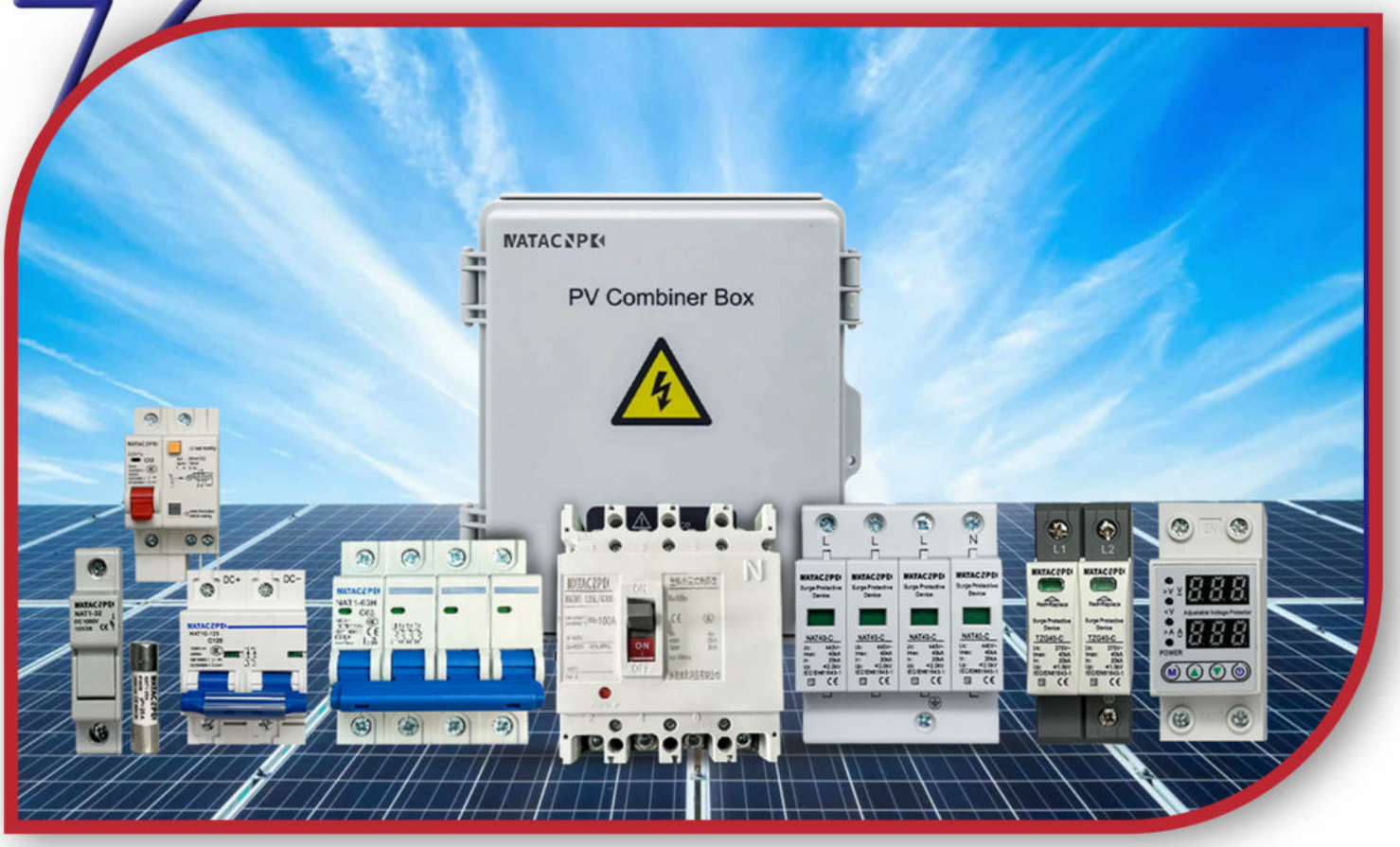
NATACNPK

ELECTRICAL

AC/DC MCB, DC SPD, DC FUSE HOLDER,
SOLAR CONNECTOR, COMBINATION BOX,
AC/DC MCCB, VOLTAGE PROTECTOR (V+A),
MTS INTERLOCKING



