



CDB6i Miniature circuit breaker

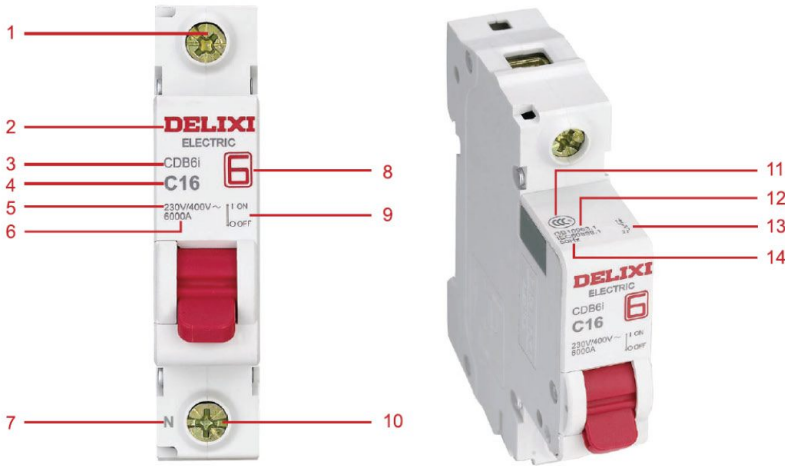
CDB6i Miniature circuit breaker has the following functions

- Short-circuit protection
- Over-load protection
- Isolation protection

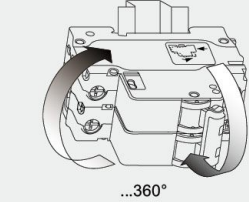
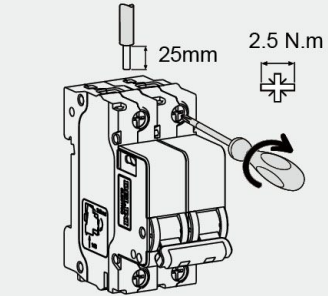
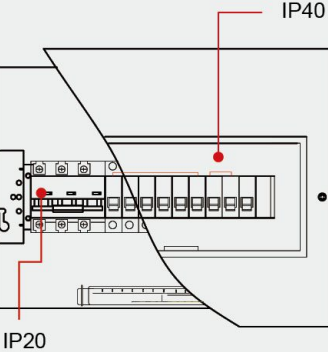
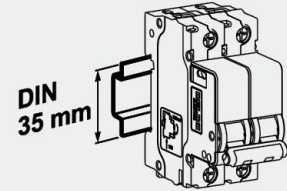
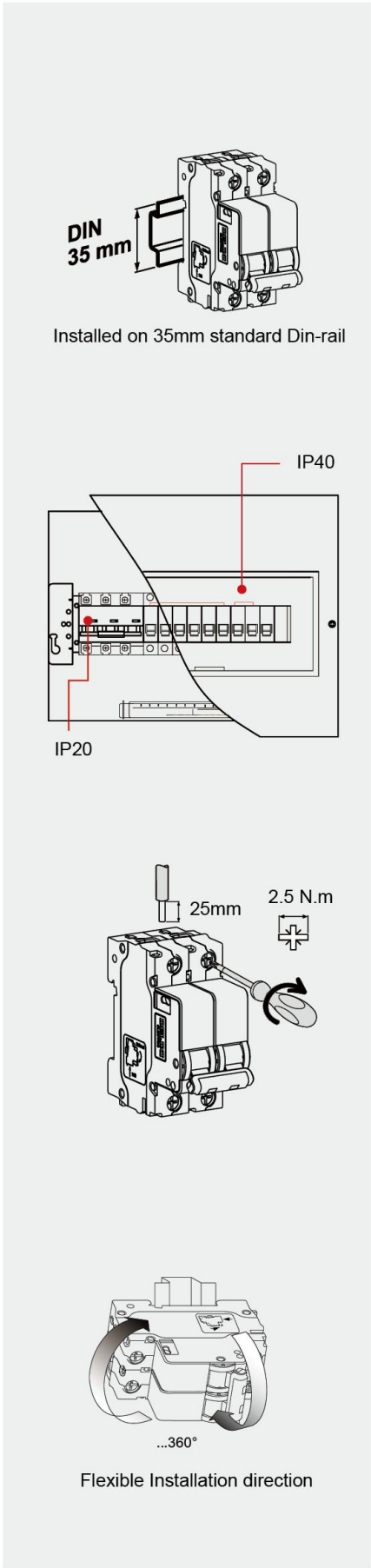
Main features

