

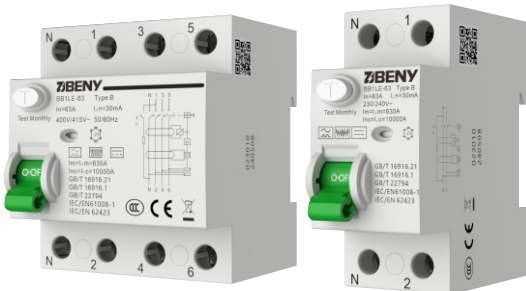
BB1LE-63 Series Type B of RCCB



GB/T 22794
GB/T 16916.1
GB/T 16916.21
IEC/EN 62423
IEC/EN 61008-1

- 1 Brand
- 2 Type
- 3 Rated Current
- 4 Rated Voltage
- 5 Breaking Capacity
- 6 short-circuit current
- 7 Indicator
- 8 Waveform
- 9 Wiring Diagram

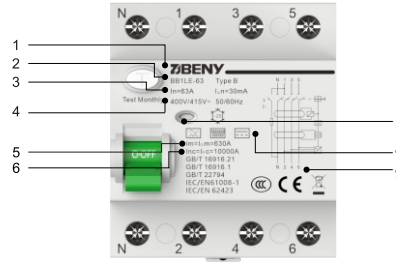
- With AC leakage, pulsating DC leakage, and smoothnessDC leakage protection and high-frequency leakage protection up to 1kHzProtective device - complete protection function
- Adopting frame type wiring structure - safe and reliable wiring
- Th35mm standard installation guide rail - simple and convenient installation
- Rated Current : 63A



Application

ZBENY The BB1LE-63 B leakage circuit breaker is suitable for industrial applications using frequency converters, photovoltaic power plants, electric vehicle chargers, and similar components. It has a rated voltage of 400/415V and a rated current of up to 63A circuit. It is used to detect pulsating DC leakage, smooth DC leakage, composite wave leakage, and high-frequency leakage up to 1kHz. When a person is electrocuted or the circuit is electrocuted or the circuit leakage exceeds the specified value, the residual current operates the circuit breaker to automatically cut off the faulty power supply in a very short time to protect the safety of the person and electrical equipment.

Appearance Introduction



Type Instruction

BB1LE	-	63	-	3P+N	-	63A	-	400/415V	-	30mA
Product Code		Max Rated Current		Pole		Rated Current		Rated Voltage		Rated Sensitivity
Leakage current circuit breaker		63A		1P+N 3P+N		25A 40A 63A		230/240V AC 400/415V AC		30mA 100mA 300mA

Parameter

Electrical Characteristics

Type(ware form of the earth leakage sensed)	Type-B	
Pole	1P+N	3P+N
Rated Working Voltage	Ue 230V AC	400/415V AC
Max Rated Current	Ith	63A
Rated Current	In	25A, 40A, 63A
Rated Insulated Voltage	Ui	500V AC
Rated Impulsed Voltage	Uimp	6kV
Rated Frequency		50/60Hz
Rated Sensitivity	Δn	30mA, 100mA, 300mA
Rated residual making and breaking capacity	I_m	500(In=25-40A) 630(In=63A)
Short-circuit current	$I_{nc}=\Delta I C$	10kA
SCPD fuse		10000
Break time under	Δn	$\leq 0.3s$
Dielectric Strength		2.5kV
Pollution degree		3

Service Life&Cycle Operation

Mechanical	6000
Electrical	2000

Installation Environment

Ingress Protection	IP20
Terminal Cross Section	1~35mm ²
Product wiring torque M5	2Nm~2.5Nm
Working Temperature(with daily average $\leq 35^{\circ}C$)	-25 $^{\circ}C$ ~+70 $^{\circ}C$
Storage Temperature	-40 $^{\circ}C$ ~+80 $^{\circ}C$
Resistance to Humidityand Heat	II (Humidity 55 $^{\circ}C$, relative humidity 95%)
Fixed installation	Fixed to the 35mm guide rail