Shenzhen Nata Technology

General

NAT7Z-63 DC mini circuit breaker is used for DC rated voltage to 1000V, rated current to 63A line, for overload and short circuit protection, and can also be used as an infrequent operation of the line.Circuit breakers are used in DC applications such as communications and photovoltaic syst.
In complicance with IEC60947-2

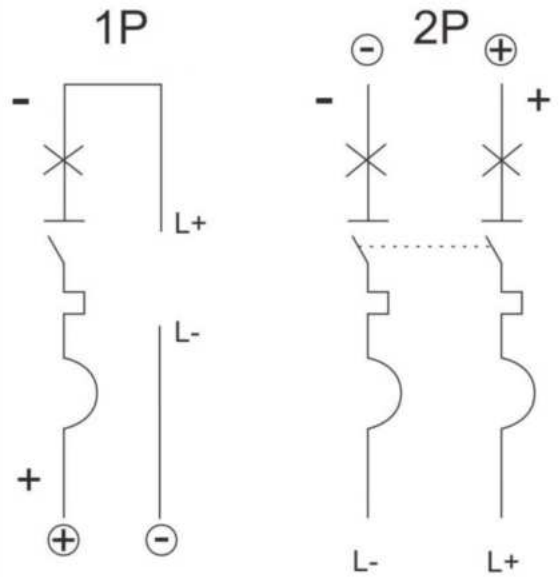
Data

Rated current In	1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63A
Poles	1P, 2P, 3P, 4P
Rated voltage Ue	1P/2P/3P/4P: 125V/240V/250V/440V/500V/600V/1000V
Insulation voltage Ui	1000V
Rated breaking capacity Ics=Icu	6000A
Rated impulse withstand voltage(1.2/50) Uimp	6KV
Thermo-magnetic release characteristic	B:6In ± 20% C:12In ± 20%
Mechanical life	20000

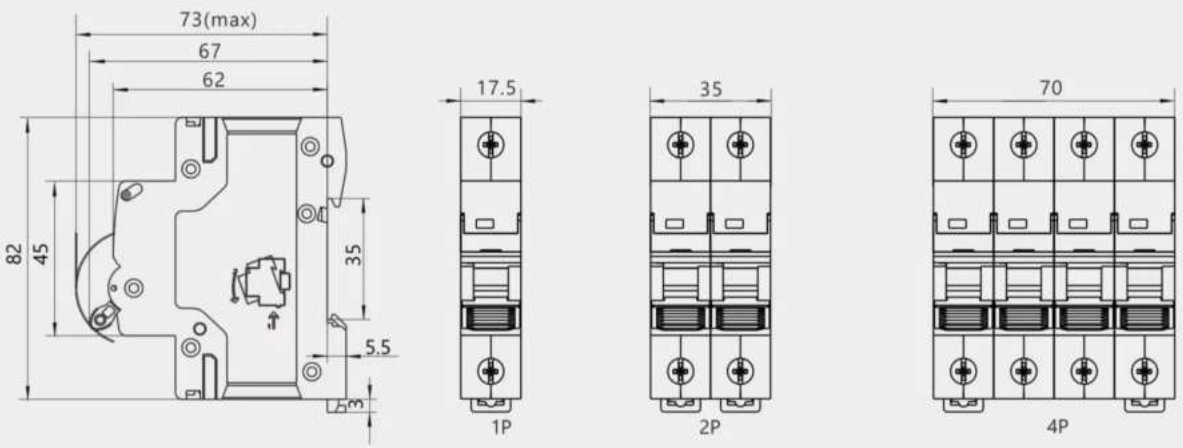
Installation

Contact position indicator	yes
Portection degree	IP20
Reference temperature for setting of thermal element	30
Ambient temperature (with daily average ≤35℃)	-5~+40℃
Storage temperature	-25~+70℃
Terminal connertion type	Cable/U-type busbar/Pin-type busbar
Terminal size top/bottom for cable	25mm² 18-3
Tightening torque	3.0N*m 22
Mounting	ON DIN rail FN 60715(35mm) by means of fast clip device
Connection	Top and bottom

