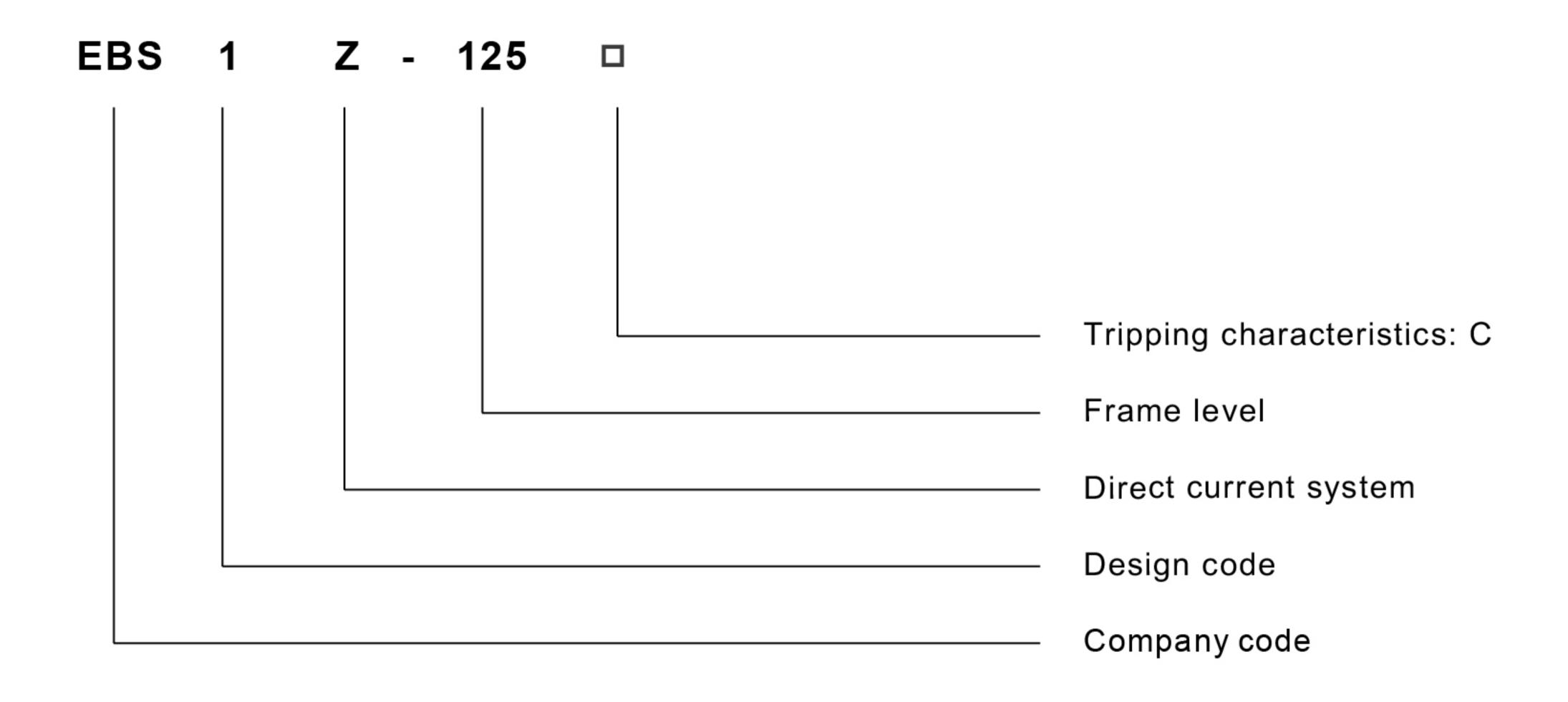


## EBS1Z-125 DC mini Circuit Breaker

# EBS1Z-125 C100 (€ 5000 T4 IEC60947-2 0.OFF 0.OFF

#### Nomenclature



#### Application

EBS1Z series DC Mini Circuit Breaker is suitable in normal current 125A and below, directly-current rated voltage 220V and 440V, Uses for carries on the overload, short-circuit protection to the current electrical power distribution system's facility and the electrical equipment, and used in professional electric power, posts and telecommunications transportation, Industrial and mining establishments, and so on.

It comply with IEC60947-2, GB14048.2 standards.

#### Feature

EBS1Z-125 is composed by shell, operation structure, thermal tripping system, electromagnetic tripping contact system, and Arc system lamp. It is used for overload and short-circuit protection, the short-circuit breaking capacity up to 10KA, mechanical lifespan over 20,000 times, elegant appearance, adopting TH35-7.5 standard steel rail, the characteristics are as follows: the handle is designed above the front surface, safe and comfortable in operation; when connecting the wires must be pay attention to the polarity"+, -", under the power source progresses, up for input, down for output, conforms to the characteristics of power source connection. Easy for installation, Ensure a cost-effective range of wires.

