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2025

CNC
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CATALOGUE

SOLAR ENERGY
COMBINER BOX AND ACCESSORIES

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Company Profile

About CNC

CNC was founded in 1988 specialized in Low-voltage electrical and Power Transmission and Distribution industries. We provide our customer with profitable growth by offering integrated comprehensive electrical solution.

CNC key value is innovation and quality to ensure clients with safe, reliable products. We set up advanced assembly line, test center, R&D Center and quality control center. We have got the certificates of ISO9001, ISO14001, OHSAS18001 and CE, CB, SEMKO, KEMA, TUV etc.

As a leading manufacturer of electrical products in China, our business covers over 100 countries.

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Photovoltaic DC Solutions Solution

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Electrical Application Plan

Overview of Photovoltaic Power Generation System

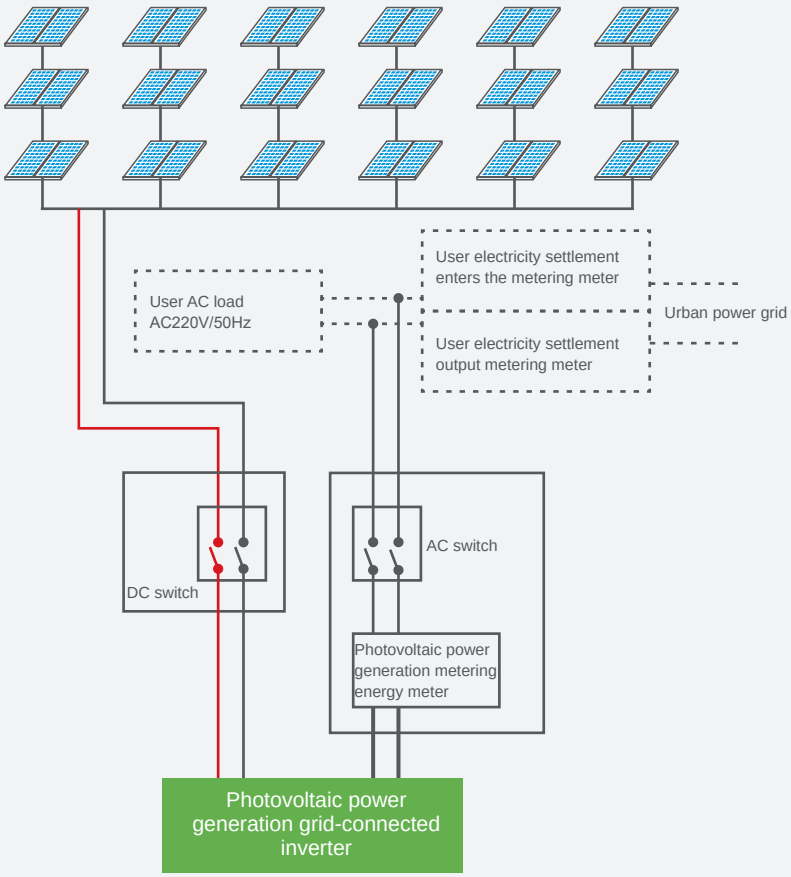
We call for “green” energy, which symbolizes civilization, change, and commitment.

We advocate for a “low-carbon lifestyle” and are committed to seeking sustainable development solutions,providing clean energy and smarter electrical system solutions for human society has been our pursuit for many years. In response to the special requirements of solar photovoltaic power systems and intelligent electrical systems, CNC Electric has launched 8 series of photovoltaic-specific AC/DC electrical products and electrical system solutions, providing electrical support and high-quality services for different fields of photovoltaic power generation applications.

Green energy: Since the beginning of the new century, the solar photovoltaic industry has become one of the most attention-grabbing emerging industries in the world. Photovoltaic power generation does not require fuel, has no gas emissions, and is a “green” industry. It has the advantages of no pollution, safety, long life, easy maintenance, inexhaustible resources, and widely distributed resources. It is considered the most important new energy source of the 21st century and can be widely used in aerospace, communications, energy, agriculture, office facilities, transportation, and residential areas.

Electrical Application Plan

Overview of Photovoltaic Power Generation System

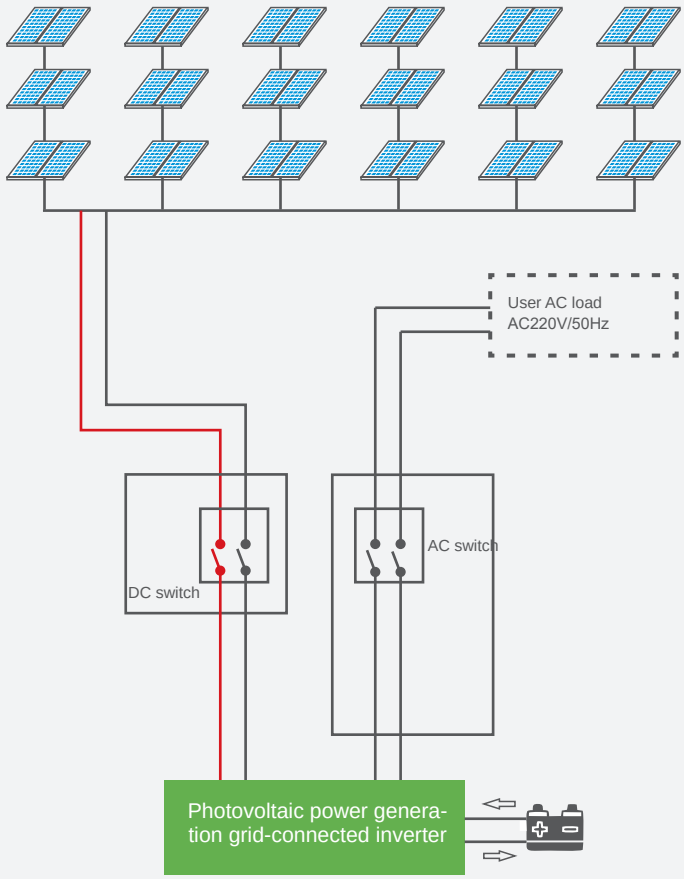


For example

- **Photovoltaic commercialpower station**
  Commercial electricity sales
- **Photovoltaic Pilot Demonstration Zone**
  Photovoltaic Agriculture Demonstration ProjectPhotovoltaic greenhouse, photovoltaic fish pond
- **Photovoltaic commercial roof**
  Large commercial buildings save electricity
- **Photovoltaic integrated building**
  Photovoltaic modules replace traditional building materials and simultaneously provide electricity for buildings
- **Photovoltaic residential community**
  Effectively utilizing solar energy in building communities
- **Photovoltaic grid connected residential system**
  Combination of residential photovoltaic power generation, sales, and usage

Electrical Application Plan

Overview of Photovoltaic Power Generation System

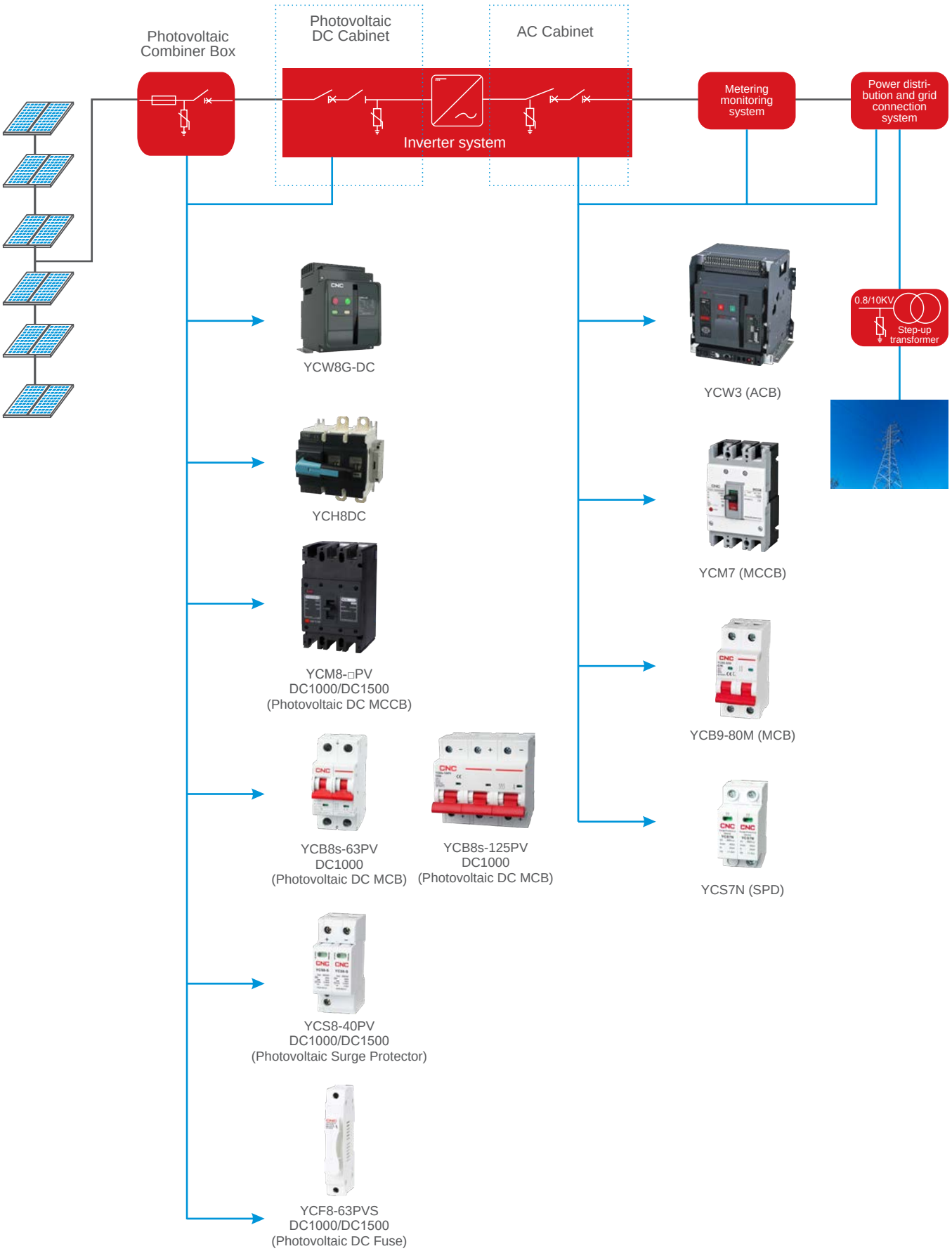


For example

- **Photovoltaic noise barrier system for highways**
  Providing noise protection and autio-visual indication power for highways
- **Wind-solar hybrid system**
  Street lighting system
- **Photovoltaic water pumping system**
  Water pumping storage, agricultural irrigation, photovoltaic fountain, water circulation
- **Off-grid residential photovoltaic system**
  Providing electricity for 2 billion people living in remote mountain areas without electricity worldwide
- **Off-grid lighting sys**
  Airport runway lighting, hotel outdoor lighting, street lighting, highway tunnel lighting, advertising lighting, etc
- **Off-grid industrial applications**
  Power supply for microwave relay communication, fiber optic communication system, wireless paging station, rural program-controlled telephone, lighthouse, navigation light, cathodic protection of oil and gas pipelines, forest fire prevention, disaster prediction instrument, et
- **Photovoltaic grid connected residential system**
  Residential photovoltaic generation, sale, and consumption integration

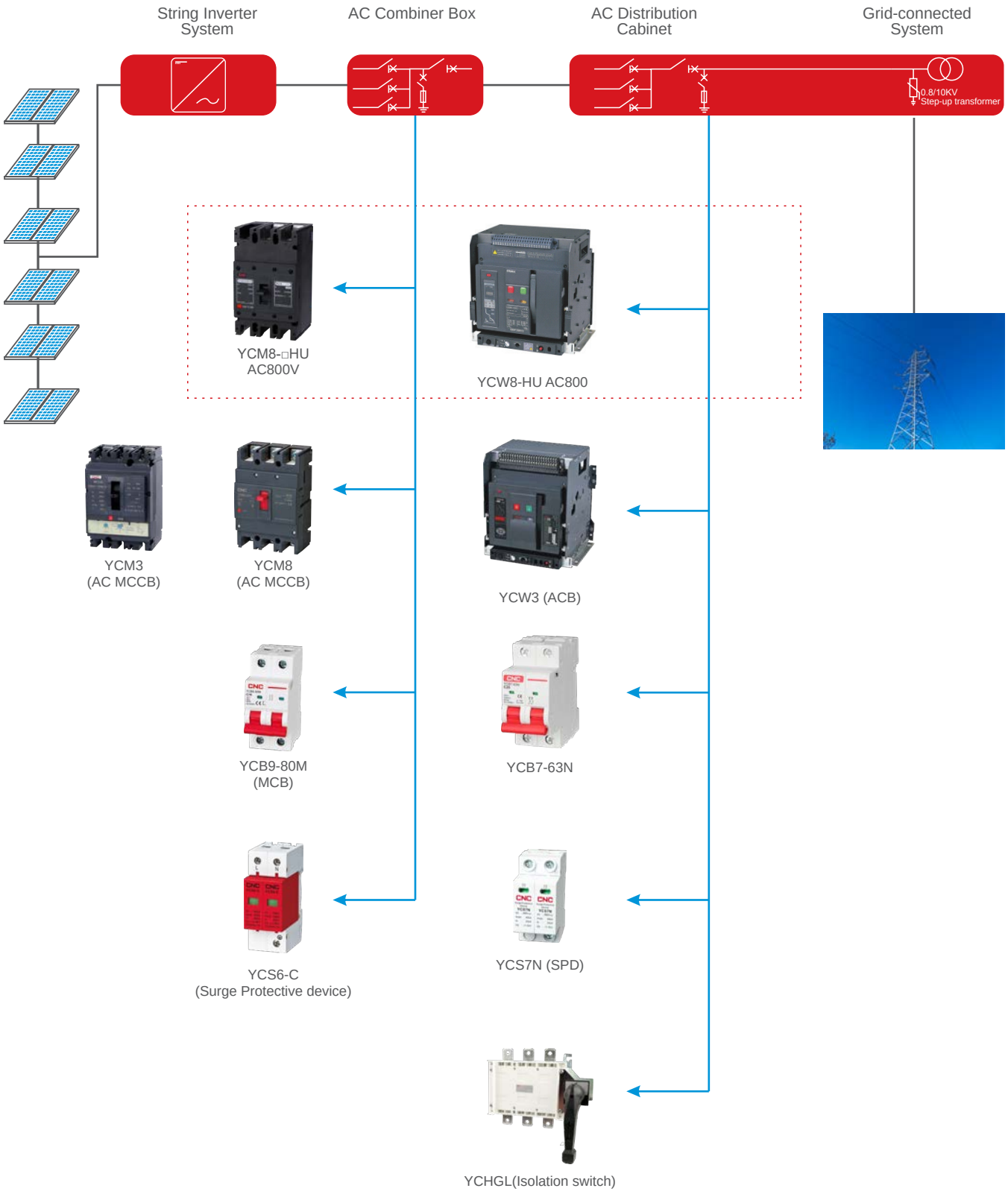
Electrical Application Plan

Overview of Photovoltaic Power Generation System



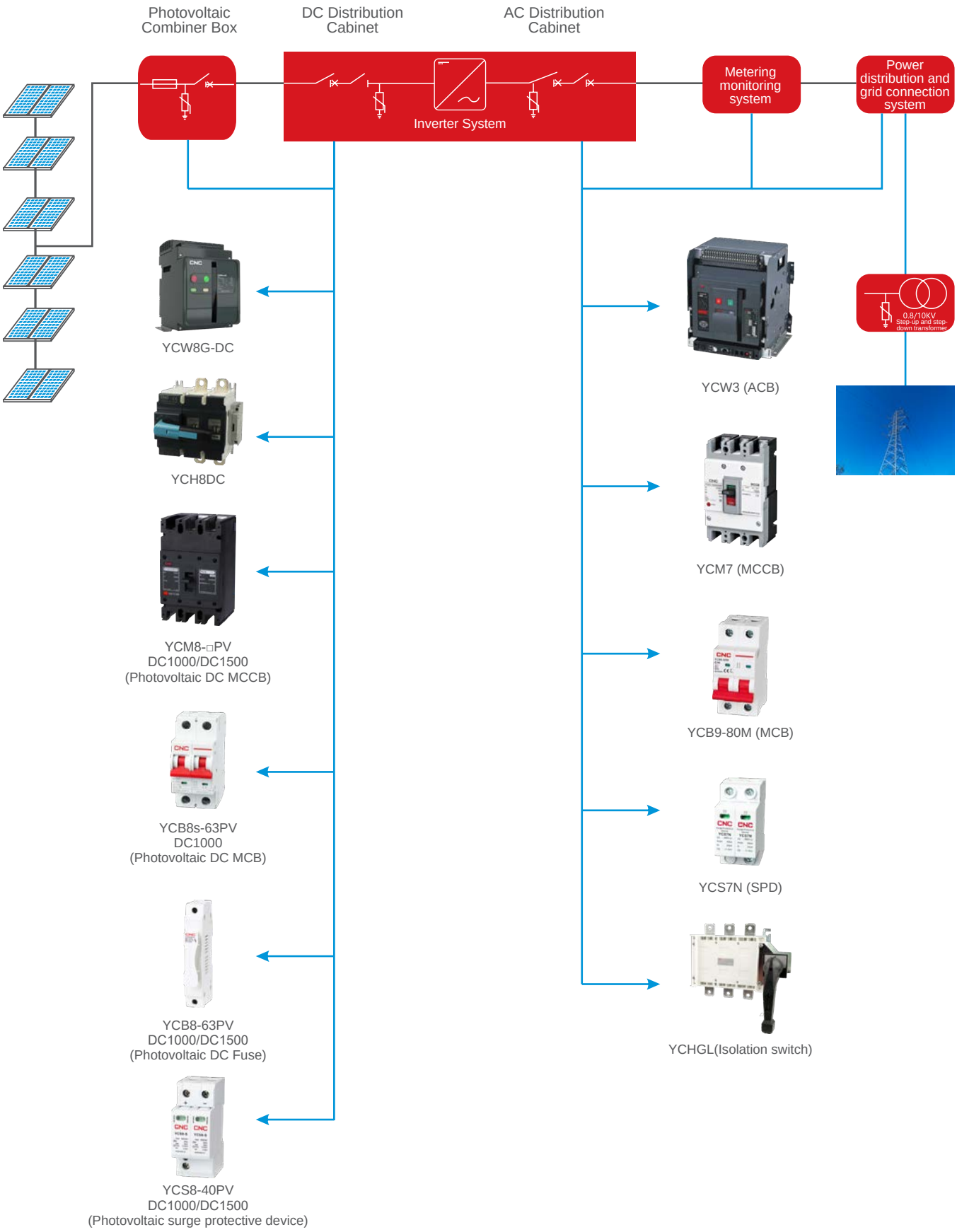
Electrical Application Plan

Overview of Photovoltaic Power Generation System



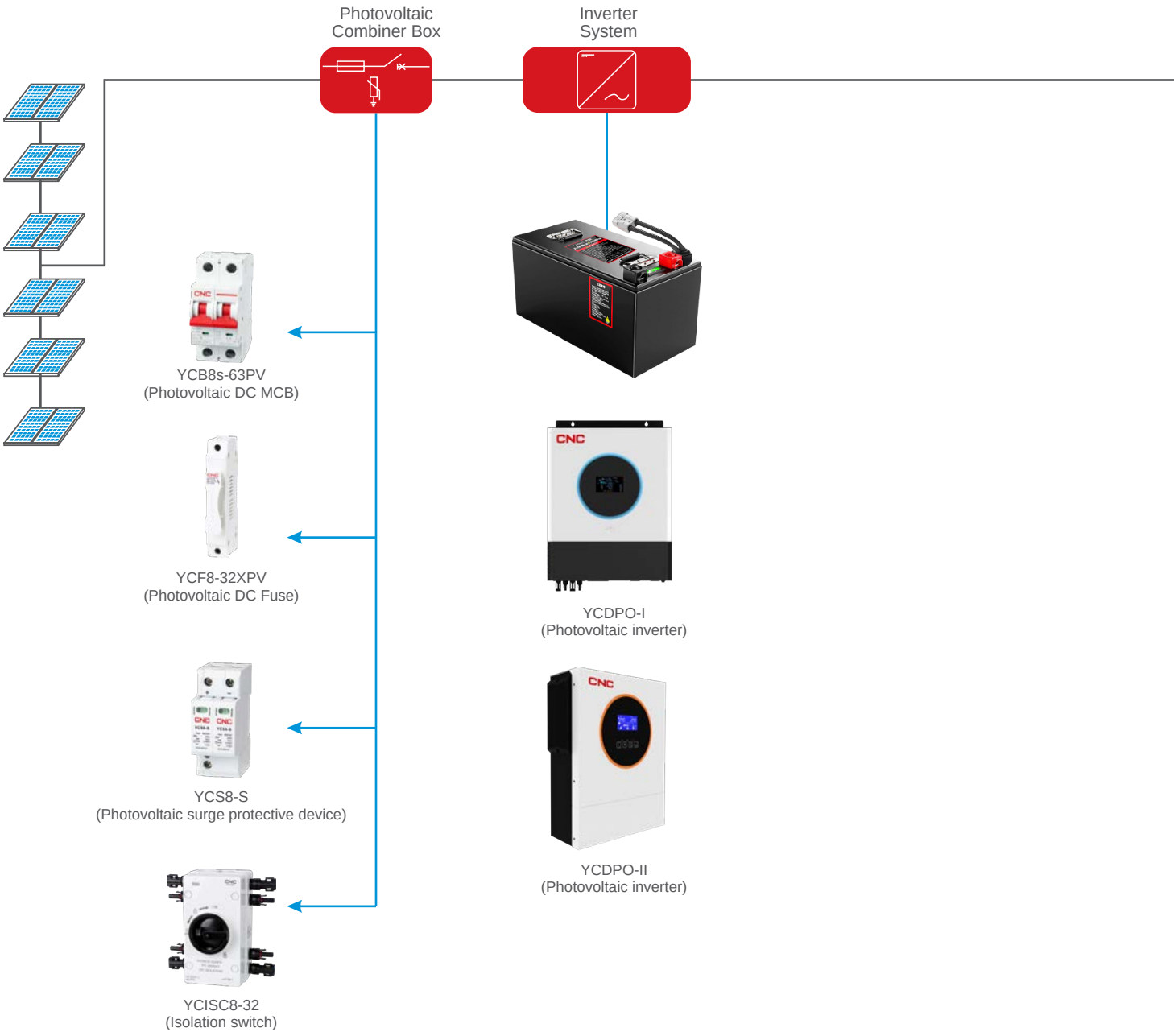
Electrical Application Plan

Overview of Photovoltaic Power Generation System



Electrical Application Plan

Overview of Photovoltaic Power Generation System

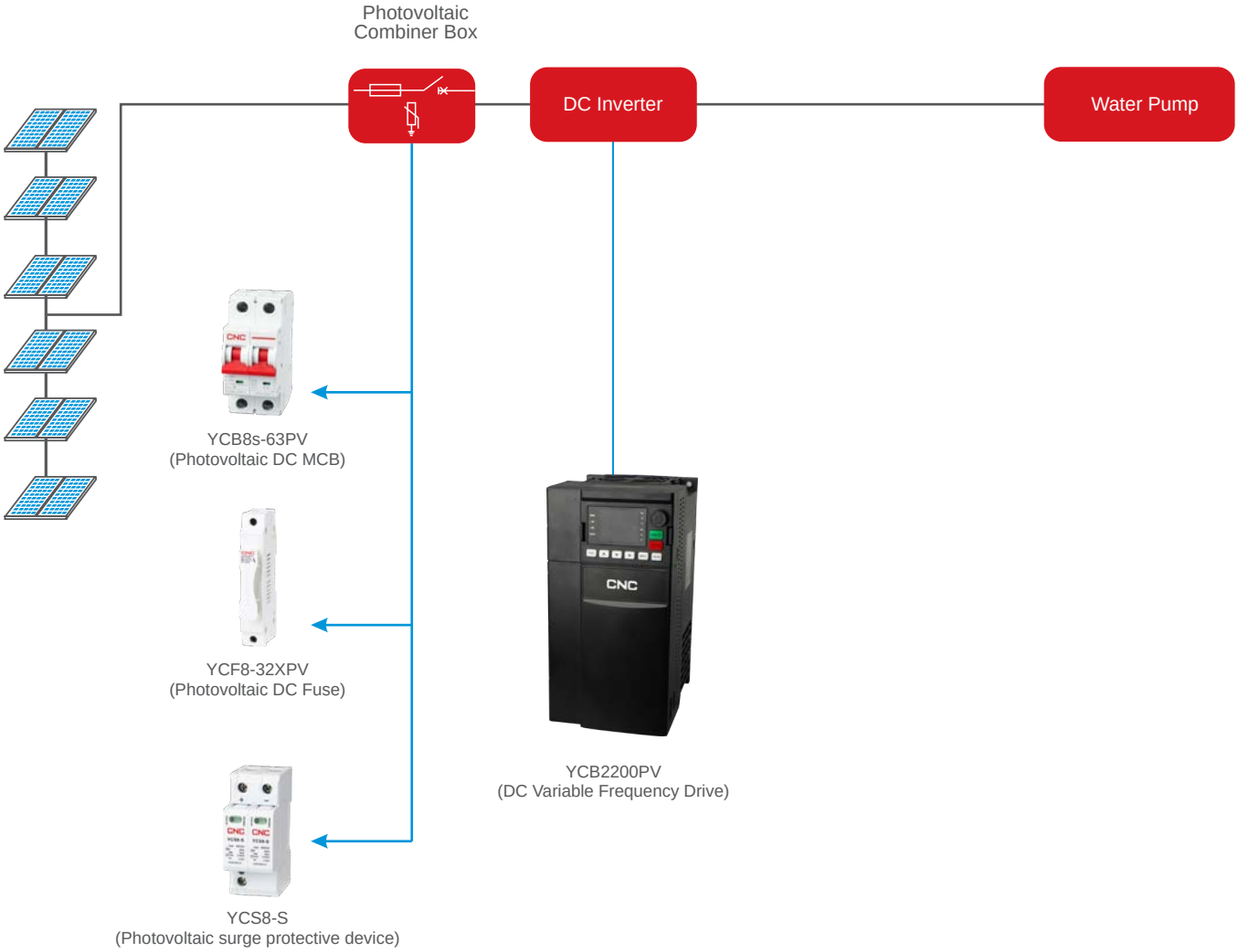


Electrical Application Plan

Overview of Photovoltaic Power Generation System

Electrical Application Plan

Overview of Photovoltaic Power Generation System



AC high voltage products

YCW8-□HU AC ACB
YCM8-□HU AC MCCB

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AC high voltage products

YCW8-□HU Air Circuit Breaker

General

YCW8-□HUseries air circuit breaker(hereinafter called ACB) is suitable for the circuit of AC 50Hz/60Hz with rated service voltage 800V, 1140V and rated service current between 630A and 4000A. It is mainly used to distribute electric energy and protect circuits and electric equipment against over-load, under-voltage, short-circuit and single-phase earthing fault.

With intelligent and selective protection functions, the breaker can improve the reliability of power supply, and avoid unnecessary power failure. The breaker is applicable for power stations, factories.

Standard: IEC 60947-2,IEC 60947-4-1

Type designation

YCW8 - 4000 HU / 3 2500 D H M

Type	Shell framecurrent	Breaking Capacity	number of poles
YCW8 -	4000	HU /	3
YCW8	2500(630~2500A) 4000(2000~4000A)	HU:AC800 /1140V	3:3P 4:4P

Rated current	Installation type	Connection	controller type
2500	D	H	M
630 800 1000 1250 1600 2000 2500 2900 3200 3600 4000	D: Drawer style F: Fixed	H: Horizontal wiring V: Vertical wiring	M: LED display 3M: LCD display 3H: LCD display with communication

Operating conditions

Item	a(mm)
Ambient temperature	-5°C~+40°C;the average value within 24h shall not exceed +35°C; L type and M type controller can be used under -40°C~+70°C
Altitude	≤2000m
Pollution grade	3
Safety category	Main circuit and undervoltage tripping coil is IV,other auxiliary and control circuit is III
Installation position	Vertically installed, inclination between the mounting plane and the vertical plane should not exceed ±5°

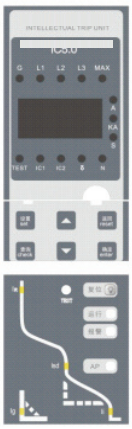
AC high voltage products

YCW8-□HU Air Circuit Breaker

Operating conditions

Item		a(mm)	
Shell current Inm (A)		2500	4000
Rated working current In (A)		630,800,1000 1250,1600,2000,2500	2000, 2500, 2900, 3200, 3600, 4000
Rated working voltage Ue (V)		800/1140	
Rated insulation voltage Ui (V)		1140	
Rated impulse withstand voltage Uimp (KV)		12	
Power frequency withstand voltage (V) for 1 minute		3500	
Number of poles		3P,4P	
Rated limit short breaking capacity Icu (KA)	800/1140V	50	50
Rated operating short-circuit breaking capacity Ics (KA)	800/1140V	50	50
Rated short time withstand current for 1s ICW (KA)	800/1140V	50	50
Full power interruption time (without additional delay) (ms)		12~18	
Closing time (ms)		≤60	
Electrical lifespan		2000	
Mechanical life (maintenance free)		10000	
Mechanical life (with maintenance)		20000	

Basic and optional functions of the controller



M-type digital display

Basic function	Optional function
Overload long delay, short circuit short delay, and short circuit instantaneous protection	Signal contact output
Functional testing	MCR and over limit tripping
Fault memory	Load monitoring
Thermal memory	Voltage measurement
Self diagnosis	
Current measurement	
Fault status indication and numerical display	
Earth fault protection	

AC high voltage products

YCW8-□HU Air Circuit Breaker

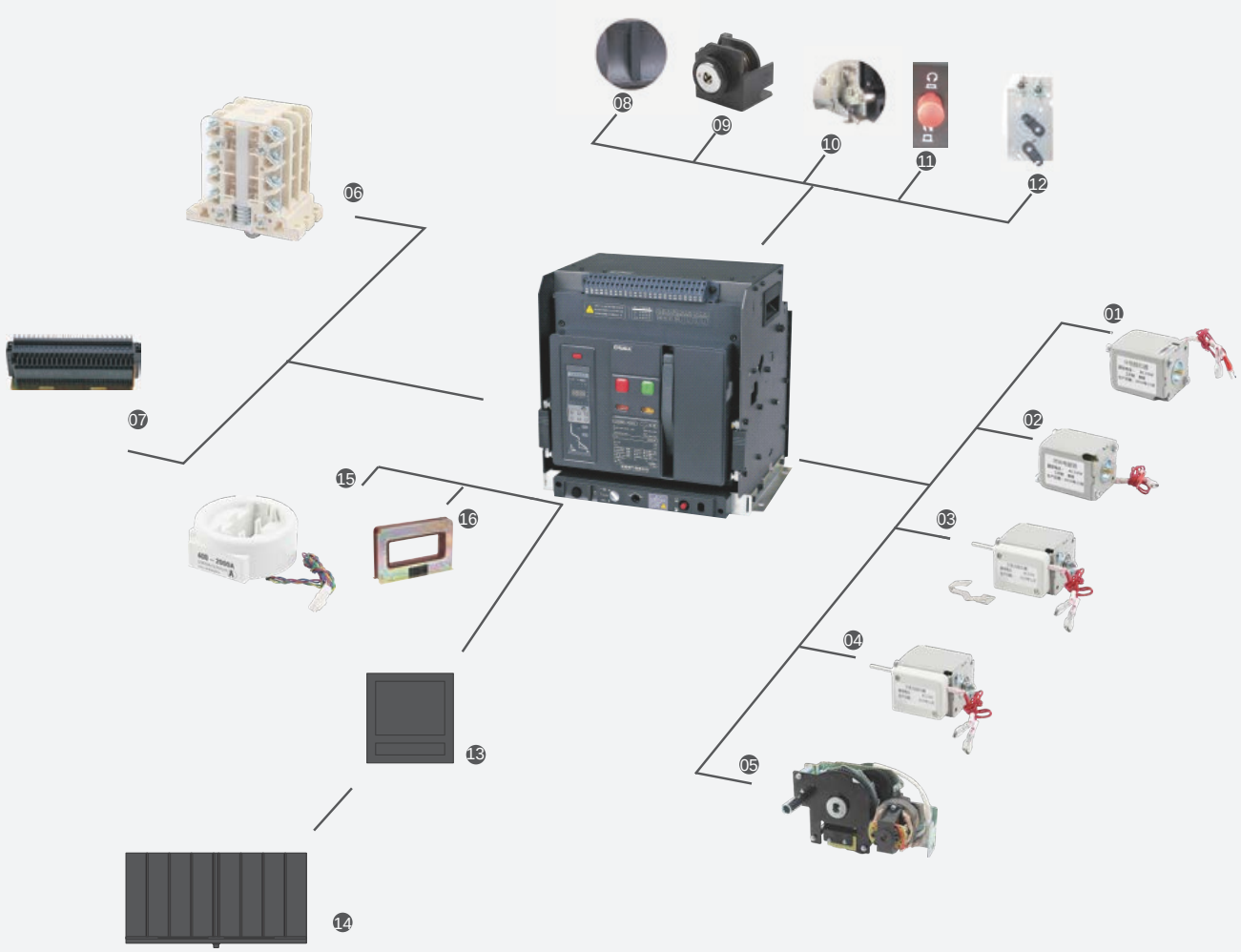
3M/3H type digital displa

Basic function	Optional function
Overload long delay, short circuit short delay, and short circuit instantaneous protection	Current imbalance protection
Functional testing	Signal contact output
Fault memory	MCR and over limit tripping
Thermal memory	Load monitoring
Self diagnosis	power measurement
Current measurement	Power factor measurement
Fault status indication and numerical display	Electric energy measurement
Communication function (3H)	Regional interlocking
Contact wear indicator (3H)	Harmonic measurement
Operation fault protection record (3H)	Voltage protection
Earth fault protection	Voltage measurement

Item	M	3M	3H
Overload long delay protection	■	■	■
Short circuit short time delay protection	■	■	■
Short circuit instantaneous protection	■	■	■
Earth fault protection	■	■	■
Current imbalance protection	-	□	□
Functional testing	■	■	■
Fault memory	■	■	■
Signal contact output	□	□	■
Thermal memory	■	■	■
Self diagnosis	■	■	■
MCU working instructions	-	-	-
Current column display	-	-	-
Current measurement	■	■	■
MCR and over limit tripping	□	□	□
Load monitoring	□	□	□
Fault status indication and numerical display	■	■	■
Voltage measurement	□	□	■
Power factor measurement	-	□	■
power measurement	-	□	□
Electric energy measurement	-	□	□
Communication function	-	□	■
Contact wear indication	-	□	■
Regional interlocking	-	□	□
Harmonic measurement	-	□	□
Voltage protection	-	□	□
Record of operation times	-	□	■

YCW8-□HU Air Circuit Breaker

Accessories



Remote operation

- 01 shunt release
- 02 closing electromagnet
- 03 under-voltage release instantaneouse type
- 04 under-voltage release time-delay type
- 05 motor-driven energy-storage mechanism

Indication contact

- 06 auxiliary contact
- 07 secondary wiring terminal

Lock and connection

- 08 padlock
- 09 key lock
- 10 door interlock
- 11 connected, disconnected, test position locking mechanism
- 12 mechanical interlock

Operation and protection

- 12 doorcase
- 13 phases barrier

Current transformer

- 14 external N-pole transformer
- 15 leakage current transformer
- 16 earthing current transformer

Accessories of YCW3

Shunt release

Shunt release can realize the remote control to break the circuit breaker.

- rated control power voltage Us(V) AC220V/230V, AC380V/400V, DC220V, DC110V
- work voltage (0.7~1.1)Us
- breaking time (50±10)ms

Forbid making the power for long time to avoid the shunt release being damaged.

Closing electromagnet

After the motor finishes the energy storage, closing release can instantly close the circuit breaker.

- rated control power voltage Us(V) AC220V/230V, AC380V/400V, DC220V, DC110V
- work voltage (0.85~1.1)Us
- closing time (55±10)ms

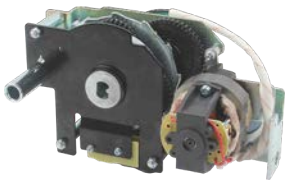
Forbid making the power for long time to avoid the closing release being damaged.

Under-voltage release

Without power supply, under-voltage release can't close.
It is classified into instantaneous and time-delay type.
After closing the circuit breaker, under-voltage release can break the circuit breaker when the voltage drops to (70%~35%) Us. The circuit breaker can be closed again when power voltage recovers and exceeds 85%Us.

- rated control power voltage Us(V) AC220V/230V,AC380V/400V
- action voltage (0.35~0.7)Us
- reliable making voltage (0.85~1.1)Us
- reliable non-making voltage ≤0.35Us
- delay time: 0.5s,1s,1.5s,3s (YCW3-1600 , non-adjustable);
  0.5s, 1s, 3s, 5s(YCW3-2000A, 3200A, 4000A, 6300A, adjustable).

Make sure there is power supply on the under-voltage release before making the circuit breaker.



Motor-driven energy-storage mechanism

With the function of motor-driven storing and auto restoring energy after closing the circuit breaker, the mechanism can ensure to close the circuit breaker instantly after breaking the circuit breaker.

- rated control power voltage Us(V) AC220V/230V,AC380V/400V,DC220V,DC110V
- work voltage (0.85~1.1)Us
- power loss 75W(1600A), 85W(2000A),110W(3200A,4000A),150W(6300A)
- energy-storage time <5s

YCW8-□HU Air Circuit Breaker

Auxiliary contact

Standard model: 4NO/4NC

For YCW8-2500/40000HU, 4NO/4NC, 4NO+4NC, 2NO+6NC, 3NO+3NC.

Ith: AC380V/AC400V 0.75A, DC220V 0.15A, AC220V/AC230V 1.3A.

Lock

Key lock

The OFF button of the circuit breaker can be locked in the depressed position and the circuit breaker cannot be closed in that case; when the user selects the option, the factory provides locks and keys; One breaker is provided with one lock and one key for the lock; two breakers are provided with two locks and one key for the locks; three breakers are provided with three same locks and two same keys for the locks.

Note: It is necessary to firstly press the OFF key and turn it anticlockwise before pulling out the key for the air circuit breaker with key lock equipped.

"Disconnected" position locking device for the draw-out type

For the “disconnected” position of the draw-out circuit breaker, a lock rod can be pulled out to lock the matter, and the breaker locked will be unable to be turned towards the TEST or CONNECTION position. Padlocks have to be provided by users themselves.

Three position locking device for the draw-out

It is the locking device for three positions(disconnected, test, connection) of drawout type. Three positions of circuit breaker is indicated by the indicator, the driving and the reversing handle which is locked in the exact position, and the lock can be released by the reset button.

Door-case

Installed on the door of the distribution cubicle, for sealing the distribution cubicle and making the protection class to IP40(fixed type and draw-out type).

Phases barrier (optional)

Installed between the bus-bars to increase the creepage distance.

Controller accessories

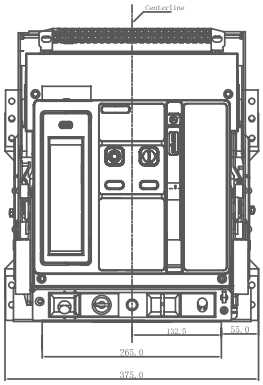
Leakage current transformer

1. If the grounding protection is the leakage type, then a rectangular transformer will be needed.

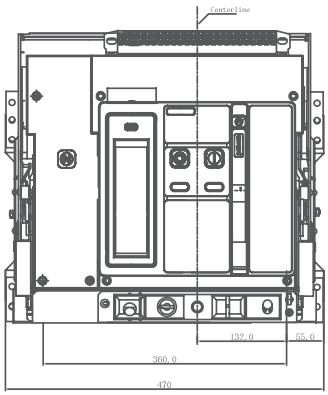
YCW8-□HU Air Circuit Breaker

Overall and mounting dimensions(mm)

YCW8-2500HU drawer type



3P



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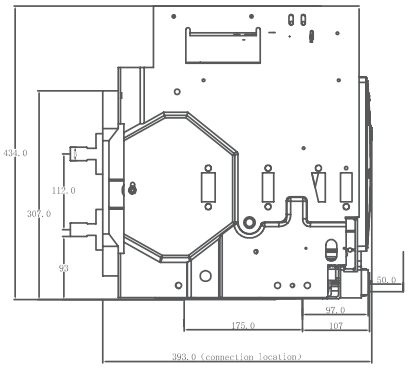
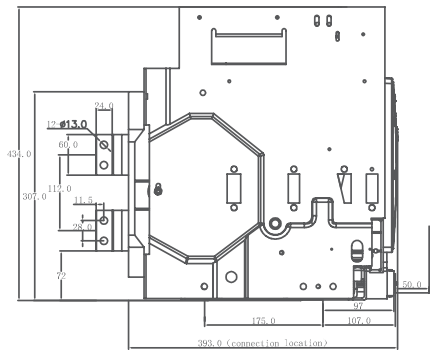


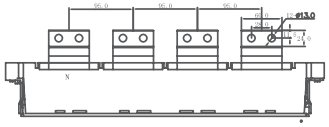
Separation position

Horizontal wiring side view

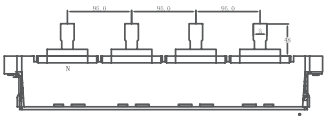


Separation position

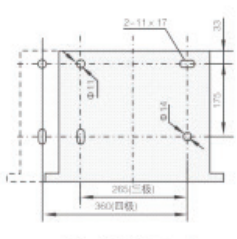
Vertical line side view



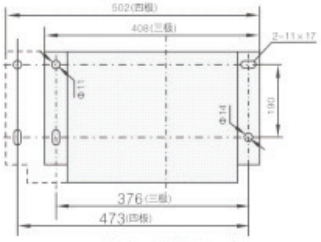
Horizontal connection



Vertical connection



Internal installation dimensions

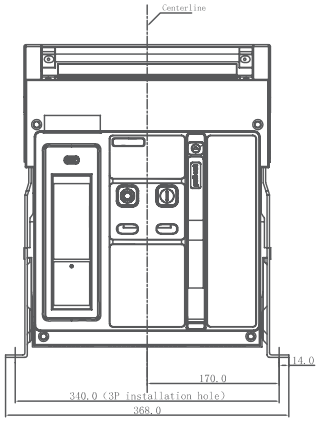


External installation dimensions

Rated current (A)	Dimension B (mm)
600~800	10
1000~1600	15
2000~2500	20

YCW8-□HU Air Circuit Breaker

YCW8-2500HU fixed type



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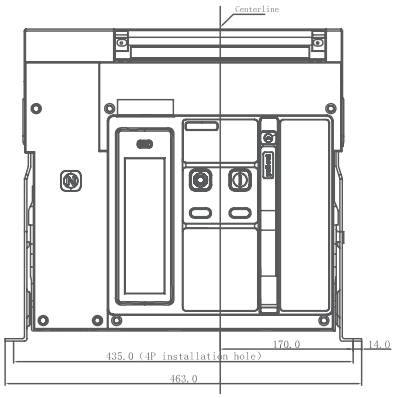
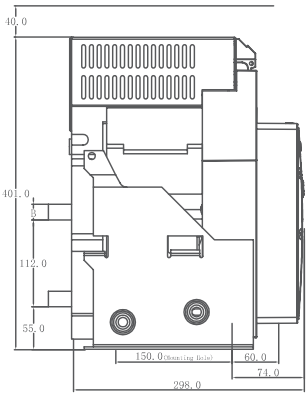


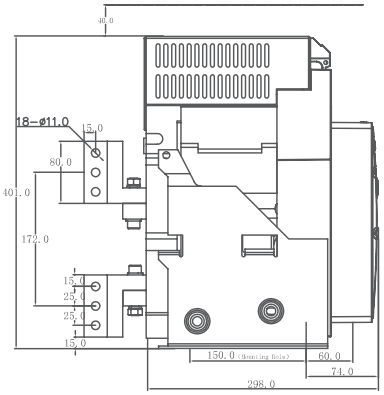
4P

Distance for dismantling the arc extinguishing chamber

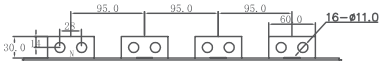


Horizontal wiring side view

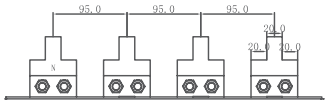
Distance for dismantling the arc extinguishing chamber



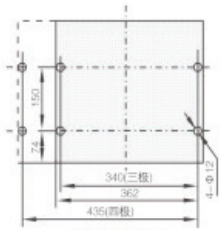
Horizontal wiring side view



Horizontal wiring



Vertical wiring

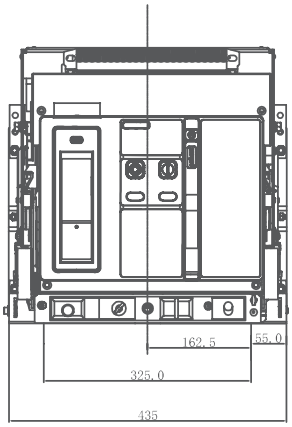


installation dimensions

Rated current (A)	Dimension B (mm)
600~800	10
1000~1600	15
2000~2500	20

YCW8-□HU Air Circuit Breaker

YCW8-4000HU drawer type



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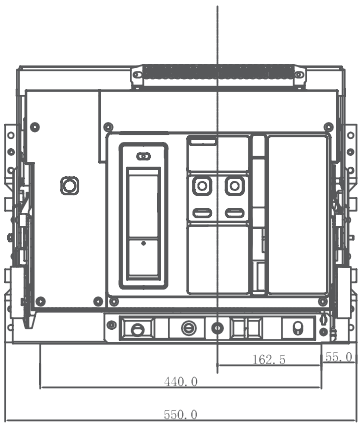

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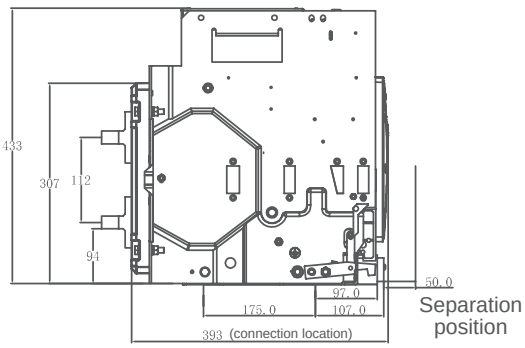
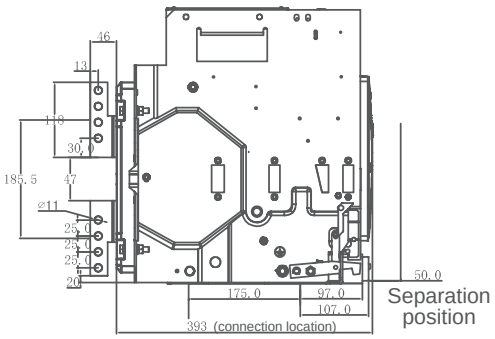
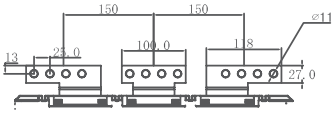


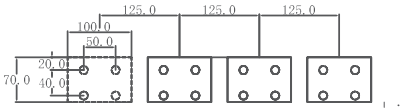
Horizontal wiring side view



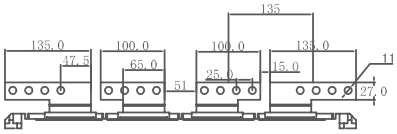
Horizontal wiring side view



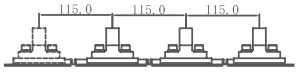
YCW8-4000HU 3P In≤3200A
Horizontal wiring



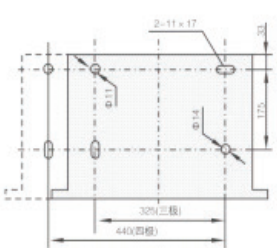
YCW8-4000HU 3P/4P In=3600,4000A
Horizontal wiring



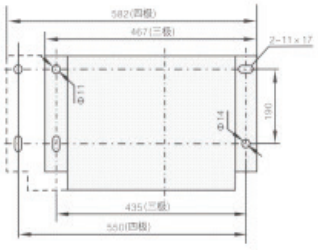
YCW8-4000HU 4P In≤3200A
Horizontal wiring



YCW8-4000HU 3P/4P
Vertical wiring



Internal installation dimensions

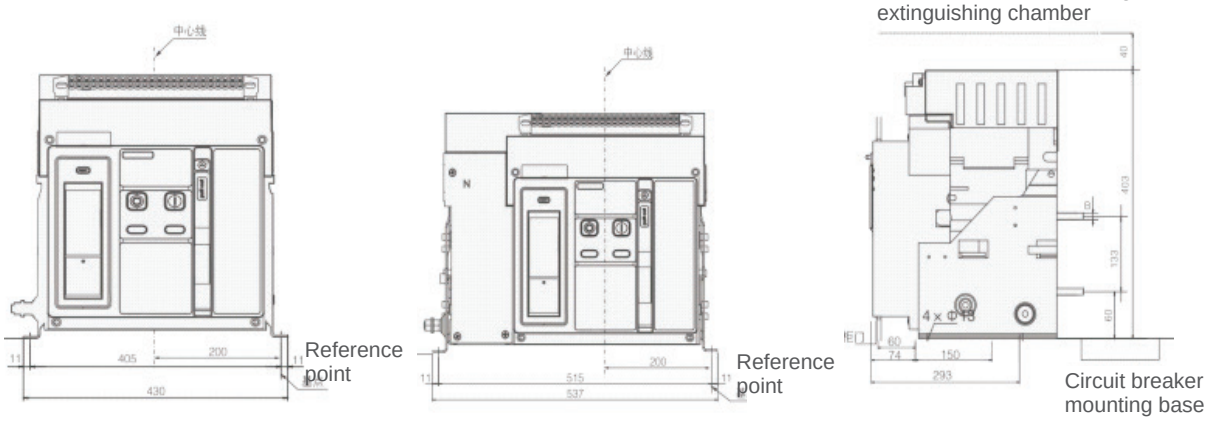


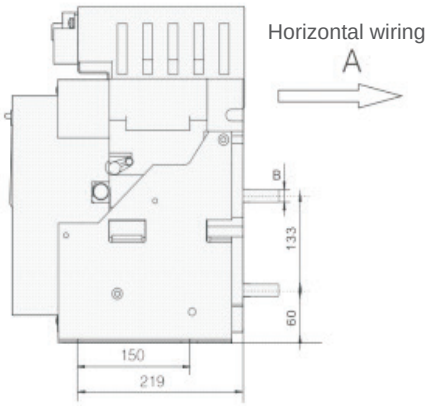
External installation dimensions

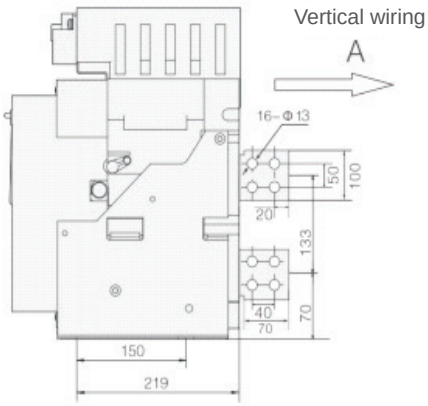
Rated current (A)	Dimension B (mm)
2000,2500	20
2900,3200	30
3600,4000	

YCW8-□HU Air Circuit Breaker

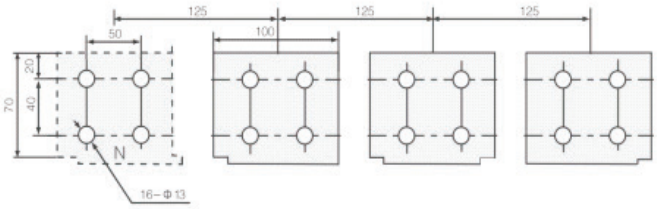
YCW8-4000HU 3P fixed type



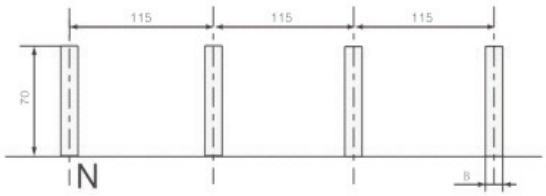


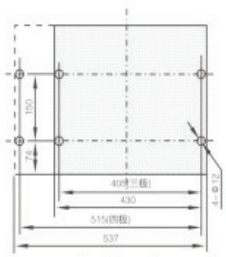


Standard horizontal wiring



Vertical wiring





installation dimensions

Rated current (A)	Dimension B (mm)
2000,2500	20
2900,3200	30
3600,4000	

YCW8-□HU Air Circuit Breaker

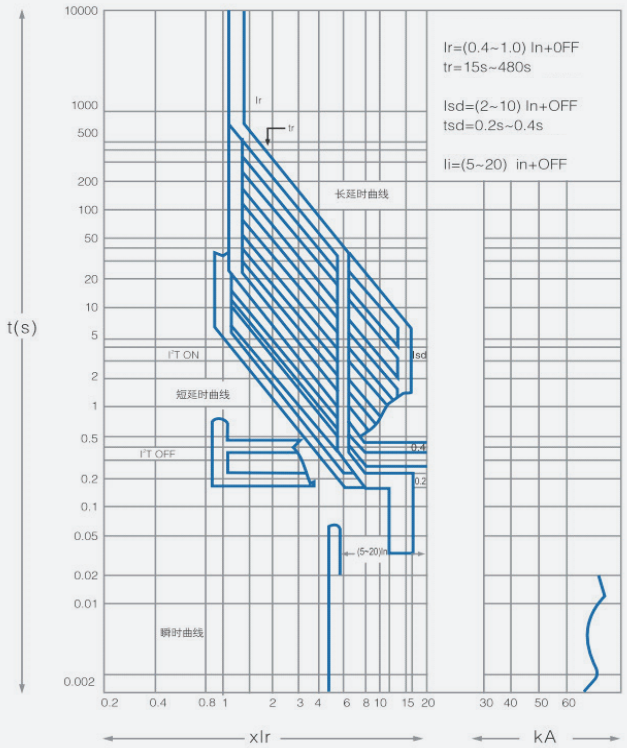
Operating conditions

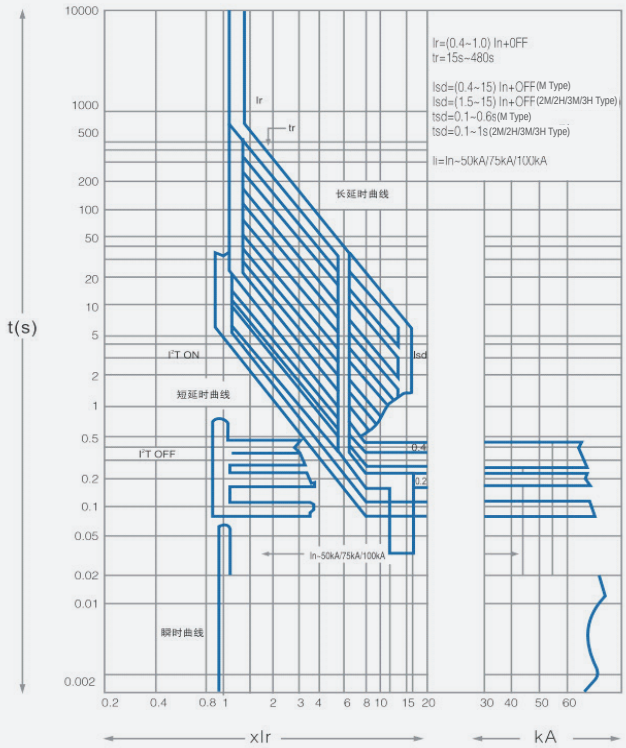
Surrounding working environment temperature	Continuous current carrying capacity	
	Inm=2500A	Inm=4000A
+40 °C	1Inm	1Inm
+45 °C	0.97Inm	0.96Inm
+50 °C	0.91Inm	0.90Inm
+55 °C	0.87Inm	0.86Inm
+60 °C	0.82Inm	0.80Inm

If the altitude exceeds 2000m in the applicable working environment,
the power frequency withstand voltage can be corrected according to the following table:

Altitude(m)	Power frequency withstand voltage (V)	Operating current correction factor	Correction coefficient for short-circuit breaking capaci
2000	3500	1	1
3000	3150	0.93	0.93
4000	2500	0.88	0.71
5000	2000	0.82	0.63

Tripping curve





AC high voltage products

YCM8-□HU AC MCCB

General

YCM8-□HU series AC molded case circuit breaker is suitable for AC grid circuits with rated voltage up to AC1140V and rated current of 800A. The circuit breaker has the functions of overload long-time delay protection and short-circuit instantaneous protection, and is used to distribute electric energy and protect lines and power supply equipment from overload, short circuit and other faults.

