Product data sheet

Specifications

power plug in relay, Harmony Electromechanical Relays, 15A, 4CO, with LED, with lockable test button, 110V DC

RPM42FD

Main

Range of product	Harmony Electromechanical Relays
Series name	RPM series
Product or component type	Plug-in relay
Contacts type and composition	4 C/O
Relay type	Power relay
status LED	With
[Uc] control circuit voltage	110 V DC
Minimum switching capacity	170 mW at 10 mA, 17 V
Release time	20 ms at nominal voltage
Ambient air temperature for operation	-40…55 °C
[Ithe] conventional enclosed thermal current	15 A at -40…55 °C

Complementary

Control type	Lockable test button
[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
Degree of protection (Housing only)	IP40 conforming to IEC 60529
Rated operational voltage limits	88...121 V DC
[Ui] rated insulation voltage	250 V conforming to IEC 300 V conforming to CSA 300 V conforming to UL
Maximum switching voltage	250 V conforming to IEC
Drop-out voltage threshold	>= 0.1 Uc DC
Maximum switching capacity	3750 VA 420 W
Mechanical durability	10000000 cycles
Electrical durability	100000 cycles for resistive load
Safety reliability data	B10d = 100000
Operating rate	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load
Utilisation coefficient	20 %

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
[Uimp] rated impulse withstand voltage	4 kV during 1.2/50 µs
Protection category	RT I
Mounting support	Plug-in
Operating position	Any position
Test levels	Level A group mounting
Device presentation	Complete product
Contacts material	AgNi
Shape of pin	Flat (faston type)
Product weight	0.071 kg

Environment

Pollution degree	3
Standards	UL 508 IEC 61810-1 CSA C22.2 No 14
Product certifications	UL CSA EAC
Ambient air temperature for storage	-40…85 °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
Shock resistance	15 gn for in operation 30 gn for not operating

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.500 cm
Package 1 Width	4.000 cm
Package 1 Length	4.500 cm
Package 1 Weight	70.000 g
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	3.000 cm
Package 2 Width	10.000 cm
Package 2 Length	22.500 cm
Package 2 Weight	748.000 g
Unit Type of Package 3	S01
Number of Units in Package 3	40
Package 3 Height	15.000 cm
Package 3 Width	15.000 cm
Package 3 Length	40.000 cm

Package 3 Weight	3.125 kg

Contractual warranty

Warranty	18 months

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Total lifecycle Carbon footprint	28

Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
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 www.P65Warnings.ca.gov

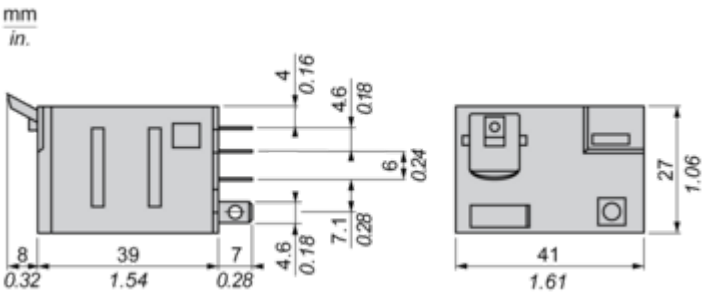
Use Again

Repack and remanufacture

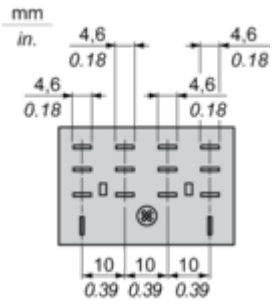
End of life manual availability	No need of specific recycling operations
Take-back	No

Dimensions Drawings

Dimensions

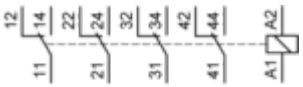


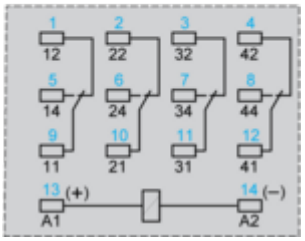
Pin Side View



Connections and Schema

Wiring Diagram



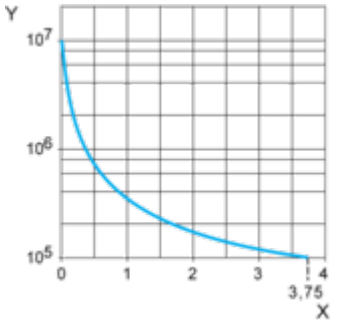


Symbols shown in blue correspond to Nema marking.

Performance Curves

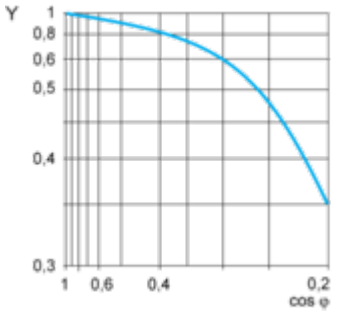
Electrical Durability of Contacts

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



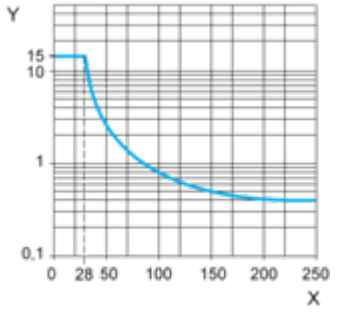
X Switching capacity (kVA)
Y Durability (Number of operating cycles)

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.

