



Comprehensive and Safer Protection



The 10kA high breaking capacity specifications of the circuit breaker and earth leakage circuit breaker are added to easily deal with short circuit fault for safer protection and more secure electricity.

CDB6HLES-63 covering **A type** and **AC type** earth leakage protection specifications for more comprehensive and safer protection.



VS



Common DC pulse application of A type leakage protection



Medical facilities



Inverter



UPS



Cabinet



Air conditioner

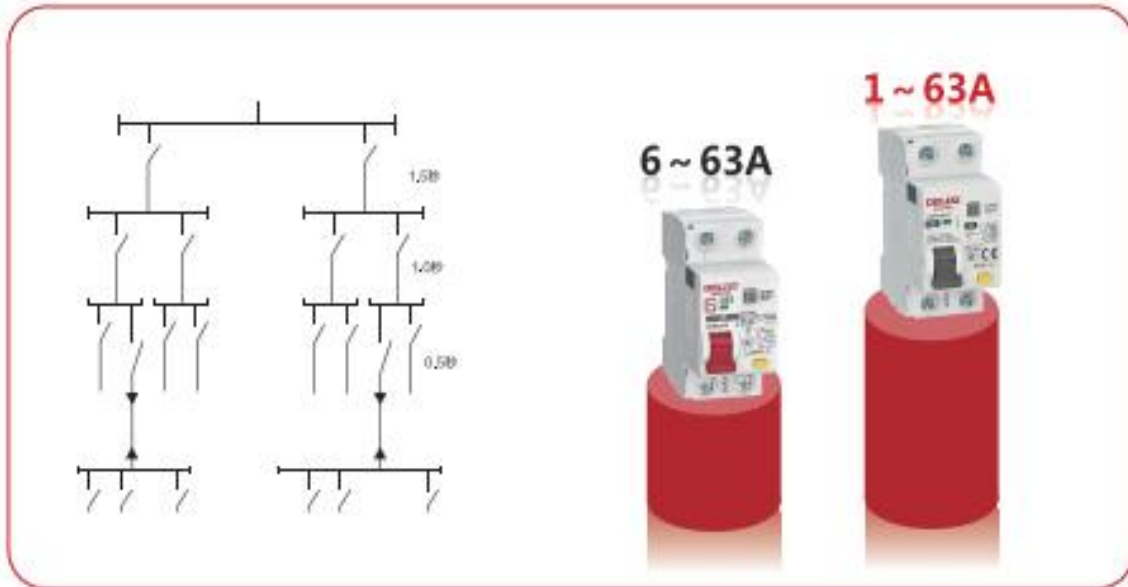


Charging pile

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CDB6H Series Miniature Circuit Breaker

The **delay type** specification and **1~5A** small current specification are added for CDB6HLES-63, realizing leakage graded protection and 1~63A current coverage to satisfy the different application needs



Small Size, Space Saving

CDB6HLES-63 adopts the integrated design, with width reduced by **30%~50%**, reducing bits, saving space, and improving heat sink and expansion capacity



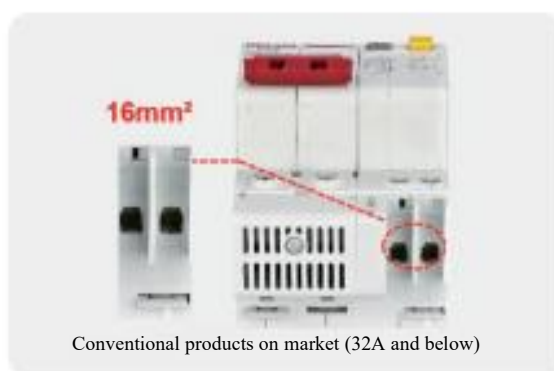


Large Hole Wiring, More Convenient

The wiring capacity of CDB6HLES-63 **full series** reaches **25 mm²**, making more convenient wiring connection, improving the worker's wiring efficiency, and reducing labor intensity

