Product datasheet Characteristics

RUMF31JD

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



Main

IVIAIII	
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
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 %
Current Status LED Control type	Without Lockable test button

Complementary

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	
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 consumption in W	1.4 W
Drop-out voltage threshold	>= 0.1 Uc DC
Operating time	20 ms at nominal voltage
Reset time	20 ms at nominal voltage
Average resistance	120 Ohm at 20 °C +/- 15 %
Rated operational voltage limits	9.613.2 V DC
Protection category	RTI
Safety reliability data	B10d = 100000
Operating position	Any position
Product weight	0.086 kg

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	CSA C22.2 No 14			
	UL 508			
	EN/IEC 61810-1			
Ambient air temperature for storage	-4085 °C			
Ambient air temperature for operation	-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 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			

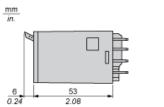
Offer Sustainability

Sustainable offer status	Green Premium product				
RoHS (date code: YYWW)	Compliant - since 1409 - Schneider Electric declaration of conformity				
	Schneider Electric declaration of conformity				
REACh	Reference not containing SVHC above the threshold				
	Reference not containing SVHC above the threshold				
Product environmental profile	Available				
	Product environmental				
Product end of life instructions	Need no specific recycling operations				

Product datasheet Dimensions Drawings

RUMF31JD

Dimensions





Product datasheet Connections and Schema

RUMF31JD

Wiring Diagram

Product datasheet Connections and Schema

RUMF31JD

1/1	'irir	~	n	~~	rol	\sim
vv		ш	ıjı	$a_{\rm CI}$	171	ш
			ш.	\sim 9		

Symbols shown in blue correspond to Nema marking.

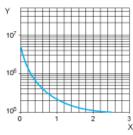
Product datasheet Performance Curves

RUMF31JD

Electrical Durability of Contacts

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

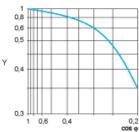
Resistive AC load



X Switching capacity (kVA)

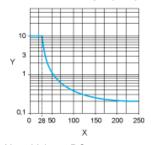
Y Durability (Number of operating cycles)

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



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



X Voltage DC

Current DC

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