Product data sheet

Specifications

plug-in relay, Harmony electromechanical relays, 15A, 2CO, with LED, 24V AC

RPM23B7

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	2 C/O
[Uc] Control Circuit Voltage	24 V AC 50/60 Hz
[Ithe] Conventional Enclosed Thermal Current	15 A -40…131 °F (-40…55 °C)
Status Led	With
Control Type	Without 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	1.1 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	177 Ohm 68 °F (20 °C) +/- 15 %
Rated Operational Voltage Limits	19.2...26.4 V AC
Protection Category	RT I
Test Levels	Level A group mounting
Operating Position	Any position
Pollution Degree	3
Safety Reliability Data	B10d = 100000
Width	0.83 in (21 mm)
Height	1.06 in (27 mm)
Depth	1.54 in (39 mm)
Net Weight	0.08 lb(US) (0.036 kg)
Device Presentation	Complete product

Environment

Dielectric Strength	1500 V AC between contacts micro disconnection 2000 V AC between coil and contact reinforced 2000 V AC between poles basic
Standards	CSA C22.2 No 14 UL 508 EN/IEC 61810-1
Product Certifications	EAC CSA UL
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 gnin operation 30 gnnot operating

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	0.87 in (2.2 cm)
Package 1 Width	1.10 in (2.8 cm)
Package 1 Length	1.89 in (4.8 cm)
Package 1 Weight	1.31 oz (37 g)
Unit Type Of Package 2	BB1
Number Of Units In Package 2	10
Package 2 Height	1.34 in (3.4 cm)
Package 2 Width	4.09 in (10.4 cm)
Package 2 Length	4.92 in (12.5 cm)

Package 2 Weight	14.18 oz (402 g)
Unit Type Of Package 3	S01
Number Of Units In Package 3	120
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	11.22 lb(US) (5.088 kg)

Contractual warranty

Warranty	18 months

Sustainability

Green Premium^{TM} label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency

RoHS/REACh

Well-being performance

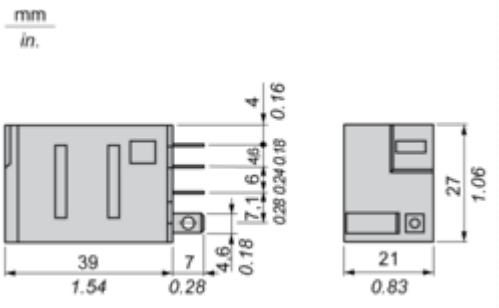
Reach Free Of Svhc	
Rohs Exemption Information	Yes

Certifications & Standards

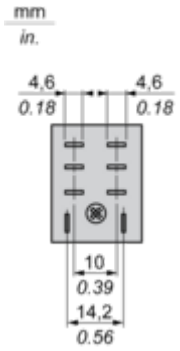
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	No need of specific recycling operations

Dimensions Drawings

Dimensions

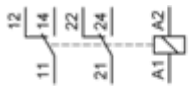


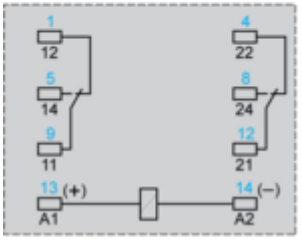
Pin Side View



Connections and Schema

Wiring Diagram



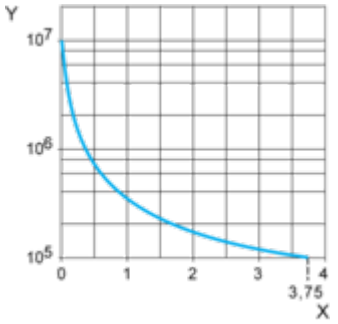


Symbols shown in blue correspond to Nema marking.

Performance Curves

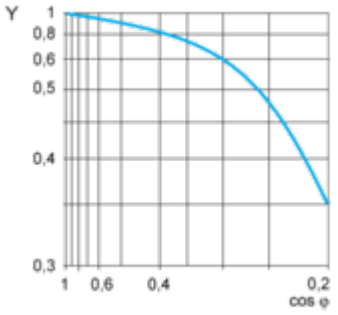
Electrical Durability of Contacts

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



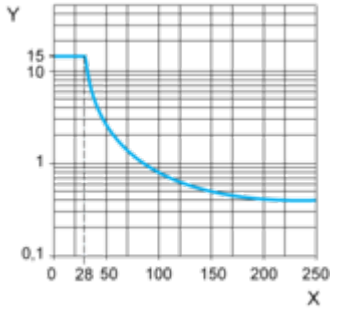
X Switching capacity (kVA)
Y Durability (Number of operating cycles)

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.