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Photovoltaic component

HYOCIE



ABOUT US



Zhejiang Yuxi Electric Co.,Ltd.

We are a photovoltaic component manufacturer in China.HYOCIE is our brand. It means 'Help you order correct items easily.'

Why choose us?

There are so many suppliers in the market for you to choose from, it will waste a lot of time. Under the premise of guaranteeing quality, the most important thing for buyers is service. This is the often and most overlooked part here.

We heard that purchasers want to change suppliers sometimes. They encountered such a situation, the supplier lowered the price very much to win the order and then reduced the cost of products, which will cause many problems. This is the reason.

- **Good communication and nice service are soft additional functions of products, the price is not the only measure of value forever. Price is what you pay, value is what you get.**

We sincerely look forward to cooperating with you,give HYOCIE a chance from now on.

About Sample

Sample is available for sure, only need to pay the shipping cost.

About Others

For related products not shown in the catalog, consult us, please. We found that sometimes customers may want to purchase a small item, such as a small tool, if it is convenient for us, we can solve this problem. The premise is that we can easily purchase & know it well.

Working Time

Monday-Friday: 9:00AM-4:30PM

Special case: Like Customers in the Philippines usually work on Saturdays.If you send us an inquiry, we will try our best to reply to you. (For the part related to freight, since the freight forwarder is off-work) on Saturday and Sunday, it will affect the delay of the quotation. During our holidays especially the Chinese New Year festival, we will provide a reasonable offer ASAP when you need an urgent quote.(except quotation with air freight).



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DC Surge Protective Device



HSP-D40

Type 2 Solar DC SPD

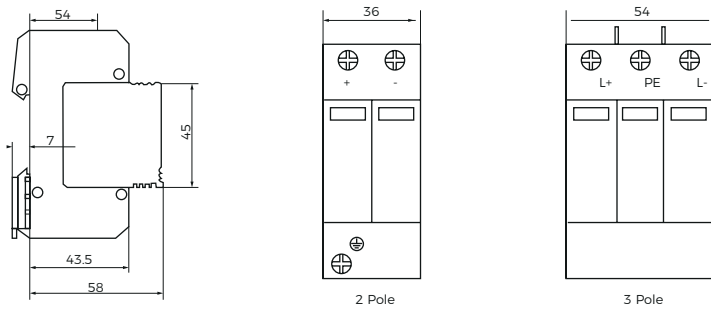
DC SPD protects against lightning surge voltage in the solar system (photovoltaic power supply system). These units must be installed in parallel on the DC networks to be protected and provide common, different modes of protection. Its installed location is recommended at both ends of the DC power supply line (solar panel side and inverter/converter side), especially if the line routing is external and long.

HSP-D40						
PV specific	EN50539-11					
Pole	2P	2P	2P	2P	3P	3P
Uoc max(VDC)	500V	600V	800V	1000V	1000V	1500V
Uc(VDC)	500V	600V	800V	1000V	1000V	1500V
Classified test	II	II	II	II	II	II
In (8 /20)us(KA)	20	20	20	20	20	20
I _{max} (8 /20)us(KA)	40	40	40	40	40	40
Up(KV)	2.5	2.5	2.5	3.5	3.5	5.3
Remote Signal Contact 						
Maximum working voltage (V)	250VAC/30VDC					
Maximum working current (A)	IA (250V/AC)					
IA (30V DC)	IA (30V DC)					

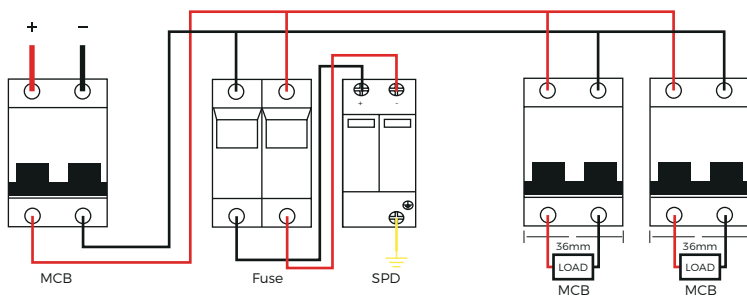
-Consult sales for other parameters, please.

Installation and Dimensions		
Wiring capacity(mm2)-Hard wire	4-25	4-25
Wiring capacity(mm2)-Flexible wire	4-16	4-16
Stripping length(mm)	10	10
Terminals crcwa	M5	M5
Torque (Nm)-Main circuit	3.5	3.5
Torque (Nm)-Remote signal contact	0.25	0.25
Protection class-All profile	IP40	IP20
Protection class-Connection port	IP40	IP20
Installation environment	No obvious shock and vibration	
Altitude (m)	≤2000	≤2000
Working Temperature	-30°C ~ +70°C	-30°C ~ +70°C
Relative humidity	30%~90 %	30%~90 %
How to install	Installed with H 35-7.5/DIN35 steel mounting rail	
Size (mm) (W x H x L)	W-36	W-54
	H-90	H-90
	L-67.6	L-67.6
Weight (kg)	0.24	0.36

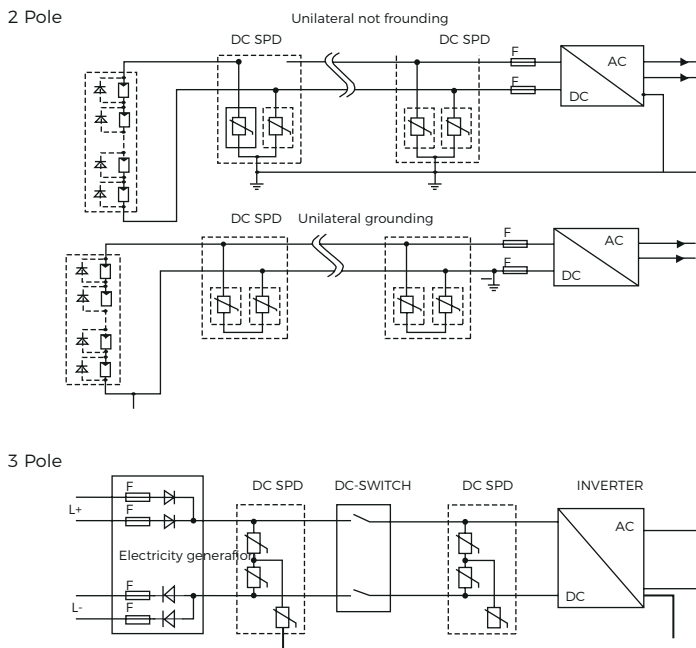
Dimensions:



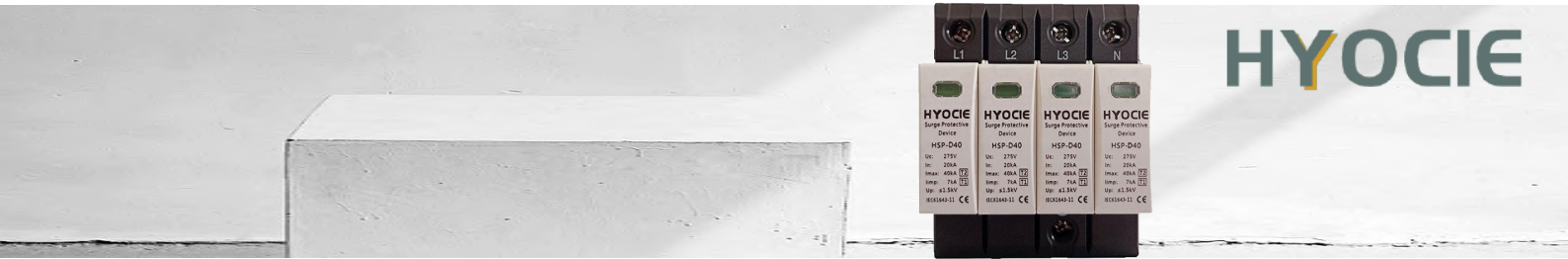
Wiring Diagram



Drawing



DC Surge Protective Device



HSP-D40

Type 1+2 Solar DC SPD

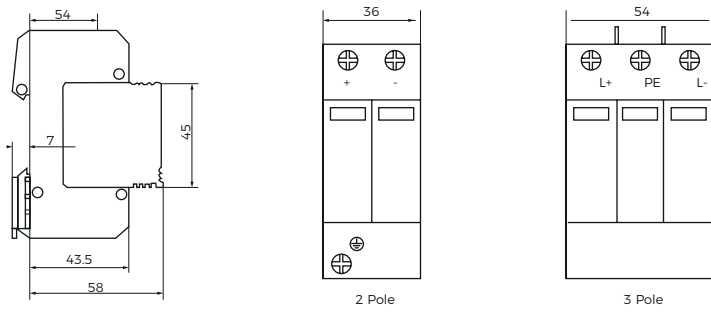
Type 1+2 surge protective device specially designed for photovoltaic power generation, it is installed at the outlet of solar panels with a high risk of a direct lightning strike, it is suitable for photovoltaic system protection with DC voltages of 1000V and 1500V.

