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Ebasee



EBS9RN

MINIATURE CIRCUIT BREAKER  
 USER'S MANUAL

Shanghai Ebasee Electric Co.,Ltd

**Application**

EBS9RN series residual current circuit breaker is used in protection of lighting or power distribution system from overload and short circuit, apply to the circuit of AC 50/60Hz, rated voltage 230/400V, rated current up to 63A. The product adopt high fire resistant and shockproof plastics, quality metal materials, which is neoteric in structure, light in weight, reliable in performance. The products comply with IEC61008

**Normal working conditions**

1. Ambient temperature: -5 C ~ +40 C , the average value can not exceeded +35 C within 24 hours.
2. Altitude: Not more than 2000m
3. Atmosphere conditions: The relative humidity can not exceed 50% when the temperature is at 40 C , the relative humidity can be higher when at a relative lower temperature. For example, when the monthly average temperature is 25 C , the monthly average humidity can not exceed 90%. Also must consider there will have cream gel in the appearance of the products.
4. Installation location: Mount on the place where has no obvious vibration or impact.
5. Installation category: Din rail mounting. III
6. Pollution level: II

**Technical data**

1. Miniature circuit breaker technical data

Table 1 Main technical data

Frame current A	Pole	Rated voltage V	Frequency 50Hz (60Hz)	Rated current A	Rated residual operating current mA
100A	2P	230	50Hz (60Hz)	25, 32, 40, 63, 80, 100	30, 100, 300
	4P	400			

2. Rated conditional short-circuit current: 6000A
3. Rated residual non operating current: (0.5-1)Δn
4. Mechanical life: 4000 times

**Setup**

1. Size and mount size (see Table 4)
2. installation method
  - 2.1. The connection terminal cannot be changed
  - 2.2. The fuse must be mounted vertically on the religious rail, the wire must enter from the top and exit the lower terminal. When the handle is attached, the cutter is in a "closed" state. When the arm is upwards, the cutter is in an "open" state.
  - 2.3. The wire cannot be recessed outside the circuit board, the wire must be in accordance with the nominal current. See

Table 4 Corresponding wire compared to nominal current

Rated current I(n) (A)	25≤In≤32	32<In≤50	50<In≤63
Related standard connection wire L (mm <sup>2</sup> )	6-10	10-16	16

**Warehouse and Usage**

1. The cutter cannot tolerate rain in transport and storage. The storage place should not rain and snow.
2. Under the conditions of use, it is better to clean the powder at regular intervals, the best way is to use a lid to protect it.

**Order note**

1. The following products must be marked when placing an

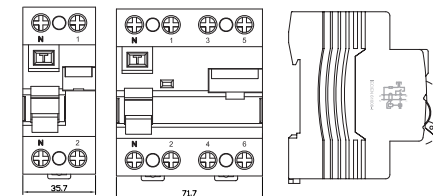
**Product name, model, and frame level**

Poles and commemorative current quantity

3. Order example

To order the EBS9RN breaker, 2P, rated current 40A and quantity 100 pcs, 30mA, must be marked:

EBS9RN 40A 2P 30mA 100pcs



Note: Incoming and outgoing lines can be reversely connected as required

Figure 3 size of appearance & installation

Pole	1	2	3	4
Size L (mm)	18 <sup>+0.10</sup>	36 <sup>+0.20</sup>	54 <sup>+0.30</sup>	72 <sup>+0.40</sup>