## Product data sheet Characteristics

## RPM31F7

power plug-in relay - Zelio RPM - 3 C/O - 120 V AC - 15 A



#### Main

mann	
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
Control circuit voltage	120 V AC
[Ithe] conventional enclosed thermal current	15 A at -4055 °C
Status LED	Without
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
[le] 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 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 in VA	1.7 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	96132 V AC
Protection category	RTI
Operating position	Any position
Safety reliability data	B10d = 100000
Product weight	0.054 kg

#### Environment

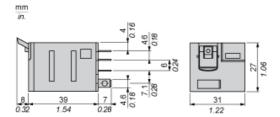
Dielectric strength	2000 V AC between poles with basic insulation 2000 V AC between coil and contact with reinforced insulation 1500 V AC between contacts with micro disconnection insulation
Standards	EN/IEC 61810-1 UL 508 CSA C22.2 No 14
Product certifications	CSA RoHS UL REACH EAC
Ambient air temperature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



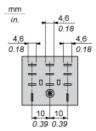
# Product data sheet Dimensions Drawings

## RPM31F7

#### **Dimensions**



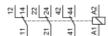
Pin Side View

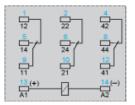


## Product data sheet Connections and Schema

## RPM31F7

#### Wiring Diagram





Symbols shown in blue correspond to Nema marking.

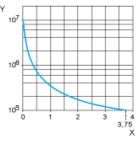
## Product data sheet Performance Curves

### RPM31F7

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

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

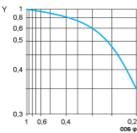
Resistive AC load



X Switching capacity (kVA)

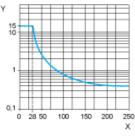
Y Durability (Number of operating cycles)

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.