

# Miniature Circuit Breaker

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## UEB3-125 Series



# INTRODUCTION

Hongfa, (Shanghai Stock Exchange: 600885), founded in 1984, has been adhering to the enterprise spirit of “persevere for progress, strive for excellence”, and has built a complete industry system with complete categories and supporting facilities. At present, Hongfa has more than 30 subsidiaries and has established three districts of R & D and production bases. Its products cover various categories, such as medium and low voltage products, relays, high and low voltage switchgear, capacitors, precision parts and automation equipment.

Xiamen Hongfa Electrical Safety & Controls Co., Ltd. is a wholly-owned subsidiary of Hongfa, which specializes in R & D, design and manufacture medium and low voltage products. Its distribution apparatus, terminal apparatus, control apparatus and other products are widely used in real estate, electric power, new energy, industry, HVAC, transportation, information and other fields.

In the United States, Europe, Southeast Asia and other regions, Hongfa has established localized marketing and service networks with global market operation and technical service. Relying on professional and rigorous technical support, fast response and all-round service, safe and reliable product quality and high cost performance, Hongfa has reached business cooperation relationship with many global top 500 enterprises and other well-known enterprises, such as Enel, GE, Honeywell, Carrier, Trane, Johnson Controls, Danfoss, State Grid, China Southern Power Grid, CRRC, China Mobile, China Unicom, etc.



Sunban Industrial Park



Donglin Industrial Park



Haicang Industrial Park



Zhongjiang Industrial Park



Zhangzhou Industrial Park



Zhoushan Industrial Park



Xi'an Factory

In terms of technology R & D and manufacturing, taking the national enterprise technology center as the platform, Hongfa has set up postdoctoral research workstation, academician and expert workstation. Now it has developed into a leading scientific research and production base in the industry. From product development, mold manufacturing, parts manufacturing, automated product assembly and online testing, Hongfa has successfully built an integrated whole industry chain of medium and low voltage products. In terms of product testing, Hongfa testing center has passed the certification of VDE, UL, CNAS and other international organizations, and has complete testing and analysis equipment for low-voltage products, such as 50kA ultimate short circuit test, 8kA electrical life test, 80kA characteristic test, mechanical simulation and testing system, electro-magnetic simulation and testing system.

Hongfa always adheres to the policy of "focused on the market, winning through quality", and has a completed quality assurance system. Its products have passed UL / CUL, VDE, CQC, CCC and other international safety certification. In the process of quality management, Hongfa actively implements the advanced quality concept, constantly improves the quality management system, continuously promotes the product process quality control and testing, strengthens the supply chain management, and is committed to providing each customer with high-quality products and creating greater value.

Advanced technology and strict quality control have created Hongfa's brand strength. Hongfa is willing to work hand in hand with global customers to share the convenience and well-being brought by science and technology.

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## Production Overview

### Scope of Application

UEB3-125 series miniature circuit breakers are mainly used in the circuit with AC 50Hz/60Hz, rated operational voltage of 230V/400V, and rated operational current up to 125A, with overload protection and short circuit protection.

### Product Features

#### Provide safe use and protection

- Red and green indicating window to indicate the opening and closing status of the contact
- Level 2 electric shock protection for safer operation

#### Convenient installation

- Dual stable snap-on design for easy installation and disassembly
- Modular structures for free combination

### Product Appearance



## Standard

	CCC	GB/T 10963.1
	CE	EN60898-1
	UKCA	BS EN60898-1

## Standard Operation And Installation Conditions

- Operating temperature range: -35 °C...+70 °C
- Storage temperature range: -40 °C...+85 °C
- Altitude: < 2000m
- Pollution degree: 2
- Mounting category: II/III
- Mounting condition: Install on 35mm DIN rail, the inclination between the mounting plane and the vertical plane shall be not exceed  $\pm 5^\circ$