Features

- Ultra-wide breaking capacity:

  rated working voltage up to AC1140V and rated current up to 800A. Under AC800V working conditions, Icu=Ics=36.5KA, ensuring reliable short-circuit protection.
- Ultra-long arc-extinguishing chamber:

  the arc-extinguishing chamber has been improved as a whole, with more arcextinguishing plates, greatly improving the product's breaking characteristics..
- Application of narrow-slot arc-extinguishing technology:

  advanced current-limiting and narrow-slot arc-extinguishing technology is applied, which enables the high voltage and high short-circuit current to be cut off very quickly, facilitating the extinguishing of the arc in the shortest possible time, effectively limiting the energy and current peak, and greatly reducing damage to cables and equipment caused by short-circuit currents.

Type designation

YCM8 - 250 S HU / 3 125A + DC800

Product name		Shell frame	Breaking capacity	Product type		Number of poles	Rated current	Rated voltage
YCM8	-	250	S	HU	/	3	125A	AC800
YCM8		250(63~250) 320(250~320) 400(225~400) 630(500~630) 800(700~800)	S: Standard breaking N: Higher breaking	HU: AC high voltage		3	63, 80, 100, 125, 140, 160, 180, 200, 225, 250, 280, 315, 320, 350, 400, 500, 630, 700, 800	AC800 AC1140

Accessory selection

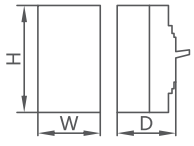
Product name		Accessories	Adapter shell frame	Accessory voltage	
YCM8	-	MX	1	AC230V	
YCM8		OF: Auxiliary contact MX: Shunt release SD: Alarm module Z: Manual operation mechanism P: Electric operating mechanism TS2: Terminal shield 2P TS3: Terminal shield 3P	1: 250/320/ 2: 400/630/800	MX: AC110V AC230V AC400V DC24V DC110V DC220V	P: AC400V AC230V DC220V

Note: YCM8-125PV shell rack only has OF, MX, SD accessories

AC high voltage products

YCM8-□HU AC MCCB

Technical data

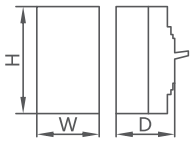
Model		YCM8- 250HU				YCM8- 320HU				YCM8- 400HU			
Appearance													
Shell frame current Inm(A)		250				320				400			
Number of poles of products		3				3				3			
AC working voltage(V)		415	690	800	1140	415	690	800	1140	415	690	800	1140
Rated insulation voltageUi(V)		AC1150				AC1150				AC1150			
Rated impulse withstand voltage Uimp(KV)		8				8				12			
Rated current In(A)		63, 80, 100, 125, 140, 160, 180, 200, 225, 250				280, 315, 320				225, 250, 315, 350, 400			
Ultimate short-circuit breaking capacity Icu (kA)	S	85	50	36.5	10	85	50	36.5	10	85	50	36.5	10
	N	/				/				100	60	50	15
Running short-circuit breaking capacity Ics(kA)	OFF	Ics=100%Icu											
Wiring method		Up in and down out, down in and up out,Down in and up out, up in and down out(3P)											
Isolation function		Yes											
Tripping type		Thermal-magnetic type											
Electrical life(time)		3000	3000	2000		3000	3000	2000		1000	1000	700	
Mechanical life(time)		20000				20000				10000			
Standard		IEC/EN60947-2											
Attached accessories		Shunt,Alarm,Auxiliary,Manual operation,Electric operation											
Certifications		CE											
Dimension(mm) a-b-c-ca 	Width(W)	107				107				182			
	Height(H)	180				180				250			
	Depth(D)	126				126				165			

Note: ① 2P connection in series, ② 3P connection in series

AC high voltage products

YCM8-□HU AC MCCB

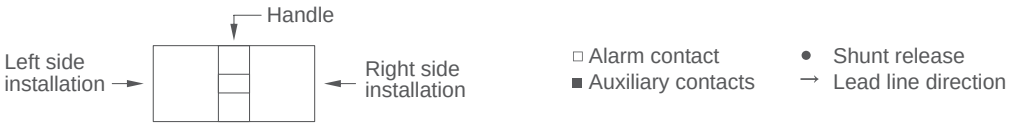
Technical data

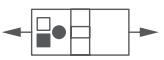
Model		YCM8- 630HU				YCM8- 800HU			
Appearance									
Shell frame current Inm(A)		630				800			
Number of poles of products		3				3			
AC working voltage(V)		415	690	800	1140	415	690	800	1140
Rated insulation voltageUi(V)		AC1150				AC1150			
Rated impulse withstand voltage Uimp(KV)		12				12			
Rated current In(A)		500, 630				630, 700, 800			
Ultimate short-circuit breaking capacity Icu (kA)	S	85	50	36.5	10	85	50	36.5	10
	N	100	60	50	15	100	60	50	15
Running short-circuit breaking capacity Ics(kA)	OFF	Ics=100%Icu							
Wiring method		Up in and down out, down in and up out,Down in and up out, up in and down out(3P)							
Isolation function		Yes							
Tripping type		Thermal-magnetic type							
Electrical life(time)		1000	1000	1000	700	1000	1000	1000	700
Mechanical life(time)		20000				10000			
Standard		IEC/EN60947-2							
Attached accessories		Shunt,Alarm,Auxiliary,Manual operation,Electric operation							
Certifications		CE							
Dimension(mm) a-b-c-ca 	Width(W)	182				182			
	Height(H)	250				250			
	Depth(D)	165				165			

Note: ① 2P connection in series, ② 3P connection in series

YCM8-□HU AC MCCB

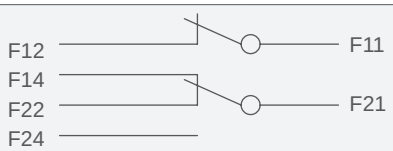
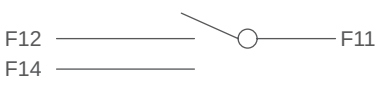
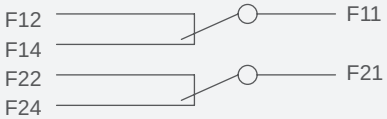
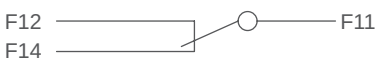
Accessories



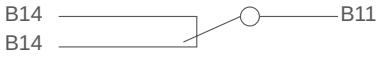
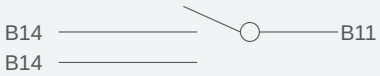
Accessory code	Accessory name	125PV	250/320PV	400/630/800PV
SD	Alarm contact			
MX	Shunt release			
OF	Auxiliary contact(1NO1NC)			
OF+OF	Auxiliary contact(2NO2NC)	—	—	
MX+OF	Shunt release+ Auxiliary contact(1NO1NC)			
OF+OF	2 sets of auxiliary contacts(2NO2NC)			—
MX+SD	Shunt release + Alarm contact	—	—	
OF+SD	Auxiliary contact + Alarm contact			
MX+OF+SD	Shunt release Auxiliary contact(1NO1NC)+ Alarm contact	—	—	
OF+OF+SD	2 sets of auxiliary contacts(2NO2NC)+Alarm contact			

Rated current of shell frame grade	Agreed heating current Ith	The rated working current at AC 400V
Inm<320	3A	0.30A
Inm>400	6A	0.40A

Auxiliary contact and its combination

When the circuit breaker is in the "off" position	
	
When the circuit breaker is in the "on" position	
	

YCM8-□HU AC MCCB

Alarm contact Ue=220V, Ith=3A	The rated working current at AC 400V
When the circuit breaker is in the "off"and "on"position	
When the circuit breaker is in the "free trip" position	

Shunt release

Generally installed in the Phase A of the circuit breaker, when the rated control power voltage is between 70% - 110%, the shunt release shall make the circuit breaker trip reliably under all operating conditions.

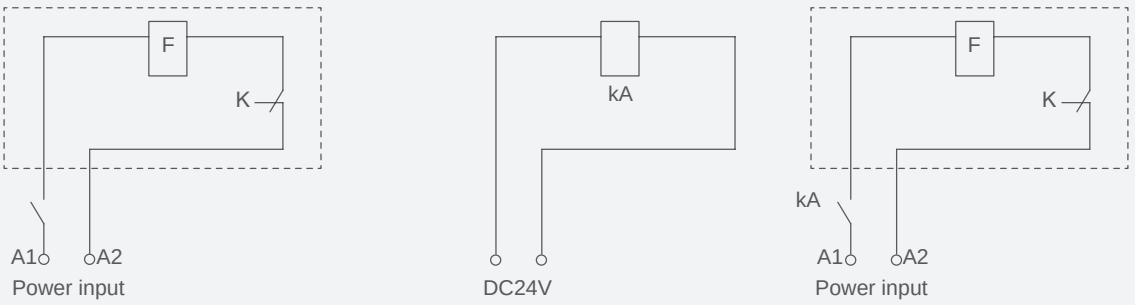
Control voltage: conventional: AC 50Hz, 110V, 230V, 400V, DC 24V, 110V, 220V.

Note: when the power supply of the control circuit is DC24V, the following figure is recommended for the design of the shunt control circuit.

KA: DC24V intermediate relay, contact current capacity is 1A

K: the microswitch in series with the coil inside the release aid is a normally closed contact. When the circuit breaker is disconnected, the contact will automatically disconnect and close when it is closed.

Wiring diagram



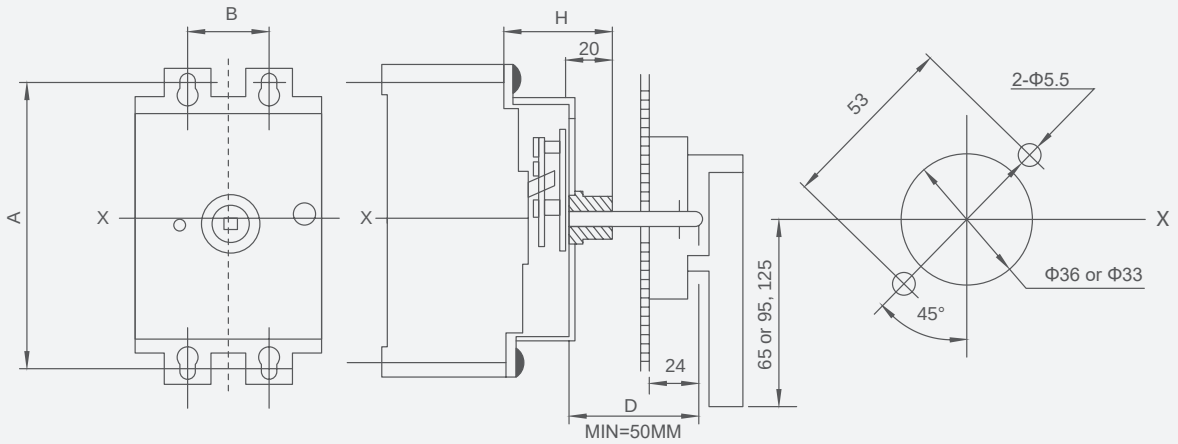
YCM8-□HU AC MCCB

Installation method and overall dimension of external accessories

Model and specification of rotating operating handle mechanism

Model	Installation dimension(mm)				Central value of the operating handle relative to the circuit breaker(mm)
	A	B	H	D	
YCM8-250/320HU	157	35	55	50-150	0
YCM8-400/630/800HU	224	48	78	50-150	±5

Schematic diagram of hole opening of rotating operating handle

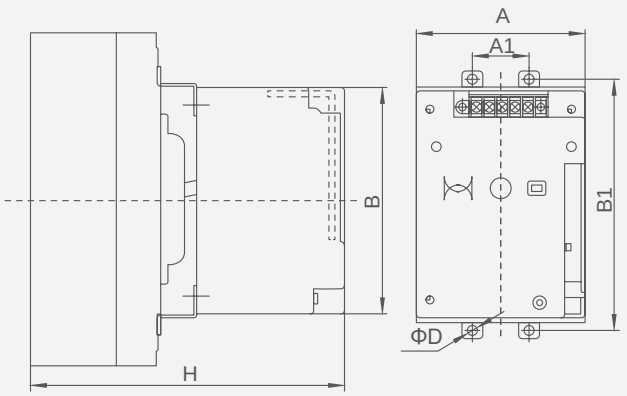


Overall and mounting dimension of external accessories

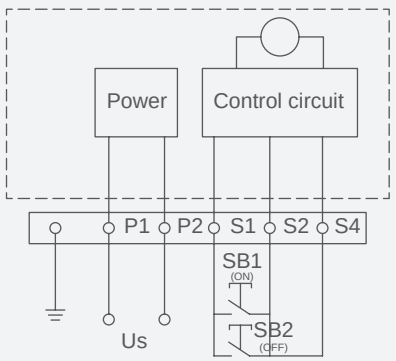
Model and specification of rotating operating handle mechanism

Model	H	B	B1	A	A1	D
YCM8-250/320HU	188.5	116	126	90	35	4.2
YCM8-400/630/800HU	244	176	194	130	48	6.5

Outline and installation dimension diagram of CD2



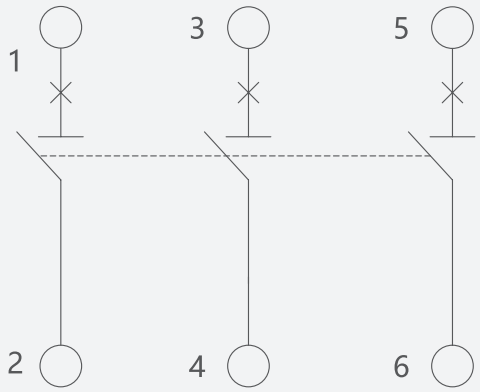
Wiring diagram



Symbol description:
SB1.SB2 operation button (provided by the user)
X terminal row
P1 and P2 are external power supply

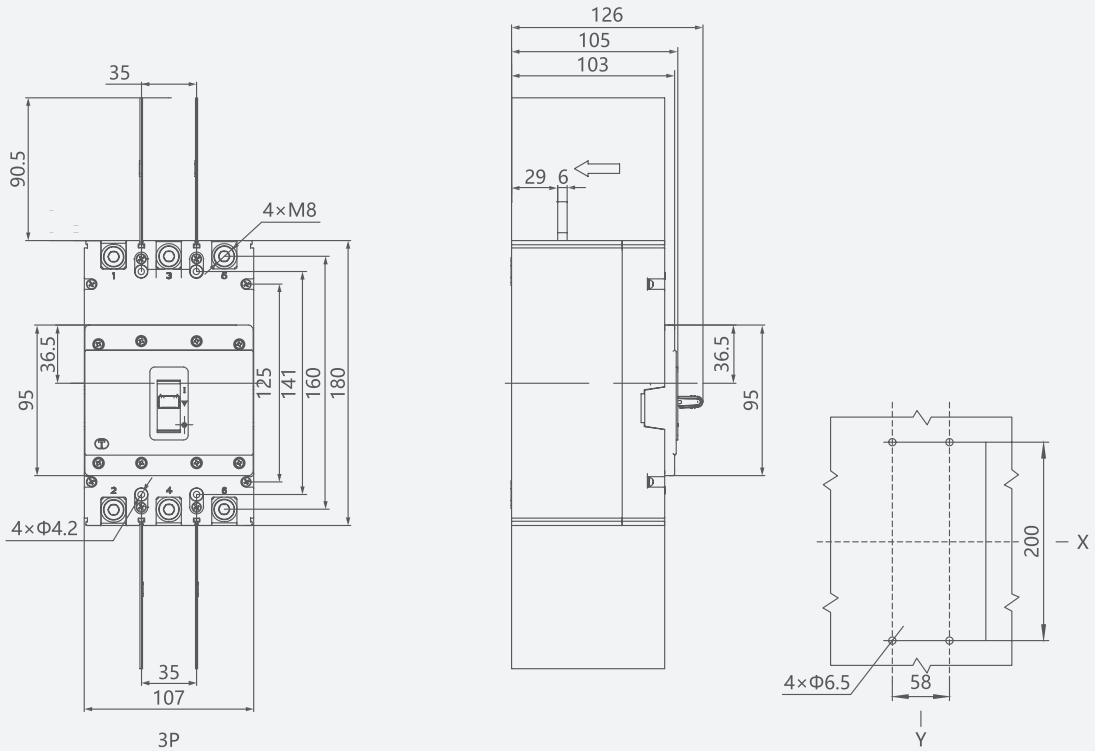
YCM8-□HU AC MCCB

Wiring diagram



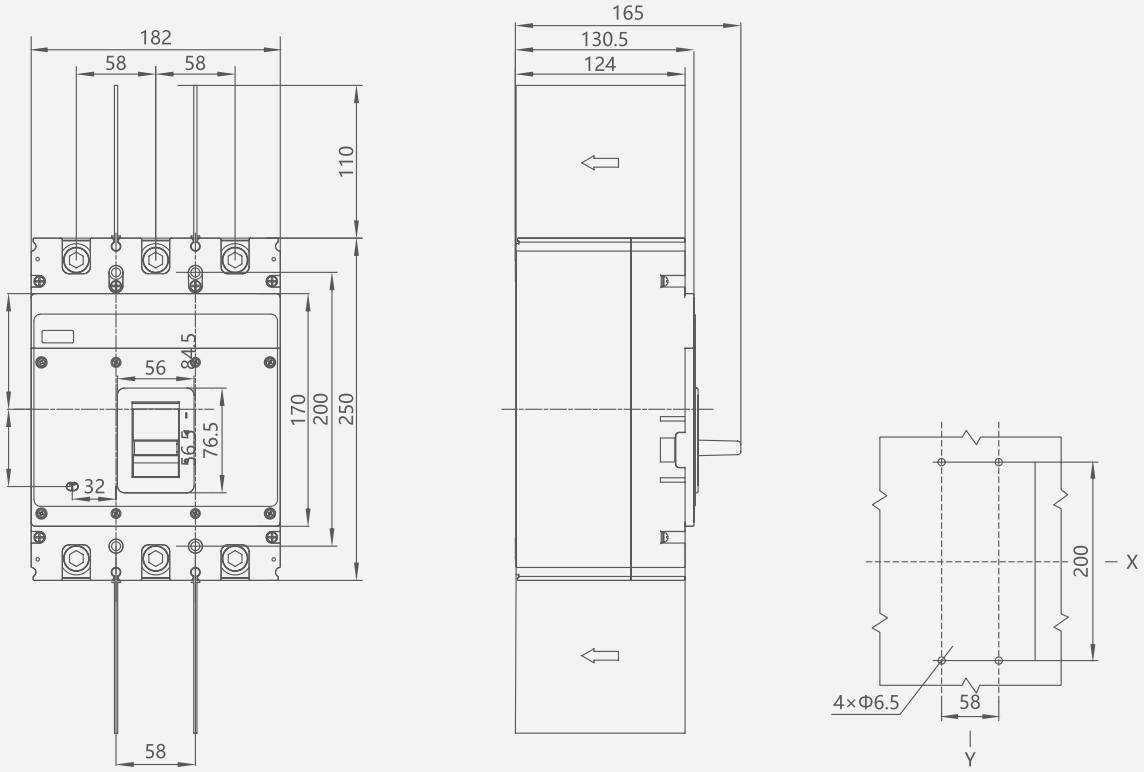
Overall and mounting dimensions(mm)

YCM8-250HU, 320HU

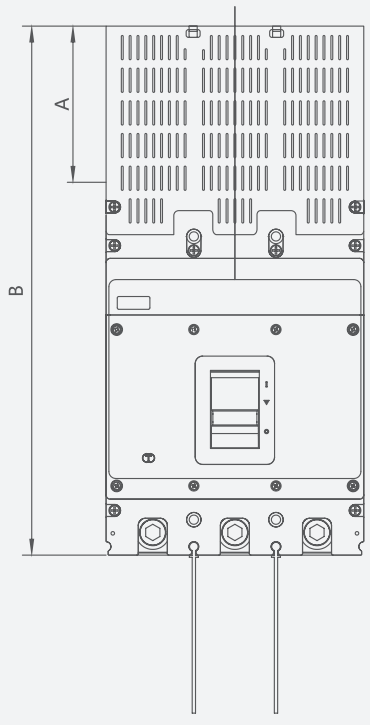


YCM8-□HU AC MCCB

YCM8-400HU, 630HU, 800HU



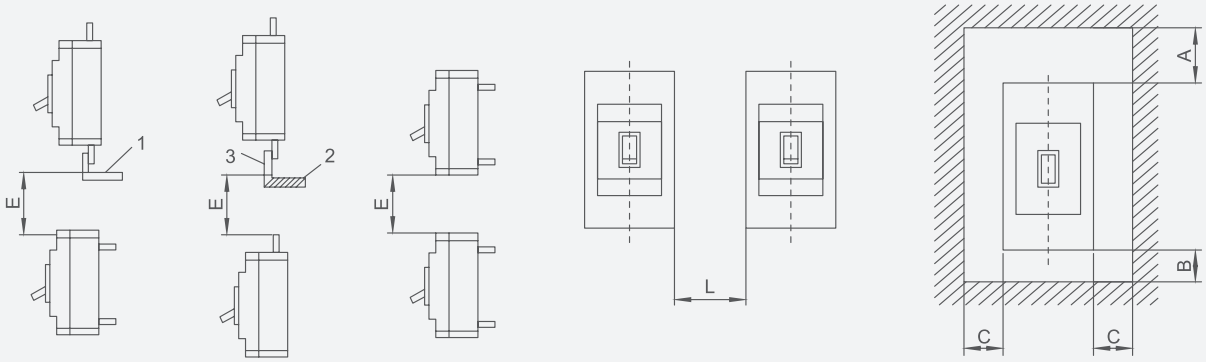
Installation drawing of YCM8-HU with arcing cover



Circuit breaker	Arcing cover length A	Total length B
YCM8-250/320HU	64	245
YCM8-400/630/800HU	64	314

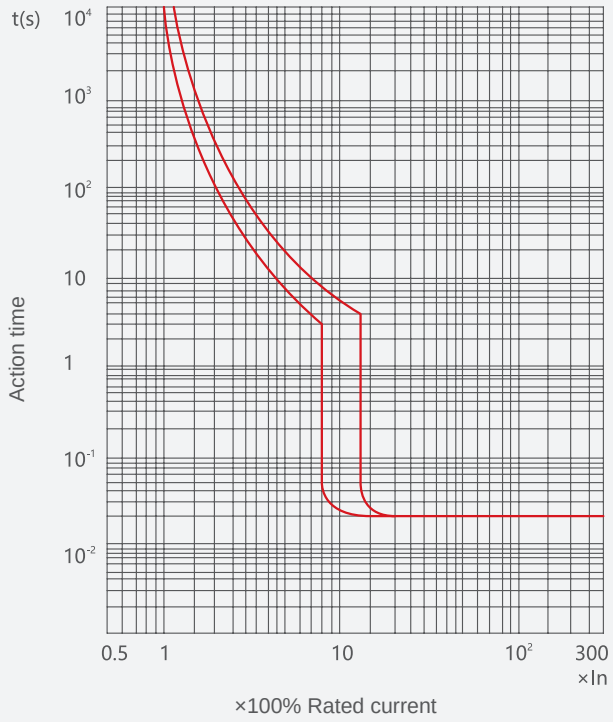
YCM8-□HU AC MCCB

Safety distance when installing circuit breaker



Model	L	A		B	C	E	
		Without zero arcing cover	With zero arcing cover			Without zero arcing cover	With zero arcing cover
YCM8-250HU	40	50	65	25	25	50	130
YCM8-320HU	40	50	65	25	25	50	130
YCM8-400HU	70	100	65	25	25	100	130
YCM8-630HU	70	100	65	25	25	100	130
YCM8-800HU	70	100	65	25	25	100	130

Curve



DC power distribution product

YCW8G-□DC DC Frame Isolation Switch

General

The YCW8G-DC DC frame isolation switch is suitable for DC systems with a rated operating voltage of DC1500V and below, and a rated current of 4000A and below. It is used for infrequent switching on and off of circuits, serving the purpose of isolating circuits.

Standards: IEC 60947-2

Operating conditions

1. Ambient temperature: -40°C to +70°C, with a 24-hour average not exceeding +35°C. For temperatures above +40°C, derating is required. Refer to Appendix 1 <Temperature Derating Factor Table>.
2. Atmospheric conditions: At an ambient temperature of +40°C, the relative humidity should not exceed 50%. Higher relative humidity is permissible at lower temperatures, e.g., at +25°C, the relative humidity can reach up to 90%. Condensation caused by temperature changes should be addressed with dehumidification or appropriate measures.
3. Corrosion resistance Grade: Salt mist level 2.
4. Pollution degree: Level 3.
5. Altitude: ≤2000m. For altitudes above 2000m, the isolating switch can be customized. Refer to Appendix 2 <Altitude Correction Table>.
6. Seismic resistance: Amplitude: 2–9Hz ±1.5mm, constant acceleration: 9–200Hz 5m/s². Excessive vibration may damage internal mechanical components of the operating mechanism, potentially affecting the reliable operation of the isolating switch.
7. Electromagnetic interference: Capable of withstanding overvoltage caused by electromagnetic interference, aging of the distribution system, or environmental disturbances, including radio waves, static discharge, etc.
8. Installation conditions: The vertical tilt should not exceed 5°. It should be installed in locations free of explosion hazards, conductive dust, and substances that could corrode metal or damage insulation.
9. Installation category: Installation category IV for the isolating switch's main circuit; category III for the control circuit.
10. Protection rating: IP30; IP40 when installed in a cabinet compartment with an additional protective door frame.

Type designation

YCW8G - 2500 DC / 2 630A F H DC1500

Product name	Shell frame	DC	Number of poles	Rated current	Installation type	Wiring method	Working voltage
YCW8G	- 2500	DC	2	630A	F	H	DC1500
YCW8G	2500 4000	DC	2:2P	630A 800A 1000A 1250A 1600A 2000A 2500A 2900A 3200A 3600A 4000A	F:Fixed type	H:Horizontal connection	DC1500

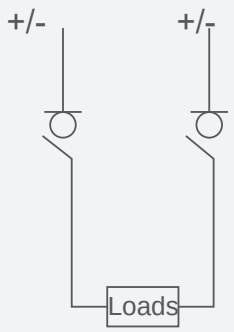
DC power distribution product

YCW8G-□DC DC Frame Isolation Switch

Technical data

Basic parameters	Unit	Data	
Switch model		YCW8G-2500DC	YCW8G-4000DC
Conventional free air thermal current (Ith)	A	2500	4000
Number of poles	P	2	
Rated operational current (Ie) [A]	A	630,800,1000,1250,1600,2000,2500	2500,2900,3200,3600,4000
Rated operational voltage (Ue) [VDC]	VDC	1500	1500
Rated insulation voltage (Ui) [VDC]	VDC	1600	2000
Rated impulse withstand voltage (Uimp) [kV]	KV	12	12
Rated short-time withstand current (Icw) [kA]	KA	65KA/1s	100KA/1s, 150KA/0.2s,
Rated short-circuit making capacity (Icm) [kA]	KA	65	100
Closing time	ms	≤70	
Total breaking time	ms	≤40	
Utilization category		DC-PV2,DC-22A,DC-23A	
Mechanical life	times	10000	
Electrical life	times	500	
Overall dimensions (WDH)	mm	286*302.5*400	312*302.5*400

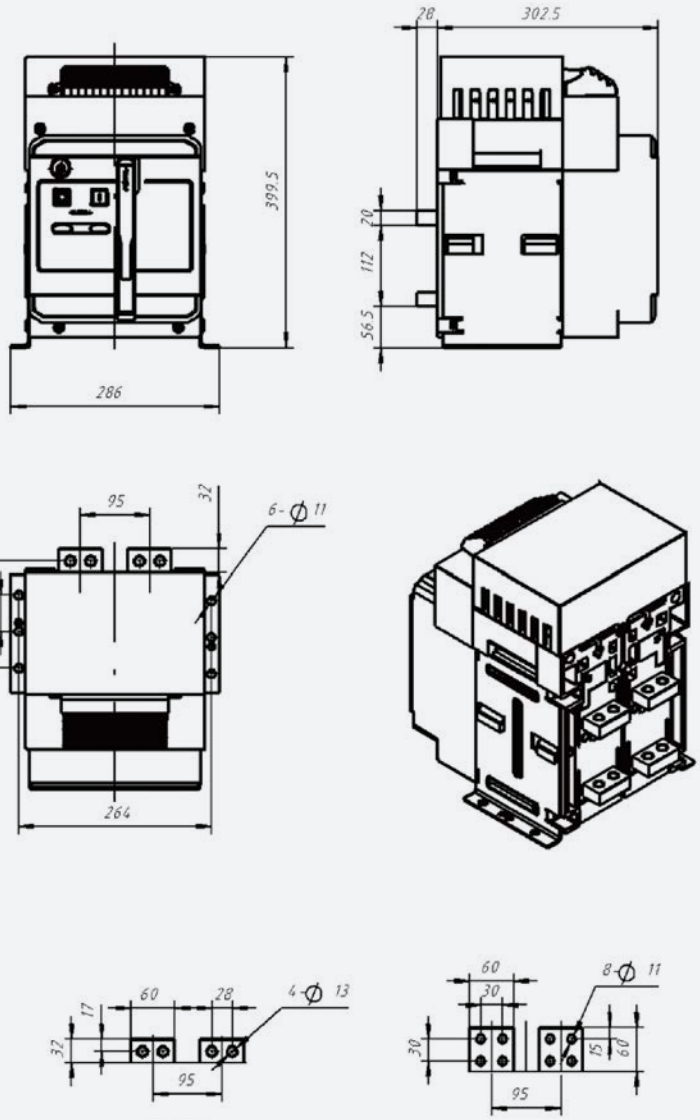
Wiring method



YCW8G-□DC DC Frame Isolation Switch

Overall and mounting dimensions

YCW8G-2500DC overall and mounting dimensions



A:Extended busbar

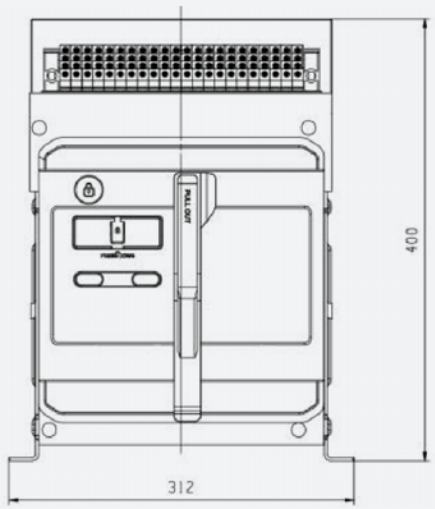
B :Standard busbar

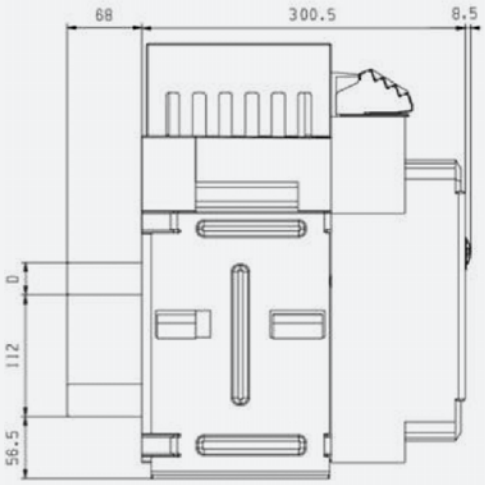
Rated current(A)	D(mm)
630~1600	15
1600~2500	20

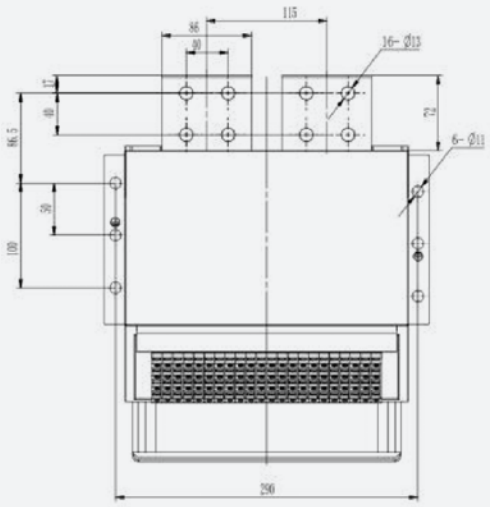
YCW8G-□DC DC Frame Isolation Switch

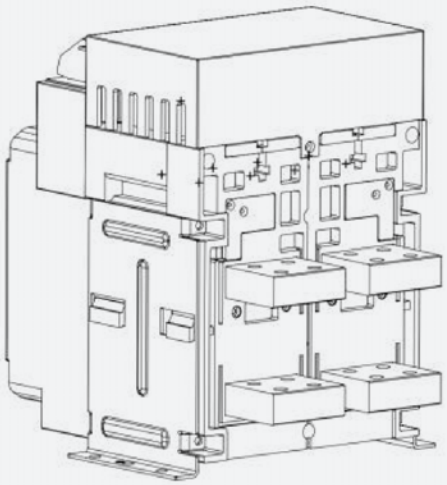
Overall and mounting dimensions

YCW8G-4000DC overall and mounting dimensions









Rated current(A)	D(mm)
630~2500	20
3200~4000	30

Appendix 1: Derating Factor Table

Current range	Ambient temperature	+40°C	+45°C	+50°C	+60°C	+65°C	+70°C
2500A	630A	1.0In	1.0In	1.0In	1.0In	1.0In	1.0In
	800A	1.0In	1.0In	1.0In	1.0In	1.0In	1.0In
	1250A	1.0In	1.0In	1.0In	1.0In	1.0In	1.0In
	1600A	1.0In	1.0In	1.0In	1.0In	1.0In	0.98In
	2000A	1.0In	1.0In	1.0In	1.0In	1.0In	0.79In
	2500A	1.0In	0.95In	0.89In	0.85In	0.97In	0.63In
4000A	2500A	1.0In	1.0In	1.0In	1.0In	0.78In	1.0In
	2900A	1.0In	1.0In	1.0In	1.0In	1.0In	0.86In
	3200A	1.0In	1.0In	1.0In	1.0In	0.97In	0.78In
	3600A	1.0In	1.0In	0.98In	094In	0.86In	0.7In
	4000A	1.0In	0.95In	0.89In	0.85In	0.78In	0.63In

Appendix 2: Altitude Correction Table

Current range	Altitude	2000m	3000m	4000m	5000m
	Ambient temperature	3820V	3440V	2730V	2180V
1600A	630A	1.0In	1.0In	1.0In	1.0In
	800A	1.0In	1.0In	1.0In	1.0In
	1250A	1.0In	1.0In	1.0In	1.0In
	1600A	1.0In	0.93In	1.0In	0.82In
2500A	1600A	1.0In	1.0In	0.88In	1.0In
	2000A	1.0In	1.0In	1.0In	1.0In
	2500A	1.0In	0.93In	0.88In	0.82In

DC power distribution product

YCW8G-□DC DC Frame Isolation Switch

Order specification table

User unit		Order quantity	Order date
Basic parameters	Frame current	□2500	□4000
	Rated current	□630 □800 □1000 □1250 □1600 □2000 □2500	□2500 □2900 □3200 □3600 □4000
	Installation method	□Fixed type	
	Connection method	□Horizontal connection	
Accessories	□ Undervoltage release	□AC220V □AC380V □DC110V □DC220V	
		□Undervoltage instantaneous release	
		□Undervoltage delay release □1s □3s □5s	
		□Voltage loss delay release □1s □3s □5s	
	□ Shunt release	□AC220V □AC380V □DC110V □DC220V	
		□Shunt release (instantaneous type)	
		□Shunt release (holding type)	
	□ Closing electromagnet (instantaneous)	□AC220V □AC380V □DC110V □DC220V	
	□ Electric operating mechanism	□AC220V □AC380V □DC110V □DC220V	
	□ Key lock	□One lock, one key □Other	
	□ Push-button lock		
	□ Phase separator		
Auxiliary switches	□ Four sets of changeover (conventional)	□3NO3NC □4NO4NC □6NO6NC	
Remarks			

Photovoltaic DC Components

YCM8-□PV Series

CNC ELECTRIC

DC power distribution product

YCM8-□PV DC MCCB

General

YCM8-□PV series photovoltaic special DC molded case circuit breaker is applicable to DC power grid circuits with rated voltage up to DC1500V and rated current 800A.

The DC circuit breaker has overload long delay protection and short circuit instantaneous protection functions, which are used to distribute electric energy and protect the line and power supply equipment from overload, short circuit and other faults.

Features

- Ultra-wide breaking capacity:

  rated working voltage up to DC1500V and rated current up to 800A. Under DC1500V working conditions, Icu=Ics=20KA, ensuring reliable short-circuit protection.
- Small size:

  for frame currents up to 320A, the 2P rated working voltage can reach DC1000V, and for frame currents of 400A and above, the 2P rated working voltage can reach DC1500V.
- Ultra-long arc-extinguishing chamber:

  the arc-extinguishing chamber has been improved as a whole, with more arcextinguishing plates, greatly improving the product's breaking characteristics.
- Application of narrow-slot arc-extinguishing technology:

  advanced current-limiting and narrow-slot arc-extinguishing technology is applied, which enables the high voltage and high short-circuit current to be cut off very quickly, facilitating the extinguishing of the arc in the shortest possible time, effectively limiting the energy and current peak, and greatly reducing damage to cables and equipment caused by short-circuit currents.

Type designation

YCM8 - 250 S PV / 3 125A DC1500

Product name		Shell frame	Breaking capacity	Product type		Number of poles	Rated current	Rated voltage
YCM8	-	250	S	PV	/	3	125A	DC1500
YCM8		125(50~125) 250(63~250) 320(250~320) 400(225~400) 630(400~630) 800(630~800)	S: Standard breaking N: Higher breaking	PV: Photovoltaic/ direct-current		2:2P 3:3P	50, 63, 80, 100, 125, 140, 160, 180, 200, 225, 250, 280, 315, 320, 350, 400, 500, 630, 700, 800	DC500 DC1000 DC1500

Note: The tripping type of this product is thermal-magnetic type

The working voltage of YCM8-250/320PV 2P is DC1000V; The working voltage of 3P is DC1500V; YCM8-400/630/800PV 2P and 3P can work under DC1500.

Accessory selection

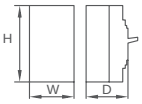
Product name		Accessories	Adapter shell frame	Accessory voltage	
YCM8	-	MX	1	AC230V	
YCM8		OF: Auxiliary contact MX: Shunt release SD: Alarm module Z: Manual operation mechanism P: Electric operating mechanism TS2: Terminal shield 2P TS3: Terminal shield 3P	0: 125 1: 250/320/ 2: 400/630/800	MX: AC110V AC230V AC400V DC24V DC110V DC220V	P: AC400V AC230V DC220V

Note: YCM8-125PV shell rack only has OF, MX, SD accessories

DC power distribution product

YCM8-□PV DC MCCB

Technical data

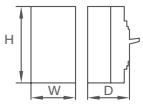
Model		YCM8- 125PV		YCM8- 250PV			YCM8- 320PV		
Appearance									
Shell frame current Inm(A)		125		250			320		
Number of poles of products		2		2		3	2		3
DC working voltage(V)		250	500	500	1000	1500	500	1000	1500
Rated insulation voltageUi(V)		DC1000		DC1250		DC1500	DC1250		DC1500
Rated impulse withstand voltage Uimp(KV)		8		8		12	8		12
Rated current In(A)		50, 63, 80, 100, 125		63, 80, 100, 125,140, 160, 180, 200, 225, 250			280, 315, 320		
Ultimate short-circuit breaking capacity Icu (kA)	S	40	40(5ms)	50	20	20	50	20	20
	N	/		/			/		
Running short-circuit breaking capacity Ics(kA)		Ics=100%Icu							
Wiring method		Up in and down out, down in and up out, Down in and up out, up in and down out(3P)							
Isolation function		Yes							
Tripping type		Thermal-magnetic type							
Electrical life(time)		5000	3000	3000	2000	1500	3000	2000	1500
Mechanical life(time)		20000		20000			20000		
Standard		IEC/EN60947-2							
Attached accessories		Shunt,Alarm,Auxiliary,Manual operation,Electric operation							
Certifications		CE							
Overall dimension (mm) 	Width(W)	64		76		107	76		107
	Height(H)	150		180			180		
	Depth(D)	95		126			126		

Note: ① 2P connection in series; ② 3P connection in series

DC power distribution product

YCM8-□PV DC MCCB

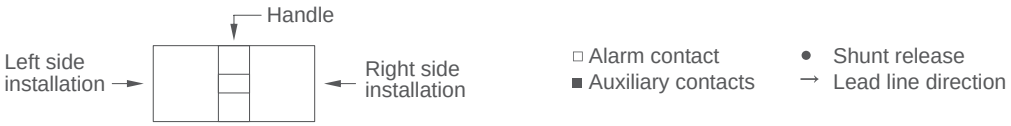
Technical data

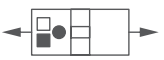
Model		YCM8- 400PV				YCM8-630PV				YCM8- 800PV			
Appearance													
Shell frame current Inm(A)		400				630				800			
Number of poles of products		2			3	2			3	2			3
DC working voltage(V)		500	1000	1500	1500	500	1000	1500	1500	500	1000	1500	1500
Rated insulation voltageUi(V)		DC1500				DC1500				DC1500			
Rated impulse withstand voltage Uimp(KV)		12				12				12			
Rated current In(A)		225, 250, 315,350, 400				400, 500, 630				630, 700, 800			
Ultimate short-circuit breaking capacity Icu (kA)	S	65	35	15	15 ① 20 ②	65	35	15	15 ① 20 ②	65	35	15	15 ① 20 ②
	N	70	40	20	20 ① 25 ②	70	40	20	20 ① 25 ②	70	40	20	20 ① 25 ②
Running short-circuit breaking capacity Ics(kA)		Ics=100%Icu											
Wiring method		Up in and down out, down in and up out, Down in and up out, up in and down out(3P)											
Isolation function		Yes											
Tripping type		Thermal-magnetic type											
Electrical life(time)		1000	1000	700	500	1000	1000	700	500	1000	1000	700	500
Mechanical life(time)		10000				5000				10000			
Standard		IEC/EN60947-2											
Attached accessories		Shunt,Alarm,Auxiliary,Manual operation,Electric operation											
Certifications		CE											
Overall dimension (mm) 	Width(W)	124			182	124			182	124			182
	Height(H)	250				250				250			
	Depth(D)	165				165				165			

Note: ① 2P connection in series; ② 3P connection in series

YCM8-□PV DC MCCB

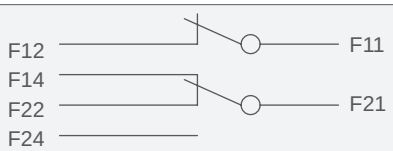
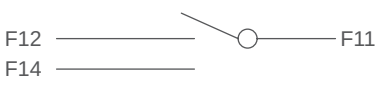
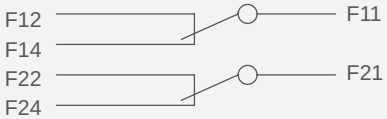
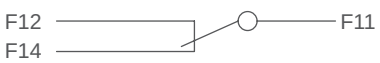
Accessories

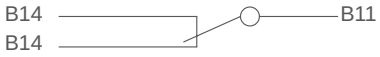
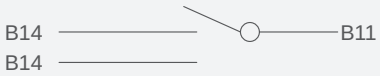


Accessory code	Accessory name	125PV	250/320PV	400/630/800PV
SD	Alarm contact			
MX	Shunt release			
OF	Auxiliary contact(1NO1NC)			
OF+OF	Auxiliary contact(2NO2NC)	—	—	
MX+OF	Shunt release+ Auxiliary contact(1NO1NC)			
OF+OF	2 sets of auxiliary contacts(2NO2NC)			—
MX+SD	Shunt release + Alarm contact	—	—	
OF+SD	Auxiliary contact + Alarm contact			
MX+OF+SD	Shunt release Auxiliary contact(1NO1NC)+ Alarm contact	—	—	
OF+OF+SD	2 sets of auxiliary contacts(2NO2NC)+Alarm contact			

Rated current of shell frame grade	Agreed heating current Ith	The rated working current at AC 400V
Inm<320	3A	0.30A
Inm>400	6A	0.40A

Auxiliary contact and its combination

When the circuit breaker is in the "off" position	
	
When the circuit breaker is in the "on" position	
	

Alarm contact Ue=220V, Ith=3A	The rated working current at AC 400V
When the circuit breaker is in the "off"and "on"position	
When the circuit breaker is in the "free trip" position	

Shunt release

Generally installed in the Phase A of the circuit breaker, when the rated control power voltage is between 70% - 110%, the shunt release shall make the circuit breaker trip reliably under all operating conditions.

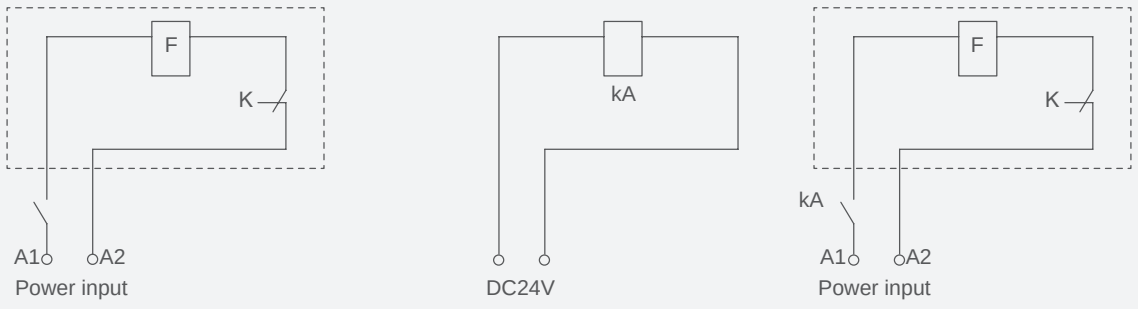
Control voltage: conventional: AC 50Hz, 110V, 230V, 400V, DC 24V, 110V, 220V.

Note: when the power supply of the control circuit is DC24V, the following figure is recommended for the design of the shunt control circuit.

KA: DC24V intermediate relay, contact current capacity is 1A

K: the microswitch in series with the coil inside the release aid is a normally closed contact. When the circuit breaker is disconnected, the contact will automatically disconnect and close when it is closed.