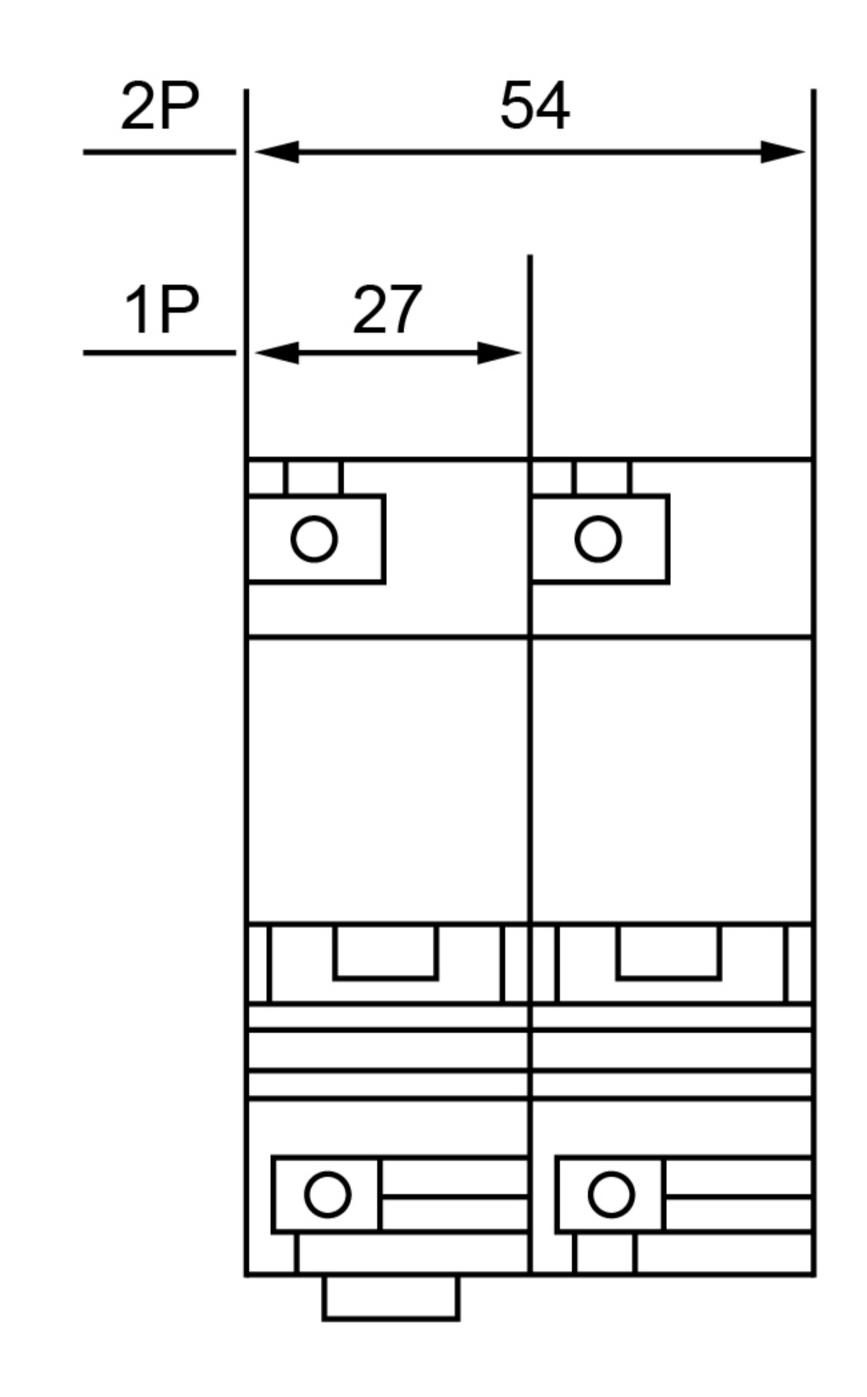
#### Technical Data

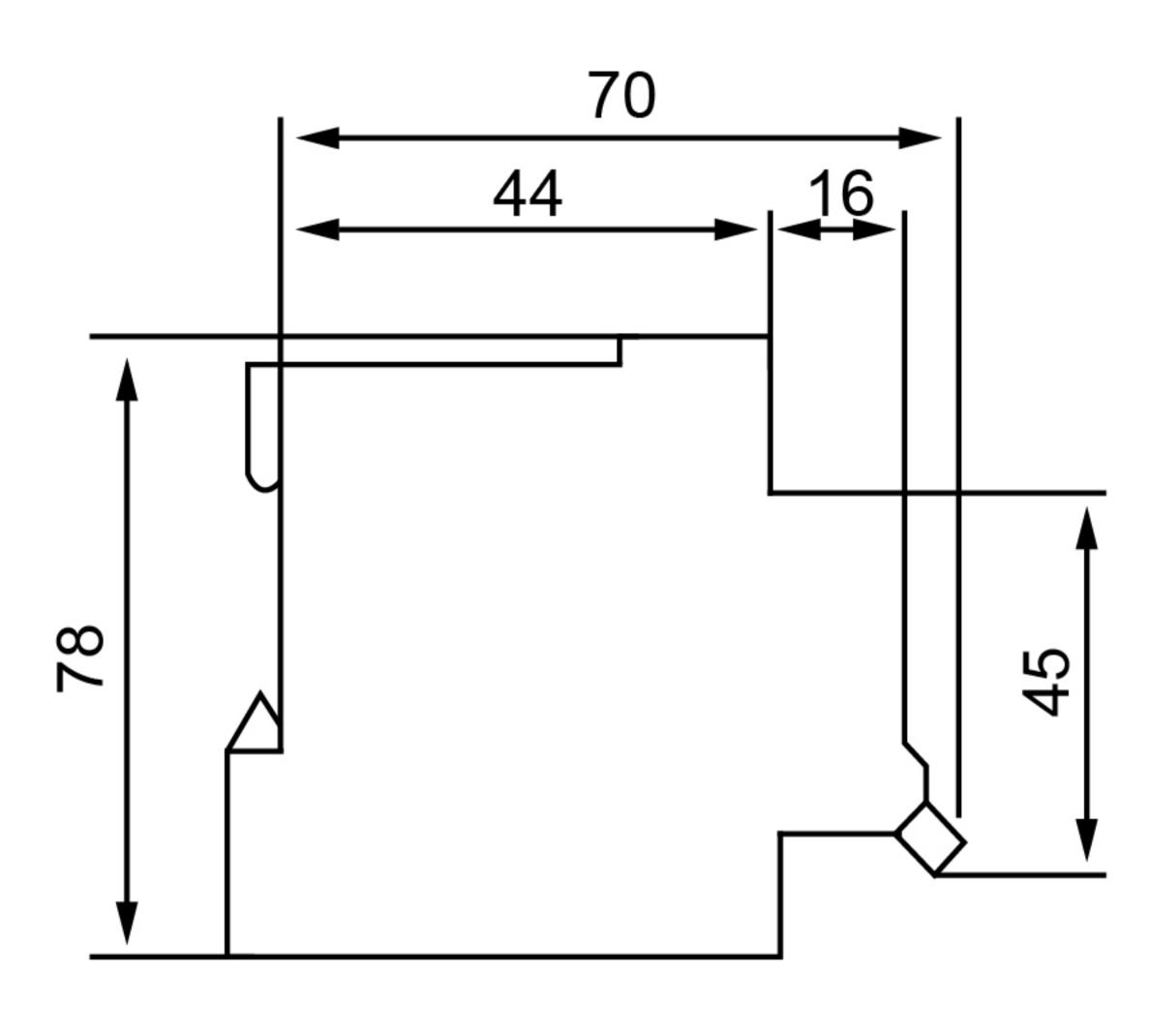
Frame level rated pole		Width/bi			Ultimate short-break capacity		Instantaneous
current Imm(A)	pole		Rated voltage(V)	Rated current(A)	Current Icu(A)	Time constant T(ms)	trip type
	1	1	DC 110V/220V		10000	10	
125	2	2	DC 220V/440V	63 80 100 125 A			
	3	3	DC 750V		63 80 100 125 A	6000	
	4	4	DC 1000V		6000		

#### Standard Time Current

Test	Type	Test current	Original current	The tripping type does not release the time limit	Result	Remark
а	С	1.05ln	Cold state	t≥2h	No trip	
b	С	1.3In	Following a tes	t<2h	trip	Current up steadily in 5s
С		8In	Cold state	t≥0.2s	tNo trip	Shut auxiliary
	С	12In		t<0.2s	trip	switch and connect the power
						power

#### Overall And Mounting Dimensions





#### Order Note

Following information need be marked when order Product name and model Curve characteristic, poles, Rated current, Quantity

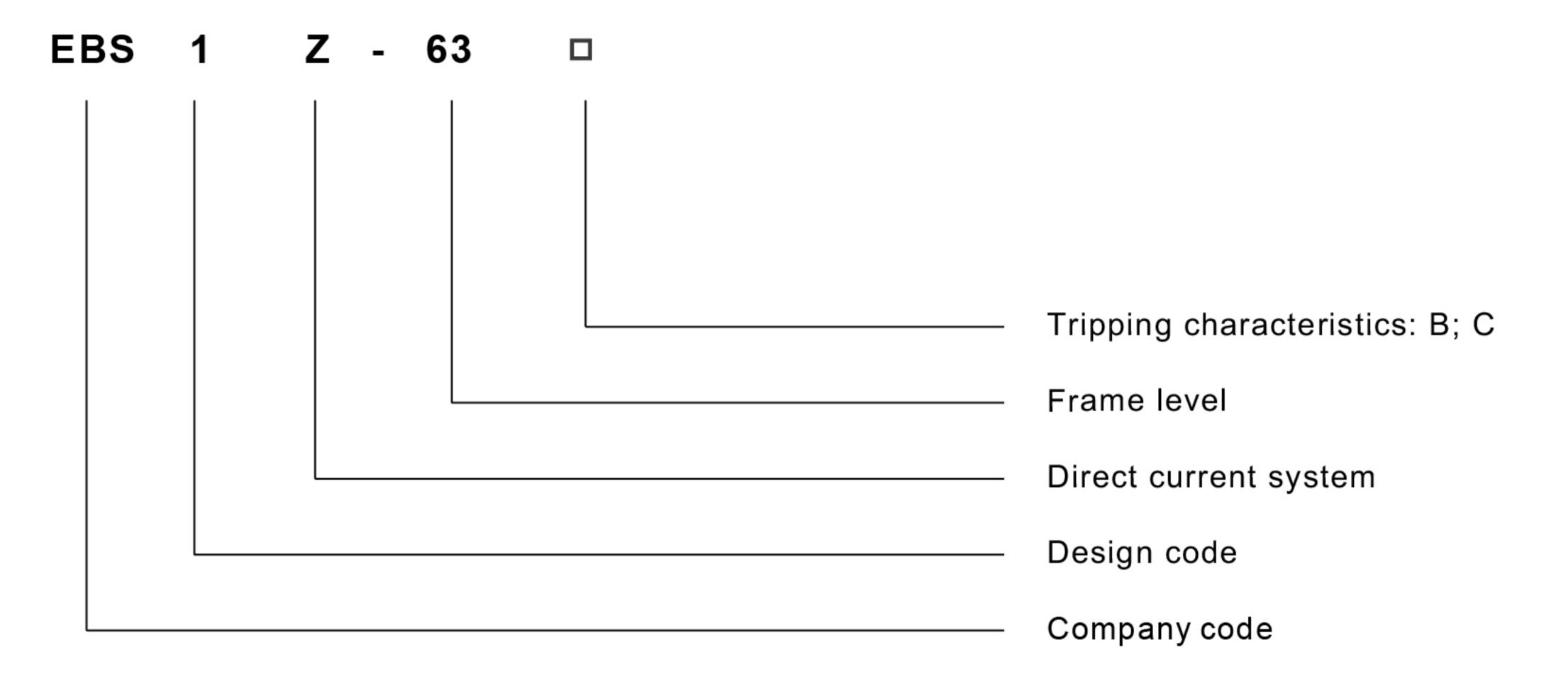
001 www.nelsonsolar.com www.nelsonsolar.com 002



