

• C

1-63A 30

7-14  $I_n$

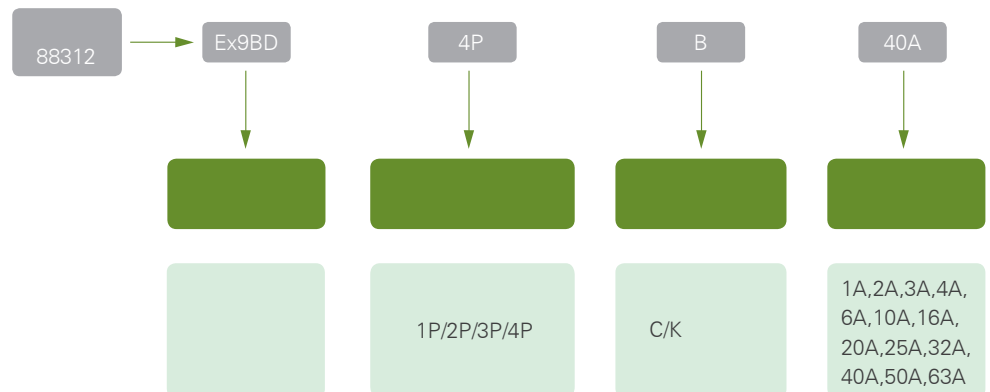
• K

K 1.3





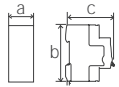
IEC / EN60898-1 GB 10963.1

14-20

\*




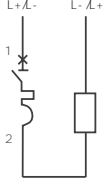

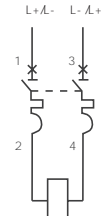

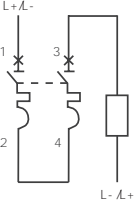
# MCB Ex9BD

Ex9BD						
IEC/EN 60947-2 GB 14048.2						
		1P	2P	3P	4P	
		63				
$U_e$	V DC	220	440	630	800	
$I_n$	A	1 2 3 4	6 10 16 20	25 32 40 50	63	
$U_i$	V	1000				
$U_{imp}$	kV	4				
		H				
	kA	10				
$I_{cs}$	$\%I_{cu}$	100%				
		C/K				
		20000				
		8500				
O~C		2500				
		1500				
		IP40				
		IP20				
		ON/OFF				
	mm <sup>2</sup>	1~35				
		-30~+70				
		2				
	m	≤2000				
		+20	95%	+40	50%	
		3				
		III				
		DIN				
x x mm		a	18	36	54	72
		b	89			
		c	74			
	kg	0.12	0.24	0.36	0.48	


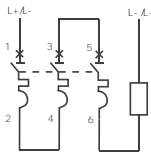

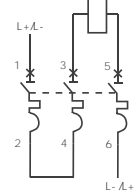

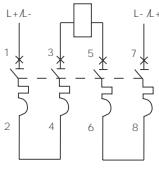
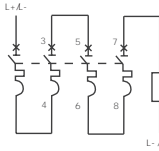
Ex9BD

10kA —C K

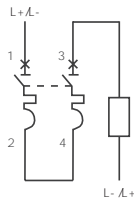
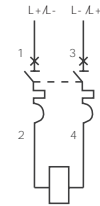
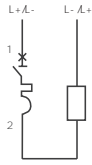
C