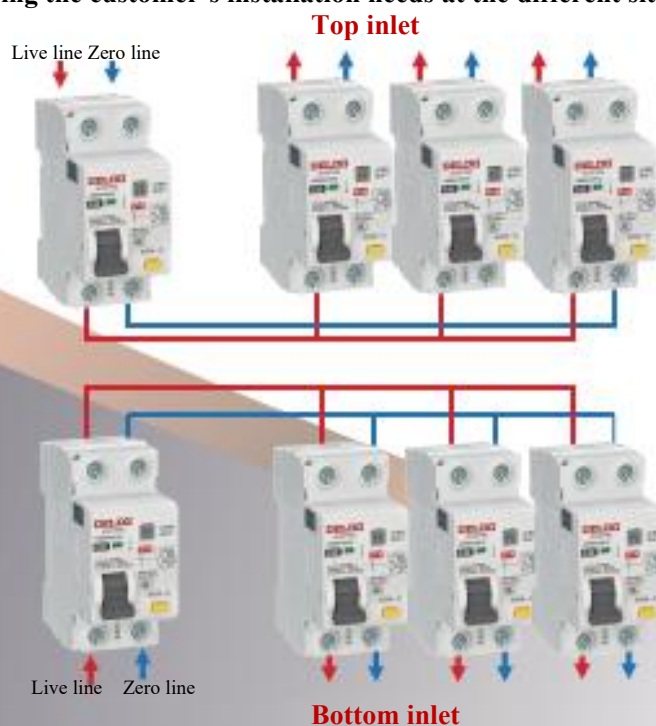


CDB6HLES-63 (full series)



Conventional products on market (32A and below)

Top inlet and bottom inlet specifications are provided for CDB6HLES-63 1P+N, 2P, satisfying the customer's installation needs at the different sites with more flexible layout



CDB6H Series Miniature Circuit Breaker



Excellent Quality and More Durable

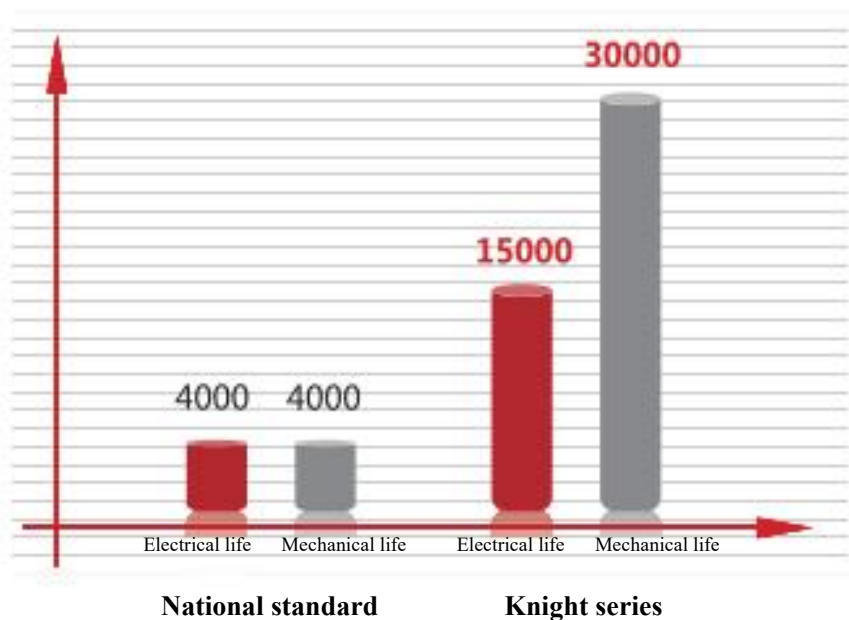
The moving and stationary contacts adopt silver graphite bases with good electroconductibility, low operation temperature rise, and longer service life



Moving contact



Stataionary contact



New accessory platform with more artistic appearance and more reliable quality; with FS, FF, and MOWY added, more complete types

Technical Parameters

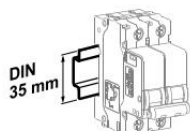
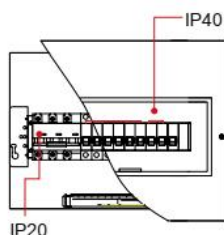
Standard miniature circuit breaker