Rated operating voltage(V)	1P: 230/400 AC
	1P+N: 230 AC
	2P,3P,3P+N,4P: 400 AC
Rated current(A)	1、 2、 3、 4、 5、 6、 8、 10、 13、 16、 20、 25、 32、 40、 50、 63
Frequency (Hz)	50
Poles	1P,1P+N,2P,3P,3P+N,4P
Breaking capacity (kA)	6
Trip curve	B、 C、 D type
Characteristic	No
Current specification	*B type no 1A、 2A、 3A、 4A、 5A; 1P+N、 3P+N type no 1A、 2A、 3A、 4A、 5A、 6A、 8A
Standard	GB 10963.1, IEC/EN60898-1
Certification	   RoHS

Product Detail Display



- 1.Power terminal 2.Logo 3. Model 4.Current specification (trip type + rated current)
5.Rated voltage 6.Breaking capacity 7.N pole indication (1P+N, 3P+N)
8.Design Number 9.On-off indication 10.Load 11.Certification 12.Standard
13.Wiring schematic 14. Rated frequency



Electrical Characteristics

Nominal insulation voltage Ui (V)	250 (phase to earth)/500 (phase to phase)
Rated operating voltage Ue (V)	1P: 230/400AC 1P+N: 230AC
	2P, 3P, 4P, 3P+N: 400AC
	1P: 60 DC
Rated short circuit capability Icn(IEC/EN 60898-1) (kA)	6
Rated impulse withstand voltage Uimp(1.2/50) (kA)	4
Dielectric test voltage	2kV(45~65Hz, 1 mins)
Utilization Category	A
Isolation function	Yes
Pollution class	2
Trip type	Thermal magnetic trip
Thermal magnetic tripping characteristics	
B-type curve(3In~5In)	■
C-type curve(5In~10In)	■
D-type curve(10In~14In)	■
Electrical and mechanical accessories	■

Mechanical Characteristics

Handle	Red
On-off indication	ON-OFF indication
Mechanical life(times)	20000
Electrical life (times)	10000
Protection degree	Installed in distribution box IP40
	Installation directly IP20
Mechanical shock resistance	30g 3shocks,lasting 11ms (no significant vibration and shock)
Anti-vibration(IEC/EN 60068-2-6)	No significant vibration and shock
Damp and hot resistance(IEC 60068-2)	Class 2, 28 cycles
Damp and hot(℃ /RH)	Relative humidity 90%-96% at 55 ℃
	Relative humidity 95%-100% at 25 ℃
Baseline ambient temperature	30 ℃
Ambient temperature (daily average temperature ≤ +35℃)	-35℃ ~+70℃
Storage temperature	-40℃ ~+70℃

Installation Characteristics

Terminal form	U terminal
Maximum wiring capability (A)	Current level 1-63: 25mm²
Maximum limit torque (A)	Current level 1-63: 2.5N.m
Tool	Phillips screwdriver or slotted screwdriver
Installation	Mounted on standard Din rail (35mm)
Incoming type	Top or bottom

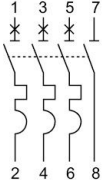
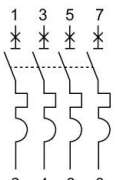
Selection Guide
Order Selection and Code