HSP-D40			
PV specific	EN50539-11		
Pole	2P	3P	3P
Max. operating voltage:Ucpv	600V	1000V	1500V
Current withstand short-circuit:Iscpv	1000V	1000V	1000V
Operating current - to the voltage Ucpv:Icpv	None		
Leakage current - to the voltage Ucpv:Ipe	None		
Follow current:I _f	None		
Nominal discharge current - 8/20 us:I _n	20KA		
Max discharge current by pole - 8/20 us:I _{max}	40KA		
Max. Lightning current by pole - 10/350 us:I _{imp}	7KA/12.5KA		
Total lightning current - 10/350 us:I _{total}	10KA		
TotalMaximaldischargecurrent-8/20us:I _{total}	60KA		
Protection level CM/DM (at I _n):U _p	3.0KV	3.5KV	5.1KV

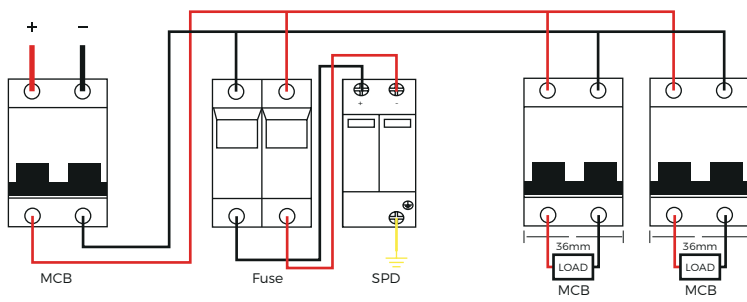
-Consult sales for other parameters, please.

Features	
Type 1+2 surge protective device for Photovoltaic	
VG-Technology	
Up to 1500 Vdc	
No leakage, no operating currents	
Impulse currents I _{imp} /I _{total} : 5/20µs & 10/350 us	
Common and Differential Mode protection	
Plug-in modules	
Remote Signaling (option)	

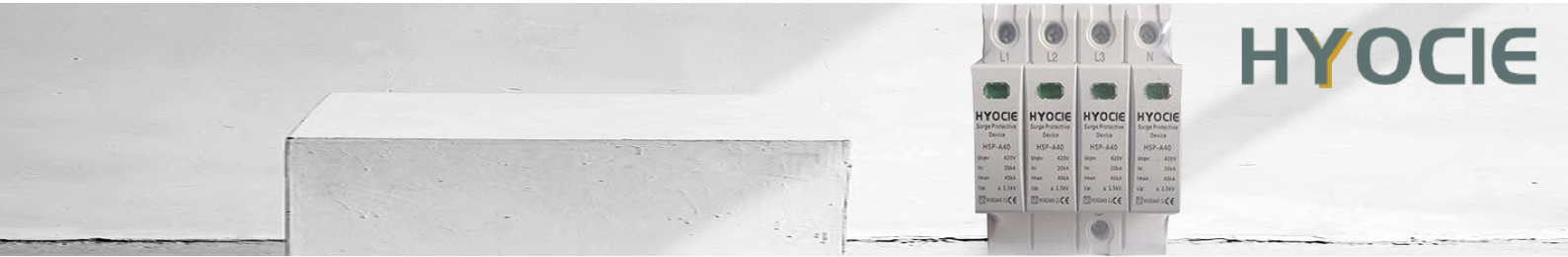
Dimensions:



Wiring Diagram



AC Surge Protective Device



HSP-A

Type 2 AC SPD

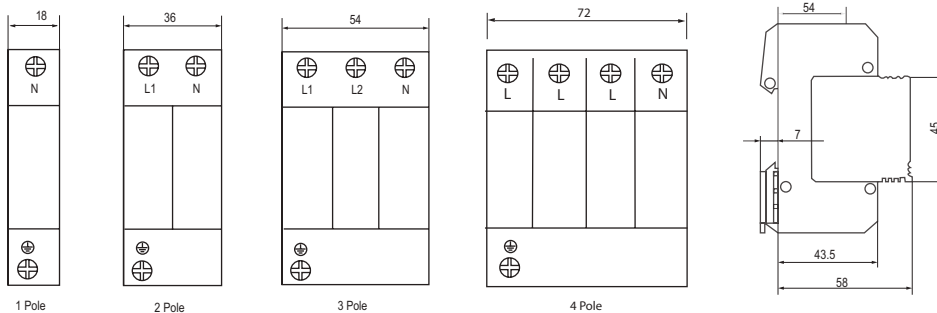
AC SPD is suitable for TN-S, TN-C-S, TT, IT, etc., power supply system of AC 50/60Hz, <380V, installed on the joint of LPZ1 or LPZ2 and LPZ3. It's designed according to IEC 61643-1, GB188 02.1, it adopts 35mm standard rail, there is a failure release mounted on the module of surge protection device, when the SPD fails in the breakdown for overheating and over-current, the failure release will help electric equipment separate from the power supply system and give the indication signal, green means normal, red means abnormal, it also could be replaced for the module when has operating voltage.

HSP-A					
Test Standard	IEC61643-11				
Pole	1P	2P	3P	4P	
Rated Operating Voltage Un	275V	275V	385V	420V	
Maximum Continuous Operating Voltage Uc	≤1.5	≤1.5	≤1.5	≤1.5	
Nominal Discharge Current In μs KA	5-10	20-40	30-60	40-50	60-100
Maximum Discharge Current Imax μs KA					
Response Time (ns)	<25				
Operating Environment (centigrade)	-40°C ~ +85°C				
Max Connection Line	35mm ² hard wire/35mm ² strand wire copper line				
Recommended Connection Line	16mm ² hard wire/25mm ² strand wire copper line				
Installation	Standard Rail 35mm				

-Consult sales for other parameters, please.

Features
Inside over-current and over-heat protection, temperature control open circuit.
Module design, convenient installation, could be replaced online.
Time of response <25ns
The color of visible window shows operating status

Dimensions:



AC Surge Protective Device



HSP-A

Type 1+2 AC SPD

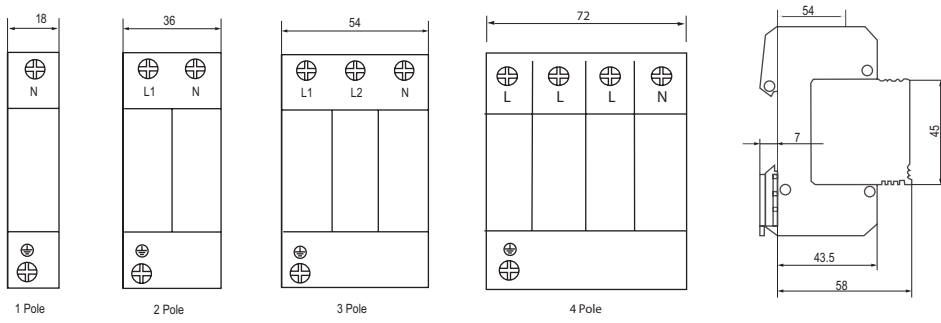
This type of DIN-Rail AC Type 1+2 surge protection device SPD can protect all electrical installations against lightning strikes by discharging the current created by a lightning surge and keeping it from spreading to the equipment.