## EBS1Z-63 DC mini Circuit Breaker



#### Nomenclature



#### Application

EBS1Z series DC mini Circuit Breaker is suitable in normal current 63A and below, directly-current rated voltage 250V-1000V, Uses for carries on the overload, short-circuit protection to the current electrical power distribution system's facility and the electrical equipment, and used in professional electric power, posts and telecommunications transportation, Industrial and mining establishments, and so on. It comply with IEC60898-2, GB10963 standards.

#### Feature

EBS1Z-63 is composed by shell, operation structure, thermal tripping system, electromagnetic tripping contact system, and Arc system lamp. It is used for overload and short-circuit protection capacity up to 10kA, mechanical lifespan over 20,000 times, elegant apperance, adopting TH35-7.5 standard steel rail, the characteristics are as follows: the handle is designed above the front surface, safe and comfortable in operation; when connecting the wires must be pay attention to the polarity"+, -", under the power source progresses, up for input, down for output, conforms to the characteristics of power source connection. Easy for installation, save the line.

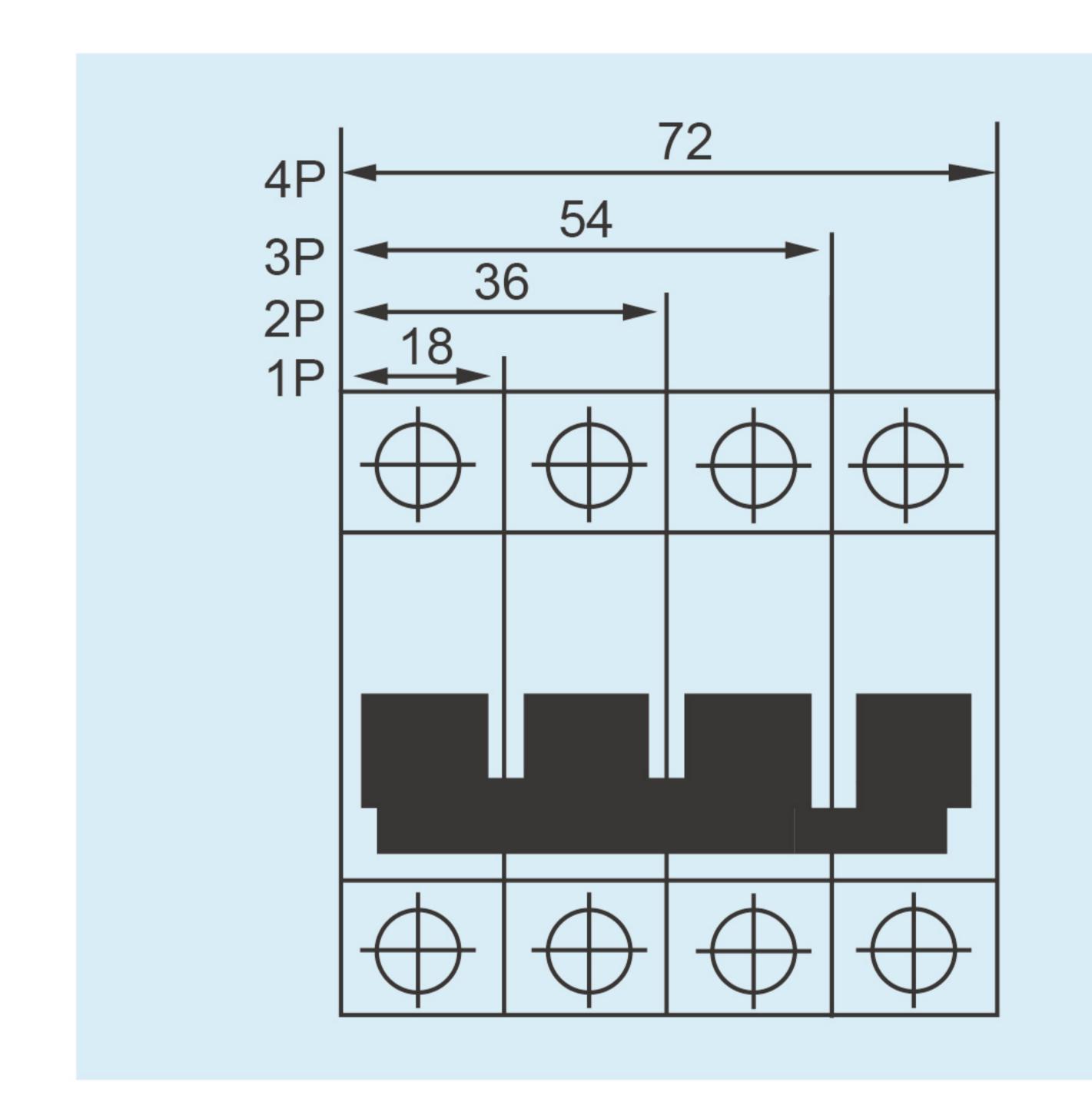
#### Technical Data

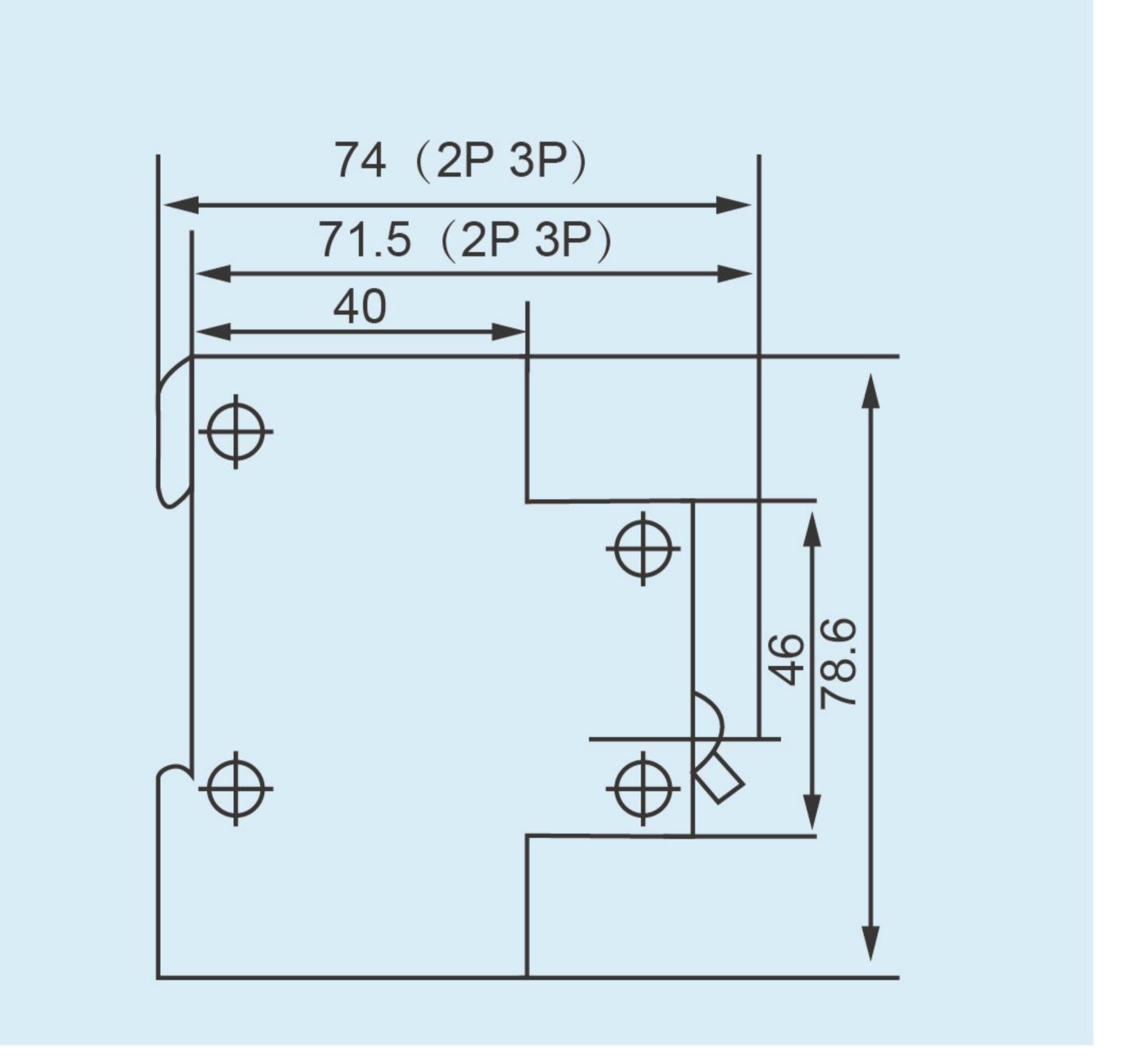