CDB6i Miniature circuit breaker

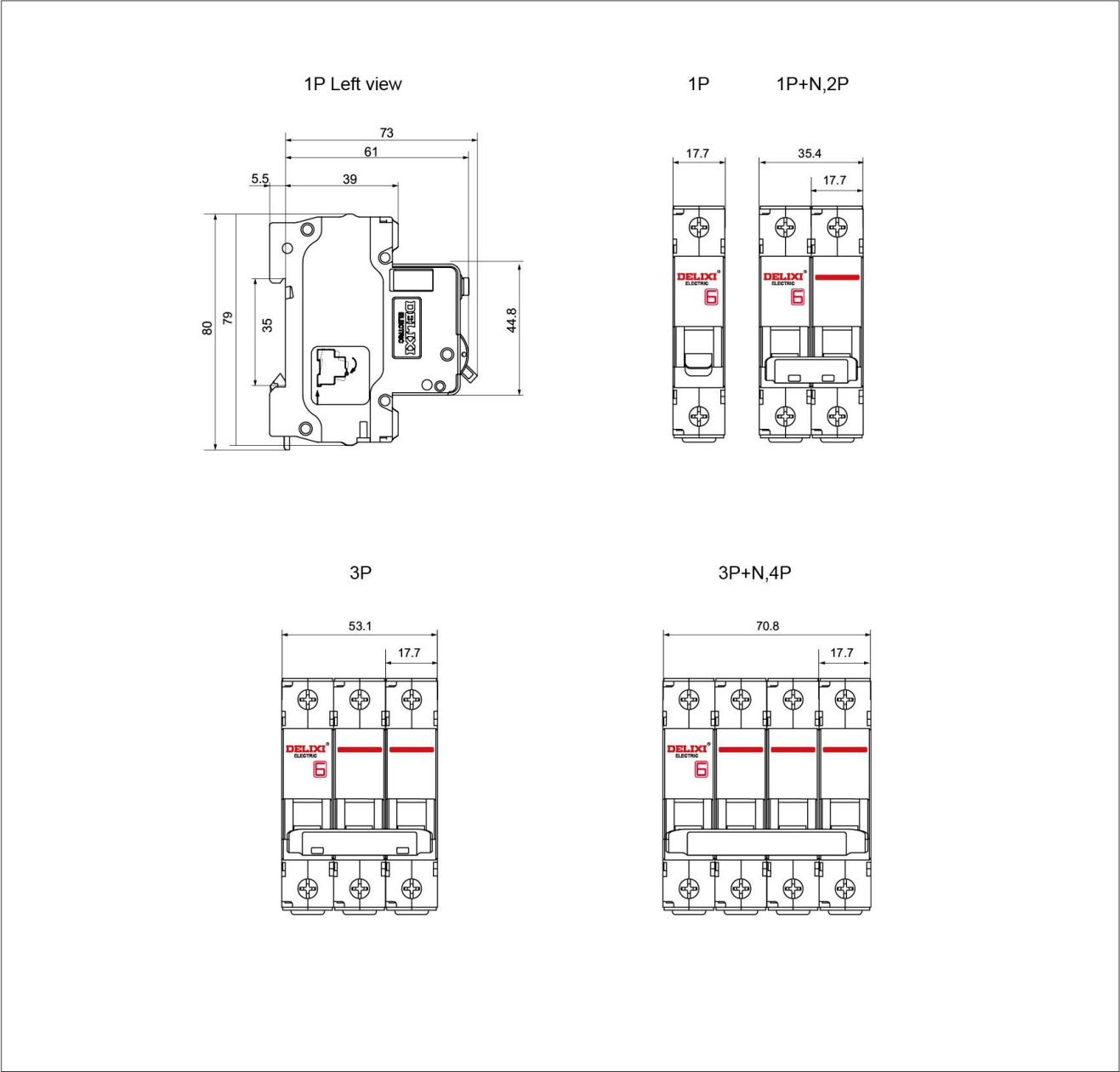
Model	Pole	Trip type	Rated Current	
CDB6i	1	C	6	
	1: 1P 2: 2P 3: 3P 4: 4P 5: 1P+N 6: 3P+N	B: B type C: C type D: D type	1: 1A 2: 2A 3: 3A 4: 4A 5: 5A 6: 6A 8: 8A 10:10A	13: 13A 16: 16A 20: 20A 25: 25A 32: 32A 40: 40A 50: 50A 63: 63A

