



Main

Range of product	Zelio Relay
Series name	Power
Product or component type	Plug-in relay
Device short name	RPM
Contacts type and composition	1 C/O
Control circuit voltage	120 V AC
[Ithe] conventional enclosed thermal current	15 A at -40...55 °C
Status LED	Without
Control type	Lockable test button
Utilisation coefficient	20 %

Complementary

Shape of pin	Flat
[Ui] rated insulation voltage	300 V conforming to UL 300 V conforming to CSA 250 V conforming to IEC
[Uimp] rated impulse withstand voltage	4 kV for 1.2/50 µs
Contacts material	AgNi
[Ie] rated operational current	7.5 A at 28 V DC (NC) conforming to IEC 7.5 A at 250 V AC (NC) conforming to IEC 15 A at 28 V DC (NO) conforming to IEC 15 A at 250 V AC (NO) conforming to IEC 15 A at 28 V DC conforming to UL 15 A at 277 V AC conforming to UL
Maximum switching voltage	250 V conforming to IEC
Resistive load current	15 A at 28 V DC 15 A at 250 V AC
Maximum switching capacity	420 W 3750 VA
Minimum switching capacity	170 mW at 10 mA, 17 V
Operating rate	<= 18000 cycles/hour no-load <= 1200 cycles/hour under load
Mechanical durability	10000000 cycles
Electrical durability	100000 cycles for resistive load
Average coil consumption in VA	1.6 at 60 Hz
Drop-out voltage threshold	>= 0.15 U _c AC
Operate time	20 ms at nominal voltage
Release time	20 ms at nominal voltage
Rated operational voltage limits	96...132 V AC
Protection category	RT I
Operating position	Any position
Safety reliability data	B10d = 100000
Product weight	0.026 kg

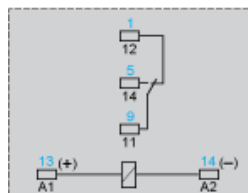
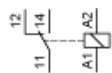
Environment

Dielectric strength	2000 V AC between coil and contact with reinforced insulation 1500 V AC between contacts with micro disconnection insulation
Standards	EN/IEC 61810-1 UL 508 CSA C22.2 No 14
Product certifications	CSA RoHS UL REACH EAC
Ambient air temperature for storage	-40...85 °C
Ambient air temperature for operation	-40...55 °C
Vibration resistance	5 gn (f = 10...150 Hz), amplitude +/- 1 mm (on 5 cycles not operating) 3 gn (f = 10...150 Hz), amplitude +/- 1 mm (on 5 cycles in operation)
Degree of protection (Housing only)	IP40 conforming to EN/IEC 60529
Shock resistance	30 gn not operating 15 gn in operation
Pollution degree	3

The technical drawing shows two views of the PCB assembly:

- Front View (Left):** Shows a rectangular board with three vertical slots. Dimensions include a total width of 40 mm (1.58 in.) and a slot width of 6 mm (0.24 in.). The distance from the left edge to the first slot is 3 mm (0.12 in.), and from the last slot to the right edge is 7 mm (0.28 in.). A small square feature is located near the top right corner.
- Side View (Right):** Shows the profile of the board. The total height is 27 mm (1.06 in.) and the width is 14 mm (0.55 in.). It indicates the placement of components like the IC and connectors.

Wiring Diagram



Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

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

Resistive AC load



X Switching capacity (kVA)

Y Durability (Number of operating cycles)

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



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



X Voltage DC

Y Current DC

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