Frame level rated	pole	Width/bi	Detect valters (\( \lambda \)	tod voltago(VV) Potod ourropt(A)		Ultimate short-break capacity		
current Imm(A)	pole	(18mm multiple)	Rated voltage(V) Rated current(A)		Current Icu(A)	Time constant T(ms)	trip type	
	1	1	DC 250V	123456	10000			
63	2	2	DC 500V	10 16 20 25 32 40 50 63 A	10 16 20 25 32	10000	10	вс
63	3	3	DC 750V		6000	10	БС	
	4	4	DC 1000V		0000			

#### Standard Time Current

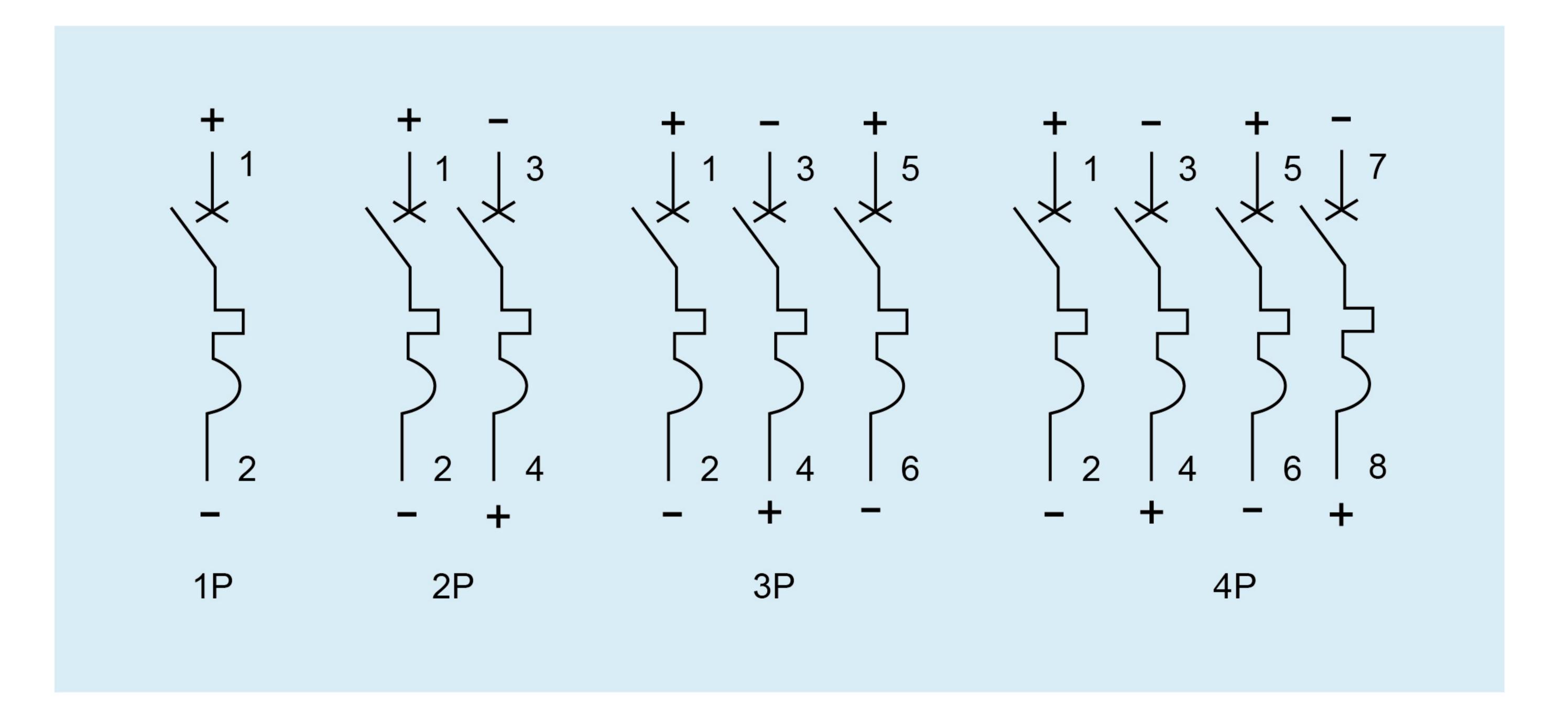
Test	Type	Test current	Original current	The tripping type does not release the time limit	Result	Remark
а	вс	1.3In	Cold state	t≥1h(In≤63A)	No trip	
b	вс	1.45In	Following a test	t<1h(In≤63A)	trip	Current up steadily in 5s
С	вс	2.55In	Cold state	1s <t<60s(in≤32a)< td=""><td>trip</td><td></td></t<60s(in≤32a)<>	trip	
				1s <t<120s(ln>32A)</t<120s(ln>		
	4In d BC 7In		Cold state	0.1s≤t≤45s(In≤32A) 0.1s≤t≤90s(In>32A)		
d		7In		0.1s≤t≤15s(In≤32A) 0.1s≤t≤30s(In>32A)	trip	Shut auxiliary switch and connect the power
		7ln	Cold state		trip	
е	e BC	15In		t<0.1s		

#### Overall And Mounting Dimensions





#### Connection Diagram



#### Order Note

Following items should be marked when ordering	Ordering sample
Product name and model	To order the EBS1Z-63 miniature circuit breaker, 1P,
Poles	Curve C, rated current is 63A, and quantity is 100
Tripping characteristic and rated current	pieces, should be marked:
Quantity	MCB EBS1Z-63/1PC63, 100 PCS.



