

RPM12FD

power plug-in relay - Zelio RPM - 1 C/O - 110 V
DC - 15 A - with LED



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	110 V DC
[Ithe] conventional enclosed thermal current	15 A at -40...55 °C
Status LED	With
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	1.1 W
Drop-out voltage threshold	>= 0.1 Uc DC
Operate time	20 ms at nominal voltage
Release time	20 ms at nominal voltage
Rated operational voltage limits	88...121 V DC
Protection category	RT I
Operating position	Any position
Safety reliability data	B10d = 100000
Product weight	0.026 kg

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

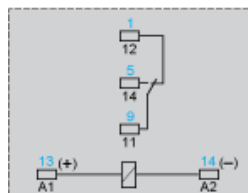
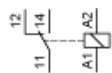
Environment

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:

- Top View:** Shows the overall footprint with dimensions: total width 1.58 mm (0.62 in), total length 7 mm (0.28 in). The mounting area has a width of 3 mm (0.12 in) and a length of 6 mm (0.24 in). There are four mounting holes, each with a diameter of 0.2 mm (0.008 in).
- Side View:** Shows the profile of the board with a thickness of 1.06 mm (0.042 in). It also indicates a central cutout or feature with a width of 14 mm (0.55 in) and a depth of 27 mm (1.06 in).

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.