Product data sheet

Specifications

universal plug in relay, Harmony Electromechanical Relays, 10A, 3CO, with LED, lockable test button, flat, 120V AC

RUMF32F7

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	120 V AC 50/60 Hz
[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
Average coil consumption in VA	3 at 60 Hz
Operating time	20 ms at nominal voltage
Rated operational voltage limits	96...132 V AC
[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	>= 0.15 Uc AC
[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	1700 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	RT I
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	-40…55 °C
IP degree of protection	IP40
Standards	CSA C22.2 No 14 UL 508 IEC 61810-1
Product certifications	CSA UL EAC
Ambient air temperature for storage	-40…85 °C
Vibration resistance	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
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	3.6 cm
Package 1 Width	3.5 cm
Package 1 Length	6.9 cm
Package 1 Weight	85.0 g

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	34

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

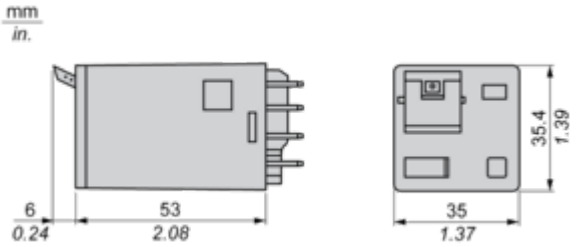
Use Again

Repack and remanufacture

End of life manual availability	No need of specific recycling operations
Take-back	No

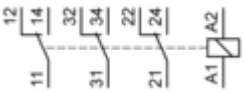
Dimensions Drawings

Dimensions

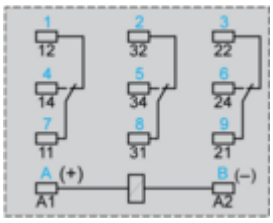


Connections and Schema

Wiring Diagram



Wiring Diagram

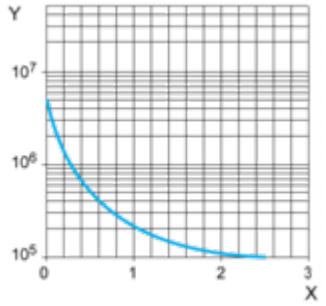


Symbols shown in blue correspond to Nema marking.

Performance Curves

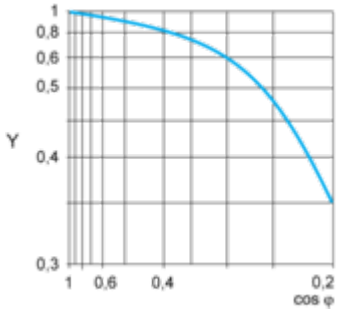
Electrical Durability of Contacts

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



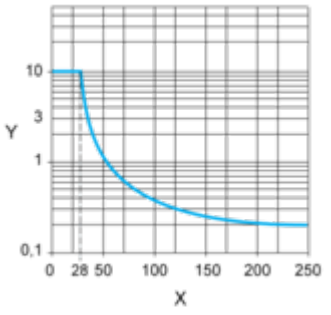
X Switching capacity (kVA)
Y Durability (Number of operating cycles)

Reduction coefficient for inductive AC load (depending on power factor cos 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

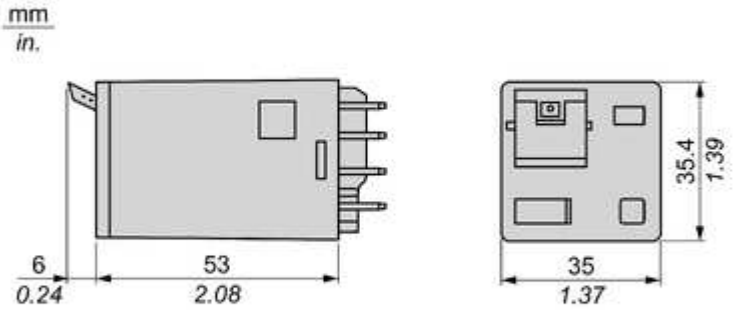


Image of product in real life situation