Main technical parameters

					
Model		CDB6H-63	CDB6HTC-63	CDB6HLES-63	CDB6H-80
Combined data					
Product function		Short circuit protection, overload protection, isolation function	Short circuit protection, overload protection, isolation function	Short circuit protection, overload protection, leakage protection, isolation function, overvoltage protection (only for overvoltage type product)	Short circuit protection, overload protection, isolation function
Standard		GB/T 10963.1, IEC60898-1	GB/T 14048.2, IEC60947-2	GB/T 16917.1, IEC61009-1	GB/T 10963.1, IEC60898-1
Compliance certification		CCC, CE, CB, ROHS	CCC, CE, CB, ROHS	CCC, CE, CB, ROHS	CCC, CE, CB, ROHS
Number of poles		1P/2P/3P/4P	1P/2P/3P/4P	1P+N/2P/3P/3P+N/4P	1P/2P/3P/4P
Rated current (A)		1-63	1-63	General type: 1-63 Delay type: 32-63	80
Rated frequency (Hz)		50/60	50/60	50/60	50/60
Electrical characteristics					
Rated operating voltage Ue	1P (V)	AC230/400, AC240/415	230/400 AC, 240/415 AC, DC80	-	AC230/400, AC240/415
	1P+N (V)	-	-	AC230/240	-
	2P, 3P, 3P+N, 4P (V)	AC400/415	AC400/415	AC400/415 (2P: AC:230/240)	AC400/415
Rated insulation voltage Ui (V)		500	500	500	500
Rated short capacity Icn (kA)		6,10	6	6,10	6
Rated residual operating current (mA)		-	-	General type: 10, 30, 50, 75, 100, 300 Delay type: 50, 75, 100, 300	-
Leakage protection type		-	-	AC, A	-
Rated impulse withstand voltage Uimp (1.2/50) (kV)		4	6	4	4
Dielectric test voltage (kV)		2kV (50/60Hz, 1 minute)	2kV (50/60Hz, 1 minute)	2kV (50/60Hz, 1 minute)	2kV (50/60Hz, 1 minute)
Isolation function		Yes	Yes	Yes	Yes
Pollution level		2	3	2	2
Use category		A	A	A	A
Trip form		Thermal magnetic trip	Thermal magnetic trip	Thermal magnetic trip	Thermal magnetic trip
Thermal magnetic chateristics	B type curve (3In~5In)	■	■	■	■
	C type curve (5In~10In)	■	■	■	■
	D type curve (10In~14In)	■	■	■	■
Electrical and mechanical accessories		■	■	■	■
Mechanical characteristics					
Mechanical life (times)		30000	30000	30000	30000
Electrical life (times)		15000	15000	15000	15000
Protection grade	Installed in the power distribution box	IP40	IP40	IP40	IP40
	Installed directly	IP20	IP20	IP20	IP20
Resistance to mechanical shock		30g, 3 impacts, duration time 11ms (place free from severe vibration and impact)	30g, 3 impacts, duration time 11ms (place free from severe vibration and impact)	30g, 3 impacts, duration time 11ms (place free from severe vibration and impact)	30g, 3 impacts, duration time 11ms (place free from severe vibration and impact)
Vibration resistance (IEC/EN 60068-2-6)		place free from severe vibration and impact	place free from severe vibration and impact	place free from severe vibration and impact	place free from severe vibration and impact
Resistance to humidity and heat (IEC 60068-2)		Class 2, 28 cycles When the temperature is 55°C, the relative humidity is 90%~96%; When the temperature is 25°C, the relative humidity is 99%~100%;	Class 2, 28 cycles When the temperature is 55°C, the relative humidity is 90%~96%; When the temperature is 25°C, the relative humidity is 99%~100%;	Class 2, 28 cycles When the temperature is 55°C, the relative humidity is 90%~96%; When the temperature is 25°C, the relative humidity is 99%~100%;	Class 2, 28 cycles When the temperature is 55°C, the relative humidity is 90%~96%; When the temperature is 25°C, the relative humidity is 99%~100%;
Humidity and heat °C/RH					
Reference ambient temp. °C		30°C	40°C	30°C	30°C
Ambient temp. (daily mean temp. ≤ +35°C) °C		-35°C~+70°C	-35°C~+70°C	-35°C~+70°C	-35°C~+70°C
Storage temp. °C		-40°C~+85°C	-40°C~+85°C	-40°C~+85°C	-40°C~+85°C
Installation characteristics					
Terminal block type		U shaped terminal block	U shaped terminal block	U shaped terminal block	U shaped terminal block
Max. wiring capacity	Current grade 1-32 (A) (mm²)	25	25	25	50
	Current grade 40-60 (A) (mm²)				
Max. ultimate torque (N.m)		2.5	2.5	2.5	3.5
Tools		Phillips screwdriver or slotted screwdriver	Phillips screwdriver or slotted screwdriver	Phillips screwdriver or slotted screwdriver	Phillips screwdriver or slotted screwdriver
Installation		Installed on the standard DIN rail (35mm)	Installed on the standard DIN rail (35mm)	Installed on the standard DIN rail (35mm)	Installed on the standard DIN rail (35mm)
Inlet method		Top inlet and bottom inlet	Top inlet and bottom inlet	Top inlet (for all numbers of poles) Bottom inlet (1P+N/2P)	Top inlet and bottom inlet
Altitude		Not exceed 2000m	Not exceed 2000m	Not exceed 2000m	Not exceed 2000m