HSP-A	
Protection mode	L-N/L-PE/N-PE
Number of protected lines	1-4
Test class	I-II
Integrated thermal disconnecter	Yes
End of life indicator	Yes
Safety reserve	Yes
Nominal discharge current:In (8/20)	20KA
Maximal discharge current:Imax (8/20)	40KA
Impulse current:Iimp (10/350)	7KA
maximal continuous operating voltage:Uc	275/385/420V
Type of current/frequency	a.c.50/60Hz
Voltage protection level at In:Up(L-PE)	1.2KV
Voltage protection level at In:Up(L-N)	/
Voltage protection level at In:Up(N-PE)	/
Short circuit withstand:ISCCR	100KA
Total current	20KA
Follow current interrupted	/
Ground residual current	< 350
TOV withstand(L-N:5s/N-PE:200 ms)	337
Voltage Combination Wave	20
Curve B or C Circuit breaker	≤125
gG-gL fuse	≤160
Comments	20
Wire range:Solid wire	2.5-25
Wire range:Stranded wire	12.5
Stripping length	Per 1
Maximal altitude	2000
Response time	12.5
Fire resistance according to UL 94	< V-0

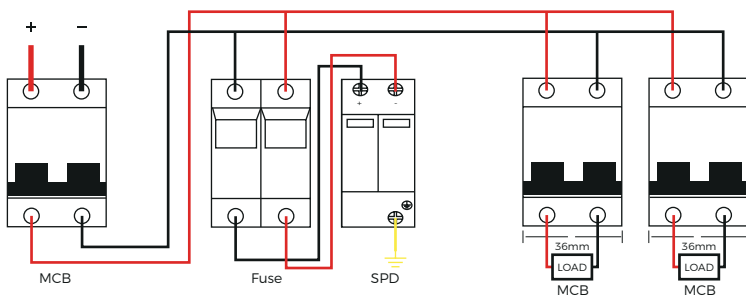
-Consult sales for other parameters, please.

Features	
Patented QuickSafe ® technology	
Safety Reserve system	
Din rail mounting	
Pluggable	
Improved safety	
Back up protection up to 160 A Fuse or 125 A MCB	

Dimensions:



Wiring Diagram



Solar MC4 Connector



MC4 Connector MC4 connector is a single-contact electrical connector commonly used for solar connecting, rated for 1000V. The newer versions are rated at 1500V, which allows longer strings to be created. They are divided into wire ends and board ends. Generally speaking, MC4 refers to wire ends.

MC4 is composed of metal parts and insulating parts. After the MC4 and the cable are connected, it needs to be tested. Under normal circumstances, the resistance is zero, and it will not break if you pull it hard with both hands.

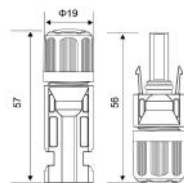


MC4 Connector
Usually sold as a set (male & female), you can also purchase the shell and pin separately.

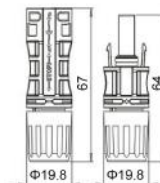
Features:

- Simple on-site processing
- Accommodates PV cable with different insulation diameters
- Mating safety provided by keyed housings
- Multiple plugging and unplugging cycles
- High current carrying capacity

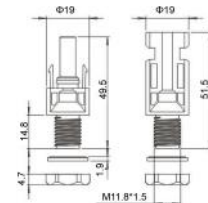
Code	Sepec.
HMC4	30A 1000V 45A 1000V
PVBM	30A 1500V 45A 1500V
HMC4-P	30A 1000V



HMC4



PVBM



HMC4-P



HMC4/PVBM 30A Pin (Copper, tin-plated)



HMC4/PVBM 45A Pin (Copper, silver-plated)



HMC4-P 30A Pin (Copper, tin-plated)

Technical Data:

- Connector system: Φ4mm
- Rated voltage: 1000VDC, 1500VDC
- Rated current: 30A, 45A (2.5-10mm²)
- Test voltage: 6KV (50HZ, 1min.)
- Ambient temperature range: 40°C...+90°C
- Upper limiting temperature: +105°C
- Degree of protection: IP2X/IP67
- Contact resistance of plug connectors: 0.5mΩ
- Safety class: II
- Contact material: Copper, tin-plated (2.5-6mm²), silver-plated (10mm²)
- Insulation material: PPO
- Locking system: Snap-in
- Flame class: UL-94-V0

Solar MC4 T Branch Connector

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MC4 T Branch Connector

MC4 branch connector is compatible with 2.5mm², 4mm² and 6mm² in solar connection projects. Connecting solar panels in series or parallel quickly and reliably connects the solar lines to the photovoltaic system (solar panels, converters).



HMC4T
MC4 T Branch Connector

Technical Data:

- Pin Dimensions: $\varnothing 4\text{mm}$
- Rated voltage: 1000VDC
- Rated current: 30A
- Test voltage: 6KV(50HZ, 1min.)
- Ambient temperature range: 40°C...+90°C
- Degree of protection: IP67
- Contact resistance of plug connectors: $< 0.5\text{m}\Omega$
- Safety class: II
- Contact material: Copper, tin-plated
- Insulation material: PPO
- Locking system: Snap-in
- Flame class: UL-94-V0

HMC4T-3



HMC4T-4



HMC4T-5



HMC4T-6



HMC4T-7



Solar MC4 Y Branch Connector

HYOCIE

MC4 Y Branch Connector MC4 Y branch connector makes it parallel wire PV modules with multi-contact out put cables. They are rated for a maximum current of 45 A and a maximum voltage of 1500 VDC.



HMC4Y
MC4 Y Branch Connector
(45A,1500V needs to be customized.)

Technical Data:

- Pin Dimensions: \varnothing 4mm
- Rated voltage: 1000VDC, 1500VDC
- Rated current: 30A, 45A
- Test voltage: 6KV(50HZ, 1min.)
- Ambient temperature range: 40°C...+90°C
- Degree of protection: IP67
- Upper limiting temperature: +105°C
- Contact resistance of plug connectors: $< 0.5m\Omega$
- Safety class: II
- Contact material: Copper, tin-plated
- Insulation material: PC/PA
- Locking system: Snap-in
- Flame class: UL-94-V0

HMC4Y-3



HMC4Y-4



HMC4Y-5



Solar MC4 Fuse Connector

MC4 Fuse Connector MC4 fuse connectors are specifically designed to protect photovoltaic strings. These fuse links are capable of interrupting low overcurrents associated with faulted photovoltaic string arrays (reverse current, multi-array fault).



Technical Data:

- Connector system: $\Phi 4$ mm
- Rated voltage: 1000VDC, 1500VDC
- Rated current: 10A, 15A, 20A, 30A
- Test voltage: 6KV(50HZ, 1min.)
- Ambient temperature range: 40°C...+90°C
- Upper limiting temperature: +105°C
- Degree of protection: IP2X/IP67
- Contact resistance of plug connectors: 0.5m Ω
- Safety class: II
- Contact material: Copper, tin-plated
- Insulation material: PPO
- Locking system: Snap-in
- Flame class: UL-94-V0

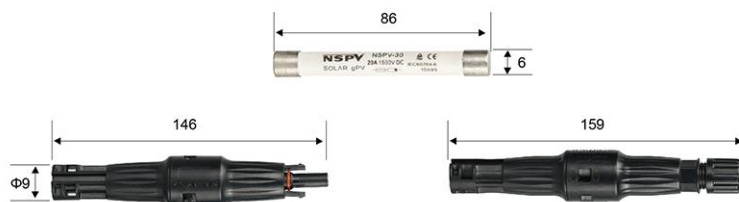
MC4 Fuse Connector

Code	Spec.
HMC4F	30A 1000V
HMC4F	30A 1500V

HMC4F 1000V



HMC4F 1500V



Solar MC4 Diode Connector

MC4 Diode Connector When solar cell modules are connected in series to form a square cell array, it is necessary to connect an MC4 diode connector antiparallel to the positive and negative output terminals of each cell panel. The role of the diode at this time is to prevent a certain element or a certain part of the element in the square array from being blocked or malfunctioning to stop generating electricity. The component's bypass diode is forward-biased, causing the diode to conduct. The working current of the component string bypasses the faulty component and flows through the diode without affecting the power generation of other normal components. At the same time, it protects the bypass components from damage.