	mm	A	V DC		
 	18	1	220	88211	Ex9BD 1P C 1A
	18	2	220	88212	Ex9BD 1P C 2A
	18	3	220	88213	Ex9BD 1P C 3A
	18	4	220	88214	Ex9BD 1P C 4A
	18	6	220	88215	Ex9BD 1P C 6A
	18	10	220	88216	Ex9BD 1P C 10A
	18	16	220	88217	Ex9BD 1P C 16A
	18	20	220	88218	Ex9BD 1P C 20A
	18	25	220	88219	Ex9BD 1P C 25A
	18	32	220	88220	Ex9BD 1P C 32A
	18	40	220	88221	Ex9BD 1P C 40A
	18	50	220	88222	Ex9BD 1P C 50A
	18	63	220	88223	Ex9BD 1P C 63A
 	36	1	440	88224	Ex9BD 2P C 1A
	36	2	440	88225	Ex9BD 2P C 2A
	36	3	440	88226	Ex9BD 2P C 3A
	36	4	440	88227	Ex9BD 2P C 4A
	36	6	440	88228	Ex9BD 2P C 6A
	36	10	440	88229	Ex9BD 2P C 10A
	36	16	440	88230	Ex9BD 2P C 16A
	36	20	440	88231	Ex9BD 2P C 20A
	36	25	440	88232	Ex9BD 2P C 25A
	36	32	440	88233	Ex9BD 2P C 32A
	36	40	440	88234	Ex9BD 2P C 40A
	36	50	440	88235	Ex9BD 2P C 50A
	36	63	440	88236	Ex9BD 2P C 63A
 	36	1	440	90100	Ex9BD 2P C 1A New
	36	2	440	90101	Ex9BD 2P C 2A New
	36	3	440	90102	Ex9BD 2P C 3A New
	36	4	440	90103	Ex9BD 2P C 4A New
	36	6	440	90104	Ex9BD 2P C 6A New
	36	10	440	90105	Ex9BD 2P C 10A New
	36	16	440	90106	Ex9BD 2P C 16A New
	36	20	440	90107	Ex9BD 2P C 20A New
	36	25	440	90108	Ex9BD 2P C 25A New
	36	32	440	90109	Ex9BD 2P C 32A New
	36	40	440	90110	Ex9BD 2P C 40A New
	36	50	440	90111	Ex9BD 2P C 50A New
	36	63	440	90112	Ex9BD 2P C 63A New

C

	mm	A	V DC			
 	54	1	630	88237	Ex9BD 3P C 1A	
	54	2	630	88238	Ex9BD 3P C 2A	
	54	3	630	88239	Ex9BD 3P C 3A	
	54	4	630	88240	Ex9BD 3P C 4A	
	54	6	630	88241	Ex9BD 3P C 6A	
	54	10	630	88242	Ex9BD 3P C 10A	
	54	16	630	88243	Ex9BD 3P C 16A	
	54	20	630	88244	Ex9BD 3P C 20A	
	54	25	630	88245	Ex9BD 3P C 25A	
	54	32	630	88246	Ex9BD 3P C 32A	
	54	40	630	88247	Ex9BD 3P C 40A	
	54	50	630	88248	Ex9BD 3P C 50A	
	54	63	630	88249	Ex9BD 3P C 63A	
	 	54	1	630	90113	Ex9BD 3P C 1A New
		54	2	630	90114	Ex9BD 3P C 2A New
		54	3	630	90115	Ex9BD 3P C 3A New
54		4	630	90116	Ex9BD 3P C 4A New	
54		6	630	90117	Ex9BD 3P C 6A New	
54		10	630	90118	Ex9BD 3P C 10A New	
54		16	630	90119	Ex9BD 3P C 16A New	
54		20	630	90120	Ex9BD 3P C 20A New	
54		25	630	90121	Ex9BD 3P C 25A New	
54		32	630	90122	Ex9BD 3P C 32A New	
54		40	630	90123	Ex9BD 3P C 40A New	
54		50	630	90124	Ex9BD 3P C 50A New	
54		63	630	90125	Ex9BD 3P C 63A New	
  		72	1	800	88250	Ex9BD 4P C 1A
		72	2	800	88251	Ex9BD 4P C 2A
		72	3	800	88252	Ex9BD 4P C 3A
	72	4	800	88253	Ex9BD 4P C 4A	
	72	6	800	88254	Ex9BD 4P C 6A	
	72	10	800	88255	Ex9BD 4P C 10A	
	72	16	800	88256	Ex9BD 4P C 16A	
	72	20	800	88257	Ex9BD 4P C 20A	
	72	25	800	88258	Ex9BD 4P C 25A	
	72	32	800	88259	Ex9BD 4P C 32A	
	72	40	800	88260	Ex9BD 4P C 40A	
	72	50	800	88261	Ex9BD 4P C 50A	
	72	63	800	88262	Ex9BD 4P C 63A	
	72	1	800	90126	Ex9BD 4P C 1A New	
	72	2	800	90127	Ex9BD 4P C 2A New	
	72	3	800	90128	Ex9BD 4P C 3A New	
	72	4	800	90129	Ex9BD 4P C 4A New	
	72	6	800	90130	Ex9BD 4P C 6A New	
	72	10	800	90131	Ex9BD 4P C 10A New	
	72	16	800	90132	Ex9BD 4P C 16A New	
72	20	800	90133	Ex9BD 4P C 20A New		
72	25	800	90134	Ex9BD 4P C 25A New		
72	32	800	90135	Ex9BD 4P C 32A New		
72	40	800	90136	Ex9BD 4P C 40A New		
72	50	800	90137	Ex9BD 4P C 50A New		
72	63	800	90138	Ex9BD 4P C 63A New		




