

RPM31ED

power plug-in relay - Zelio RPM - 3 C/O - 48 V DC - 15 A



Main

Range of product	Zelio Relay
Series name	Power
Product or component type	Plug-in relay
Device short name	RPM
Contacts type and composition	3 C/O
[Uc] control circuit voltage	48 V DC
[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	250 V conforming to IEC 300 V conforming to UL 300 V conforming to CSA
[Uimp] rated impulse withstand voltage	4 kV for 1.2/50 µs
Contacts material	AgNi
[Ie] 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 coil consumption	1.5 W
Drop-out voltage threshold	>= 0.1 U _c DC
Operating time	20 ms at nominal voltage
Reset time	20 ms at nominal voltage
Average resistance	1280 Ohm +/- 10 % at 20 °C
Rated operational voltage limits	38.4...52.8 V DC
Protection category	RT I
Operating position	Any position
Safety reliability data	B10d = 100000
Product weight	0.054 kg
Device presentation	Complete product

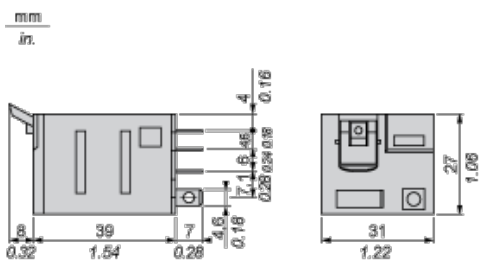
Environment

dielectric strength	2000 V AC between coil and contact with reinforced insulation 2000 V AC between poles with basic insulation
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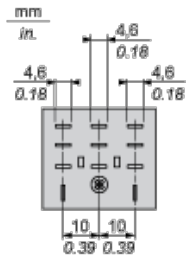
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standards	EN/IEC 61810-1 UL 508 CSA C22.2 No 14
product certifications	CSA RoHS UL REACH EAC
ambient air temperature for storage	-40...85 °C
ambient air temperature for operation	-40...55 °C
vibration resistance	3 gn (f = 10...150 Hz), amplitude +/- 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

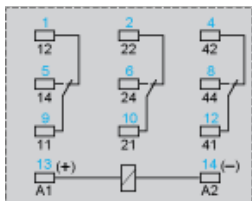
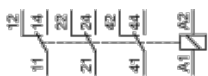
Dimensions



Pin Side View



Wiring Diagram

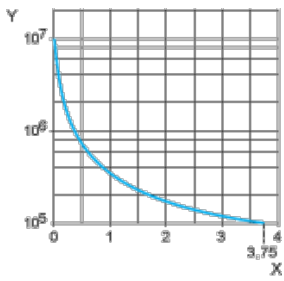


Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

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

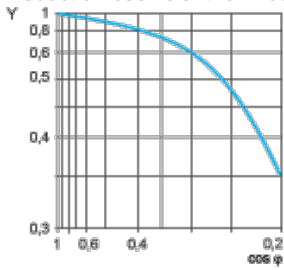
Resistive AC load



X Switching capacity (kVA)

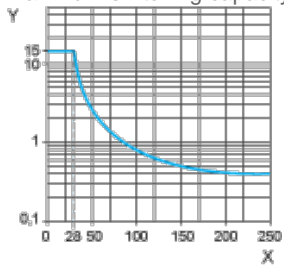
Y Durability (Number of operating cycles)

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.