## Product data sheet Characteristics

## RPM42P7

power plug-in relay - Zelio RPM - 4 C/O - 230 V AC - 15 A - with LED



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	
[Uc] control circuit voltage	230 V AC	
[Ithe] conventional enclosed thermal current	15 A at -4055 °C	
Status LED	With	:
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
[le] 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 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
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	<= 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	2.5 at 60 Hz
Drop-out voltage threshold	>= 0.15 Uc AC
Operate time	20 ms at nominal voltage
Release time	20 ms at nominal voltage
Rated operational voltage limits	184253 V AC
Protection category	RT I
Operating position	Any position
Safety reliability data	B10d = 100000
Product weight	0.071 kg
Device presentation	Complete product

#### Environment

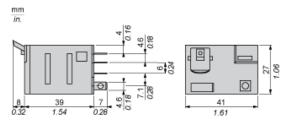
Dielectric strength	2000 V AC between coil and contact with reinforced insulation 2000 V AC between poles with basic insulation 1500 V AC between contacts with micro disconnection insulation	
Standards	EN/IEC 61810-1 UL 508 CSA C22.2 No 14	
Product certifications	CSA RoHS UL REACH EAC	
Ambient air temperature for storage	-4085 °C	
Ambient air temperature for operation	-4055 °C	
Vibration resistance	3 gn (f = 10150 Hz), amplitude +/- 1 mm (on 5 cycles in operation) 5 gn (f = 10150 Hz), amplitude +/- 1 mm (on 5 cycles not operating)	
Degree of protection (Housing only)	IP40 conforming to EN/IEC 60529	
Shock resistance	30 gn not operating 15 gn in operation	
Pollution degree	3	

#### Contractual warranty

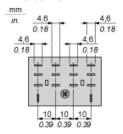
Warranty period	18 months

## RPM42P7

#### **Dimensions**



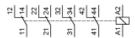
Pin Side View

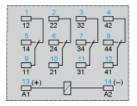


# Product data sheet Connections and Schema

## RPM42P7

### Wiring Diagram



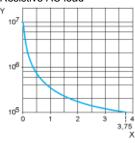


Symbols shown in blue correspond to Nema marking.

#### **Electrical Durability of Contacts**

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

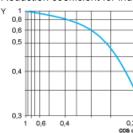
Resistive AC load



X Y Switching capacity (kVA)

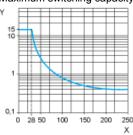
Durability (Number of operating cycles)

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



Υ Reduction coefficient (A)

Maximum switching capacity on resistive DC load



Voltage DC Χ Current DC

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