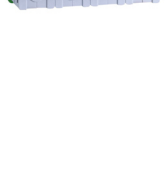
K



mm	A	V DC		
18	1	220	88263	Ex9BD 1P K 1A
18	2	220	88264	Ex9BD 1P K 2A
18	3	220	88265	Ex9BD 1P K 3A
18	4	220	88266	Ex9BD 1P K 4A
18	6	220	88267	Ex9BD 1P K 6A
18	10	220	88268	Ex9BD 1P K 10A
18	16	220	88269	Ex9BD 1P K 16A
18	20	220	88270	Ex9BD 1P K 20A
18	25	220	88271	Ex9BD 1P K 25A
18	32	220	88272	Ex9BD 1P K 32A
18	40	220	88273	Ex9BD 1P K 40A
18	50	220	88274	Ex9BD 1P K 50A
18	63	220	88275	Ex9BD 1P K 63A
36	1	440	88276	Ex9BD 2P K 1A
36	2	440	88277	Ex9BD 2P K 2A
36	3	440	88278	Ex9BD 2P K 3A
36	4	440	88279	Ex9BD 2P K 4A
36	6	440	88280	Ex9BD 2P K 6A
36	10	440	88281	Ex9BD 2P K 10A
36	16	440	88282	Ex9BD 2P K 16A
36	20	440	88283	Ex9BD 2P K 20A
36	25	440	88284	Ex9BD 2P K 25A
36	32	440	88285	Ex9BD 2P K 32A
36	40	440	88286	Ex9BD 2P K 40A
36	50	440	88287	Ex9BD 2P K 50A
36	63	440	88288	Ex9BD 2P K 63A
36	1	440	90139	Ex9BD 2P K 1A New
36	2	440	90140	Ex9BD 2P K 2A New
36	3	440	90141	Ex9BD 2P K 3A New
36	4	440	90142	Ex9BD 2P K 4A New
36	6	440	90143	Ex9BD 2P K 6A New
36	10	440	90144	Ex9BD 2P K 10A New
36	16	440	90145	Ex9BD 2P K 16A New
36	20	440	90146	Ex9BD 2P K 20A New
36	25	440	90147	Ex9BD 2P K 25A New
36	32	440	90148	Ex9BD 2P K 32A New
36	40	440	90149	Ex9BD 2P K 40A New
36	50	440	90150	Ex9BD 2P K 50A New
36	63	440	90151	Ex9BD 2P K 63A New