Wiring diagram

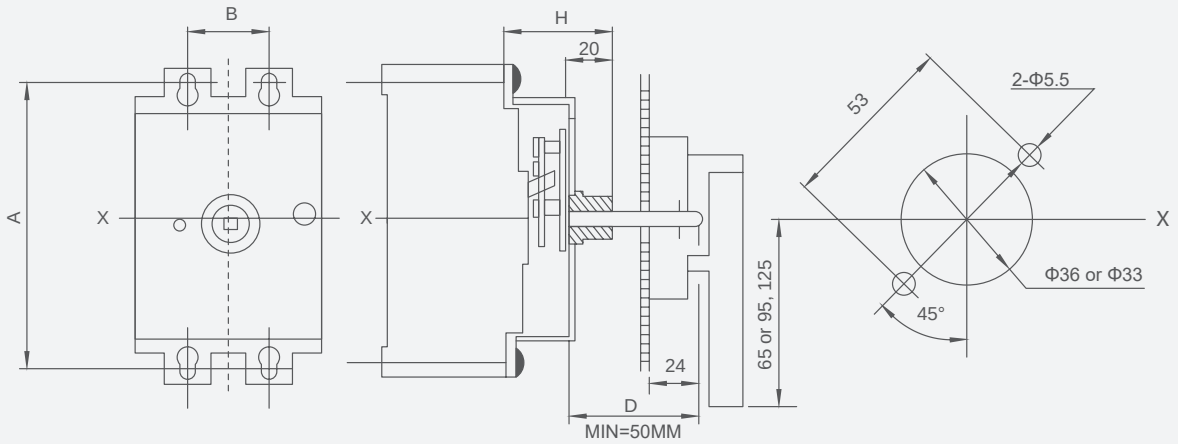


Installation method and overall dimension of external accessories

Model and specification of rotating operating handle mechanism

Model	Installation dimension(mm)				Central value of the operating handle relative to the circuit breaker(mm)
	A	B	H	D	
YCM8-250/320PV	157	35	55	50-150	0
YCM8-400/630/800PV	224	48	78	50-150	±5

Schematic diagram of hole opening of rotating operating handle

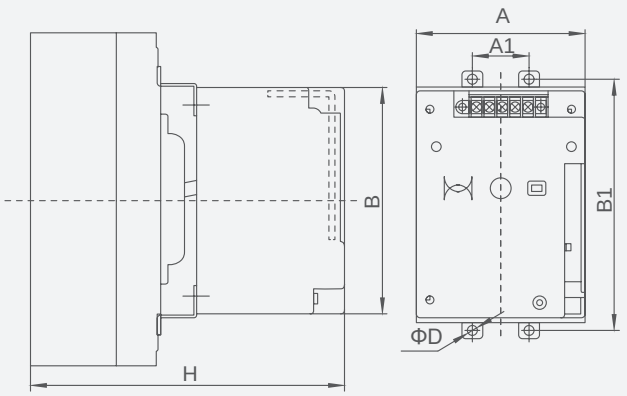


Overall and mounting dimension of external accessories

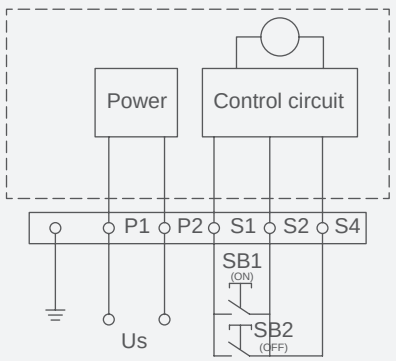
Model and specification of rotating operating handle mechanism

Model	H	B	B1	A	A1	D
YCM8-250/320PV	188.5	116	126	90	35	4.2
YCM8-400/630/800PV	244	176	194	130	48	6.5

Outline and installation dimension diagram of CD2



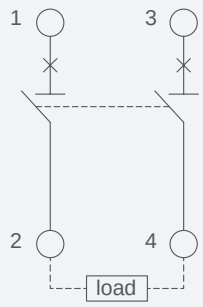
Wiring diagram



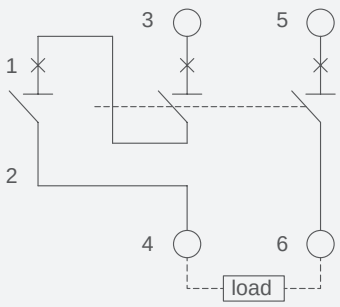
Symbol description:
SB1.SB2 operation button (provided by the user)
X terminal row
P1 and P2 are external power supply

YCM8-□PV DC MCCB

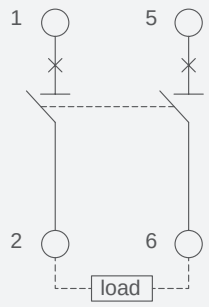
Wiring diagram



YCM8-250PV,320PV
2P DC1000V
YCM8-400PV,630PV,800PV
2P DC1500V



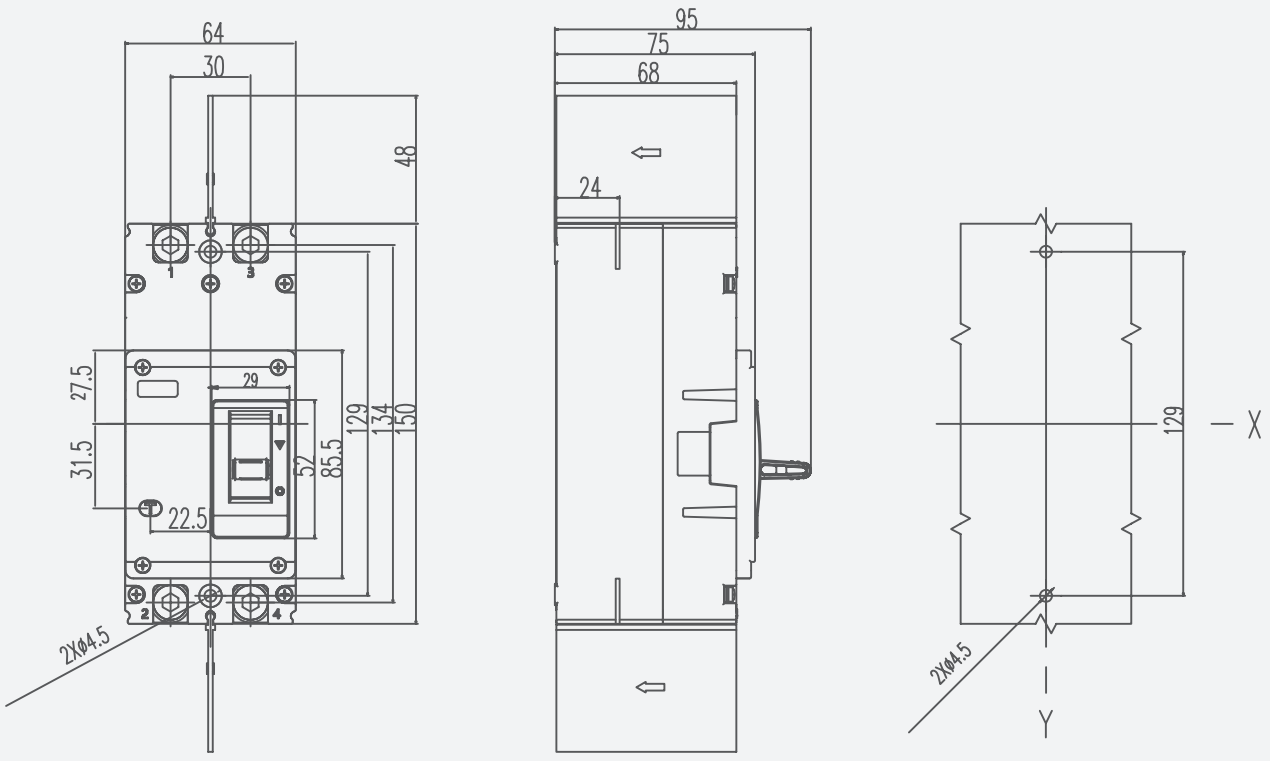
YCM8-250PV,320PV
3P DC1500V



YCM8-400PV,630PV,800PV 3P
(Make 3P into 2P to increase phase spacing)

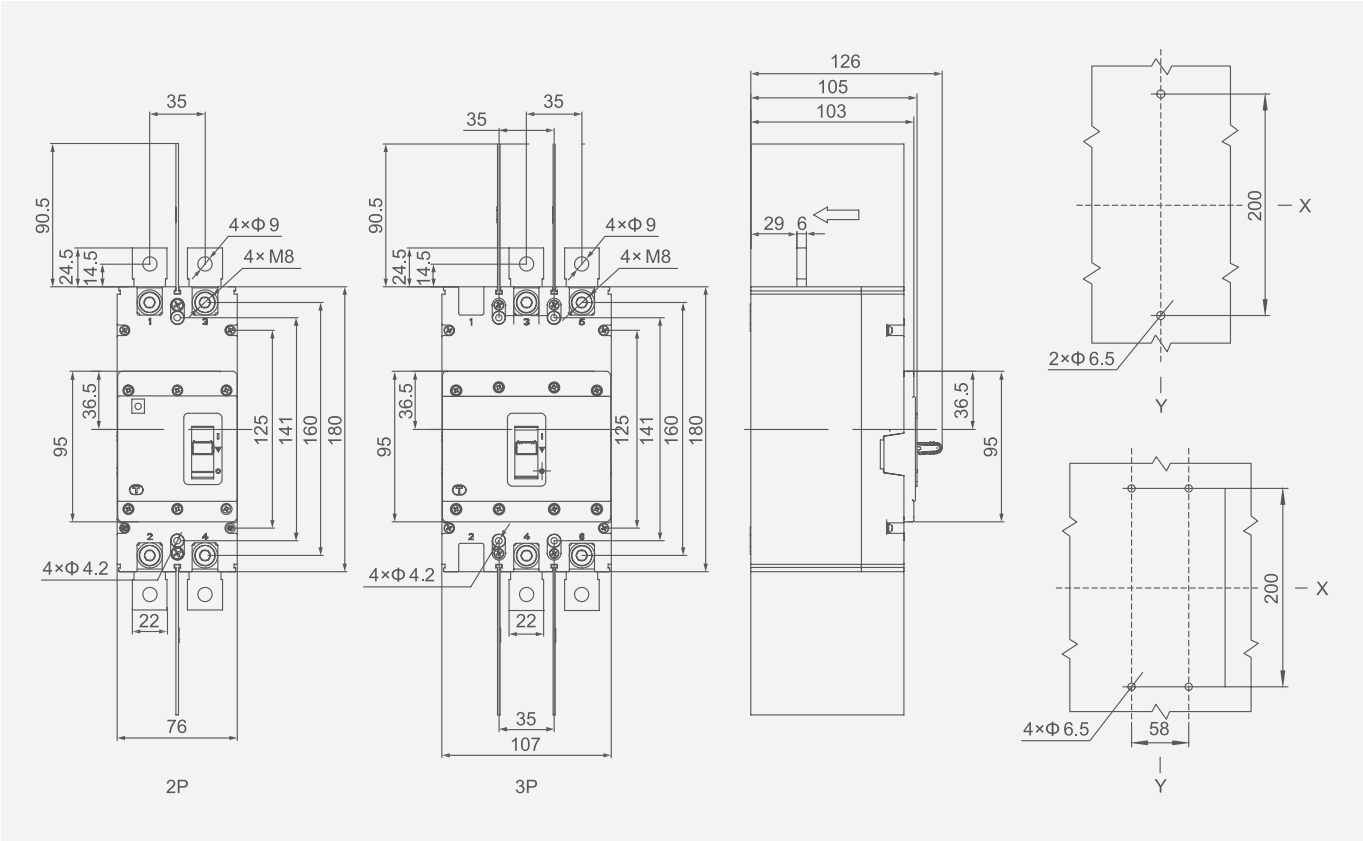
Overall and mounting dimensions(mm)

YCM8-125PV

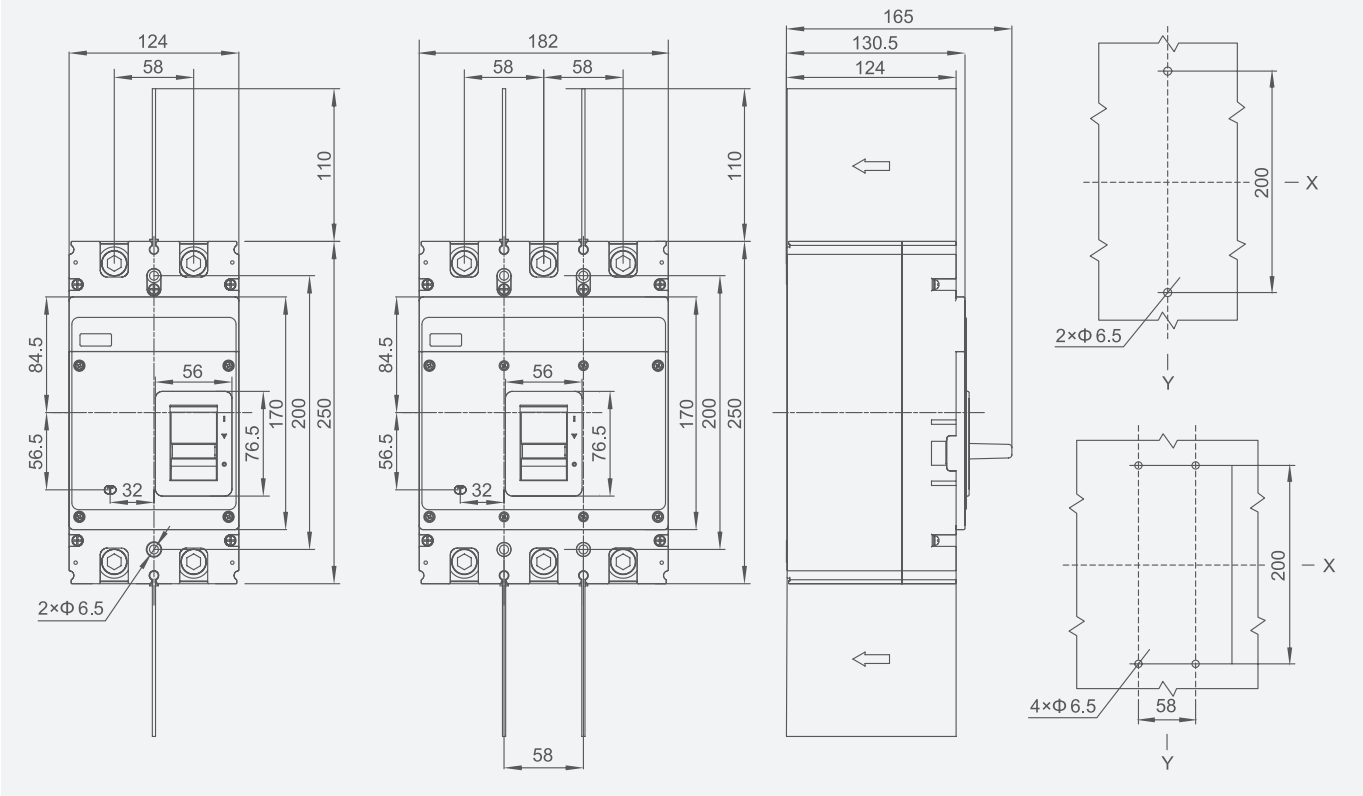


YCM8-□PV DC MCCB

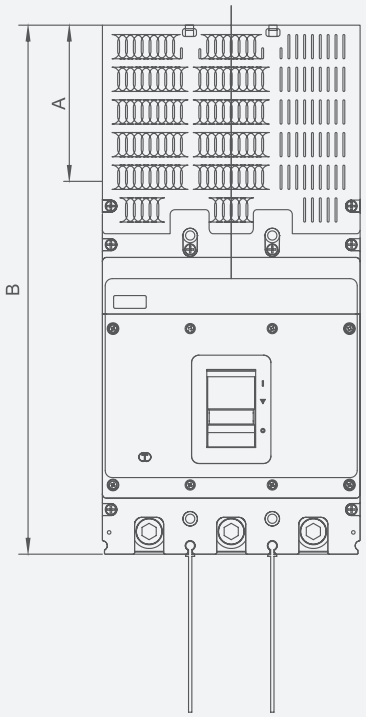
YCM8-250PV,320PV



YCM8-400PV,630PV,800PV

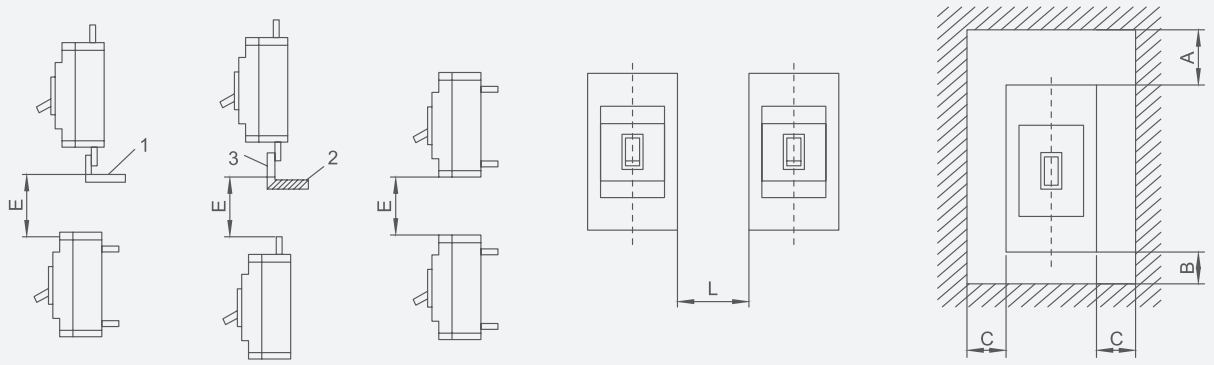


Installation drawing of YCM8-PV with arcing cover



Circuit breaker	Arcing cover length A	Total length B
YCM8-250/320PV	64	245
YCM8-400/630/800PV	64	314

Safety distance when installing circuit breaker



Model	L	A		B	C	E	
		Without zero arcing cover	With zero arcing cover			Without zero arcing cover	With zero arcing cover
YCM8-250PV	40	50	65	25	25	50	130
YCM8-320PV	40	50	65	25	25	50	130
YCM8-400PV	70	100	65	25	25	100	130
YCM8-630PV	70	100	65	25	25	100	130
YCM8-800PV	70	100	65	25	25	100	130

Temperature correction factor table

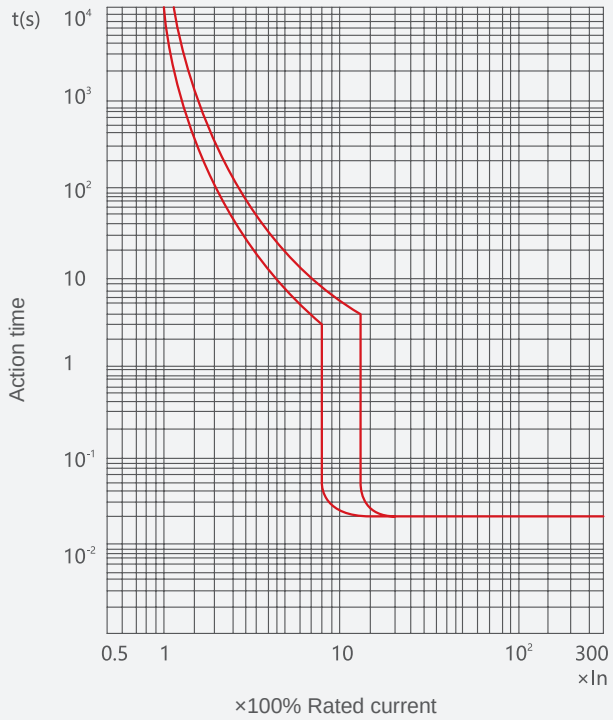
Product shell frame	Working current In						
	40°C	45°C	50°C	55°C	60°C	65°C	70°C
250	1.00	1.00	1.00	0.97	0.95	0.93	0.90
320	1.00	0.96	0.94	0.92	0.90	0.88	0.85
400	1.00	1.00	1.00	0.97	0.95	0.93	0.90
630	1.00	1.00	0.98	0.95	0.92	0.89	0.87
800	1.00	0.94	0.92	0.90	0.87	0.84	0.80

Note: 1. When the ambient temperature is lower than 50°C, the product can be used normally without derating;
2. The above derating factors are measured at the rated current of the shell frame.

Use of derating table at high altitude

Product shell frame	250			320			400			630			800		
	Rated work Current A	Rated working voltage V	Rated power frequency withstand voltage V	Rated work Current A	Rated working voltage V	Rated power frequency withstand voltage V	Rated work Current A	Rated working voltage V	Rated power frequency withstand voltage V	Rated work Current A	Rated working voltage V	Rated power frequency withstand voltage V	Rated work Current A	Rated working voltage V	Rated power frequency withstand voltage V
2	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2.5	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00
3	1.00	0.98	0.98	0.92	0.98	0.98	1.00	0.98	0.98	0.98	0.98	0.98	0.92	0.98	0.98
3.5	1.00	0.95	0.95	0.90	0.95	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.90	0.95	0.95
4	1.00	0.92	0.92	0.87	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.92	0.87	0.92	0.92
4.5	0.98	0.89	0.89	0.84	0.89	0.89	0.98	0.89	0.89	0.89	0.89	0.89	0.84	0.89	0.89
5	0.96	0.86	0.86	0.82	0.86	0.86	0.97	0.86	0.86	0.86	0.86	0.86	0.80	0.86	0.86

Curve



Photovoltaic DC MCB

YCB8s Series

CNC ELECTRIC

Photovoltaic DC MCB

YCB8s-63PV DC MCB (Polarized type)

General

YCB8s-63PV photovoltaic dedicated DC circuit breaker is mainly used in solar photovoltaic power generation systems. The maximum working voltage can reach DC1500V, and the rated current is up to 63A. It is used for overload and short circuit protection of the line, and can quickly cut off the fault current of the DC distribution system, protecting the important components in the solar power generation system, ensuring the reliable operation of the solar photovoltaic power generation system.

Standards:IEC60947-2

Features

- Modular design, small size;
- Standard Din rail installation, convenient installation;
- Overload, short circuit, isolation protection function, comprehensive protection;
- Current up to 63A, 14 options;
- The breaking capacity reaches 6KA, with strong protection capacity;
- Complete accessories and strong expansibility;
- Multiple wiring methods to meet various wiring needs of customers.

Type designation

YCB8s - 63 H PV 2P 20A DC800V

Product name		Shell frame	Breaking capacity	PV DC	Number of poles	Rated current	Operating voltage
YCB8s	-	63	H	PV	2P	20A	DC800V
YCB8s		63	Default:6KA H:10KA	PV	1P 2P 3P 4P	1A 2A 3A 4A 6A 10A 16A 20A 25A 32A 40A 50A 63A	DC400V DC800V DC1000V DC1200V DC1500V

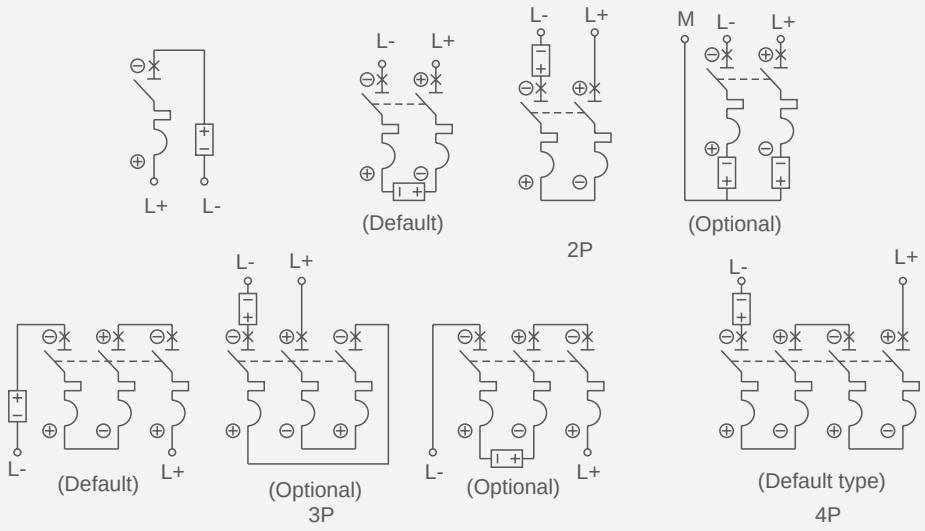
Photovoltaic DC MCB

YCB8s-63PV DC MCB (Polarized type)

Technical data

Appearance diagram				
Number of poles	1P	2P	3P	4P
Rated working voltage Ue (V)	DC400	DC800 / DC1000	DC1200	DC1500
Rated insulation voltage Ui (V)	DC400	DC1000	DC1200	DC1500
Rated impulse withstand voltage Uimp (KV)	4			
Rated current In (A)	1,2,3,4,6,10,16,20,25,32,40,50,63			
Ultimate short-circuit breaking capacity Icu (KA)	Default: 6; H:10			
Instantaneous tripping characteristics	B,C,K			
Service life (times)	Mechanical 20000, electrical life 1500			
Protection degree	IP20			
Operating ambient temperature	-25°C~+40°C			
Altitude	≤ 2000m			
Wiring capacity (mm^2)	25			
Connection	both upper and lower incoming lines are acceptable			
Use Category	A			
Standard	IEC60947-2			

Wiring diagram



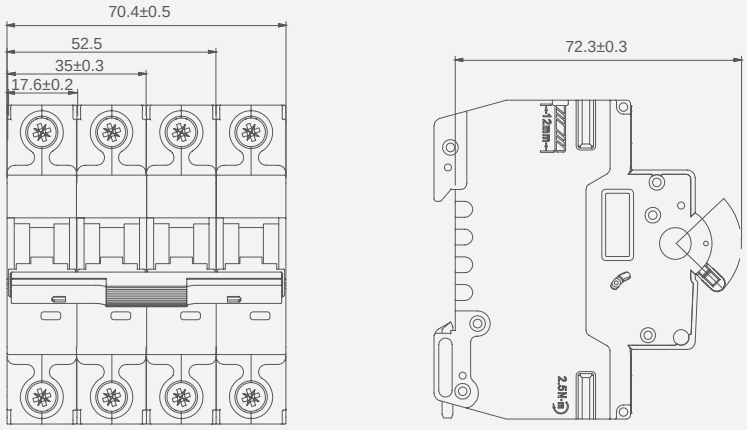
Note:
L+power supply positive pole
L-power cathode
⊕ Positive pole of circuit breaker
⊖ Negative pole of circuit breaker

Please place a note for other wiring methods while placing an order.

Photovoltaic DC MCB

YCB8s-63PV DC MCB (Polarized type)

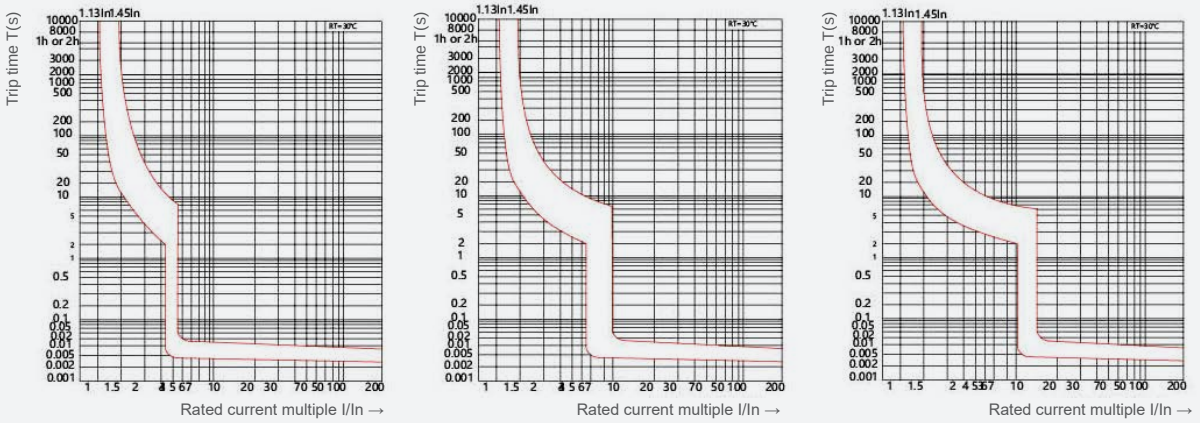
Overall and mounting dimensions



Product tripping characteristics

Rated current(A)	Overload tripping characteristics		Instantaneous tripping characteristics(A)
	1.05In agreed non tripping time H (cold state)	1.30In agreed tripping time H (hot state)	
In ≤ 63	1	1	B(4In±20%) C(8In±20%) K(10In±20%)
In > 63	2	2	

Release curve diagram



B Curve 4In±20%　　C Curve 8In±20%　　K Curve 10In±20%

YCB8s-63PV DC MCB (Polarized type)

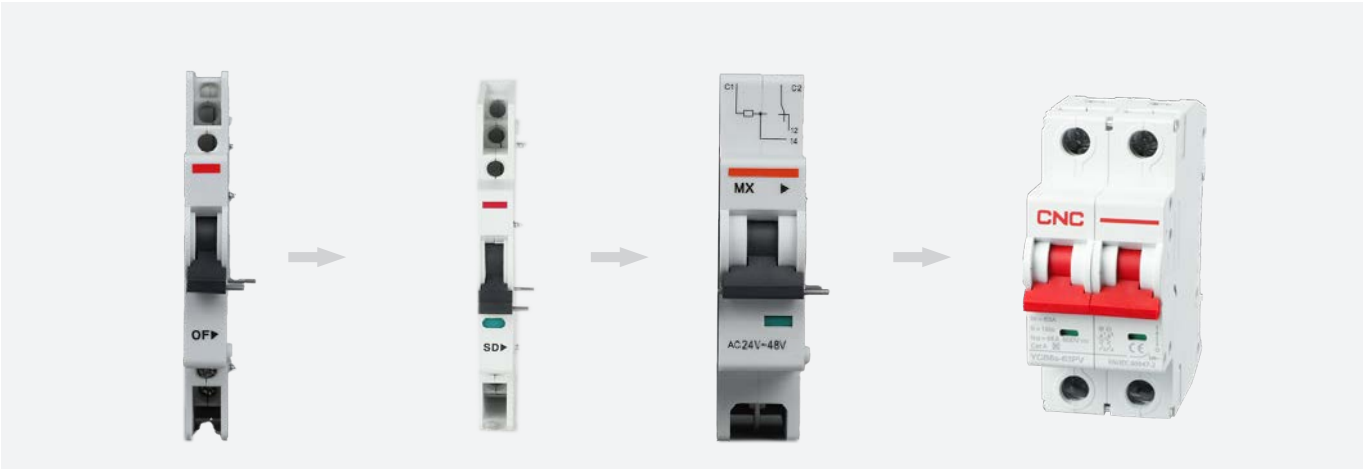
Temperature correction factor table

Current correction value used in different environments

Rated current(A)	Ambient temperature corresponding to rated current (A)											
In(A)	-25°C	-20°C	-10°C	0°C	10°C	20°C	30°C	35°C	40°C	50°C	60°C	75°C
6A	10.12	9.77	9.03	8.26	7.49	6.75	6	5.59	5.19	4.75	4.62	/
10A	17.41	16.75	15.41	14.04	12.71	11.35	10	9.09	8.21	7.9	8.7	7.86
16A	21.72	21.15	20.15	19.12	18.08	17.04	16	15.49	15.1	14.38	13.52	12.75
20A	25.86	25.79	24.61	23.47	22.32	21.16	20	19.43	18.83	18.58	17.1	16.3
25A	32.41	31.74	30.37	28.98	27.69	26.35	25	24.33	23.65	23.3	24.7	23.8
32A	44.83	43.62	41.29	38.96	36.67	34.33	32	30.83	29.67	30.7	30.8	30
40A	50.34	49.35	47.51	45.62	43.73	41.87	40	39.04	38.11	38.6	36.2	35.8
50A	63.79	62.48	59.99	57.48	54.98	52.5	50	48.76	47.48	47.1	47.5	46
63A	80	78.46	75.38	72.28	69.17	66.09	63	61.46	59.93	55.6	53.8	52.4

Accessories

The following accessories are suitable for YCB8s-63PV series, which can provide the functions of remote control of circuit breaker, automatic disconnection of fault circuit, status indication (breaking/closing/fault tripping).



a. The total width of the accessories assembled is within 54mm, the order and quantity from left to right: OF, SD(3max) + MX, MX+OF+MCB, SD can only assemble up to 2 pieces ;
b. Assembled with the body, no tools required;
c. Before installation, check whether the technical parameters of the product meet the requirements of use, and operate the handle to open and close several times to check whether the mechanism is reliable.

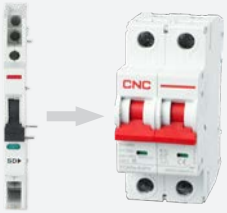
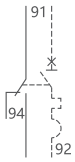
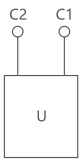
Miniature circuit breaker accessories

- Auxiliary contact OF
  Remote indication of closing/opening status of circuit breaker.
- Alarm contact SD
  When the circuit breaker fault trips, it sends out a signal, together with a red indicator on the front of the device.
- Shunt release MX
  When the power supply voltage is 70%~110%Ue, the remote control circuit breaker trips after receiving the signal.
- Minimum making and breaking current: 5mA(DC24V)
- Service life: 6000 times (operating frequency: 1s)

Photovoltaic DC MCB

YCB8s-63PV DC MCB (Polarized type)

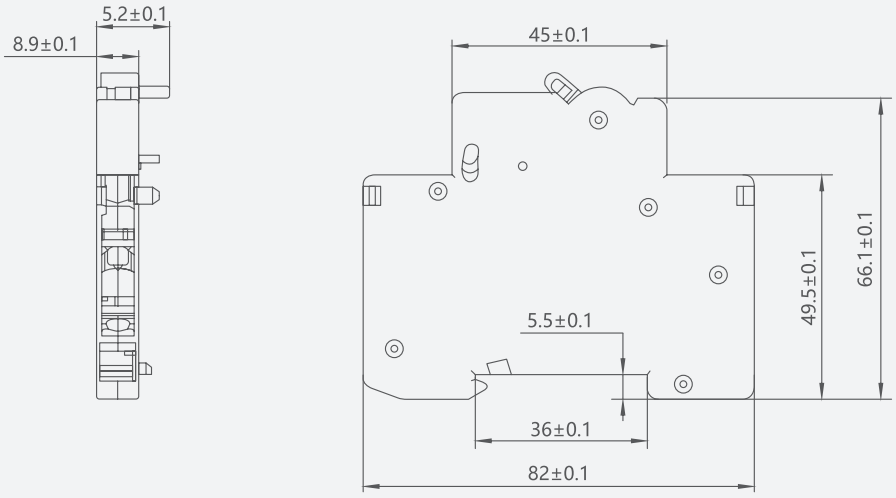
Technical data

Model	YCB8s-63 OF	YCB8s-63 SD	YCB8s-63 MX
Appearance			
Types			
Number of contacts	1NO+1NC	1NO+1NC	/
Control voltage (V AC)			110-415 48 12-24
Control voltage(V DC)			110-415 48 12-24
Working current of contact	AC-12 Ue/Ie: AC415/3A DC-12 Ue/Ie: DC125/2A		/
Shunt control voltage			Ue/Ie: AC:220-415/ 0.5A AC/DC:24-48/3
Width(mm)	9	9	18
Applicable Environmental Conditions and Installation			
Storage temperature(°C)	-40°C~+70°C		
Storage humidity	the relative humidity does not exceed 95% when at +25°C		
Protection degree	Level 2		
Protection degree	IP20		
Installation environment	Places without significant vibration and impact		
Installation category	Category II , Category III		
Installation method	TH35-7.5/DIN35 rail installation		
Maximum wiring capacity	2.5mm²		
Terminal torque	1N·m		

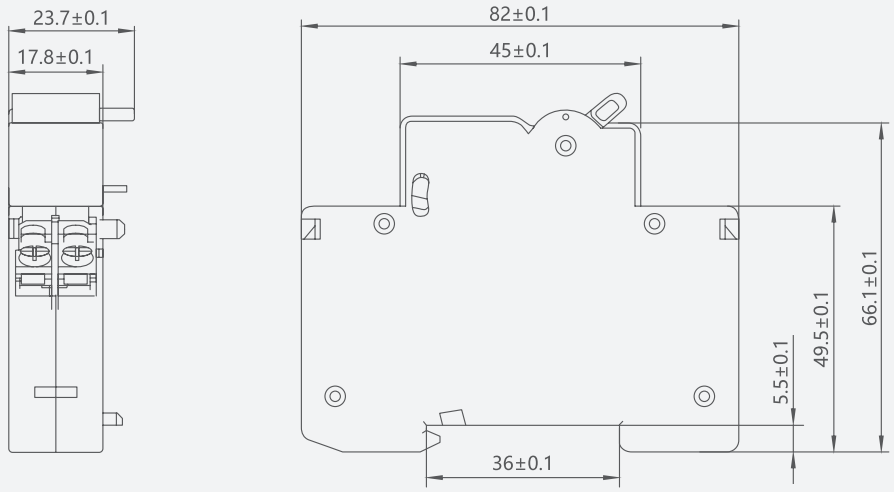
YCB8s-63PV DC MCB (Polarized type)

Overall and mounting dimensions(mm)

OF/SD Outline and installation dimensions



MX+OF Outline and installation dimensions



Photovoltaic DC MCB

YCB8s-63PVn DC MCB (Non-polarized type)

General

YCB8s-63PVn photovoltaic dedicated DC circuit breaker is mainly used in solar photovoltaic power generation systems. The maximum working voltage can reach DC1200V, and the rated current is up to 63A. It is used for overload and short circuit protection of the line, and can quickly cut off the fault current of the DC distribution system, protecting the important components in the solar power generation system - photovoltaic modules from the harm of DC side reverse current and AC side feedback current caused by inverter faults, ensuring the reliable operation of the solar photovoltaic power generation system.

Standards:IEC60947-2

Features

- Modular design, small size;
- Standard Din rail installation, convenient installation;
- Overload, short circuit, isolation protection function, comprehensive protection;
- Current up to 63A, 14 options;
- The breaking capacity reaches 6KA, with strong protection capacity;
- Complete accessories and strong expansibility;
- Multiple wiring methods to meet various wiring needs of customers.

Type designation

YCB8s - 63 H PVn 2P 20A DC600

Product name		Shell frame	Breaking capacity	PV DC	Number of poles	Rated current	Operating voltage
YCB8s	-	63	H	PVn	2P	20A	DC600
YCB8s		63	Default:6KA H:10KA	PVn:Photovoltaic DC non-polarity	1P 2P 3P 4P	1A 2A 3A 4A 6A 10A 16A 20A 25A 32A 40A 50A 63A	DC300 DC600 DC900 DC1200

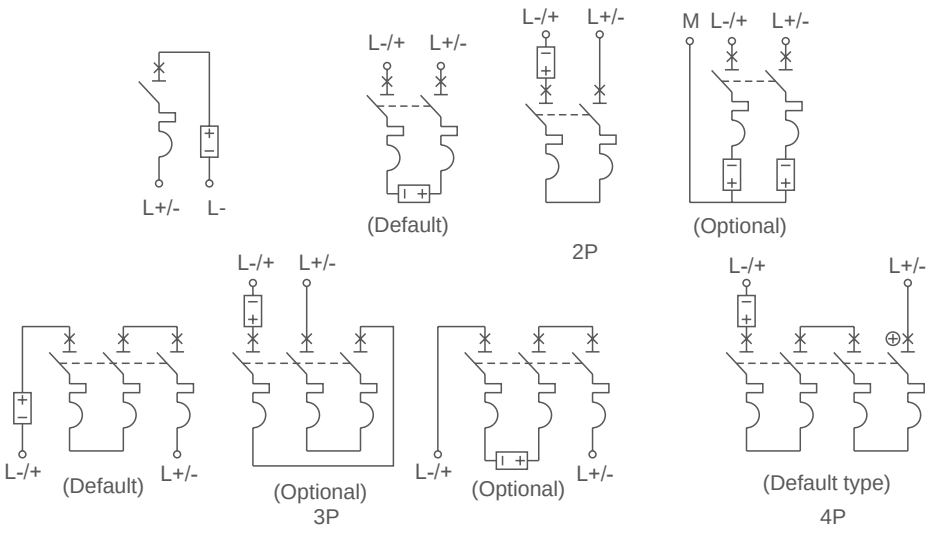
Photovoltaic DC MCB

YCB8s-63PVn DC MCB (Non-polarized type)

Technical data

Appearance diagram				
Number of poles	1P	2P	3P	4P
Rated operating voltage Ue (V)	DC300	DC600	DC900	DC1200
Rated insulation voltage Ui (V)	DC300	DC600	DC900	DC1200
Rated impulse withstand voltage Uimp (KV)	6			
Rated frame current (A)	63			
Rated current In (A)	1,2,3,4,6,10,16,20,25,32,40,50,63			
Ultimate short-circuit breaking capacity Icu (KA)	Default: 6; H:10			
Instantaneous tripping characteristic	B,C,K			
Service life (times)	Mechanical 20000, electrical life 1500			
Protection degree	IP20			
Environmental temperature for use	-25°C~+40°C			
Altitude	≤ 2000m			
Wiring ability(mm²)	25			
Connection	both upper and lower incoming lines are acceptable			
Use Category	A			
Standard	IEC60947-2			

Wiring diagram

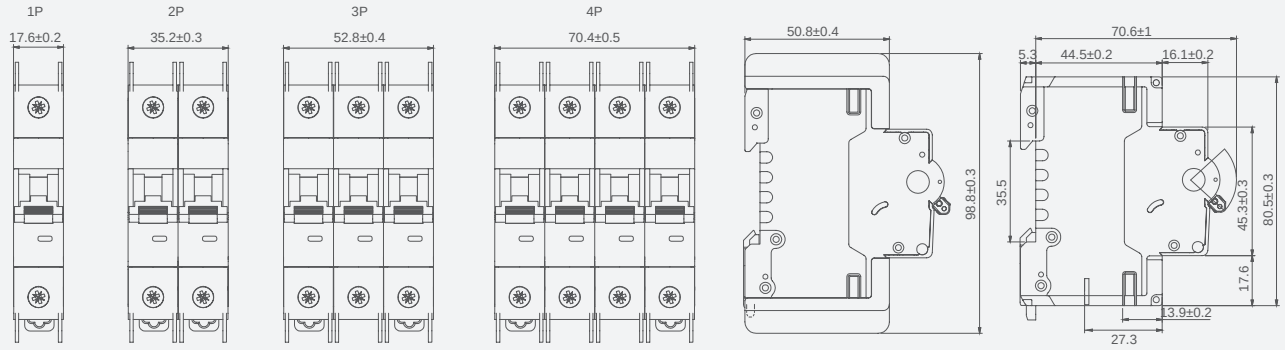


Note:
L+power supply positive pole
L-power cathode

Photovoltaic DC MCB

YCB8s-63PVn DC MCB (Non-polarized type)

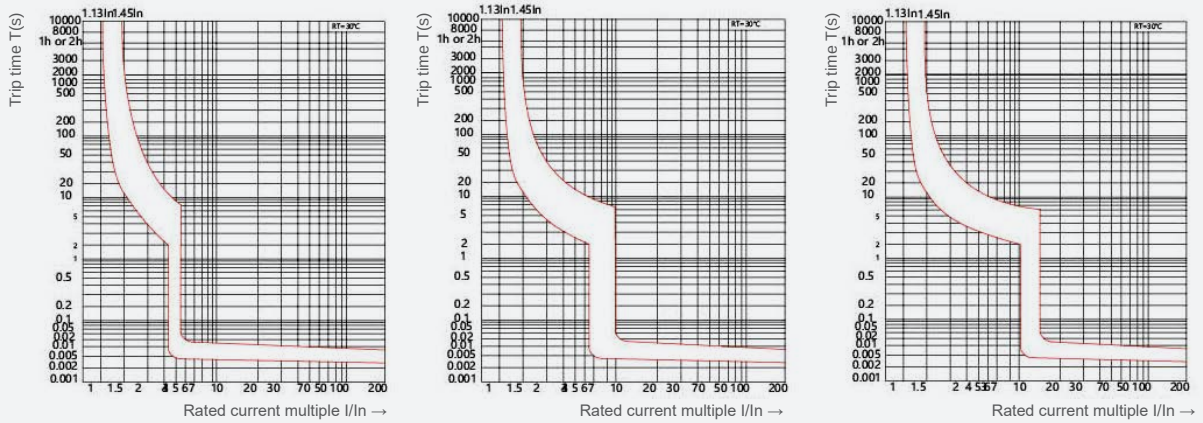
Overall and mounting dimensions



Product tripping characteristics

Rated current(A)	Overload tripping characteristics		Instantaneous tripping characteristics(A)
	1.05In agreed non tripping time H (cold state)	1.30In agreed tripping time H (hot state)	
In ≤ 63	1	1	B(4In±20%) C(8In±20%) K(10In±20%)
In > 63	2	2	

Release curve diagram



YCB8s-63PVn DC MCB (Non-polarized type)

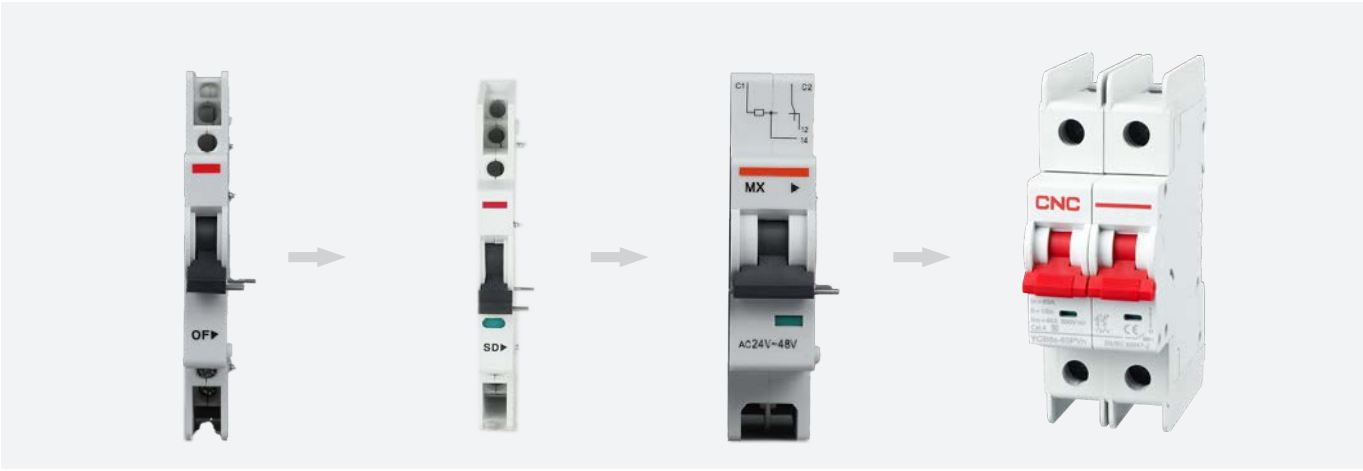
Temperature correction factor table

Current correction value used in different environments

Rated current(A)	Ambient temperature corresponding to rated current (A)											
In(A)	-25°C	-20°C	-10°C	0°C	10°C	20°C	30°C	35°C	40°C	50°C	60°C	75°C
6A	10.12	9.77	9.03	8.26	7.49	6.75	6	5.59	5.19	4.75	4.62	/
10A	17.41	16.75	15.41	14.04	12.71	11.35	10	9.09	8.21	7.9	8.7	7.86
16A	21.72	21.15	20.15	19.12	18.08	17.04	16	15.49	15.1	14.38	13.52	12.75
20A	25.86	25.79	24.61	23.47	22.32	21.16	20	19.43	18.83	18.58	17.1	16.3
25A	32.41	31.74	30.37	28.98	27.69	26.35	25	24.33	23.65	23.3	24.7	23.8
32A	44.83	43.62	41.29	38.96	36.67	34.33	32	30.83	29.67	30.7	30.8	30
40A	50.34	49.35	47.51	45.62	43.73	41.87	40	39.04	38.11	38.6	36.2	35.8
50A	63.79	62.48	59.99	57.48	54.98	52.5	50	48.76	47.48	47.1	47.5	46
63A	80	78.46	75.38	72.28	69.17	66.09	63	61.46	59.93	55.6	53.8	52.4

Accessories

The following accessories are suitable for YCB8s-63PV series, which can provide the functions of remote control of circuit breaker, automatic disconnection of fault circuit, status indication (breaking/closing/fault tripping).



a. The total width of the accessories assembled is within 54mm, the order and quantity from left to right: OF, SD(3max) + MX, MX+OF+MCB, SD can only assemble up to 2 pieces ;
b. Assembled with the body, no tools required;
c. Before installation, check whether the technical parameters of the product meet the requirements of use, and operate the handle to open and close several times to check whether the mechanism is reliable.

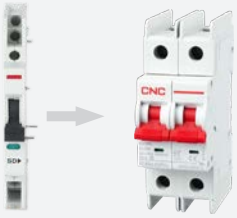
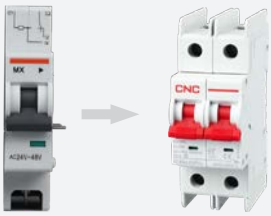
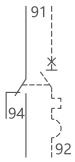
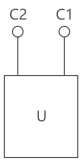
Miniature circuit breaker accessories

- Auxiliary contact OF
  Remote indication of closing/opening status of circuit breaker.
- Alarm contact SD
  When the circuit breaker fault trips, it sends out a signal, together with a red indicator on the front of the device.
- Shunt release MX
  When the power supply voltage is 70%~110%Ue, the remote control circuit breaker trips after receiving the signal.
- Minimum making and breaking current: 5mA(DC24V)
- Service life: 6000 times (operating frequency: 1s)

Photovoltaic DC MCB

YCB8s-63PVn DC MCB (Non-polarized type)

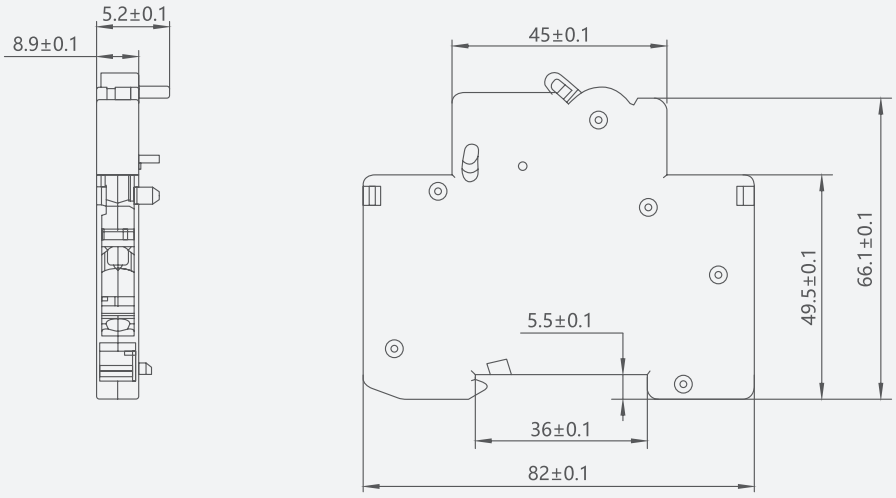
Technical data

Model	YCB8s-63 OF	YCB8s-63 SD	YCB8s-63 MX
Appearance			
Types			
Number of contacts	1NO+1NC	1NO+1NC	/
Control voltage (V AC)			110-415 48 12-24
Control voltage(V DC)			110-415 48 12-24
Working current of contact	AC-12 Ue/Ie: AC415/3A DC-12 Ue/Ie: DC125/2A		/
Shunt control voltage			Ue/Ie: AC:220-415/ 0.5A AC/DC:24-48/3
Width(mm)	9	9	18
Applicable Environmental Conditions and Installation			
Storage temperature(°C)	-40°C~+70°C		
Storage humidity	the relative humidity does not exceed 95% when at +25°C		
Protection degree	Level 2		
Protection degree	IP20		
Installation environment	Places without significant vibration and impact		
Installation category	Category II , Category III		
Installation method	TH35-7.5/DIN35 rail installation		
Maximum wiring capacity	2.5mm²		
Terminal torque	1N·m		

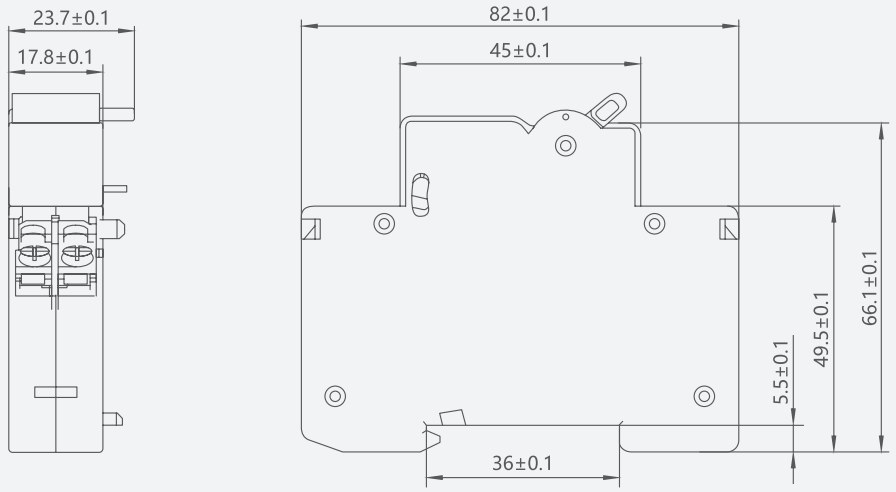
YCB8s-63PVn DC MCB (Non-polarized type)

Overall and mounting dimensions(mm)

OF/SD Outline and installation dimensions



MX+OF Outline and installation dimensions



Photovoltaic DC MCB

YCB8s-125PV DC MCB (Polarized type)

General

The rated operating voltage of YCB8s-125PV series DC miniature circuit breakers can reach DC1000V, and the rated operating current can reach 63A, which are used for isolation, overload and short circuit protection. It is widely used in photovoltaic system, and can also be used in industrial, civil, communication and other DC systems to ensure the reliable operation of systems.

Standard: IEC/EN 60947-2.

Features

- Modular design, small size;
- Standard Din rail installation, convenient installation;
- Overload, short circuit, isolation protection function, comprehensive protection;
- Current up to 125A, 4 options;
- The breaking capacity reaches 6KA, with strong protection capacity;
- Complete accessories and strong expansibility;
- Multiple wiring methods to meet various wiring needs of customers.

Type designation

YCB8s - 125 PV 4P 63 DC250 + YCB8-63 OF

Product name		Shell grade current	Usage	Number of poles	Rated current	Rated voltage		Accessories
YCB8s	-	125	PV	4P	63	DC250	+	YCB8-125 OF
Miniature circuit breaker		125	PV: heteropolarity	1P 2P 3P 4P	63A 80A 100A 125A	DC250V DC500V DC750V DC1000V		YCB8-125 OF: Auxiliary YCB8-125 SD: Alarm YCB8-125 MX: Shunt

Note: The rated voltage is affected by the number of poles and wiring mode.

The single pole is DC250V, the two poles in series are DC500V, and so on.

