## Product data sheet Characteristics

# RPM12BD

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





#### Main

Wall	
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 -4055 °C
Status LED	With
Control type	Lockable test button
Utilisation coefficient	20 %

#### Complementary

RPM 🔮		
A = !		
Aain Range of product	Harmony Electromechanical Relays	
Series name	Power	
	Plug-in relay	
Product or component type	RPM	
Device short name		
Contacts type and composition	1 C/O	
Uc] control circuit voltage	24 V DC	
Ithe] conventional enclosed thermal current	15 A at -4055 °C	
Status LED	With	
Control type	Lockable test button	
Jtilisation 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	
le] 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	1000000 cycles
Electrical durability	100000 cycles for resistive load
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	19.226.4 V DC
Protection category	RT I
Test levels	Level A group mounting
Operating position	Any position
Pollution degree	3
Safety reliability data	B10d = 100000
Net 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	-4085 °C	
Ambient air temperature for operation	-4055 °C	
Vibration resistance	3 gn, amplitude = +/- 1 mm (f = 10150 Hz)5 cycles in operation 5 gn, amplitude = +/- 1 mm (f = 10150 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

Package 1 Weight	0.025 kg	
Package 1 Height	0.470 dm	
Package 1 width	0.140 dm	
Package 1 Length	0.280 dm	

### 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	

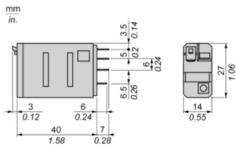
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
California proposition 65	WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Di-isodecyl 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

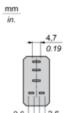
Warranty

Product data sheet Dimensions Drawings

#### Dimensions





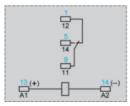


2,6 0.1 0.1



### Wiring Diagram

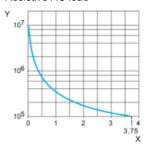




Symbols shown in blue correspond to Nema marking.

## Electrical Durability of Contacts

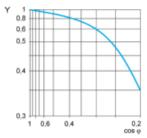
Durability (inductive load) = durability (resistive load) x reduction coefficient. Resistive AC load



X Switching capacity (kVA)

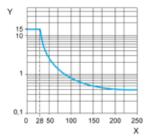
Y Durability (Number of operating cycles)

Reduction coefficient for inductive AC load (depending on power factor  $\cos \phi$ )



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.