

RUMF31BD

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 -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 _c 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	19.2...26.4 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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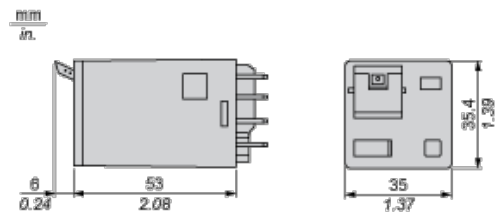
Environment

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

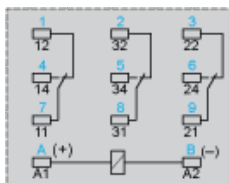
Dimensions



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.

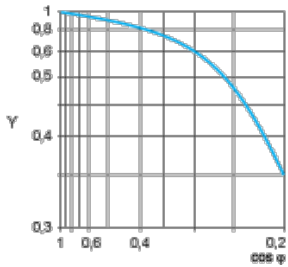
Resistive AC load



X Switching capacity (kVA)

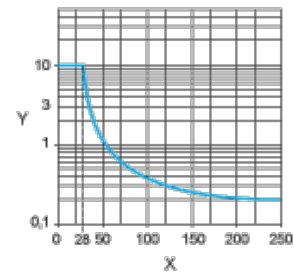
Y Durability (Number of operating cycles)

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.