Technical Data:

- Connector system: $\Phi 4\text{mm}$
- Rated voltage: 1000VDC
- Rated current: 10A, 15A, 20A
- Test voltage: 6KV(50HZ, 1min.)
- Ambient temperature range: 40°C...+90°C
- Upper limiting temperature: +105°C
- Degree of protection: IP2X/IP67
- Contact resistance of plug connectors: 0.5m Ω
- Safety class: II
- Contact material: Copper, tin-plated
- Insulation material: PPO
- Locking system: Snap-in
- Flame class: UL-94-V0

MC4 Diode Connector

Code	Spec.
HMC4D	20A 1000V



Solar MC4 Extension Cable



MC4 Extension Cable Solar Extension Cable is a solar cable complete with fitted MC4 connectors. Used in photovoltaic power generation and solar systems to interconnect solar panels and electrical components in the photovoltaic system.



PV1 Single Core	2.5mm ²	4mm ²	6mm ²
Rated voltage	1000V/1500V	1000V/1500V	1000V/1500V
Length	customized	customized	customized
Outer diameter(mm)	5.4	6.1	7.2
Overall diameter(mm)	49*0.254	56*0.3	84*0.3
Current temperature	-40°C~+120°C	-40°C~+120°C	-40°C~+120°C
Conductor:	copper wire structure	copper wire structure	copper wire structure
Insulation material:	XLPE	XLPE	XLPE
Colors	black/red	black/red	black/red



Single core solar cable

Code	Spec.
PV1-F	2.5mm ² ,4mm ² ,6mm ² ,10mm ²



Solar crimping pliers

This is a specialized crimping tool for MC4 connectors and non-insulated open, plug type connectors.

The components of the ratchet - type crimping pliers are made of special steel. Ergonomically designed structure for terminal crimping, saving 50% effort. The precise crimping module and overall locking (self-setting release mechanism) design ensures that high- quality crimping standards can be maintained during repeated crimping.

It has undergone precise and accurate calibration before leaving the factory. Due to the well - designed grip position, the use of a lightweight and compact structure, and the design of the handle shape that conforms to ergonomic principles, it ensures a good crimping effect.



Technical Data:

- Use: For MC4 connector
- Crimping range: 2.5/4.0/6.0mm²
- AWG: 14-10
- Length: 270mm
- Weight: 0.74KG

High Quality Crimping Pliers

Code	Crimping Range
A-2546B	2.5/4.0/6.0mm ²

The spring automatically returns, making it more labor-saving to use. The Ratchet wheel controls the size of the jaws, with a wide angle rebound mechanism and easy control of terminal closure size.



Technical Data:

- Use: For MC4 connector
- Crimping range: 2.5/4.0/6.0mm²
- AWG: 14-10
- Length: 220mm
- Weight: 0.55KG

High Quality Crimping Pliers

Code	Crimping Range
LY-2546B	2.5/4.0/6.0mm ²

Solar Wire Cutter

Blade made of SUS 420J2 stainless steel with heat treatment, HRC 50-54.
 PP and TPR are over-molded, for left and right-handed users.
 Spring loaded to reduce fatigue, easy to use safety lock, Extended tang for durability.



Technical Data:

- Cutting range: Below 35mm²
- Length: 165mm
- Weight: 0.11KG

Wire Cutter

Code	Cutting Range
HWC	Below 35mm ²

Solar Wire Stripper

Blade made of SUS 420J2 stainless steel with heat treatment, HRC 50-54.
 PP and TPR are over-molded, for left and right-handed users.
 Spring loaded to reduce fatigue, easy to use safety lock, extended tang for durability.



Technical Data:

- Stripping range: 2.5/4.0/6.0mm²
- AWG: 22-10
- Length: 190mm
- Weight: 0.16KG

Wire Stripper

Code	Stripping Range
HWS	2.5/4.0/6.0mm ²



Technical Data:

- Stripping range: 2.5/4.0/6.0mm²
- AWG: 22-10
- Length: 175mm
- Weight: 0.32KG

Automatic Wire Stripper

Code	Stripping Range
700M	2.5/4.0/6.0mm ²

Solar Wrench

It's suitable for assembling and disassembling MC4 male/female plugs.
Double wrenches- quick screw down.
Saved time and manpower for installation.



Technical Data:

- Size: 119*29*17mm

Solar Wrench

Code HSW



Technical Data:

- For various solar connectors

Multi-Funtion Solar Wrench

Code HSWM

Solar Tools Kit

Sometimes the appearance and color of the tools may be different from the pictures, which does not affect the use. (it means the code may change)
Tool kits can have different combinations and flexible assembly.



Remark

- Tools can be combined into different kits.

Solar Tools Kit

Code HSTK

-Consult sales for other parameters, please.



DC Fuse DC fuse is mainly used for breaking which is due to current feedback of inverters in case of possible photovoltaic series of solar energy-collecting plates in solar energy photovoltaic header boxes and circuit overload and short-circuit current generate, thus protecting the entire photovoltaic energy - collecting plates. Also, it can be used in any other DC circuits as an option for circuit overload and short-circuit protection of electric elements.

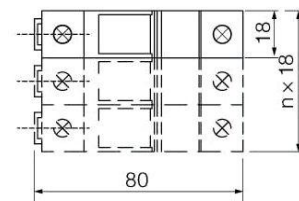
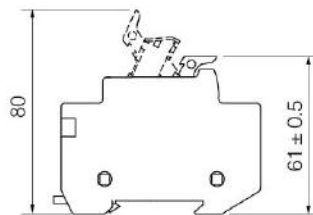
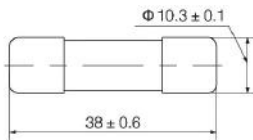
10*38mm DC Fuse link 30A with holder(led)



Technical Data:

- Pole: 1P,2P,3P,4P
- Rated Voltage U_e (V DC): 1000V 1500V
- Rated Current I_n (A): 2, 3, 3.15, 3.5, 4, 5, 6, 8, 10, 12, 15, 16, 20, 25, 30A
- Biggest Block Ability (KA): 20
- The Most High Power Consumption (W): 4.5
- With or without an indicator light is optional

Code	Spec.
HDF-30	2-30A 1000V 1500V
HDF-30B	30A 1000V 1500V



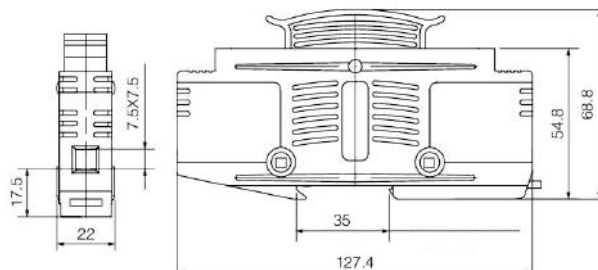
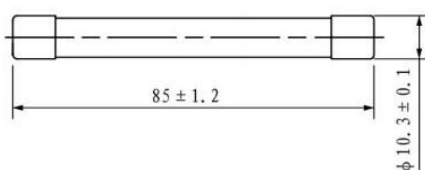
10*85mm DC Fuse link 30A with holder



Technical Data:

- Pole: 1P
- Rated Voltage U_e (VDC): 1500V
- Rated Current I_n (A): 2, 3, 3.15, 3.5, 4, 5, 6, 8, 10, 12, 15, 16, 20, 25, 30A
- Biggest Block Ability (KA): 20
- 35mm DIN Rail mounting

