

# RPM42FD

power plug-in relay - Zelio RPM - 4 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	4 C/O
Control circuit voltage	110 V DC
[I <sub>th</sub> ] 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
[U <sub>i</sub> ] rated insulation voltage	250 V conforming to IEC 300 V conforming to UL 300 V conforming to CSA
[U <sub>imp</sub> ] rated impulse withstand voltage	4 kV for 1.2/50 μs
Contacts material	AgNi
[I <sub>e</sub> ] rated operational current	15 A at 277 V AC conforming to UL 7.5 A at 28 V DC (NC) conforming to IEC 15 A at 250 V AC (NO) 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 28 V DC conforming to UL
Maximum switching voltage	250 V conforming to IEC
Load current	15 A at 250 V AC 15 A at 28 V DC
Maximum switching capacity	3750 VA 420 W

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 consumption in W	1.6 W
Drop-out voltage threshold	>= 0.1 U <sub>c</sub> DC
Operating time	20 ms at nominal voltage
Reset 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	0.071 kg

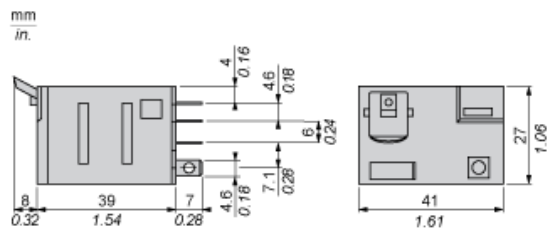
## Environment

Dielectric strength	2000 V AC between coil and contact with reinforced insulation 2000 V AC between poles with basic 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	3 gn (f = 10...150 Hz), amplitude +/- 1 mm (on 5 cycles in operation) 5 gn (f = 10...150 Hz), amplitude +/- 1 mm (on 5 cycles not operating)
IP degree of protection	IP40 conforming to EN/IEC 60529
Shock resistance	30 gn not operating 15 gn in operation
Pollution degree	3

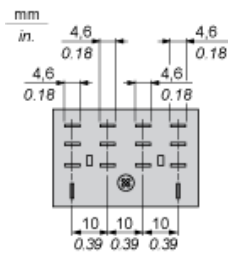
## Contractual warranty

Warranty period	18 months
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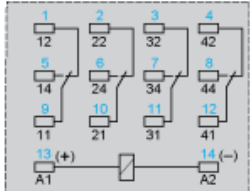
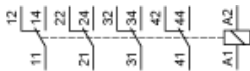
Dimensions



Pin Side View



Wiring Diagram

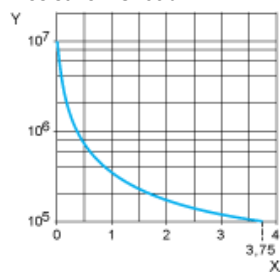


Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

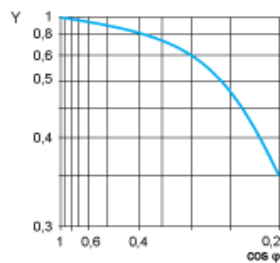
Durability (inductive load) = durability (resistive load) x reduction coefficient.

Resistive AC load



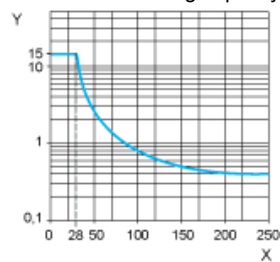
X Switching capacity (kVA)  
Y Durability (Number of operating cycles)

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.