Product data sheet

Specifications

Harmony, Power plug-in relay, 15 A, 1 CO, with LED, with lockable test button, 24 V DC

RPM12BD

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	1 C/O
[Uc] control circuit voltage	24 V DC
[Ithe] conventional enclosed thermal current	15 A at -40…55 °C
Status LED	With
Control type	Lockable test button
Utilisation coefficient	20 %

Complementary

Shape of pin	Flat
[Ui] rated insulation voltage	250 V conforming to IEC 300 V conforming to CSA 300 V conforming to UL
[Uimp] rated impulse withstand voltage	4 kV during 1.2/50 µs
Contacts material	AgNi
[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
Maximum switching voltage	250 V conforming to IEC
Resistive load current	15 A at 250 V AC 15 A at 28 V DC
Maximum switching capacity	3750 VA 420 W
Minimum switching capacity	170 mW at 10 mA, 17 V
Operating rate	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load
Mechanical durability	10000000 cycles
Electrical durability	100000 cycles for resistive load

Disclaimer: 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

Average coil consumption	1.1 W
Drop-out voltage threshold	>= 0.1 Uc DC
Operate time	20 ms at nominal voltage
Release time	20 ms at nominal voltage
Average coil resistance	450 Ohm at 20 °C +/- 10 %
Rated operational voltage limits	19.2...26.4 V DC
Protection category	RT I
Test levels	Level A group mounting
Operating position	Any position
Pollution degree	3
Safety reliability data	B10d = 100000
Product weight	0.026 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
Standards	EN/IEC 61810-1 UL 508 CSA C22.2 No 14
Product certifications	CSA EAC UL
Ambient air temperature for storage	-40…85 °C
Ambient air temperature for operation	-40…55 °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
Degree of protection (Housing only)	IP40 conforming to EN/IEC 60529
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 Weight	0.025 kg
Package 1 Height	1.39 cm
Package 1 width	2.72 cm
Package 1 Length	4.69 cm
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Weight	0.281 kg
Package 2 Height	2.8 cm
Package 2 width	9.1 cm
Package 2 Length	11.5 cm
Unit Type of Package 3	S02
Number of Units in Package 3	360

Package 3 Weight	10.4 kg
Package 3 Height	15 cm
Package 3 width	30 cm
Package 3 Length	40 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
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
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

Contractual warranty

Warranty	18 months

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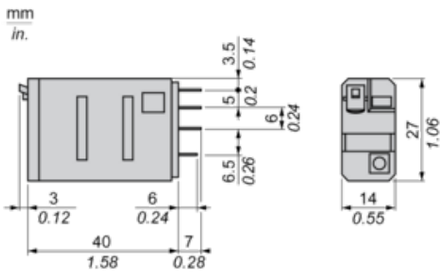
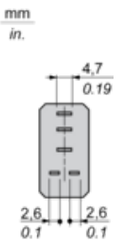
Dimensions Drawings

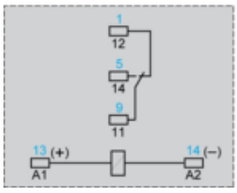
Dimensions



Pin Side View



Wiring Diagram

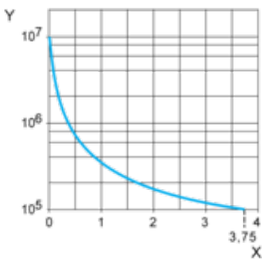


Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

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

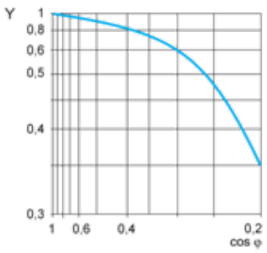
Resistive AC load



X Switching capacity (kVA)

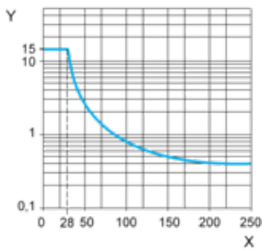
Y Durability (Number of operating cycles)

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.