Photovoltaic DC MCB

YCB8s-125PV DC MCB (Polarized type)

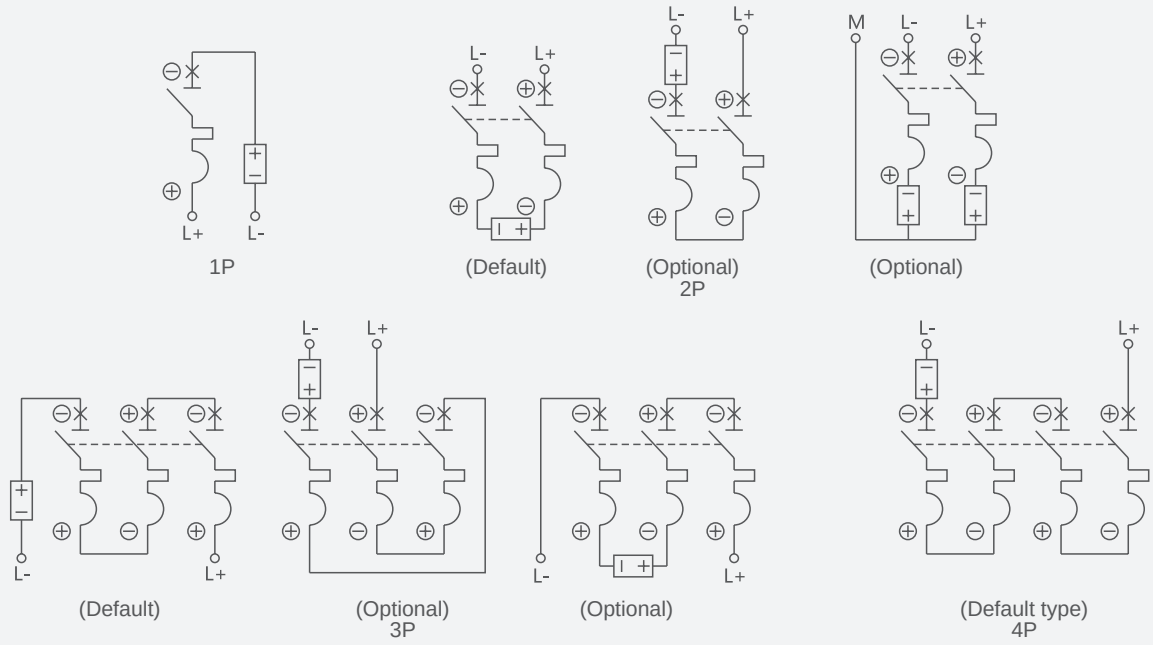
Technical data

Standard		IEC/EN 60947-2			
Number of poles		1P	2P	3P	4P
Rated current of shell frame grade		125			
Electrical performance					
Rated working voltage Ue(V DC)		250	500	750	1000
Rated current In(A)		63,80,100,125			
Rated insulation voltage Ui(V DC)		1000V			
Rated impulse voltage Uimp(KV)		6			
Ultimate breaking capacity Icu(kA)		Pv:6 PVn:10			
Operation breaking capacity Ics(KA)		PV:Ics=100%Icu PVn:Ics=75%Icu			
Curve type		Ii=10In			
Tripping type		Thermomagnetic			
Service life (time)	Mechanical	20000			
	Electrical	PV:1000 PVn:300			
Inline methods		Can be up and down into the line			
Electrical accessories					
Auxiliary contact		□			
Alarm contact		□			
Shunt release		□			
Applicable environmental conditions and installation					
Working temperature(°C)		-35~+70			
Storage temperature(°C)		-40~+85			
Moisture resistance		Category 2			
Altitude(m)		Use with derating above 2000m			
Pollution degree		Level 3			
Protection degree		IP20			
Installation environment		Places without significant vibration and impact			
Installation category		Category III			
Installation method		DIN35 standard rail			
Wiring capacity		2.5-50mm²			
Terminal torque		3.5N·m			

Photovoltaic DC MCB

YCB8s-125PV DC MCB (Polarized type)

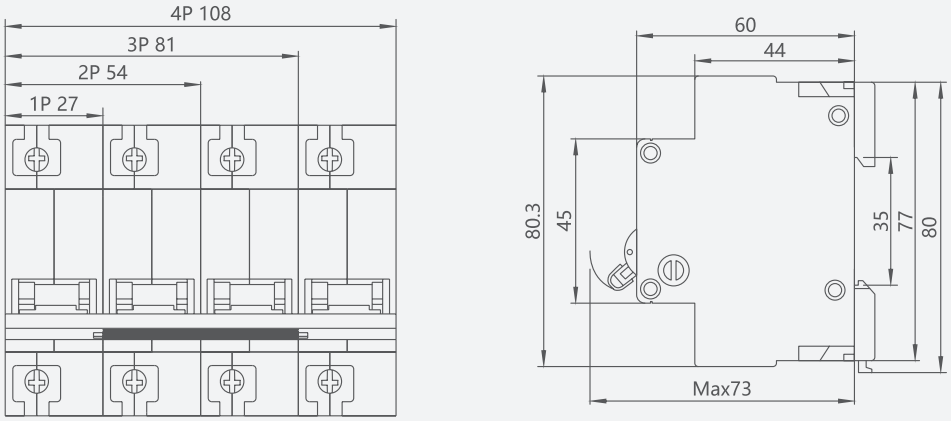
Wiring diagram



Note:
L+power supply positive pole
L-power cathode

⊕ Positive pole of circuit breaker
⊖ Negative pole of circuit breaker

Overall and mounting dimensions(mm)



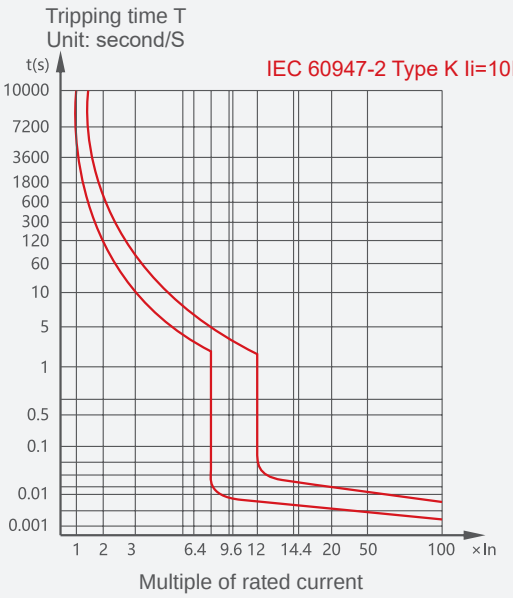
Tripping characteristics

Circuit breaker under normal installation conditions and reference ambient temperature (30~35)°C

Tripping type	DC current	Initial state	Appointed time	Expected results
All types	1.05In	Cold state	t≤2h	No tripping
	1.3In	Thermal state	t<2h	Tripping
Ii=10In	8In	Cold state	t≤0.2s	No tripping
	12In		t<0.2s	Tripping

YCB8s-125PV DC MCB (Polarized type)

Curve



Rated current(A) \ Temperature(°C)	-25	-20	-10	0	10	20	30	40	50	60
63A	77.4	76.2	73.8	71.2	68.6	65.8	63	60	56.8	53.4
80A	97	95.5	92.7	89.7	86.6	83.3	80	76.5	72.8	68.9
100A	124.4	120.7	116.8	112.8	108.8	104.5	100	95.3	90.4	87.8
125A	157	152.2	147.2	141.9	136.5	130.8	125	118.8	112.3	105.4

Use of derating table at high altitude

Current correction value for different ambient temperatures

Rated current(A)	Current correction factor		
	≤2000m	2000-3000m	≥3000m
63, 80, 100, 125	1	0.9	0.8

Example: If a circuit breaker with a rated current of 100A is used at an altitude of 2500m,the rated current must be derated to 100A×90%=90A

Power consumption per pole of circuit breaker and wiring size

Rated current In(A)	Nominal cross-section of copper conductor(mm²)	Maximum power consumption per pole(W)
63	16	13
80	25	15
100	35	15
125	50	20

YCB8s-125PV DC MCB (Polarized type)

Accessories

The following accessories are suitable for YCB8s-125PV series, which can provide the functions of remote control of circuit breaker, automatic disconnection of fault circuit, status indication (breaking/closing/fault tripping)

a. The total width of the accessories assembled is within 54mm, the order and quantity from left to right: OF, SD(3max)+MX, MX+OF, MV+MN, MV(1max)+MCB; SD can only assemble up to 2 pieces ;

b. Assembled with the body, no tools required;

c. Before installation, check whether the technical parameters of the product meet the requirements of use, and operate the handle to open and close several times to check whether the mechanism is reliable.

Miniature circuit breaker accessories

- Auxiliary contact OF

  Remote indication of closing/opening status of circuit breaker.
- Alarm contact SD

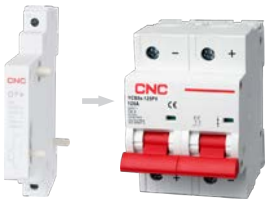
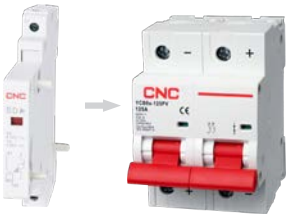
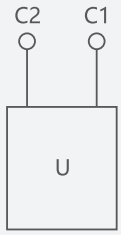
  When the circuit breaker fault trips, it sends out a signal, together with a red indicator on the front of the device.
- Shunt release MX

  When the power supply voltage is 70%~110%Ue, the remote control circuit breaker trips after receiving the signal.
- Minimum making and breaking current: 5mA(DC24V)
- Service life: 6000 times (operating frequency: 1s)

Photovoltaic DC MCB

YCB8s-125PV DC MCB (Polarized type)

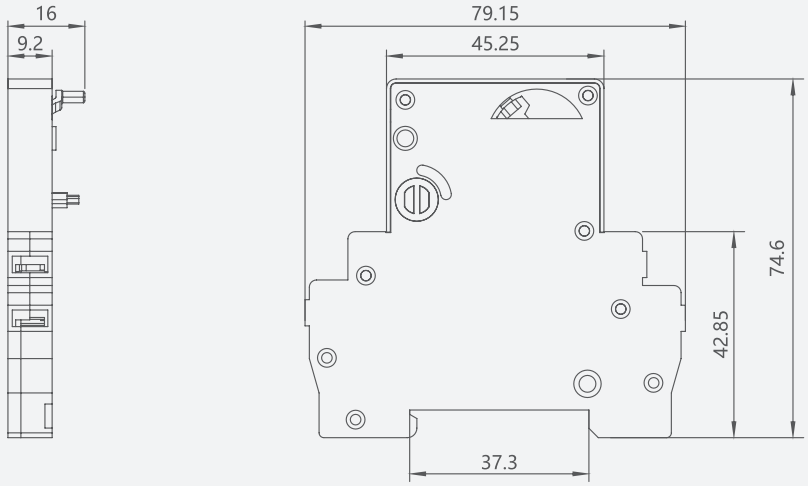
Technical data

Model	YCB8s-125 OF	YCB8s-125 SD	YCB8s-125 MX
Appearance			
Types			
Number of contacts	1NO+1NC	1NO+1NC	/
Control voltage (V AC)			110-415 48 12-24
Control voltage(V DC)			110-415 48 12-24
Working current of contact	AC-12 Ue/Ie: AC415/3A DC-12 Ue/Ie: DC125/2A		/
Shunt control voltage			Ue/Ie: AC:220-415/ 0.5A AC/DC:24-48/3
Width(mm)	9	9	18
Applicable Environmental Conditions and Installation			
Storage temperature(°C)	-40°C~+70°C		
Storage humidity	the relative humidity does not exceed 95% when at +25°C		
Protection degree	Level 2		
Protection degree	IP20		
Installation environment	Places without significant vibration and impact		
Installation category	Category II , Category III		
Installation method	TH35-7.5/DIN35 rail installation		
Maximum wiring capacity	2.5mm²		
Terminal torque	1N·m		

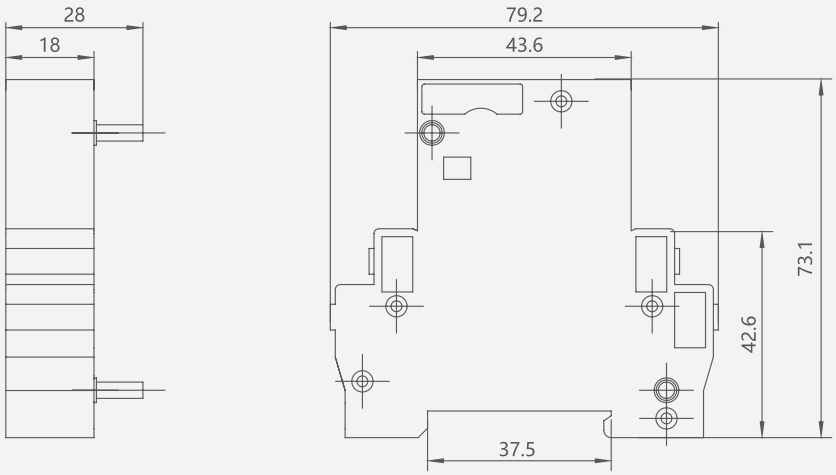
YCB8s-125PV DC MCB (Polarized type)

Overall and mounting dimensions(mm)

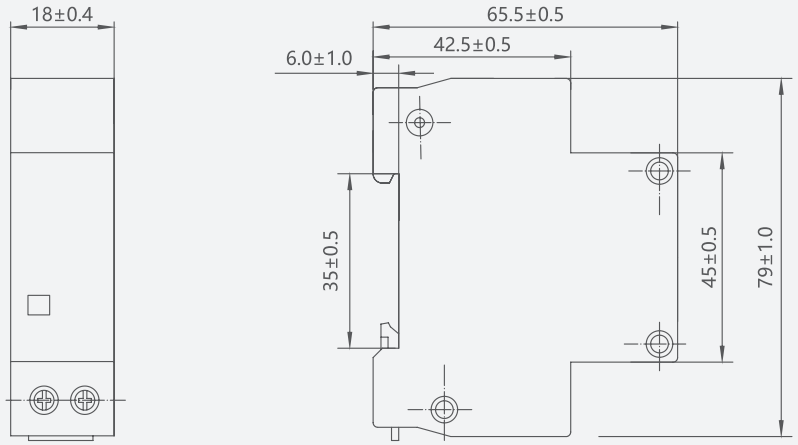
Alarm Contact Outline and installation dimensions



MX+OF Outline and installation dimensions



MX+OF Outline and installation dimensions



Photovoltaic DC MCB

YCB8-125PVn DC MCB (Non-polarized type)

General

The rated operating voltage of YCB8-125PVn series DC miniature circuit breakers can reach DC1000V, and the rated operating current can reach 63A, which are used for isolation, overload and short circuit protection. It is widely used in photovoltaic system, and can also be used in industrial, civil, communication and other DC systems to ensure the reliable operation of systems.

standards:IEC60947-2

Features

- The product can achieve non-polar wiring, ensuring reliable equipment safety
- Modular design, small size;
- Standard Din rail installation, convenient installation;
- Overload, short circuit, isolation protection function, comprehensive protection;
- Current up to 125A, 4 options;
- The breaking capacity reaches 10KA, with strong protection capacity;
- Complete accessories and strong expansibility;
- Multiple wiring methods to meet various wiring needs of customers

Type designation

YCB8 - 125 PVn 2P 63A DC500

Product name		Shell grade current	Usage	Number of poles	Rated current	Rated voltage
YCB8	-	125	PVn	2P	63A	DC500
YCB8		125	PVn: Non-polarized type	1P 2P 3P 4P	63A 80A 100A 125A	DC250V DC500V DC750V DC1000V

Photovoltaic DC MCB

YCB8-125PVn DC MCB (Non-polarized type)

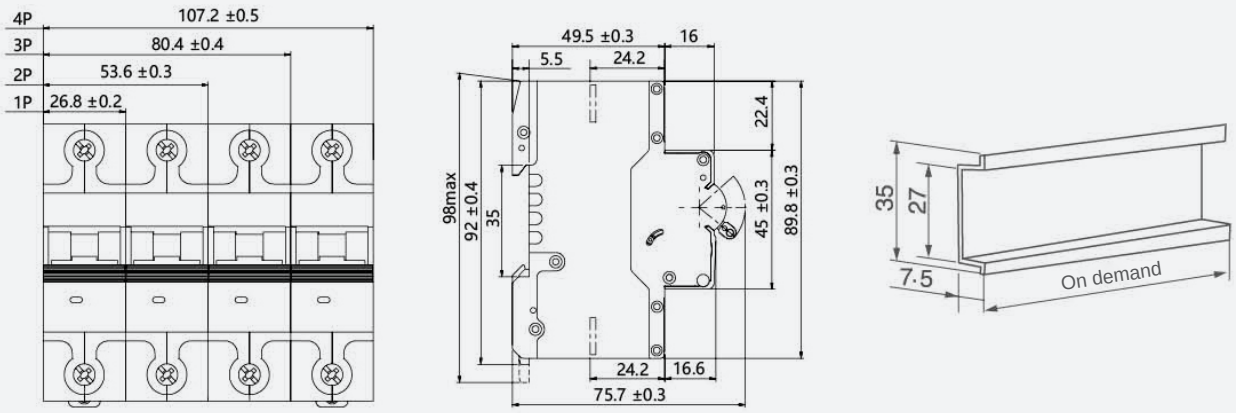
Technical data

Appearance diagram				
Polarity	1P	2P	3P	4P
Rated working voltage Ue	DC250	DC500	DC750	DC1000
Rated insulation voltage Ui (V)	1000			
Rated impulse withstand voltage (Uimp)	6			
Rated frame current (A)	125			
Rated current In (A)	63, 80, 100, 125			
Ultimate short-circuit breaking capacity Icu (KA)	10			
Lifespan (times)	Mechanical 20000, electrical life 300			
Protection grade	IP20			
Environmental temperature for use	-25°C~+40°C			
Wiring ability（mm^2）	25			
Connection	both upper and lower incoming lines are acceptable			
Usage Category	A			
Composite standard	IEC60947-2			

Photovoltaic DC MCB

YCB8-125PVn DC MCB (Non-polarized type)

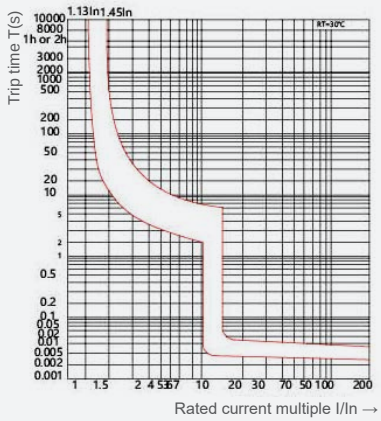
Overall and mounting dimensions



Product tripping characteristics

Rated current(A)	Overload tripping characteristics		Instantaneous tripping characteristics(A)
	1.05In agreed non tripping time H (cold state)	1.30In agreed tripping time H (hot state)	
In ≤ 125	1	1	10In±20%

Release curve diagram



Photovoltaic DC Isolation Switch

YCH8DC DC Isolation Switch

General

YCH8DC DC isolation switch is suitable for DC systems with rated voltage up to DC1500V and rated current up to 800A, playing a role in DC circuit isolation and helping the system operate safely and stably.

Mainly used in DC power supply systems such as photovoltaic power generation DC side, DC power supply system, DC charging pile, energy storage, etc.

Features

1. The switch has no polarity, making the wiring more flexible
2. Clearly visible breakpoints make line maintenance safer
3. Compact size, easy installation, and reliable operation
4. Strong environmental adaptability and wide application

Operating condition

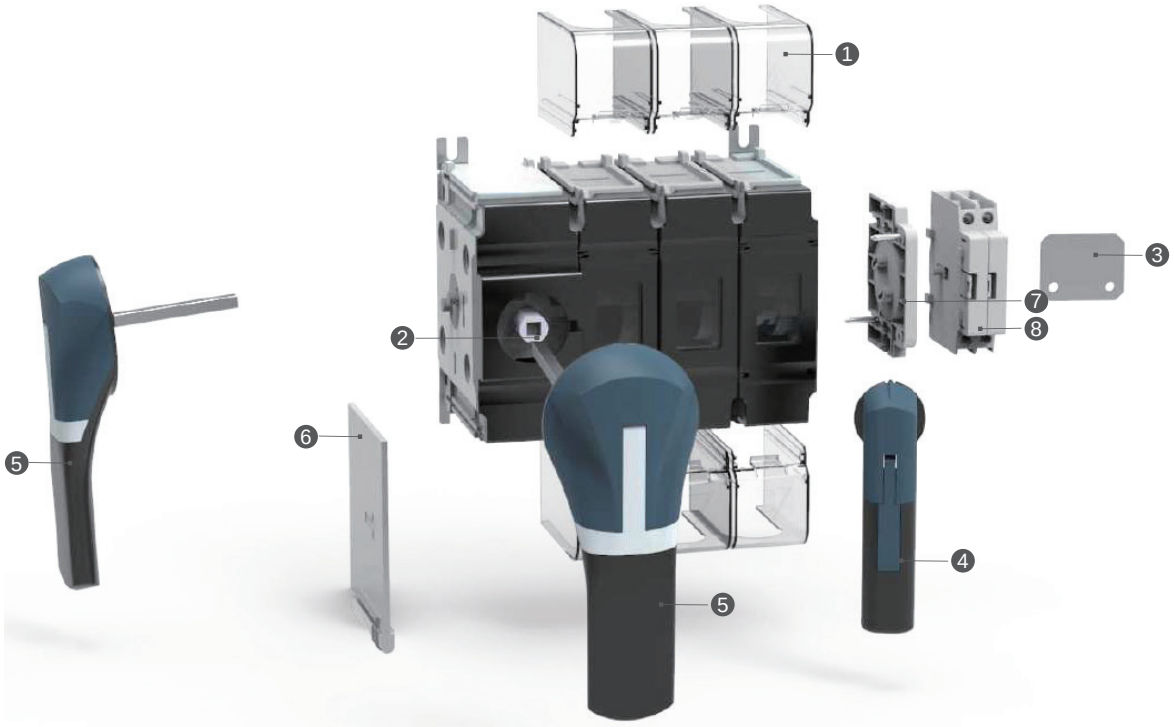
1. High temperature withstand: no derating up to 70°C.
2. Ambient Temperature: -40°C to +70°C.
3. Humid temperature testing (2 cycles, 55°C/131F with 95% humidity level).
4. Salt mist testing(3 cycles with humidity storage, 40°C/104F, 93% humidity after each cycle).

Type designation

Product name		Shell frame current	Installation and operation methods		Pole array	Current rating	Working voltage
YCH8DC	-	400	D	/	02	250A	DC1000
YCH8DC		400(160~400) 800(400~800)	NO:Ontology operation D:Door lock installation EP:Plastic enclosure box EF:Ferric enclosure box		02 11 03 12 04 22 20 21 30 40	160A 250A 315A 400A 630A 800A	DC1000 DC1500

Photovoltaic DC Isolation Switch

YCH8DC DC Isolation Switch



1 Terminal shroud
2 Extension rod
3 Bridge bar
4 Direct handle
5 Door interlocked handle
6 Phase barrier
7 AUX. coupler
8 AUX. contact (2no or 1NC1NO)

Technical data

Shell frame current(A)					YCH8DC-400				YCH8DC-800		
Thermal current (Ith)(A)					160	250	315	400	400	630	800
Rated insulation voltage (Ui)(V)					1500	1500	1500	1500	1500	1500	1500
Rated impulse withstand voltage Uimp (KV)					12	12	12	12	12	12	12
Code	Number of poles		Rated voltage	Utilisation category	Ie(A)	Ie(A)	Ie(A)	Ie(A)	Ie(A)	Ie(A)	Ie(A)
YCH8DC	2P(1P+,1P-)	4P(2P+,2P-)	1000VDC	DC-PV1/DC-21B	160	250	315	400	400	630	800
YCH8DC	2P(1P+,1P-)	4P(2P+,2P-)	1500VDC	DC-PV1/DC-21B	160	250	315	400	400	630	800
YCH8DC	3P(2P+,1P-)	6P(4P+,2P-)	1500VDC	DC-PV1/DC-21B	-	-	-	-	-	-	-
YCH8DC	2P(1P+,1P-)	4P(2P+,2P-)	1000VDC	DC-PV2	160	250	315	-	400	630	-
YCH8DC	2P(1P+,1P-)	4P(2P+,2P-)	1500VDC	DC-PV2	100	160	250	-	400	630	-
YCH8DC	3P(2P+,1P-)	6P(4P+,2P-)	1500VDC	DC-PV2	-	-	315	-	-	-	800
The short-circuit capacity is between 1000 and 1500VDC (no protection)											
Rated short time withstand current Icw 1s (kAeff) Icw					5	5	5	5	8	8	8
Rated short-circuit making capacity Icm(kA peak)- 60 ms Icm					10	10	10	10	10	10	10
Cable											
Recommended Cu rigid cable cross section(mm)					70	120	185	185	240	2x185	2x240
Recommended Cu busbar width(mm)					20	20	20	20	25	25	25
Mechanical characteristics											
Durability (number of operating cycles)					8000	8000	8000	8000	8000	8000	8000
Number of cycles of operation with current					1000	1000	1000	1000	1000	1000	1000

Photovoltaic DC Isolation Switch

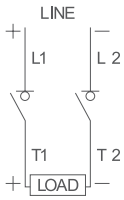
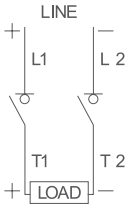
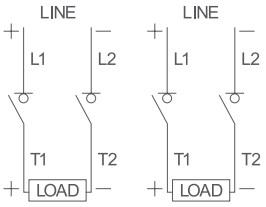
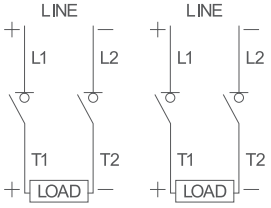
YCH8DC DC Isolation Switch

Add-on Auxiliary Contacts

Type	YCH8DC-OF11	YCH8DC-OF20	YCH8DC-OF10
Contacts	1NO+1NC	2NO	1NO
Width	9mm	9mm	9mm
Parameter	AC-13: 10A, 230V~ AC-15: 6A,230V~		
Function	1NO+1NC 13 21 14 22	2NO 13 23 14 24	1NO 13 14

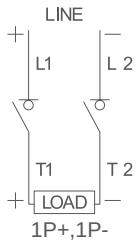
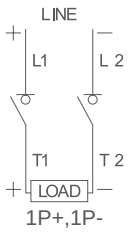
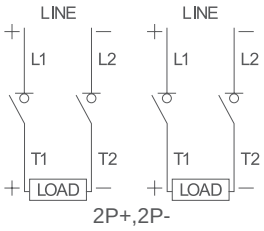
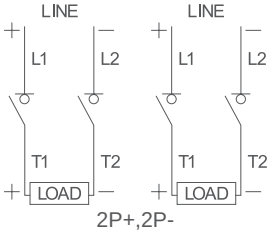
Wiring diagram

DC-PV1 1000/1500V circuit reference table

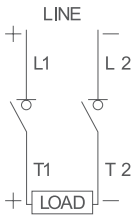
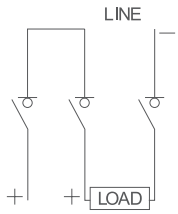
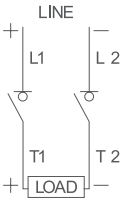
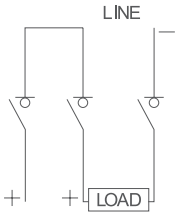
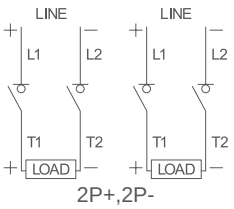
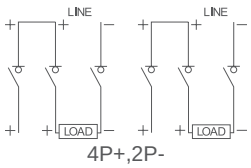
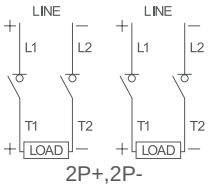
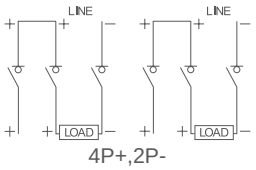
Shell frame current Imm(A)		YCH8DC-400				YCH8DC-800		
Rate current Ie(A)		160	250	315	400	400	630	800
Circuit diagram	1 Line	 1P+,1P-				 1P+,1P-		
	2 Line	 2P+,2P-				 2P+,2P-		

YCH8DC DC Isolation Switch

DC-PV2 1000V circuit reference table

Shell frame current Imm(A)		YCH8DC-400			YCH8DC-800	
Rate current Ie(A)		160	250	315	400	630
Circuit diagram	1 Line					
	2 Line					

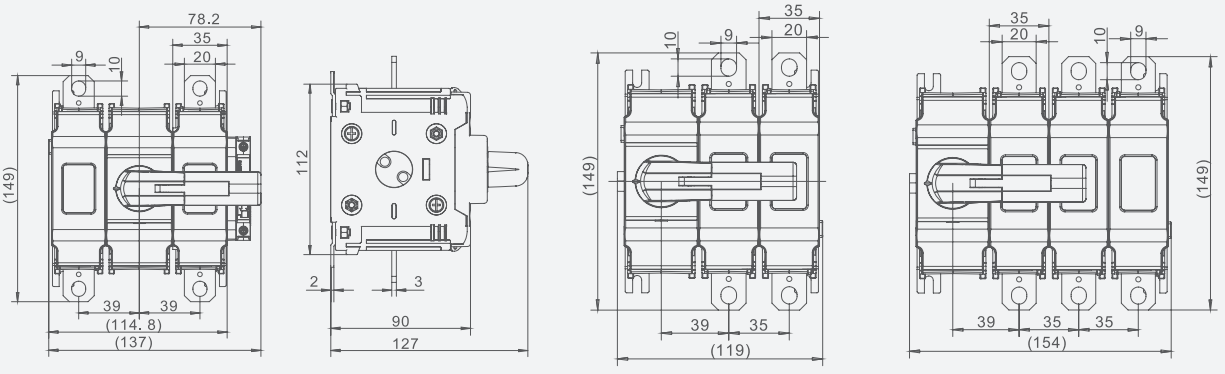
DC-PV2 1500V circuit reference table

Shell frame current Imm(A)		YCH8DC-400			YCH8DC-800		
Rate current Ie(A)		160	250	315	400	630	800
Circuit diagram	1 Line						
	2 Line						

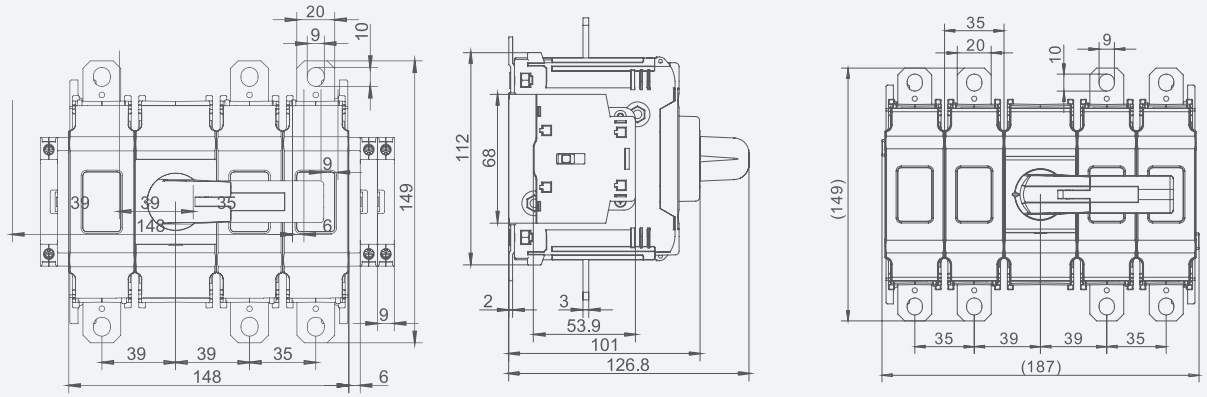
YCH8DC DC Isolation Switch

Overall and mounting dimensions(mm)

YCH8DC-400 dimensions (mm)



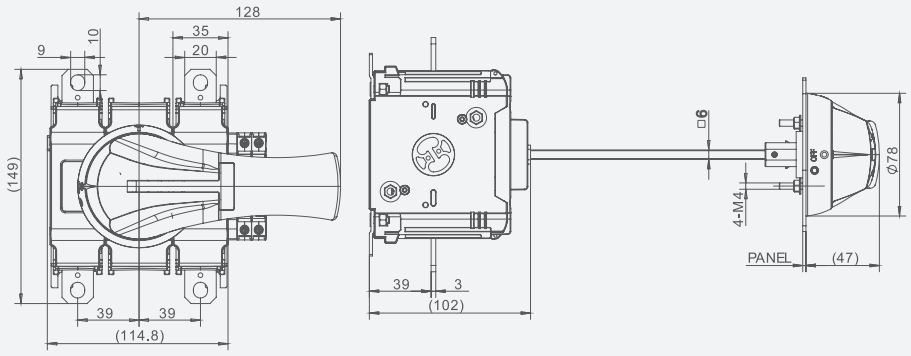
YCH8DC-400/11 YCH8DC-400/02 YCH8DC-400/03



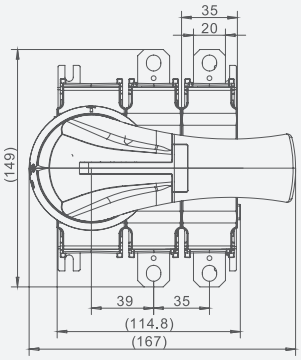
YCH8DC-400/12 YCH8DC-400/22

YCH8DC DC Isolation Switch

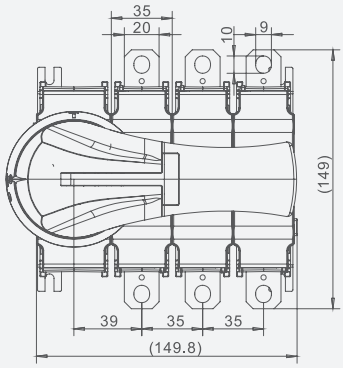
YCH8DC-400D dimensions (mm)



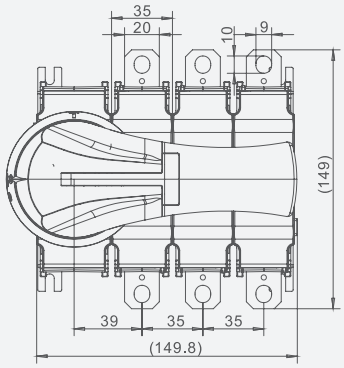
YCH8DC-400D/11



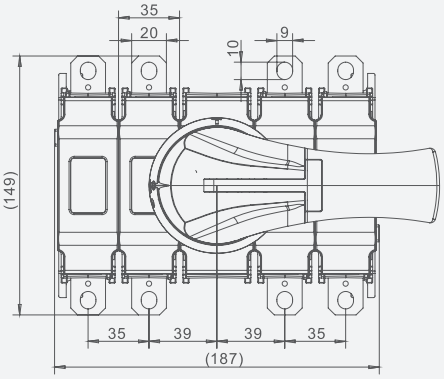
YCH8DC-400D/02



YCH8DC-400D/03



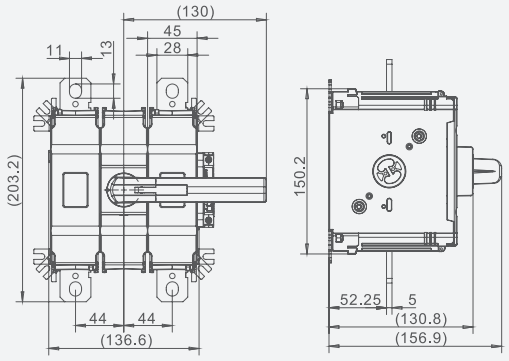
YCH8DC-400D/12



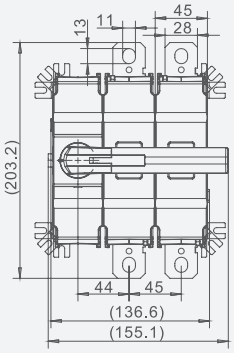
YCH8DC-400D/22

YCH8DC DC Isolation Switch

YCH8DC-800 dimensions (mm)



YCH8DC-800/11



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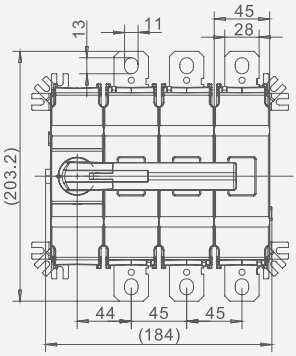

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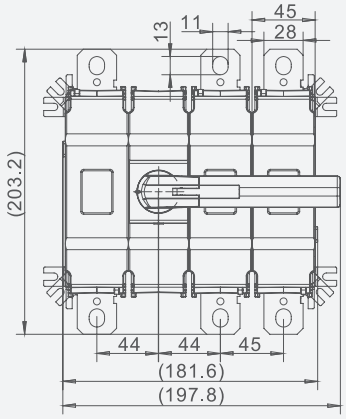
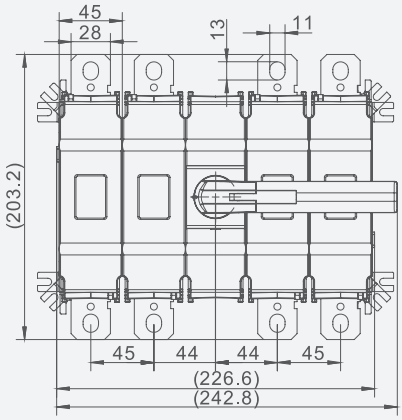


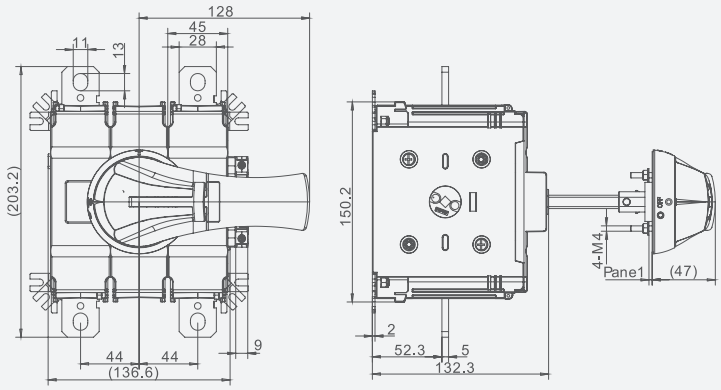
YCH8DC-800/12



YCH8DC-800/22

YCH8DC DC Isolation Switch

YCH8DC-800D dimensions (mm)



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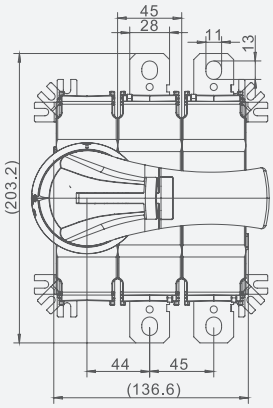

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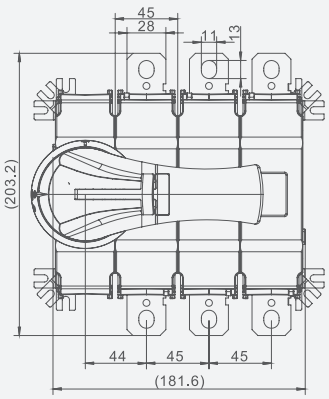

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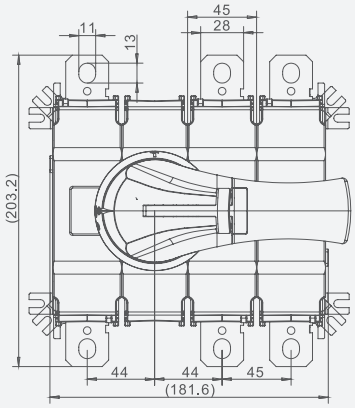

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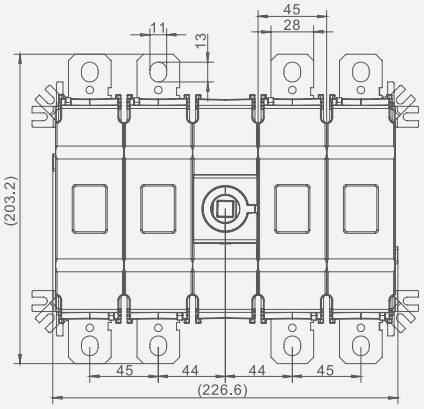
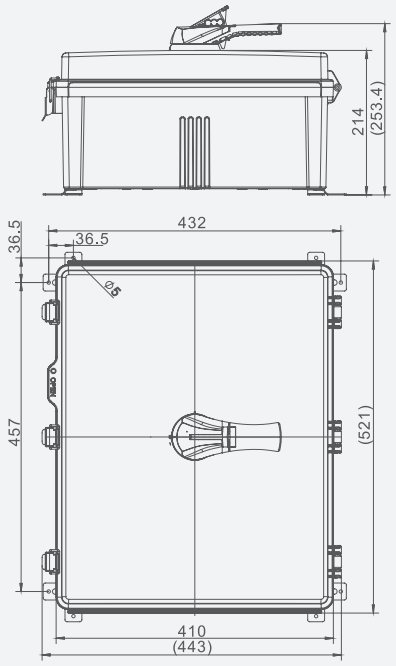


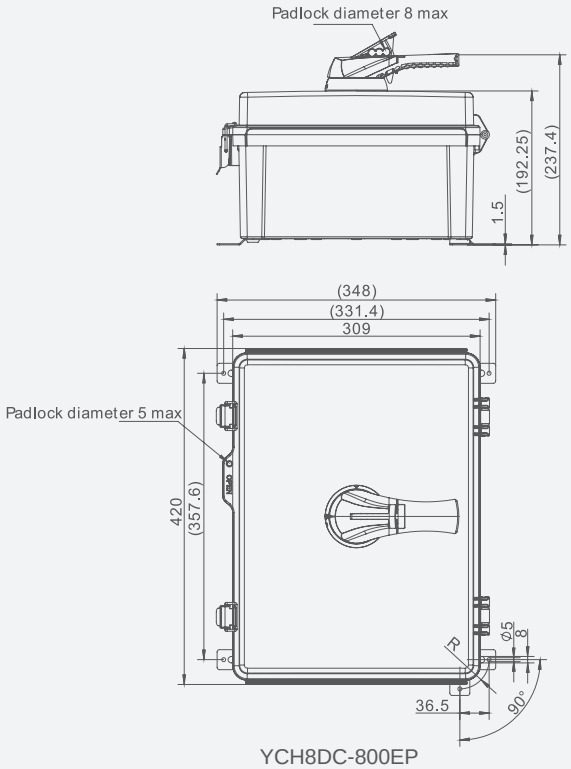
YCH8DC-800D/22

YCH8DC DC Isolation Switch

YCH8DC-□EP dimensions (mm)

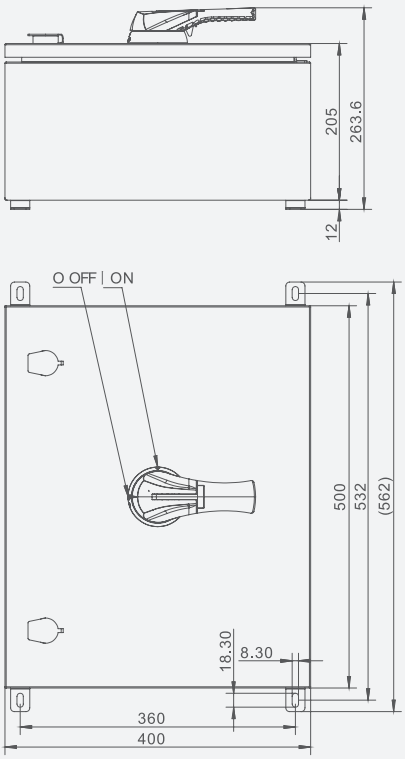


YCH8DC-400EP

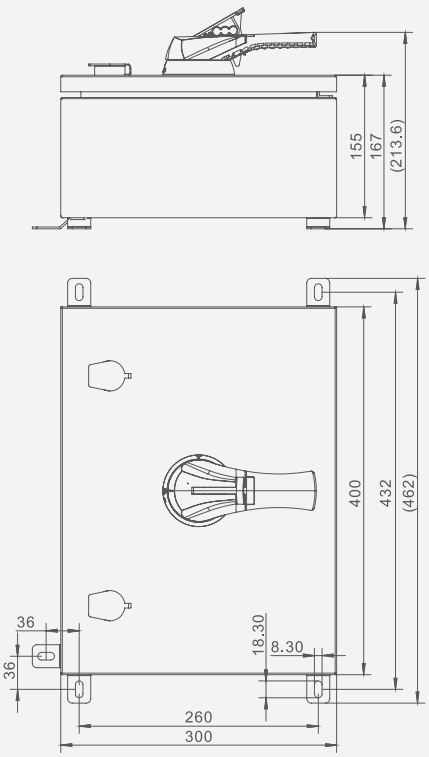


YCH8DC-800EP

YCH8DC-□ EF dimensions(mm)



YCH8DC-400EF



YCH8DC-800EF

Photovoltaic DC Isolation Switch

YCISC8 Series DC Isolation Switch

CNC ELECTRIC

Photovoltaic DC Isolation Switch

YCISC8-32 DC Isolation Switch

Din rail installation

Panel installation

Door lock installation

External installation

Terminal shield

General

Cage type isolation switch YCISC8 series is suitable for DC power systems with rated voltage DC1200V and below and rated current 32A and below. This product is used for infrequent on/off, and can disconnect 1~2 MPPT lines at the same time. It is mainly used in the control cabinet, distribution box and combiner box of the photovoltaic power generation system, and is used for isolation of the DC power distribution system. The external water-proof performance of this product reaches IP66.

Standard: IEC/EN60947-3: AS60947.3, UL508i.

Features

- E type external installation can reach IP66 waterproof level at any angle;
- UV resistant and V0 flame retardant material;
- Contact silver plating, silver layer thickness reaches the highest standard in the industry;
- Arc extinguishing time(3ms);
- The bottom of the external box is equipped with a breather valve;
- Nonpolarity;
- Lockable in closed position;
- 4 installation modes optional.

Type designation

YCISC8 - 32 X PV P 2 MC4 13A + YCISC8-C

Model		Rated current	With lock or not	Usage	Installation mode
YCISC8	-	32	X	PV	P
Isolation switch		32	/: No lock X: With lock	PV: Photovoltaic/ direct-current	No: Din rail installation P: Panel installation D: Door lock installation E: External installation

Wiring mothod	Joint type	Rated current		Model
2	MC4	MC4	+	YCISC8-C
2 4 4B 4T 4S	/: No /: No /:No MC4: MC4 joint	DC1000 DC1200		C: Terminal shield

Photovoltaic DC Isolation Switch

YCISC8-32 DC Isolation Switch

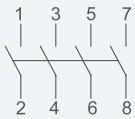
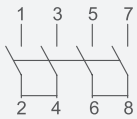
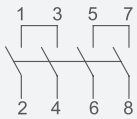
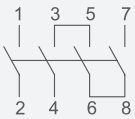
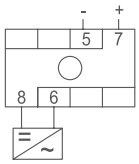
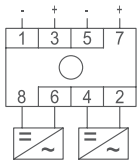
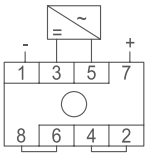
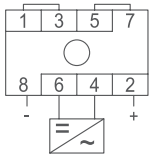
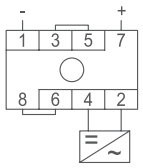
Technical data

Model		YCISC8-32PV			
Standard		IEC/EN60947-3:AS60947.3, UL508i			
Use category		DC-PV1, DC-PV2			
Appearance		 Din rail installation	 Panel installation	 Door lock installation	 External
Wiring method		2,2H,4,4T,4B,4S			/,2MC4,4MC4
Shell frame grade		32			
Electrical performance					
Rated heating current Ith(A)		32			
Rated insulation voltage Ui(V DC)		1500			
Rated working voltage Ue(V DC)		1000V or 1200V			
Rated impulse voltage Uimp(kV)		8			
Rated short-time withstand current Icw(1s)(kA)		1kA			
Rated short-time making capacity(Icm)(A)		1.7kA			
Rated short circuit current(Icn)		3kA			
Overvoltage category		II			
Polarity		No polarity, "+" and "-" polarity can be interchanged			
Switch knob position		9 o'clock position off, 12 o'clock position on (or 12 o'clock position off, 3 o'clock position on)			
Service life	Mechanical	10000			
	Electrical	3000			
Applicable environmental conditions and installation					
Maximum wiring capacity (including jumper wires)					
Single wire or standard(mm²)		4-16			
Flexible cord(mm²)		4-10			
Flexible cord (+ stranded cable end)(mm²)		4-10			
Torque					
Tightening torque of terminal M4 screw(Nm)		1.2-1.8			
Tightening torque of upper cover mounting screw ST4.2 (304 stainless steel)(Nm)		1.5-2.0			
Tightening torque of knob M3 screw(Nm)		0.5-0.7			
Bottom wiring torque(Nm)		1.1-1.4			
Environment					
Protection degree		IP20; External type IP66			
Operating temperature(°C)		-40~+85			
Storage temperature(°C)		-40~+85			
Pollution degree		3			
Overvoltage category		III			

Photovoltaic DC Isolation Switch

YCISC8-32 DC Isolation Switch

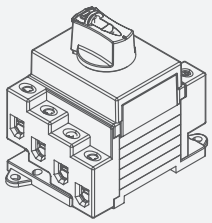
Wiring diagram

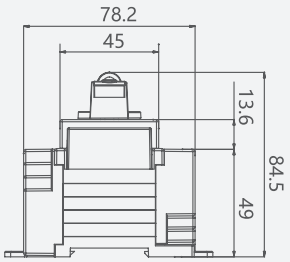
Type	2-Pole	4-Pole	4-Pole with Input and Output on top	4-Pole with Input and Output bottom	4-Pole with Input on top Output bottom
YCISC8-32 DC1000/ DC1200	2	4	4T	4B	4S
Contacts Wiring graph					
Switching example					

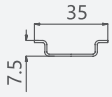
Overall and mounting dimensions(mm)

Din rail installation

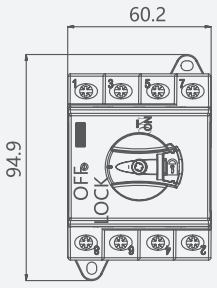
YCISC8-32XPV

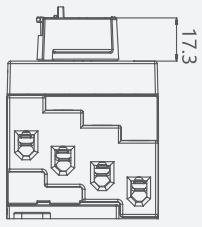


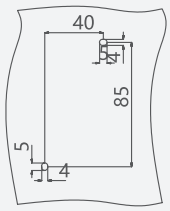




Installation size of switch bottom





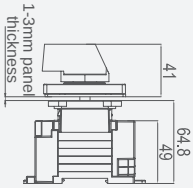


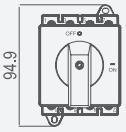
Screw installation size

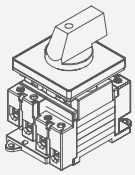
YCISC8-32 DC Isolation Switch

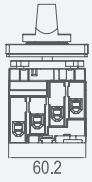
Panel installation

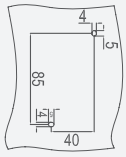
YCISC8-32PV P







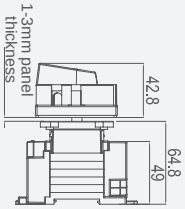


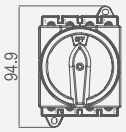


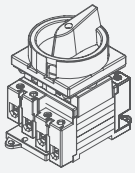
Screw installation size

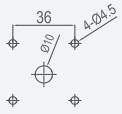
Switch bottom guide rail installation size

YCISC8-32XPV P





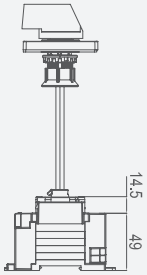


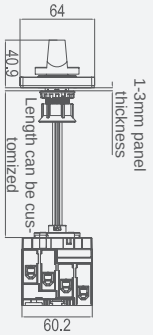


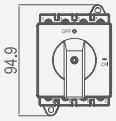
Head panel installation size

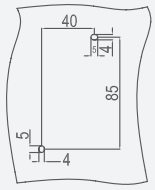
Door lock installation

YCISC8-32PV D

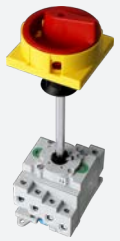




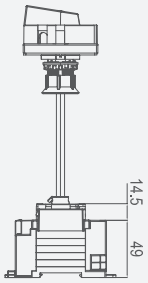


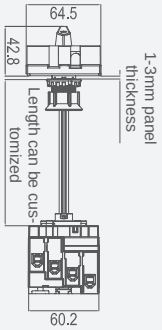


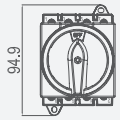
Screw installation size

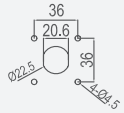


YCISC8-32XPV D









Head panel installation size

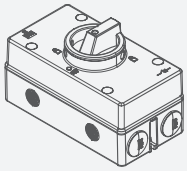
Switch bottom guide rail installation size

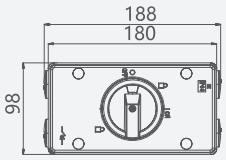
Photovoltaic DC Isolation Switch

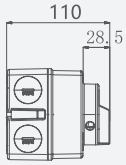
YCISC8-32 DC Isolation Switch

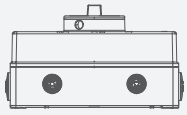
External installation

YCISC8-32XPV E

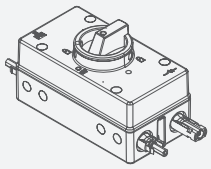


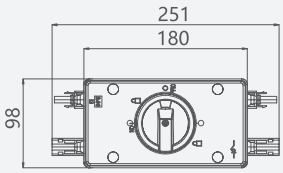


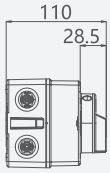


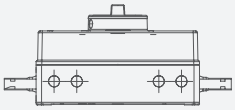


YCISC8-32XPV E2 MC4

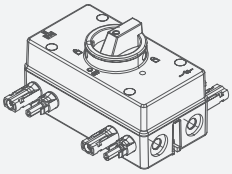


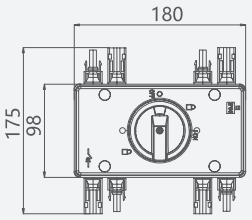


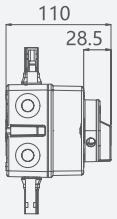


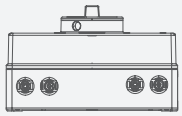


YCISC8-32XPV E4 MC4









Photovoltaic DC Isolation Switch

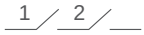
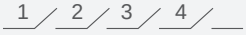
YCISC8-32 DC Isolation Switch

Current/Voltage category parameter table

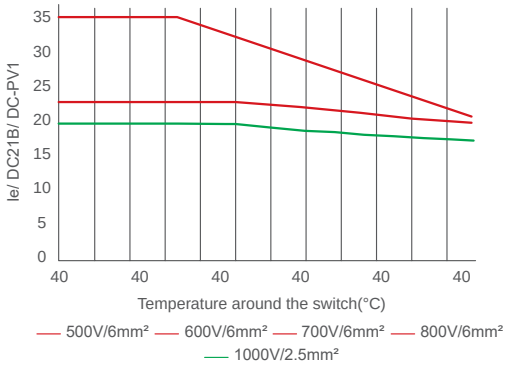
The following current data IEC/EN60947-3:2009+A1+A2, AS60947.3, use category DC-PV1, DC-PV2

Model	Series	Wiring method	300V		600V		800V		1000V		1200V	
			PV1	PV2	PV1	PV2	PV1	PV2	PV1	PV2	PV1	PV2
YCISC8-32XPV □2 DC1000	1	2	32	32	32	32	32	16	16	9	/	/
YCISC8-32XPV □2 DC1200	1		32	32	32	32	32	16	16	9	13	9
YCISC8-32XPV □4 DC1000	2	4	32	32	32	32	32	16	16	9	/	/
YCISC8-32XPV □4 DC1200	2		32	32	32	32	32	16	16	9	13	9
YCISC8-32XPV □4S DC1000	1	4S	32	32	32	32	32	32	32	32	/	/
YCISC8-32XPV □4S DC1200	1		32	32	32	32	32	32	32	32	32	32
YCISC8-32XPV □4B DC1000	1	4B	32	32	32	32	32	32	32	32	/	/
YCISC8-32XPV □4B DC1200	1		32	32	32	32	32	32	32	32	32	32
YCISC8-32XPV □4T DC1000	1	4T	32	32	32	32	32	32	32	32	/	/
YCISC8-32XPV □4T DC1200	1		32	32	32	32	32	32	32	32	32	32

Data comply with AS60947-3

Main contact	Voltage	DC1000	DC1200
Rated thermal current Ithe		32A	
Rated insulation voltage Ui		1500V	
Contact spacing (per pole)		8mm	
Rated working current Ie(DC-PV2)			
4 layers, only 2 layers in series, with two loads 	300V	32A	32A
	600V	32A	32A
	800V	16A	16A
	1000V	9A	9A
	1200V	/	9A
4 layers, 4 layers in series, one load 	300V	300V	32A
	600V	32A	32A
	800V	32A	32A
	1000V	32A	32A
	1200V	/	32A

Type		
Number of poles		4-pole
Terminal name, main circuit		1; 3; 5; 7; 2; 4; 6; 8
Terminal type, main circuit		Screw terminal
Cable cross-section		4.0-16mm²
Conductor type		4-16mm (rigidity: solid or stranded)
		4-10mm Flexible
Number of wires per terminal		1
Preparation required for wire		Yes
Stripping length (mm), main circuit		8mm
Tightening torque (M4), main circuit		1.2~1.8N.m



DC Isolator switch

YCIS8 Series DC Isolation Switch

CNC
ELECTRIC

Photovoltaic DC Isolation Switch

YCIS8-55 DC Isolation Switch

General

Isolating switch YCIS8 series is suitable for DC power systems with rated voltage DC1500V and below and rated current 55A and below. This product is used for infrequent on/off, and can disconnect 1~4 MPPT lines at the same time. It is mainly used in control cabinets, distribution boxes, inverters and combiner boxes in photovoltaic power generation systems for isolation of DC power distribution systems. The external waterproof performance of this product reaches IP66. The inner core of the product can be installed inside the inverter for controlling the incoming line of the inverter.

