

Product name		CDB6i	CDB6i-80	CDB6LESi
				
Combined data				
Standards		GB/T10963.1 IEC/EN60898-1	GB/T 10963.1, IEC60898-1	GB/T16917.1 IEC61009-1
Certification		CCC, CE, TUV, RoHS	CCC, CE, ROHS	CCC, CE, RoHS
Number of poles		1P,1P+N,2P,3P,3P+N,4P	1P/1P+N/2P/3P/3P+N/4P	1P+N,2P,3P,3P+N,4P
Rated current (A)		(A) 1-63	80	6-63
Rated frequency (Hz)		(Hz) 50/60	50/60	50/60
Electrical characteristics				
Rated operating voltage U _e	1P	(V) 230/400AC, 240/415AC	230/400, 240/415 AC	-
	1P+N	(V) 230/240AC	230/240 AC	230 AC
	2P, 3P, 3P+N, 4P	(V) 400/415V	400/415 AC	400 AC(2P 230 AC)
Rated insulation voltage U _i		(V) 500	500	500
Rated short circuit capacity I _{cn}		(kA) 6, 10	6	6
Rated impulse withstand voltage U _{imp} (1.2/50)		(kV) 4	4	4
Dielectric test voltage		(kV) 2 kV (50/60 Hz, 1 minute)	2 kV (50/60 Hz, 1 minute)	2 kV (50/60 Hz, 1 minute)
Disconnection function		Yes	Yes	Yes (except for 1P+N, 3P+N)
Pollution level		2	2	2
Usage category		A	A	A
Trip form		Thermal magnetic trip	Thermal magnetic trip	Thermal magnetic trip
Thermal magnetic trip characteristics	B type curve (3I _n ~5I _n)	■	■	■
	C type curve (5I _n ~10I _n)	■	■	■
	D type curve (10I _n ~14I _n)	■	■	■
Electrical and mechanical accessories		■	■	■
Mechanical property				
Mechanical durability		Times 20000	20000	20000
Electrical durability		Times 12000	10000	10000
Protection grade	Installed in a distribution box	IP40	IP40	IP40
	Directly installed	IP20	IP20	IP20
Mechanical shock resistance		30g, 3 shocks, duration 11 ms (in places without significant vibration and shock)	30g, 3 shocks, duration 11 ms (in places without significant vibration and shock)	30g, 3 shocks, duration 11 ms (in places without significant vibration and shock)
Anti-vibration (IEC/EN 60068-2-6)		Installed in places without significant vibration and shock	Installed in places without significant vibration and shock	Installed in places without significant vibration and shock
Resistance to damp and heat (IEC 60068-2)		Class 2, 28 cycles When the temperature is 55℃, the relative humidity is 90%-96% When the temperature is 25℃, the relative humidity is 95%-100%	Class 2, 28 cycles When the temperature is 55℃, the relative humidity is 90%-96% When the temperature is 25℃, the relative humidity is 95%-100%	Class 2, 28 cycles When the temperature is 55℃, the relative humidity is 90%-96% When the temperature is 25℃, the relative humidity is 95%-100%
Resistance ambient temperature		℃ 30℃	30℃	30℃
Ambient working temperature (mean daily temperature ≤ +35℃)		-35℃ ~+70℃	-35℃ ~+70℃	-35℃ ~+70℃
Storage temperature		℃ -40℃ ~+85℃	-40℃ ~+85℃	-40℃ ~+85℃
Installation characteristics				
Terminal block form		U-shaped terminal block	U-shaped terminal block	U-shaped terminal block
Max. wiring capacity	Current grade 1-32 (A) (mm ²)	25	-	25
	Current grade 40-63 (A) (mm ²)			
	Current grade 80-125 (A) (mm ²)	-	50	
Max. ultimate torque		(N.m) Current grade 1-63(A): 2.5	Current grade 1-63(A): 3.5	Current grade 1-63(A): 2.5
Tools		Cross screwdriver or slotted screwdriver	Cross screwdriver or slotted screwdriver	Cross 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)
Inlet method		Top and bottom inlet	Top and bottom inlet	Top inlet (for any number of poles); Bottom inlet (only for 1P+N/2P product)