Code	Spec.
HDF-30	2-30A 1500V
HDF-30B	30A 1500V



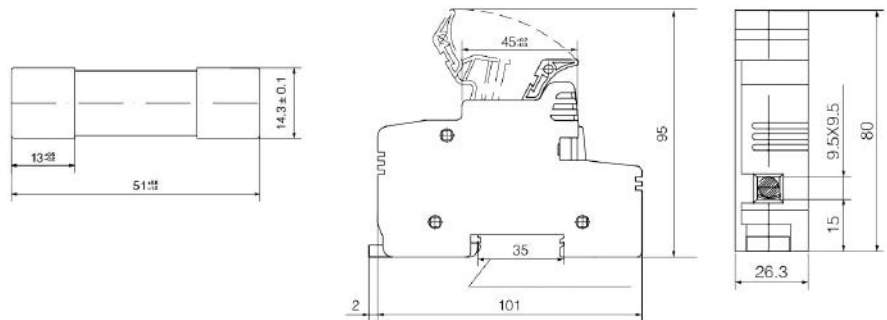
14*51mm DC Fuse link 40A with holder



Technical Data:

- Pole: 1P
- Rated Voltage U_e (V DC): 1000V 1500V
- Rated Current I_n (A): 10, 12, 15, 20, 25, 32, 40A
- Biggest Block Ability (KA): 25

Code	Spec.
HDF-40	10-40A 1000V 1500V
HDF-40B	40A 1000V 1500V



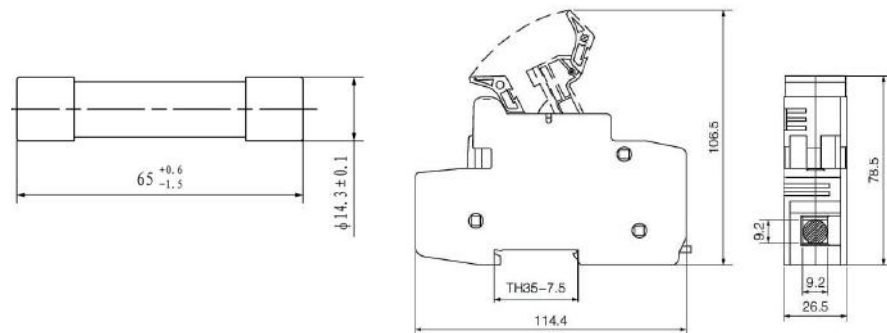
14*65mm DC Fuse link 63A with holder



Technical Data:

- Pole: 1P
- Rated Voltage U_e (VDC): 1000V 1500V
- Rated Current I_n (A): 2, 10, 15, 20, 25, 32, 40, 50, 63A
- Biggest Block Ability (KA): 25
- 35mm DIN Rail mounting

Code	Spec.
HDF-63	2-63A 1000V 1500V
HDF-63B	63A 1000V 1500V



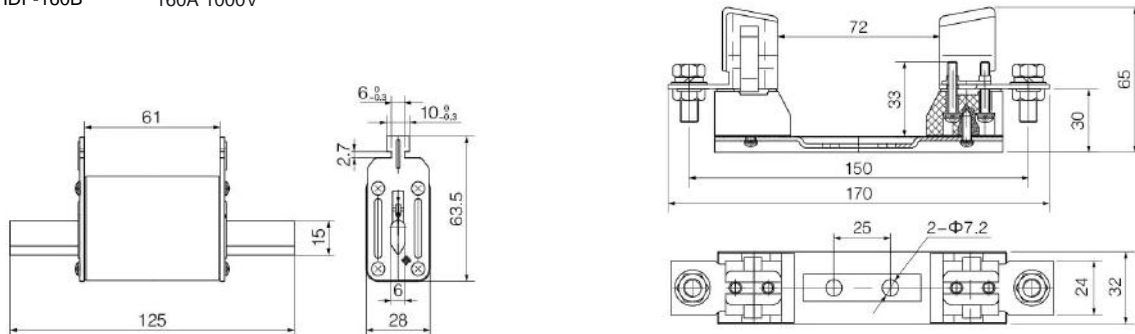
DC Fuse link 160A with holder



Technical Data:

- Pole: 1P
- Rated Voltage U_e (V DC): 1000V
- Rated Current I_n (A): 40, 50, 63, 80, 100, 125, 160A
- Biggest Block Ability (KA): 20

Code	Sepc.
HDF-160	40-160A 1000V
HDF-160B	160A 1000V



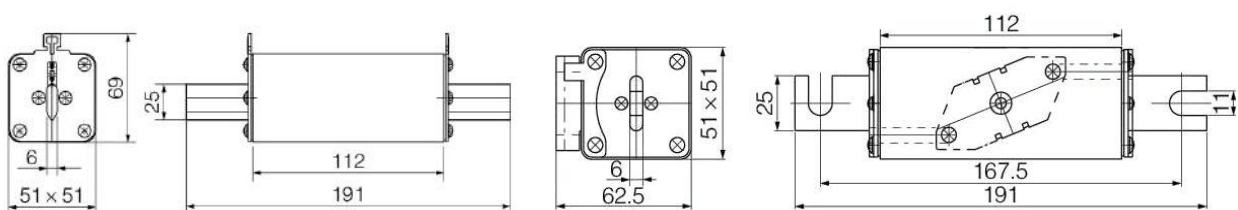
DC Fuse link 250A with holder



Technical Data:

- Pole: 1P
- Rated Voltage U_e (VDC): 1000V 1500V
- Rated Current I_n (A): 125, 160, 200, 250A
- Biggest Block Ability (KA): 25

Code	Sepc.
HDF-250	125-250A 1000V 1500V
HDF-250B	250A 1000V 1500V



Solar DC Fuse



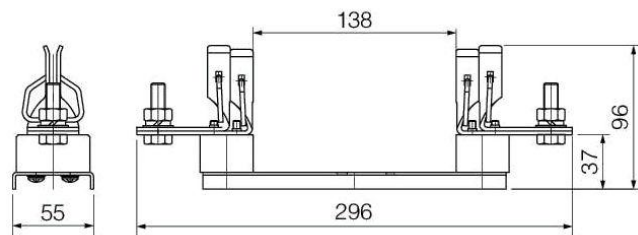
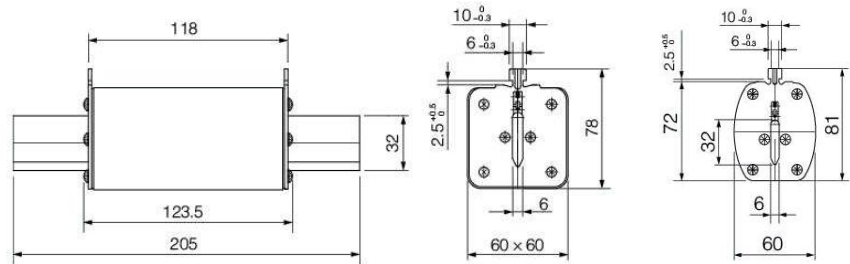
DC Fuse link 400A with holder



Technical Data:

- Pole: 1P
- Rated Voltage U_e (V DC): 1000V 1500V
- Rated Current I_n (A): 200, 250, 315, 350, 400A
- Biggest Block Ability (KA): 30