CDB6i	Pole	Rated current	Trip type		
			B	C	D
1P		1	-	CDB6i1C1	CDB6i1D1
		2	-	CDB6i1C2	CDB6i1D2
		3	-	CDB6i1C3	CDB6i1D3
		4	-	CDB6i1C4	CDB6i1D4
		5	-	CDB6i1C5	CDB6i1D5
		6	CDB6i1B6	CDB6i1C6	CDB6i1D6
		8	CDB6i1B8	CDB6i1C8	CDB6i1D8
		10	CDB6i1B10	CDB6i1C10	CDB6i1D10
		13	CDB6i1B13	CDB6i1C13	CDB6i1D13
		16	CDB6i1B16	CDB6i1C16	CDB6i1D16
		20	CDB6i1B20	CDB6i1C20	CDB6i1D20
		25	CDB6i1B25	CDB6i1C25	CDB6i1D25
		32	CDB6i1B32	CDB6i1C32	CDB6i1D32
		40	CDB6i1B40	CDB6i1C40	CDB6i1D40
		50	CDB6i1B50	CDB6i1C50	CDB6i1D50
		63	CDB6i1B63	CDB6i1C63	CDB6i1D63
		10	CDB6i5B10	CDB6i5C10	CDB6i5D10
		13	CDB6i5B13	CDB6i5C13	CDB6i5D13
		16	CDB6i5B16	CDB6i5C16	CDB6i5D16
		20	CDB6i5B20	CDB6i5C20	CDB6i5D20
1P+N		25	CDB6i5B25	CDB6i5C25	CDB6i5D25
		32	CDB6i5B32	CDB6i5C32	CDB6i5D32
		40	CDB6i5B40	CDB6i5C40	CDB6i5D40
		50	CDB6i5B50	CDB6i5C50	CDB6i5D50
		63	CDB6i5B63	CDB6i5C63	CDB6i5D63
		1	-	CDB6i2C1	CDB6i2D1
		2	-	CDB6i2C2	CDB6i2D2
		3	-	CDB6i2C3	CDB6i2D3
2P		4	-	CDB6i2C4	CDB6i2D4
		5	-	CDB6i2C5	CDB6i2D5
		6	CDB6i2B6	CDB6i2C6	CDB6i2D6
		8	CDB6i2B8	CDB6i2C8	CDB6i2D8
		10	CDB6i2B10	CDB6i2C10	CDB6i2D10
		13	CDB6i2B13	CDB6i2C13	CDB6i2D13
		16	CDB6i2B16	CDB6i2C16	CDB6i2D16
		20	CDB6i2B20	CDB6i2C20	CDB6i2D20
		25	CDB6i2B25	CDB6i2C25	CDB6i2D25
		32	CDB6i2B32	CDB6i2C32	CDB6i2D32
		40	CDB6i2B40	CDB6i2C40	CDB6i2D40
		50	CDB6i2B50	CDB6i2C50	CDB6i2D50
		63	CDB6i2B63	CDB6i2C63	CDB6i2D63

CDB6i Miniature circuit breaker

CDB6i	Pole	Rated current	Trip type		
			B	C	D
3P		1	-	CDB6i3C1	CDB6i3D1
		2	-	CDB6i3C2	CDB6i3D2
		3	-	CDB6i3C3	CDB6i3D3
		4	-	CDB6i3C4	CDB6i3D4
		5	-	CDB6i3C5	CDB6i3D5
		6	CDB6i3B6	CDB6i3C6	CDB6i3D6
		8	CDB6i3B8	CDB6i3C8	CDB6i3D8
		10	CDB6i3B10	CDB6i3C10	CDB6i3D10
		13	CDB6i3B13	CDB6i3C13	CDB6i3D13
		16	CDB6i3B16	CDB6i3C16	CDB6i3D16
		20	CDB6i3B20	CDB6i3C20	CDB6i3D20
		25	CDB6i3B25	CDB6i3C25	CDB6i3D25
		32	CDB6i3B32	CDB6i3C32	CDB6i3D32
		40	CDB6i3B40	CDB6i3C40	CDB6i3D40
		50	CDB6i3B50	CDB6i3C50	CDB6i3D50
		63	CDB6i3B63	CDB6i3C63	CDB6i3D63
3P+N		10	CDB6i6B10	CDB6i6C10	CDB6i6D10
		13	CDB6i6B13	CDB6i6C13	CDB6i6D13
		16	CDB6i6B16	CDB6i6C16	CDB6i6D16
		20	CDB6i6B20	CDB6i6C20	CDB6i6D20
		25	CDB6i6B25	CDB6i6C25	CDB6i6D25
		32	CDB6i6B32	CDB6i6C32	CDB6i6D32
		40	CDB6i6B40	CDB6i6C40	CDB6i6D40
		50	CDB6i6B50	CDB6i6C50	CDB6i6D50
4P		63	CDB6i6B63	CDB6i6C63	CDB6i6D63
		1	-	CDB6i4C1	CDB6i4D1
		2	-	CDB6i4C2	CDB6i4D2
		3	-	CDB6i4C3	CDB6i4D3
		4	-	CDB6i4C4	CDB6i4D4
		5	-	CDB6i4C5	CDB6i4D5
		6	CDB6i4B6	CDB6i4C6	CDB6i4D6
		8	CDB6i4B8	CDB6i4C8	CDB6i4D8
		10	CDB6i4B10	CDB6i4C10	CDB6i4D10
		13	CDB6i4B13	CDB6i4C13	CDB6i4D13
		16	CDB6i4B16	CDB6i4C16	CDB6i4D16
		20	CDB6i4B20	CDB6i4C20	CDB6i4D20
		25	CDB6i4B25	CDB6i4C25	CDB6i4D25
		32	CDB6i4B32	CDB6i4C32	CDB6i4D32
		40	CDB6i4B40	CDB6i4C40	CDB6i4D40
		50	CDB6i4B50	CDB6i4C50	CDB6i4D50
		63	CDB6i4B63	CDB6i4C63	CDB6i4D63