Note: 1. The same model may contain two kinds of materials: RoHS compliant and non-conforming materials, so that please select them carefully;

CDB6LEi	CDB6Pi	CDB6PLEi	CDB6i-125
			
GB/T16917.1 IEC61009-1	GB/T10963.1 IEC/EN60898-1	GB/T16917.1 IEC/EN61009-1	GB/T14048.2 IEC/EN60947-2
CCC, CE, RoHS	CCC, CE, TUV, RoHS	CCC, CE, TUV, RoHS	CCC, CE, TUV, RoHS
1P+N,2P,3P,3P+N,4P	1P+N	1P+N	1P,1P+N,2P,3P,3P+N,4P
6-63	6-40	6-40	63-125
50/60	50	50	50/60
-	-	-	230/240AC, 80DC
230/240AC	230 AC	230 AC	230/240AC
400/415AC(2P 230/240AC)	-	-	400/415(2P 230/240AC, 125DC)
500	500	500	500
6	4.5, 6	4.5, 6	10
4	4	4	4
2 kV (50/60 Hz, 1 minute)	2 kV (50/60 Hz, 1 minute)	2 kV (50/60 Hz, 1 minute)	2 kV (50/60 Hz, 1 minute)
Yes (except for 1P+N, 3P+N)	Yes	Yes	Yes
2	2	2	2
A	A	A	A
Thermal magnetic trip	Thermal magnetic trip	Thermal magnetic trip	Thermal magnetic trip
—	—	-	-
■	■	■	■
■	■	■	■
■	■	■	■
20000	20000	20000	20000
12000	10000	10000	6000 Times (In≤100A) 4000 Times (In>100A)
IP40	IP40	IP40	IP40
IP20	IP20	IP20	IP20
30g, 3 shocks, duration 11 ms (in places without significant vibration and shock)	30g, 3 shocks, duration 11 ms (in places without significant vibration and shock)	30g, 3 shocks, duration 11 ms (in places without significant vibration and shock)	30g, 3 shocks, duration 11 ms (in places without significant vibration and shock)
Installed in places without significant vibration and shock	Installed in places without significant vibration and shock	Installed in places without significant vibration and shock	Installed in places without significant vibration and shock
Class 2, 28 cycles When the temperature is 55℃, the relative humidity is 90%-96% When the temperature is 25℃, the relative humidity is 95%-100%	Class 2, 28 cycles When the temperature is 55℃, the relative humidity is 90%-96% When the temperature is 25℃, the relative humidity is 95%-100%	Class 2, 28 cycles When the temperature is 55℃, the relative humidity is 90%-96% When the temperature is 25℃, the relative humidity is 95%-100%	Class 2, 28 cycles When the temperature is 55℃, the relative humidity is 90%-96% When the temperature is 25℃, the relative humidity is 95%-100%
30℃	30℃	30℃	30℃
-35℃ ~+70℃	-35℃ ~+70℃	-35℃ ~+70℃	-35℃ ~+70℃
-40℃ ~+85℃	-40℃ ~+85℃	-40℃ ~+85℃	-40℃ ~+85℃
U-shaped terminal block	U-shaped terminal block	U-shaped terminal block	U-shaped terminal block
16	10	10	-
25			50
-	-	-	-
Current grade 6-32(A): 2	Current grade 6-40(A): 2	Current grade 6-40(A): 2	Current grade 63-125(A): 3.5
Current grade 40-63(A): 2.5			
Cross screwdriver or slotted screwdriver	Cross screwdriver or slotted screwdriver	Cross screwdriver or slotted screwdriver	Cross screwdriver or slotted screwdriver
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)
Top inlet	Top inlet and bottom inlet	Top inlet	Top inlet and bottom inlet