Standard: IEC/EN60947-3, AS60947.3, UL508i Standard.

Certification: TUV, CE, CB, SAA, UL, CCC.

Features

- Non-polarity design;
- Switch modular design, can provide 2-10 layers;
- Provide single-hole installation, panel installation, guide rail installation, door clutch or waterproof housing (dynamic sealing design and world-class sealing materials ensure IP66 protection grade);
- DC1500V insulation voltage design;
- Single-channel current 13-55A;
- Single hole installation, panel installation, power distribution module, door lock installation, external installation and other installation methods are optional;
- Provide 15 wiring schemes.

*: If you order “External installation”M25 and M16 interface products, we only reserve corresponding waterproof connector holes, and do not provide PG waterproof connectors

Type designation

YCISC8 - 55 X PV P 2 MC4 25A

Model		Rated current	With lock or not	Usage	Installation mode
YCISC8	-	55	X	PV	P
Isolation switch		55	/: No lock X: With lock	PV: Photovoltaic/ direct-current	No: Din rail installation P: Panel installation D: Door lock installation S: Single hole installation E: External installation

Wiring mothod	Joint type	Rated current
2	MC4	MC4
2/3/4/6/8/10 2H/3H/4H 4S/4B/4T 3T/6T/9T 2\4\4B\4T\4S	/: No /:No MC4: MC4 joint	13A, 20A, 25A, 40A, 50A (note the type when ordering)

Note:
1. The “Din rail installation” and “external installation” can only be with the lock.
2. The rated current is the category of DC-PV1, and DC1000V is the benchmark. For other scenarios, please refer to: “Current/Voltage Category Parameter Table (DC-PV1/DC-PV2)”
3. Rated current 55A, suitable for wiring mode 4B, 4T, 4S

Photovoltaic DC Isolation Switch

YCIS8-55 DC Isolation Switch

Model		YCIS8-55				
Standard		IEC/EN60947-3:AS60947.3, UL508i				
Use category		DC-PV1, DC-PV2				
Appearance		 Din rail installation	 Panel installation	 Door lock installation	 Single hole installation	 External installation
Wiring method		2/3/4/6/8/10; 2H/3H/4H; 4S/4B/4T; 3T/6T/9T				2\4\4B\4T\4S
Joint type		/				/,M25,2MC4,4MC4
Electrical performance						
Rated current In(A)		13	20	25	40	50
Rated heating current Ith(A)		32	40	55	55	55
Rated insulation voltage Ui(V DC)		1500				
Rated working voltage Ue(V DC)		1500				
Rated impulse voltage Uimp(kV)		8				
Rated short-time withstand current Icw(1s)(A)		780				
Rated short-time making capacity(Icm)(A)		1200				
Rated limited short-circuit current Icc(A)		5000				
Maximum fuse specification gL(gG)(A)		160				
Overvoltage category		III				
Polarity		No polarity, "+" and "-" polarity can be interchanged				
Switch knob position		9 o'clock position off, 12 o'clock position on (or 12 o'clock position off, 3 o'clock position on)				
Contact spacing (per pole)(mm)		8				
Service life	Mechanical	10000				
	Electrical	3000				
Applicable environmental conditions and installation						
Maximum wiring capacity (including jumper wires)						
Single wire or standard(mm^2)		4-16				
Flexible cord(mm^2)		4-10				
Flexible cord (+ stranded cable end)(mm^2)		4-10				
Torque						
Tightening torque of terminal M4 screw(Nm)		1.2-1.8				
Tightening torque of upper cover mounting screw ST4.2 (304 stainless steel)(Nm)		2.0-2.5				
Tightening torque of knob M3 screw(Nm)		0.5-0.7				
Switching torque		0.9-1.9				
Environment						
Protection degree		IP20; External type IP66				
Operating temperature(°C)		-40~+85				
Storage temperature(°C)		-40~+85				
Pollution degree		3				
Overvoltage category		III				

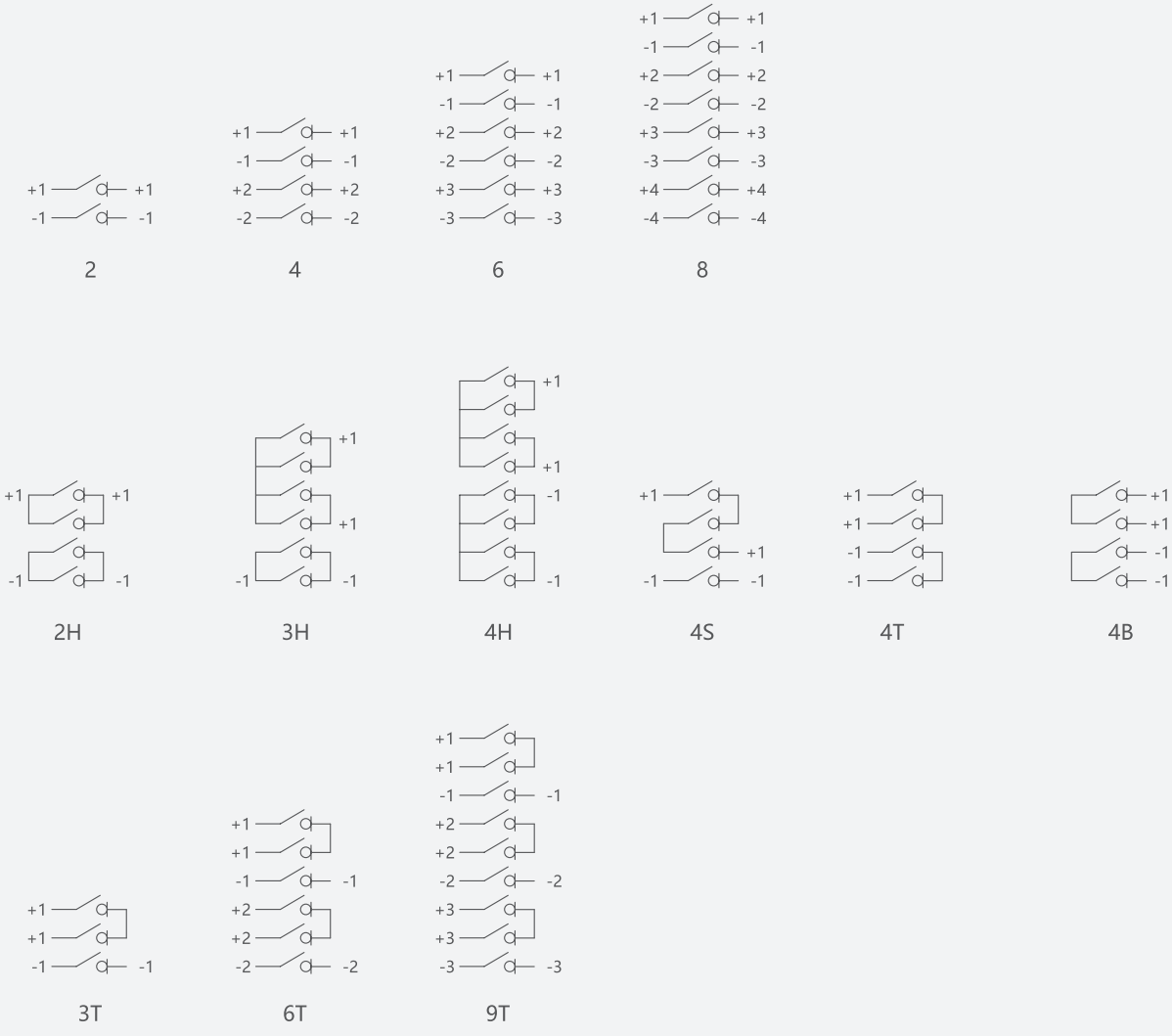
Photovoltaic DC Isolation Switch

YCIS8-55 DC Isolation Switch

Maximum power loss per contact pair

Wiring method	Power loss(W)
2	≤6
4	≤12
6	≤18
8	≤24
2H	≤3
3H	≤4.5
4H	≤6

Wiring diagram



Photovoltaic DC Isolation Switch

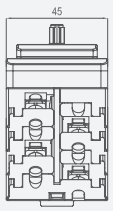
YCIS8-55 DC Isolation Switch

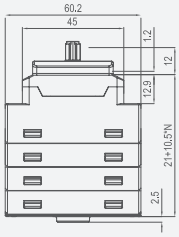
Overall and mounting dimensions(mm)

YCISC8-55XPV

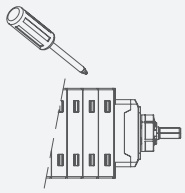
Din rail installation

Default



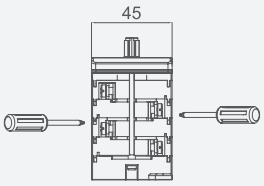


N is the number of layers

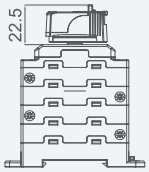


Contact installation direction

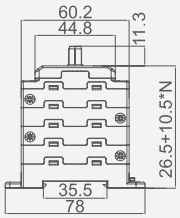
Order notes



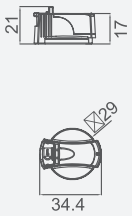
Wiring diagram

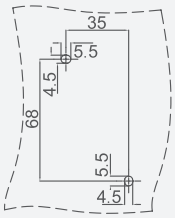


Head height



N is the number of layers





Bottom screw installation size

Bottom screw installation size

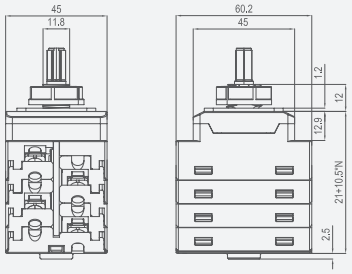
12 o'clock,OFF
3 o'clock,ON

YCIS8-55 DC Isolation Switch

YCISC8-55PV S

Single hole installation

Default



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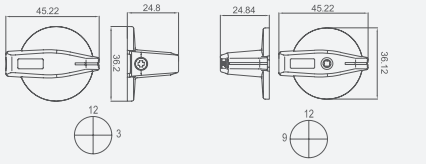
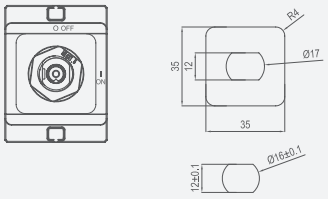


12 o'clock,OFF 3 o'clock,ON

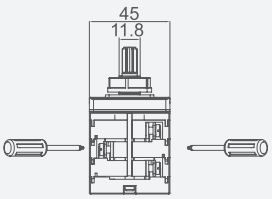
9 o'clock,OFF 12 o'clock,ON



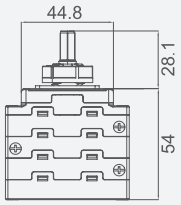
Opening size

Contact installation direction

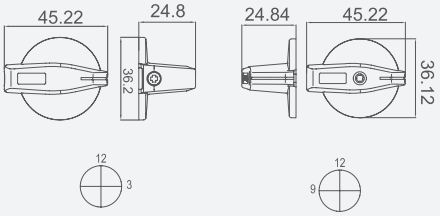
Order notes



Wiring diagra

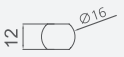


N is the number of layers



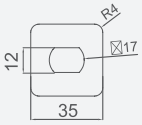
12 o'clock,OFF
3 o'clock,ON

9 o'clock,OFF
12 o'clock,ON



Hole Size

M16X1.5

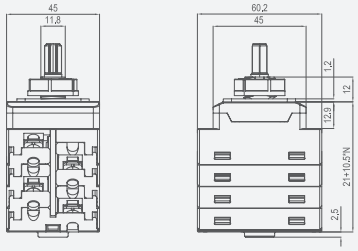


YCIS8-55 DC Isolation Switch

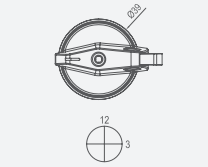
YCISC8-55XPV S

Single hole installation

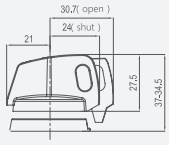
Default

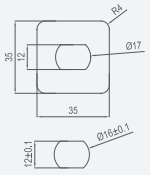


N is the number of layers

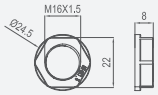


12 o'clock,OFF 3 o'clock,ON



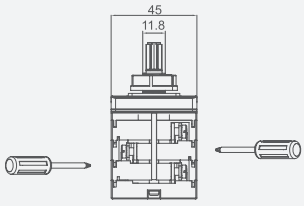


Opening size



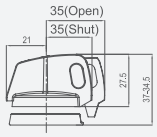
Contact installation direction

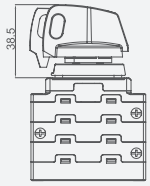
Order notes



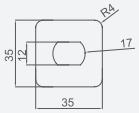
Wiring diagram

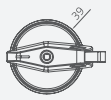
N is the number of layers



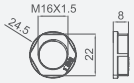


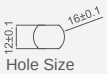
Head height





12 o'clock,OFF
3 o'clock,ON





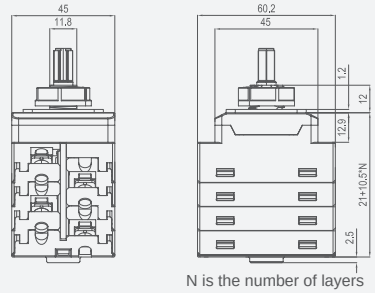
Hole Size

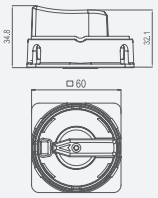
YCIS8-55 DC Isolation Switch

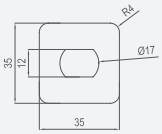
YCISC8-55XPV P

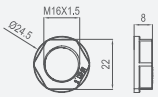
Panel installation

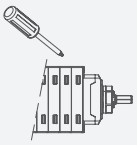
Default







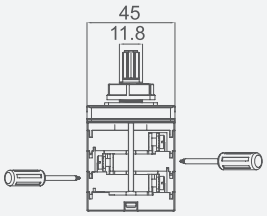




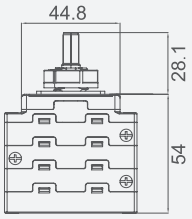
Contact installation direction

12 o'clock,OFF
3 o'clock,ON

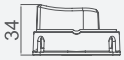
Opening size

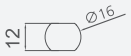


Wiring diagram



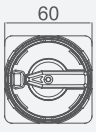
N is the number of layers

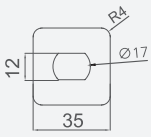




Hole Size

9 o'clock,OFF
12 o'clock,ON



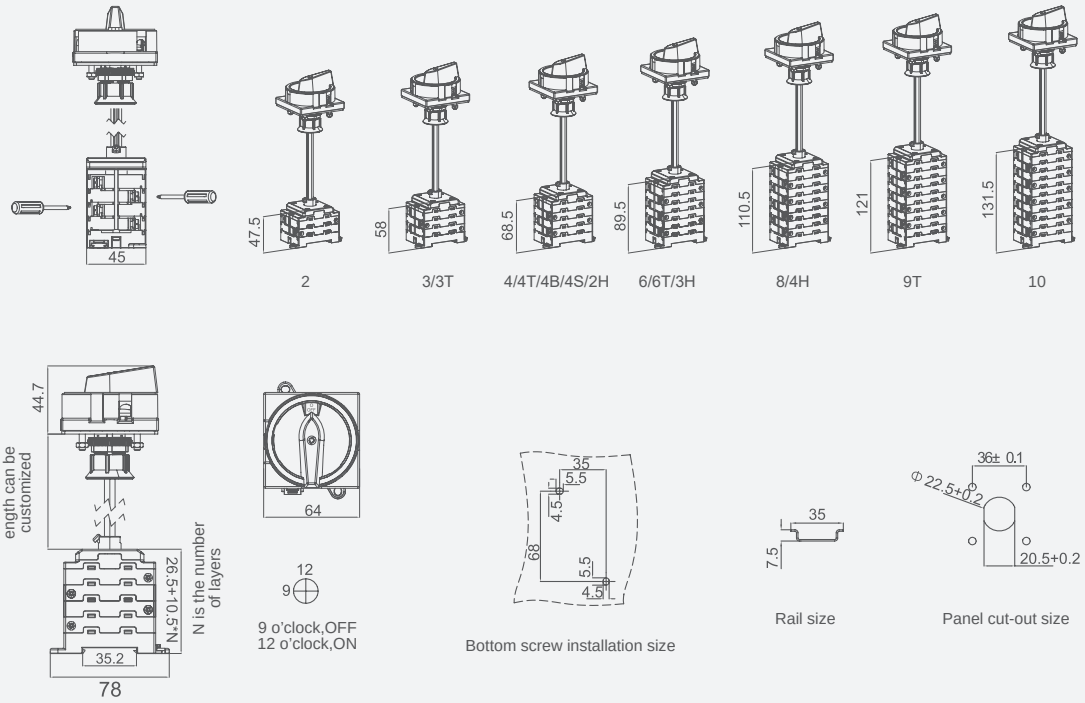


M16X1.5

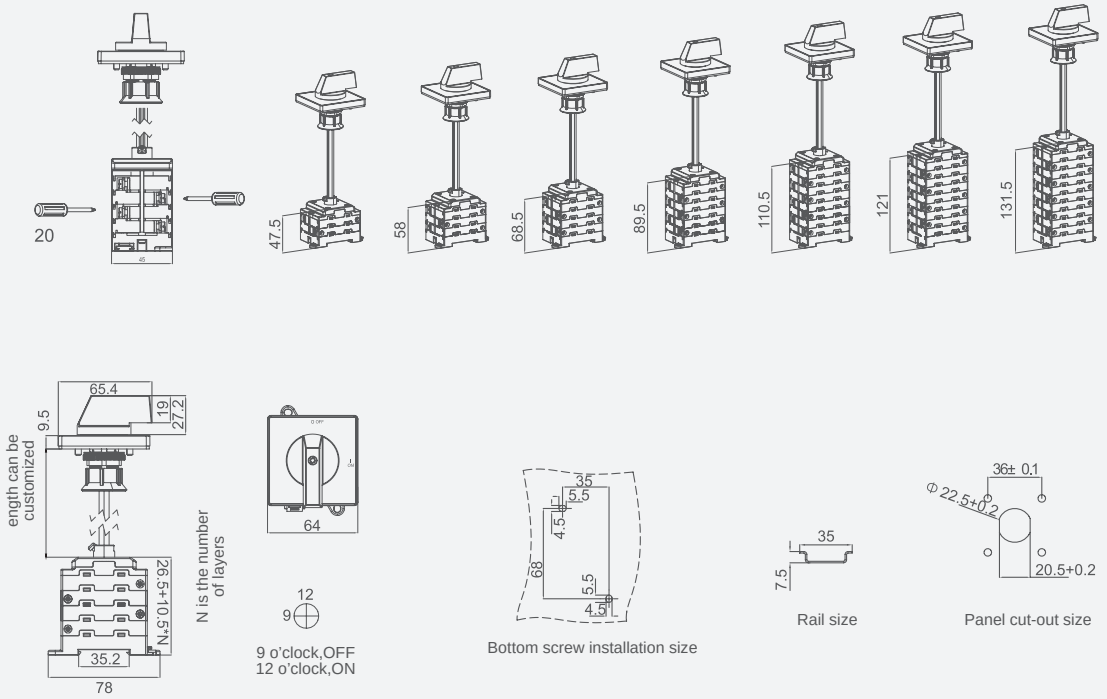
YCIS8-55 DC Isolation Switch

Door lock installation

YCISC8-55XPV D



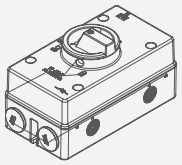
YCISC8-55PV D

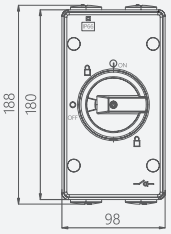


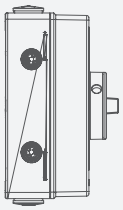
YCIS8-55 DC Isolation Switch

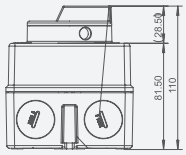
Door lock installation

YCIS8-55XPV E
(None: No joint)

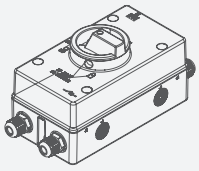


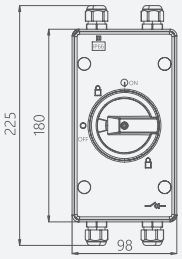


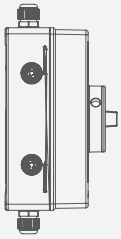


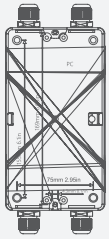


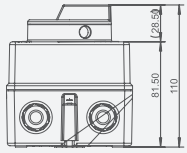
YCIS8-55XPV E M16
(Waterproof joint)



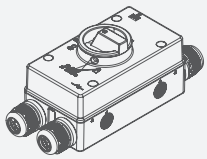


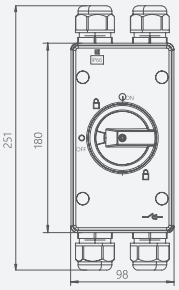


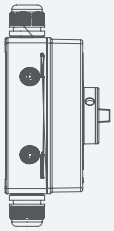


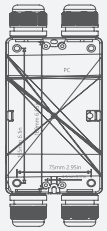


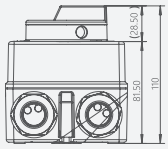
YCIS8-55XPV E M25
(Waterproof joint)



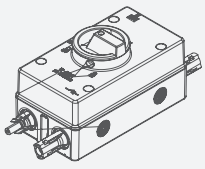


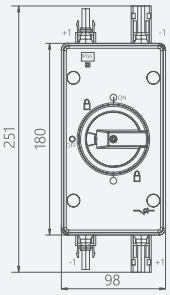


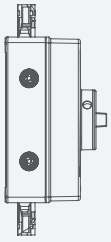


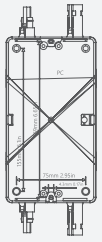


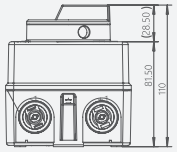
YCIS8-55XPV E2 MC4
(MC4 Joint)



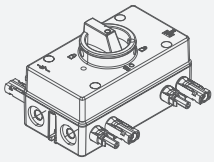


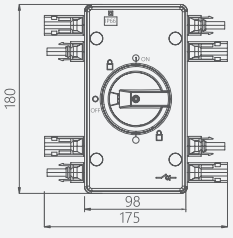


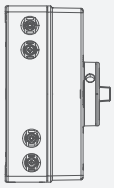


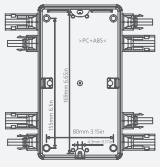


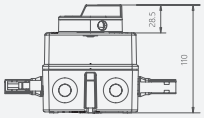
YCIS8-55XPV E4 MC4
(MC4 Joint)











Photovoltaic DC Isolation Switch

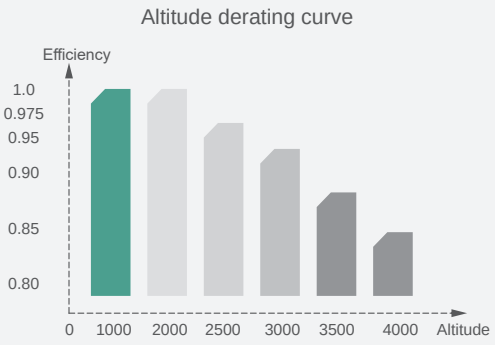
YCIS8-55 DC Isolation Switch

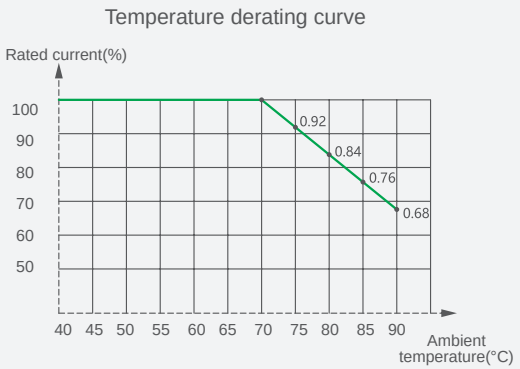
Current/Voltage category parameter table

Wiring method	Working voltage / Rated current	600V		800V		1000V		1200V		1500V	
		PV1	PV2	PV1	PV2	PV1	PV2	PV1	PV2	PV1	PV2
2,3,4 6,8,10	13	32	13	26	13	13	6	10	4	5	3
	20	40	20	30	15	20	8	12	6	6	4
	25	55	25	45	23	25	10	15	8	8	5
	40	55	40	50	30	40	15	30	15	20	8
	50	55	50	55	40	50	18	40	18	30	10
4T,4B,4S	13	32	12	32	12	32	8	26	8	13	5
	20	40	18	40	18	40	12	30	12	20	8
	25	55	20	55	20	55	15	40	15	30	10
	40	55	40	55	40	55	32	50	32	45	20
	50	55	50	55	50	55	40	55	40	50	/

Note: 2H/3H/4H/3T/6T/9T/10P products need to be customized, if necessary, please contact us.

Derating table





Photovoltaic DC Fuse

YCF8 Series DC Fuse

CNC
ELECTRIC

Photovoltaic DC Fuse

YCF8-63PVS DC Fuse

General

Photovoltaic fuse YCF8-□ PVS series is applicable to DC distribution lines with rated voltage not exceeding DC1500V, rated current not exceeding 50A and rated short circuit capacity not exceeding 50kA; It is used for line overload and short circuit protection. It is mainly used in energy storage systems and solar Photovoltaic DC Solutionses as short circuit and overload protection for solar photovoltaic power generation devices, batteries and other semiconductor devices.

Standard: IEC 60269-6 UL248-19

Type designation

YCF8 - 63 PVS DC1500

Model		Shell frame	Product type	Rated Voltage
YCF8	-	63	PVS	DC1500
Fuse		63	PVS:Photovoltaic DC	DC1500

Technical data

Model	YCF8-63PVS	
Fuse size(mm)	10×85	14×85
Rated working voltage Ue(V)	DC1500	
Rated insulation voltage Ui(V)	DC1500	
Rated short-circuit breaking capacity (KA)	20	
Operating level	gPV	
Standard	IEC60269-6, UL4248-19	
Number of poles	1P	
Installation method	TH-35 Din-rail installation	
Operating environment and installation		
Working temperature	-40°C≤X≤+90°C	
Altitude	≤2000m	
Humidity	When the maximum temperature is+40°C, the relative humidity of the air shall not exceed 50%, and higher humidity can be allowed at lower temperatures, For example +90% at 25°C. Special measures shall be taken for occasional condensation due to temperature changes;	
Installation environment	In a place where there is no explosive medium and the medium is not enough to corrode metal and damage insulation gas and conductive dust.	
Pollution degree	Level 3	
Installation category	III	

Fuse adapter table

Fuse(Base)	Fuse		
Model	Model	Current rating	Voltage
YCF8-63PVS DC1500	YCF8-1085	2, 3, 4, 5, 6, 8, 10, 15, 16, 20, 25, 30, 32	DC1500
	YCF8-1485	30-50	

Photovoltaic DC Fuse

YCF8-63PVS DC Fuse

Type designation

YCF8 - 1085 25A DC1500

Model		Size	Rated current	Rated Voltage
YCF8	-	1085	25A	DC1500
Fuse link		1085: 10×85(mm) 1485: 14×85(mm)	2-32A 40-50A	DC1500

Technical data

Wiring method	YCF8-1085	40-50A
Model	2-32A	YCF8-1485
Rated current In(A)	10×85	14×85
Fuse size	DC1500	
Rated working voltage Ue(V)	20	
Rated short-circuit breaking capacity (KA)	1-3ms	
Time constant(ms)	gPV	
Operating level	IEC60269-6, UL248-19	
Standard	YCF8-63PVS	

Test method

The agreed time and current of the fuse “gPV”

Rated current of the fuse "gPV" (A)	Agreed time (h)	40-50A	
		Inf	In
In≤63	1	1.13In	1.45In
63<In≤160	2		
160<In≤400	3		
In>400	4		

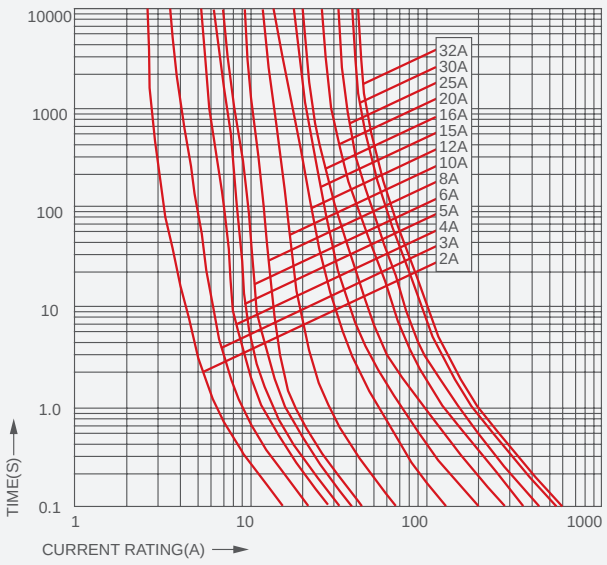
Photovoltaic DC Fuse

YCF8-63PVS DC Fuse

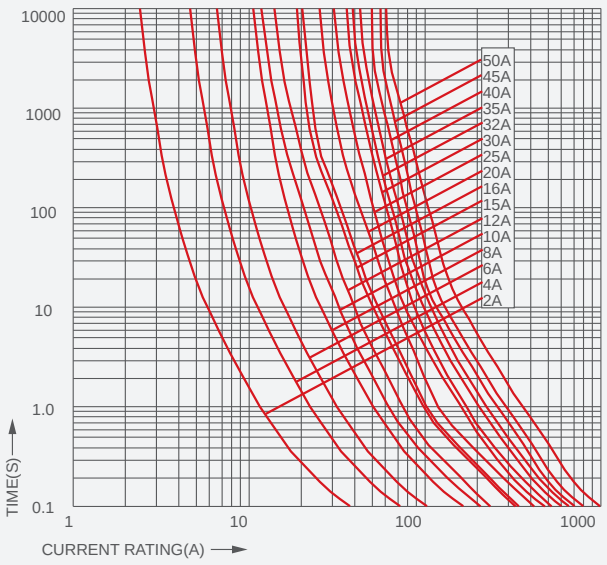
Joule integral table

Model	Rated current (A)	Joule integral $I^2T(A^2S)$	
		Pre-arcing	Total
YCF8-1085	2	4	8
	3	6	11
	4	8	14
	5	11	22
	6	15	30
	8	9	35
	10	10	98
	12	12	120
	15	14	170
	20	34	400
	25	65	550
	30	85	680
	32	90	720
YCF8-1485	40	125	800
	50	155	920

Curve



YCF8-1085 Characteristic Curve

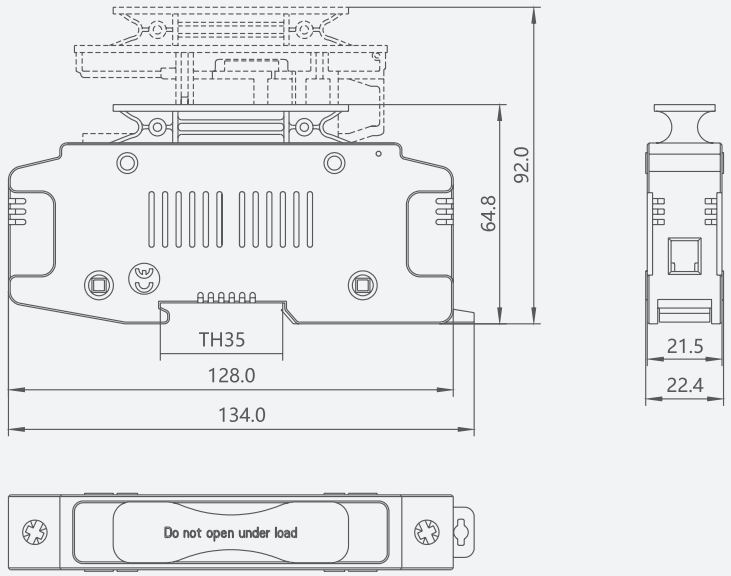


YCF8-1485 Characteristic Curve

YCF8-63PVS DC Fuse

Overall and mounting dimensions(mm)

Base



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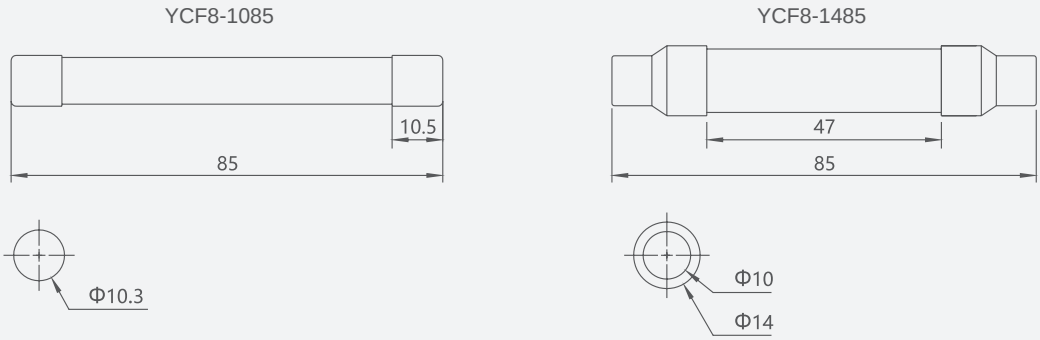


Photovoltaic DC Fuse

YCF8-32/63/125PV DC Fuse

General

YCF8-□ □ PV series fuses have a rated operating voltage of DC1500V and a rated current of 80A. It is mainly used in the solar photovoltaic DC combiner box to break the line overload and short-circuit current generated by the current feedback of the photovoltaic components of the solar panel and the inverter, so as to protect the solar photovoltaic components. It is widely used in the circuit protection of electric drive system, power supply system and auxiliary system, and the fuse can also be selected in any other DC circuit as the circuit overload and short circuit protection of electrical components.

Standard: IEC60269, UL4248-19.

Features

The fuse base is made of a plastic pressed shell with contacts and fuse-carrying parts, which are riveted and connected, and can be used as the supporting part of the fuse link of corresponding size. This series of fuses has the characteristics of small size, convenient installation, safe use and beautiful appearance.

Type designation

YCF8 - 32 X PV DC1500

Model		Size	Size	Rated current	Rated Voltage
YCF8	-	32	X	PV	DC1500
Fuse		32: 1~32A	/:standard X: With display H: High base XH: High base with display	PV: Photovoltaic/ direct-current	DC1000V
		63: 15~40A	/:non		DC1000V
		125: 40~80A			DC1500V

Fuse

Fuse holder	Assembly fuse
YCF8-32	YCF8-1038
YCF8-63	YCF8-1451
YCF8-125	YCF8-2258

Photovoltaic DC Fuse

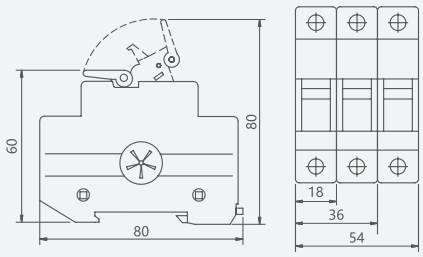
YCF8-32/63/125PV DC Fuse

Technical data

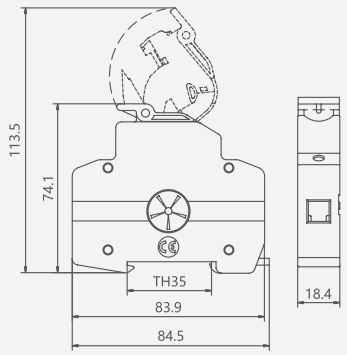
Model	YCF8-32PV	YCF8-63PV	YCF8-125PV
Specifications	/:standard X: With display H: High base XH: High base with display	/:standard	/:standard
Fuse size(mm)	10×38	14×51	22×58
Rated working voltage Ue(V)	DC1000		
Rated insulation voltage Ui(V)	DC1500		
Use category	gPV		
Standard	IEC60269-6, UL4248-19		
Operating environment and installation			
Working temperature	-40°C≤X≤+90°C		
Altitude	≤2000m		
Humidity	When the maximum temperature is+40°C, the relative humidity of the air shall not exceed 50%, and higher humidity can be allowed at lower temperatures, For example+ 90% at 25°C. Special measures shall be taken for occasional condensation due to temperature changes;		
Installation environment	In a place where there is no explosive medium and the medium is not enough to corrode metal and damage insulation gas and conductive dust.		
Pollution degree	Level 3		
Installation category	III		
Installation method	TH-35 Din-rail installation		

Overall and mounting dimensions(mm)

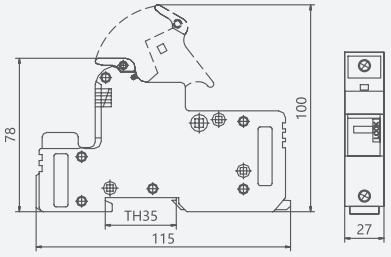
Base



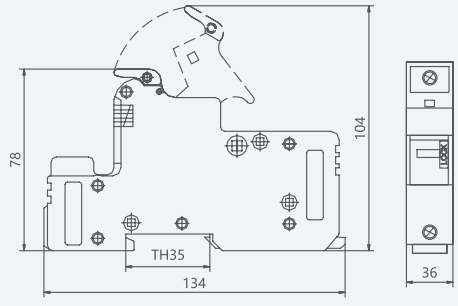
YCF8-32PV,YCF8-32XPV



YCF8-32HPV



YCF8-63PV



YCF8-125PV

Photovoltaic DC Fuse

YCF8-1038/1451/2258 DC Fuse

General

The variable cross-section melt made of pure silver sheet (or silver wire winding) is soldered with low-temperature tin and packaged in a fusion tube made of highstrength porcelain. The fusion tube is filled with chemically treated and specially processed Process-treated high-purity quartz sand is used as the arc-extinguishing medium, and the two ends of the melt are firmly electrically connected with the contacts by electric welding.

Type designation

YCF8 - 1038 25A DC1500

Model		Size	Size	Rated Voltage
YCF8	-	1038	25A	DC1500
Fuse		1038: 10×38	1 2,3,4,5,6,8,10,15,16,20,25,30,32	DC1000V
		1451: 14×51	15,16,20,25,30,32,40,50	DC1000V DC1500V
		2258: 22×58	40,50,63,80	

Technical data

Model	YCF8-1038	YCF8-1451	YCF8-2258
Rated current In(A)	1,2,3,4,5,6,8,10,12,15, 20,25,30,32	15,20,25,30,32,40,50	40,50,63,80
Fuse size(mm)	10×38	14×51	22×58
Rated working voltage Ue(V)	DC1000	DC1000,DC1500	
Rated short-circuit breaking capacity (KA)	20		
Time constant(ms)	1-3ms		
Operating level	gPV		
Standards	IEC60269-6, UL248-19		

YCF8-1038/1451/2258 DC Fuse

Test method

The agreed time and current of the fuse “gPV”

Rated current of the fuse "gPV" (A)	Agreed time (h)	40-50A	
		Inf	In
In≤63	1	1.13In	1.45In
63<In≤160	2		
160<In≤400	3		
In>400	4		

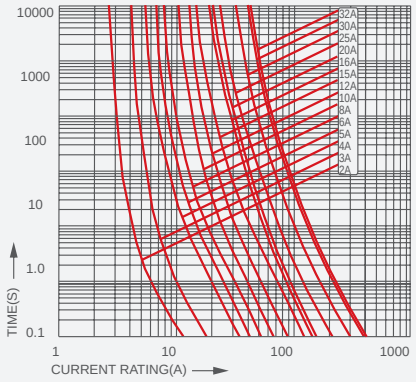
Joule integral table

Model	Rated current (A)	Joule integral $I^2T(A^2S)$	
		Pre-arcing	Total
YCF8-1085	1	0.15	0.4
	2	1.2	3.3
	3	3.9	11
	4	10	27
	5	18	48
	6	31	89
	8	3.1	31
	10	7.2	68
	12	16	136
	15	24	215
	16	28	255
	20	38	392
	25	71	508
	30	102	821
	32	176	976
YCF8-1485	15	330	275
	20	220	578
	25	275	956
	30	380	1160
	32	405	1830
	40	600	2430
	50	850	3050
YCF8-2258	40	750	3450
	50	1020	5050
	63		
	80		

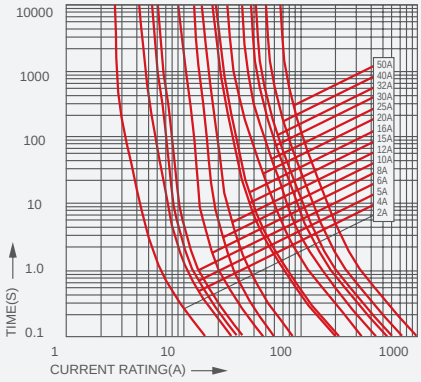
Photovoltaic DC Fuse

YCF8-1038/1451/2258 DC Fuse

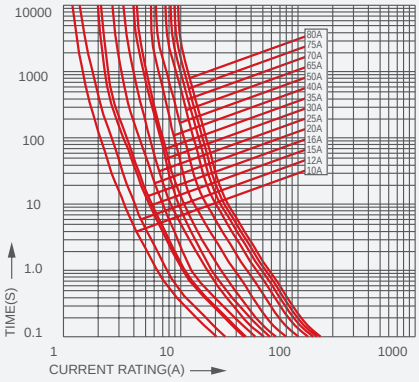
Curve



YCF8-1085 Characteristic Curve



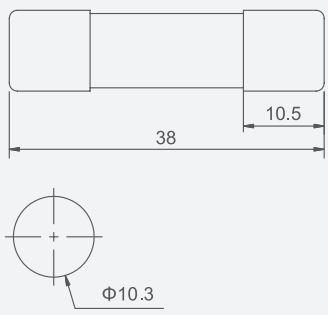
YCF8-1451 Characteristic Curve



YCF8-2258 Characteristic Curve

Link

YCF8-1038



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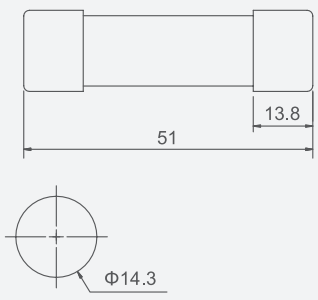

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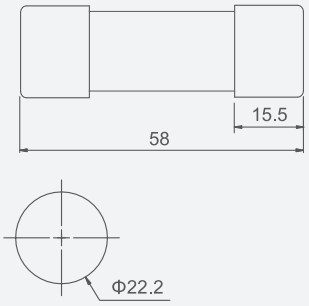


Photovoltaic DC Fuse

YCF8-H Series DC Fuse

General

The YCF8-H series high current fuse has a rated working voltage of DC1500V and a rated current of 500A. Mainly used in battery modules, battery clusters, AC/DC conversion inverters, DC energy storage systems, and high current DC systems.

Standard: IEC60269-6

Type designation

Link

YCF8 - H00 100A DC1000

Model		Size	Rated current	Rated Voltage
YCF8	-	H00	100A	DC1000
Fuse		H00	16-100A	DC1000V
		H1	32-160A	
		H2	160-250A	
		H3	250-400A	
		H1XL	35-200A	DC1500
		H2XL	80-400A	
		H3L	125-500A	

Base

YCF8 - H00B

Model		Size
YCF8	-	H00
Fuse		H00B
		H1B
		H2B
		H3B
		H1XLB
		H2XLB
		H3LB

Technical data

Model							
Fuse specifications	YCF8-H00	YCF8-H1	YCF8-H2	YCF8-H3	YCF8-H1XL	YCF8-H2XL	YCF8-H3XL
Breaking capacity (kA)	50kA				30kA		
Time constant (ms)	1-3ms				1-3ms		
Specification of fuse holder	YCF8-H00B	YCF8-H1B	YCF8-H2B	YCF8-H3B	YCF8-H1XLB	YCF8-H2XLB	YCF8-H3XLB
Rated working voltage Ue (V)	1-3ms				1500V DC		
Usage Category	gPV				gPV		
Executive Standard	IEC60269-6, UL248-19				IEC60269-6		

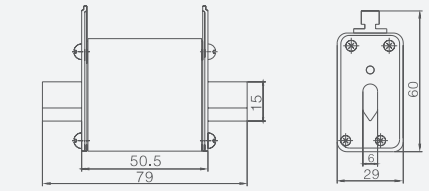
Photovoltaic DC Fuse

YCF8-H Series DC Fuse

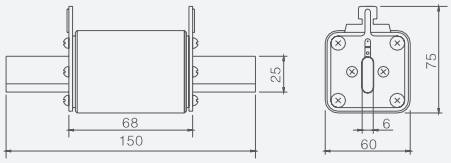
Overall and mounting dimensions(mm)

Model	Adaptation Table	Rated voltage	Rated current	overall dimension/size(mm)				
				A	B	C	E	H
YCF8-H00B	YCF8-H00 NH00	1000V DC	125	119	102	35	23	57
YCF8-H1B	YCF8-H1 NH1	1000V DC	200	208	176	58	32	82
YCF8-H2B	YCF8-H2 NH2	1000V DC	350	224	198	58	35	89
YCF8-H3B	YCF8-H3 NH3	1000V DC	500	239	207	58	40	106

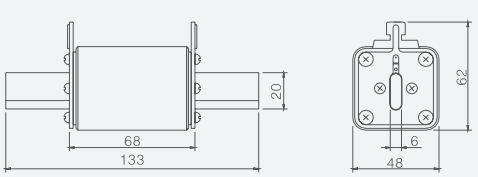
Link

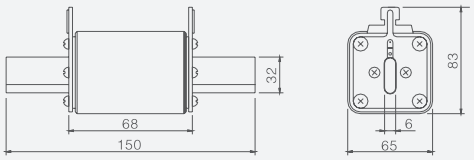


YCF8-H00



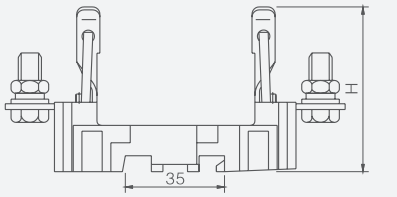
YCF8-H2

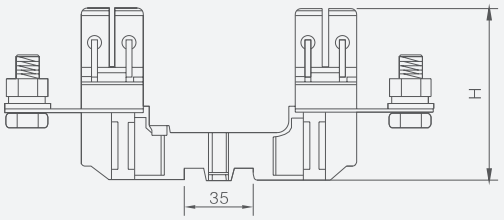


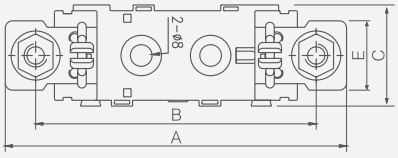


YCF8-H3

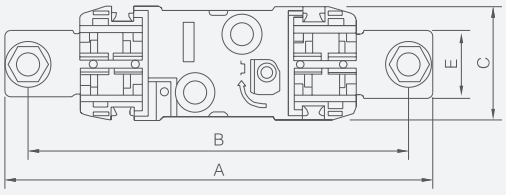
Base







YCF8-H00B



YCF8-1/YCF8-2/YCF8-3

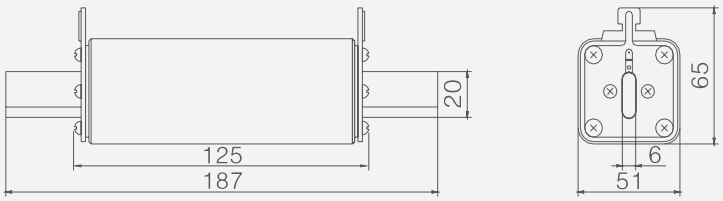
Photovoltaic DC Fuse

YCF8-H Series DC Fuse

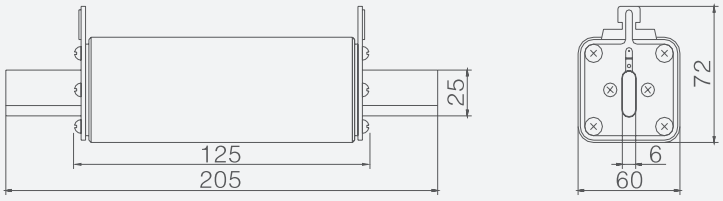
Overall and mounting dimensions(mm)

Model	Adaptation Table	Rated voltage	Rated current	overall dimension/size(mm)				
				A	B	C	E	H
YCF8-H1XLB	YCF8-H1XL	1500V DC	250	247	190	129	52	91
YCF8-H2XLB	YCF8-H2XL	1500V DC	400	278	210	135	63	104
YCF8-H3XLB	YCF8-H3XL	1500V DC	630	300	210	135	63	1058

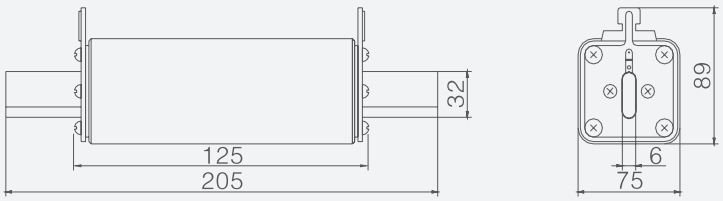
Link



YCF8-H1XL

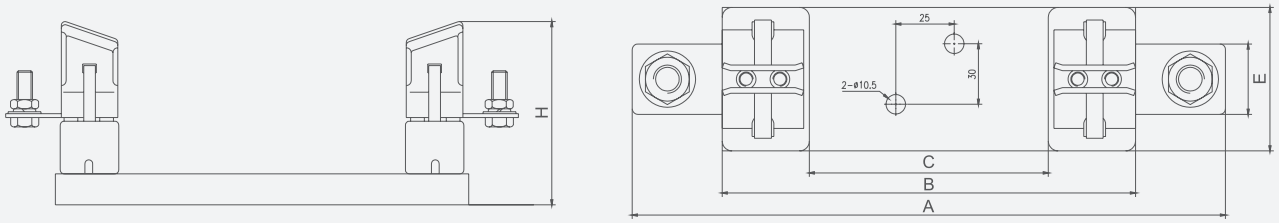


YCF8-H2XL



YCF8-H3XL

Base



Photovoltaic DC Fuse

YCHR8 Series Fuse-type Isolating Switches

General

YCHR8 series fuse-type isolating switches works with NH00 and NH01 type fuses. Has aworking voltage range of 0-500V DC and 0-690V AC with a maximum current of 800A. The working current varies according to size of fuse used.

Features

- UPS for the power supply of computers and servers
- Telecommunication power supply
- Metering and lighting module applications
- Switchboards
- Capacitor banks
- General fuse for power supply networks
- Power supply and generation fuse protection

Operating condition

1. The ambient air temperature should not be higher than +50°C and not lower than -5°C.
2. Humidity: When the maximum temperature is +50°C, the relative humidity of the air does not exceed 50%. Higher relative humidity is allowed at lower temperatures, such as 90% at 20°C. Special measures should be taken against occasional condensation due to temperature changes.
3. The pollution level of the surrounding environment is level 3.
4. The switch should be installed in a place without significant vibration away from hazardous and flammable materials.
5. Has an IP30 rating when closed and IP20 rating when open.