Technical Parameters

CDB6H-63 Standard miniature circuit breaker



Installed on the 35mm standard rail

CDB6H-63 Standard Miniature Circuit Breaker

The CDB6H-63 standard miniature circuit breaker has the following functions

- Short circuit protection
- Overload protection
- Isolation function

Main features

Rated operating voltage (V)	1P: 230/400, 240/415 AC 2P, 3P, 4P: 400/415 AC
Rated current (A)	1-63
Rated frequency (Hz)	50/60
Number of poles	1P, 2P, 3P, 4P
Breaking capacity (kA)	6, 10
Standard	GB/T 10963.1. IEC60898-1
Certification	CCC CE RoHS

Electrical characteristics

Rated insulation voltage U_i (V)	500
Max. operating voltage U_{max} (V)	1P (V) 240/415AC 2P, 3, 4P (V) 415AC
Rated short circuit capacity I_{cn} (kA)	6, 10
Rated impulse withstand voltage U_{imp} (1.2/50) (kV)	4
Dielectric test voltage	2kV (50/60HZ, 1 minute)
Use category	A
Isolation function	Yes
Pollution level	2
Trip form	Thermal magnetic trip
Trip curve	B type curve (3In~5In) ■ C type curve (5In~10In) ■ D type curve (10In~14In) ■

Electrical and mechanical accessories Yes

Mechanical characteristics

Handle	Gray
Mechanical life (times)	30000
Electrical life (times)	15000
Protection grade	Installed in distribution box: IP40 Directly installed: IP20
Resistance to mechanical shock	30g, 3 impacts, duration time 11ms (place free from severe vibration and impact)
Vibration resistance (IEC/EN 60068-2-6)	Place free from severe vibration and impact
Resistance to humidity and heat (IEC 60068-2)	Class 2, 28 cycles
Humidity and heat (°C/RH)	When the temperature is 55°C, the relative humidity is 90%~96%; When the temperature is 25°C, the relative humidity is 99%~100%;
Reference ambient temp.	30°C
Ambient temp. (daily mean temp. $\leq +35^\circ\text{C}$)	-35°C~ 70°C
Storage temp.	-40°C~ +85°C

Installation characteristics

Terminal block type	U shaped terminal block
Max. wiring capacity (A)	25mm ²
Max. ultimate torque (A)	2.5 N.m
Tools	Phillips screwdriver or slotted screwdriver
Installation	Installed on the standard DIN rail (35mm)
Inlet method	Top inlet and bottom inlet

Model Catalog and Dimensions Drawings

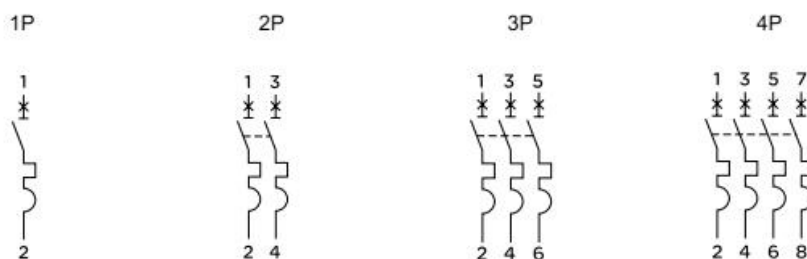
CDB6H-63 Standard Miniature Circuit Breaker



