

# RR

## Rapid Auxiliary Relay



The function of the Rapid Auxiliary Relay - RR is to multiply a signal into several independent contacts without a substantial time delay in its transmission.

The importance of the response time may be noticed, for instance, when the relay is used in protection systems for power transformers, where a small delay in the emission of a trip signal may increase the damages caused by an internal failure.

The RR is provided with 4 reversible contacts with operation time  $< 2.5$  ms, capable of switching loads in both DC and AC.

A LED light on the RR front panel indicates when the output contacts are actuated.



RR

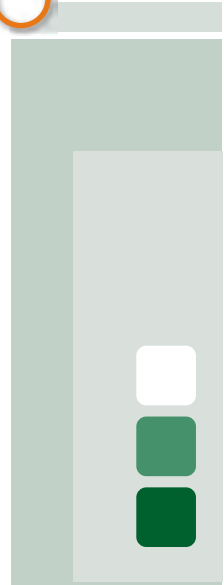
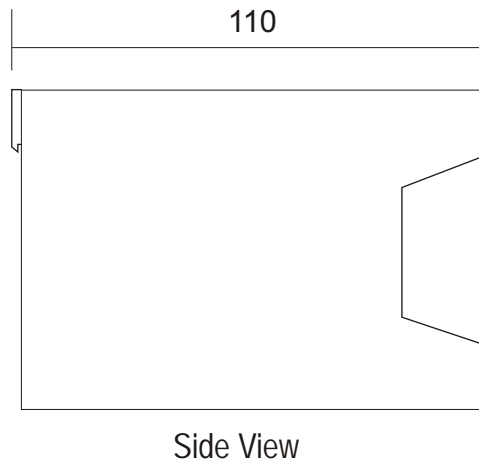
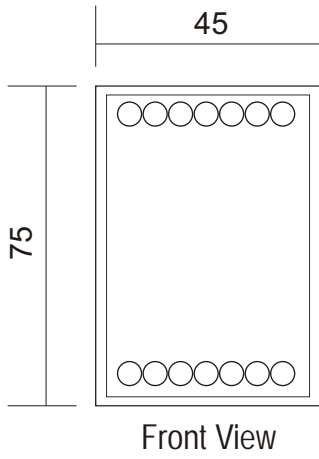
## Technical Characteristics

Consumption	< 4 W
Operation Voltage	0.8 ~ 1.1xUN <sup>1)</sup>
Drop-out Voltage	< 0.1 x UN
Outputs	4 Reversible Contacts
Maximum Switching Voltage	220Vdc/250Vac
Maximum Switching Power	60W/125VA
Maximum Conduction Current	2A
Pickup time	< 2.5 ms
Drop-out Time	< 1.5ms
Isolation of open contact	1000 VRMS
Isolation from control circuit to contacts	1000 VRMS
Mechanical life	10 <sup>8</sup> operations
Electrical life at Nominal Power	3x10 <sup>5</sup> operations
Operation Temperature:	
Fixation	-10 to 70 °C
LED	Rail U
Enclosure	Contacts Actuated
Protection Class	16 pins type needle (2x2.5 mm <sup>2</sup> ) IP 40

Note: 1) UN = Nominal Voltage

RR

# Dimensions



# RR

## Accomplished Tests



### Surges and transients (IEC 60255-6)

Peak value 1 <sup>st</sup> cycle:	2.5 kV
Frequency:	1.1 MHz
Time:	2 s
Repetition Rate:	400 (surges/s)
Declining to 50%:	5 cycles

### Impulse (IEC 60255-5)

Wave form:	1.2/50 s
Amplitude:	5 kV
Number of pulses:	3 negative and 3 positive with interval of 5 seconds between pulses.
Energy:	0.5J

### Insulation Test (IEC 60255-5)

Insulation voltage nominal at industrial frequency:	2.0 kVrms. 60 Hz. for 1 minute between circuits and mounting panel.
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## Ordering Information

Nominal Voltage	Language		
11 - 110 Vdc	1 - Portuguese		
12 - 125 Vdc	2 - English		
22 - 220 Vdc	3 - Spanish		
	4 - Other		

RR  
Nominal Voltage \_\_\_\_\_  
Language \_\_\_\_\_

Example: RR - 122  
RR of 125 Vdc with language  
in english





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