Product data sheet Characteristics

RUMF21JD

universal plug-in relay - Zelio RUM - 2 C/O - 12 V DC - 10 A





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	2 C/O
[Uc] control circuit voltage	12 V DC
[Ithe] conventional enclosed thermal current	10 A at -4055 °C
Status LED	Without
Control type	Lockable test button
Utilisation coefficient	20 %

Complementary

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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
[le] rated operational current	10 A at 277 V AC conforming to UL
	10 A at 30 V DC conforming to UL
	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
	10 A at 277 V AC 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 for 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

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	CSA C22.2 No 14
	EN/IEC 61810-1
	UL 508
Ambient air temperature for storage	-4085 °C
Ambient air temperature for operation	-4055 °C
Vibration resistance	3 gn, amplitude = +/- 1 mm (f = 10150 Hz)5 cycles in operation
	4 gn, amplitude = +/- 1 mm (f = 10150 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

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Unit Type of Package 1	PCE
Package 1 Length	7.2 cm
Number of Units in Package 1	1
Package 3 Width	30.0 cm
Package 3 Weight	5.788 kg
Package 2 Width	13.2 cm
Package 2 Height	4.0 cm
Package 2 Weight	860.0 g
Number of Units in Package 3	60
Unit Type of Package 3	S02
Package 3 Height	15.0 cm
Package 3 Length	40.0 cm
Package 1 Width	3.8 cm
Package 1 Height	3.7 cm
Package 1 Weight	92.0 g
Number of Units in Package 2	10
Unit Type of Package 2	BB1
Package 2 Length	20.0 cm
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Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EVEN RoHS
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	₽¥Yes
China RoHS Regulation	☑ China RoHS Declaration
Environmental Disclosure	Product Environmental Profile

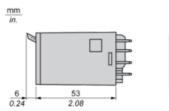
Contractual warranty

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Product data sheet Dimensions Drawings

RUMF21JD

Dimensions





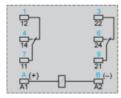
Product data sheet Connections and Schema

RUMF21JD

Wiring Diagram



Wiring Diagram



Symbols shown in blue correspond to Nema marking.

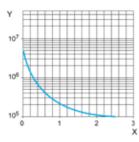
Product data sheet Performance Curves

RUMF21JD

Electrical Durability of Contacts

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

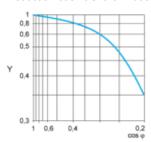
Resistive AC load



X Switching capacity (kVA)

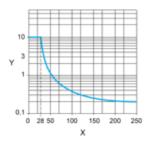
Y Durability (Number of operating cycles)

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.