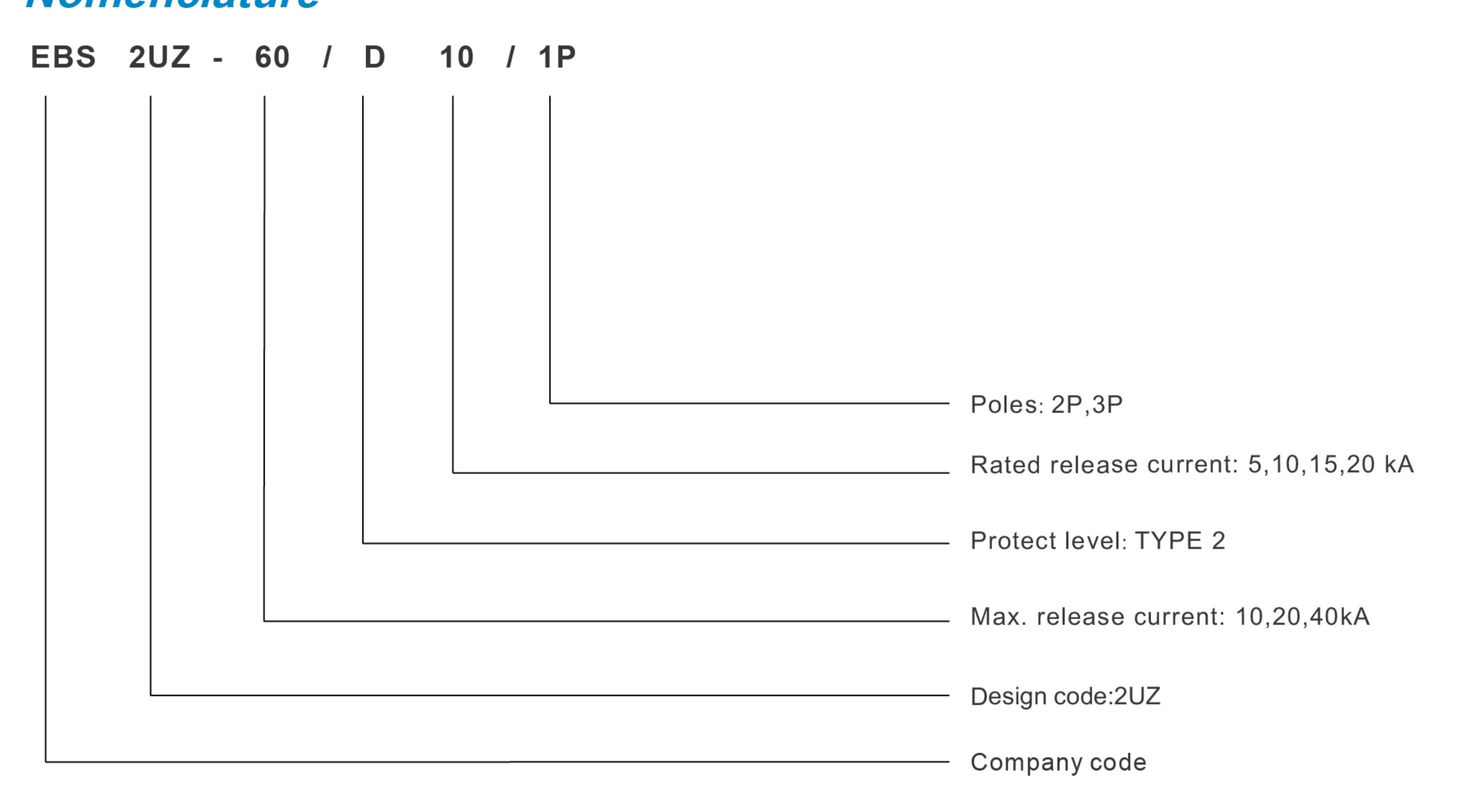
## EBS2UZ DC Surge Protector



#### Introduction

EBS2UZ DC surge arrester is to be installed in 1000V DC system for PV application and other DC application. The product is to installed in lightning protection zone between LPZ1 to LPZ2 for PV system DC side and other DC distribution box. It will provide surge protection against lighting strike and other surge current.