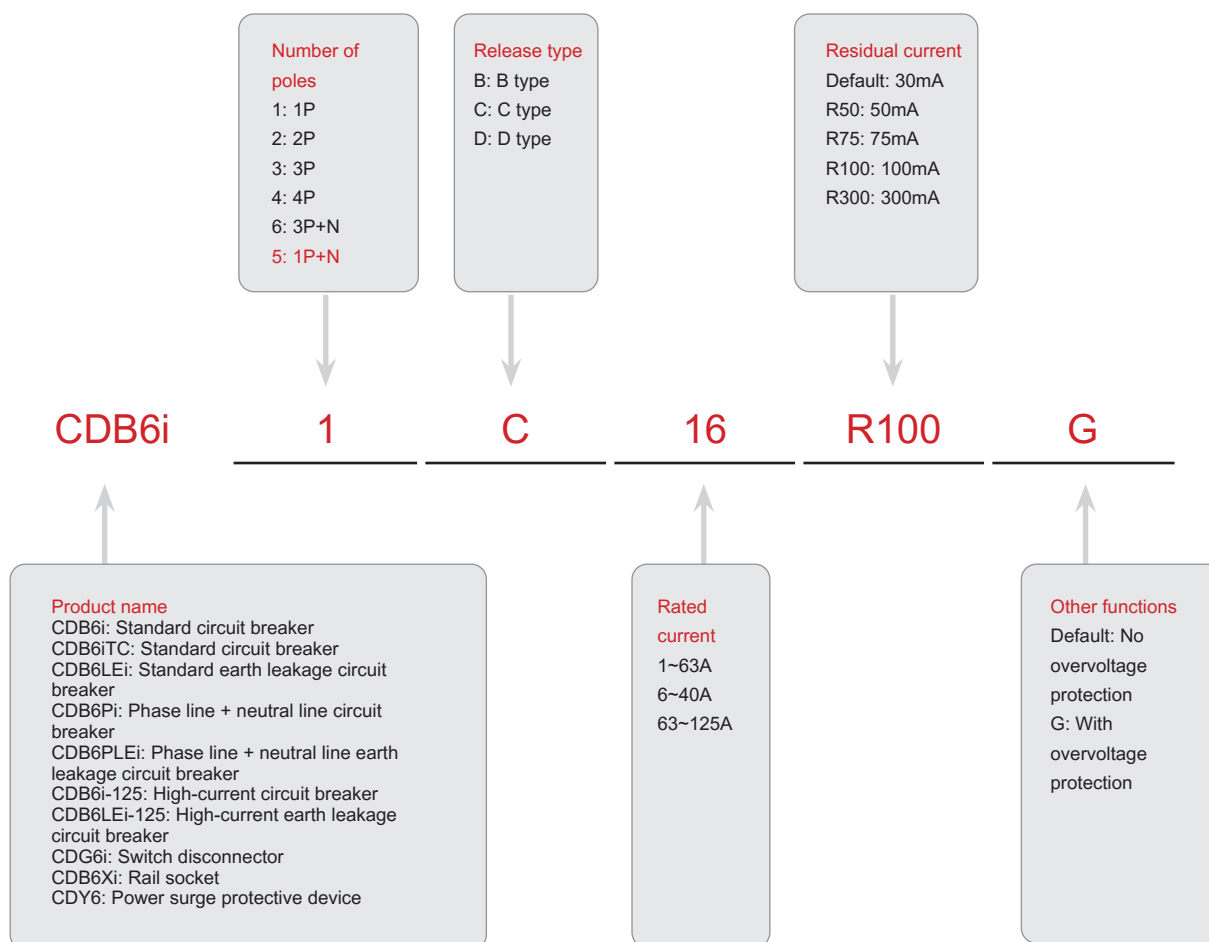
Product name		CDB6LEI-125	CDG6i
			
Combined data			
Standards		GB/T14048.2 IEC60947-2	GB/T14048.3 IEC60947-3
Certification		CCC, CE, RoHS	CCC, CE, RoHS
Number of poles		1P+N, 2P, 3P, 3P+N, 4P	1P, 2P, 3P, 4P
Rated current		(A) 63-125	20-125
Rated frequency		(Hz) 50/60	50/60
Electrical characteristics			
Rated operating voltage U _e	1P (V)	-	230 AC
	1P+N (V)	230/240 AC	-
	2P, 3P, 3P+N, 4P(V)	400/415 AC(2P 230/240AC)	400 AC
Rated insulation voltage U _i		(V) 500	500
Rated short circuit capacity I _{cn}		(kA) 10	-
Rated impulse withstand voltage U _{imp} (1.2/50)		(kV) 4	6
Dielectric test voltage		(kV) 2 kV (50/60 Hz, 1 minute)	2 kV (50/60 Hz, 1 minute)
Disconnection function		Yes	Yes
Pollution level		2	-
Usage category		A	-
Trip form		Thermal magnetic trip	-
Thermal magnetic trip characteristics	B type curve (3I _n ~5I _n)	-	-
	C type curve (5I _n ~10I _n)	-	-
	D type curve (10I _n ~14I _n)	■	-
Electrical and mechanical accessories		■	-
Mechanical property			
Mechanical durability		Times 20000	10000
Electrical durability		Times 6000 Times (I _n ≤100A) 4000 Times (I _n >100A)	3000
Protection grade	Installed in a distribution box	IP40	IP40
	Directly installed	IP20	IP20
Mechanical shock resistance		30g, 3 shocks, duration 11 ms (in places without significant vibration and shock)	30g, 3 shocks, duration 11 ms (in places without significant vibration and shock)