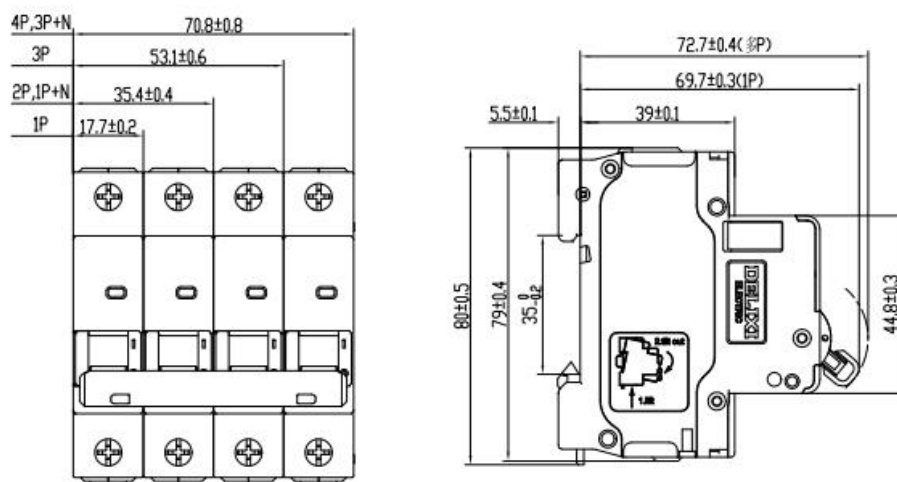
Model Catalog

Product model	Breaking capacity	Number of poles	Trip type	Rated current
CDB6H-63	H	1	C	6
	Default: 6kA H:10kA	1: 1P 2: 2P 3: 3P 4: 4P	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

Wiring Diagram



Outline and Installation Dimensions



Technical Parameters

CDB6HTC-63 Standard Miniature Circuit Breaker



CDB6HTC-63 standard miniature circuit breaker

CDB6HTC-63 standard miniature circuit breaker has the following functions

- Short circuit protection
- Overload protection
- Isolation function

Main features

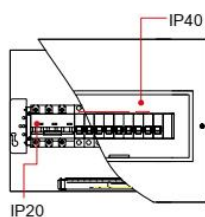
Rated operating voltage (V)	1P:230/400, 240/415VAC, DC 80V 2P: AC 400/415V, DC125V 3P-4P: AC 400/415V
Rated current (A)	1-63
Rated frequency (Hz)	50/60
Number of poles	1P, 2P, 3P, 4P
Breaking capacity (kA)	6
Standard	GB/T 14048.2, IEC60947-2
Certification	CCC CE RoHS

Electrical characteristics

Rated insulation voltage U_i	(V)	500
Max. operating voltage U_{max}	1P, (V)	240/415 AC, 80DC
	2P, 3P, 4P (V)	415 AC, 125VDC
Rated short circuit capacity I_{cn}	(kA)	6, 10
Rated impulse withstand voltage U_{imp}	(kV)	6
(1.2/50)		
Dielectric test voltage		2kV (50/60HZ, 1 minute)
Use category		A
Isolation function		Yes
Pollution level		3
Trip form		Thermal magnetic trip
Trip curve	Ii(B) type curve 4In(AC), 5In(DC) ■ Ii(C) type curve 8In(AC), 10In(DC) ■ Ii(D) type curve 12In(AC), 15In(DC) ■	
Electrical and mechanical accessories		Yes

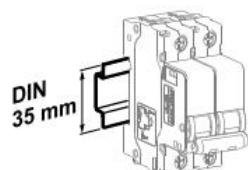
Technical Parameters

CDB6HTC-63 Standard Miniature Circuit Breaker



Mechanical characteristics

Handle	Gray
Mechanical life (times)	30000
Electrical life (times)	15000
Protection grade	Installed in distribution box: IP40 Directly installed: IP20
Resistance to mechanical shock	30g, 3 impacts, duration time 11ms (place free from severe vibration and impact)
Vibration resistance (IEC/EN 60068-2-6)	Place free from severe vibration and impact
Resistance to humidity and heat (IEC 60068-2)	Class 2, 28 cycles
Humidity and heat (°C/RH)	When the temperature is 55 °C, the relative humidity is 90%~96%; When the temperature is 25 °C, the relative humidity is 99%~100%;
Reference ambient temp.	40°C
Ambient temp. (daily mean temp. ≤+35°C)	-35°C~ 70°C
Storage temp.	-40°C~ +85°C



Installed on the 35mm standard rail

Installation characteristics

Terminal block type	U shaped terminal block
Max. wiring capacity (A)	25mm ²
Max. ultimate torque (A)	2.5 N.m
Tools	Phillips screwdriver or slotted screwdriver
Installation	Installed on the standard DIN rail (35mm)
Inlet method	Top inlet and bottom inlet