CDB6i Miniature Circuit Breaker



Accessories

Remote indication accessories

- OF Auxiliary contact
 - External circuit, indicating the status of the circuit breaker
 - Basic form of the auxiliary contact: 1 NO, 1 NC
 - Wiring capacity: 1-2.5mm²

- SD Alarm contact
 - Signal when the circuit breaker fault trips
 - Mechanical indication on the front panel to indicate fault tripping
 - Basic form of the auxiliary contact: 1 NO, 1 NC
 - Wiring capacity: 1-2.5mm²

Trip accessories

- MX+OF Shunt release
 - External circuit, indicating the status of the circuit breaker
 - When the signal is obtained, trigger the tripping of the circuit breaker assembled with it
 - Auxiliary contact basic form: 1 NO, 1 NC
 - Wiring capacity: 1-2.5mm²

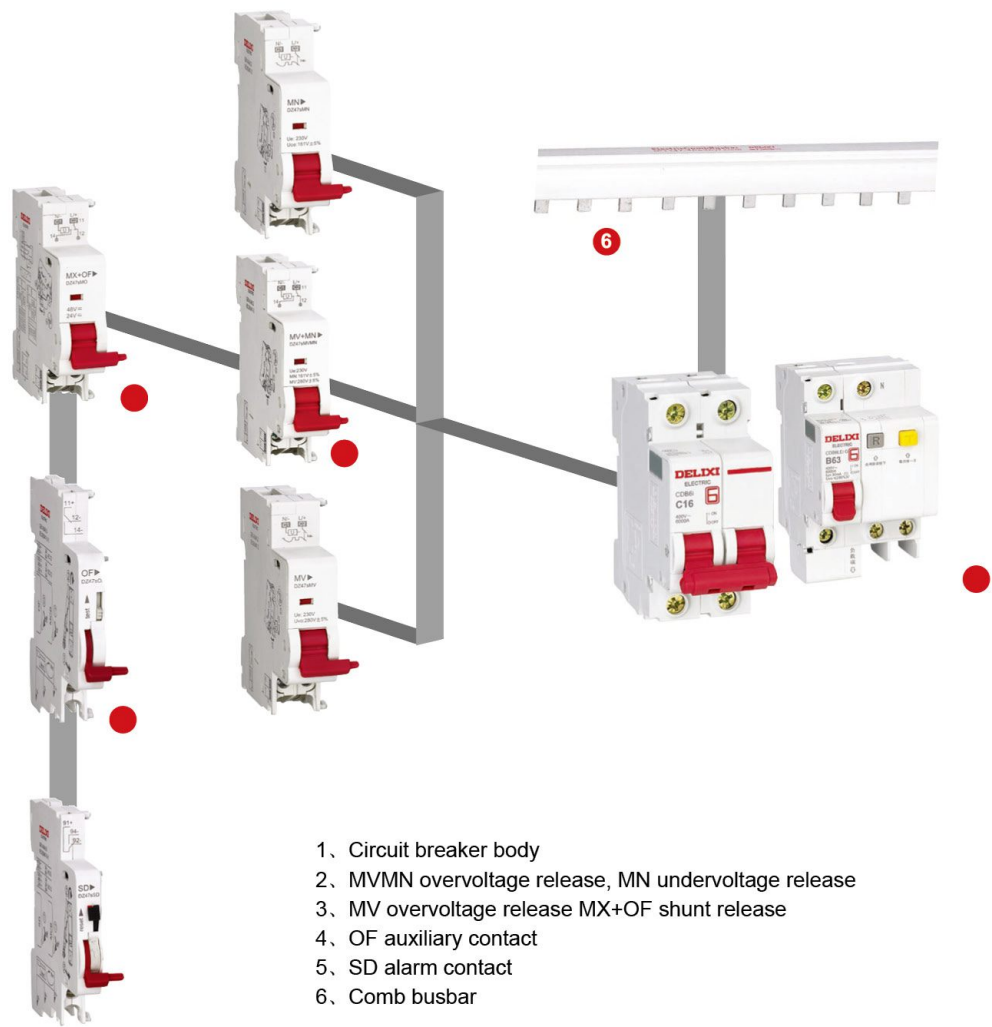
- MV Overvoltage release
 - Protection against line overvoltage faults
 - When the voltage across the trip unit rises to the rated range, trigger the circuit breaker tripping with the assembled circuit breaker
 - There is a fault trip indication on the front panel, and the indicator pops up for overvoltage tripping.
 - Rated working trip overvoltage: 280 (1 ± 5%) V AC
 - Wiring ability: 1-2.5mm²