Wiring Diagram of DC Breaker



Overall and Mounting Dimensioned Chart



General

NAT1C-125 DC Circuit Beaker is used for DC rated voltage to 1000V, rated current to 125A line, for overload and short circuit protection, and Can also be use as an infrequent operation of the line. Circuit breaker are used ub DC applications such as communications and photovoltaic syst. In complicance with IEC60947-2

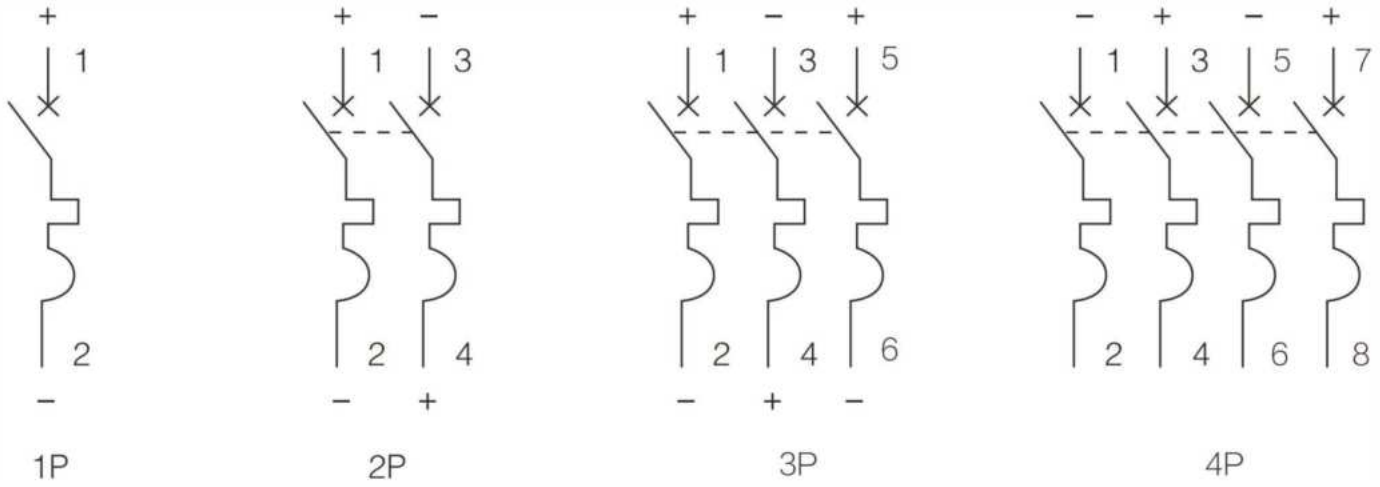
Data

Rated current In	63、80、100、125A
Poles	1P 2P 3P 4P
Rated voltage Ue	1P:250V 2P:600V 3P:800V 4P:1000V | 2P:1000V 4P:1000V
Insulation voltage Ui	1000V
Rated breaking capacity Ics=Icu	10000A
Rated impulse withstand voltage(1.2/50) Uimp	6KV
Thermo-magnetic release characteristic	B:6In ± 20% C:12In ± 20%
Mechanical life	20000