Anti-vibration (IEC/EN 60068-2-6)		Installed in places without significant vibration and shock	Installed in places without significant vibration and shock
Resistance to damp and heat (IEC 60068-2)		Damp and heat °C /RH 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 95%-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 95%-100%
Resistance ambient temperature		°C 30°C	-
Ambient working temperature (mean daily temperature ≤ +35°C)		°C -35°C ~+70°C	-35°C ~+70°C
Storage temperature		°C -40°C ~+85°C	-40°C ~+85°C
Installation characteristics			
Terminal block form		U-shaped terminal block	U-shaped terminal block
Max. wiring capacity	Current grade 1-32 (A) (mm ²)	50	25
	Current grade 40-63 (A) (mm ²)		50
	Current grade 80-125 (A) (mm ²)		
Max. ultimate torque		(N.m) Current grade 63-125(A): 3.5	Current grade 20-63(A): 3.5 Current grade 80-125(A): 3.5
Tools		Cross screwdriver or slotted screwdriver	Cross screwdriver or slotted screwdriver
Installation		Installed on the standard DIN rail (35mm)	Installed on the standard DIN rail (35mm)
Inlet method		Top inlet	Top and bottom inlet

Note:

1. The same model may contain two kinds of materials: RoHS compliant and non-conforming materials, so that please select them carefully;
2. Only RoHS-compliant materials meet the CE certification requirements.

