Product data sheet
Characteristics

RPM41ED
power plug-in relay - Zelio RPM - 4 C/O - 48 V DC - 15 A

Main

Range of product	Harmony Electromechanical Relays
Series name	Power
Product or component type	Plug-in relay
Device short name	RPM
Contacts type and composition	4 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 CSA 300 V conforming to UL
[Uimp] rated impulse withstand voltage	4 kV during 1.2/50 µs
Contacts material	AgNi
[Ie] rated operational current	15 A at 277 V (AC) conforming to UL 15 A at 28 V (DC) conforming to UL 15 A at 250 V (AC) NO conforming to IEC 15 A at 28 V (DC) NO conforming to IEC 7.5 A at 250 V (AC) NC conforming to IEC 7.5 A at 28 V (DC) NC conforming to IEC
Maximum switching voltage	250 V conforming to IEC
Resistive 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	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load
Mechanical durability	10000000 cycles
Electrical durability	100000 cycles for resistive load
Average coil consumption	1.6 W
Drop-out voltage threshold	>= 0.1 Uc DC
Operate time	20 ms at nominal voltage
Release time	20 ms at nominal voltage
Average coil resistance	1210 Ohm at 20 °C +/- 10 %
Rated operational voltage limits	38.4...52.8 V DC
Protection category	RT I
Test levels	Level A group mounting
Operating position	Any position
Pollution degree	3
Safety reliability data	B10d = 100000

Net weight	0.071 kg
Device presentation	Complete product

Environment

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

Packing Units

Package 1 Weight	0.074 kg
Package 1 Height	0.470 dm
Package 1 width	0.400 dm
Package 1 Length	0.280 dm

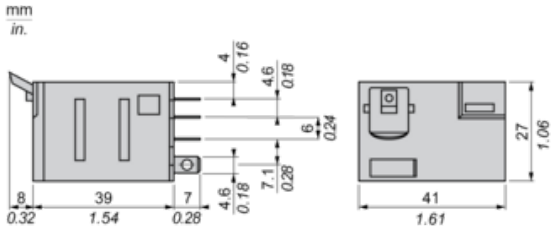
Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

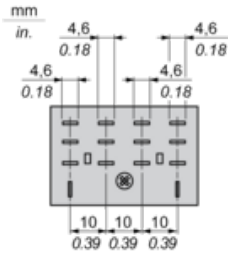
Contractual warranty

Warranty	18 months

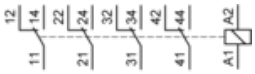
Dimensions

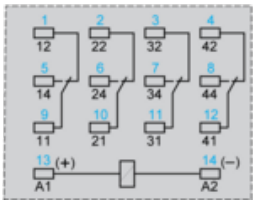


Pin Side View



Wiring Diagram



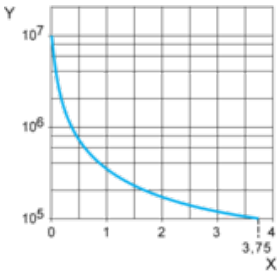


Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

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

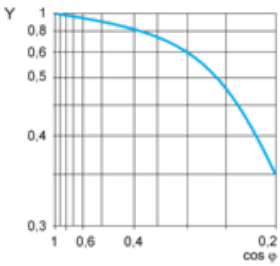
Resistive AC load



X Switching capacity (kVA)

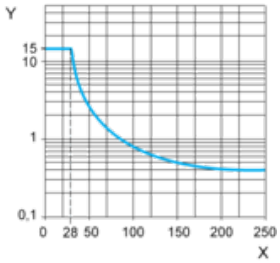
Y Durability (Number of operating cycles)

Reduction coefficient for inductive AC load (depending on power factor cos ϕ)



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.