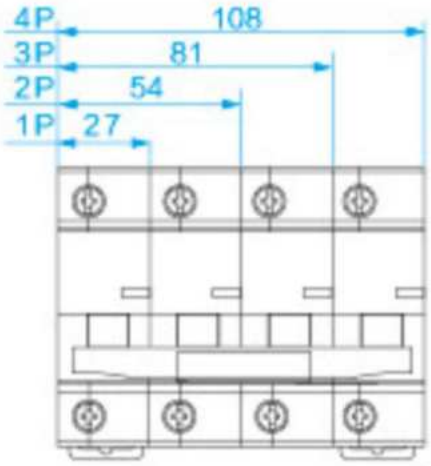
Installation

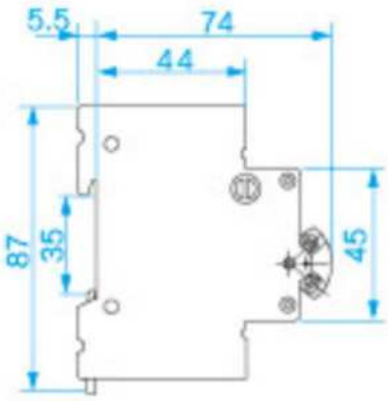
Contact position indicator	yes
Portection degree	IP20
Reference temperature for setting of thermal element	30
Ambient temperature (with daily average ≤35℃)	-5~+40℃
Storage temperature	-25~+70℃
Terminal connertion type	Cable/U-type busbar/Pin-type busbar
Terminal size top/bottom for cable	25mm² 18-3
Tightening torque	3.0N*m 22
Mounting	ON DIN rail FN 60715(35mm) by means of fast clip device
Connection	Top and bottom

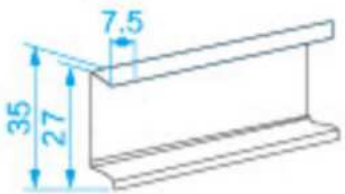
Wiring Diagram of DC



Overall and Mounting Dimensioned Chart







Basic Features

Standards	EN/IEC 60898-1
Certificate	CE, CB

Electrical Features

Rated Current in	6,10,16,20, 25, 32, 40, 50, 63	
Rated Voltage Ue	120V,230/400, 240/415V |	120, 230, 240, 400, 415V
Rated Frequency	50/60	
No of Poles	1P, 2P, 3P, 4P	
Ultimate short-circuit breaking capacity Icu	6	
Service shory-circuit breaking capacity Ics	6	
Rated insulation voltage Ui	500	
Rated impulse withstand voltage(1.2/50) Uimp	4	
Dielectric test voltage at ind. Freq for 1 Min	2	
Pollution degree	3	
Trim form	Thermal magnetic trip	
Thermo-magnetic-release characteristic	■ B type(3-5In) ■ C type(5-10In) ■ D Type(10-20In)	
Thermo release charateristics	1.13In Non trip cold state| < 63A t<1h	1.13In Non trip cold state| < 63A t<1h

Machanical features & Installation

Protection degree	IP20
Mechnical Life	10000
Electrical Life	4000
Ambient temperature	-35~+70C
Norninal cross-sectional area for the copper conductor	16mm^2
Tightening torque	2.0 N-m
Line entry	Line-plug in, Load-cable