Type designation

YCHR8 - 250 / 2

Model		Shell frame current		Number of poles
YCHR8	-	250	/	2
YCHR8		160(160~400) 250(400~800)		2:2P 3:3P 4:4P

YCHR8 Series Fuse-type Isolating Switches

Technical data

Switch technical parameters

Model	YCHR8-160				YCHR8-250		
Number of poles	2P		2P/3P/4P		2P	2P/3P/4P	
Rated operational voltage Ue AC (V)	/	/	500	690	/	500	690
Rated operational voltage Ue DC (V)	220	500	/	/	500	/	/
Rated operational current Ie (A)	160	125	160	125	250	250	200
Thermal current with fuse-link Ith (A)	160	160	160	160	250	250	250
Utilization category	DC22B	DC22B	ADC22B	ADC21B	DC22B	ADC22B	ADC21B
Rated insulation voltage Ui (V)	1000				1000		
Rated impulse withstand voltage Uimp (kV)	8				8		
Rated conditional short circuit current (kArms)	50				50		
Rated frequency (Hz)	50/60				50/60		
Power loss(Ith)without fuselink,per phase (W)	3.5				7.5		
Electrical durability	200				200		
Mechanical durability	1400				1400		
Degree of protection from the front according to IEC60529	IP20				IP20		
	IP30				IP30		

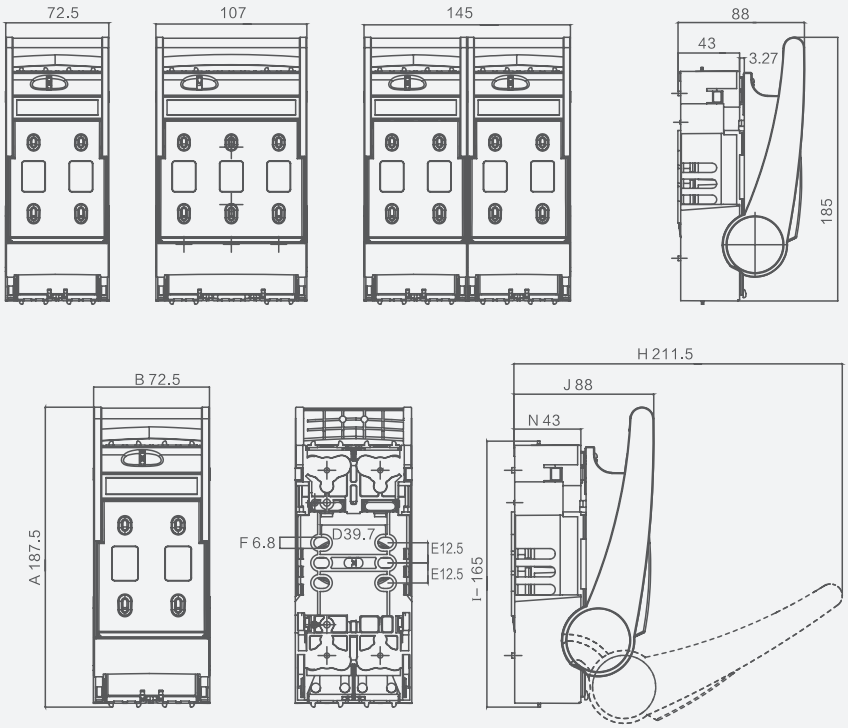
The relationship between switches and fuses

Agreed heating current (A)	Fuse link model	Rated working voltage (V)	Optional fuse (A)
YCHR8-160	NT00	1-220VDC	4, 6, 10, 16, 20, 25, 32, 35, 40, 50, 63, 80, 100, 125, 160
		220-500VDC	4, 6, 10, 16, 20, 25, 32, 35, 40, 50, 63, 80, 100, 125
		220-400VAC	4, 6, 10, 16, 20, 25, 32, 35, 40, 50, 63, 80, 100, 125, 160
		400-690VAC	4, 6, 10, 16, 20, 25, 32, 35, 40, 50, 63, 80, 100, 125
YCHR8-250	NT1	1-500VDC	80, 100, 125, 160, 200, 225, 250
		220-400VAC	80, 100, 125, 160, 200, 225, 250
		400-690VAC	80, 100, 125, 160, 200, 225

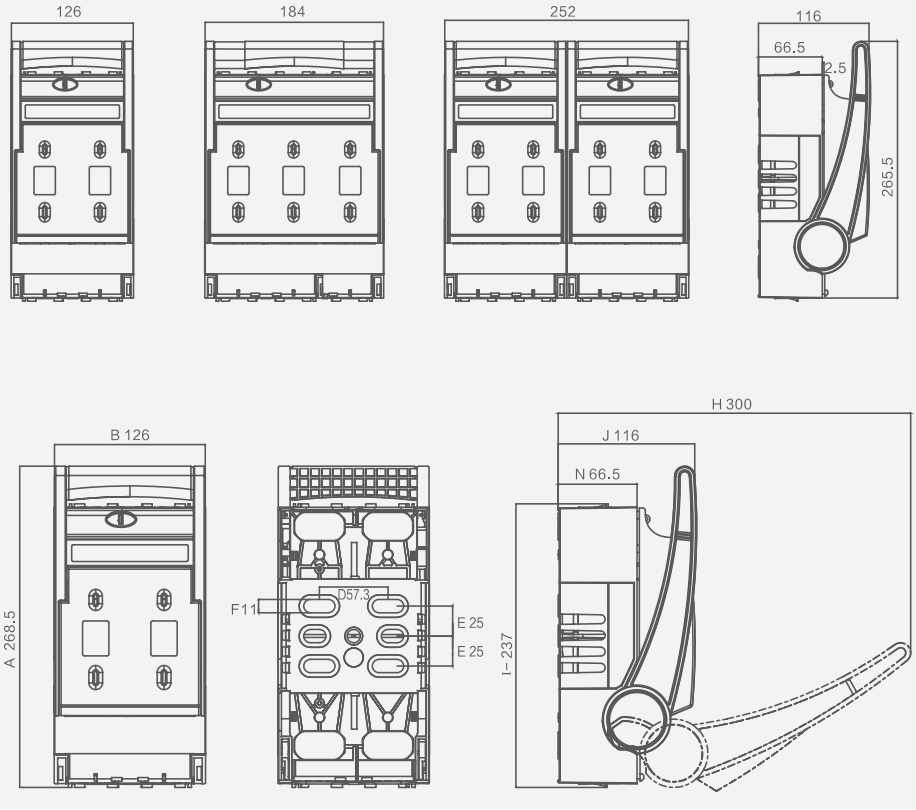
YCHR8 Series Fuse-type Isolating Switches

Overall and mounting dimensions(mm)

YCHR8-160



YCHR8-250



Photovoltaic DC Fuse

YCHR8 Series Fuse-type Isolating Switches

Size	SpecificationsOptional fuse (A)	
	160A	250A
A	187.5	268.5
B	72.5	126
D	39.7	57.3
E	12.5	25
F	6.8	11
H	211.5	300
J	88	116
I	166	237
N	43	66.5

Photovoltaic DC Surge Protective Device

YCS8 Series DC Surge Protective Device

CNC
ELECTRIC

Photovoltaic DC Surge Protective Device

YCS8-□ Photovoltaic DC SPD

General

YCS8-□ series is applicable to photovoltaic power generation system. When surge overvoltage occurs in the system due to lightning stroke or other reasons, the protector immediately conducts in nanosecond time to introduce the surge overvoltage to the earth, thus protecting the electrical equipment on the grid.

Features

- T2/T1+T2 surge protection has two types of protection, which can can meet Class I (10/350 μS waveform) and Class II (8/20 μS waveform) SPD test, and voltage protection level Up ≤ 1.5kV;
- Modular, large-capacity SPD, maximum discharge current Imax=40kA;
- Pluggable module;
- Based on zinc oxide technology, it has no power frequency aftercurrent and fast response speed, up to 25ns;
- The green window indicates normal, and the red indicates a defect, and the module needs to be replaced;
- Dual thermal disconnection device provides more reliable protection;
- Remote signal contacts are optional;
- Its surge protection range can be from power system to terminal equipment;
- It is applicable to direct lightning protection and surge protection of DC systems such as PV combiner box and PV distribution cabinet.

Type designation

YCS8 - S I+II 40 PV 2P DC600

Model	Types	Test category	Maximum discharge current	Use category	Number of poles	Maximum continuous working voltage	Functions
YCS8 -	S	I+II	40	PV	2P	DC600	/
YCS8	/: Standard type S: Upgraded type	I+II: T1+T2 II: T2	40: 40KA	PV: Photovoltaic/ direct-current	2: 2P 3: 3P	DC600 DC1000 DC1500	/: Non communication R: Remote communication

Photovoltaic DC Surge Protective Device

YCS8-□ Photovoltaic DC SPD

Technical data

Model		YCS8							
Standard		IEC61643-31:2018; EN 50539-11:2013+A1:2014							
Test category		T1+T2				T2			
Number of poles		2P		3P		2P		3P	
Maximum continuous working voltage Ucpv		600VDC	1000VDC	1000VDC	1500VDC	600VDC	1000VDC	1000VDC	1500VDC
Maximum discharge current Imax(kA)		40							
Nominal discharge current In(kA)		20							
Maximum impulse current limp(kA)		6.25				/			
Voltage protection level Up(kV)		2.2		3.6	5.6	2.2		3.6	5.6
Response time tA(ns)		≤25							
Remote and indication									
Working status/fault indication		Green/red							
Remote contacts		Optional							
Remote terminal switching capability	AC	250V/0.5A							
	DC	250VDC/0.1A/125VDC 0.2A/75VDC/0.5A							
Remote terminal connection capability		1.5mm²							
Installation and environment									
Working temperature range		-40°C-+70°C							
Allowable working humidity		5%...95%							
Air pressure/altitude		80k Pa...106k Pa/-500m. 2000m							
Terminal torque		4.5Nm							
Conductor cross section(maximum)		35mm²							
Installation method		DIN35 standard din-rail							
Protection degree		IP20							
Shell material		Fire-proof level UL 94 V-0							
Thermal protection		Yes							

Photovoltaic DC Surge Protective Device

YCS8-□ Photovoltaic DC SPD

Technical data

Model		YCS8-S							
Standard		IEC61643-31:2018; EN 50539-11:2013+A1:2014							
Test category		T1+T2				T2			
Number of poles		2P		3P	3P	2P		3P	3P
Maximum continuous working voltage Ucpv		600VDC	1000VDC	1000VDC	1500VDC	600VDC	1000VDC	1000VDC	1500VDC
Maximum discharge current Imax(kA)		40							
Nominal discharge current In(kA)		20							
Maximum impulse current limp(kA)		6.25				/			
Voltage protection level Up(kV)		2.2		3.6	5.6	2.2		3.6	5.6
Response time tA(ns)		≤25							
Remote and indication									
Working status/fault indication		Green/red							
Remote contacts		Optional							
Remote terminal switching capability	AC	250V/0.5A							
	DC	250VDC/0.1A/125VDC 0.2A/75VDC/0.5A							
Remote terminal connection capability		1.5mm²							
Installation and environment									
Working temperature range		-40°C-+70°C							
Allowable working humidity		5%...95%							
Air pressure/altitude		80k Pa...106k Pa/-500m. 2000m							
Terminal torque		4.5Nm							
Conductor cross section(maximum)		35mm²							
Installation method		DIN35 standard din-rail							
Protection degree		IP20							
Shell material		Fire-proof level UL 94 V-0							
Thermal protection		Yes							

YCS8-□ Photovoltaic DC SPD

Failure release device, Alarm release device

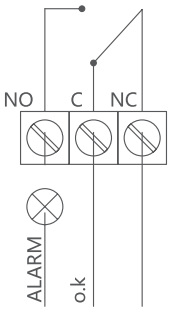
Failure release device

The surge protective device is equipped with a failure protection device. When the protector is broken down due to overheating, the failure protection device can automatically disconnect it from the power grid and give an indication signal.

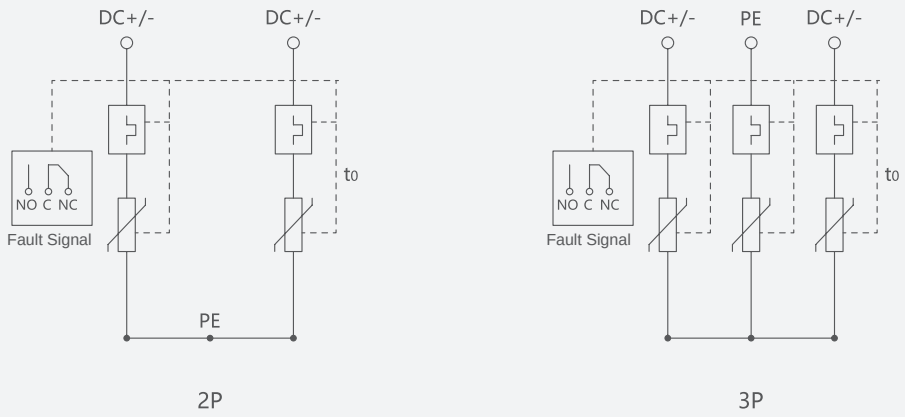
The window displays green when the protector is normal, and red when the protector fails.

Alarm remote signaling device

The protector can be made into a variety with remote signaling contacts. The remote signaling contacts have a set of normally open and normally closed contacts. When the protector works normally, the normally closed contacts are connected. If one or more modules of the protector fail, the contact will change from normally open to normally closed, and the normally open contact will work and send a fault message.

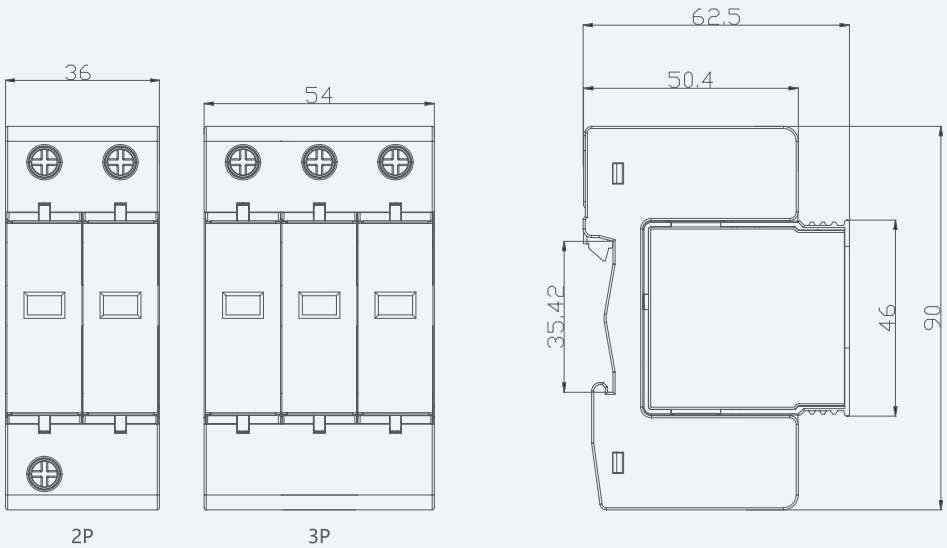


Wiring diagram



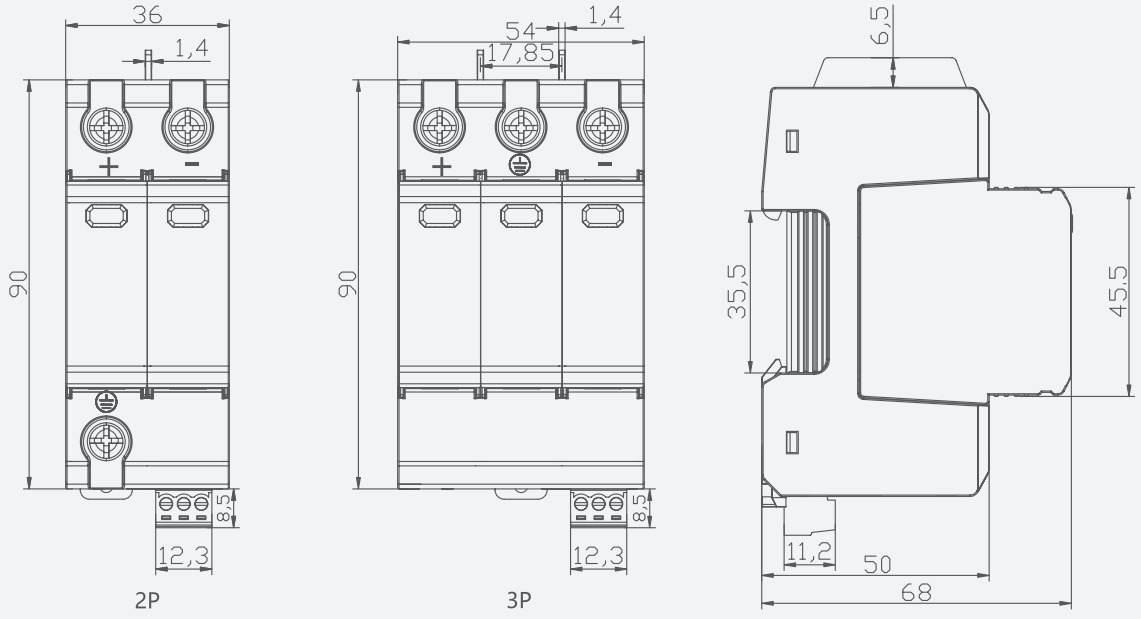
Overall and mounting dimensions(mm)

YCS8

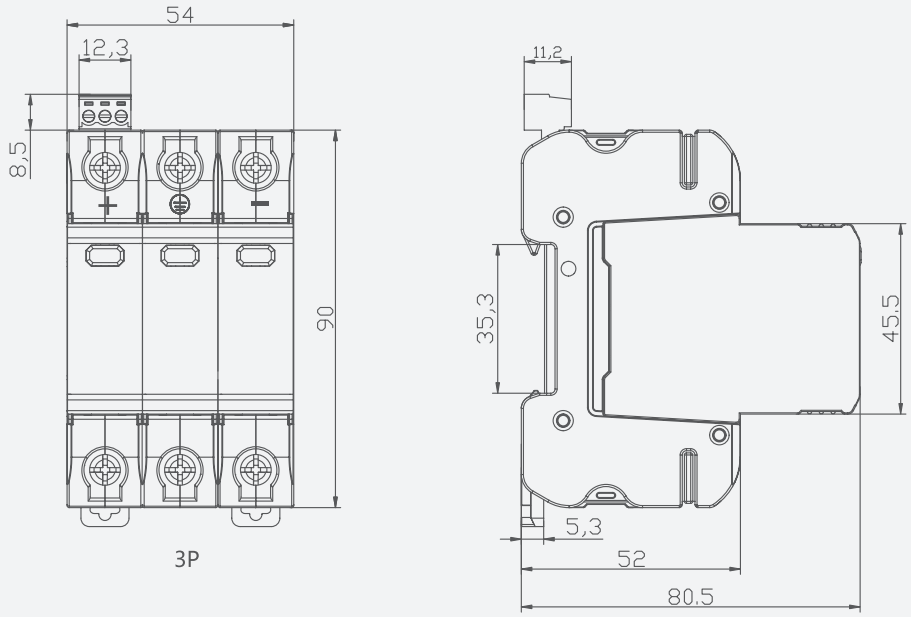


YCS8-□ Photovoltaic DC SPD

YCS8

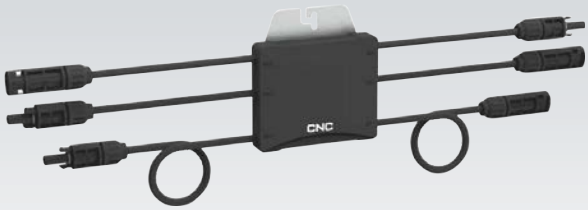


YCS8-S DC1500



Rapid shutdown device

YCRS/YCRP Rapid Shutdown Device



CNC
ELECTRIC

Rapid shutdown device

YCRS Rapid Shutdown Device

General

The YCRS series rapid shutdown device can shut down one or two string modules at maximum, with a maximum circuit current of 55A and a maximum circuit voltage of 1500VDC. It is made of PC+ABS material and has an IP66 protection rating. Multiple interface types are available, including push-through holes, pressure covers,and MC4 terminals. The internal isolation switch is certified by TUV.CE.CB.SAA,and the device is equipped with a waterproof and ventilated valve design to prevent condesation inside the housing.An advanced temperature sensor is used to detect the highest temperature inside the housing in real-time, and the switch will automatically cut off when the internal temperature exceeds 70 degrees Celsius. This device is suitable for residential, industrial,and commercial photovoltaic systems.

Cause

Why do photovoltaic power generation systems need to be equipped with fast shutdown devices?The use of rapid shutdown devices in photovoltaic (PV) systems has become increasingly important due YCRS Rapid Shutdown Device YCRS Rapid Shutdown Deviceto concerns about safety in recent years. PV system accidents often result in fires, and 80% of these fires are caused by DC voltage arcing. Additionally, because many distributed PV systems are installed in densely populated areas or near industrial facilities, any accidents or failures can lead to significant losses of life and property. Therefore, many countries require that PV systems be equipped with component-level rapid shutdown devices in order to eliminate DC voltage in emergency situations and protect the safety of firefighting and maintenance personnel, as well as to ensure the overall safety of the system. In the event of a fire or other emergency, maintenance personnel can quickly disconnect each component by closing the YCRS device and eliminating the DC voltage, thus protecting the safety of firefighting and maintenance personnel.

Type designation

YCRS - 50 2 MC4

Enterprise code		Rated current	Wiring mode	Joint type
YCRS	-	50	2	MC4
Firefighter safety switch		13: 13A 20: 20A 25: 25A 40: 40A 50: 50A	2 4 4B 6 8 10 12 14 16 18 20	MC4:MC4 Joint /: No

Note: RP Rapid Shutdown Switch/Panel

Rapid shutdown device

YCRS Rapid Shutdown Device

Technical data

Model	YCRS-2/4/4B	YCRS-6/8	YCRS-10	YCRS-12~20 Large
String voltage(VDC)	300~1500	300~1500	300~1500	300~1500
String current A	9~55	9~55	9~55	9~55
Return circuit	1/2	3-4-05	3-4-05	6-8-10
Isolation switch circuit connection method	2/4/4B	6/8	10	12-16-20
Working voltage	100Vac-270Vac	100Vac-270Vac	100Vac-270Vac	100Vac-270Vac
Rated voltage	230Vac	230Vac	230Vac	230Vac
Rated current	30mA	30mA	30mA	60mA
Starting (loading) current	100mA(AVG)	100mA(AVG)	100mA(AVG)	200mA(AVG)
Action current	300mA(Max)	300mA(Max)	300mA(Max)	600mA(Max)
Contact action conditions	24Vdc-300mA(Max)	24Vdc-300mA(Max)	24Vdc-300mA(Max)	24Vdc-300mA(Max)
Working temperature	-20°C-+50°C	-20°C-+50°C	-20°C-+50°C	-20°C-+50°C
Maximum temperature before automatic shutdown	+70°C	+70°C	+70°C	+70°C
Storage temperature	-40°C-+85°C	-40°C-+85°C	-40°C-+85°C	-40°C-+85°C
Protection degree	IP66	IP66	IP66	IP66
Overcurrent protection	II	II	II	II
Authentication	CE	CE	CE	CE
Standard	EN60947-1&3	EN60947-1&3	EN60947-1&3	EN60947-1&3
Mechanical life	10000	10000	10000	10000
Load operands(PV1)	>1500	>1500	>1500	>1500

Rapid shutdown device

YCRS Rapid Shutdown Device

Current/Voltage category parameter table(DC-PV1)

Data of ERS refer to built-in DC isolators. Data according to IEC60947-3(ed.3.2):2015,UL508i.Utilization category DC-PV1.					Pole number	Circuit	Model
600V	800V	1000V	1200V	1500V			
32	26	13	10	5	2	1	YCRS-13 2
40	30	20	12	6	2	1	YCRS-20 2
55	40	25	15	8	2	1	YCRS-25 2
/	50	40	30	20	2	1	YCRS-40 2
/	55	50	40	30	2	1	YCRS-50 2
32	26	13	10	5	4	2	YCRS-13 4
40	30	20	12	6	4	2	YCRS-20 4
55	40	25	15	8	4	2	YCRS-25 4
/	50	40	30	20	4	2	YCRS-40 4
/	55	50	40	30	4	2	YCRS-50 4
32	26	13	10	5	4	1	YCRS-13 4B
40	40	40	30	20	4	1	YCRS-20 4B
/	/	55	40	30	4	1	YCRS-25 4B
/	/	/	/	45	4	1	YCRS-40 4B
/	/	/	/	50	4	1	YCRS-50 4B
32	26	13	10	5	6	3	YCRS-13 6
40	30	20	12	6	6	3	YCRS-20 6
55	45	25	15	8	6	3	YCRS-25 6
/	50	40	30	20	6	3	YCRS-40 6
/	55	50	40	30	6	3	YCRS-50 6
32	26	13	10	5	8	4	YCRS-13 8
40	30	20	12	6	8	4	YCRS-20 8
55	40	25	15	8	8	4	YCRS-25 8
/	50	40	30	20	8	4	YCRS-40 8
/	55	50	40	30	8	4	YCRS-50 8
32	26	13	10	5	10	5	YCRS-13 10
40	30	20	12	6	10	5	YCRS-20 10
55	40	25	15	8	10	5	YCRS-25 10
/	50	40	30	20	10	5	YCRS-40 10
/	55	50	40	30	10	5	YCRS-50 10
32	26	13	10	5	12	6	YCRS-13 12
40	30	20	12	6	12	6	YCRS-20 12
55	40	25	15	8	12	6	YCRS-25 12
/	50	40	30	20	12	6	YCRS-40 12
/	55	50	40	30	12	6	YCRS-50 12
32	26	13	10	5	14	6	YCRS-13 14
40	30	20	12	6	14	6	YCRS-20 14
55	40	25	15	8	14	6	YCRS-25 14
/	50	40	30	20	14	6	YCRS-40 14
/	55	50	40	30	14	6	YCRS-50 14

Note: RP Rapid Shutdown Switch/Panel

Rapid shutdown device

YCRS Rapid Shutdown Device

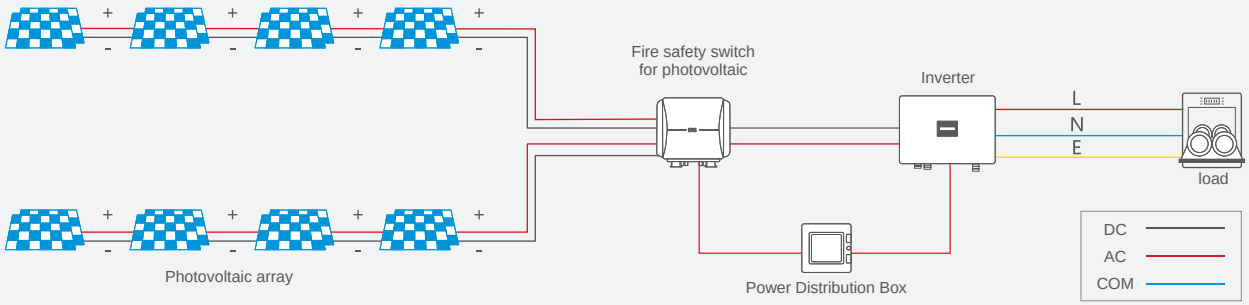
Current/Voltage category parameter table(DC-PV1)

Data of ERS refer to built-in DC isolators. Data according to IEC60947-3(ed.3.2):2015,UL508i.Utilization category DC-PV1.					Pole number	Circuit	Model
600V	800V	1000V	1200V	1500V			
32	26	13	10	5	16	8	YCRS-13 16
40	30	20	12	6	16	8	YCRS-20 16
55	40	25	15	8	16	8	YCRS-25 16
/	50	40	30	20	16	8	YCRS-40 16
/	55	50	40	30	16	8	YCRS-50 16
32	26	13	10	5	18	9	YCRS-13 18
40	30	20	12	6	18	9	YCRS-20 18
55	40	25	15	8	18	9	YCRS-25 18
/	50	40	30	20	18	9	YCRS-40 18
/	55	50	40	30	18	9	YCRS-50 18
32	26	13	10	5	20	10	YCRS-13 20
40	30	20	12	6	20	10	YCRS-20 20
55	40	25	15	8	20	10	YCRS-25 20
/	50	40	30	20	20	10	YCRS-40 20
/	55	50	40	30	20	10	YCRS-50 20

Note: RP Rapid Shutdown Switch/Panel

Sketch map

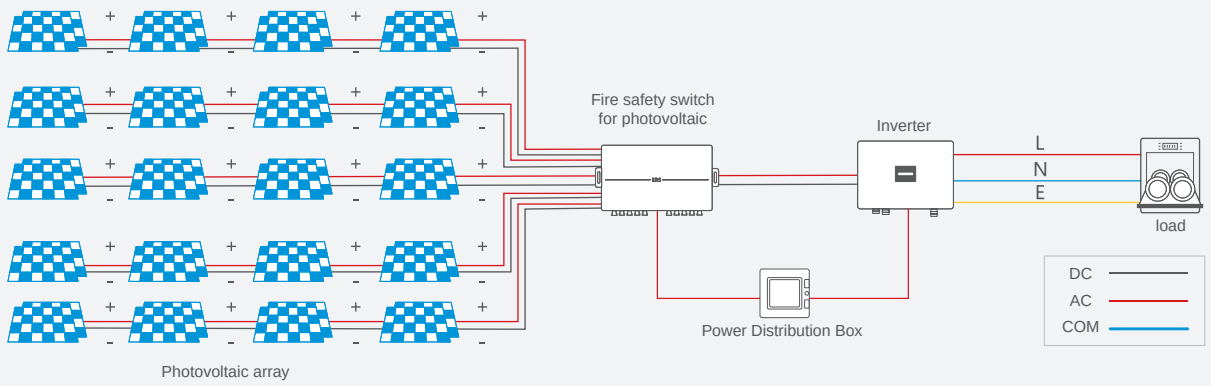
YCRS-2/4P/4B serie



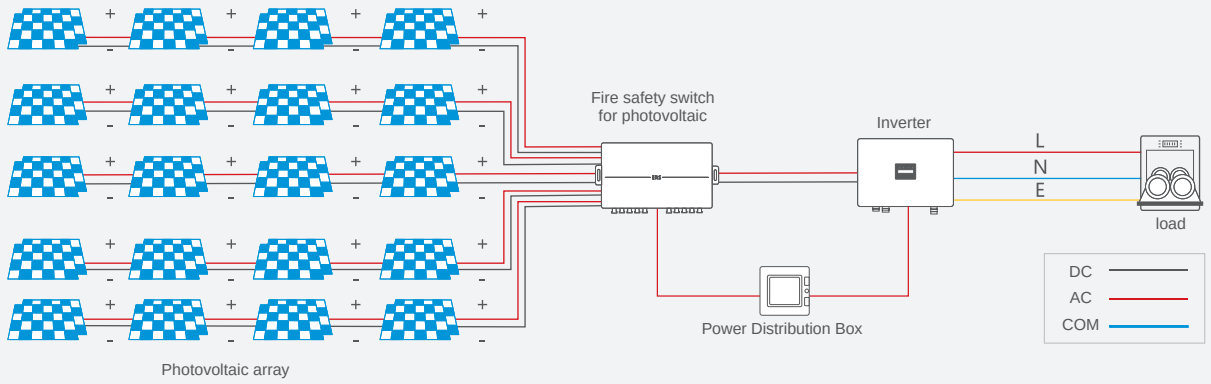
Rapid shutdown device

YCRS Rapid Shutdown Device

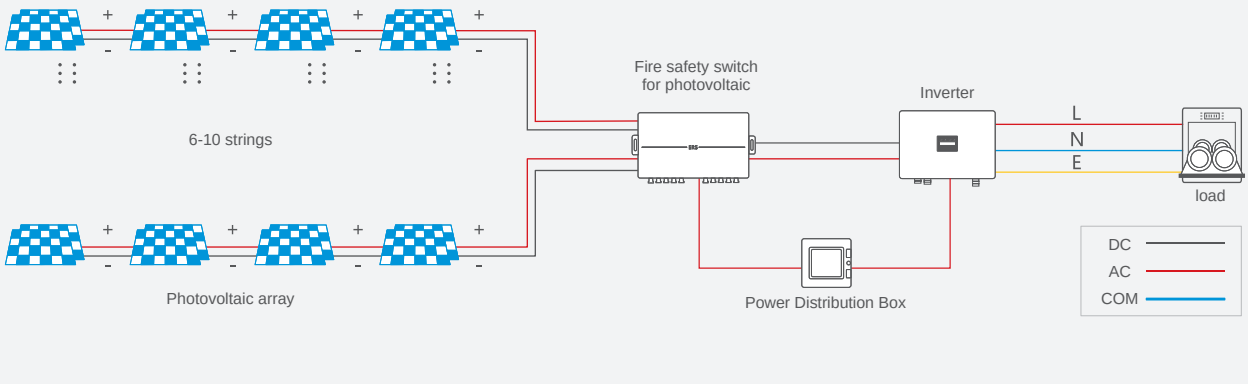
YCRS-2/4/4B series



YCRS-10 series



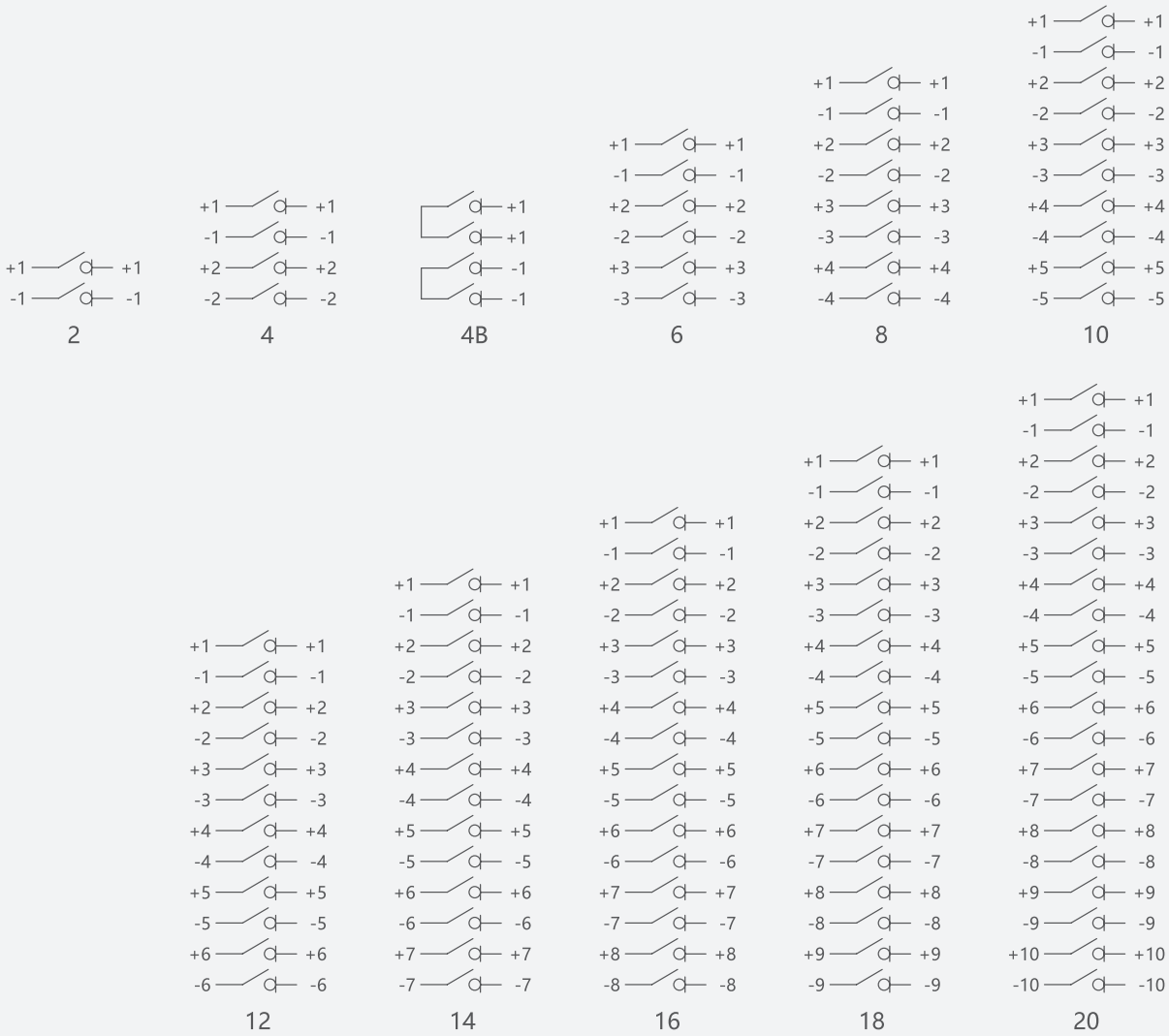
YCRS-12~20 series



Rapid shutdown device

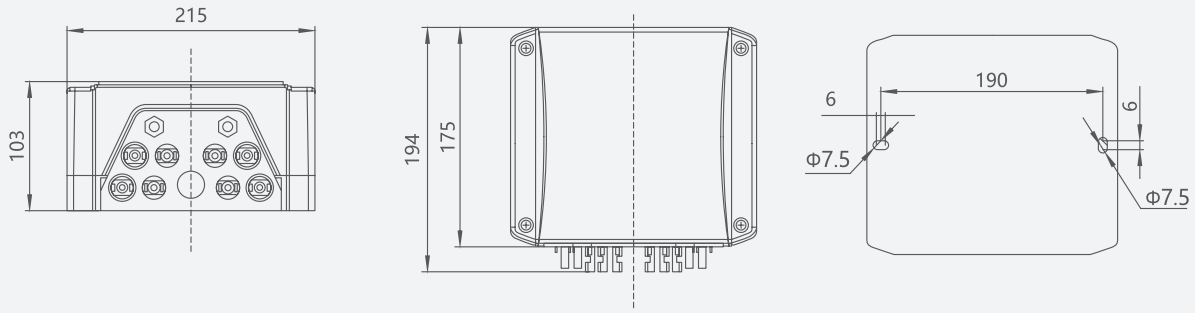
YCRS Rapid Shutdown Device

Wiring Diagram



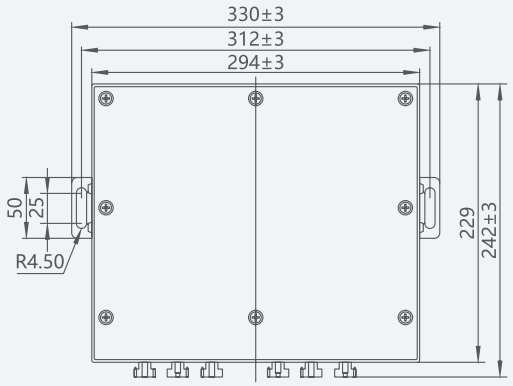
Overall and mounting dimensions(mm)

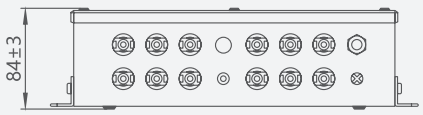
2P/4P



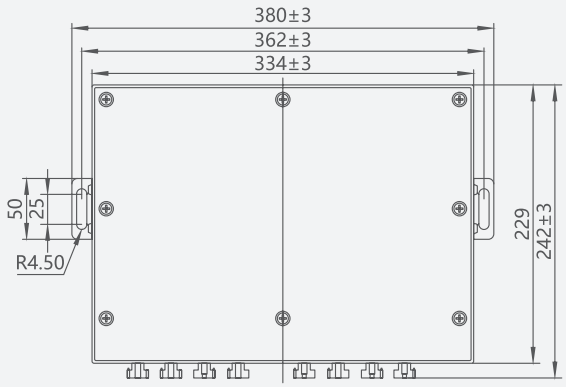
YCRS Rapid Shutdown Device

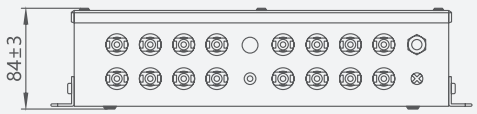
6P



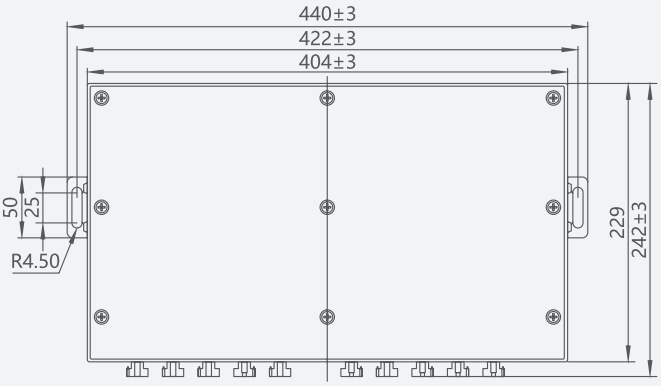


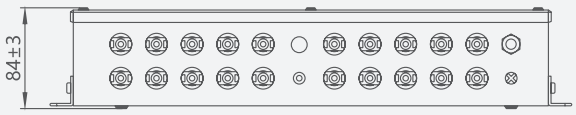
8P





10P

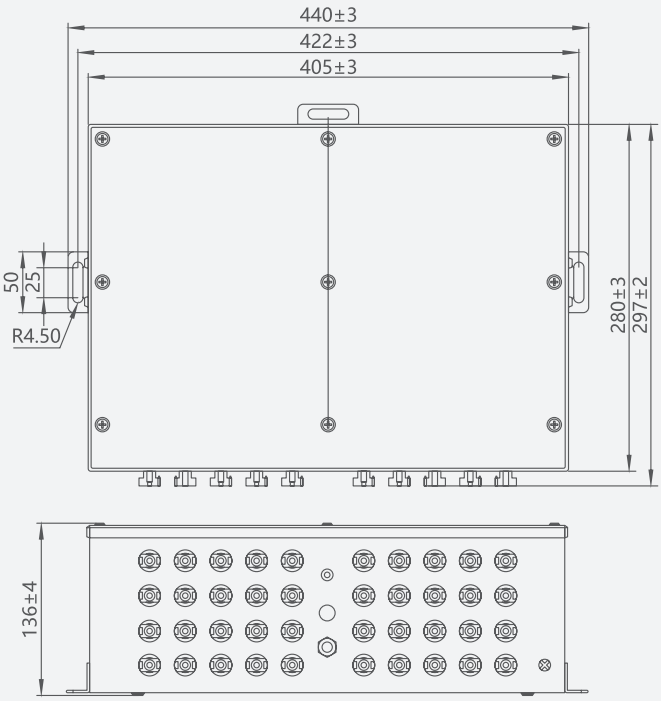




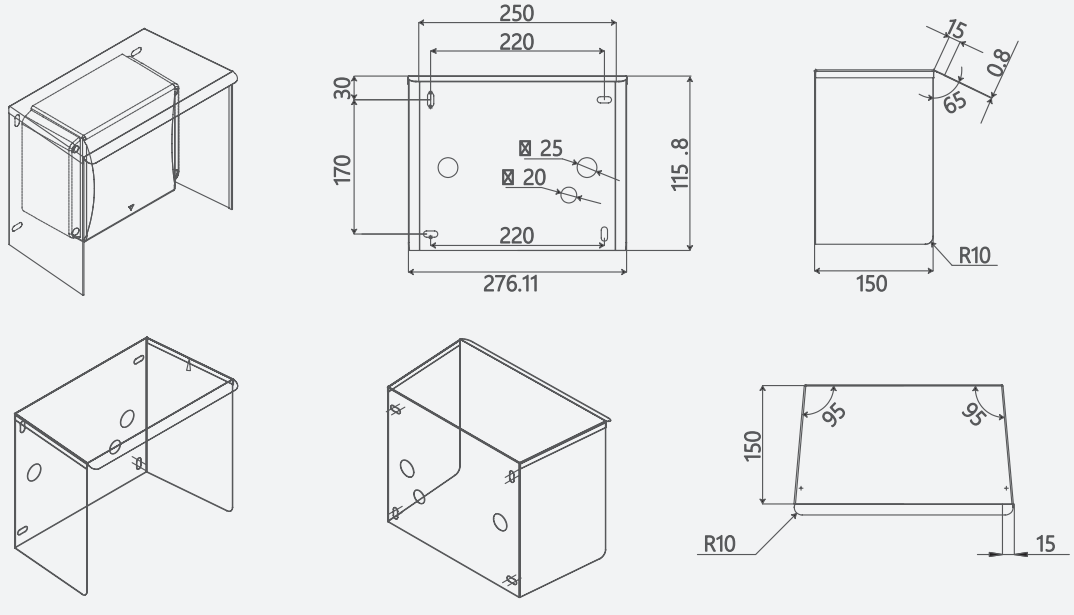
Rapid shutdown device

YCRS Rapid Shutdown Device

12~20P



Note: the fire safety switch cannot be installed in the place with direct sunlight, and the sun visor is recommended.



The specific specifications are subject to the specific product packaging.

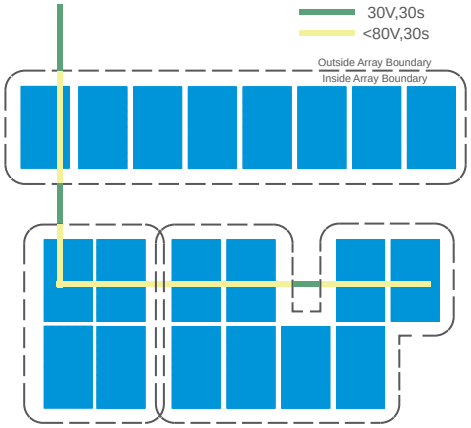
Rapid shutdown device

YCRP-□C Rapid Shutdown Device

General

The component-level rapid shutdown PLC control box is a device that cooperates with the component-level fire rapid shutdown actuator to form the photovoltaic DC side quick shutdown system, and the device conforms to the American National Electrical Code NEC2017&NEC2020 690.12 for rapid shutdown of photovoltaic power stations. The specification requires that the photovoltaic system on all buildings, and the circuit beyond 1 foot (305 mm) from the photovoltaic module array, must drop to below 30 V within 30 seconds after the rapid shutdown start; The circuit within 1 foot (305 mm) from the PV module array must drop to below 80V within 30 seconds after the fast shutdown start. The circuit within 1 foot (305 mm) from the PV module array must drop to below 80V within 30 seconds after the rapid shutdown start.

The component-level fire rapid shutdown system has automatic power off and reclosing functions. On the basis of meeting the rapid shutdown function requirements of NEC2017&NEC2020 690.12, it can maximize the power generation of the photovoltaic power generation system and improve the power generation rate. When the mains power is normal and there is no emergency stop demand, the module level fast shutdown PLC control box will send a closing command to the fast shutdown actuator through the photovoltaic power line to connect each photovoltaic panel; When the mains power is cut off or the emergency stop is started, the component-level rapid shutdown PLC control box will send the disconnection command to the rapid shutdown actuator through the photovoltaic power line to disconnect each photovoltaic panel.



Features

- Meet the requirements of NEC2017&NEC2020 690.12;
- MC4 quick connection terminal quick installation without opening the cover;
- Integrated design, without additional distribution box;
- Wide operating temperature adaptability -40~+85 °C;
- Compatible with SUNSPEC rapid shutdown protocol;
- Support PSRSS rapid shutdown protocol.

Type designation

YCRP - 15 C - S

Model		Rated current	Usage		DC input
YCRP	-	15	C	-	S
YCRP		15: 15A 25: 25A	C: Control box (Use with YCRP)		S: Single D: Dual

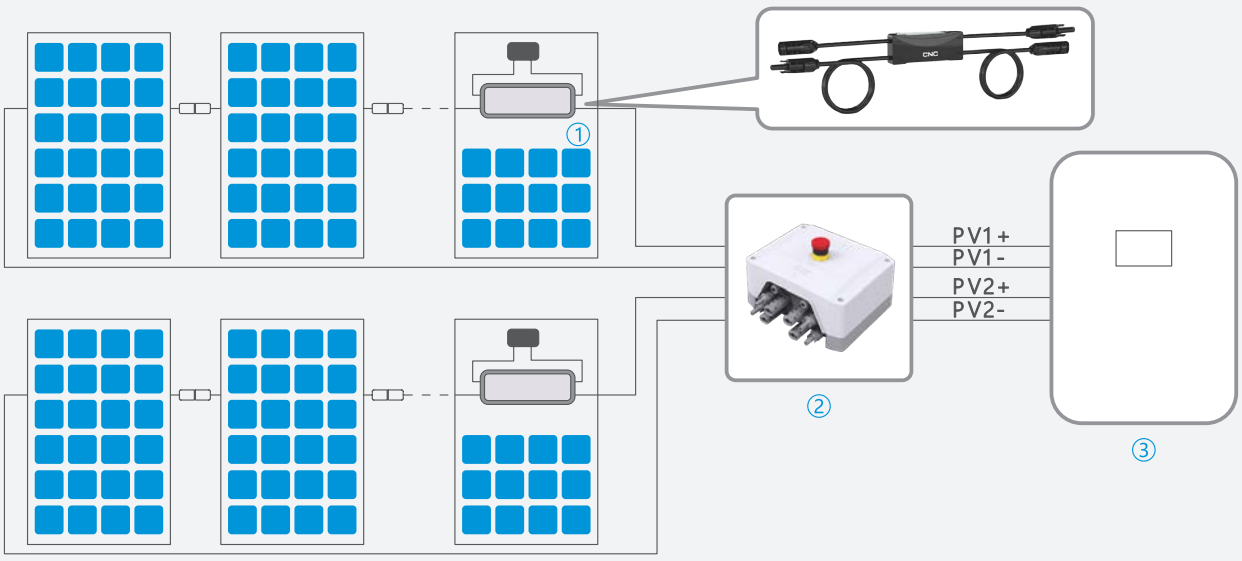
Rapid shutdown device

YCRP-□C Rapid Shutdown Device

Technical data

Model	YCRP-□C-S	YCRP-□C-D
Maximum input current(A)	15,25	
Input voltage range(V)	85~275	
Maximum system voltage(V)	1500	
Working temperature(°C)	-40~85	
Protection degree	IP68	
Maximum number of PV panel strings supported	1	2
Maximum number of PV panels supported per string	30	
Connection terminal type	MC4	
Communication type	PLC	
Over-temperature protection function	Yes	

Sketch map



① Component-level fast shutdown actuator ② Rapdi shutdown PLC controller ③ PV inverter

YCRP Rapid Shutdown Device

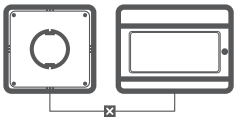
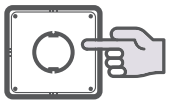
General

Rapid shutdown switch YCRP series is a cost-effective rapid shutdown device; through one-button operation, the DC high voltage is limited to the roof or near the components, and in case of fire and other emergency situations, the personal safety of rescuers is protected to a certain extent to avoid electric shock accidents.

Features

- Shutdown when ambient temperature exceeds 85°C;
- Ultra-thin size perfectly matches the module;
- Flame retardant grade: UL94-V0;
- Protection grade: IP68;
- Meet UL standard and SUNSPEC protocol;
- PLC control optional;
- Hook design, convenient and simple installation, saving labor costs.

Shutdown mode

Automatic Shutdown	Manual Shutdown	Manual Shutdown
		
Automatically shutdown the DC power of panels when detecting temperature of the area is higher than 85°C.	In an emergency, firefighters or homeowners can manually turn off the AC power of the distribution box	In an emergency, it can be shut down manually through the Panel Level Rapid Shutdown Controller Box

Type designation

YCRP - 15 P S - S

Model		Rated current	Communication method	DC input	DC input
YCRP	-	15	P	S	S
Rapid shutdown device		15: 15A 21: 21A	P: PLC W: Wifi	S: Single D: Dual	S: Screw type C: Clip type

Note: RP Rapid Shutdown Switch/Panel

Rapid shutdown device

YCRP Rapid Shutdown Device

Technical data

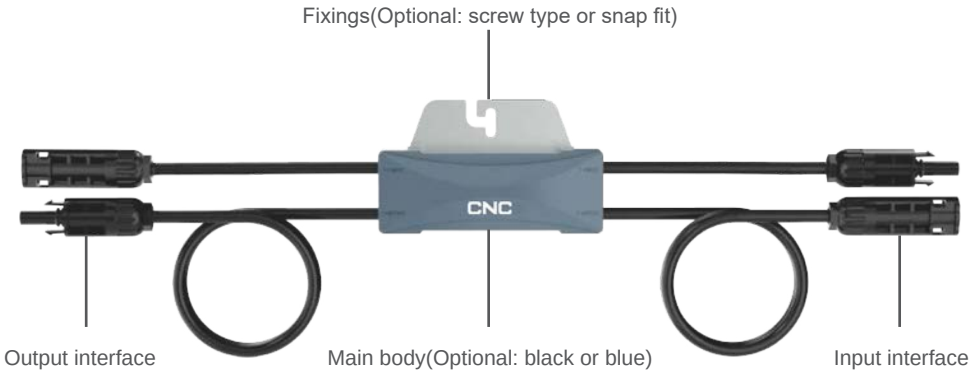
Model	YCRP-□ S	YCRP-□ D
Maximum allowable input voltage	80V	160V
Maximum output voltage	80V	160V
Number of connectable panels	1	2
Maximum input current	15A/21A	
Maximum short-circuit current	15A/21A	
Maximum system voltage	1000V(1500V optional)	
Working temperature	-30°C-+80°C(Automatic shutdown when the temperature exceeds 85 °C	
Operating ambient temperature	-30°C-+80°C	
Supply voltage	PV panel	
Protection degree	IP68	
Fire rating	UL94-V0	
Humidity	0%~90%(20°C)	
Interface	MC4	
Warranty	10 Years	
Panel cable length	280±10mm	
String cable length	1280±10mm	
Communication	PLC	
Standard	UL 1741/NEC 2017 690.12	

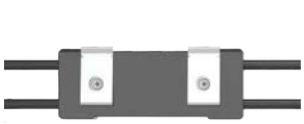
Rapid shutdown device

YCRP Rapid Shutdown Device

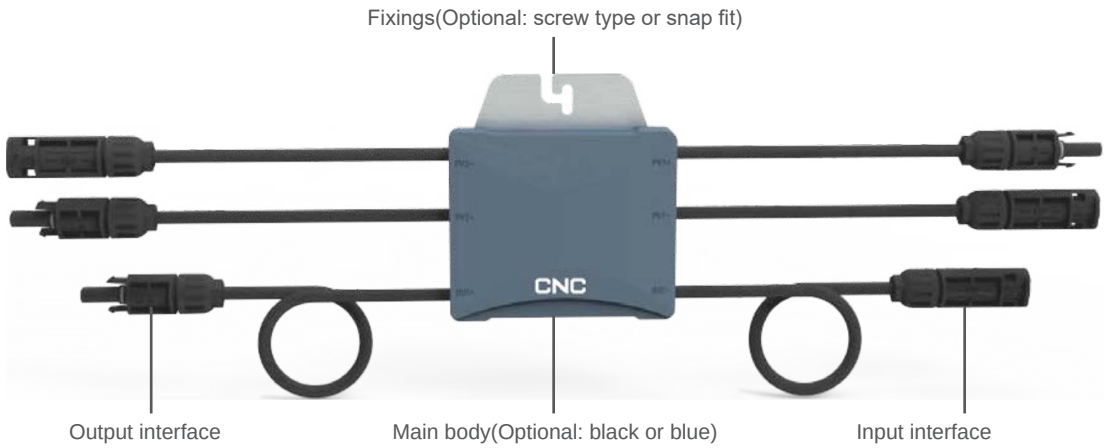
Product details

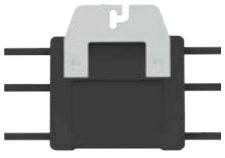
S(Single type)



Main body colors		Product back	
			
Optional: ■ blue	Optional: ■ black	Optional: screw type	Optional: clip type

D(Dual type)



Main body colors		Product back	
			
Optional: ■ blue	Optional: ■ black	Optional: screw type	Optional: clip type

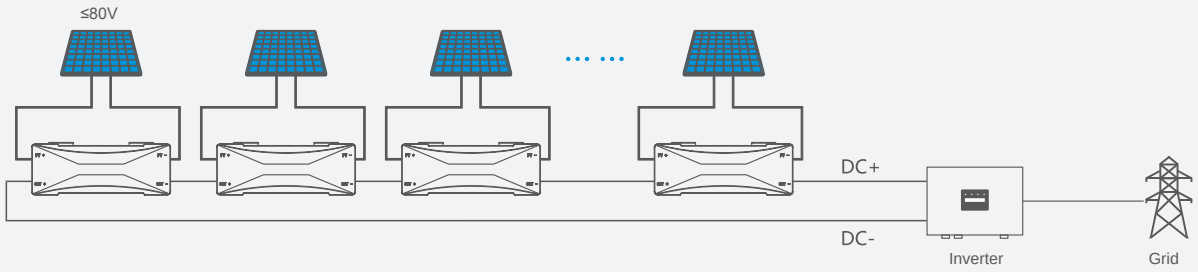
Rapid shutdown device

YCRP Rapid Shutdown Device

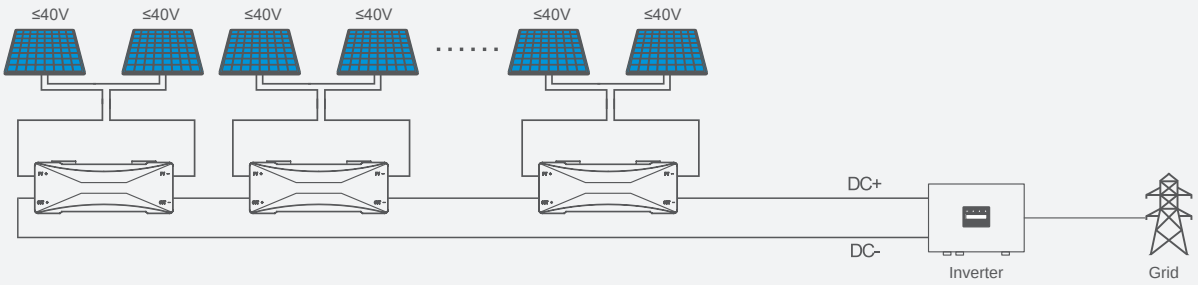
Wiring diagram

The inverter contains SunSpec

When the open-circuit voltage of PV panel is below 80V.