# MCB Ex9BD

C

	mm	A	V DC			
		54	1	630	88289 Ex9BD 3P K 1A	
		54	2	630	88290 Ex9BD 3P K 2A	
		54	3	630	88291 Ex9BD 3P K 3A	
		54	4	630	88292 Ex9BD 3P K 4A	
		54	6	630	88293 Ex9BD 3P K 6A	
		54	10	630	88294 Ex9BD 3P K 10A	
		54	16	630	88295 Ex9BD 3P K 16A	
		54	20	630	88296 Ex9BD 3P K 20A	
		54	25	630	88297 Ex9BD 3P K 25A	
		54	32	630	88298 Ex9BD 3P K 32A	
		54	40	630	88299 Ex9BD 3P K 40A	
		54	50	630	88300 Ex9BD 3P K 50A	
		54	63	630	88301 Ex9BD 3P K 63A	
		54	1	630	90153 Ex9BD 3P K 2A New	
		54	2	630	90154 Ex9BD 3P K 3A New	
			54	3	630	90155 Ex9BD 3P K 4A New
		54	4	630	90156 Ex9BD 3P K 6A New	
		54	6	630	90157 Ex9BD 3P K 10A New	
		54	10	630	90158 Ex9BD 3P K 16A New	
		54	16	630	90159 Ex9BD 3P K 20A New	
		54	20	630	90160 Ex9BD 3P K 25A New	
		54	25	630	90161 Ex9BD 3P K 32A New	
		54	32	630	90162 Ex9BD 3P K 40A New	
		54	40	630	90163 Ex9BD 3P K 50A New	
		54	50	630	90164 Ex9BD 3P K 63A New	
		54	63	630	90165 Ex9BD 4P K 1A New	
			72	1	800	88302 Ex9BD 4P K 1A
			72	2	800	88303 Ex9BD 4P K 2A
			72	3	800	88304 Ex9BD 4P K 3A
			72	4	800	88305 Ex9BD 4P K 4A
			72	6	800	88306 Ex9BD 4P K 6A
		72	10	800	88307 Ex9BD 4P K 10A	
		72	16	800	88308 Ex9BD 4P K 16A	
		72	20	800	88309 Ex9BD 4P K 20A	
		72	25	800	88310 Ex9BD 4P K 25A	
		72	32	800	88311 Ex9BD 4P K 32A	
		72	40	800	88312 Ex9BD 4P K 40A	
		72	50	800	88313 Ex9BD 4P K 50A	
		72	63	800	88314 Ex9BD 4P K 63A	
		72	1	800	90166 Ex9BD 4P K 2A New	
		72	2	800	90167 Ex9BD 4P K 3A New	
			72	3	800	90168 Ex9BD 4P K 4A New
		72	4	800	90169 Ex9BD 4P K 6A New	
		72	6	800	90170 Ex9BD 4P K 10A New	
		72	10	800	90171 Ex9BD 4P K 16A New	
		72	16	800	90172 Ex9BD 4P K 20A New	
		72	20	800	90173 Ex9BD 4P K 25A New	
		72	25	800	90174 Ex9BD 4P K 32A New	
		72	32	800	90175 Ex9BD 4P K 40A New	
		72	40	800	90176 Ex9BD 4P K 50A New	
		72	50	800	90177 Ex9BD 4P K 63A New	
		72	63	800	90178 Ex9BD 4P K 63A New	

Ex9B/Ex9PN/Ex9BD/Ex9BP

5

- AL3111/AXL31

- UVT31/UVT3101/UVT3110

AXL31

UVT31

70%-35%Ue

85%-110%Ue

- AX3111/AX3122

- OVT31

- SHT31/SHT3111

280V± 5%

SHT31

AL31/AXL31/AX31

IEC/EN 60947-1 GB14048.1

	V	A
AC	240	6
	415	3
	24	6
DC	48	2
	130	1

IEC/EN 60947-5-1 GB14048.5

18mm

36mm



AL31/AXL31



AX31



SHT31



UVT31



OVT31



Ex9B

- 
- 
- 
- 

2

3

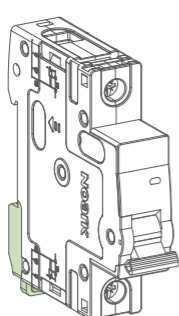
1

2

2

## Ex9BD直流小型断路器

Ex9BD Series DC Miniature Circuit Breaker



未按本说明书要求操作造成的不良后果，制造商将不承担责任。  
The manufacturer assumes no responsibility for unfavourable consequence resulting from the non-application or incorrect application of the instructions provided herein.