NAT40-PV DC SPD

General

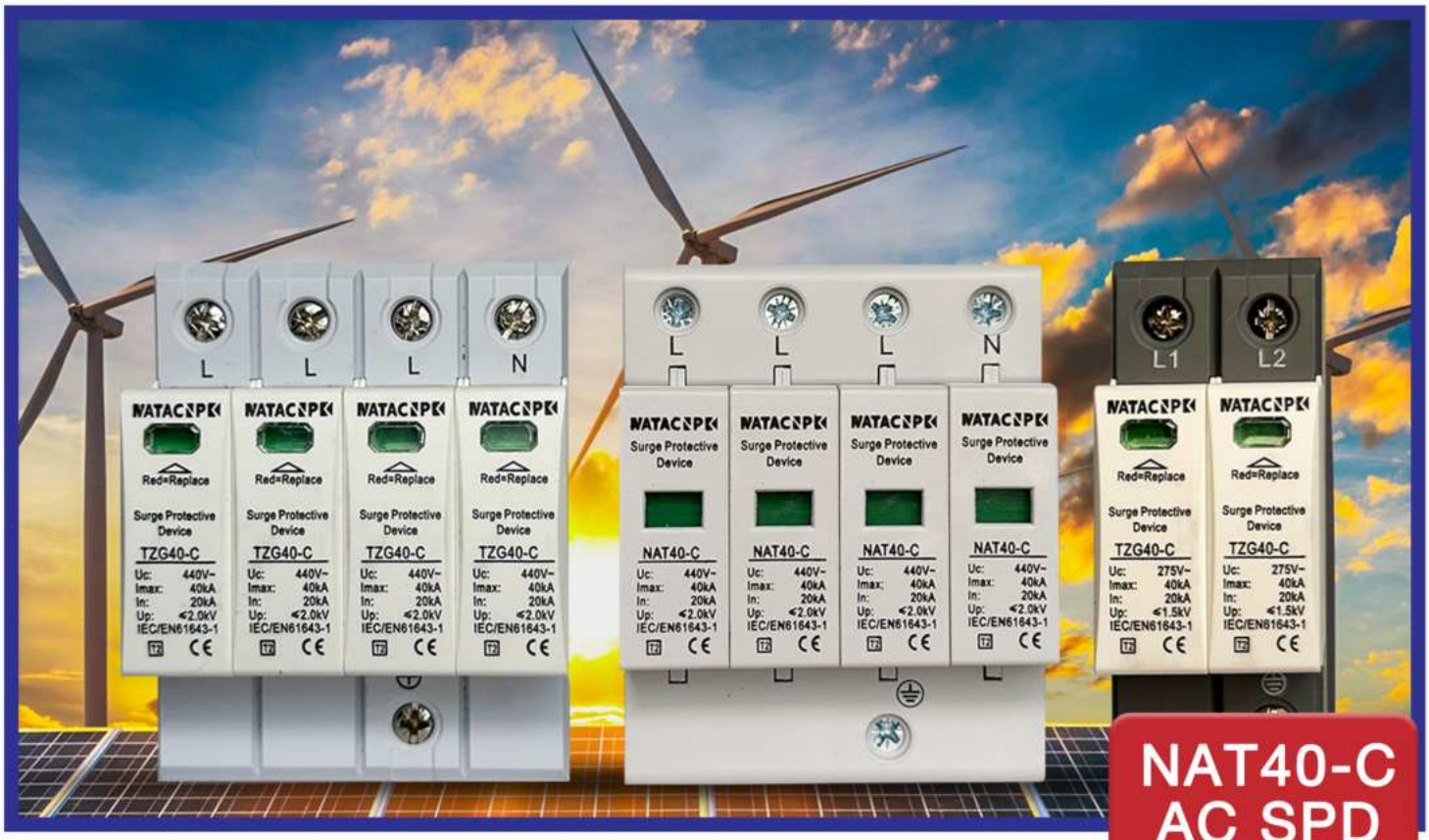
This DC surge protective device is applied low voltage standard IEC/EN 61643–11 to protect against DC powe line system and other equipment from over voltage an instantaneous over voltage damage. Widely used ir photovoltaic comber box,power inverter,DCdistributior cabinet etc.It has advantages of large discharge current fast respond time,low residual voltage.Max.PVvoltage up to Up ⩽1200V dc.

Main Features

1.High discharge capacity,quick response,module pluggable;
2.Fast response time,din rail installation;
3.Double thermal disconnection devices,provide more reliable protection;
4.Green window means normal,red means defect,need to change module;
5.Remote alarm terminal optional.
6.T2 surge protection.

