

universal plug in relay, Harmony Electromechanical Relays, 10A, 3CO, with LED, lockable test button, flat, 24V DC

RUMF32BD

## Main

Range of product	Harmony Electromechanical Relays	
Series name	RUM series	
Product or component type	Plug-in relay	
Relay type	Universal relay	
Contacts type and composition	3 C/O	
status LED	With	
Control type	Lockable test button	
[Uc] control circuit voltage	24 V DC	
[Ithe] conventional enclosed thermal current	10 A at -4055 °C	

#### Complementary

Complementary		
[Uimp] rated impulse withstand 4 kV (1.2/50 µs) voltage		
Minimum switching capacity	170 mW at 10 mA, 17 V	
Electrical durability	100000 cycles for resistive load	
Operating time	20 ms at nominal voltage	
Rated operational voltage limits	19.226.4 V DC	
[Ui] rated insulation voltage	250 V conforming to IEC 300 V conforming to CSA 300 V conforming to UL	
Reset time	20 ms at nominal voltage	
Maximum switching voltage	250 V conforming to IEC	
Drop-out voltage threshold	>= 0.1 Uc DC	
[le] rated operational current	10 A at 277 V AC conforming to UL 10 A at 30 V DC conforming to UL 10 A at 277 V AC (same polarity) conforming to CSA 10 A at 30 V DC conforming to CSA 5 A at 250 V AC (NC) conforming to IEC 5 A at 28 V DC (NC) conforming to IEC 10 A at 250 V AC (NO) conforming to IEC 10 A at 28 V DC (NO) conforming to IEC	
Average resistance	470 Ohm at 20 °C +/- 15 %	
Maximum switching capacity	2500 VA/280 W	
Mechanical durability	5000000 cycles	
Safety reliability data	B10d = 100000	
Operating rate	<= 18000 cycles/hour no-load <= 1200 cycles/hour under load	

Utilisation coefficient	20 %
Compatibility code	RUM
Dielectric strength	1500 V AC between contacts with micro disconnection 2500 V AC between coil and contact with reinforced 2000 V AC between poles with basic
Protection category	RTI
Pollution degree	3
Operating position	Any position
Test levels	Level A group mounting
Device presentation	Complete product
Contacts material	AgNi
Shape of pin	Flat
Product weight	0.086 kg

# **Environment**

Ambient air temperature for operation	-4055 °C
IP degree of protection	IP40
Standards	CSA C22.2 No 14 UL 508 IEC 61810-1
Product certifications	UL EAC CSA
Ambient air temperature for storage	-4085 °C
Vibration resistance	3 gn, amplitude = +/- 1 mm (f = 10150 Hz)5 cycles in operation 4 gn, amplitude = +/- 1 mm (f = 10150 Hz)5 cycles not operating
Shock resistance	10 gn (duration = 11 ms) for in operation conforming to IEC 60068-2-27 10 gn (duration = 11 ms) for not operating conforming to IEC 60068-2-27

# **Packing Units**

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.500 cm
Package 1 Width	6.900 cm
Package 1 Length	3.600 cm
Package 1 Weight	84.000 g
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	4.000 cm
Package 2 Width	13.200 cm
Package 2 Length	19.800 cm
Package 2 Weight	906.000 g
Unit Type of Package 3	S02
Number of Units in Package 3	60
Package 3 Height	15.000 cm

Package 3 Width	30.000 cm
Package 3 Length	40.000 cm
Package 3 Weight	6.055 kg



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 >

<b>⊘</b> Environmental footprint		
Total lifecycle Carbon footprint	18	

#### 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**

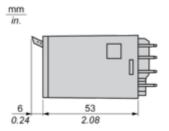
○ Repack and remanufacture	
End of life manual availability	No need of specific recycling operations
Take-back	No

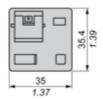
# Product data sheet

# **RUMF32BD**

# **Dimensions Drawings**

## **Dimensions**





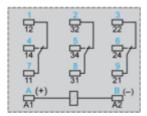
# **Product data sheet**

## **RUMF32BD**

Connections and Schema

Wiring Diagram

## Wiring Diagram



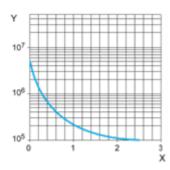
Symbols shown in blue correspond to Nema marking.

### **RUMF32BD**

#### Performance Curves

#### **Electrical Durability of Contacts**

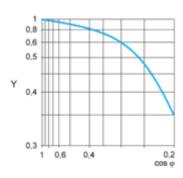
Durability (inductive load) = durability (resistive load) x reduction coefficient. Resistive AC load



X Switching capacity (kVA)

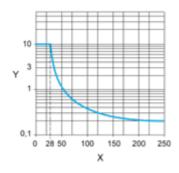
Y Durability (Number of operating cycles)

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



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



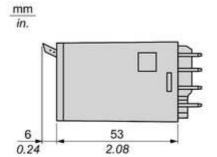
X Voltage DC
Y Current DC

Note: These are typical curves, actual durability depends on load, environment, duty cycle, etc.

# **RUMF32BD**

**Technical Illustration** 

## **Dimensions**



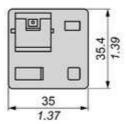


Image of product in real life situation