## Ordering Information

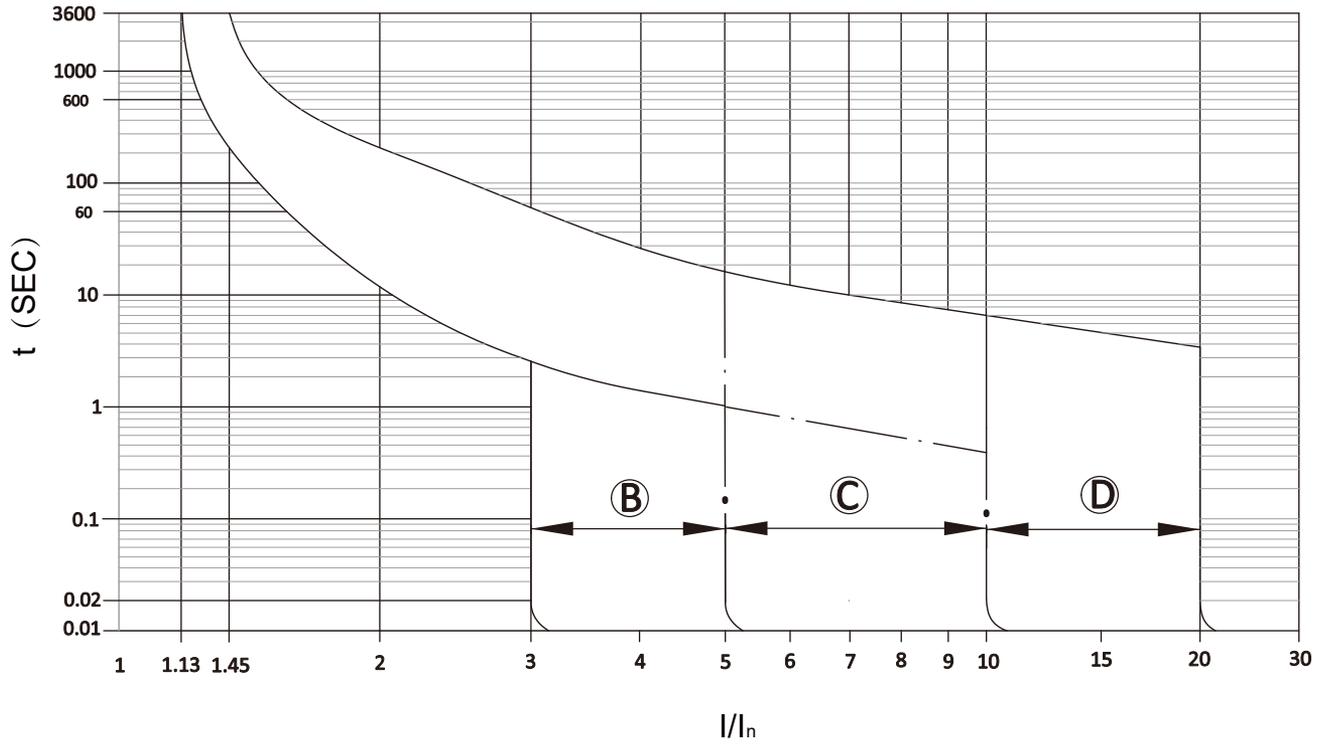
	UE	B	3	- 125	/C	125	3
<b>Enterprise code:</b> HESC							
<b>Product code:</b> MCB Miniature Circuit Breaker							
<b>Design SN:</b> 3							
<b>Maximum rated current:</b> 125: 125A							
<b>Instantaneous tripping characteristics:</b> B: 3 In ... 5 In; C: 5 In ... 10 In; D: 10 In ... 20 In.							
<b>Rated current:</b> 63A, 80A, 100A, 125A							
<b>Number of poles:</b> 1: 1P; 2: 2P; 3: 3P; 4: 4P							

## Main Technical Parameter

Type		UEB3-125
<b>Electrical Characteristics</b>		
Number of poles		1P, 2P, 3P, 4P
Instantaneous tripping characteristics		B: 3In to 5In; C: 5In to 10In; D: 10In to 20In
Breaking capacity	kA	Icn=15, Ics=7.5
Rated current In	A	63, 80, 100, 125 (125A B/C only)
Rated voltage Ue	V/AC	230/400 (1P); 400 (2P/3P/4P)
Rated insulation withstand voltage Ui	V	500
Rated impulse withstand voltage Uimp	kV	4
<b>Mechanical Characteristics</b>		
Mechanical endurance	cycles	8000
Electrical endurance	cycles	4000
Protection degree		IP20
Contact position indication		OFF = Green ON = Red
Reference ambient temperature	°C	30
<b>Other Characteristics</b>		
Weight (g)	1P	220
	2P	445
	3P	670
	4P	895

