# **RUMC31BD**

universal plug-in relay - Zelio RUM - 3 C/O - 24 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	24 V DC
[Ithe] conventional enclosed thermal current	10 A at -4055 °C
Status LED	Without
Control type	Lockable test button
Utilisation coefficient	20 %

#### Complementary

Shape of pin	Cylindrical	
[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 coil consumption	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	470 Ohm at 20 °C +/- 15 %	
Rated operational voltage limits	19.226.4 V DC	
Protection category	RTI	
Safety reliability data	B10d = 100000	
Operating position	Any position	
Product weight	0.086 kg	
Device presentation	Complete product	
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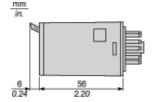
#### **Environment**

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	-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
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	2

### 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**

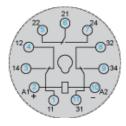




### **Wiring Diagram**



## **Wiring Diagram**



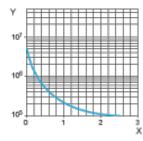
Symbols shown in blue correspond to Nema marking.

## **Electrical Durability of Contacts**

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

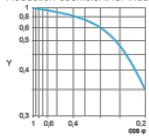
Resistive AC load





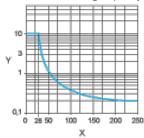
- X Switching capacity (kVA)
- Y Durability (Number of operating cycles)

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.