Features

CDB9Z DC Miniature Circuit Breaker



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The CDB9Z DC miniature circuit breaker provides the following functions:

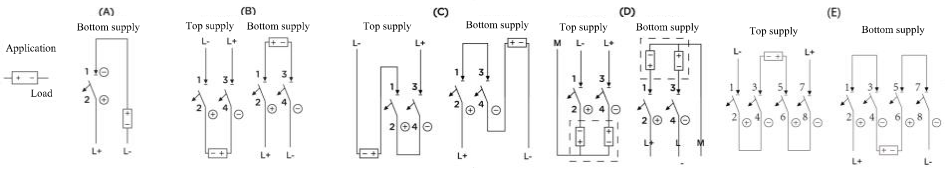
Overload protection
Short-circuit protection
Control
Isolation
Suitable for industrial and original equipment manufacturer (OEM) applications

Main parameters

Rated current	1A, 2A, 4A, 6A, 10A, 16A, 20A, 25A, 32A, 40A, 50A, 63A
Frame size	63A
Poles	1P/2P/4P
Tripping curve	Ii = 5.5In ±20%, Ii = 8.5In ±20% (see appendix)
Rated operating voltage	DC:1P/2P/4P 125V/250V/1000V 1P/2P/4P 250V/500V/1000V
Rated impulse withstand voltage Uimp	6kV
Fast closing	Ensures reliable operation under impact loads and extends the electrical service life of the circuit breaker.
Breaking capacity	1P 125V/2P 250V 10kA; 1P 250V/2P 500V 10kA 4P 1000V 6KA
Current limiting class	3
Mechanical life	20,000 operations
Electrical life	3,000 operations
Environment	Operating temperature: -30°C to 70°C Altitude: not exceeding 2000 m Resistance to humidity and heat: Class 2 (95% relative humidity at 55°C) Locations free from significant vibration and shock
Wiring	Tunnel-type terminal 1–32A: up to 25 mm² 40–63A: up to 35 mm²

Connection example — Observe polarity when wiring DC circuit breakers

	1P single pole	2P two poles	2P two poles	2P two poles	4P four poles
Breaking capacity	⎓10kA	⎓10kA	⎓10kA	⎓10kA	⎓6kA
Un (rated voltage)	⎓125V/250V	⎓250V/500V	⎓250V/500V	⎓250V/500V	⎓1000V
Unmax $U_{L+/L-}$	⎓125V/250V	⎓250V/500V	⎓250V/500V	⎓250V/500V	⎓1000V
Unmax $U_{L/⏚}$	⎓125V/250V	⎓250V/500V	⎓250V/500V	⎓125V/250V	⎓1000V



⊕Notes: (1) L+ power supply positive pole, L- power supply negative pole; (2) circuit breaker positive pole, circuit breaker negative pole; (3) in DC power systems, "L-" is usually grounded, while in positive and negative power supply systems, the neutral pole "M" is grounded.⊖

Installation dimensions	Modular structure for easy installation on a DIN standard rail Rated torque: up to 32A: 2.5 N.m 40–63A: 3.5 N.m

■ Degree of protection: IP20
■ Accessories: OF/SD/MX+OF installed on the left side of the circuit breaker (capable of mounting two or more accessories simultaneously)
■ Applicable standards: IEC 60898-2/GB 10963.2
■ Certifications: CCC, CE, CB, SEMKO

Tripping characteristics

■ Type B curve
□ Protects loads with low short-circuit current
□ Tripping characteristic: instantaneous tripping range (4.4–6.6)In
■ Type C curve
□ Protects conventional loads and distribution cables
□ Tripping characteristic: instantaneous tripping range (6.8–10.2)In

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Product Name	Breaking Capacity	Frame Size	Poles	Tripping Type	Rated Current
CDB9Z	H	63	1	B	16

Default: breaking type 10KA (1P/2P); 6 KA (4P) Default: 1P: 125V; 2P: 250V H: 1P : 250V; 2P: 500V	63A	1: 1P 2: 2P 4: 4P	B: Type B C: Type C	1A 2A 4: 4A 6: 6A 10: 10A 16: 16A	20: 20A 25: 25A 32: 32A 40: 40A 50: 50A 63: 63A

Voltage Rating (1P/2P)	Tripping Type	Rated Current	Poles	
			1P	2P
H	B	1	CDB9ZH631B1	CDB9ZH632B1
		2	CDB9ZH631B2	CDB9ZH632B2
		4	CDB9ZH631B4	CDB9ZH632B4
		6	CDB9ZH631B6	CDB9ZH632B6
		10	CDB9ZH631B10	CDB9ZH632B10
		16	CDB9ZH631B16	CDB9ZH632B16
		20	CDB9ZH631B20	CDB9ZH632B20
		25	CDB9ZH631B25	CDB9ZH632B25
		32	CDB9ZH631B32	CDB9ZH632B32
		40	CDB9ZH631B40	CDB9ZH632B40
		50	CDB9ZH631B50	CDB9ZH632B50
		63	CDB9ZH631B63	CDB9ZH632B63
	C	1	CDB9ZH631C1	CDB9ZH632C1
		2	CDB9ZH631C2	CDB9ZH632C2
		4	CDB9ZH631C4	CDB9ZH632C4
		6	CDB9ZH631C6	CDB9ZH632C6
		10	CDB9ZH631C10	CDB9ZH632C10
		16	CDB9ZH631C16	CDB9ZH632C16
		20	CDB9ZH631C20	CDB9ZH632C20
		25	CDB9ZH631C25	CDB9ZH632C25
		32	CDB9ZH631C32	CDB9ZH632C32
		40	CDB9ZH631C40	CDB9ZH632C40
		50	CDB9ZH631C50	CDB9ZH632C50
		63	CDB9ZH631C63	CDB9ZH632C63