Code	Sepc.
HDF-400	200-400A 1000V 1500V
HDF-400B	400A 1000V 1500V



Solar DC Fuse

HYOCIE

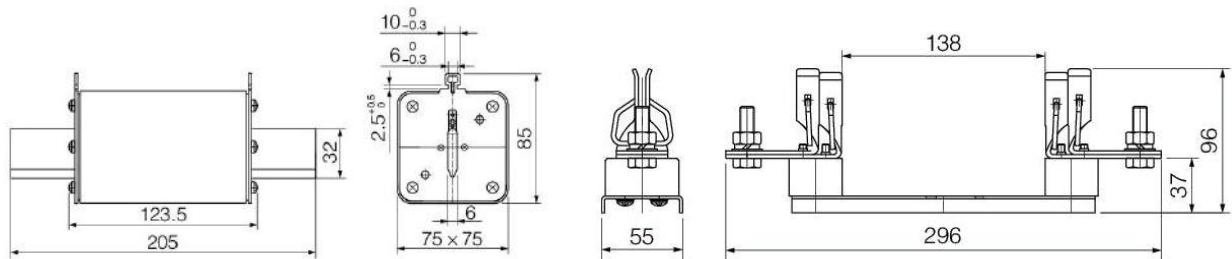
DC Fuse link 630A with holder



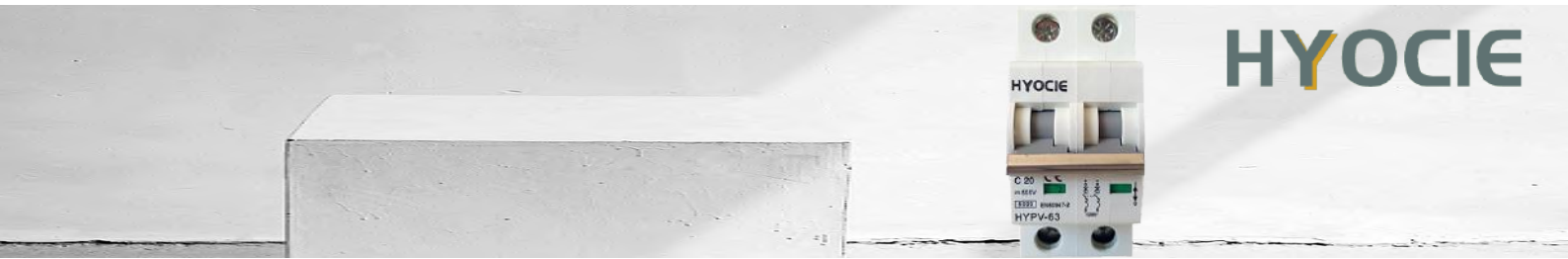
Technical Data:

- Pole: 1P
- Rated Voltage U_e (V DC): 1500V
- Rated Current I_n (A): 350, 400, 450, 500, 630A
- Biggest Block Ability (KA): 50

Code	Spec.
HDF-630	350-630A 1500V
HDF-630B	630A 1500V



DC Miniature Circuit Breaker



HYPV-63

DC MCB

DC MCB supplementary protectors are designed to provide overcurrent protection within appliances or electrical equipment, where a branch circuit protection is already provided or not required. Devices are designed for direct current (DC) control circuit applications.

HYPV-63				
Installation Environment	No obvious shock and vibration			
Pole	1P	2P	3P	4P
Rated Operating Voltage (VDC)	250V	500V	750V	1000V
Rated Insulation Voltage U_i (V DC)	1200V			
Rated Current I_n (A)	1, 2, 3, 6, 10, 16, 20, 25, 32, 40, 50, 63A			
Ambient Temperature	-35°C ~+70°C			
Ultimate Breaking Capacity I_{cu} (kA)	6			
Relative Humidity	≤ 95%			
Curve Type	C(8~12) I_n			
Pollution Level	Class 2			
Electrical Life (times)	8000			
Mechanical Life (times)	20000			
Trip Type	Thermal-magnetic			

-Consult sales for other parameters, please.

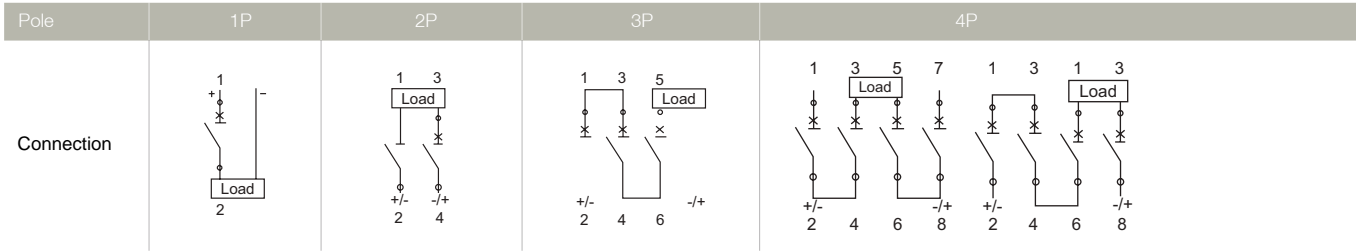
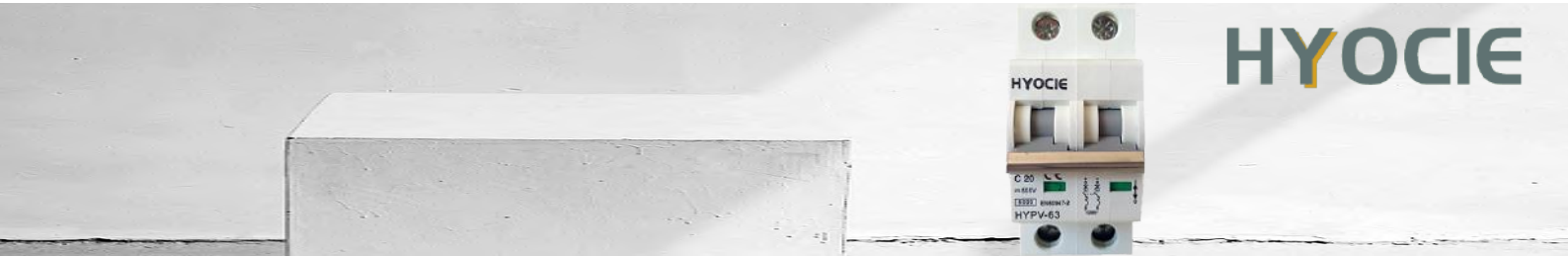
Over current tripping characteristic

Test	Test Current	Initial State	Limited Time	Expected Result
a	1.05 I_n	Cold state	t 1h	Non-tripping
b	1.3 I_n	Right after test number a	t<1h	Tripping
c	7 I_n	Cold state	t≤st	Non-tripping
d	10 I_n	Cold state	0.1s	Tripping

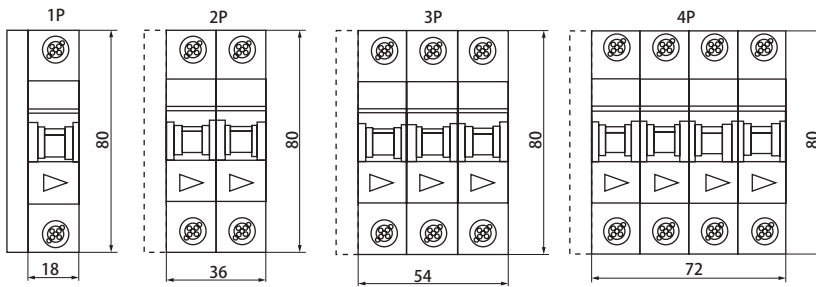
Over current tripping characteristic

Fixed current(A) Rated Current (A)	Temperature												
	-35	-30	-20	-10	0	10	20	30	40	50	60	70	
3A	3.9	3.78	3.69	3.57	3.42	3.3	3.12	3	2.88	2.79	2.64	2.49	
6A	7.8	7.56	7.38	7.14	6.84	6.6	6.24	6	5.76	5.64	5.28	4.98	
10A	13.2	12.7	12.5	12	11.5	11.1	10.6	10	9.6	9.3	8.9	8.4	
16A	21.12	20.48	20	19.2	18.4	17.76	16.96	16	15.36	14.88	14.24	13.44	
20A	26.4	26.4	25	24	23	22.2	21.2	20	19.2	18.6	17.8	16.8	
25A	33	32	31.25	30	28.75	27.75	26.5	25	24	23.25	22.25	21	
32A	42.56	41.28	40	38.72	37.12	35.52	33.93	32	30.72	29.76	28.16	26.88	
40A	53.2	51.2	50	48	46.4	44.8	42.4	40	38.4	37.2	35.6	33.6	
50A	67	65.5	63	60.5	58	56	53	50	48	46.5	44	41.5	
63A	83.79	81.9	80.01	76.86	73.71	70.56	66.78	63	60.48	58.9	55.44	52.29	