Model Catalog and Dimensions Drawings

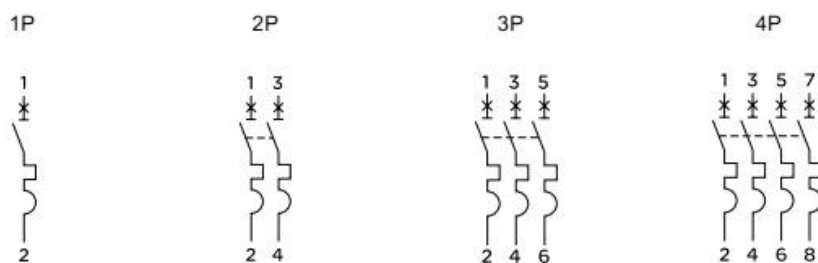
CDB6HTC-63 Standard Miniature Circuit Breaker



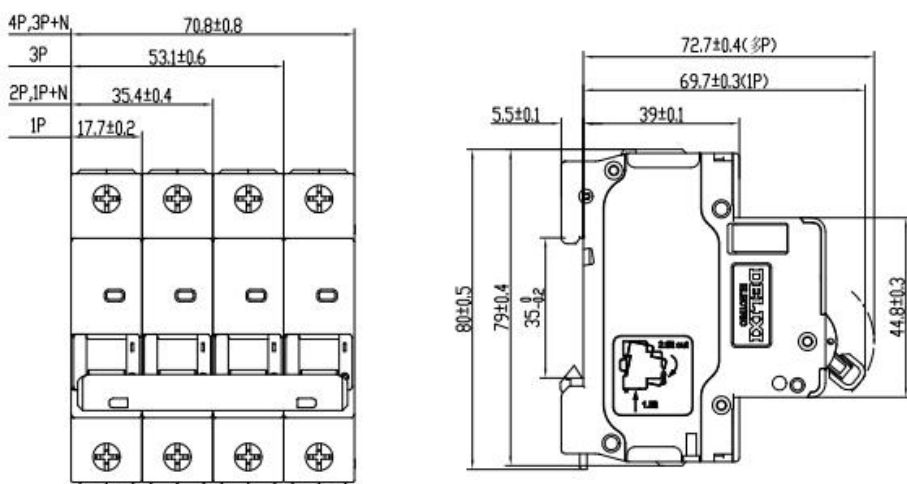
Model Catalog

Product model	Number of poles	Trip type	Rated current
CDB6HTC-63	1	C	6
	1: 1P 2: 2P 3: 3P 4: 4P	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

Wiring Diagram



Outline and Installation Dimensions



Technical Parameters

CDB6HLES-63 Miniature Earth Leakage Circuit Breaker



CDB6HLES-63 Miniature Earth Leakage Circuit Breaker

CDB6HLES-63 miniature earth leakage circuit breaker has the following functions

- Short circuit protection
- Overload protection
- Isolation function
- Earth leakage protection function
- Overload protection function

Main features

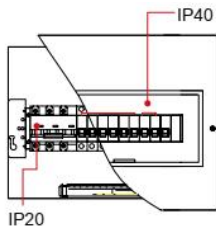
Rated operating voltage (V)	1P+N, 2P: 230/240 AC 2P, 3P, 3P+N, 4P: 400/415 AC
Rated current (A)	General type: 1-63 S type (delay type): 32~63
Rated frequency (Hz)	50/60
Number of poles	1P+N, 2P, 3P, 3P+N, 4P
Breaking capacity (kA)	6, 10
Rated residual operating current (mA)	General type: 10, 30, 50, 75, 100, 300 S type (delay type): 50, 75, 100, 300
Overvoltage protection function (V)	(280 ± 14) VAC (only suitable for 1P+N, 2P, C type product)
Standard	GB/T 16917.1, IEC61009-1
Certification	CCC CE RoHS
	Note: CE certification only for 2P, 3P, 4P

Electrical characteristics

Rated insulation voltage U_i (V)	500
Max. operating voltage U_{max} 1P+N, 2P (V)	240AC
3P, 3P+N, 4P (V)	415AC
Rated short circuit capacity I_{cn} (kA)	6, 10
Rated impulse withstand voltage U_{imp} (1.2/50) (kV)	4
Dielectric test voltage	2kV(50/60HZ, 1 minute)
Isolation function	Yes
Leakage type	A type, AC type
Pollution level	2
Trip form	Thermal magnetic trip
Trip curve	B type curve (3 I_n ~5 I_n) ■
C type curve (5 I_n ~10 I_n)	■
D type curve (10 I_n ~14 I_n)	■
Electrical and mechanical accessories	Yes