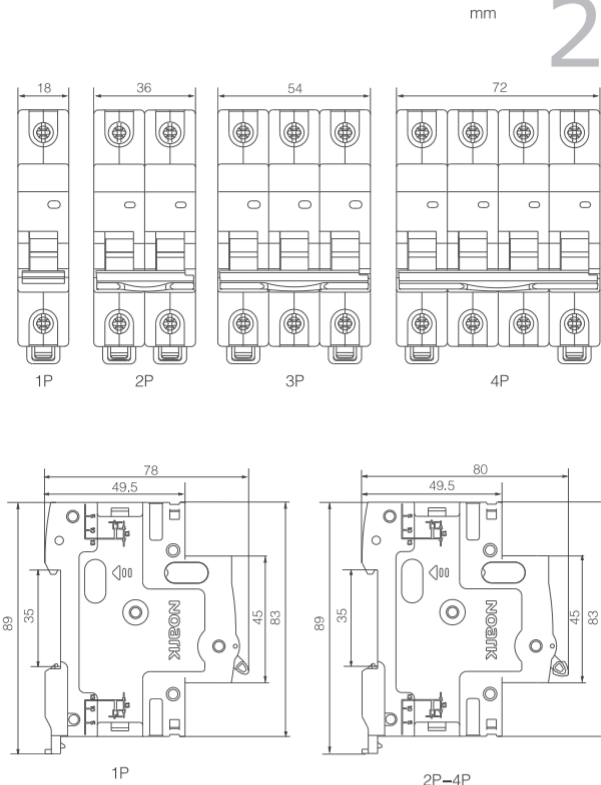
**NOARK 诺雅克**

## Ex9BD直流小型断路器

Ex9BD Series DC Miniature Circuit Breaker

外形尺寸 Dimension

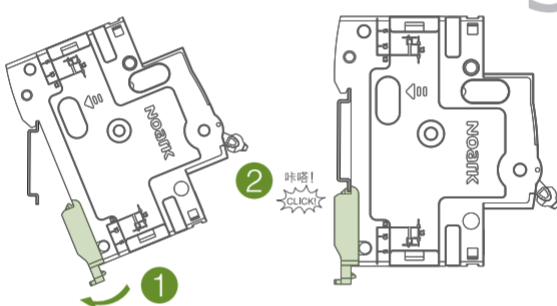
mm



## Ex9BD直流小型断路器

Ex9BD Series DC Miniature Circuit Breaker

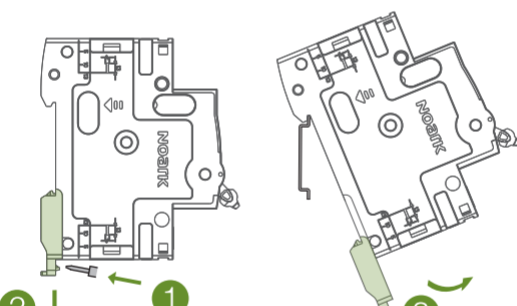
安装步骤 Installation



## Ex9BD直流小型断路器

Ex9BD Series DC Miniature Circuit Breaker

拆卸步骤 Removal

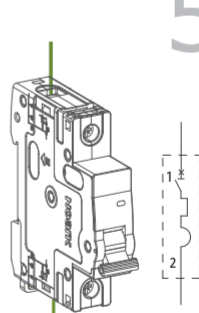


## Ex9BD直流小型断路器

Ex9BD Series DC Miniature Circuit Breaker

接线 Wiring

接线工具 Connection tool		⊕ ⊖ 2#螺丝刀 2# screw driver
接线能力(mm <sup>2</sup> ) Wiring capability		1-35mm <sup>2</sup>
拧紧力矩(Nm) Tightening torque		2-3.5Nm

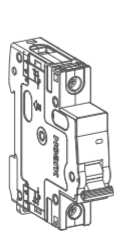


## Ex9BD直流小型断路器

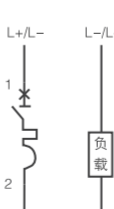
Ex9BD Series DC Miniature Circuit Breaker

接线 Wiring

1P: 220VDC



1P

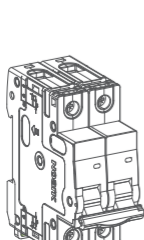


## Ex9BD直流小型断路器

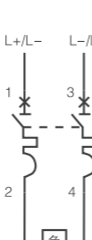
Ex9BD Series DC Miniature Circuit Breaker

