



MINIATURE CIRCUIT BREAKER USER MANUAL

Thank you for choosing 10VTB Series Miniature Circuit Breaker, please read this User Manual carefully before installing and using the device and keep it properly for future reference.

STANDARD AND QUALITY CERTIFICATES

IEC/EN 60947-2



TECHNICAL SPECIFICATIONS

Stock Code	Product Definition	Pole Size	Rated Current	Breaking Capacity (kA)
10VTB-1C80-R2	MCB 10kA 1P C Type 80A	1P	80A	10kA
10VTB-1C100-R2	MCB 10kA 1P C Type 100A	1P	100A	10kA
10VTB-1C125-R2	MCB 10kA 1P C Type 125A	1P	125A	10kA
10VTB-2C80-R2	MCB 10kA 2P C Type 80A	2P	80A	10kA
10VTB-2C100-R2	MCB 10kA 2P C Type 100A	2P	100A	10kA
10VTB-2C125-R2	MCB 10kA 2P C Type 125A	2P	125A	10kA
10VTB-3C80-R2	MCB 10kA 3P C Type 80A	3P	80A	10kA
10VTB-3C100-R2	MCB 10kA 3P C Type 100A	3P	100A	10kA
10VTB-3C125-R2	MCB 10kA 3P C Type 125A	3P	125A	10kA
10VTB-4C80-R2	MCB 10kA 4P C Type 80A	4P	80A	10kA
10VTB-4C100-R2	MCB 10kA 4P C Type 100A	4P	100A	10kA
10VTB-4C125-R2	MCB 10kA 4P C Type 125A	4P	125A	10kA

INSTALLATION AND TRANSPORTATION

Conditions of normal use and installation

- The ambient temperature ranges between -25°C and +55°C with average value in 24h not exceeding +35°C;
- Altitude: ≤2000m;
- The relative humidity should not exceed 50% at a maximum temperature of +40°C; the relative humidity is allowed to increase while under lower temperature, for instance 90% for temperature +20%, but should take condensation into consideration when temperature is changed.
- The external magnetic field near the installation site of the residual current circuit breaker shall not exceed 5 times the geomagnetic field in any direction;
- It shall be installed in medium free of explosion risk and gas or dust that may cause metal corrosion or damage to insulation;
- It shall be installed in places where there is no shock and vibration, or rain and snow either;
- Pollution class: 2;
- Installation category: II & III;
- It shall be installed in distribution box, distribution cabinet or box;
- Negative wiring is allowed for the product;
- For products with N pole, the phase line shall be connected to the pole with the indication N.

Conditions of normal storage and transportation

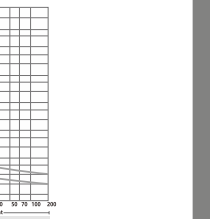
- Temperature range: -25°C ~ +70°C;
- Relative humidity: ≤95%;
- The product shall be handled with care during transportation without upside down. Avoid violent collision.

MAIN TECHNICAL AND PERFORMANCE PARAMETERS

Model No.	Setting Current	In(A)	Number of Poles	Rated Voltage Ue	Rated Breaking Capacity	Standard
10VTB (80-125A) - R2 series	10In±20%	80, 100, 125	1, 2, 3, 4P	230/240V, 400/415V	10000A	IEC/EN60947-2

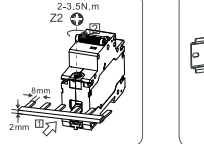
Overcurrent protection characteristics of the circuit breaker

Rated current(A)	Thermal Release			Magnetic release	
	Non-tripping current(A)	Tripping current(A)	Non-tripping time(h)	Tripping time(h)	Holding time (S)
80-125	1.05In	1.30In	≤2	<2	≤0.2

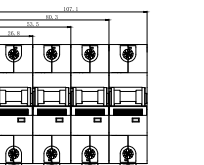


PRODUCT ASSEMBLY

Product calibrating and programming are performed during manufacturing and each product is offered to sales after a thorough quality control. There are no maintenance or programming tasks that the users can perform.



DIMENSIONS



INSTALLATION, USE AND MAINTENANCE

Before installing the circuit breaker:

- Check whether the technical parameters of the product meet the use requirements.
- Before use, users shall check the insulation resistance respectively between the two poles (except for single pole), the pole and the shell, the pole and the mounting rail, the incoming and the outgoing line end with a 500V megohmmeter. Do not use the product if the insulation resistance is below 5 Ω (5 megaohms) and contact the supplier timely for exchange.
- Close and open the breaker for several times to check whether the operation mechanism is reliable or clamping stagnation exists in the mechanism;
- The reference temperature for the breaker of this series is Operating ambient temperature is -5°C ~ +40°C
- The sectional area of connecting conductor shall fit the rated current of the circuit breaker.

Rated current and section area of the connecting wire

Rated current A	80	100	125
Sectional area of conductor mm²	25	35	50

- The breaker of this series adopts DIN rail mounting method, for which TH35-7.5 steel DIN rail shall apply.

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