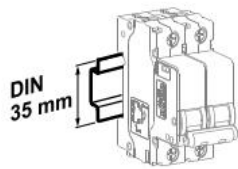
Technical Parameters

CDB6HLES-63 Miniature Earth Leakage Circuit Breaker



Mechanical characteristics

Trip indicator	CDB6HLES-63 has residual current operation trip indicator; when the reset button bounces, this is leakage trip
Handle	Gray
Mechanical life (times)	30000
Electrical life (times)	15000
Protection grade	Installed in distribution box: IP40 Directly installed: IP20
Resistance to mechanical shock	30g, 3 impacts, duration time 11ms (place free from severe vibration and impact)
Vibration resistance (IEC/EN 60068-2-6)	Place free from severe vibration and impact
Resistance to humidity and heat (IEC 60068-2)	Class 2, 28 cycles
Humidity and heat (°C/RH)	When the temperature is 55 °C , the relative humidity is 90%~96%; When the temperature is 25 °C , the relative humidity is 99%~100%;
Reference ambient temp.	30°C
Ambient temp. (daily mean temp. ≤ +35°C)	-35°C~ 70°C
Storage temp.	-40°C~ +85°C



Installed on the 35mm standard rail

Installation characteristics

Terminal block type	U shaped terminal block
Max. wiring capacity (A)	25mm ²
Max. ultimate torque (A)	2.5 N.m
Tools	Phillips screwdriver or slotted screwdriver
Installation	Installed on the standard DIN rail (35mm)
Inlet method	Top inlet (for all numbers of poles) Bottom inlet (only for 1P + N/2P product)

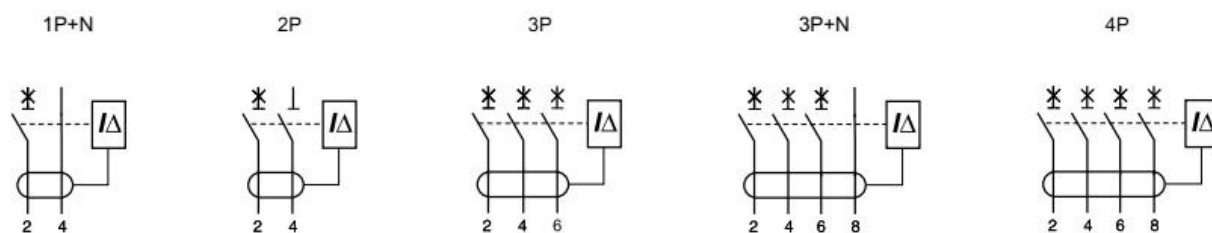
Model Catalog and Dimensions Drawings

CDB6HLES-63 Miniature Earth Leakage Circuit Breaker

Model Catalog

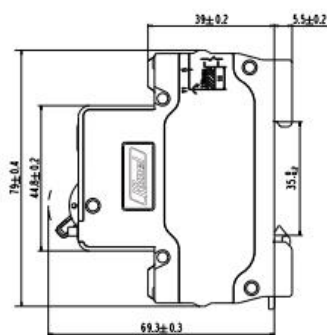
Product model	Breaking capacity	Inlet method	Number of poles	Trip type	Rated current	Residual current	Other function
CDB6HLES-63	H		1	C	6		
CDB6HLES-63	Default: 6kA H:10kA	Default: Top inlet	1:1P+N 2:2P 3:3P 4:4P 6:3P+N	B: B type C: C type D: D type	1:1A 2:2A 3:3A 4:4A 5:5A 6:6A 8:8A 10:10A 13:13A 16:16A 20:20A 25:25A 32:32A 40:40A 50:50A 63:63A	Default: 30mA R10:10mA R50:50mA R75:75mA R1:100mA R3:300mA	Default: AC type leakage protection, no overvoltage protection A: A type leakage protection, no overvoltage protection G: AC type leakage protection, overvoltage protection S: Delay type
CDB6HLES-63		X: Bottom inlet	1:1P+N 2:2P				

Wiring Diagram

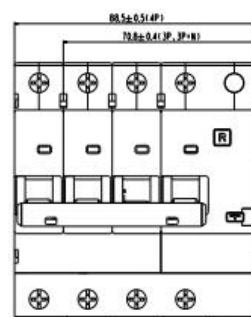
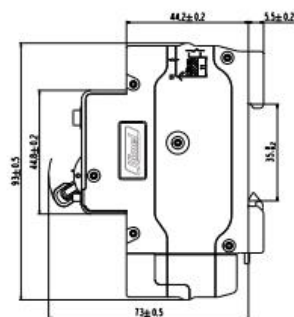