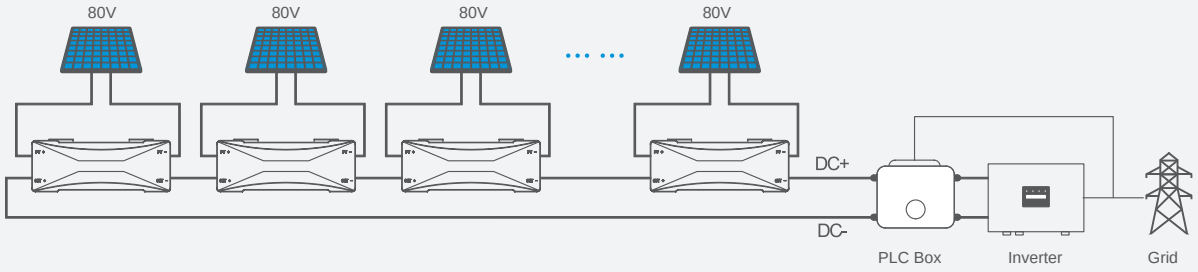


When the open-circuit voltage of PV panel is below 40V.

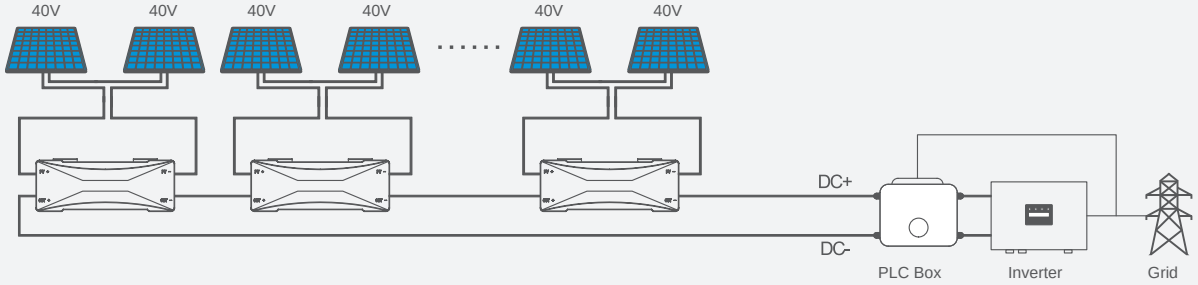


The inverter contains SunSpec

When the open-circuit voltage of PV panel is below 80V.



When the open-circuit voltage of PV panel is below 40V.

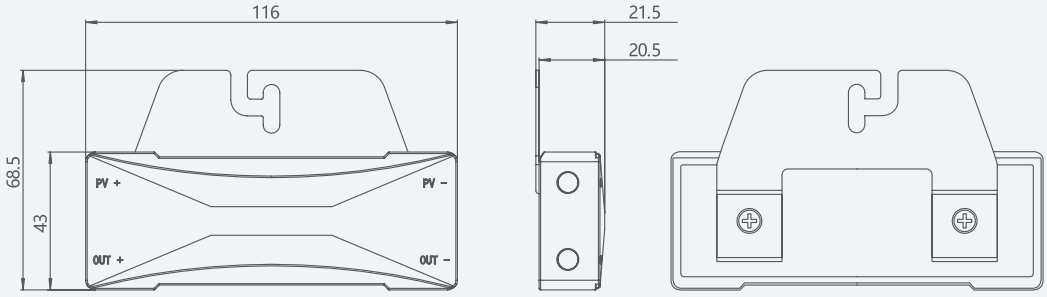


Rapid shutdown device

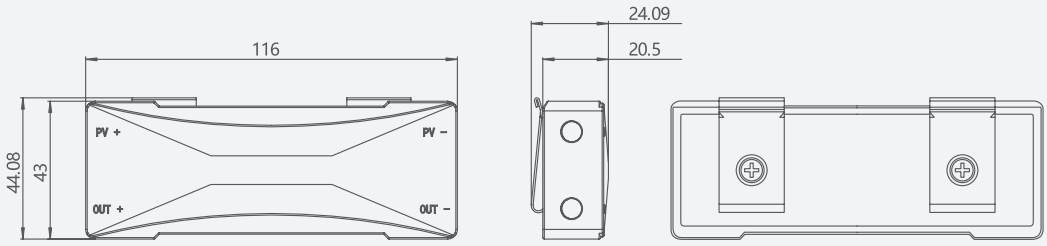
YCRP Rapid Shutdown Device

Overall and mounting dimensions(mm)

Screw type



Clip type



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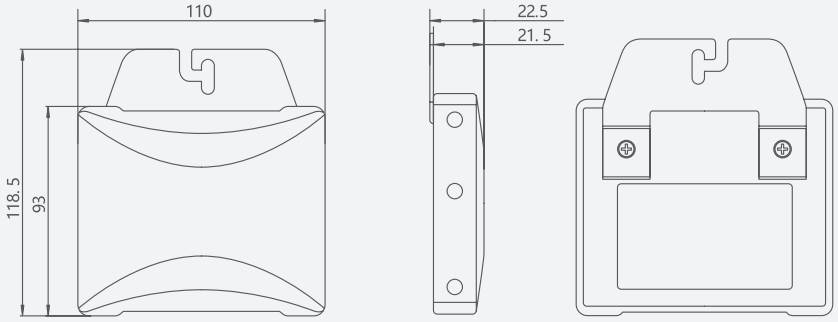

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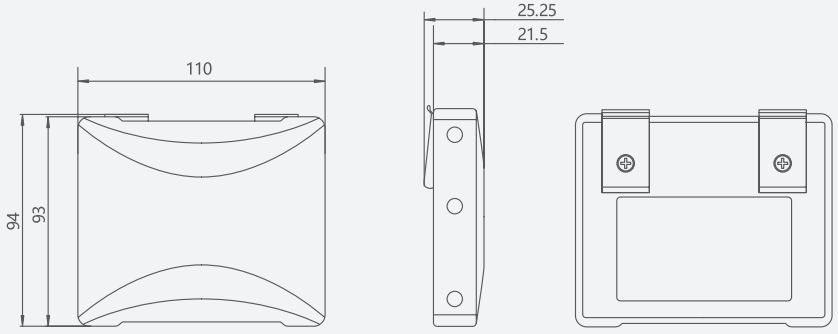


Photovoltaic Inverter

YCDPO Series

CNC
ELECTRIC

Photovoltaic Inverter

YCDPO-I Hybrid Grid Energy Storage Inverter

General

YCDPO-I hybrid grid energy storage inverter, input voltage range DC60~450V, output AC pure sine wave AC230V 50/60HZ, can drive 4~11KW single-phase load.

Features

1. Built-in two MPPT(6KW-11kW).with wide PV input range:60-450VDC
2. Configurable AC/PV output usage time and prioritization
3. YCDPO I senes is suitable for on & off-grid applications
4. Battery egualization function extend life cycleReserved communicatonportRS485,CAN) for BMS
5. Parallel operation up to 6 units
6. Communication WiFi or bluetooth
   Touchable button with large 5” colorful LCD

Type designation

YCDPO I - 4000 / 24

Product name		Rated power(W)		Battery charging voltage
YCDPO I	-	4000	/	24
YCDPO I		4000 6000 8000 11000		24 48

Photovoltaic Inverter

YCDPO-I Hybrid Grid Energy Storage Inverter

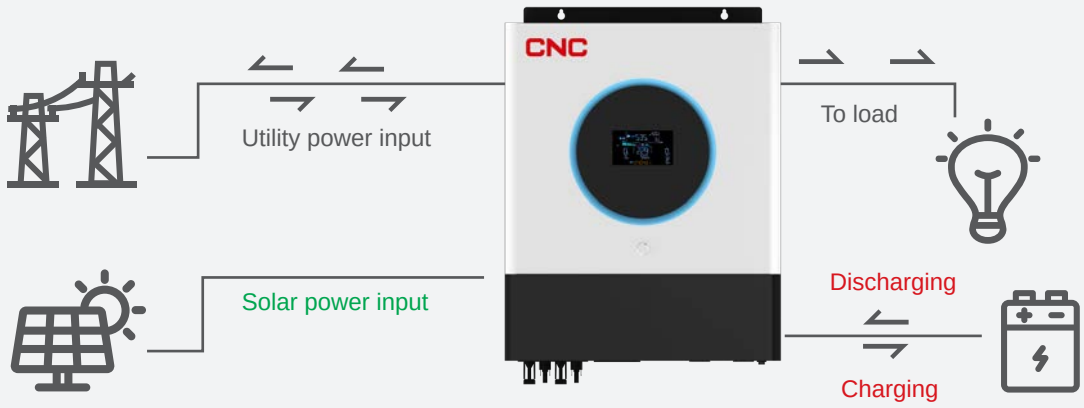
Technical date

Model	YCDPO I-4000-24	YCDPO I-6000-48	YCDPO I-8000-48	YCDPO I-11000-48
Rated Power(W)	4000VA/4000W	6000VA/6000W	8000VA/8000W	11000VA/11000 W
AC INPUT				
Nominal Voltage(VAC)	230VAC			
Voltage range(VAC)	170~280VAC / 90~280VAC			
Frequency range(Hz)	50/60Hz			
AC OUTPUT				
Surge power	8000	12000	16000	22000
Output voltage(VAC)	220/230/240			
Output wave form	Pure sine wave			
Rated Frequency(Hz)	50/60			
Efficiency	93% max			
Transfer time	10ms typical(narrow range);20ms typical (wide range)			
BATTERY				
Nominal DC voltage(VDC)	24	48		
Floating charge voltage(VDC)	27	54		
Overcharge protection(VDC)	31	63		
Battery type	Lithium & Lead-acid			
SOLAR CHARGER & AC CHARGER				
Max.PV array open circuit voltage(VDC)	500			
Max.PV array power(W)	5000	7000	10000W(5000*2)	11000W(5500*2)
MPPT input voltage range@operating(VDC)	60-450			
Max.input current(A)	27		27*2(Max 40A)	
Max.solar charging current(A)	120		150	150
Max.AC charging current(A)	100		120	150
Max.charging current(A)	120		150	150
DISPLAY INTERFACE				
Parallel function	up to 6 units			
Communication	Standard:RS232,CAN&RS485;Optional:WiFi,Bluetooth			
Display	5”colorful LCD			
ENVIRONMENT				
Humidity	5~90%RH (No Condensing)			
Operating Temperature	-10°C to 50°C			
Net Weight(KG)	9	10	18.8	20
Dimensions D x W x H(mm)	434*311*126.5		420*561.6*152.4	

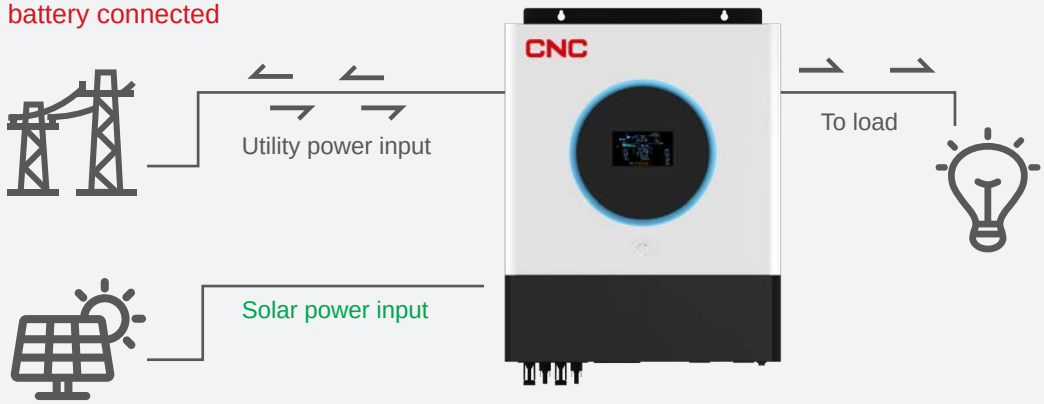
YCDPO-I Hybrid Grid Energy Storage Inverter

Schematic diagram of the product connection

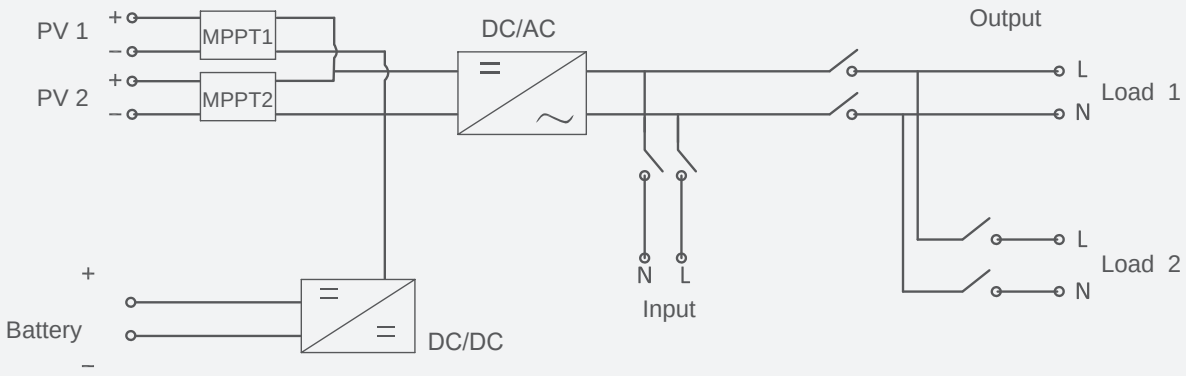
With battery connected



With battery connected



Schematic diagram



Photovoltaic Inverter

YCDPO-II Off-grid Energy Storage Inverter

General

YCDPO-II off-grid energy storage inverter, input voltage range to 450V, output AC pure sine wave AC230V 50/60HZ, can drive 1.6~6KW single-phase load.

Features

1. Pure sine wave MPPT solar inverter Bulit-in 80/120A MPPT solar charger
2. YCDPO II series is suitable for off-grid and on grid(optional) applications.
3. Battery equalization function extend life cycle Reserved communication port(RS485,-CAN) for BMS
4. High PV input voltage range With touch buttons Two outputs for smart load management (4/6KW OPT)

Type designation

YCDP II - 4000 / 24

Product name		Rated power(W)		Battery charging voltage
YCDPO II	-	4000	/	24
YCDPO II		1600 3200 4000 6000		12 24 48

Photovoltaic Inverter

YCDPO-II Off-grid Energy Storage Inverter

Technical date

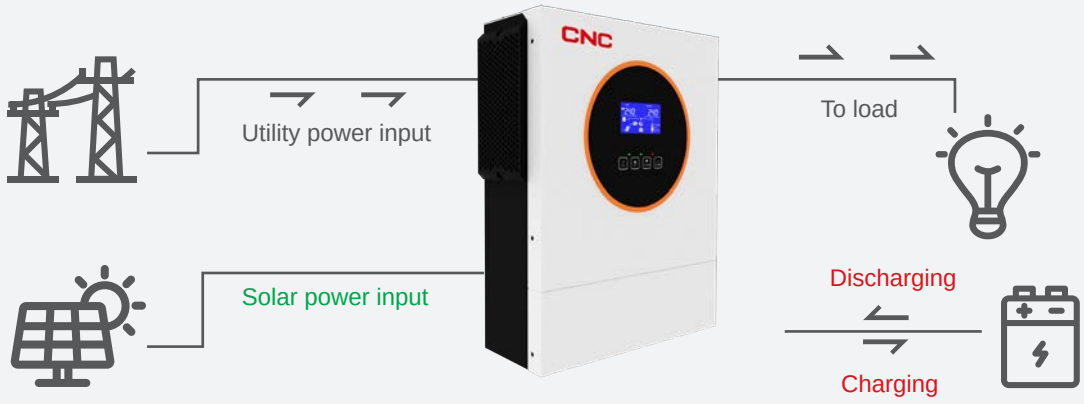
Model	YCDPO II-1600-12	YCDPO II-3200-24	YCDPO II-4000-24	YCDPO II-6000-48
Rated Power	1600VA/1600W	3200VA/3200W	4000VA/4000W	6000VA/6000W
AC INPUT				
Nominal Voltage(VAC)	230VAC			
Voltage Range(VAC)	170-280VAC(For Personal Computers);90-280 VAC(For Home Appliances)			
Frequency range(Hz)	50/60Hz(Auto sensing)			
AC OUTPUT				
Surge power (VA)	3200VA	6400VA	8000VA	12000VA
Output voltage(VAC)	230VAC ± 5%			
Rated frequency	50/60Hz			
Efficiency (Peak)	93%			
Transfer time	10ms(For Personal Computers);20ms(For Home Appliances)			
BATTERY				
Battery Voltage(VDC)	12VDC	24VDC	48VDC	
Floating Charge Voltage(VDC)	13.5VDC	27VDC	54VDC	
Overcharge Protection(VDC)	16VDC	33VDC	63VDC	
Battery type	Lithium/Lead-acid			
SOLAR CHARGER & AC CHARGER				
Maximum PV Array Open Voltage(V)	500			
Maximum PV Array Power	2000W	3500W	5000W	7000W
MPPT voltage range(V)	30~450VDC		60~450VDC	
Maximum input current	15A		20A	27A
MPPT tracker/strings	1			
Maximum solar charge current	80A		120A	
Maximum AC charge current	60A		100A	
Maximum charge current	80A		120A	
PROTECTION & FEATURE				
AC overcurrent	Yes			
AC overvoltage	Yes			
Over temperature protection	Yes			
Smart load management	NO		Yes(optional)	
On Grid	Yes (optional)			
ENVIRONMENT				
Operating Temperature	-10°C ~ 50°C			
Humidity	5~90%RH (No Condensing)			
Altitude	(2000m Derating)			
Dimensions DxWxH(mm)	348*270*95		400*300*115	
Net Weight(KG)	5	5.5	8.5	9
COMMUNICATION				
Interface	Standard:RS232,USB; CAN&RS485; Optional:WiFi,Bluetooth			
Safety standard	EN/IEC62109-1,EN/IEC62109-2			

Photovoltaic Inverter

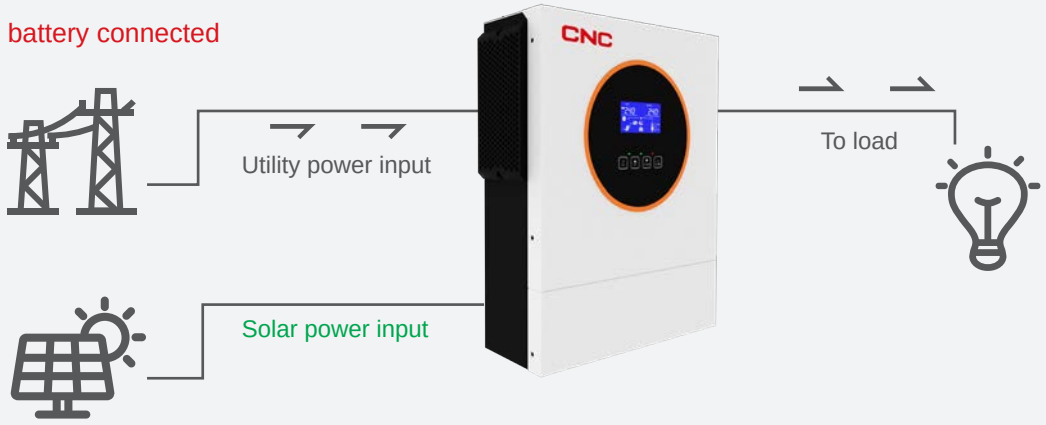
YCDPO-II Off-grid Energy Storage Inverter

Schematic diagram of the product connection

With battery connected



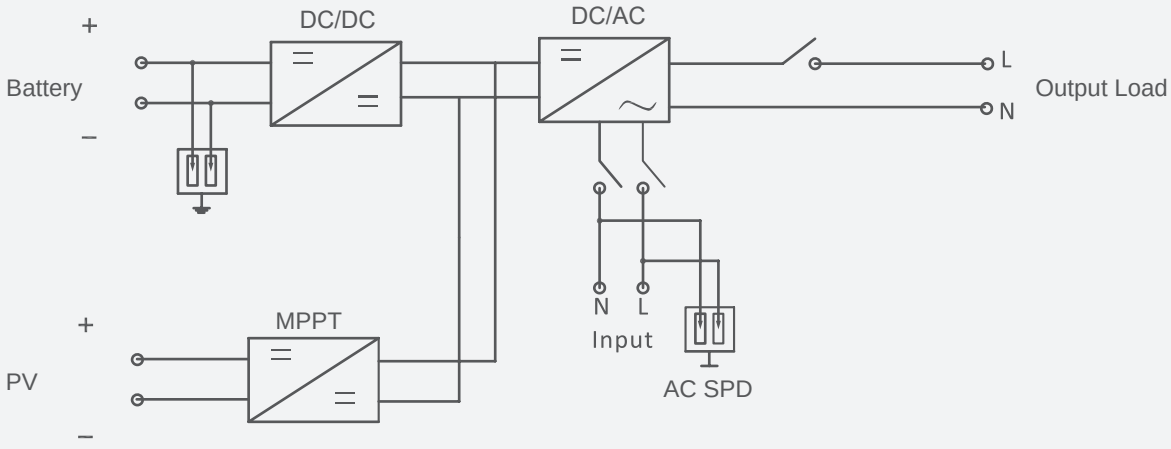
With battery connected



Solar system connection

YCDPO-II Off-grid Energy Storage Inverter

Schematic diagram



Photovoltaic Inverter

YCDPO-III Hybrid Grid Energy Storage Inverter

General

YCDPO-III hybrid grid energy storage inverter, input voltage range DC60~450V, output AC pure sine wave AC230V 50/60HZ, can drive 4~11KW single-phase load.

Features

1. YCDPO III series is suitable for on-grid and off-grid applications.
2. Control and monitor your smart system on the move via our monitoring App and website
3. BMS Communication for lithium battery
4. Accessible through a LCD touch screenand through the web. Two outputs for smart load management
5. Built-in anti-dust kit for harsh environment AC overcurrent,AC overvoltage,overtemperature protection
6. Charge from the grid at off-peak time whenenergy is cheaper and discharge at peak timewhen energy is more expensive.

Type designation

YCDPO III - 6000 / 48

Product name		Rated power(W)		Battery charging voltage
YCDPO III	-	6000	/	48
YCDPO III		4000 6000 8000 11000		48

Photovoltaic Inverter

YCDPO-III Hybrid Grid Energy Storage Inverter

Technical date

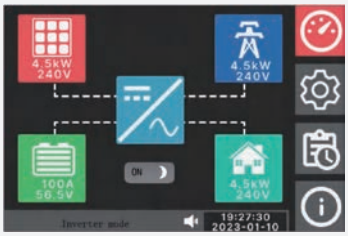
Model	YCDPO III-4000-48	YCDPO III-6000-48	YCDPO III-8000-48	YCDPO III-11000-48
Rated Power(W)	4000VA/4000W	6000VA/6000W	8000VA/8000W	11000VA/11000 W
AC INPUT				
Nominal Voltage(VAC)	230VAC			
Voltage Range(VAC)	170~280VAC / 90~280VAC			
Frequency Range(Hz)	50/60Hz			
AC OUTPUT				
Surge power	8000VA		16000VA	22000VA
Output voltage(VAC)	220VAC/230VAC/240VAC+5%			
Rated frequency	50/60Hz			
Efficiency	93%			
Transfer Time	10ms(For PersonalComputers):20ms (For Home Appliances)			
BATTERY				
Battery Voltage(VDC)	48			
Floating Charge Voltage(VDC)	54			
Overcharge Protection(VDC)	63			
Battery type	Lithium/Lead-acid			
SOLAR CHARGER & AC CHARGER				
Max.PV array open circuit voltage(VDC)	500VDC			
Max.PV array power(W)	5000W	7000W	11000W(5500W*2)	13000W(6500*2)
MPPT input voltage range@operating(VDC)	60~450			
Maximum input current	27A		27A*2 (MAX 40A)	
MPPT tracker/strings	1		2	
Maximum solar charge current	120A		120A	150A
Maximum AC charge current	100A		120A	150A
Maximum charge current	120A		120A	150A
PROTECTION & FEATURE				
AC overcurrent	Yes			
AC overvoltage	Yes			
Over temperature protection	Yes			
Smart load management	Yes			
On Grid	Yes			
Parallel function	6			
CT Anti-backflow function	NO		YES	
ENVIRONMENT				
Humidity	5~90%RH (No Condensing)			
Operating Temperature	-10°C to 50°C			
Altitude	(2000m Derating)			
Dimensions DxWxH(mm)	466*313*136.5		553.6*432.5*147.4	
Net Weight(KG)	9	10.5	18	18.4
COMMUNICATION				
Display	Touch screen			
Interface	Standard:RS232,USB; CAN&RS485; Optional:WiFi,Bluetooth			
Safety standard	EN/IEC62109-1,EN/IEC62109-2			

YCDPO-III Hybrid Grid Energy Storage Inverter

Schematic diagram of the product connection

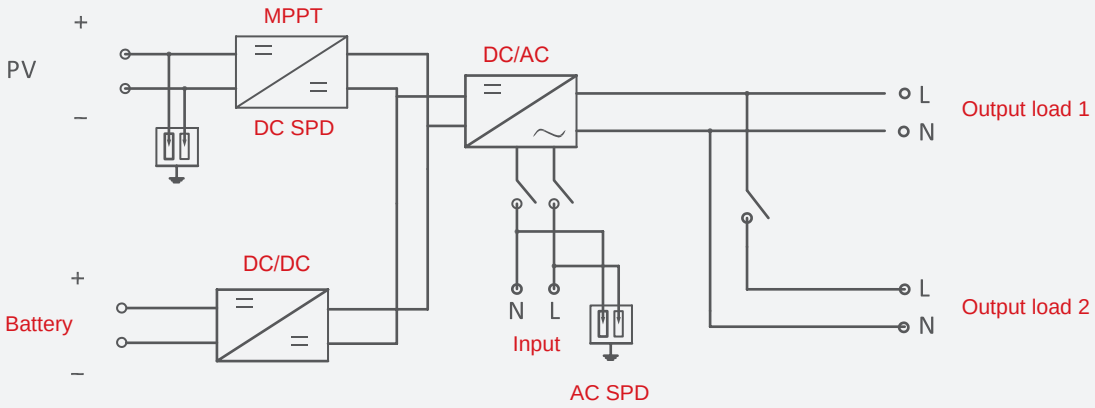
Product characteristics

A:AC OUTPUT
B:AC INPUT
C:COM
D:PV INPUT
E:ON/OFF
F:DC INPUT
G:PARALLEL CONNECTION

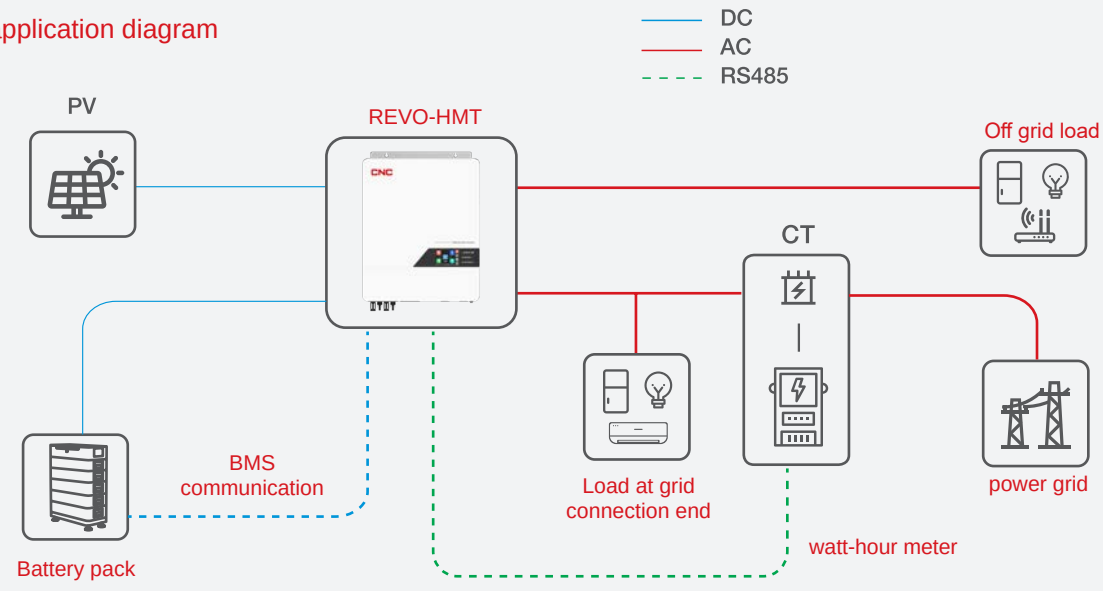


LCD touch screen

Circuit block diagram



Product application diagram



Photovoltaic Inverter

YCDPO-V Off-grid Energy Storage Inverter

General

YCDPO-V off-grid energy storage inverter, the input voltage range is 115V, the output AC pure sine wave AC230V 50/60HZ, can drive 1.2~5KW single-phase load

Features

1. Pure sine wave MPPT solar inverter Bulit-in 50/65A MPPT solar charger
2. Battery equalization function extend lifecycle
3. YCDPO-V series is suitable for off-grid applications
4. Equalization function

Type designation

YCDPO V - 1200 / 12

Product name		Rated power(W)		Battery charging voltage
YCDPO V	-	1200	/	12
YCDPO V		1200 2200 3000 3200 5000		12 24 48

Photovoltaic Inverter

YCDPO-V Off-grid Energy Storage Inverter

Technical date

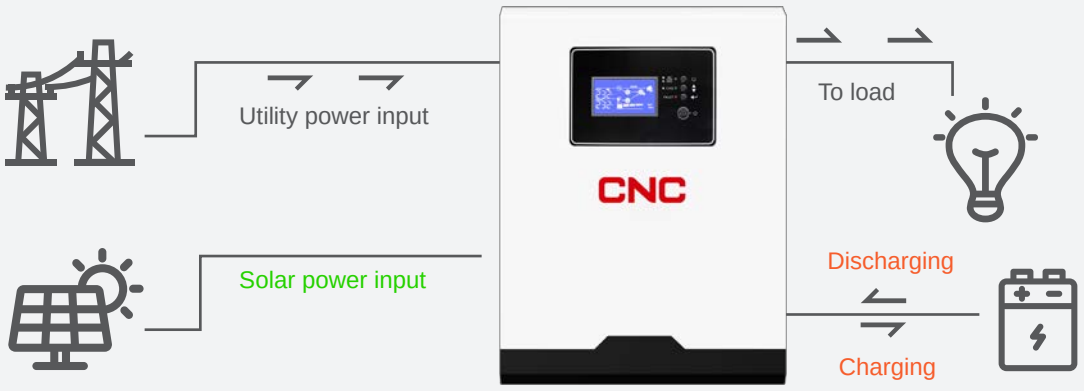
Model	YCDPO V-1200-12	YCDPO V-2200-24	YCDPO V-3200-24	YCDPO V-5000-48
Rated Power	1200VA/1200W	2200VA/2200W	3200VA/3200W	5000VA/5000W
AC INPUT				
Nominal Voltage(VAC)	230VAC			
Selectable Voltage Range	170-280VAC (For Personal Computers);90-280 VAC (For Home Appliances)			
Frequency Range	50/60Hz(Auto sensing)			
AC OUTPUT				
Output voltage(VAC)	230VAC±5%			
Surge Power	2000VA	4000VA	6000VA	10000VA
Rated Frequency(Hz)	50/60			
Efficiency	93%			
Transfer time	10ms(For Personal Computers);20ms(For Home Appliances)			
BATTERY				
Battery Voltage(VDC)	12	24		48
Floating Charge Voltage(VDC)	13.5	27		54
Overcharge Protection(VDC)	16	31	33	63
SOLAR CHARGER & AC CHARGER				
Max.PV array open circuit voltage(VDC)	102	102	102	145
Max.PV array power(W)	700	1400	1800	3000
MPPT input voltage range@ operating(VDC)	15-80	30-80	30-80	60-115
Max.solar charging current(A)	50		65	60
Max.AC charging current(A)	20		25	60
Max.charging current(A)	60		70	120
ENVIRONMENT				
Humidity	5% to 95% RH (Non-condensing)			
Operating Temperature	-10°C to 50°C			
Altitude	(2000m Derating)			
Net Weight(KG)	4.4	5	6.5	9.7
Dimensions D x W x H(mm)	103*225*320	103*225*330	118*285*360	100*300*440
COMMUNICATION				
Interface	Standard:RS232			
Safety standard	EN/IEC62109-1,EN/IEC62109-2			

Photovoltaic Inverter

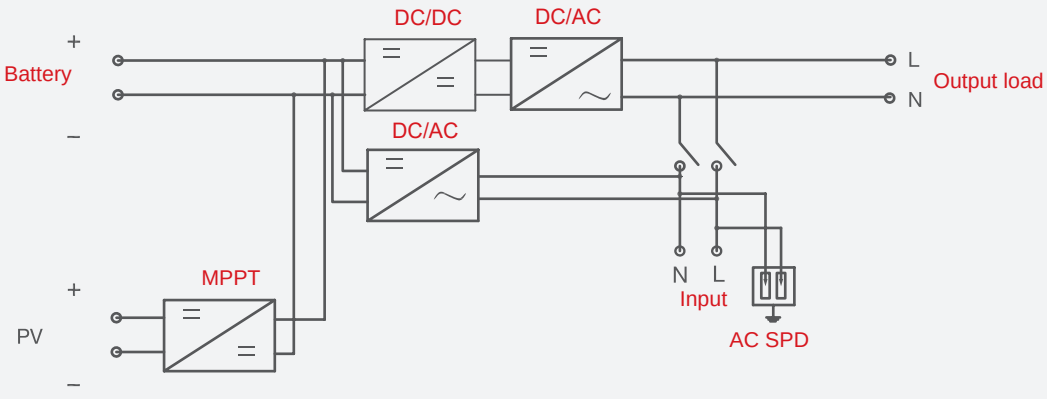
YCDPO-V Off-grid Energy Storage Inverter

Schematic diagram of the product connection

With battery connected



Schematic diagram



Photovoltaic Inverter

YCDPO-TP Three Phase Solar Grid Inverter

General

YCDPO-TP Three Phase solar grid inverter, input voltage DC1000V, output AC pure sine wave AC400V 50/60HZ, can drive 4~25KW single-phase load.

Features

1. Big LCD display
2. Power export limit
3. Compact and easy to install
4. Wifi/GPRS/Lan communication optional
5. IP65 degree of protection

Type designation

YCDPO - TP 4K TL

Product name		Product range	Rated powe(W)	Product configuration
YCDPO	-	TP	4K	TL
YCDPO		TP	4K 5K 6K 8K 10K 12K 15K 17K 20K 25K	TL:Without isolation transformer

Photovoltaic Inverter

YCDPO-TP Three Phase Solar Grid Inverter

Technical date

Model No	TP4KTL	TP5KTL	TP6KTL	TP8KTL	TP10KTL	TP12KTL	TP15KTL
Input(DC)							
Max DC power (W)	5500W	6500W	7500W	9500W	11500W	18000W	22500W
Max DC voltage (Vdc)	1000Vd.c.						
Min working voltage (Vdc)	160Vd.c.						
MPPT voltage range (Vdc)	160...850Vd.c.						
Max input current / per string (A)	18A/18A						
Max.input short circuit per MPPT	25A/25A						
Number of MPP trackers	2						
Strings per MPP tracker	1						
Output(DC)							
AC nominal power (W)	4000	5000	6000	8000	10000	12000	15000
Max AC apparent power (VA)	5000	6000	7000	8800	11000	13200	16500
Max output current (A)	8	10	12	15	17	20	23
Nominal AC output	50/60 Hz; 400 Vac						
AC output range	45/55 Hz ; 280 ~ 490 Vac (Adj)						
Power factor	0.8leading...0.8laging						
Harmonics	< 5%						
Grid type	3 W/N/PE						
Efficiency							
Max efficiency	98.0%	98.2%	98.2%	98.3%	98.4%	98.4%	98.4%
Euro efficiency	97.5%	97.7%	97.7%	97.8%	97.9%	97.9%	98.0%
MPPT efficiency	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Safety and Protection							
DC reverse-polarity protection	yes						
DC breaker	yes						
DC/AC SPD	yes						
Leakage current protection	yes						
Insulation Impedance Detection	yes						
Residual Current protection	yes						
General Parameters							
Dimension (W/H/D)(mm)	480*476*157						
Weight (kg)	16						
Operating temperature range ºC	-25°C~+60°C						
Degree of protection	IP65						
Cooling concept	Smart Cooling						
Topology	Transformerless						
Display	LCD						
Humidity	0-95%, no condensation						
Communication	RS485WIFVGPRS						
Warranty	Standard 5 years; 7/10 years optional						

Photovoltaic Inverter

YCDPO-TPL Three Phase Solar Grid Inverter

General

YCDPO-TP Three Phase solar grid inverter, input voltage DC1000V, output AC pure sine wave AC150~300V 50/60HZ, can drive 4~25KW single-phase load.

Features

1. Big LCD display
2. Power export limit
3. Compact and easy to install
4. Wifi/GPRS/Lan communication optional
5. IP65 degree of protection

Type designation

YCDPO - TPL 4K TL

Product name		Product range	Rated powe(W)	Product configuration
YCDPO	-	TPL	4K	TL
YCDPO		TPL	10K 12K 15K	TL:Without isolation transformer

Photovoltaic Inverter

YCDPO-TPL Three Phase Solar Grid Inverter

Technical date

Model No	TP10KTL	TP12KTL	TP15KTL
Input(DC)			
Max DC power (W)	25500W	30000W	30000W
Max DC voltage (Vdc)	1000Vd.c.		
Min working voltage (Vdc)	250Vd.c.		
MPPT voltage range (Vdc)	200...850Vd.c.		
Max input current / per string (A)	26A/26A		36A/26A
Number of MPP trackers	2		
Strings per MPP tracker	2		
Output(DC)			
AC nominal power (W)	17000	20000	25000
Max AC apparent power (VA)	18700	22000	27500
Max output current (A)	25	10	36
Nominal AC output	50/60 Hz; 400 Vac		
AC output range	45/55 Hz ; 280 ~ 490 Vac (Adj)		
Power factor	0.8leading...0.8laging		
Harmonics	< 1.5%		
Grid type	3 W/N/PE		
Efficiency			
Max efficiency	98.5%	98.5%	98.5%
Euro efficiency	98.1%	98.1%	98.2%
MPPT efficiency	99.9%	99.9%	99.9%
Safety and Protection			
DC reverse-polarity protection	yes		
DC breaker	yes		
DC/AC SPD	yes		
Leakage current protection	yes		
Insulation Impedance Detection	yes		
Residual Current protection	yes		
General Parameters			
Dimension (W/H/D)(mm)	520*510*160		
Weight (kg)	23		
Operating temperature range ºC	-25°C~+60°C		
Degree of protection	IP65		
Cooling concept	Smart Cooling		
Topology	Transformerless		
Display	LCD		
Humidity	0-95%, no condensation		
Communication	RS485WIFVGPRS		
Warranty	Standard 5 years; 7/10 years optional		

Photovoltaic Inverter

YCDPO-EPH Three Phase Solar Hybrid Grid Energy Storage Inverter

General

YCDPO-EPH Three Phase solar hybrid grid energy storage inverter, input voltage DC1000V, output AC pure sine wave AC400/350V 50/60HZ, can drive 4~12KW single-phase load.

Features

1. Big LCD display
2. Three phase unbalanced output
3. CPower export limit
4. Wifi/GPRS/Lan communication optional
5. IP65 degree of protection

Type designation

YCDPO - EPH 4K TL

Product name		Product range	Rated powe(W)	Product configuration
YCDPO	-	EPH	4K	TL
YCDPO		EPH	4K 5K 6K 8K 10K 12K 15K	TL:Without isolation transformer

Photovoltaic Inverter

YCDPO-EPH Three Phase Solar Hybrid Grid Energy Storage Inverter

Technical date

Model No	EPH4KTL	EPH5KTL	EPH6KTL	EPH8KTL	EPH10KTL	EPH12KTL
Input(DC)						
Max DC power	6000W	7500W	9000W	12000W	15000W	15000W
Max DC voltage	1000Vd.c.					
MPPT voltage range	200...850Vd.c.					
Max input current/per string	13A/13A					
Max.input short circuit per MPPT	18A/18A					
Number of MPP trackers	2					
Strings per MPP tracker	1					
Battery Input						
Battery Type	Li-Ion					
Battery voltage range	130-700V					
Maximum charge/discharge current	25/25A					
Charge strategy for Li-ion Battery	Self-adaptation to BMS					
Output (AC)						
AC nominal power	4000VA	5000VA	6000VA	8000VA	10000VA	12000VA
Max AC apparent power	5000VA	5500VA	7000VA	8800VA	11000VA	13200VA
Max output current	8A	10A	12A	15A	17A	2A
Nominal AC output	50/60Hz; 400/350					
AC output range	45/55Hz;280~490Vac(Adj)					
Power factor	0.8leading...0.8laging					
Harmonics factor	<3%					
Grid type	3W/N/PE					
Three-phase unbalance output	0~100%	0~100%	0~100%	0~100%	0~100%	0~100%
AC Output(Back-up)						
Max AC apparent power	4000VA	5000VA	6000VA	8000VA	10000VA	10000VA
Norminal Output Voltage	400/380V					
Norminal Output Freqency	50/60HZ					
Output THDV (@Linear Load)	<3%					
Efficiency						
Maximum conversion efficiency	98.0%	98.0%	98.2%	98.2%	98.2%	98.2%
European efficiency	97.3%	97.3%	97.5%	97.5%	97.5%	97.5%
Max battery to AC Efficiency	97.2%	97.2%	97.4%	97.4%	97.4%	97.4%
MPPT efficiency	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Safety and Protection						
DC reverse-polarity protection	yes					
DC breaker	yes					
DC/AC SPD	yes					
Leakage current protection	yes					
Insulation Impedance Detection	yes					
Residual Current protection	yes					
Output short circuit protection	yes					
Battery reverse connection protection	yes					
General Parameters						
Dimension (W/H/D)(mm)	480*476*157					
Weight (kg)	16					
Operating temperature range ºC	-25°C~+60°C					
Degree of protection	IP65					
Cooling concept	Smart Cooling					
Topology	Transformerless					
Display	LCD					
Humidity	0-95%, no condensation					
Communication	RS485WIFVGPRS					
Warranty	Standard 5 years; 7/10 years optional					

DC Variable Frequency Drives

YCB2200PV Series DC Variable Frequency Drive

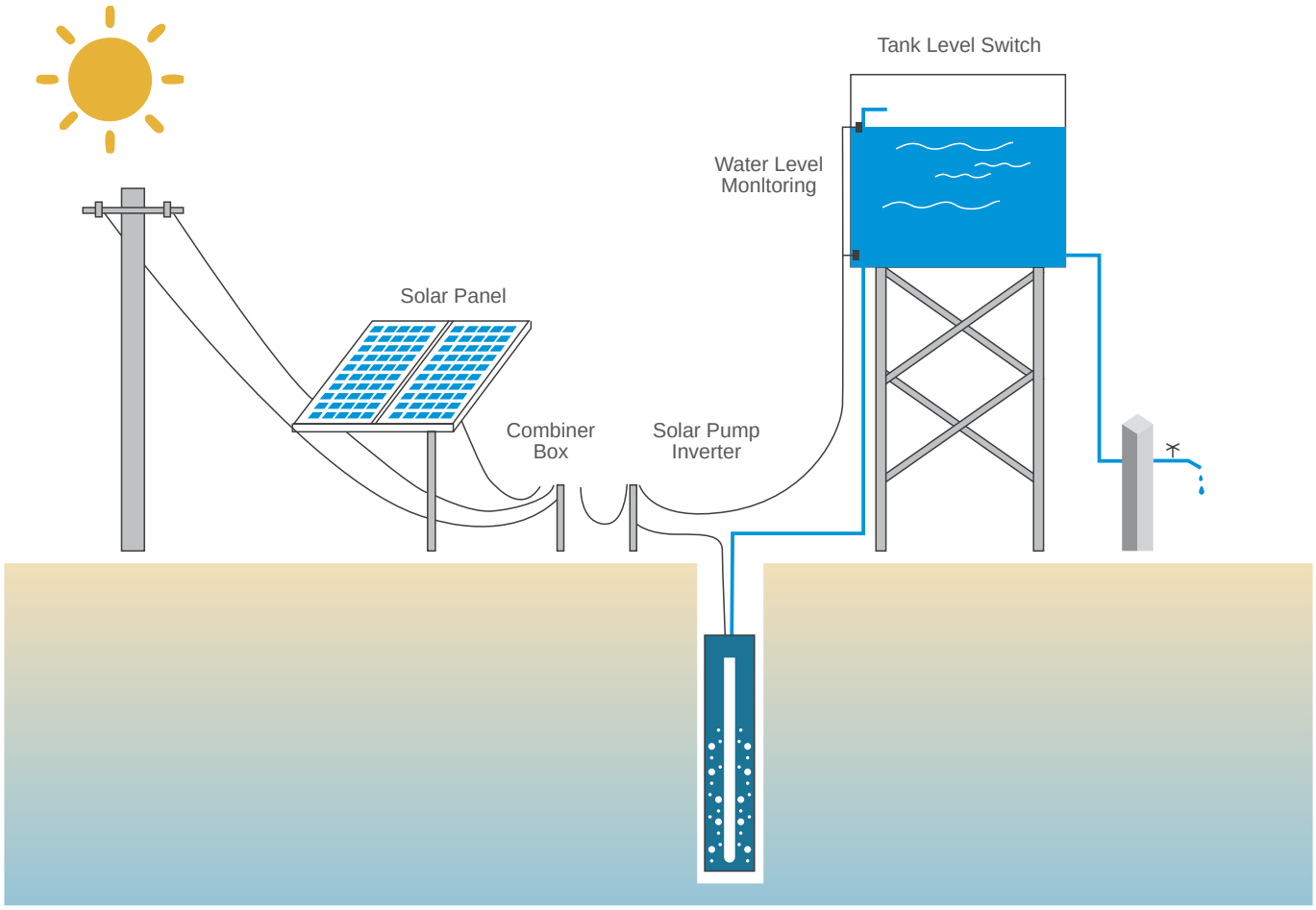
CNC ELECTRIC

YCB2200PV Series DC Variable Frequency Drive

Solar pumping system

The YCB2200PV solar pumping system serves to provide water in remote applicarions where electrical grid power is either unreliable or un-available. The system pumps water using a high-voltage DC power source such as aphotovoltaic array of solar panels. Since the sun is only available during certain hours of a day and only in good weather conditions, the water is generally pumped into a storage pool or tank for furher usage. And water sources are those natural or special such as river, lake, well or waterway, etc.

Solar pumping system is constituted by solar module array, combiner box,liquid level switch, solar pump erc. It aims at providing solutions for the region that suffers water shortage, no power supply or uncertain power supply.



DC Variable Frequency Drives

YCB2200PV Series DC Variable Frequency Drive

Solar pumping system

In order to satisfy the demands of various pumping applications, YCB2200PV solar pump controller adopts Max Power Point Tracking and proven motor drive technology to maximize output from solar modules. It supports both single phase or three-phase AC input such as a generator or inverter from battery. The controller provides fault detection, motor soft start, and speed control. YCB2200PV controller is designed to proceed these features with the plug and play, ease of installation.

Type designation

YCB2200PV - T 5D5 G

Model		Output voltage	Adaptive power	Load type
YCB2200PV	-	T	5D5	G
YCB2200PV		S: Three phase AC220V T: Three phase AC380V	0D75:0.75KW 1D5:1.5KW 2D2:2.2KW 4D0:4.0KW 5D5:5.5KW 7D5:7.5KW 011:11KW 015:15KW 110:110KW	G: Constant torque

DC Variable Frequency Drives

YCB2200PV Series DC Variable Frequency Drive

Flexibility

Compatible with IEC standard threephase asynchronous induction motors
Compatible weth popular PV arrays
Grid supply option

Remote monitoring

Standard Rs485 interface equipped for each solar pump controller
Optional GPRS/Wi-Fi/Erhernet Rj45 modules for remote access
Spots value of solar pump parameters monitoring available from anywhere
History of solar pump parameters and events lookup support
Android/iOS monitoring APP support

Cost effectiveness

Plug-and-play system design
Embedded motor protection and pump functions
Battery-free for most applications
Effortless maintenance

Reliability

10-year market proven experience of leading motor and pump drive technology
Soft start feature to prevent water hammer and increase system life
Built-in overvoltage,overload,overheat and dryrun protection

Smartness

Self-adaptive maximum power point tracking technology up to 99% efficiency
Automatic regulation of pump flow
Self-adaptation to the motor used in the installation

Protection

Surge protection
Overvoltage protection
Undervoltage protection
Locked pump protection
Open circuit protection
Short circuit protection
Overheat protection
Dry run protection

General data

Ambient Temperature Tange: -20°C~60°C,
> 45°C,Derating as required
Cooling Method:Fan Cooling
Ambient Humidity:≤95%RH

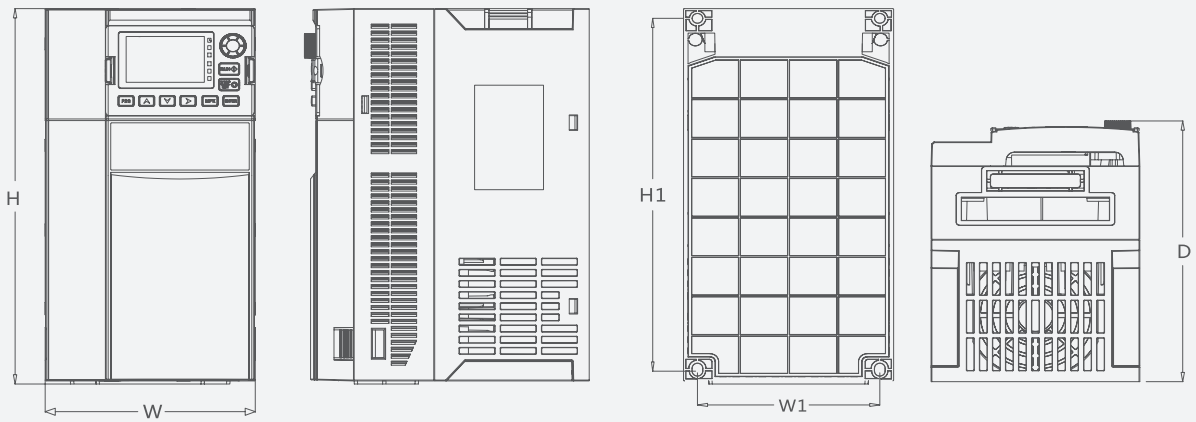
DC Variable Frequency Drives

YCB2200PV Series DC Variable Frequency Drive

Models	Rate current(A)	DC input range(VDC)	Output voltage(VAC)	Applicable for pumps (KW)	Recommended voc(VDC)
YCB2200PV-S0D75G	4.0	150~450	220~240	0.75	360~400
YCB2200PV-S1D5G	7.5	150~450	220~240	1.5	360~400
YCB2200PV-S2D2G	10.0	150~450	220~240	2.2	360~400
YCB2200PV-T0D75G	2.5	250~900	380~440	0.75	650~700
YCB2200PV-T1D5G	3.7	250~900	380~440	1.5	650~700
YCB2200PV-T2D2G	5.0	250~900	380~440	2.2	650~700
YCB2200PV-T4D0G	10.0	250~900	380~440	4	650~700
YCB2200PV-T5D5G	13.0	250~900	380~440	5.5	650~700
YCB2200PV-T7D5G	17.0	250~900	380~440	7.5	650~700
YCB2200PV-T011G	25.0	250~900	380~440	11	650~700
YCB2200PV-T015G	33.0	250~900	380~440	15	650~700
YCB2200PV-T018G	38.0	250~900	380~440	18.5	650~700
YCB2200PV-T022G	45.0	250~900	380~440	22	650~700
YCB2200PV-T030G	60.0	250~900	380~440	30	650~700
YCB2200PV-T037G	75.0	250~900	380~440	37	650~700
YCB2200PV-T045G	91.0	250~900	380~440	45	650~700
YCB2200PV-T055G	110.0	250~900	380~440	55	650~700
YCB2200PV-T075G	150.0	250~900	380~440	75	650~700
YCB2200PV-T090G	180.0	250~900	380~440	90	650~700
YCB2200PV-T110G	210.0	250~900	380~440	110	650~700

YCB2200PV Series DC Variable Frequency Drive

Overall and mounting dimensions(mm)



External dimension

Models	Dimensions(mm)			Installation dimensions(mm)		Cut-outs(mm)
	H	W	D	H1	W1	d
YCB2200PV-S0D75G	197.2	89.6	139	187	74	5
YCB2200PV-S1D5G						
YCB2200PV-S2D2G						
YCB2200PV-T0D75G						
YCB2200PV-T1D5G						
YCB2200PV-T2D2G						
YCB2200PV-T4D0G	202	102	162	190.5	90	5
YCB2200PV-T5D5G						
YCB2200PV-T7D5G	242.5	125	170	228	108.5	5
YCB2200PV-T011G						
YCB2200PV-T015G	297	165	206	278	147	6
YCB2200PV-T018G						
YCB2200PV-T022G						
YCB2200PV-T030G	435	230	230	418	150	7
YCB2200PV-T037G						
YCB2200PV-T045G	510	260	255	200	493	7
YCB2200PV-T055G	580	270	300	564	200	7
YCB2200PV-T075G						
YCB2200PV-T090G	620	320	300	600	260	9
YCB2200PV-T110G						

YCB2200PV Series DC Variable Frequency Drive

Scenic spot of daocheng yading, shangri-la:

System installed in Scenic Spot of Daocheng Yading, Shangri-la to cloth barren mountains with greenery scene. 3pcs 37kW solar pumps, 3PCS YCB2200PV-T037G Solar Pump Controllers.

