

# Product data sheet

Specifications



plug-in relay, Harmony  
electromechanical relays, 15A, 3CO,  
lockable test button, 120V AC

RPM31F7

Product availability : Stock - Normally stocked in distribution facility

Price\* : 9.88 USD

## 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	3 C/O
[Uc] control circuit voltage	120 V AC 50/60 Hz
[Ithe] conventional enclosed thermal current	15 A -40...131 °F (-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 IEC 300 V CSA 300 V UL
[Uimp] rated impulse withstand voltage	4 kV 1.2/50 µs
Contacts material	AgNi
[Ie] rated operational current	15 A 277 V AC) UL 15 A 28 V DC) UL 15 A 250 V AC) NO IEC 15 A 28 V DC) NO IEC 7.5 A 250 V AC) NC IEC 7.5 A 28 V DC) NC IEC
Maximum switching voltage	250 V IEC
Resistive load current	15 A 250 V AC 15 A 28 V DC
Maximum switching capacity	3750 VA 420 W
Minimum switching capacity	170 mW 10 mA, 17 V
Operating rate	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load
Mechanical durability	10000000 cycles

\* Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Electrical durability	100000 cycles resistive
Average coil consumption in VA	1.7 60 Hz
Drop-out voltage threshold	>= 0.15 Uc AC
Operate time	20 ms at nominal voltage
Release time	20 ms at nominal voltage
Average coil resistance	2880 Ohm at 68 °F (20 °C) +/- 15 %
Rated operational voltage limits	96...132 V AC
Protection category	RT I
Test levels	Level A group mounting
Operating position	Any position
Pollution degree	3
Safety reliability data	B10d = 100000
Net Weight	0.12 lb(US) (0.054 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 IEC 61810-1 UL 508
Product Certifications	UL EAC CSA
Ambient Air Temperature for Storage	-40...185 °F (-40...85 °C)
Ambient air temperature for operation	-40...131 °F (-40...55 °C)
Vibration resistance	3 gn +/- 1 mm 10...150 Hz)5 cycles in operation 5 gn +/- 1 mm 10...150 Hz)5 cycles not operating
Degree of protection (Housing only)	IP40 conforming to IEC 60529
Shock resistance	15 gnin operation 30 gnnot operating

## Ordering and shipping details

Category	21127-ZELIO ICE CUBE RELAYS
Discount Schedule	CP2
GTIN	3389119402002
Returnability	Yes
Country of origin	CN

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.85 in (4.7 cm)
Package 1 Width	1.22 in (3.1 cm)
Package 1 Length	1.10 in (2.8 cm)

Package 1 Weight	1.94 oz (55 g)
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	1.18 in (3 cm)
Package 2 Width	4.13 in (10.5 cm)
Package 2 Length	7.09 in (18 cm)
Package 2 Weight	20.07 oz (569 g)
Unit Type of Package 3	S01
Number of Units in Package 3	80
Package 3 Height	5.91 in (15 cm)
Package 3 Width	5.91 in (15 cm)
Package 3 Length	15.75 in (40 cm)
Package 3 Weight	10.78 lb(US) (4.891 kg)

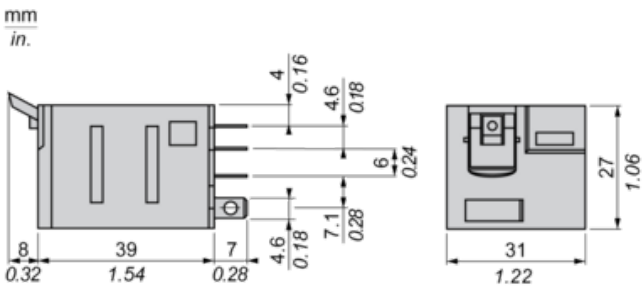
### Offer Sustainability

California proposition 65	WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	No need of specific recycling operations
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

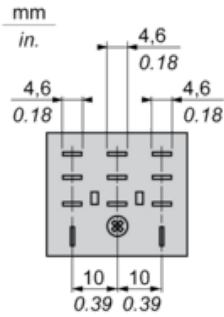
### Contractual warranty

Warranty	18 months
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Dimensions



Pin Side View

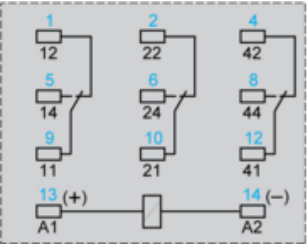
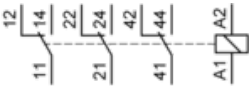


# Product data sheet

## Connections and Schema

# RPM31F7

## Wiring Diagram

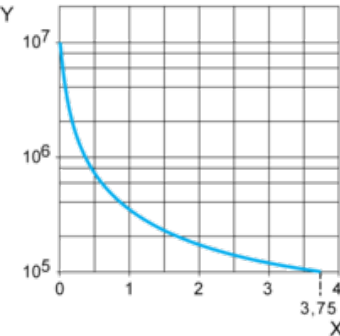


Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

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

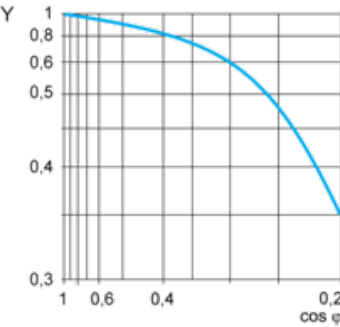
Resistive AC load



X Switching capacity (kVA)

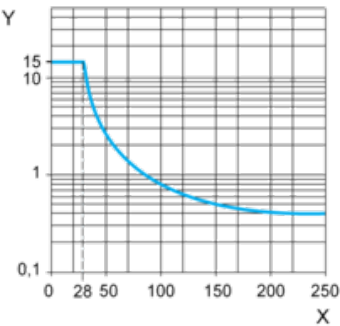
Y Durability (Number of operating cycles)

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.

Recommended replacement(s)