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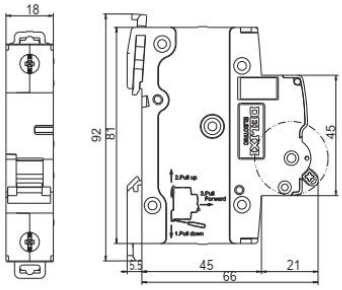
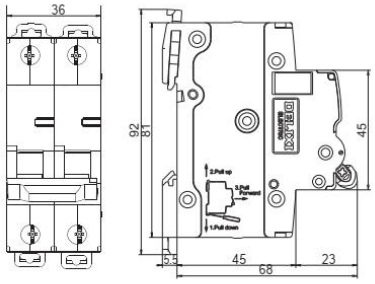
Voltage Rating (1P/2P/4P)	Tripping Type	Rated Current	Poles		
			1P	2P	4P
Omitted	B	1	CDB9Z631B1	CDB9Z632B1	CDB9Z634B1
		2	CDB9Z631B2	CDB9Z632B2	CDB9Z634B2
		4	CDB9Z631B4	CDB9Z632B4	CDB9Z634B4
		6	CDB9Z631B6	CDB9Z632B6	CDB9Z634B6
		10	CDB9Z631B10	CDB9Z632B10	CDB9Z634B10
		16	CDB9Z631B16	CDB9Z632B16	CDB9Z634B16
		20	CDB9Z631B20	CDB9Z632B20	CDB9Z634B20
		25	CDB9Z631B25	CDB9Z632B25	CDB9Z634B25
		32	CDB9Z631B32	CDB9Z632B32	CDB9Z634B32
		40	CDB9Z631B40	CDB9Z632B40	CDB9Z634B40
		50	CDB9Z631B50	CDB9Z632B50	CDB9Z634B50
		63	CDB9Z631B63	CDB9Z632B63	CDB9Z634B63
	C	1	CDB9Z631C1	CDB9Z632C1	CDB9Z634C1
		2	CDB9Z631C2	CDB9Z632C2	CDB9Z634C2
		4	CDB9Z631C4	CDB9Z632C4	CDB9Z634C4
		6	CDB9Z631C6	CDB9Z632C6	CDB9Z634C6
		10	CDB9Z631C10	CDB9Z632C10	CDB9Z634C10
		16	CDB9Z631C16	CDB9Z632C16	CDB9Z634C16
		20	CDB9Z631C20	CDB9Z632C20	CDB9Z634C20
		25	CDB9Z631C25	CDB9Z632C25	CDB9Z634C25
		32	CDB9Z631C32	CDB9Z632C32	CDB9Z634C32
		40	CDB9Z631C40	CDB9Z632C40	CDB9Z634C40
		50	CDB9Z631C50	CDB9Z632C50	CDB9Z634C50
		63	CDB9Z631C63	CDB9Z632C63	CDB9Z634C63

CDB9Z DC Miniature Circuit Breaker

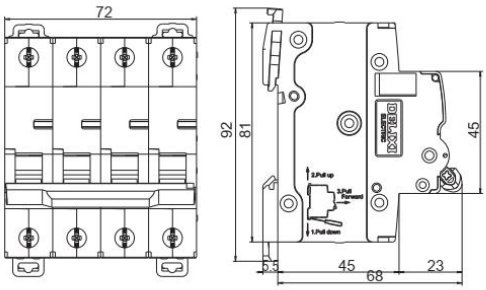
63A frame size



1P



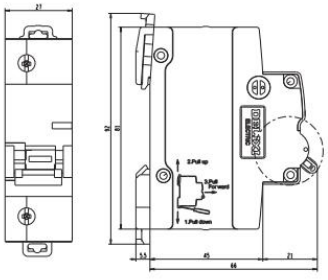
2P



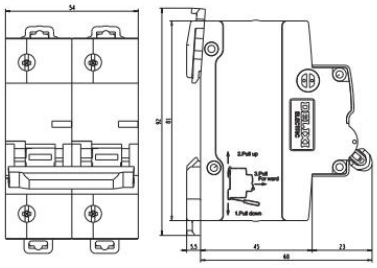
4P

CDB9-125 High-current Circuit Breaker

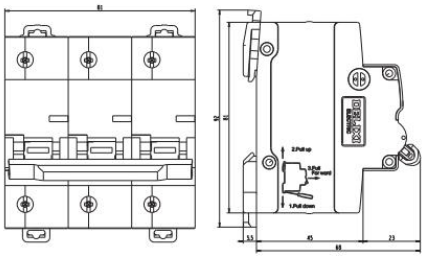
125A frame size



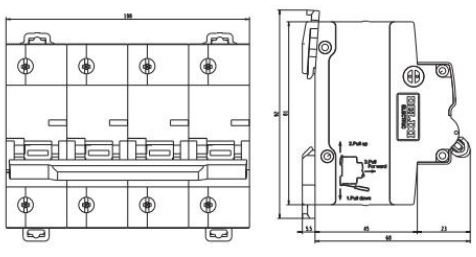
1P



2P



3P



4P