接线 Wiring

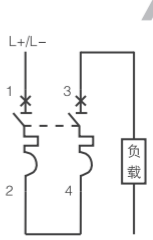
2P: 440VDC



2P



不接地系统



单极接地系统



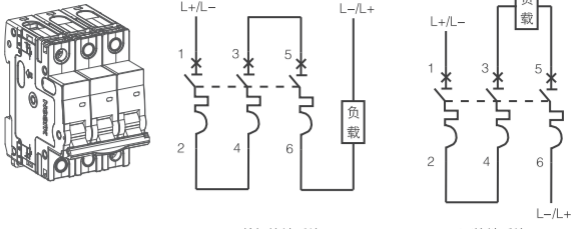
## Ex9BD直流小型断路器

Ex9BD Series DC Miniature Circuit Breaker

接线 Wiring

3P: 630VDC

# 8



3P

单极接地系统

不接地系统

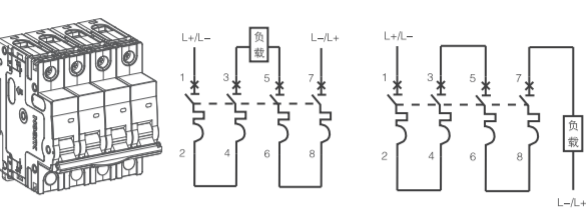
## Ex9BD直流小型断路器

Ex9BD Series DC Miniature Circuit Breaker

接线 Wiring

4P: 800VDC

# 9



4P

不接地系统

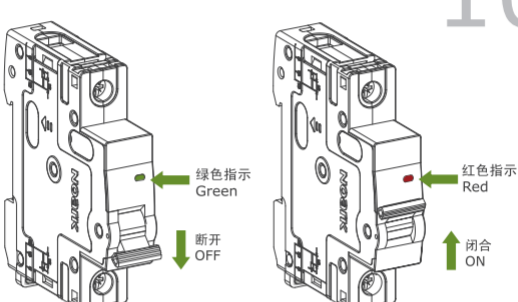
单极接地系统

## Ex9BD直流小型断路器

Ex9BD Series DC Miniature Circuit Breaker

指示 Indication

# 10

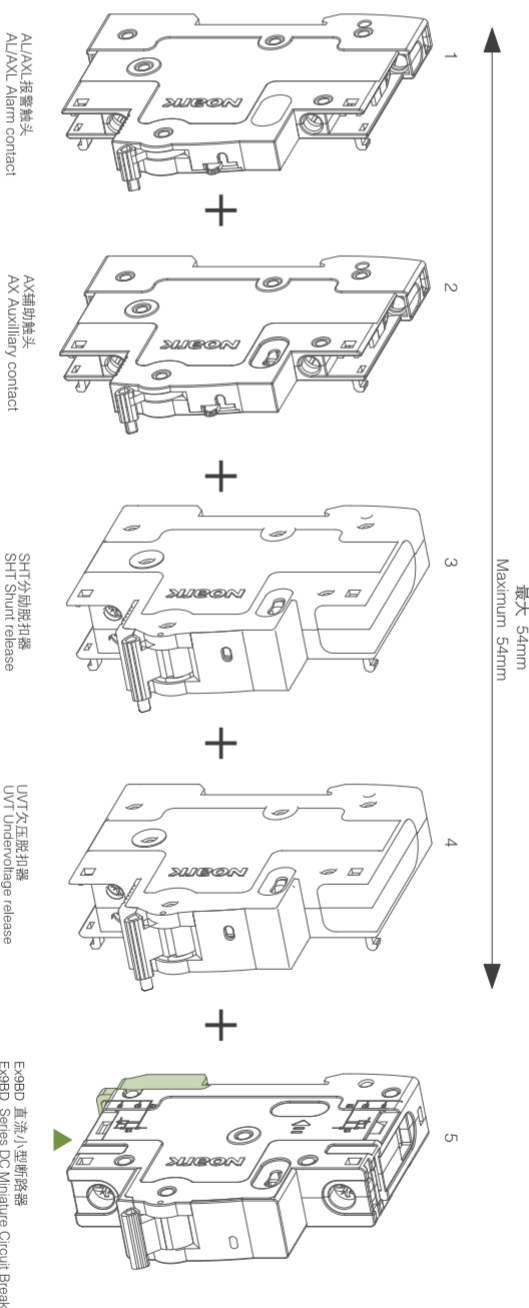


## Ex9BD直流小型断路器

Ex9BD Series DC Miniature Circuit Breaker

附件 Accessories

# 11



\*附件可单独与断路器拼装，也可以按顺序与其他附件组合后与小型断路器拼装。

\*Accessory can be combined with circuit breaker alone.Or accessories can combine themselves with other accessories at first and then with MCB

上海诺雅克电气有限公司

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Add: 855 Wenhe Road, Songjiang District, Shanghai

电话：+86-21-3779 1111

Tel: +86-21-3779 1111



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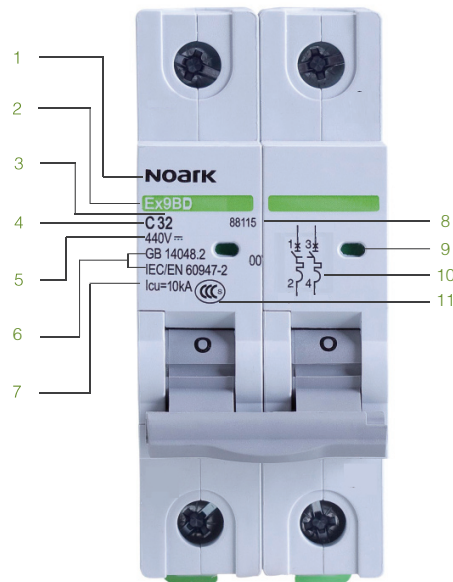
客服热线 / Customer Service Hotline:



