



Rapid Auxiliary Relay – RARE

Catalogue

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INTRODUCTION

Rapid Auxiliary Relay - RARE was built obeying strict quality standards and designed to be installed in power transformers in power substation yards, industrial processes and machines. It meets the levels of requirements, supportability and reliability according to the IEC, DIN, IEEE and ABNT standards.

RARE has a unique system of connectors called Pluggable System, this allows the connection and disconnection with only one "Click", making it ideal for applications where it is necessary to disable and enable contacts to perform maneuvers, tests and tests of equipment.

Due to its high speed of action, redundancy of the contacts (dual) and filters to eliminate the Bounce effect, the RARE is an appropriate relay for applications that do not admit failures and delays in their operation, such as circuit protections, duplication of alarm points and activation of equipment that require high precision and reliability.

Rapid Auxiliary Relay - RARE of high operating speed (fast response), built in an ABS injected cabinet, is the most compact on the market occupying less space inside the panel and reducing the final cost of the project. Easy attachment to DIN 35mm rail, it also has the exclusive pluggable connector system.

It is the most compact line of relays of its modality. Optimizes space, generates reduction in the size of the panel where it is installed and as a result a compact design and a best cost benefit.

MAIN FEATURES

- Multipoint Feeding;
- Connectors with exclusive "Pluggable System" system;
- Rapid Response (High Operating Speed);
- Protection against polarity reversal;
- Operation Redundancy (dual contacts);
- Bounce Filter (Internal Protection of Contacts);
- 22.5 mm case, DIN Standard for 35 mm rail;
- 4 Years of Warranty;

TYPE TESTS ATTENDED

- Applied Voltage (IEC 60255-5): 2kV / 60Hz / 1 min. (Against land);
- Immunity to Electrostatic Transients (IEC 60255-22-1): 2.5kV / 1.1 MHz / 2sec / 400 surges/sec;
- Voltage Impulse (IEC 60255-5): 1.2msec. / 5kV / 3 neg. And 3 posts. / 5 sec. interval;

TECHNICAL DATA

Max Switching Capacity	2 Amps	4 Amps	10 Amps
Operating Voltage	24 Vdc	24 Vdc	24 Vdc
	48 Vdc	48 Vdc	48 Vdc
	110 Vdc	110 Vdc	110 Vdc
	125 Vdc	125 Vdc	125 Vdc
	220 Vdc	220 Vdc	220 Vdc
	110 Vac	110 Vac	110 Vac
	220 Vac	220 Vac	220 Vac
Contact Numbers	from 1 to 4 reversible	from 1 to 4 reversible	from 1 to 4 reversible
Max Switching Power	60W-VCC/125VA-VCA	120W-VCC/1000VA-VCA	240W-VCC/ 440VCA
Max Switching Voltage	200 VCC/ 250VCA	125 VCC/ 440VCA	125 VCC/ 440VCA
Conduction current Max.	2A	4A	10A
Max Consumption	4W	4W	4W
Indication of Operation (contact acted)	LED	LED	LED
Max Initial Contact Resistance	100 mOhms	100 mOhms	100 mOhms
Connections	24 a 12 AWG/ 4mm ²	24 a 12 AWG/ 4mm ²	24 a 12 AWG/ 4mm ²
Fixation	Trilho DIN 35mm	Trilho DIN 35mm	Trilho DIN 35mm
Mechanical Life - number of operations	10x10 ⁷ (min)	2x10 ⁷ (min)	2x10 ⁷ (min)
Electric Life - n° of operations	5x10 ⁵ (min)	10 ⁵ (min)	10 ⁵ (min)
Max Operating Time	2.5 mseg	7 MSEG	7 MSEG
Max operation time	1.5 mseg	4 MSEG	4 MSEG
Contact material	Golden Alloy, Ag-Pd	Silver League	Silver League
Dielectric Stiffness (coil/contact)	2.250 VCA (1min)	5.000 VCA (1min)	5.000 VCA (1min)
Dielectric Stiffness (open contacts)	2.000 VCA (1min)	1.000 VCA (1min)	1.000 VCA (1min)
Insulation Resistance	1.000 Mohms (500VCA, 25°C, 50RH)	1.000 Mohms (500VCA, 25°C, 50RH)	1.000 Mohms (500VCA, 25°C, 50RH)
Operating Temperature	(-)40°C + 85°C	(-)40°C + 85°C	(-)40°C + 85°C
Degree of Protection	IP20	IP20	IP20
Vibration Resistance	10G - 10 a 55Hz	10G - 10 a 55Hz	10G - 10 a 55Hz
Operation Limits	0.8 [~] 1.2UN (Rated voltage)	0.8 [~] 1.2UN (Rated voltage)	0.8 [~] 1.2UN (Rated voltage)