Technical Illustration

Dimensions

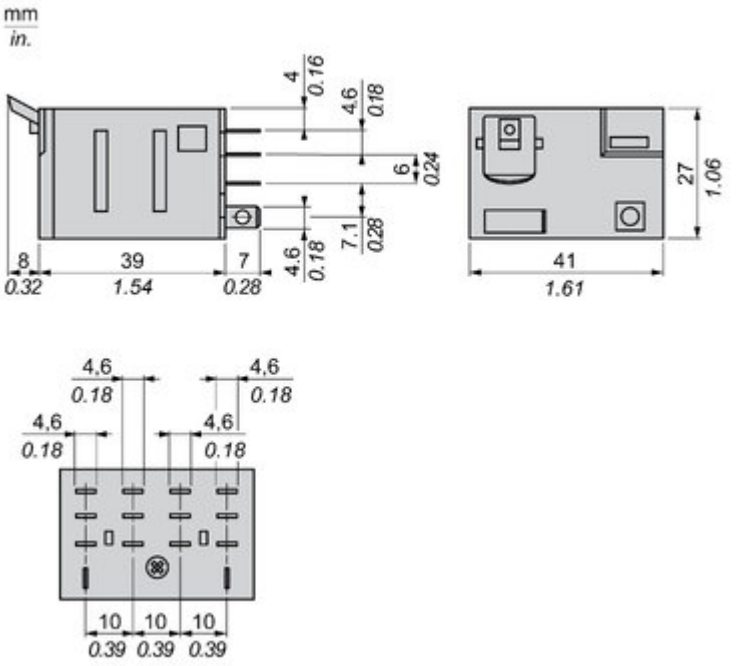
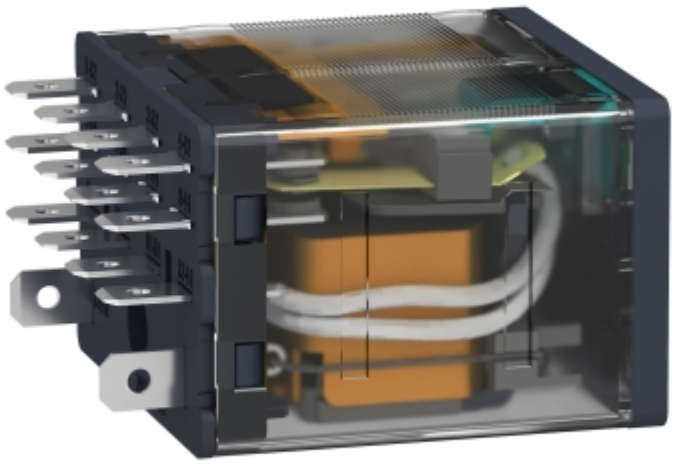


Image of product / Alternate images

Alternative

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7-34
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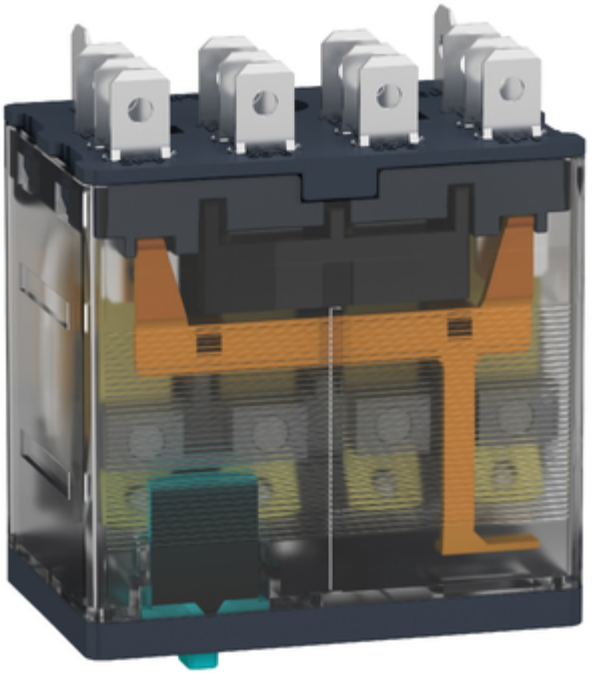
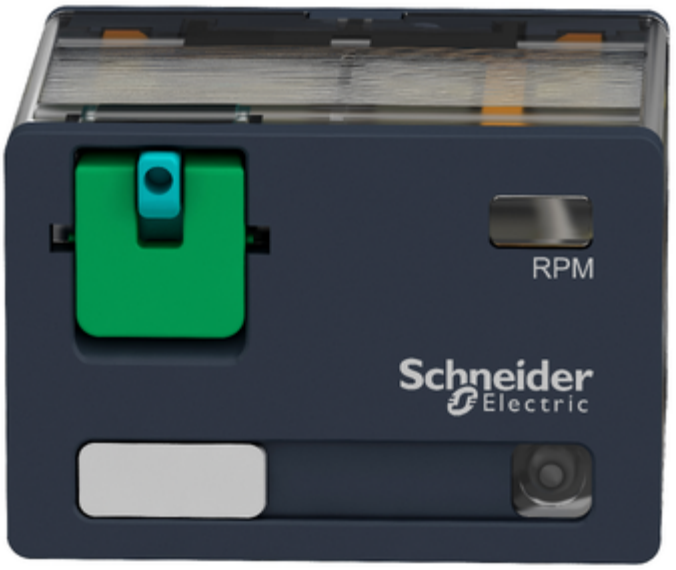
9-11
10-21
11-31
12-41
14-A2
NEMA-IEC




RPM
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