

# RPM31F7

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



## 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
Electrical durability	100000 cycles resistive
Average coil consumption in VA	1.7 60 Hz
Drop-out voltage threshold	>= 0.15 U <sub>c</sub> 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
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

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## 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	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 EN/IEC 60529
Shock resistance	15 gn in operation 30 gn not operating

## Ordering and shipping details

Category	21127-ZELIO ICE CUBE RELAYS
Discount Schedule	CP2
GTIN	3389119402002
Nbr. of units in pkg.	1
Package weight(Lbs)	1.94 oz (55.0 g)
Returnability	Yes
Country of origin	CN

## Packing Units

Unit Type of Package 1	PCE
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)
Unit Type of Package 2	CAR
Number of Units in Package 2	10
Package 2 Weight	19.68 oz (558.0 g)
Package 2 Height	1.18 in (3 cm)
Package 2 width	3.94 in (10 cm)
Package 2 Length	6.57 in (16.7 cm)
Unit Type of Package 3	S01
Number of Units in Package 3	80
Package 3 Weight	10.34 lb(US) (4.689 kg)
Package 3 Height	5.91 in (15 cm)
Package 3 width	5.91 in (15 cm)
Package 3 Length	15.75 in (40 cm)

## Offer Sustainability

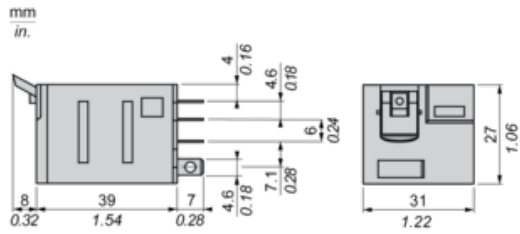
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth 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>
Toxic heavy metal free	Yes

Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

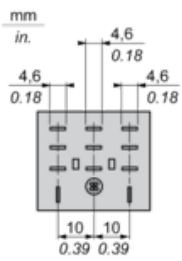
### Contractual warranty

Warranty	18 months
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Dimensions



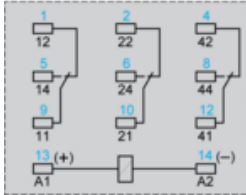
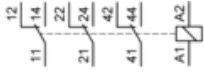
Pin Side View



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Wiring Diagram

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Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

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

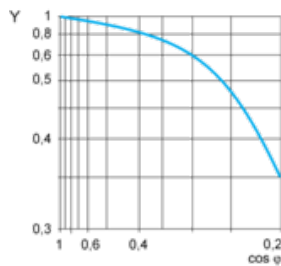
Resistive AC load



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.