Table 1 – Technical Data

DIMENSIONS

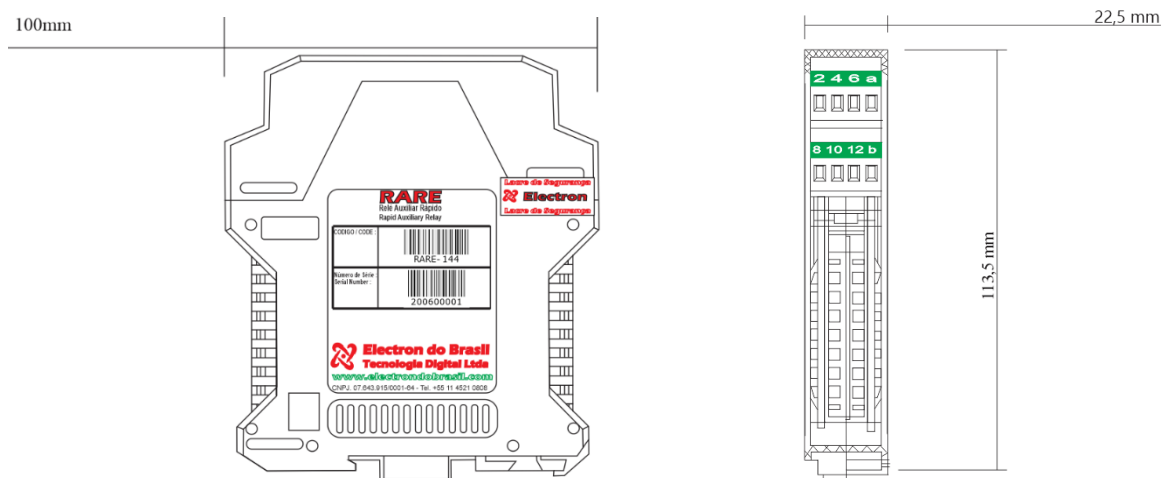


Figure 2 – Dimensions

CONNECTION DIAGRAM

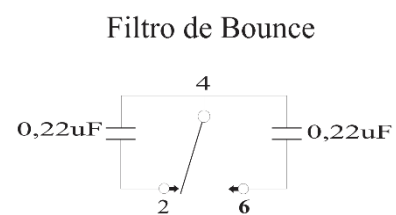
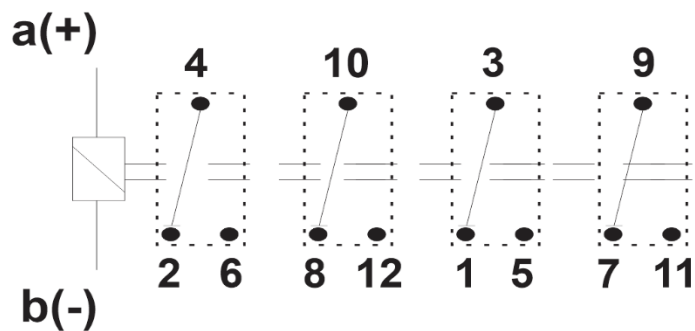


Figure 2 – Connection diagram Figure 3 – Filter de Bounce

SPECIFICATION FOR ORDER

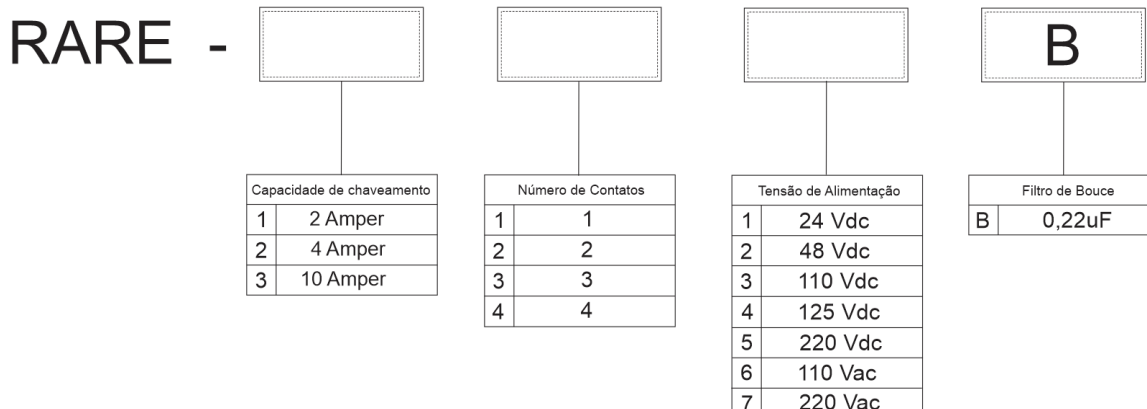


Figure 4 – Order Specification

WARRANTY TERM

The Rapid Auxiliary Relay - RARE has a warranty of 4 (four) years, or the limit of operation of the product (whichever occurs first), counted from the date of sale consigned in the invoice. It has a warranty against manufacturing defect that makes it unsuitable or unsuitable for the applications for which it is intended.

DISCLAIMER OF WARRANTY

A Warranty does not cover transportation expenses for technical assistance, freight and insurance for remittance of product .com clue of defect or want operation. No are Covered alsothe following events: Natural wear of parts by continuous use and frequentuDamage to the partexternal Caused by Falls or packaging inadequate; attempt of repair/ rapeof seal .com damage Caused by people No Authorized By Electron e in disagreement .comas Instructions What Do part of the descriptive technician.

LOSS OF WARRANTY

The product will lose its warranty when:

- The instructions for use and assembly contained in the technical description and the installation procedures contained in Standard NBR 5410 are not observed;
- Subjected to conditions outside the limits specified in the respective technical descriptions;
- Breached or repaired by a person other than Electron's technical team;
- the damage is caused by a fall or impact;
- Infiltration of water or any other liquid occurs;
- Occur overload What causes a degradation Of Components e parts of product;

USE OF WARRANTY

To take advantage of this guarantee the customer must send the product to Electron along with a copy of the purchase invoice duly packed so that there is no damage in transport. For an emergency service it is recommended to send as much information as possible regarding the defect detected. It will be analyzed and subjected to full tests of operation.

The analysis of the product and its eventual maintenance will only be carried out by the technical team of Electron do Brasil at its headquarters.

REVISION CONTROL

Revision No. 1.0 – July 2011.

- Change of format;

Revision No. 1.1 – August 2011.

- Added ANSI code;

Revision No. 1.2 – December 2019.

- Spelling, grammar and formatting review; Revision No. 2 – October 2020

- Addition of codes 6 and 7 for Supply Voltage;

- General revision of the catalogue – 31/05/2023