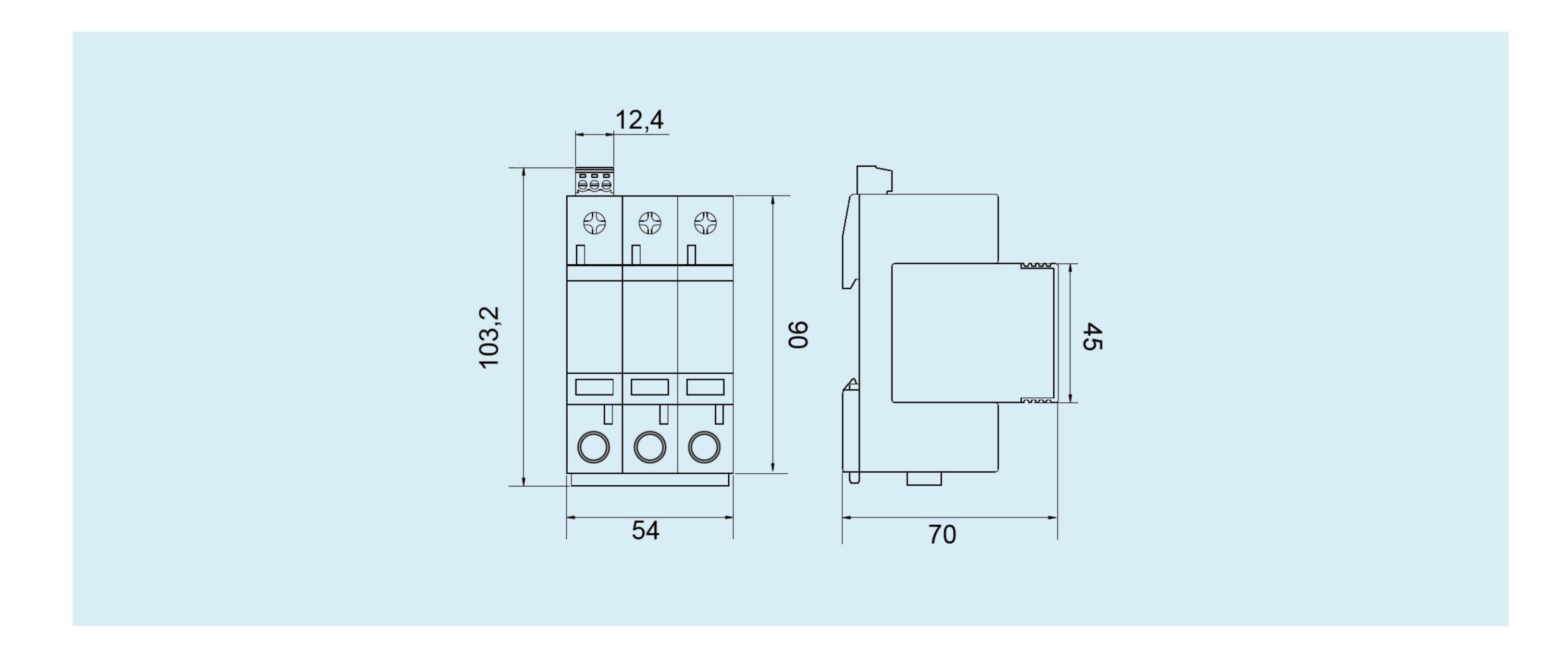
#### Nomenclature



#### Technical Parameter

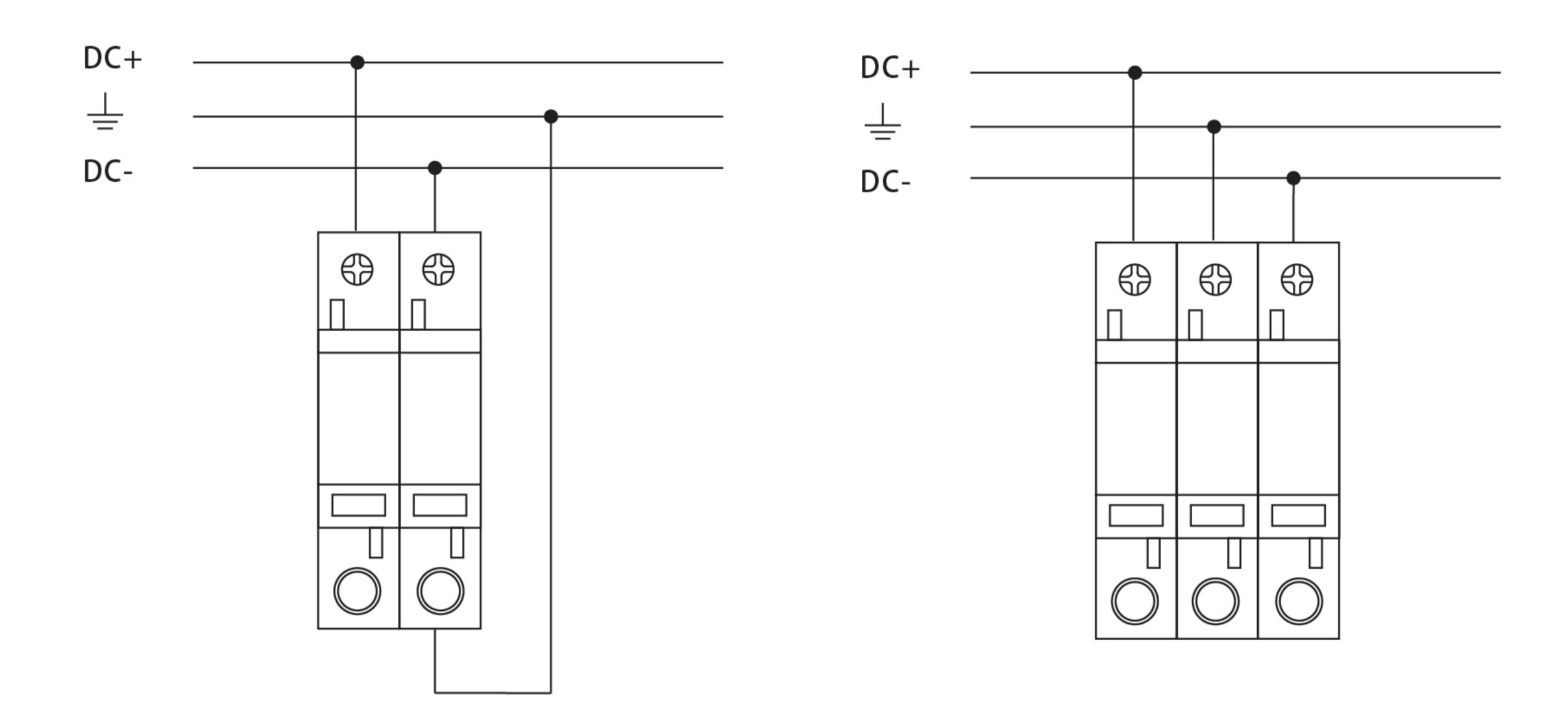
SPDType	TYPE2
Max. Continuous operating a.c.voltageVoltage UCPV	1000V DC
Norminal discharge current (8/20µs) In	20kA
Max. discharge current (8/20µs) Imax	40kA
Voltage protection level Up	<3.8kV
Short circuit withstand ISCPV	1000A
Location	Indoor
SPD failure behavier	open circuit mode
Residual current IPE ac. and dc.	500μΑ; 50μΑ
Response time	25ns
Follow current extinguishing capability a.c.	Nofollowcurrent
Operating temperature and humidity	-40℃ to + 70℃ 5% to 95%
Enclosure material	PA-6V0
Protection Level	IP2X
Cross-section area (Min.)	4mm <sup>2</sup>
Cross-section area (Max.)	25mm <sup>2</sup>
For mounting on	35mmDINrail
Cable length to earthing bar	≤200mm
Standard	IEC61643-1

#### Dimension



#### Installation

EBS2UZ should be installed as following in 1000V DC PV system or other DC system:



#### Routine maintenance

- ☐ The SPD should be checked from time to time to make sure that the indicator is green colour.
- ☐ The SPD should not be rewired once the installation is done. The earthing cable should be as short as possible.
- ☐ The SPD should be changed once the indicator turns to red.

#### Order Note

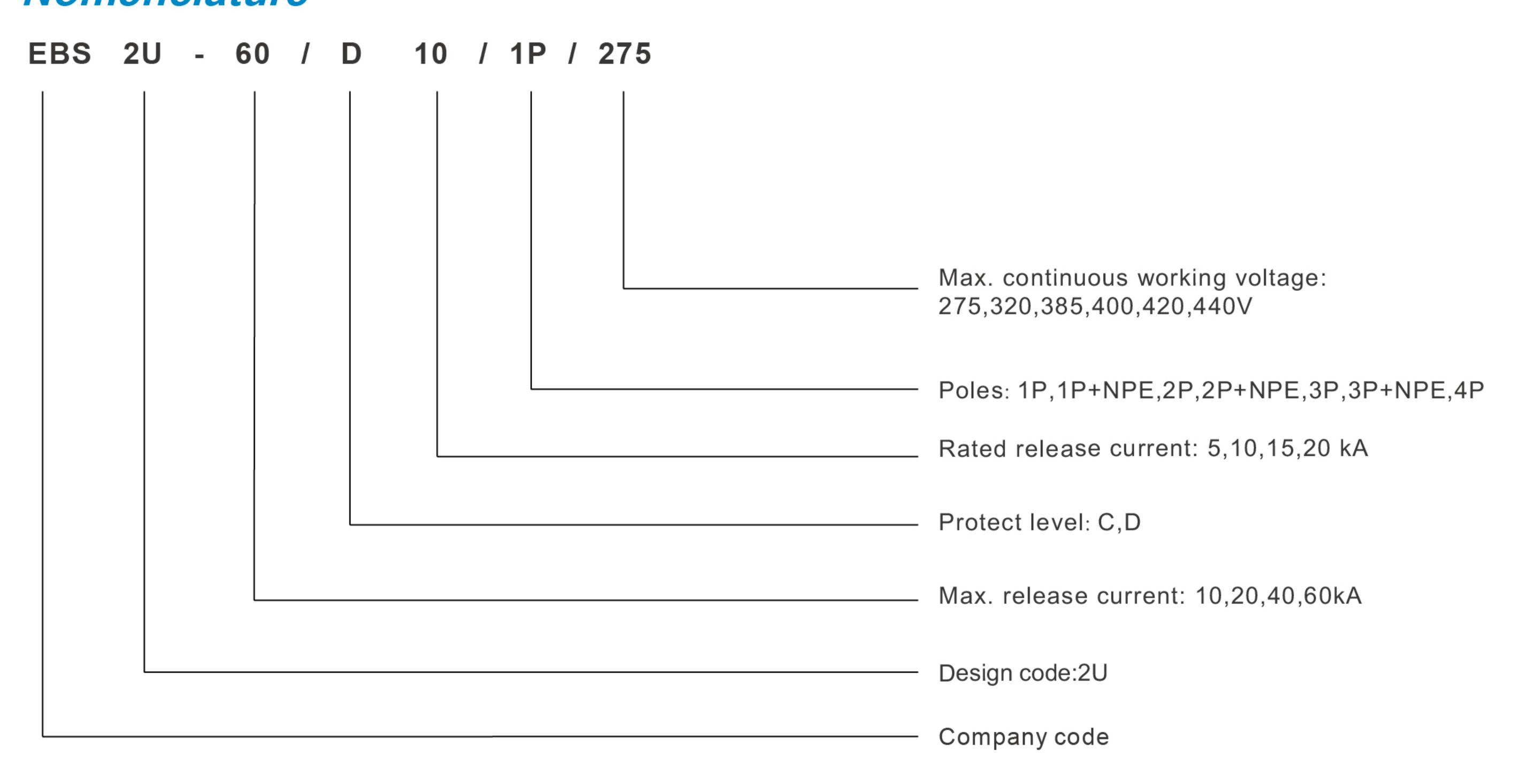
Following items should be marked when ordering	Ordering sample	
Product name, model	To order the EBS2UZ Surge Protector,Imax=40kA In=10kA,	
Poles,	protection level is TYPE2,1 Poles,Uc=1000 and quantity is 100	
Protection level,	pieces, should be marked:	
Max.release current,	surge protector EBS2UZ-40/10/1P/1000,100PCS.	
Max. continuous working voltage		
Quantity		



