

# RUMF31FD

universal plug-in relay - Zelio RUM - 3 C/O - 110 V  
DC - 10 A



## Main

Range of product	Zelio Relay
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 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 UL 300 V conforming to CSA
[Uimp] rated impulse withstand voltage	4 kV (1.2/50 µs)
Contacts material	AgNi
[Ie] rated operational current	10 A at 28 V DC (NO) conforming to IEC 10 A at 250 V AC (NO) conforming to IEC 5 A at 28 V DC (NC) conforming to IEC 5 A at 250 V AC (NC) conforming to IEC 10 A at 30 V DC conforming to UL 10 A at 277 V AC conforming to UL 10 A at 30 V DC conforming to CSA 10 A at 277 V AC (same polarity) conforming to CSA
Maximum switching voltage	250 V conforming to IEC
Load current	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
Average coil consumption	1.4 W
Drop-out voltage threshold	>= 0.1 U <sub>c</sub> DC
Operating time	20 ms at nominal voltage
Reset time	20 ms at nominal voltage
Average resistance	7300 Ohm at 20 °C +/- 15 %
Rated operational voltage limits	88...121 V DC
Protection category	RT I
Safety reliability data	B10d = 100000
Operating position	Any position
Product weight	0.086 kg
Device presentation	Complete product

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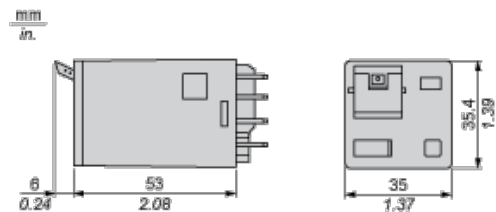
## Environment

dielectric strength	2000 V AC between poles with basic insulation 1500 V AC between contacts with micro disconnection insulation 2500 V AC between coil and contact with reinforced insulation
product certifications	CSA RoHS UL REACH EAC
standards	EN/IEC 61810-1 UL 508 CSA C22.2 No 14
ambient air temperature for storage	-40...85 °C
ambient air temperature for operation	-40...55 °C
vibration resistance	3 gn (f = 10...150 Hz), amplitude +/- 1 mm (on 5 cycles in operation) 4 gn (f = 10...150 Hz), amplitude +/- 1 mm (on 5 cycles not operating)
IP degree of protection	IP40
shock resistance	10 gn for 11 ms in operation conforming to EN/IEC 60068-2-27 10 gn for 11 ms not operating conforming to EN/IEC 60068-2-27
pollution degree	3

## Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1430 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Need no specific recycling operations

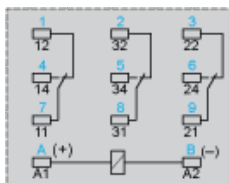
## Dimensions



## 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.

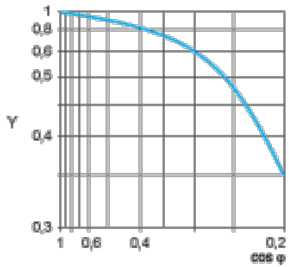
Resistive AC load



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.