Model

Test standard	IEC/EN 61643–11; GB/T18802.11			
IEC test classification	T2/Class II			
Max.PV voltage (Uc pv)	600VDC	800VDC	1000VDC	1200VDC
Nominal discharge current(8/20 μ s)	20kA			
Maximum discharge current(8/20 μ s)	40kA			
Poles	2P	2P	2P	3P
Voltage protection level Up	⩽3.2kV	⩽3.2kV	⩽3.2kV	⩽4.0kV
Response time Ta	25ns			
Connecting cable	4mm²(L–N);6mm²(PE)			
Method of installation	35mm Din Rail			
Type of remote signaling contact	Switching contact(Optional) C+NC:Normally closed C+NO:Normally open C:Common contact			
Switching capacity	DC:250V/0.1A,125V/0.2A,75V/0.5A			
Cross–sectional area for remote signal contact	Max.1.5mm solid / flexible			
Operating temperature range	40℃...+80℃			



General

SPD is designed to limit transient overvoltages of atmospheric origin and divert current waves to earth, so as to limit the amplitude of this overvoltage to a value that is not hazardous for the electrical installation and electric switchgear and controlgear.

Specification

No of poles	2P		4P
Network Systems	TN-S		TN-S
Mode of protection	L-PE, N-PE		L-PE, N-PE
Protective Elements	High Energy MOV		High Energy MOV
Maximum continuous operating voltage (L-N)	275V		385V/440V
Maximum continuous operating voltage (N-PE)		255V	
Norminal discharge current (8/20us) (L-N)(N-PE)		20KA	
Maximum discharge current (8/20us) (L-N)(N-PE)		40KA	
Voltage Protection Level (L-N)/(N-PE)	1.3KV/KV		1.8KV/1.5KV
Voltage Protection Level 5ka	1.0KV		1.4KV
Response time (L-N)/(N-PE)		<25ns/<100ns	
Operating temperature range		-40°C to +80°C	
Max. Back-up Fuse		125 A gL/gG	
Operating State/fault indication		Green/Red(L-N),Yellow(N-PE)	
Cross- Section area (Min.)(Max.)		$4mm^2$ /$35mm^2$	
Mounting		35mm DIN Rail, EN 60715	
Enclosure material		Thermal Plastic UL67-V0	
Degree of Protection		IP20 (built-in)	

Voltage Protector

General

Voltage surge protectors are efficient devices for electrical protection around the house. In addition to electrical protection, it also comes with other benefits including: Effectively manages the voltage levels. It is super easy to install.

Operating Range

FUNCTION	TECHNICAL PARAMETER
Input voltage	AC80-300V
Over-voltage protection value	120-300V default 270V
Under-voltage protection value	80V-210V default 170V
Over current protection value	40A: 1-40A default 20A | 63A: 1-63A default 40A | 80A: 1-80A default 60A
Recovery delay time	1-500s default 30s
Continuous over current faults times	1-20 times default OFF
Power consumption	<2W
Boundary dimension	86x36x66mm
Power-on delay time	1-500s default 10s
Over-voltage recovery value	115-295V default 256V
Under-voltage recovery value	85V-215 default 175V
Over-current recovery value	0.5-39.5A | 0.5-62.5A | 0.5-79.5A
Action time	0.1-30s default 1s
Electrical and machanical life	>100000cycles
Wiring	Over-entering down-out

General

PV-NT05(1000V)
PV-NT05-1(1500V)

Specifications

Rated voltage	1000V I 1500V DC
Rated current	10A, 15A, 20A, 30A
Test voltage	6KV (50HZ, 1min.)
Ambient temperature range	-40°C ...+90°C (IEC) -40°C ....+75°C (UL)
Upper limiting temperature	+105°C (IEC)
Degree of protection, mated	IP67
Unmated	IP2X
Comtact resistance of plug connectors	0.5mΩ
Safetyclass	II
Contact material	Messing, verzinnt Copper Alloy, tin plated
Insulation material	PC/PPO
Locking system	Snap-in
Flame class	UL-94-VO
Salt mist spray test, degree of severity 5	IEC 60068-2-52