Wiring Diagram

Pole	Wiring Diagram
1P+N	
3P+N	

Connection

Installation and use

Rated current I_n	25A	40A	63A
Coppr Wire mm^2	4	10	16

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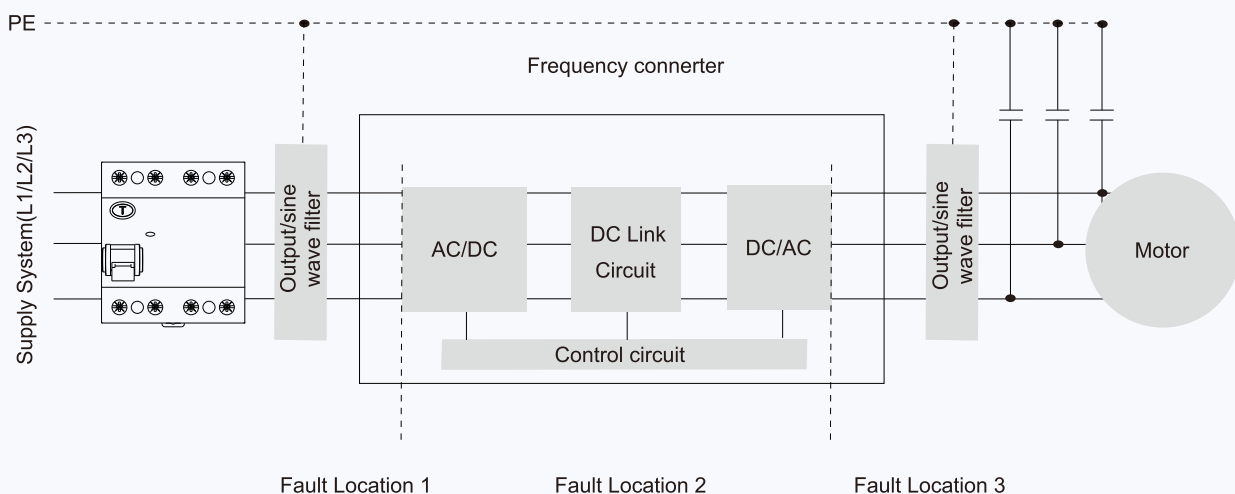
all connections (including bridging link connections) are suitable for the rated current, prepared to ensure only conductive parts are clamped and tightened to the manufacturers required torque before energization.

Detect the type and classification of residual current waveform

Definition of residual current waveform	Waveform	Leakage circuit breaker type			Tripping range	
		AC Type	A Type	B Type	Tripping current	Tripping time
Sinusoidal exchange		✓	✓	✓	$0.5 \sim 1 I_{\Delta n}$	$1 I_{\Delta n}: t \leq 0.3s$ $2 I_{\Delta n}: t \leq 0.15s$ $5 I_{\Delta n}: t \leq 0.04s$
Pulsating half wave		X	✓	✓	$0.5 \sim 1.4 I_{\Delta n}$	
Pulsating Half wave + direct current (6mA)		X	✓	✓	$\max 1.4 I_{\Delta n}$	
Pulsating Half wave + direct current (10mA)		X	X	✓	$\max 1.4 I_{\Delta n}$	
High frequency (up to 1KHz)		X	X	✓	150Hz, $0.5 \sim 2.4 I_{\Delta n}$	
		X	X	✓	400Hz, $0.5 \sim 6 I_{\Delta n}$	
		X	X	✓	1000Hz, $1 \sim 14 I_{\Delta n}$	
Two phase rectified full wave		X	X	✓	$0.5 \sim 2 I_{\Delta n}$	$2 I_{\Delta n}: t \leq 0.3s$
Three phase rectified full wave				✓	$0.5 \sim 2 I_{\Delta n}$	$4 I_{\Delta n}: t \leq 0.15s$
Direct current					$0.5 \sim 2 I_{\Delta n}$	$10 I_{\Delta n}: t \leq 0.04s$