- MN Undervoltage release
 - Protection against line undervoltage faults
 - When the voltage across the trip unit drops to the rated range, trigger the circuit breaker tripping with the assembled circuit breaker
 - There is a fault trip indication on the front panel, and the indicator pops up for undervoltage tripping
 - Rated working trip undervoltage: 161 (1 ± 5%) VAC, undervoltage protection range (35%~70%)
 - UeWiring ability: 1-2.5mm²

- MVMN Over-undervoltage release
 - Protection against line overvoltage and undervoltage
 - When the voltage across the trip unit rises or falls to the rated range, the faulty trip indicator on the front panel of the circuit breaker tripping assembled with the trigger is triggered, and the indicator is bounced for overvoltage or undervoltage tripping.
 - Rated work tripping overvoltage: 280 (1 ± 5%) VAC, rated working trip undervoltage: 161 (1 ± 5%) VAC, undervoltage protection interval (35%~70%) Ue
 - Wiring ability: 1-2.5mm²



Accessories installation diagram



Assembly instructions

- 1. The accessory is free of tool installation and the installation position is on the left side of the circuit breaker.
- 2. The total width of the attachment is 54mm. Order and number from left to right: OF, SD (3 max.) M0, MV, MN, MVMN (2 max.) MCB.
- 3. Accessories are commonly used for CDB6i, CDB6LEi, CDB6Pi, CDB6PLEi

Accessories Introduction

Name	Width(mm)	Voltage range(V)	Order code
OF 	9	AC: 415V/3A ,240V/6A; DC: 130V/1A,48V/2A,24V/6A	CDB6iOF
SD 	9	AC: 415V/3A , 240V/6A; DC: 130V/1A, 48V/2A,24V/6A	CDB6iSD
MX+OF 	18 18	AC: 130V-415V; DC: 110-130v AC/DC: 24V-48V;	CDB6iMO220 CDB6iMO24
MV 	18	AC: 230V	CDB6iMV
MN 	18	AC: 230V	CDB6iMN
MVMN 	18	AC: 230V	CDB6iMVMN

Tripping characteristics

B type

B tripping characteristics miniature circuit breakers comply with the GB 10963.1 IEC60898 standard and are suitable for protecting resistive loads or loads without inrush current.

C type

C tripping characteristics miniature circuit breakers comply with GB 10963.1 IEC60898 standard and are suitable for protecting inductive loads with resistive loads or low inrush current.

D type

D tripping characteristics miniature circuit breaker complies with the GB 10963.1 IEC60898 standard and is suitable for protecting loads with high inrush current when the line is connected.

Trip type	Standard	Thermal tripping characteristics				Electromagnetic tripping characteristics			
		Test current	Test time	Starting state	Result	Test current AC	Test time	Starting state	Result
B	IEC60898-1 GB10963.1	1.13In	$\leq 1h (\leq 63A)$ $\leq 2h (>63A)$	Cold	No trip	3In	$\leq 0.1s$	Cold	No trip
		1.45In	$<1h (\leq 63A)$ $<2h (>63A)$	Hot	Trip	5In	$<0.1s$		Trip
C	IEC60898 GB10963.1	1.13In	$\leq 1h (\leq 63A)$ $\leq 2h (>63A)$	Cold	No trip	5In	$\leq 0.1s$		No trip
		1.45In	$<1h (\leq 63A)$ $<2h (>63A)$	Hot	Trip	10In	$<0.1s$		Trip
D	IEC60898-1 GB10963.1	1.13In	$\leq 1h (\leq 63A)$ $\leq 2h (>63A)$	Cold	No trip	10In	$\leq 0.1s$		No trip
		1.45In	$<1h (\leq 63A)$ $<2h (>63A)$	Hot	Trip	14In	$<0.1s$		Trip

Tripping curve