## Characteristic Curve

Tripping characteristics B, C, D



## Derating Coefficient

### Temperature Compensation

In (A)	Ambient temperature T (°C)											
	-35	-30	-20	-10	0	10	20	30	40	50	60	70
63	82.53	81.27	78.75	75.6	72.45	69.93	66.15	63	59.22	55.44	51.66	47.25
80	104.8	103.2	100	96	92	88.8	84	80	75.2	70.4	65.6	60
100	131	129	125	120	115	111	105	100	94	88	82	75
125	163.7	161.2	156.2	150	143.7	138.7	131.2	125	117.5	110	102.5	93.7

### Derating Coefficient In High Altitude Area

Altitude (m)	2000	3000	4000
Rated voltage Ue (V)	400	400	400
Rated current In (A)	In	0.96*In	0.93*In

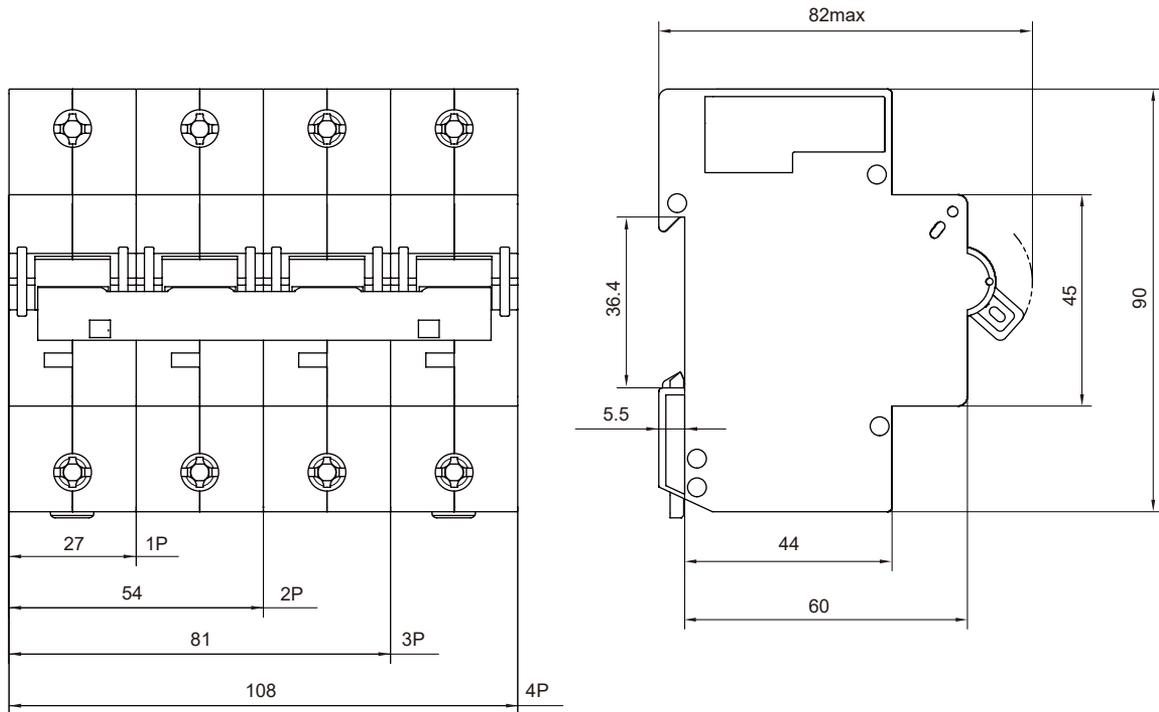
## Wiring Capability

Press wiring, connection to 2.5mm<sup>2</sup>...50mm<sup>2</sup> wire.

Terminal screw specification	Rated torque	EN/IEC standard torque	Solid/Rigid wire	Flexible/Stranded copper wire
M6	2.5N·m	2.5N·m	2.5mm <sup>2</sup> ...50mm <sup>2</sup>	2.5mm <sup>2</sup> ...50mm <sup>2</sup>

## Dimensions

Unit: mm



Note: Unmarked tolerance is  $\pm 1$

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