400-1092-111

Z9BD201110CE

## 外观



- 1 品牌
- 2 型号
- 3 额定电流
- 4 脱扣类型
- 5 额定电压
- 6 符合标准
- 7 额定短路能力
- 8 限流等级
- 9 订货代码
- 10 指示窗口
- 11 电气接线图

## 特性

### 瞬时脱扣类型说明

- C型  
保护感性负载和高感照明系统  
额定电流：1-63A (30 °C时)  
脱扣特性：瞬时脱扣范围 (7-14)  $I_n$
- K型  
适用于对电动机系统及变压器配电系统等领域的线路设备提供可靠保护。其K特性的1.3倍热脱扣动作电流可有效地保护电动机线路设备，而14-20倍磁脱扣动作范围可方便地适用于光伏场合，有较高的抗冲击电流能力

\*具体脱扣特性曲线请参见附录

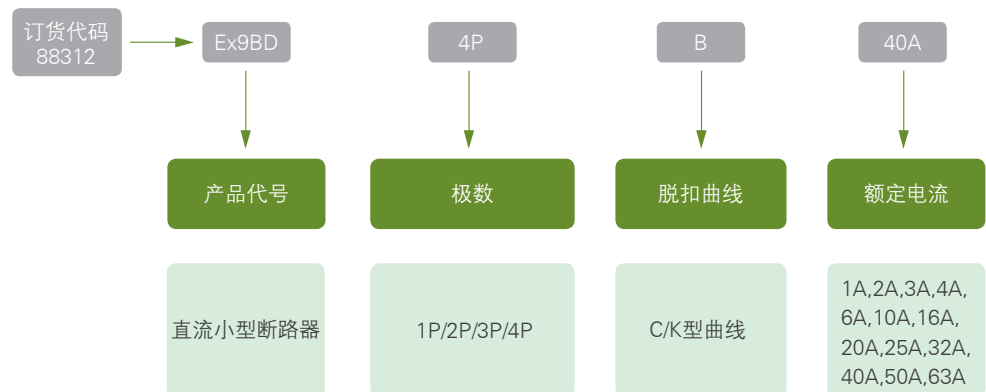
### 产品特点

产品可以实现无极性接线,可靠保证设备安全

### 符合的标准

符合IEC / EN60898-1和GB 10963.1

## 选型



# MCB Ex9BD直流小型断路器

## 参数

Ex9BD系列小型断路器						
一般配电保护用 ( IEC/EN 60947-2; GB 14048.2 )						
极数		1P	2P	3P	4P	
壳架等级额定电流		63				
电气性能						
额定工作电压	$U_e$	V DC	220	440	630	800
额定电流	$I_n$	A	1、2、3、4、6、10、16、20、25、32、40、50、63			
额定绝缘电压	$U_i$	V	1000			
额定冲击电压	$U_{imp}$	kV	4			
分断类型			H			
极限分断能力		kA	10			
运行分断能力	$I_{cs}$ ( % $I_{cu}$ )		100%			
曲线类型			C/K			
脱扣类型			热磁式			
使用寿命 ( O~C )	机械	实际平均值	20000			
		标准规定值	8500			
	电气	实际平均值	2500			
		标准规定值	1500			
控制与指示						
辅助触头			<input type="checkbox"/>			
报警触头			<input type="checkbox"/>			
分励脱扣器			<input type="checkbox"/>			
欠压脱扣器			<input type="checkbox"/>			
过压脱扣器			<input type="checkbox"/>			
连接与安装						
防护等级	所有侧面		IP40			
	接线端口		IP20			
手柄锁			ON/OFF位置			
接线能力		mm <sup>2</sup>	1~35			
使用环境温度		°C	-30~+70			
抗湿热性			2类			
海拔		m	≤2000			
空气相对湿度			+20°C时, 不超过95%; +40°C时, 不超过50%			
污染等级			3			
安装环境			无显著振动和冲击的地方			
安装类别			Ⅲ级			
安装方式			DIN标准导轨			
外形尺寸 ( mm ) 长 × 宽 × 高		a	18	36	54	72
		b	89			
		c	74			
重量		kg	0.12	0.24	0.36	0.48

■ 标准配置    □ 可选    — 无