Product name		CDB6iTC	CDB6iZ	CDL6i	CDB6Xi
					
Combined data					
Standards		GB/T 14048.2	GB/T 14048.2, IEC60947-2	GB/T 16916.1	GB/T 2099, GB/T 1002,
Certification		CCC, RoHS, CE	CCC	CCC	GB/T 1003 CCC, ROHS
Number of poles		1P, 1P+N, 2P, 3P, 3P+N, 4P	1P, 2P, 3P	2P, 4P	2P, 2P+PE, 3P+PE, 2P/2P+PE
Rated current (A)		1-63	1-63	10-100	10-25
Rated frequency (Hz)		50	\	50	50
Electrical characteristics					
Rated operating voltage U _e	1P (V)	60 DC 230/400 AC	DC250V	-	-
	1P+N (V)	230 AC	\	230 AC	250 AC
	2P, 3P, 3P+N, 4P (V)	125DC (2P), 400 AC	DC500V	400 AC	440 AC
Rated insulation voltage U _i (V)		500	500	500	500
Rated impulse withstand voltage U _{imp} (1,2/50) (kV)		4	4	4	4
Rated short circuit capacity I _{cn} (kA)		6	6	-	-
Dielectric test voltage (kV)		2 kV (50/60 Hz, 1 minute)	\	2 kV (50/60 Hz, 1 minute)	2 kV (50/60 Hz, 1 minute)
Rated residual making and breaking capacity I _m (A)		-	-	I _n <63A, 500A; I _n ≥63A, 10I _n	-
Rated limit short circuit current I _{Δc} (kA)		-	-	6	-
Disconnection function		Yes	Yes	Yes	-
Pollution level		2	2	2	-
Usage category		A	A	A	-
Trip form		Thermal magnetic trip	Thermal magnetic trip	-	-
Thermal magnetic trip characteristics	B type curve	■ 4I _n (AC), 5I _n (DC)	■	-	-
	C type curve	■ 8I _n (AC), 10I _n (DC)	■	-	-
	D type curve	■ 12I _n (AC), 15I _n (DC)	-	-	-
Electrical and mechanical accessories			■	-	-
Mechanical property					
Mechanical durability Times		20000	20000	20000	-
Electrical durability Times		10000	10000	10000	5000
Protection grade	Installed in the distribution box	IP40	IP40	IP40	-
	Installed outside the distribution box	IP20	IP20	IP20	-
Mechanical shock resistance		30g, 3 shocks, duration 11 ms (in places without significant vibration and shock)	30g, 3 shocks, duration 11 ms (in places without significant vibration and shock)	30g, 3 shocks, duration 11 ms (in places without significant vibration and shock)	30g, 3 shocks, duration 11 ms (in places without significant vibration and shock)
Anti-vibration (IEC/EN 60068-2-6)		Installed in places without significant vibration and shock	Installed in places without significant vibration and shock	Installed in places without significant vibration and shock	Installed in places without significant vibration and shock
Resistance to damp and heat (IEC 60068-2) °C /RH		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 95%-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 95%-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 95%-100%	-
Resistance ambient temperature °C		30°C	30°C	30°C	30°C
Ambient working temperature (mean daily temperature ≤ +35°C) °C		-35°C ~+70°C	-35°C ~+70°C	-5°C ~+40°C	-20°C ~+60°C
Storage temperature °C		-40°C ~+85°C	-40°C ~+85°C	-25°C ~+55°C	-40°C ~+70°C
Installation characteristics					
Terminal block form		U-shaped terminal block	U-shaped terminal block	U-shaped terminal block	U-shaped terminal block
Max. wiring capacity	Current grade 1-32 (A) (mm ²)	25	25	16	25
	Current grade 40-63 (A) (mm ²)	-	-	-	-
	Current grade 80-125 (A) (mm ²)	-	-	35	-
Max. ultimate torque (N.m)		Current grade 1-63(A): 2.5	Current grade 10-100(A): 2.5	Current grade 10-100(A): 2.5	2.5
Tools		Cross screwdriver or slotted screwdriver	Cross screwdriver or slotted screwdriver	Cross screwdriver or slotted screwdriver	Cross 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 and bottom inlet	Top and bottom inlet	Top inlet	Lead the wire in according to the product mark

■ Product Introduction



Notes:

1. The code 5 of the number of neutral poles in the CDB6i and CDY6 product encoding only represents 1P+N product;
2. The CDB6Pi and CDB6PLEi products are all 1P+N products, and the code of the number of neutral poles in the product encoding is default;

Product Overview

Main functions

Short circuit protection, overload protection, and disconnection functions

Applied standards

GB/T 10963.1, IEC/EN60898-1

Certification compliance

* RoHS compliant products have a separate material number, and carefully select it when ordering

* Only RoHS-compliant products are CE certified



Main features

Rated operating voltage(V)	1P: 230/400, 240/415AC	Rated frequency (Hz)	50/60
	1P+N: 230/240 AC	Number of poles	1P,1P+N,2P,3P,3P+N,4P
	2P,3P,3P+N,4P: 400/415 AC	Breaking capacity (kA)	6, 10
Rated current (A)	1,2,3,4,5,6,8,10,13,16,20,25,32,40,50,63	Trip curve	B, C, and D types