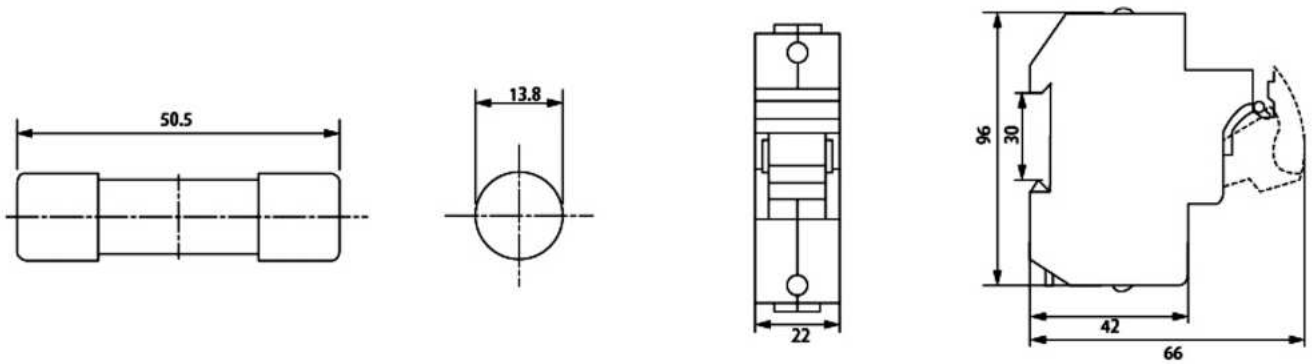
General

A range of 14x51 mm fuse links specifically designed for protecting photovoltaic strings. These fuse links are capable of interrupting low overcurrents associated with faulted photovoltaic string arrays (reverse current. multi-array fault).

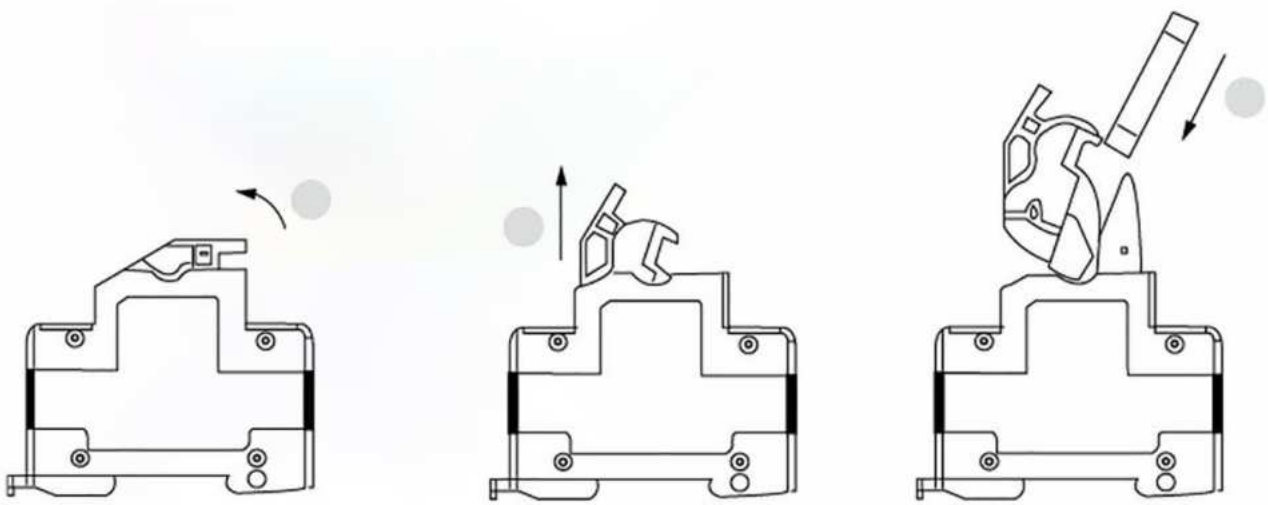
Data	
Rated Current In	4, 6, 8,10,12,16, 20, 25, 32, 40, 50, 63
Size (WxHxL)	22x66x96
Rated voltage Ue	1P 1000V
Fuse Size	14x51
Fuse holder Weight (kg)	0.11
Fuse link weight(kg)	0.025

