# Product data sheet Characteristics

# RUMF31JD universal plug-in relay - Zelio RUM - 3 C/O - 12 V DC - 10 A





#### Product availability: Non-Stock - Not normally stocked in distribution facility

Main	
Range of product	Zelio Relay
Series name	Universal
Product or component type	Plug-in relay
Device short name	RUM
Contacts type and com- position	3 C/O
[Uc] control circuit volt- age	12 V DC
[Ithe] conventional en- closed thermal current	10 A at -40131 °F (-4055 °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
[le] 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
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 resistive load
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	120 Ohm at 20 °C +/- 15 %
Rated operational voltage limits	9.613.2 V DC
Protection category	RTI
Test levels	Level A group mounting
Safety reliability data	B10d = 100000
Operating position	Any position



Product weight	0.19 lb(US) (0.086 kg)
Device presentation	Complete product

#### 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	REACH
	EAC
	RoHS
	CSA
	UL
Standards	CSA C22.2 No 14
	UL 508
	EN/IEC 61810-1
Ambient air temperature for storage	-40185 °F (-4085 °C)
Ambient air temperature for operation	-40131 °F (-4055 °C)
Vibration resistance	3 gn (f = 10150 Hz), amplitude +/- 1 mm (on 5 cycles in operation)
	4 gn (f = 10150 Hz), amplitude +/- 1 mm (on 5 cycles not operating)
IP degree of protection	IP40
Pollution degree	3
Shock resistance	10 gn 11 ms in operation conforming to EN/IEC 60068-2-27
	10 gn 11 ms not operating conforming to EN/IEC 60068-2-27

# Ordering and shipping details

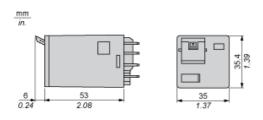
Category	21127 - ZELIO ICE CUBE RELAYS
Discount Schedule	CP2
GTIN	00785901990550
Nbr. of units in pkg.	10
Package weight(Lbs)	2
Returnability	Ν
Country of origin	CN

# 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
California proposition 65	WARNING: This product can expose you to chemicals including:
Substance 1	Nickel compounds, which is known to the State of California to cause cancer, and
Substance 2	Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm.
More information	For more information go to www.p65warnings.ca.gov

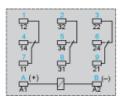
Product data sheet Dimensions Drawings RUMF31JD

### Dimensions



# Wiring Diagram

# Wiring Diagram



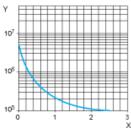
Symbols shown in blue correspond to Nema marking.

RUMF31JD

#### **Electrical Durability of Contacts**

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

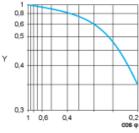
#### Resistive AC load



Switching capacity (kVA)

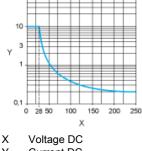
X Y Durability (Number of operating cycles)

Reduction coefficient for inductive AC load (depending on power factor  $\cos \phi$ )



Reduction coefficient (A) Y

Maximum switching capacity on resistive DC load



Y Current DC

Note : These are typical curves, actual durability depends on load, environment, duty cycle, etc.

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Schneider Electric: RUMF31JD