Product Selection

Product name	Breaking capacity	Number of poles	Trip type	Rated current	
CDB6i		1	C	6	
	↓	↓	↓	↓	
	Default: 6kA H: 10kA	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

Notes:1. Those listed in the above table are the model selection rules for non-RoHS material; for RoHS compliant products, the model number is simply changed to CDB6R;

2. The product can be assembled with accessories OF, SD, MSN, MV, MN, MVMN, FF, FS, MO (with power), and MOWY (without power).

Technical Parameters

Electrical characteristics

Rated insulation voltage U_i	(V)	500	Disconnection function	Yes
Rated operating voltage U_e (V)	1P (V)	230/400 AC, 240/415 AC	Pollution level	2
	1P+N (V)	230/240 AC	Trip type	Thermal magnetic trip
	2P, 3P, 4P, 3P+N (V)	400/415 AC	Thermal magnetic trip characteristics	B type curve (3In~5In) ■ C type curve (5In~10In) ■ D type curve (10In~14In) ■
Rated short circuit capacity I_{cn} (IEC/EN 60898-1) (kA)		6, 10	Electrical and mechanical accessories	■
Rated impulse withstand voltage U_{imp} (1.2/50) (kV)		4		
Dielectric test voltage (kV)		2kV (50/60Hz, 1 minute)		

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Mechanical characteristics

Handle		Red, mark indicates ON-OFF position
Mechanical durability	Times	20000
Electrical durability	Times	12000
Protection grade		Installed in a distribution box: IP40 Installed directly: IP20
Mechanical shock resistance		30g, 3 shocks, duration 11 ms (in places without significant vibration and shock)

Vibration resistance (IEC/EN 60068-2-6)		In places without significant vibration and shock
Resistance to damp and heat (IEC 60068-2)	Damp and heat °C/RH	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 95%-100%
Reference ambient temperature	°C	30°C
Ambient working temperature (mean daily temperature $\leq +35^{\circ}\text{C}$)	°C	-35°C ~ +70°C
Storage temperature	°C	-40°C ~ +85°C

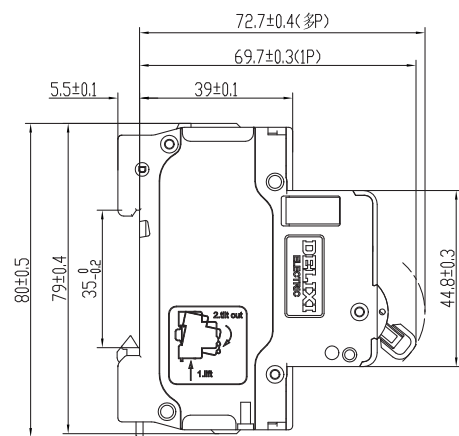
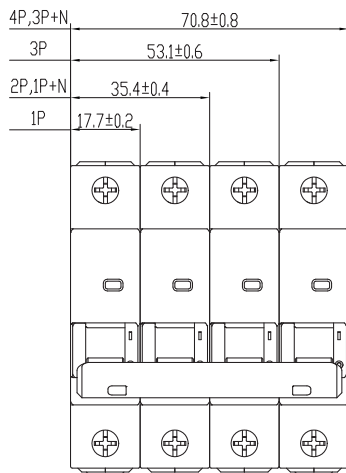
Installation characteristics

Terminal block form	U-shaped terminal block
Max. wiring capacity	Current grade 1-63(A): 25 mm ²
Max. ultimate torque	Current grade 1-63(A): 2.5N.m

Tools	Cross screwdriver or slotted screwdriver
Installation	Installed on the standard DIN rail (35mm)
Inlet method	Top inlet and bottom inlet

Outline and Installation Dimensions

Dimensional drawing



Wiring diagram

