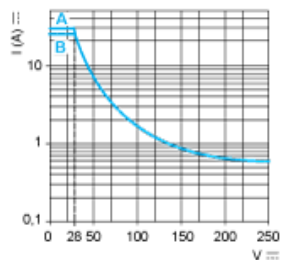
AC Reduction coefficient for inductive load (depending on power factor  $\cos \phi$ )

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.