Product datasheet

Specifications

Green Premium™

Universal plug in relay, Harmony, 10A, 3CO, lockable test button, flat (faston) terminals, 120V AC

RUMF31F7

Discontinued on: 1 Nov 2020

Discontinued

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	120 V AC 50/60 Hz
[Ithe] Conventional Enclosed Thermal Current	10 A at -40…55 °C
Status Led	Without
Control Type	Lockable test button
Utilisation 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 (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 conforming to IEC
Resistive Rated Load	10 A at 250 V AC 10 A at 28 V DC
Maximum Switching Capacity	2500 VA/280 W
Minimum Switching Capacity	170 mW at 10 mA, 17 V
Operating Rate	<= 18000 cycles/hour no-load <= 1200 cycles/hour under load
Mechanical Durability	5000000 cycles
Electrical Durability	100000 cycles for resistive load

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Average Coil Consumption In Va	3 at 60 Hz
Drop-Out Voltage Threshold	>= 0.15 Uc AC
Operate Time	20 ms at nominal voltage
Release Time	20 ms at nominal voltage
Average Coil Resistance	1700 Ohm at 20 °C +/- 15 %
Rated Operational Voltage Limits	96...132 V AC
Protection Category	RT I
Test Levels	Level A group mounting
Safety Reliability Data	B10d = 100000
Operating Position	Any position
Net Weight	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	CSA UL EAC
Standards	EN/IEC 61810-1 CSA C22.2 No 14 UL 508
Ambient Air Temperature For Storage	-40…85 °C
Ambient Air Temperature For Operation	-40…55 °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
Ip Degree Of Protection	IP40
Shock Resistance	10 gn (duration = 11 ms) for in operation conforming to EN/IEC 60068-2-27 10 gn (duration = 11 ms) for not operating conforming to EN/IEC 60068-2-27
Pollution Degree	3

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	3.7 cm
Package 1 Width	3.8 cm
Package 1 Length	7.2 cm
Package 1 Weight	92.0 g
Unit Type Of Package 2	BB1
Number Of Units In Package 2	10
Package 2 Height	4.0 cm
Package 2 Width	13.2 cm
Package 2 Length	19.8 cm
Package 2 Weight	913.0 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	5.933 kg

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency RoHS/REACh

Well-being performance

Reach Free Of Svhc

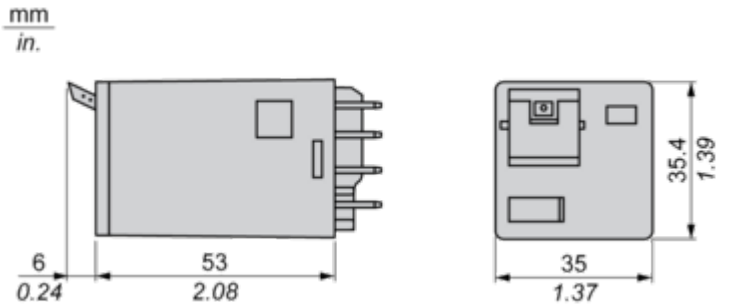
Rohs Exemption Information	Yes

Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	No need of specific recycling operations

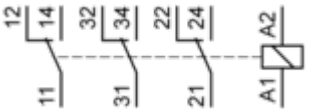
Dimensions Drawings

Dimensions

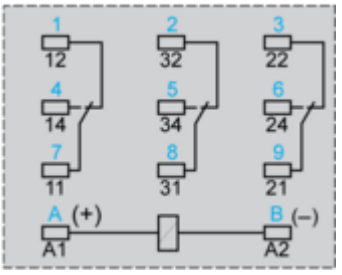


Connections and Schema

Wiring Diagram



Wiring Diagram

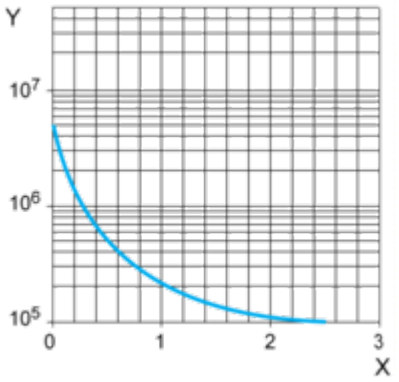


Symbols shown in blue correspond to Nema marking.

Performance Curves

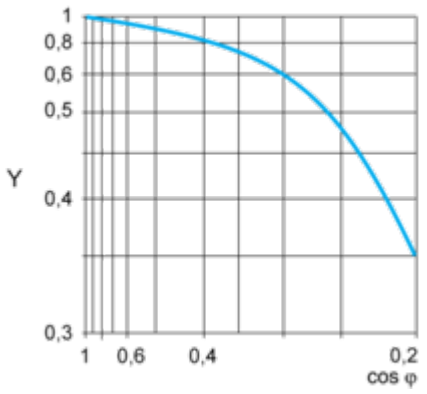
Electrical Durability of Contacts

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



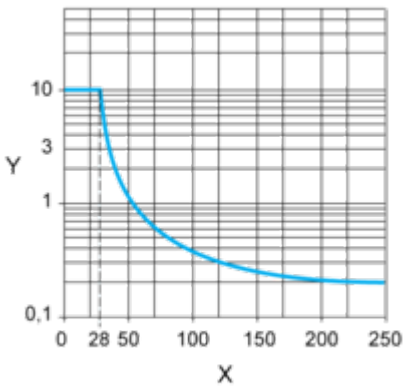
X Switching capacity (kVA)
Y Durability (Number of operating cycles)

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.