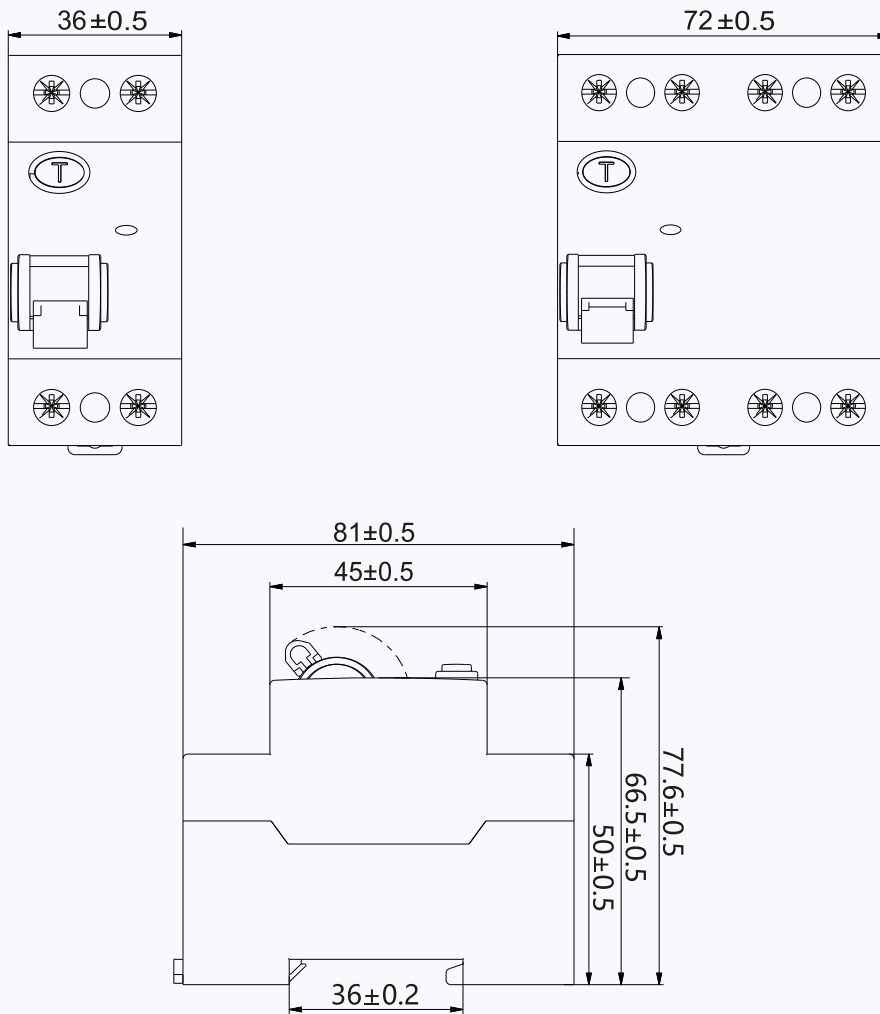
- protection of persons against electric shock by direct contact (30mA)
- protection of persons against electric shock by indirect contact ($\geq 300mA$)
- protection of installations against the risk of fire (300mA or 500mA)

Typical application



Attention: leakage circuit breakers cannot be used in DC power systems

Dimensions(mm)



Derating Date

Derating Temperature

Tem Proportion Type	-25°C~40°C	50°C	60°C	70°C
BB1LE-63	100%	95%	90%	85%

Altitude of Derating

Altitude	2000m	3000m	4000m	5000m
Power frequency withstand voltage	100%	100%	100%	100%
Ui	100%	100%	100%	100%
In	100%	100%	90%	80%
Ue	N/A			