Outline and Installation Dimensions

1P+N/2P



3P/3P+N/4P



Technical Parameters

CDB6H-80 Standard Miniature Circuit Breaker



CDB6H-80 Standard Miniature Circuit Breaker

CDB6H-80 standard miniature circuit breaker has the following functions

- Short circuit protection
- Overload protection
- Isolation function

Main features

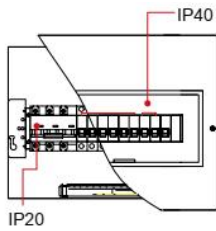
Rated operating voltage (V)	1P: 230/400, 240/415 AC 2P, 3P, 4P: 400/415 AC
Rated current (A)	80
Rated frequency (Hz)	50/60
Number of poles	1P,2P,3P,4P
Breaking capacity (kA)	6
Standard	GB/T 10963.1. IEC60898-1
Certification	CCC CE RoHS

Electrical characteristics

Rated insulation voltage U_i	(V)	500
Max. operating voltage U_{max}	1P (V) 2P, 3, 4P (V)	240/415AC 415AC
Rated short circuit capacity I_{cn}	(kA)	6
Rated impulse withstand voltage U_{imp}	(kV)	4
Dielectric test voltage		2kV (50/60HZ, 1 minute)
Use category		A
Isolation function		Yes
Leakage type		A type, AC type
Pollution level		2
Trip form		Thermal magnetic trip
Trip curve	B type curve ($3I_n \sim 5I_n$) C type curve ($5I_n \sim 10I_n$) D type curve ($10I_n \sim 14I_n$)	■ ■ ■
Electrical and mechanical accessories		Yes

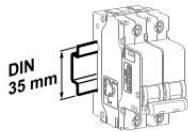
Technical Parameters

CDB6H-80 Standard Miniature Circuit Breaker



Mechanical characteristics

Handle	Gray
Mechanical life (times)	30000
Electrical life (times)	15000
Protection grade	Installed in distribution box: IP40 Directly installed: IP20
Resistance to mechanical shock	30g, 3 impacts, duration time 11ms (place free from severe vibration and impact)
Vibration resistance (IEC/EN 60068-2-6)	Place free from severe vibration and impact
Resistance to humidity and heat (IEC 60068-2)	Class 2, 28 cycles
Humidity and heat (°C/RH)	When the temperature is 55 °C, the relative humidity is 90%~96%; When the temperature is 25 °C, the relative humidity is 99%~100%;
Reference ambient temp.	30°C
Ambient temp. (daily mean temp. ≤+35°C)	-35°C~ 70°C
Storage temp.	-40°C~ +85°C



Installed on the 35mm standard rail

Installation characteristics

Terminal block type	U shaped terminal block
Max. wiring capacity (A)	25mm ²
Max. ultimate torque (A)	2.5 N.m
Tools	Phillips screwdriver or slotted screwdriver
Installation	Installed on the standard DIN rail (35mm)
Inlet method	Top inlet and bottom inlet

Model Catalog and Dimensions Drawings

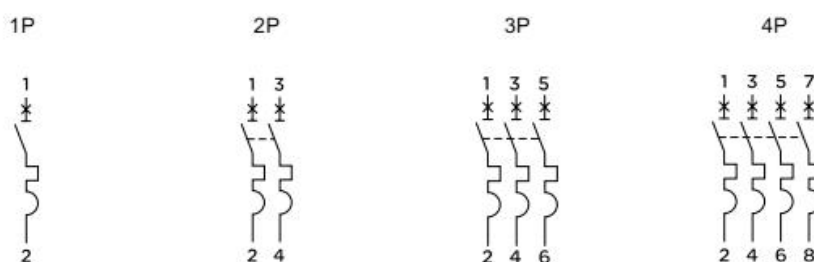
CDB6H-80 Standard Miniature Circuit Breaker



Model Catalog

Product model	Number of poles	Trip type	Rated current
CDB6H-80	1	C	80
	1: 1P 2: 2P 3: 3P 4: 4P	B: B type C: C type D: D type	80: 80A

Wiring Diagram



Outline and Installation Dimensions