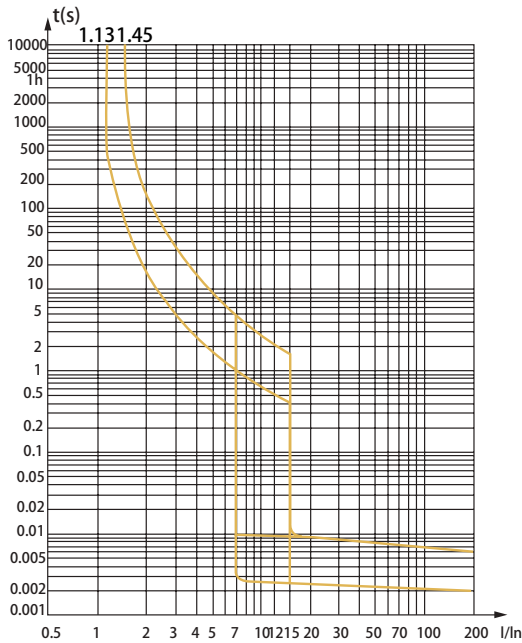
DC Miniature Circuit Breaker



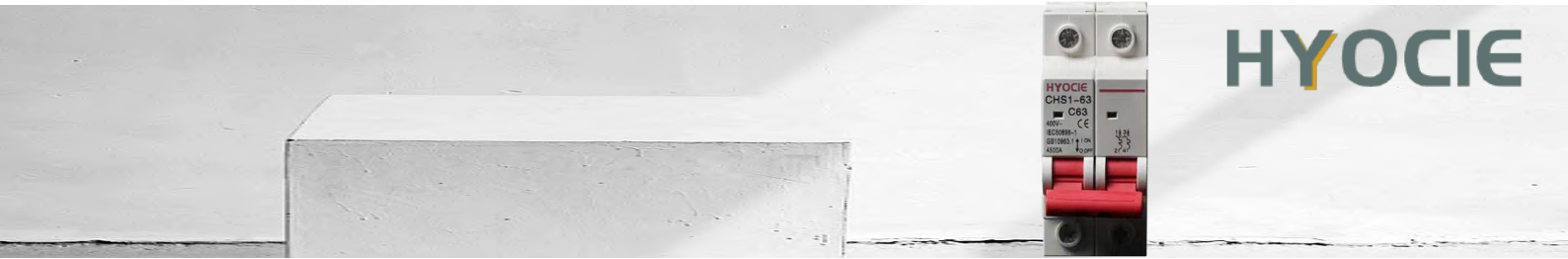
Dimension:



Over current tripping characteristic



AC Miniature Circuit Breaker



CHS1-63

AC MCB

AC MCB has a protective function as overload and is used in the lighting distribution systems in industry commerce and dwelling, protects fractional electric motors. And they also have many merits of high protective grade (up to IP20), high breaking capacity, reliable sensitivity, action convenience, and multi-pole assembling.

CHS1-63				
Nominal Frequency	50/60Hz			
Pole	1P	2P	3P	4P
Rated Operating Voltage (VDC)	230/400V	400V	400V	400V
Selective Grade	3			
Rated Current In (A)	3, 6, 10, 16, 20, 25, 32, 40, 50, 63A			
Ambient Temperature	-5 °C ~+40°C			
Ultimate Breaking Capacity Icu (kA)	4.5KA - 1/2/3P 6KA-4P			
Relative Humidity	≤ 95%			
Curve Type	C(8-12)In			
Pollution Level	Class 2			
Electrical Life (times)	8000			
Mechanical Life (times)	20000			
Enclosed Protective Class	IP20			

-Consult sales for other parameters, please.

Over current tripping characteristic

Test	Test Current	Initial State	Limited Time	Expected Result
a	1.05In	Cold state	t 1h	Non-tripping
b	1.3In	Right after test number a	t<1h	Tripping
c	7In	Cold state	t≤st	Non-tripping
d	10In	Cold state	0.1s	Tripping

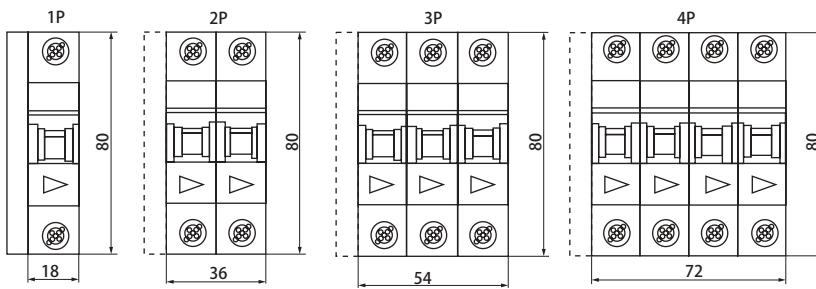
Over current tripping characteristic

Fixed current(A) Rated Current (A)	Temperature												
	-35	-30	-20	-10	0	10	20	30	40	50	60	70	
3A	3.9	3.78	3.69	3.57	3.42	3.3	3.12	3	2.88	2.79	2.64	2.49	
6A	7.8	7.56	7.38	7.14	6.84	6.6	6.24	6	5.76	5.64	5.28	4.98	
10A	13.2	12.7	12.5	12	11.5	11.1	10.6	10	9.6	9.3	8.9	8.4	
16A	21.12	20.48	20	19.2	18.4	17.76	16.96	16	15.36	14.88	14.24	13.44	
20A	26.4	26.4	25	24	23	22.2	21.2	20	19.2	18.6	17.8	16.8	
25A	33	32	31.25	30	28.75	27.75	26.5	25	24	23.25	22.25	21	
32A	42.56	41.28	40	38.72	37.12	35.52	33.93	32	30.72	29.76	28.16	26.88	
40A	53.2	51.2	50	48	46.4	44.8	42.4	40	38.4	37.2	35.6	33.6	
50A	67	65.5	63	60.5	58	56	53	50	48	46.5	44	41.5	
63A	83.79	81.9	80.01	76.86	73.71	70.56	66.78	63	60.48	58.9	55.44	52.29	

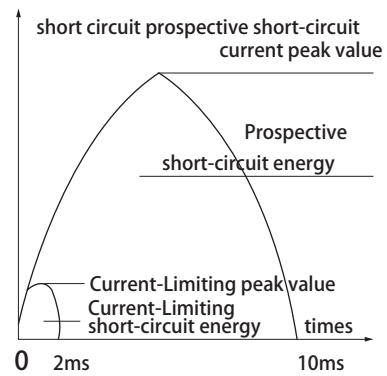
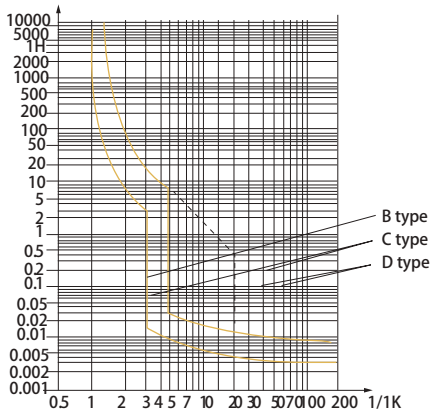
AC Miniature Circuit Breaker



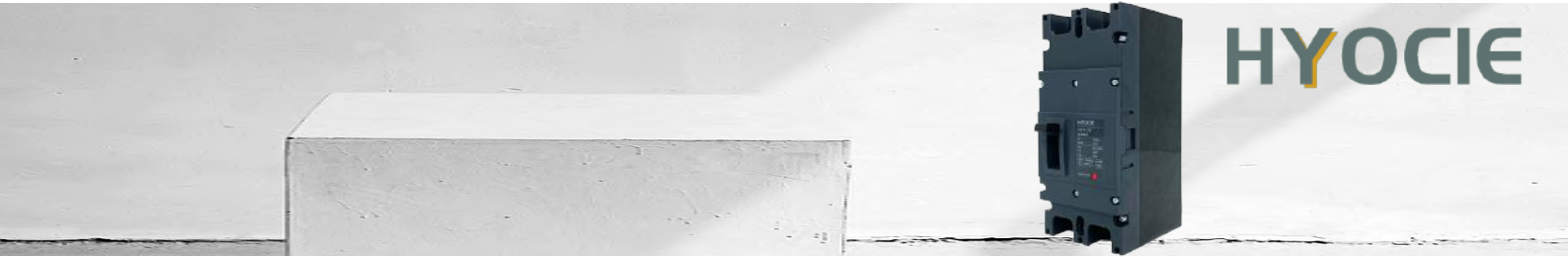
Dimension:



Over current tripping characteristic



DC Molded Case Circuit Breaker

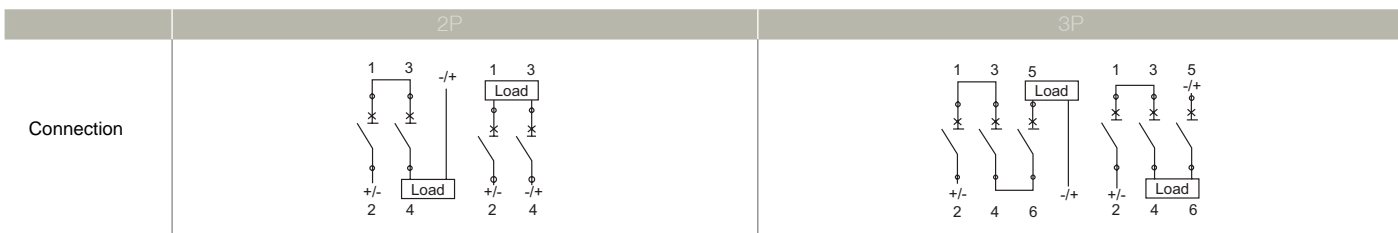


HPVM DC MCCB

DC Molded Case Circuit Breaker is designed to distribute power and protect the circuit and power equipment against overload in the solar system.

HPVM		
Test Standard	IEC60947-2	
Pole	2P	3P
Rated Operating Voltage(V): Ue	1000V	1500V
Rated Insulated Voltage (Ui)	1500V	
Rated Current In (A)	16,20,25,32,40,50,63,80,100,125,140,180,200,225,250,300,320A	
Rated impulse withstand voltage(kV): Uimp	12KV	
Ultimate breaking capacity(KA rms Icu): DC 1000V	20	
Rated service breaking capacity(KA rms Icu): DC 1000V	16	
Magnetic trip range	400A	
Utilization category	A	
Type of trip unit	Thermal-Magnetic	
Protection Degree	IP20	

-Consult sales for other parameters, please.

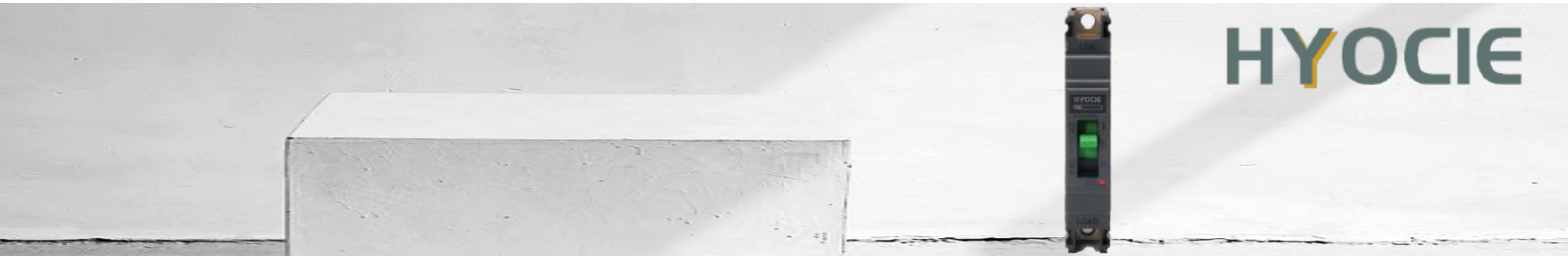


Dimension(mm):

200*90*126

200*133*126

AC Molded Case Circuit Breaker



HYMB AC MCCB

AC molded-case circuit breaker (AC MCCB) is our independent research and development of a household or industrial low-voltage circuit breaker. It has the characteristics of compact structure, complete modularization, high break, zero arcs, and so on. Its rated insulation voltage 800V, suitable for ac 50Hz/60Hz, rated working voltage 690V and below, rated working current to 630A circuit for infrequent conversion and motor infrequent start. Circuit breaker has overload, short circuit and under-voltage protection device, can protect the circuit and power equipment from damage.

HYMB				
Pole	1P	2P	3P	4P
Rated Operating Voltage(V): Ue	415V	415V	415V	415V
Rated Insulated Voltage (Ui)	800V			
Rated Current In (A)	16,20,25,32,40,50,63,80,100,125,150,175,200,225,250,300,315,350,400,450,500,600,630A			
Rated impulse withstand voltage(kV): Uimp	8KV			
Connection	Front connection			
Electrical Life (times)	5000			
Mechanical Life (times)	10000			

-Consult sales for other parameters, please.

Dimension:(mm)	1P	2P	3P	4P
16-125A	130*25*82	130*50*82	130*75*82	130*100*82
100-250A	165*45*84	165*75*84	165*105*84	165*140*84
250-400A/400-630A			257*140*145	257*185*145

CB Automatic Transfer Switch



Q1-63 ATS

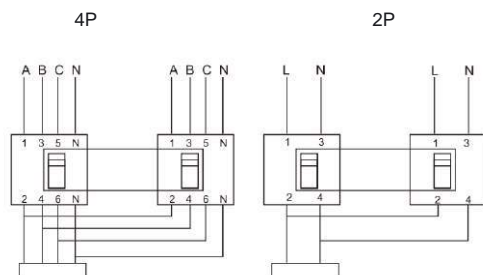
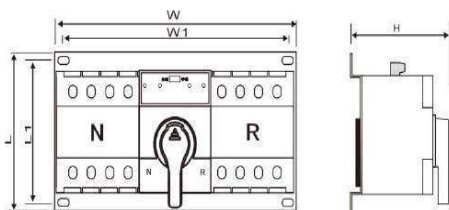
Q1-63 automatic transfer switch (ATS) , suitable for AC 50Hz or 60Hz, rated working voltage 400V, rated workingpower 63A and below dual - circuit power supply system.The two power supplies can be selectively switched as needed. It has short circuit,overload,loss of voltage protection functions, and also has the function of outputting closing signals.It's especially suitable for the installation and use of lighting circuits in office buildings,shopping malls, banks, stations,hospitals and high-rise buildings.

Safeguard

- 1)Do not plug or unplug the controller plug when the power is on,otherwise it will cause electric shock hazard or damage.
- 2)The internal setting parameters of the controller do not need to be changed by the user,otherwise it will cause the damage.
- 3)The load capacity cannot exceed the rated capacity of the switch,otherwise it will cause the switch to trip or burn out.
- 4)Do not connect the neutral line (N) to the phase line by mistake. The input phase sequence of the two circuit breakers must be the same .When selecting a three-pole circuit breaker, you must connect the neutral line (NN) of the common power supply separately. To the corresponding terminal on the floor,otherwise the switch supply separately.To the corresponding terminal on the floor, otherwise the switch will be damaged.The ground wire should be connected reliably to ensure safe use.
- 5)Do not be directly installed outdoors to work, otherwise, it will shorten the service life or cause adverse reactions.
- 6)When the ATS needs to be operated manually, the switch should be placed in the manual position first. NORMAL or READY power. At this time, you can turn the to switch between NORMAL or READY power.When the ATS needs an automatic operation,the button switch should be in the automatic state first,and the NORMAL power supply has priority.

Q1-63

Pole	2P	4P
Rated voltage Ue	400V	
Rated Current In (A)	16, 20, 25, 30,40, 50, 63A	
Use Category	AC-33iB	
Rated Short-circuit Breaking Capacity	4KA	
Rated Short-circuit Making Capacity	4KA	
Electrical Appliances Class	CB	
Rated Frequency	50/60HZ	
Rated Frequency	CB	
Conversion Insulation Voltage	U= 500V	



	W	W 1	L	L 1	H
Q1-63/2P	155	135	136	125	115
Q1-63/4P	225	205	136	125	115



Zhejiang Yuxi Electric Co., Ltd.

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Wenzhou City, Zhejiang Province,
325604 China.

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