

# RUMC32FD

universal plug in relay, Harmony  
Electromechanical Relays, 10A, 3CO, with  
LED, lockable test but to n, 110V DC



## Main

Range of Product	Harmony Electromechanical Relays
Series name	Universal
Product or Component Type	Plug-in relay
Device short name	RUM
Contacts type and composition	3 C/O
[Uc] control circuit voltage	110 V DC
[Ithe] conventional enclosed thermal current	10 A -40...131 °F (-40...55 °C)
Status LED	With
Control Type	Lockable test button
Utilisation coefficient	20 %

## Complementary

Shape of pin	Cylindrical
[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	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
Maximum switching voltage	250 V IEC
Resistive rated load	10 A 250 V AC 10 A 28 V DC
Maximum switching capacity	2500 VA/280 W
Minimum switching capacity	170 mW 10 mA, 17 V
Operating rate	<= 18000 cycles/hour no-load <= 1200 cycles/hour under load
Mechanical durability	5000000 cycles
Electrical durability	100000 cycles resistive
Average coil consumption in W	1.4 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	7300 Ohm 20 °C +/- 15 %
Rated operational voltage limits	88...121 V DC
Protection category	RT I
Test levels	Level A group mounting
Safety reliability data	B10d = 100000

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Operating position	Any position
Net Weight	0.190 lb(US) (0.086 kg)
Device presentation	Complete product

## Environment

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
Product Certifications	UL[RETURN]EAC[RETURN]CSA
Standards	CSA C22.2 No 14 UL 508 IEC 61810-1
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 4 gn +/- 1 mm 10...150 Hz)5 cycles not operating
IP degree of protection	IP40
Shock resistance	10 gn 11 ms) in operation IEC 60068-2-27 10 gn 11 ms) not operating IEC 60068-2-27
Pollution degree	2

## Ordering and shipping details

Category	US10CP221127
Discount Schedule	OCP2
GTIN	3606480626975
Returnability	No
Country of origin	CN

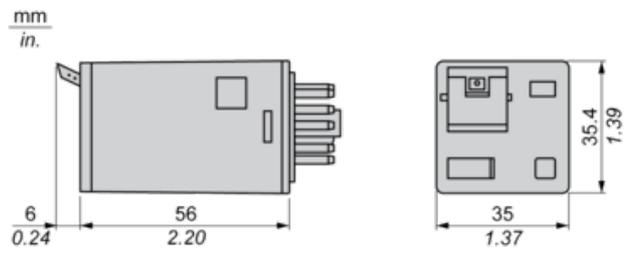
## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.5 in (3.7 cm)
Package 1 Width	1.5 in (3.8 cm)
Package 1 Length	2.8 in (7.2 cm)
Package 1 Weight	3.4 oz (95.0 g)
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	1.6 in (4.0 cm)
Package 2 Width	5.7 in (14.6 cm)
Package 2 Length	7.8 in (19.8 cm)
Package 2 Weight	34.4 oz (975.0 g)
Unit Type of Package 3	S02
Number of Units in Package 3	60
Package 3 Height	5.9 in (15.0 cm)
Package 3 Width	11.8 in (30.0 cm)
Package 3 Length	15.7 in (40.0 cm)
Package 3 Weight	13.85 lb(US) (6.28 kg)

## Offer Sustainability

Sustainable offer status	Green Premium product
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	No need of specific recycling operations

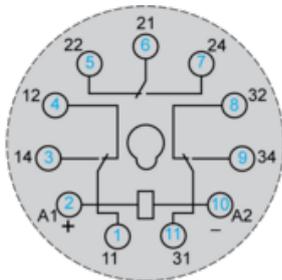
Dimensions



## Wiring Diagram



## Wiring Diagram

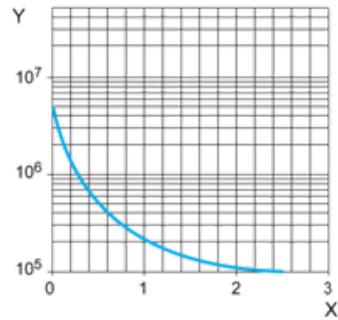


Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

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

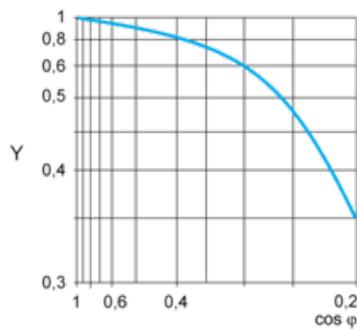
Resistive AC load



X Switching capacity (kVA)

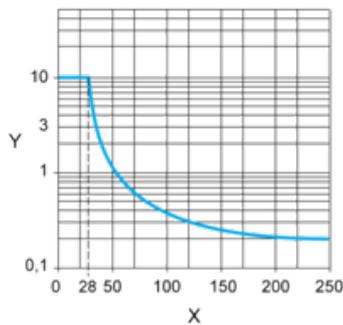
Y Durability (Number of operating cycles)

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.