## EBS2U Surge Protector



#### Nomenclature



#### Technical Parameter

	EBS2U-40	EBS2U-40 N-PE
According to IEC61643-11	Type 2	Type 2
Max. continous operation AC voltage Uc	275V AC	255V AC
Norminal discharge current (8/20µs) In	20kA	20kA
Maximum discharge current (8/20µs) Imax	40kA	
Peak current (10/350) Ipeak		12.5kA
Voltage protection level (L-N) Up	1.5kV	1.5kV
Response time (L-N) tA	25ns	25ns
Environment temperature Tu	-40 ℃~80 ℃	-40℃~80℃
Status indicator	Green / red	Green / red
Mounting	36mm Standard Guide	36mm Standard Guide
Cross section of wire (Min.)	4mm <sup>2</sup>	4mm <sup>2</sup>
Cross section of wire (Max.)	35mm <sup>2</sup>	35mm <sup>2</sup>
Casing material	Thermoplastic UL94-V0	Thermoplastic UL94-V0
Degree of protection	IP20	IP20
Remote signalling	Optional	Optional
Dimension (LxWxH)	90x70x54mm	90x70x54mm

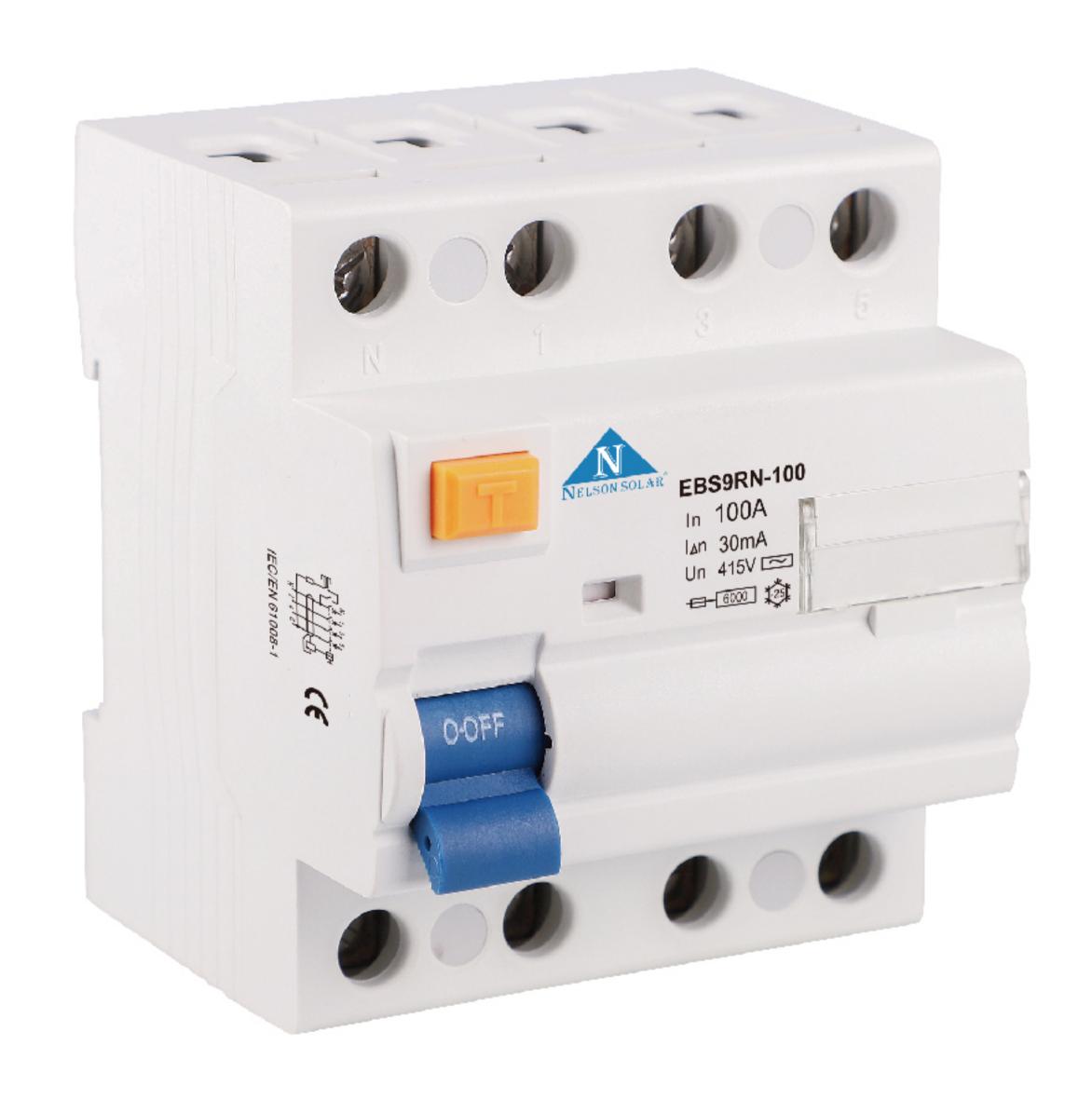
#### Order Note

Following items should be marked when ordering	Ordering sample
Product name, model	To order the EBS2U Surge Protector,Imax=60kA In=10kA, protection
Poles,	level is C,1 Poles,Uc=140 and quantity is 100 pieces, should be
Protection level,	marked:
Max.release current,	surge protector EBS2U-60/C10/1P/140,100PCS.
Max. continuous working voltage	
Quantity	

