

# Product datasheet

Specifications



## universal plug-in relay - Harmony RUM - 3 C/O - 110 V DC - 10 A - with LED

Local distributor code:  
403005314

RUMF33FD

⚠ Discontinued on: 9 Feb 2023

⚠ Discontinued

EAN Code: 3606480627576

## 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	Without lockable test button
[Uc] control circuit voltage	110 V DC
[Ithe] conventional enclosed thermal current	10 A at -40...55 °C

## Complementary

[Uimp] rated impulse withstand voltage	4 kV (1.2/50 μs)
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	88...121 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	$\geq 0.1 U_c$ DC
[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
Average resistance	7300 Ohm at 20 °C +/- 15 %
Maximum switching capacity	2500 VA/280 W
Mechanical durability	5000000 cycles
Safety reliability data	B10d = 100000

<b>Operating rate</b>	<= 18000 cycles/hour no-load <= 1200 cycles/hour under load
<b>Utilisation coefficient</b>	20 %
<b>Compatibility code</b>	RUM
<b>Dielectric strength</b>	1500 V AC between contacts with micro disconnection 2500 V AC between coil and contact with reinforced 2000 V AC between poles with basic
<b>Protection category</b>	RT I
<b>Pollution degree</b>	3
<b>Operating position</b>	Any position
<b>Test levels</b>	Level A group mounting
<b>Device presentation</b>	Complete product
<b>Contacts material</b>	AgNi
<b>Shape of pin</b>	Flat
<b>Product weight</b>	0.086 kg
<b>Average coil consumption</b>	1.4 W
<b>Load current</b>	10 A at 250 V AC 10 A at 28 V DC

## Environment

<b>Ambient air temperature for operation</b>	-40...55 °C
<b>IP degree of protection</b>	IP40
<b>Standards</b>	IEC 61810-1 CSA C22.2 No 14 UL 508
<b>Product certifications</b>	CSA EAC UL
<b>Ambient air temperature for storage</b>	-40...85 °C
<b>Vibration resistance</b>	3 gn, amplitude = +/- 1 mm (f = 10...150 Hz)5 cycles in operation 4 gn, amplitude = +/- 1 mm (f = 10...150 Hz)5 cycles not operating
<b>Shock resistance</b>	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

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	6.05 cm
<b>Package 1 Width</b>	3.55 cm
<b>Package 1 Length</b>	3.5 cm
<b>Package 1 Weight</b>	89.0 g
<b>Unit Type of Package 2</b>	BB1
<b>Number of Units in Package 2</b>	10
<b>Package 2 Height</b>	4.0 cm
<b>Package 2 Width</b>	13.2 cm
<b>Package 2 Length</b>	20.0 cm

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Package 2 Weight	904.0 g
Unit Type of Package 3	S02
Number of Units in Package 3	60
Package 3 Height	15.0 cm
Package 3 Width	30.0 cm
Package 3 Length	40.0 cm
Package 3 Weight	5.923 kg

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## Logistical informations

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Country of origin	CN
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## Contractual warranty

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Warranty (in months)	18
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## Environmental Data

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 >](#)



### Environmental footprint

Total lifecycle Carbon footprint	24 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	4 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	19 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.2 kg CO2 eq.

## Use Better



### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	<a href="#">Compliant</a>
REACH Regulation	<a href="#">Free of Substances of Very High Concern above the threshold</a>

## Use Longer



### Lifetime extension

Repair	No
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## Use Again



### Repack and remanufacture

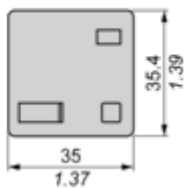
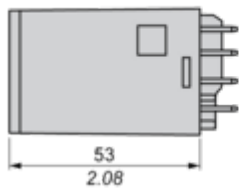
Recyclability potential, in %	58
End of life manual availability	No need of specific recycling operations
Take-back	No

Dimensions Drawings

Dimensions

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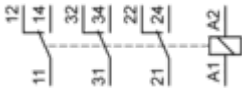
mm  
in.



Connections and Schema

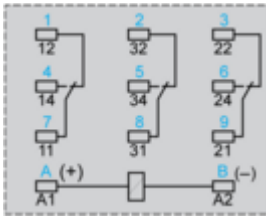
Wiring Diagram

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Wiring Diagram

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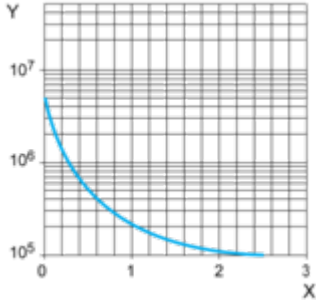
Symbols shown in blue correspond to Nema marking.

Performance Curves

**Electrical Durability of Contacts**

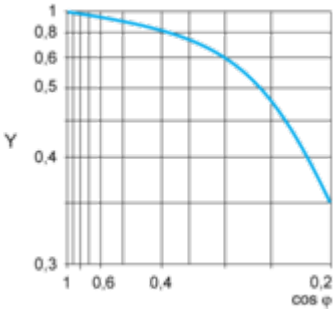
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**Durability (inductive load) = durability (resistive load) x reduction coefficient.**  
 Resistive AC load

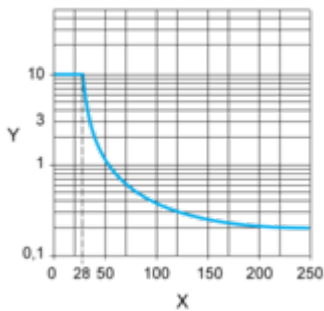


X Switching capacity (kVA)  
 Y Durability (Number of operating cycles)

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.

Technical Illustration

Dimensions

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mm  
in.

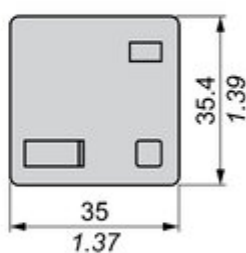
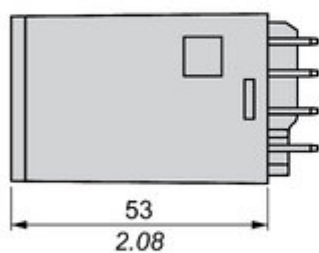


Image of product in real life situation

