



## Main

Commercial Status	Commercialised
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	120 V AC
Shape of pin	Flat
Contacts material	Silver tin oxide
[Ithe] 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
Load current	30 A 28 V DC for 13 mm gap between two relays 30 A 250 V AC for 13 mm gap between two relays 25 A 28 V DC for relays side by side without a gap 25 A 250 V AC for relays side by side without a gap
Utilisation coefficient	10 %

## Complementary

Mounting support	DIN rail Panel
Rated operational voltage limits	96...132 V AC
[Ie] rated operational current	3 A at 28 V (DC-1) NC conforming to UL 3 A at 277 V (AC-1) NC conforming to UL 3 A at 28 V (DC-1) NC conforming to IEC 3 A at 250 V (AC-1) NC conforming to IEC 20 A at 28 V (DC-1) NO conforming to UL 30 A at 277 V (AC-1) NO conforming to UL 30 A at 28 V (DC-1) NO conforming to IEC 30 A at 250 V (AC-1) NO conforming to IEC
[Ui] rated insulation voltage	300 V conforming to UL 60947-4-1A 250 V conforming to EN/IEC 61810-1
[Uimp] rated impulse withstand voltage	4 kV
Minimum switching current	10 mA
Minimum switching voltage	17 V
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 switching capacity	170 mW
Operating rate	<= 18000 cycles/hour no-load <= 1200 cycles/hour under load
Mechanical durability	5000000 cycles
Electrical durability	100000 cycles for resistive loadC/O
Average consumption in VA	4 at 60 Hz
Drop-out voltage threshold	AC: >= 0.15 U <sub>c</sub>
Operating time	20 ms between coil energisation and making of the On-delay contact 20 ms between coil de-energisation and making of the Off-delay contact
Coil resistance	4250 Ohm at 20 °C +/- 15 %
Protection category	RT II
Operating position	Any position

CAD overall width	33.7 mm
CAD overall height	68.5 mm
CAD overall depth	39.2 mm
Product weight	0.082 kg

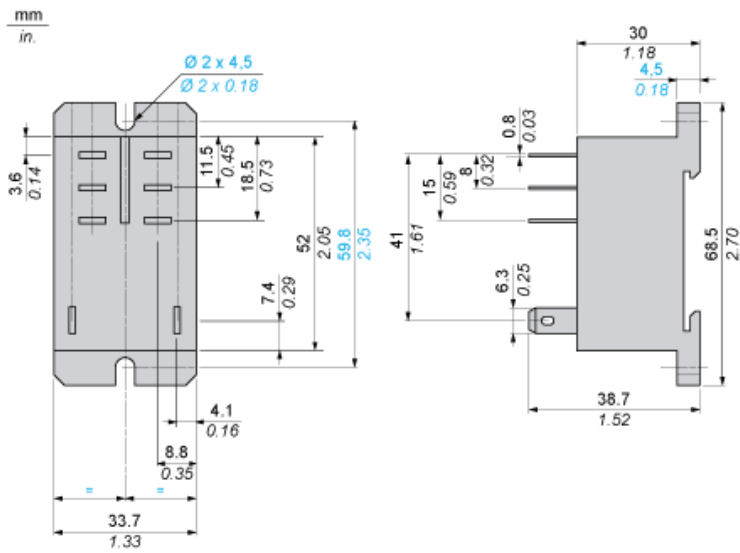
## Environment

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	CSA C22-2 No 14 EN/IEC 61810-1 UL 60947-4-1A
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

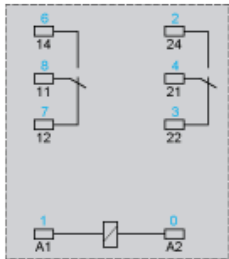
## Contractual warranty

Period	18 months
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Dimensions



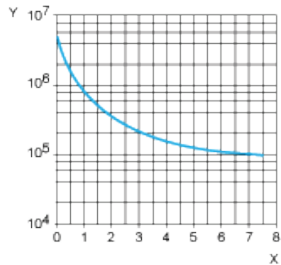
## Wiring Diagram



Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

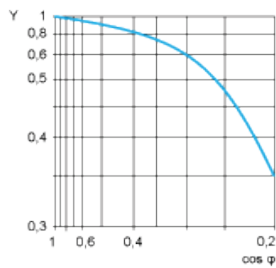
AC Resistive load



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

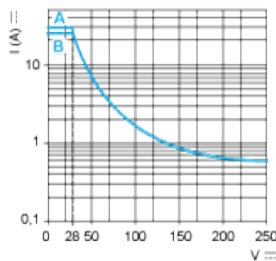
AC Reduction coefficient for inductive load (depending on power factor  $\cos \phi$ )

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