Installation	
Working Temperature('C)	-30-+70
Resistance And Damp Hot	Class2
Altitude(m)	,; 2000
Relative Humidity	:<:;95%
Protection Class/Degree	IP20
Pollution	3
Installation Environment	No obvious shock and vibration
Installation Class/Type	Class III/DIN rail
Product Parameters	1000VDC(10x38)
Class of Operations	gPV

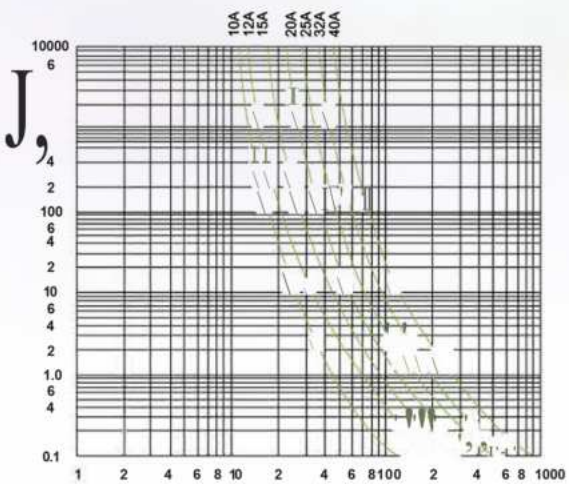
Dimensions



Installation



Installation



General

Molded case circuit breakers (MCCBs) are essential devices for protecting electrical circuits from overloads and short circuits. They are widely used in residential, commercial, and industrial settings due to their reliability, durability, and flexibility.

Basic Features

Standards	IEC 60947-2

Electrical Features

Rated Current in	100-250	200-400	400-800
Rated Voltage Ue	AC400V		
No of Poles	4P		
Rated residual operating current	50-1000(adjustable)		
Max, actuation time under	0.1-2(adjustable)		
Leakage indication system	Button		
Short -circuit breaking capacity icu/1cs	35/25KA	50/35KA	
Operating cycle number	ON. 3000, 1000	OFF. 7000, 4000	
Outline dim a-b-c-ca	140-165-88-115mm	185-257-103-156mm	280-257-103-156mm
Weight	3kg, 3.1kg, 8.5kg, 17.5kg		
Electric operating device	●		
External driving operating device	●		
Automatic release	Thermal Electromagnetic type		

Protection

Over charge protection, Over discharge protection, Over Curent protection,
Shortcircuit protection, Over temperature protection

Specification	
Battery Type	LiFeP04
Total Energy	5120Wh
Usable Energy(90%DOD)	4608Wh
Voltage Window	44.8~58.4V
Fast Charge Voltage	57.6V
Folat Charge Voltage	56.6V
Low DC Cut-off Voltage	46.8V
Max.continue discharge current	100A
Max.pulse discharge current	150A 1sec.
Max.continue charge current	50A
Scalable	1~15 in parallel
Communication	CAN,RS485
Cycle Life	>8000 Cycles for 300Ah, >6000 Cycles for 100Ah/200Ah
Terminal	Double MB
Storage Temperature	0˚C~30˚C
Storage duration	6 Months at 25 ℃
Safety standard	UN38.3,MSDS
IP degree	IP20

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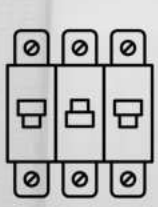

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