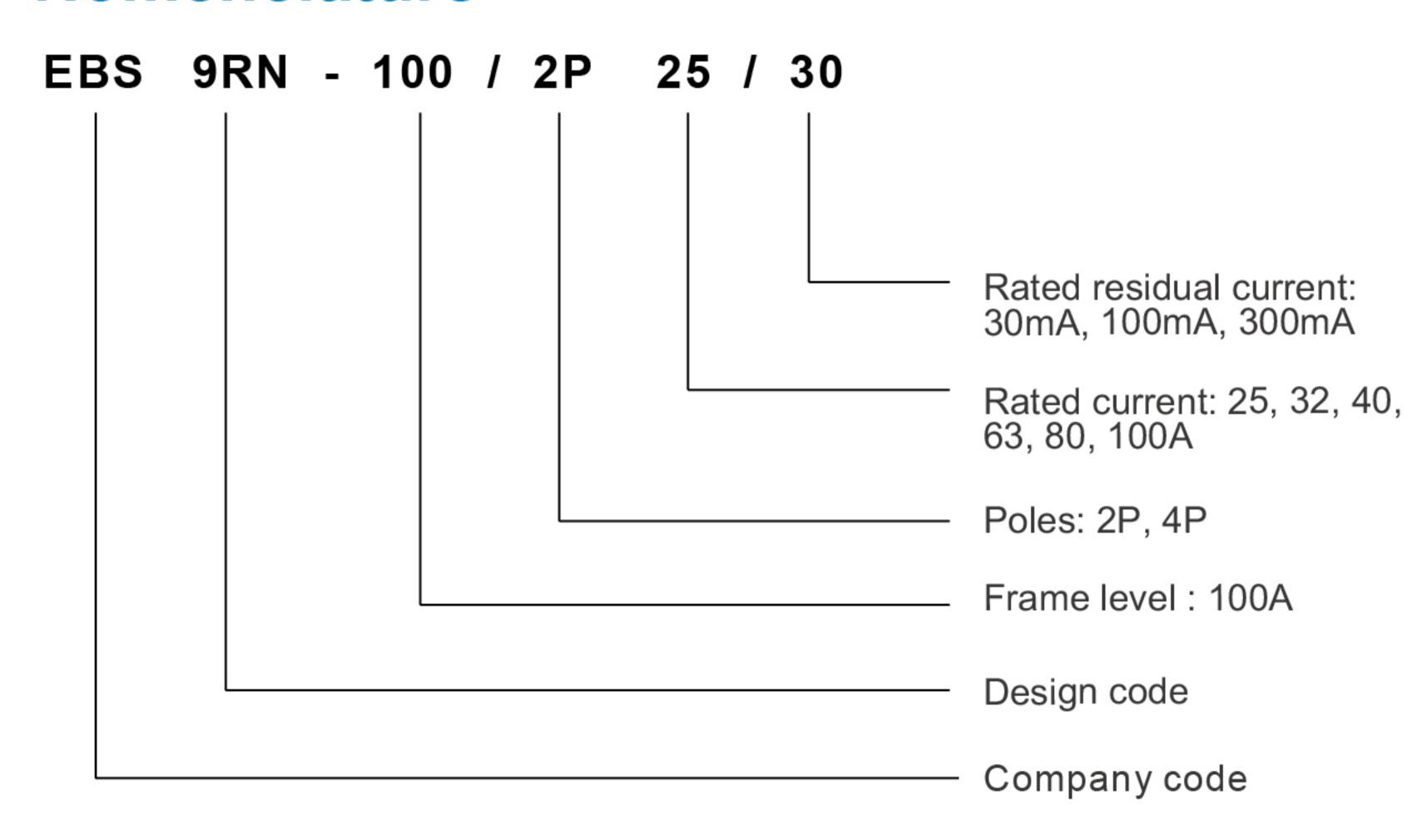


### EBS9RN

#### Residual Current Circuit Breaker



#### Nomenclature



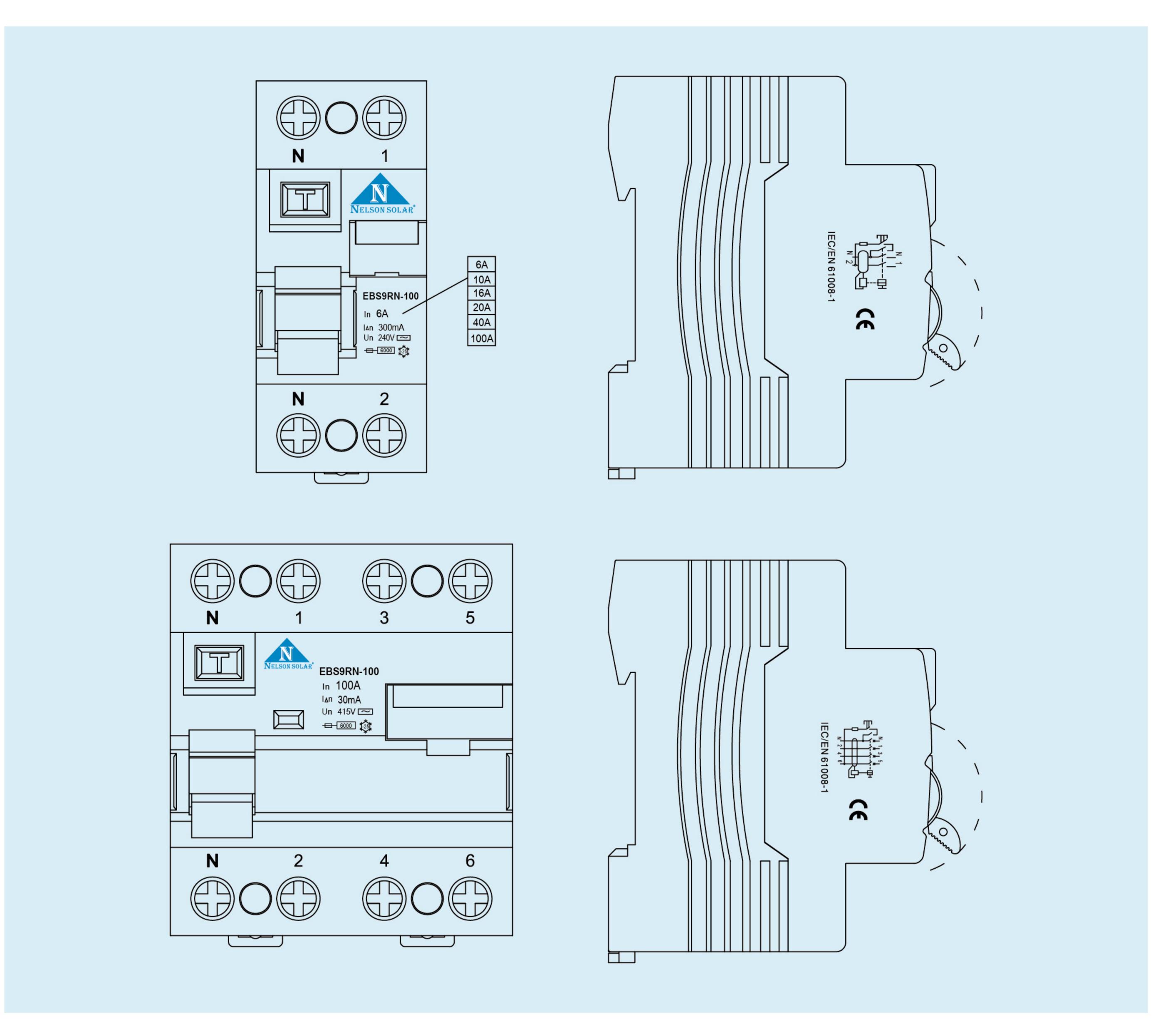
#### **Function**

- ☐ Provides protection against earth fault/leakage current and unction of isolation
- High short-circuit current withstand capacity
- Applicable to terminal and pin/U type busbar connection
- On off display function of contact position
- ☐ Fire resistant plastic parts endures abnormal heating and strong impact
- Automatically disconnect the circuit when earth fault/leakage current occurs and exceeds the rated sensitivity

#### Technical Parameter

Standard	IEC61008
Poles	2P, 4P
Rated current In(A)	25,32,40,63,80,100A
Rated voltage Un (V)	2P: 230V~ 50/60Hz 4P: 400V~ 50/60Hz
Rated conditional short-circuit current Icn(A)	6000A
Rated residual operating current I△n(mA)	30,100,300
Rated residual non operating current I△no	0.5l△n∼l△n
Action time	instantaneous type ≤0.1S
Protection grade	IP20
Ambient temperature	-5℃~+40℃
Installation	DIN rail 35mm, panel mounting

#### Dimensions



#### Order Note

Following items should be marked when ordering	Ordering sample
Product name and model	TTo order EBS9RN-100 residual current circuit breaker, frame level
Frame level	100A, 2P, rated current 25A, rated residual current is 30mA, quantity
Poles	100 pieces, should be marked:
Tripping characteristic and rated current	RCCB EBS9RN-100/2P 25/30, 100PCS.
Rated residual current	
Quantity	