System capacity:160KW

Panels:245W

Altitude:3400M

Pumping height:250M

Flow:69M /H

Photovoltaic DC Solutions

YCX8 Series PV Combiner Box

CNC
ELECTRIC

YCX8 Series DC Combiner Box

General

YCX8-□ series photovoltaic DC box can be equipped with different components according to different needs of customers, and its combination is diversified to meet different needs of customers. It is used for isolation, overload, short circuit, lightning protection and other protection of photovoltaic DC system to ensure the reliable and safe operation of photovoltaic system. This product is widely used in residential, commercial, and factory photovoltaic power generation systems.

And it is designed and configured in strict accordance with the requirements of “Technical Specifications for Photovoltaic Convergence Equipment” CGC/GF 037:2014.

Features

- Multiple solar photovoltaic arrays can be connected simultaneously, with a maximum of 6 circuits;
- Rated input current of each circuit is 15A (customizable as required);
- The output terminal is equipped with a photovoltaic DC high-voltage lightning protection module that can withstand a maximum lightning current of 40kA;
- High voltage circuit breaker is adopted, with DC rated working voltage up to DC1000, safe and reliable;
- The protection level reaches IP65, meeting the use requirements for outdoor installation.

Type designation

YCX8 - IFS 2/1 15/32

Model		Functions	Input circuit/ Output circuit	Input current/ Output current	System Voltage
YCX8	-	IFS	2/1	15/32	DC500
Photovoltaic box		I: Isolation IF: Isolation& Fuse DIS:Door lock Isolation& SPD BS:MCB&SPD IFS:Isolation& Fuse&SPD IS:Isolation& SPD FS:Fuse&SPD BFS:MCB&Fuse&SPD	1/1 2/1 2/2 3/1 3/3 4/1 4/2 4/4 5/1 5/2 6/1 6/2 6/3 6/6	15A(Changeable)/ Match as needed	DC500 DC1000

Note:*The product will be produced according to the company’s standard scheme. (To be confirmed with the customer before production)* if the customer customizes other solutions, please contact us before placing an orde

Photovoltaic DC Solutions

YCX8 Series DC Combiner Box

Technical data

Model		YCX8-I	YCX8-IF	YCX8-DIS	YCX8-BS	YCX8-IFS	YCX8-IS	YCX8-FS	YCX8-BFS
Rated insulation voltage(Ui)		1500VDC							
Input strings		1,2,3,4,5,6							
Output strings		1,2,3,4,5,6							
Rated voltage(Ue)		500VDC,1000VDC							
Maximum input current		1~100A							
Maximum output current		32~100A							
Enclosure									
Waterproof terminal boxYCX8		□	□	-	□	□	□	□	□
Plastic distribution box		□	□	□	□	□	□	□	□
Fully plastic sealed box		□	□	□	□	□	□	□	□
Configuration									
Photovoltaic isolation switch		■	■	■	-	■	■	■	-
Photovoltaic fuse		-	■	-	-	■	-	■	■
Photovoltaic MCB		-	-	-	■	-	-	-	■
Photovoltaic surge protective device		-	-	■	■	■	■	-	■
Anti reflection diode		-	-	-	-	-	-	-	-
Monitoring module		-	-	-	-	-	-	-	-
Input/output port	Mc4	□	□	□	□	□	□	□	□
	PG	□	□	□	□	□	□	□	□
Environment									
Working temperature		-20°C~+60°C							
Humidity		0.99							
Altitude		<2000m							
Installation		Wall mounting							

■ Standard □ Optional - Non

YCX8-I PV Switch Box(ISO)

Features

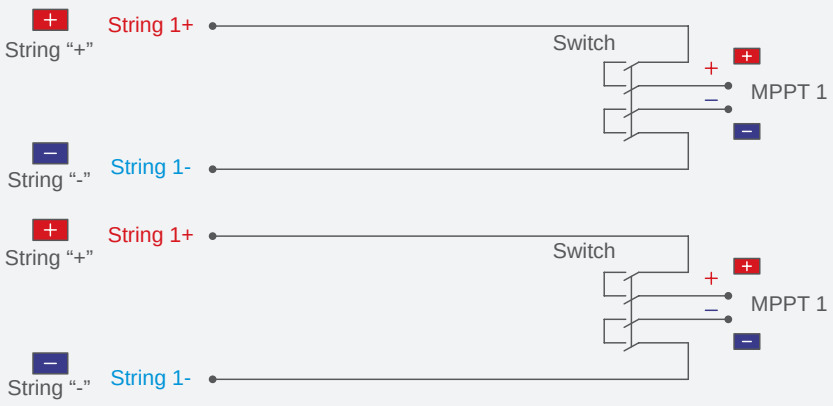
- 1~6 Strings
- DC1000V
- 16A/32A
- 3ms arc suppression
- Lockable in closed position
- Isolation protection
- Ip65

Technical data

Model	YCX8-I 2/2 32/32	YCX8-I 3/3 32/32	YCX8-I 4/4 32/32	YCX8-I 6/6 32/32
Input/output	2 strings/2 strings	3 strings/3 strings	4 strings/4 strings	5 strings/5 strings
Maximum Voltage	1000VDC			
Maximum Current	32A			
Enclosure	YCX8-9	YCX8-12	YCX8-18	YCX8-24
Degree of Prontection	IP65			
Degree of Resistance to Impacts	IK10			
Dimension (W*H*D)	219*200*100	273*230*110	381*230*110	273*380*110
Configuration				
DC Switch Model	YCISC8-32XPV 4			
Rated insulation volatge	1000VDC			
Rated current	32A			
Use category	DC-21B/DC-PV2			
Standard	IEC 60947-3			
Environment				
Working temperature	-20°C~+60°C			
Humidity	0.99			
Altitude	<2000m			
Installation	Wall mounting			

Wiring diagram

Example:YCX8-I 2/2 32/32 DC1000



YCX8-IF PV Switch Box(ISO&Fuse)

Features

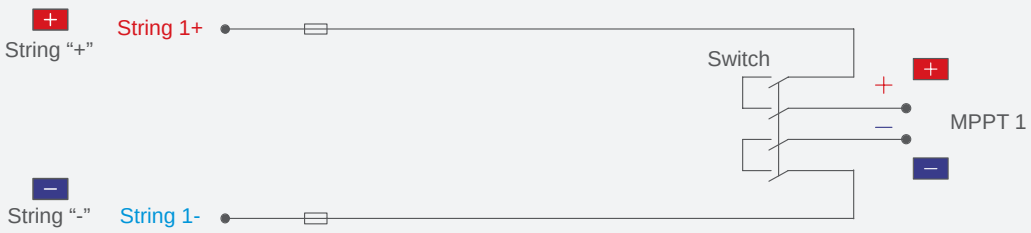
- 1~6 Strings
- DC1000V
- 16A/32A
- 3ms arc suppression
- Lockable in closed position
- Overload&Isolation protection
- IP65

Technical data

Model	YCX8-IF 1/1 32/32	YCX8-IF 2/1 15/32	YCX8-IF 3/1 15/50	YCX8-IF 2/2 32/32
Input/output	1 strings/1 strings	2 strings/1 strings	3 strings/1 strings	2 strings/2 strings
Maximum Voltage	1000VDC			
Maximum Current	32A			
Enclosure	YCX8-6	YCX8-12	YCX8-12	YCX8-12
Degree of Prontection	IP65			
Degree of Resistance to Impacts	IK10			
Dimension (W*H*D)	273*230*110			
Configuration				
DC Switch Model	YCISC8-32XPV 4	YCISC8-32XPV 4	YCIS8-55XPV	YCISC8-32XPV 4
Rated insulation volatge	1000VDC			
Rated current	32A		50A	32A
Use category	DC-21B/DC-PV2			
Standard	IEC 60947-3			
Environment	YCF8-32HPV		YCF8-32HPV4	YCF8-32HPV
Working temperature	-20°C~+60°C			
Humidity	0.99			
Altitude	<2000m			
Installation	Wall mounting			

Wiring diagram

Example:YCX8-IF 1/1 32/32 DC1000



Photovoltaic DC Solutions

YCX8-DIS PV Switch Box(ISO&SPD)

Features

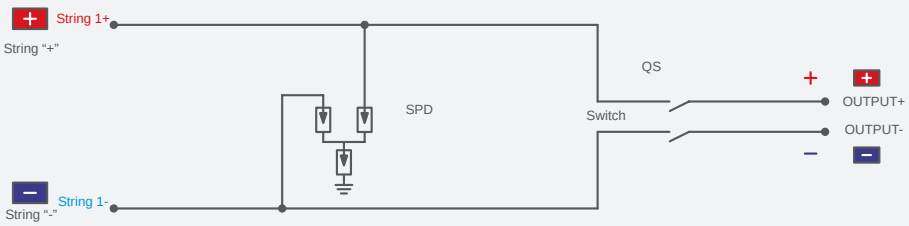
- 1~8 Strings
- DC1000V
- 16A/32A
- 3ms arc suppression
- Lockable in closed position
- Lightning&Isolation protection
- IP65

Technical data

Model	YCX8-DIS 1/1 16/16	YCX8-DIS 2/2 16/16	YCX8-DIS 3/3 16/16	YCX8-DIS 4/4 16/16	YCX8-DIS 6/6 16/16	YCX8-DIS 8/1 16/16
Input/output	1 strings/1 strings	2 strings/2 strings	3 strings/3 strings	4 strings/4 strings	6 strings/6 strings	8 strings/8 strings
Maximum Voltage	1000VDC					
Maximum Current	16/32A					
Enclosure	YCX8-T		YCX8-R			
Degree of Prontection	IP65					
Degree of Resistance to mpacts	IK10					
Dimension (W*H*D)	160*210*110	190*280*130	200*300*170	300*400*170	430*530*200	430*530*200
Configuration						
DC Switch Model	YCISC8-32XPV D2	YCISC8-32XPV D4	YCISC8-50XPV D6	YCISC8-32XPV D4		
Rated insulation volatge	1000VDC					
Rated current	16/32A					
Use category	DC-21B/DC-PV2					
Standard	IEC 60947-3					
DC SPD Model						
Working temperature	-20°C~+60°C					
Humidity	0.99					
Altitude	<2000m					
Installation	Wall mounting					

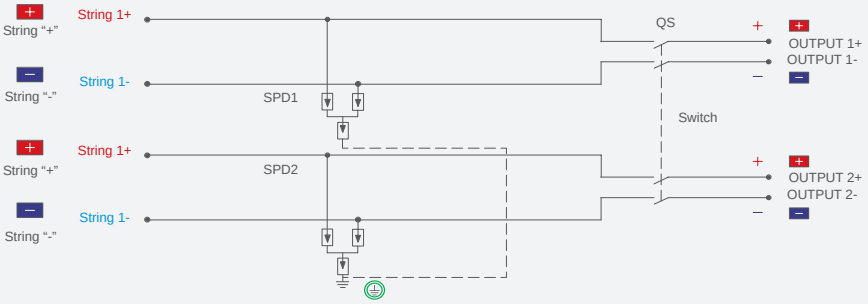
Wiring diagram

YCX8-DIS 1/1 16/16

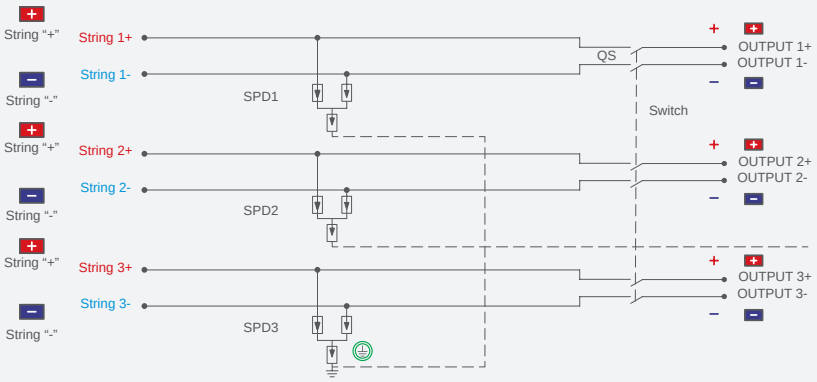


YCX8-DIS PV Switch Box(ISO&SPD)

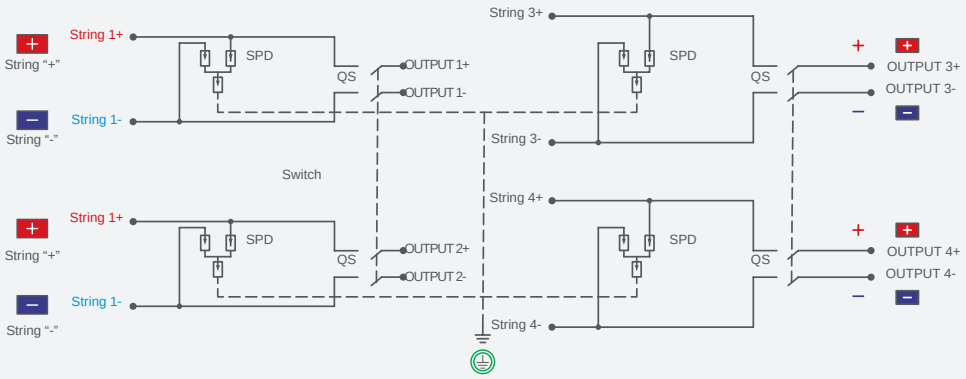
YCX8-DIS 2/2 16/16



YCX8-DIS 3/3 16/16

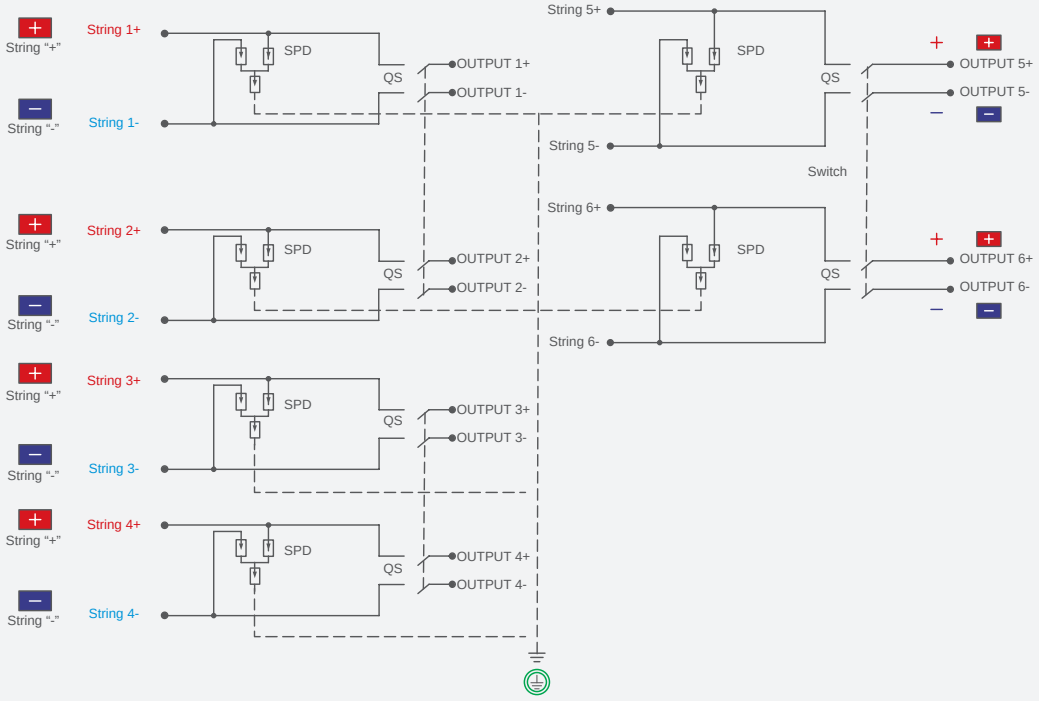


YCX8-DIS 4/4 16/16

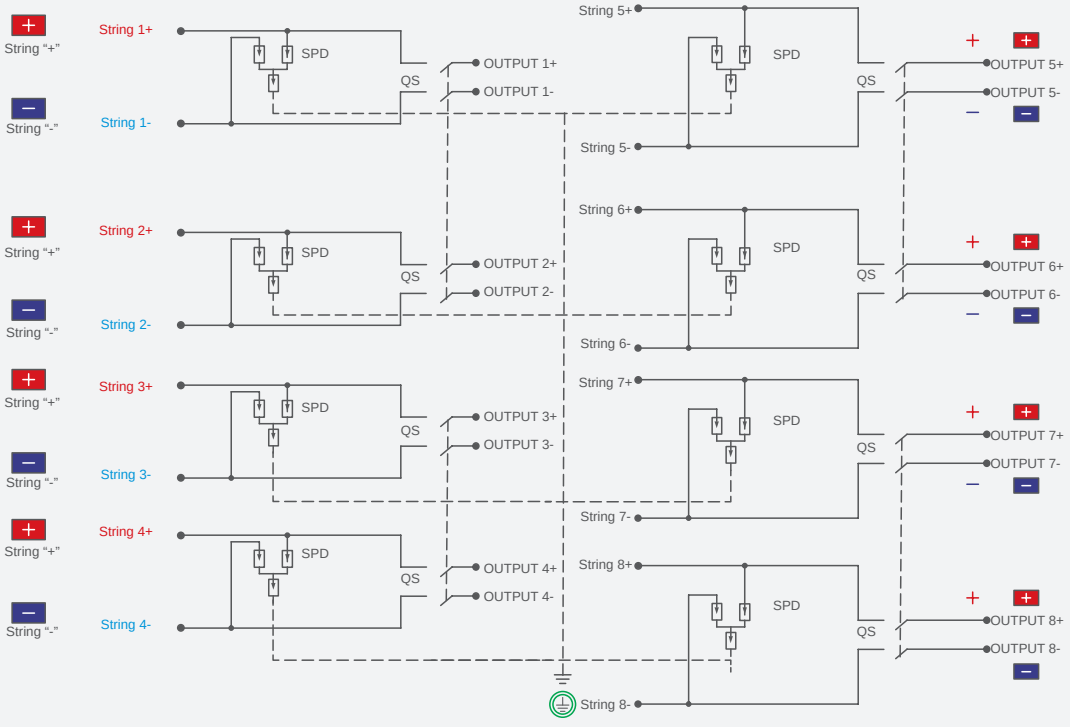


YCX8-DIS PV Switch Box(ISO&SPD)

YCX8-DIS 6/6 16/16



YCX8-DIS 8/8 16/16



YCX8-BS PV Box(MCB&SPD)

Features

- 1~6 Strings
- DC1000V
- 32A
- Lightning&Over-Load protection
- IP65

Technical data

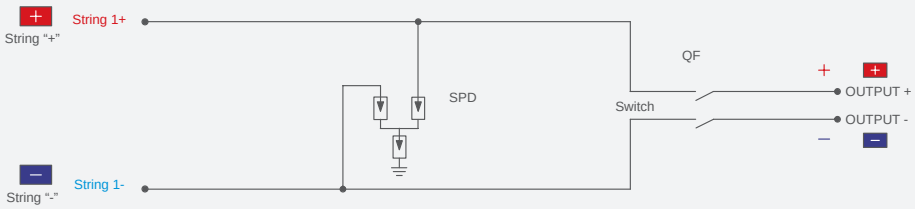
Model	YCX8-BS 1/1 32/32	YCX8-BS 2/1 16/32	YCX8-BS 2/2 32/32	YCX8-BS 3/1 16/63
Input/output	1 strings/1 strings	2 strings/1 strings	2 strings/2 strings	3 strings/1 strings
Maximum Voltage	1000VDC			
Maximum Current	32A			
Enclosure	YCX8-9		YCX8-18	YCX8-24
Degree of Prontection	IP65			
Degree of Resistance to Impacts	IK10			
Dimension (W*H*D)	219*200*100		381*230*110	273*380*110
Configuration				
DC Breaker Model	YCB8-63PV 2P/4P			
Rated insulation volatge	500/1000VDC			
Rated current	16A/32A/63A			
Standard	IEC 60947-2			
DC SPD Model	YCS8-II 40PV DC1000			
Maximum discharge current	40KA			
Environment				
Working temperature	-20°C~+60°C			
Humidity	0.99			
Altitude	<2000m			
Installation	Wall mounting			

YCX8-BS PV Box(MCB&SPD)

Model	YCX8-BS 3/3 32/32	YCX8-BS 4/2 16/32	YCX8-BS 4/4 32/32	YCX8-BS 6/2 16/63	YCX8-BS 6/6 32/32
Input/output	3 strings/3 strings	4 strings/2 strings	4 strings/4 strings	6 strings/2 strings	6 strings/6 strings
Maximum Voltage	500/1000VDC				
Maximum Current	16/32A/63A				
Enclosure	YCX8-24	YCX8-18	YCX8-R	YCX8-18	YCX8-24
Degree of Prontection	IP65				
Degree of Resistance to Impacts	IK10				
Dimension (W*H*D)	273*380*110	381*230*110	/	381*230*110	273*380*110
Configuration					
DC Breaker Model	YCB8-63PV 2P/4P				
Rated insulation volatge	500/1000VDC				
Rated current	16A/32A/63A				
Standard	IEC 60947-2				
DC SPD Model	YCS8-II 40PV DC1000				
Maximum discharge current	40KA				
Environment					
Working temperature	-20°C~+60°C				
Humidity	0.99				
Altitude	<2000m				
Installation	Wall mounting				

Wiring diagram

YCX8-BS 1/1



YCX8-IFS PV Box(ISO&Fuse&SPD)

Features

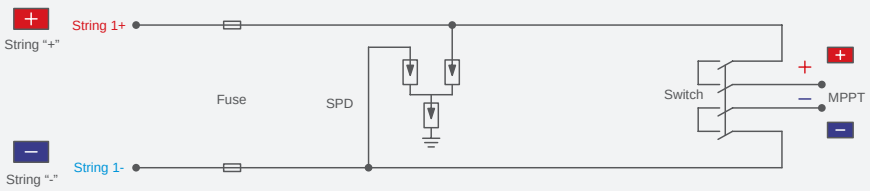
- 1~6 Strings
- DC1000V
- 125A
- Lightning&Over-Load protection
- IP65

Technical data

Model	YCX8-IFS 1/1 16/16	YCX8-IFS 2/1 16/32	YCX8-IFS 2/2 32/32	YCX8-IFS 3/1 16/50	YCX8-IFS 4/2 16/32	YCX8-IFS 6/2 16/50
Input/output	1 strings/1 strings	2 strings/1 strings	2 strings/2 strings	3 strings/1 strings	4 strings/2 strings	6 strings/2 strings
Maximum Voltage	1000VDC					
Maximum Current	32A					
Enclosure	YCX8-9	YCX8-12	YCX8-14	YCX8-12	YCX8-24	YCX8-24
Degree of Prontection	IP65					
Degree of Resistance to Impacts	IK10					
Dimension (W*H*D)	219*200*100	273*230*110	381*230*110	273*230*110	273*380*110	273*380*110
Configuration						
DC Switch Model	YCISC8-32XPV 4			YCIS8-50XPV 6	YCISC8-32XPV 4	YCIS8-50XPV 6
Rated insulation volatge	1000VDC					
Rated current	32A/50A					
Use category	DC-21B/DC-PV2					
Standard	IEC 60947-3					
DC Fuse	YCF8-32HPV					
Fuse Link	10*38mm/15~32A					
DC SPD Model	YCS8-II 40PV 2P DC1000					
Maximum discharge current	40KA					
Environment						
Working temperature	-20°C~+60°C					
Humidity	0.99					
Altitude	<2000m					
Installation	Wall mounting					

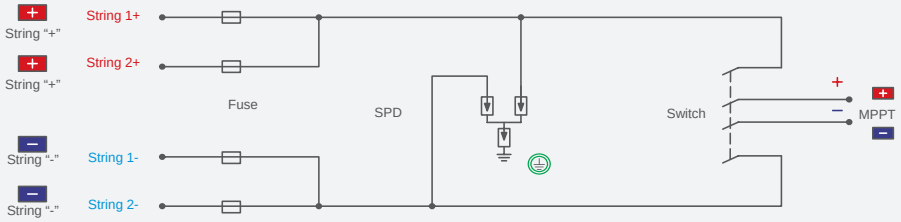
Wiring diagram

YCX8-IFS 1/1 16/16

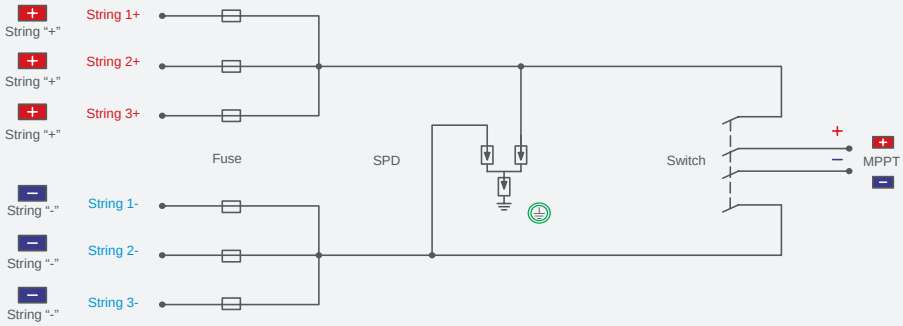


YCX8-IFS PV Box(ISO&Fuse&SPD)

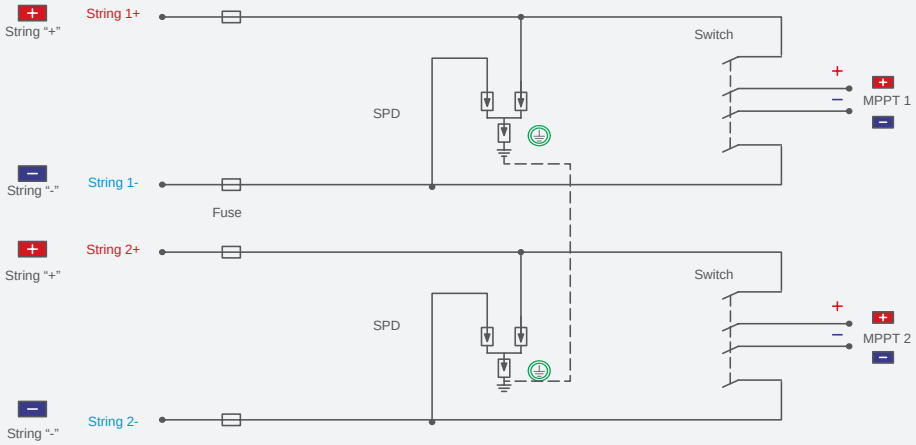
YCX8-IFS 2/1 16



YCX8-IFS 3/1 16/50



YCX8-IFS 2/2 32/32



Photovoltaic DC Solutions

YCX8-BFS PV Box(MCB&Fuse&SPD)

Features

- 1~6 Strings
- DC1000V
- 125A
- Lightning&Over-Load protection
- IP65

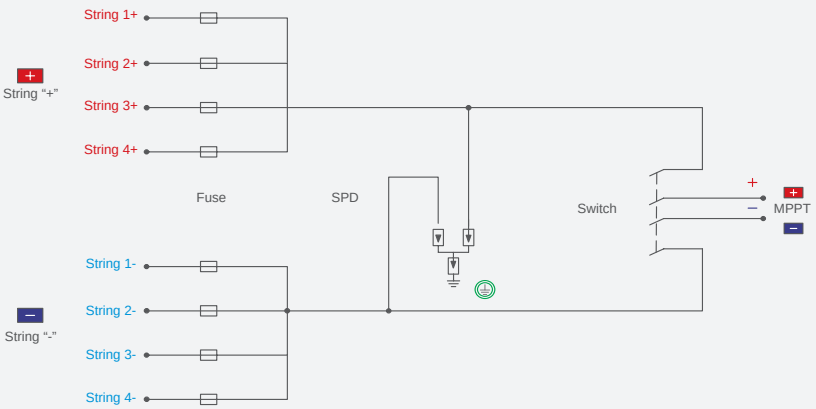
Technical data

Model	YCX8-BFS 1/1 32/32	YCX8-BFS 2/1 16/32	YCX8-BFS 2/2 32/32	YCX8-BFS 3/1 16/63	YCX8-BFS 4/2 16/32	YCX8-BFS 6/2 16/63	YCX8-BFS 6/1 16/63
Input/output	1 strings/1 strings	2 strings/1 strings	2 strings/2 strings	3 strings/1 strings	4 strings/2 strings	6 strings/2 strings	6 strings/1 strings
Maximum Voltage	500/1000VDC						
Maximum Current	16A/32A/63A/125A						
Enclosure	YCX8-9	YCX8-12	YCX8-18	YCX8-12	YCX8-24		
Degree of Prontection	IP65						
Degree of Resistance to Impacts	IK10						
Dimension (W*H*D)	219*200*100	273*230*110	381*230*110	273*230*110	273*380*110		
Configuration							
DC Breaker Model	YCB8-63PV 2P/4P						
Rated insulation volatge	500/1000VDC						
Rated current	16A/32A/63A						
Standard	IEC 60947-2						
DC Fuse	YCF8-32HPV						
Fuse Link	10*38mm/15~32A						
DC SPD Model	YCS8-II 40PV 2P DC1000						
Maximum discharge current	40KA						
Environment							
Working temperature	-20°C~+60°C						
Humidity	0.99						
Altitude	<2000m						
Installation	Wall mounting						

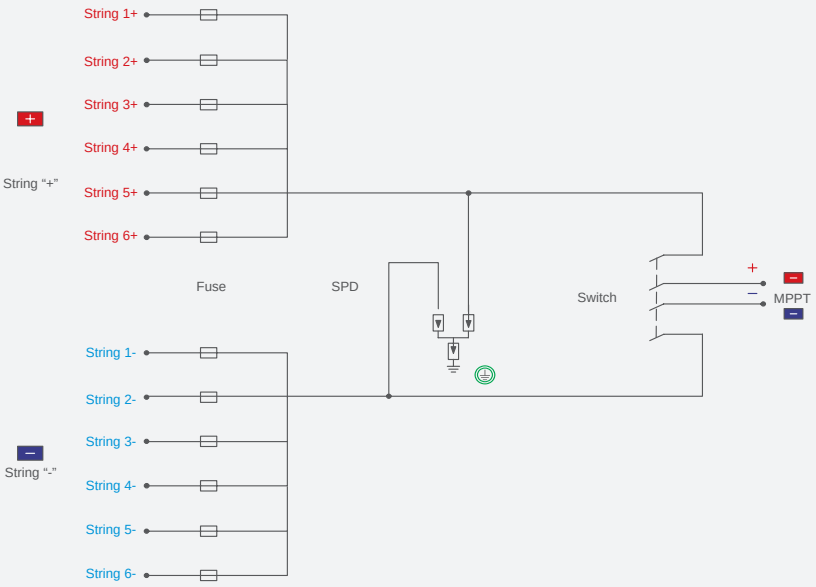
YCX8-BFS PV Box(MCB&Fuse&SPD)

Wiring diagram

YCX8-BFS 4/1 16/63



YCX8-BFS 4/1 16/63



YCX8i-IFS/MFS Photovoltaic DC Combiner Box

General

YCX8i photovoltaic DC combiner box is suitable for photovoltaic power generation systems with a maximum DC system voltage of DC1500V and an output current of 800A. This product is designed and configured in strict accordance with the requirements of the “Technical Specification for Photovoltaic Combiner Equipment” CGC/GF 037:2014, providing users with a safe, concise, beautiful and applicable photovoltaic system product.

Features

- The box can be made of hot-dip galvanized steel plate or cold-rolled steel plate to ensure that the components do not shake and remain unchanged in shape after installation and operation;
- Protection grade: IP65;
- Can simultaneously access up to 50 solar photovoltaic arrays, with a maximum output current of 800A;
- The positive and negative electrodes of each battery string are equipped with photovoltaic dedicated fuses;
- The current measurement adopts Hall sensor perforated measurement, and the measuring equipment is completely isolated from the electrical equipment;
- The output terminal is equipped with a photovoltaic DC high-voltage lightning protection module that can withstand a maximum lightning current of 40KA;
- The combiner box is equipped with a modular intelligent detection unit to detect the current, voltage, circuit breaker status, box temperature, etc. of each string of components;
- The overall power consumption of the modular combiner box intelligent detection unit is less than 4W, and the measurement accuracy is 0.5%;
- The modular combiner box intelligent detection unit adopts DC 1000V/1500V self power supply mode;
- It has multiple methods for remote data transmission, providing RS485 interface and wireless ZigBee interface;
- The power supply has functions such as simulated reverse connection, overcurrent, overvoltage protection, and anti-corrosion.

Type designation

YCX8i - IFS D 15/125 DC500 DC500

Model		Functions	Input strings/ Output strings	Input current/ Output current	Functional protection	System Voltage
YCX8i	-	IFS	D	15/125	DC500	DC500
Photovoltaic box		IFS: Isolation& Fuse&SPD MFS:MCCB&Fuse&SPD	6/1 8/1 12/1 16/1 24/1 30/1 50/1	15A(Changeable)/ Match as needed	No: / D: Diode module M: Monitoring module	DC500 DC1000 DC1500

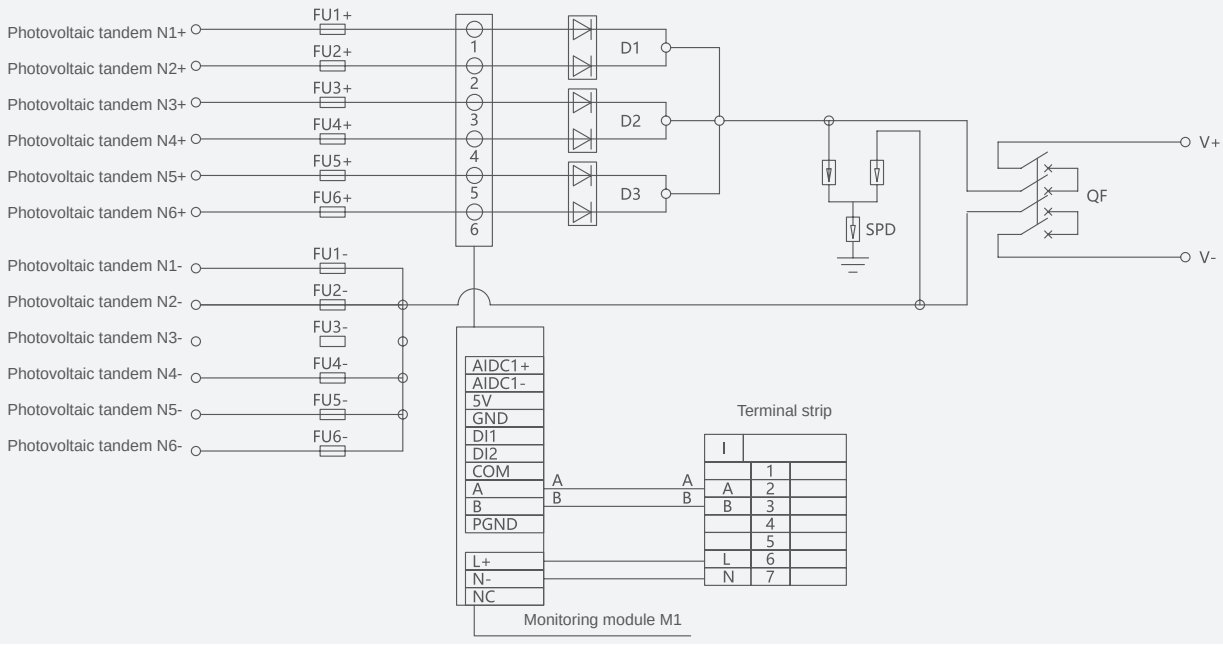
Note:
The product will be produced according to the company’s standard scheme. (To be confirmed with the customer before production)
If the customer customizes other solutions, please contact us before placing an orde

YCX8i-IFS/MFS Photovoltaic DC Combiner Box

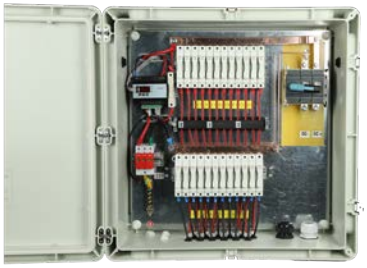
Technical data

Model			YCX8i 6/8/12/24/30/50						
Input/output			1 strings/1 strings	2 strings/1 strings	2 strings/2 strings	3 strings/1 strings	4 strings/2 strings	6 strings/2 strings	6 strings/1 strings
Maximum Voltage			500/1000/1500VDC						
Maximum input Current			16A~32A						
Maximum Output Current			105A	140A	210A	280A	280A	420A	525A
Enclosure									
Material Type			Metal						
Enclosure									
DC Breaker Model		□	YCM8-□PV 2P/3P						
DC Isolating Model		□	YCH8						
Rated insulation volatge			500/1000/1500VDC						
Rated current			63~800A						
Standard			IEC 60947-2						
DC Fuse	DC1000V	□	YCF8-32PV						
	DC1500V	□	YCF8-63PVS						
Fuse Link			15~50A						
DC SPD Model			YCS8-II 40PV 3P						
Maximum discharge current			40KA						
Others									
Anti blocking diode			□						
Monitoring module all-in-one machine			□						
Environment									
Working temperature			-20°C~+60°C						
Humidity			0.99						
Altitude			<2000m						
Installation			Wall mounting						

Wiring diagram



YCX8p-IFS/MFS Photovoltaic DC Combiner Box



General

YCX8p photovoltaic DC combiner box is suitable for photovoltaic power generation systems with a maximum DC system voltage of DC1500V and an output current of 800A. This product is designed and configured in strict accordance with the requirements of the “Technical Specification for Photovoltaic Combiner Equipment” CGC/GF 037:2014, providing users with a safe, concise, beautiful and applicable photovoltaic system product.

Features

- The box can be made of hot-dip galvanized steel plate or cold-rolled steel plate to ensure that the components do not shake and remain unchanged in shape after installation and operation;
- Protection grade: IP65;
- Can simultaneously access up to 50 solar photovoltaic arrays, with a maximum output current of 800A;
- The positive and negative electrodes of each battery string are equipped with photovoltaic dedicated fuses;
- The current measurement adopts Hall sensor perforated measurement, and the measuring equipment is completely isolated from the electrical equipment;
- The output terminal is equipped with a photovoltaic DC high-voltage lightning protection module that can withstand a maximum lightning current of 40KA;
- The combiner box is equipped with a modular intelligent detection unit to detect the current, voltage, circuit breaker status, box temperature, etc. of each string of components;
- The overall power consumption of the modular combiner box intelligent detection unit is less than 4W, and the measurement accuracy is 0.5%;
- The modular combiner box intelligent detection unit adopts DC 1000V/1500V self power supply mode;
- It has multiple methods for remote data transmission, providing RS485 interface and wireless ZigBee interface;
- The power supply has functions such as simulated reverse connection, overcurrent, overvoltage protection, and anti-corrosion.

Type designation

YCX8p - IFS D 15/125 DC500 DC500

Model		Functions	Input strings/ Output strings	Input current/ Output current	Functional protection	System Voltage
YCX8p	-	IFS	D	15/125	DC500	DC500
Photovoltaic box		IFS: Isolation& Fuse&SPD MFS:MCCB&Fuse&SPD	6/1 8/1 12/1 16/1 24/1 30/1 50/1	15A(Changeable)/ Match as needed	No: / D: Diode module M: Monitoring module	DC500 DC1000 DC1500

Note:

The product will be produced according to the company’s standard scheme. (To be confirmed with the customer before production)

If the customer customizes other solutions, please contact us before placing an orde

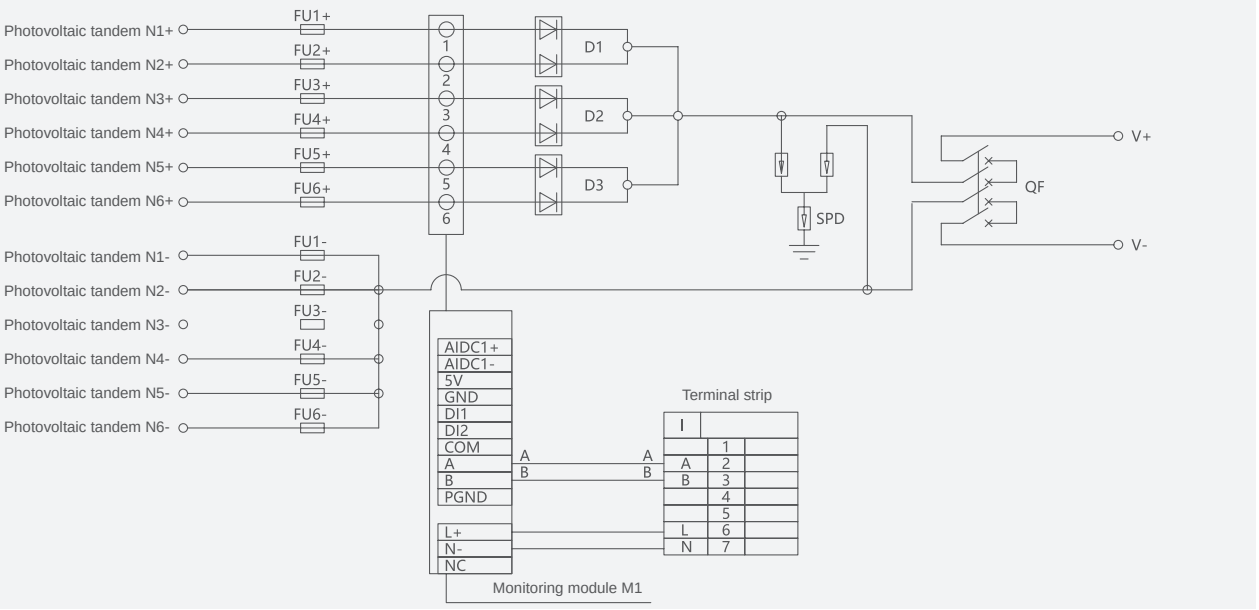
YCX8p-IFS/MFS Photovoltaic DC Combiner Box

Technical data

Model			YCX8P 6/8/12/24/30/50						
Input/output			6 strings/1 strings	8 strings/1 strings	12 strings/1 strings	16 strings/1 strings	24 strings/1 strings	30 strings/1 strings	50 strings/1 strings
Maximum Voltage			500/1000/1500VDC						
Maximum input Current			16A~32A						
Maximum Output Current			105A	140A	210A	280A	280A	420A	525A
Enclosure									
Material Type			Metal						
Enclosure									
DC Breaker Model		□	YCM8-□PV 2P/3P						
DC Isolating Model		□	YCH8						
Rated insulation volatge			500/1000/1500VDC						
Rated current			63~800A						
Standard			IEC 60947-2						
DC Fuse	DC1000V	□	YCF8-32PV						
	DC1500V	□	YCF8-63PVS						
Fuse Link			15~50A						
DC SPD Model			YCS8-II 40PV 3P						
Maximum discharge current			40KA						
Others									
Anti blocking diode			□						
Monitoring module all-in-one machine			□						
Environment									
Working temperature			-20°C~+60°C						
Humidity			0.99						
Altitude			<2000m						
Installation			Wall mounting						

■ Standard □ Optional - Non

Wiring diagram



Distribution Box

YCX8 Series Waterproof Terminal Box

CNC ELECTRIC

Distribution Box

YCX8 Waterproof Terminal Box

General

It is suitable for special occasions such as waterproof, dustproof and anti-corrosion.

Standard: IEC60529 EN 60309.

Protection class: IP65.

Type designation

YCX8 - 8

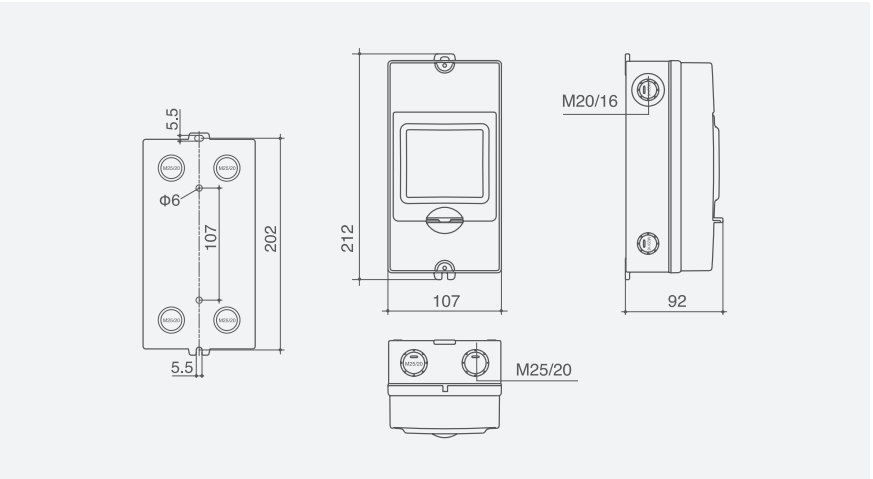
Model		Number of shell circuits
YCX8i	-	8
Plastic distribution box		4,6,9,12,18,24,36

Technical data

Name	Data
Max. Rated insulation voltage AC/DC	AC1000V/DC1500V
Impact strength(IK degree)	IK08
Type of protection(IP degree)	IP65
Number of modules	4/6/9/12/18/24/36
Flammability class according with UL94 (Base part)	V0
Glow-wire flammability according to IEC/EN 60695-2-11 (Base part)	960°C
Ambient temperature	-25-+80°C
Base/Cover unit material	Polycarbonate

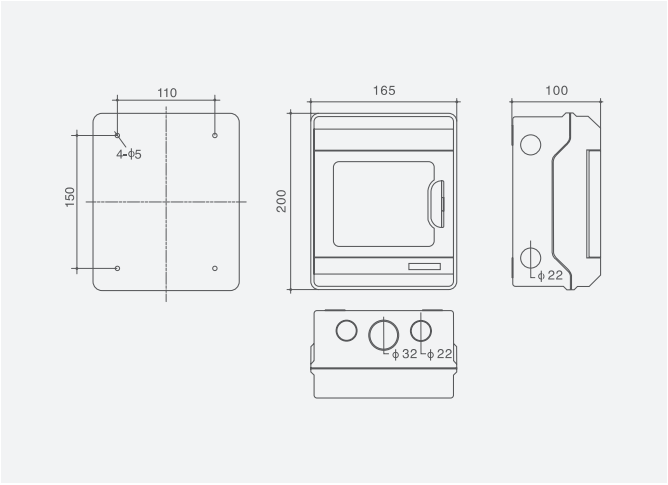
Wiring diagram

YCX8-4

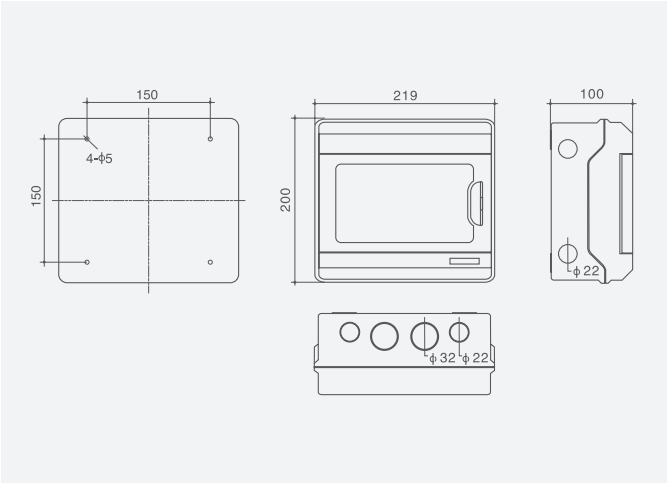


YCX8 Waterproof Terminal Box

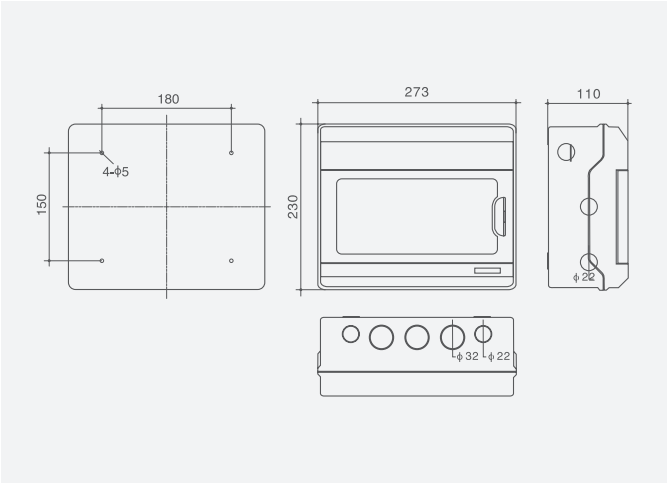
YCX8-6



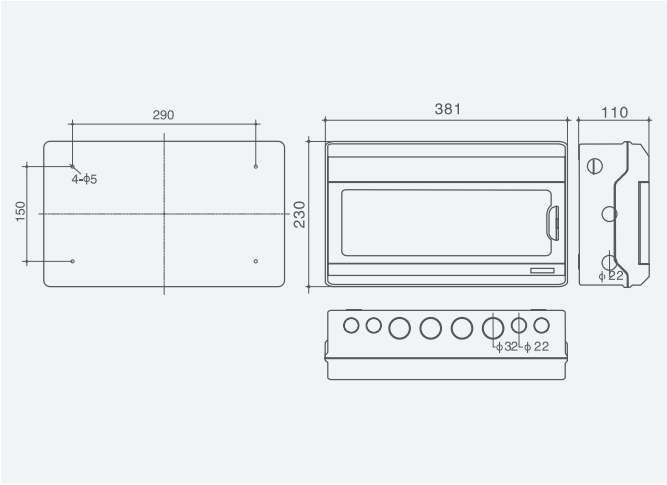
YCX8-9



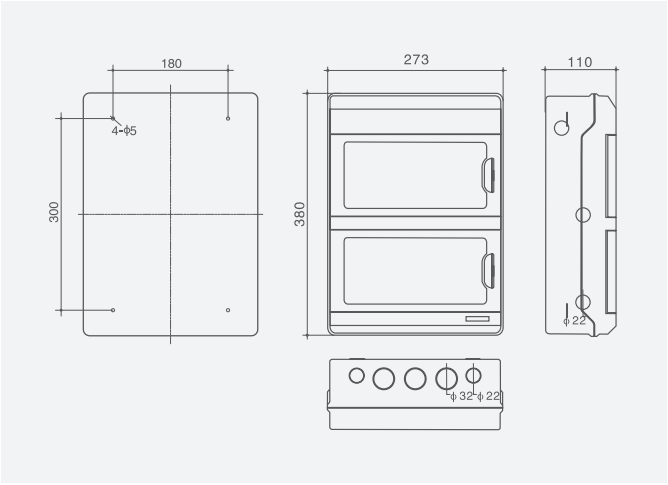
YCX8-12



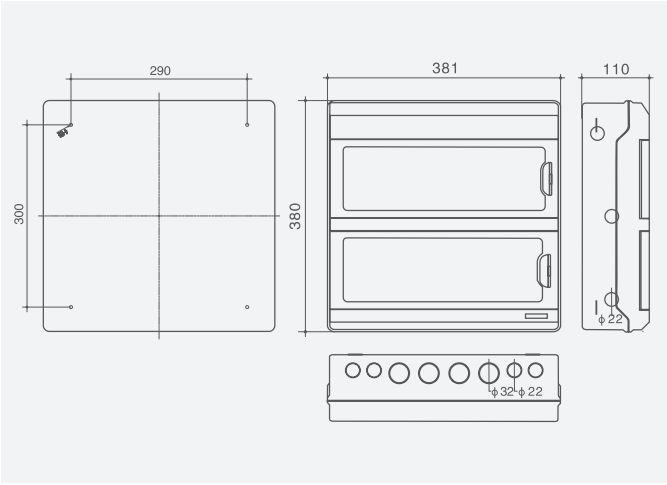
YCX8-18



YCX8-24



YCX8-36



Distribution Box

YCX8-T Waterproof Terminal Box

General

It is suitable for special occasions such as waterproof, dustproof and anti-corrosion.

Protection class: IP67.

Type designation

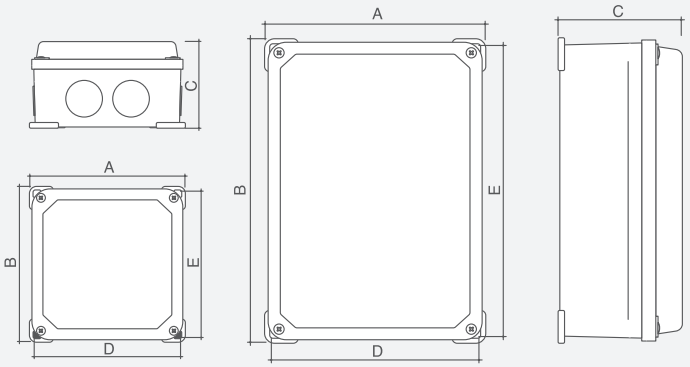
YCX8 - T 858575

Model	Box type	Dimension	Corresponding overall dimensions(mm)				
YCX8i -	T	858575	A	B	C	D	E
Plastic distribution box	T: Electrical box (transparent cover)	858575	85	85	75	74	74
		111180	110	110	80	104	104
		131390	130	130	90	124	124
		131890	130	180	90	154	154
		161690	160	160	90	154	154
		162111	160	210	110	154	204
		162112	160	210	120	154	204
		182511	180	250	110	174	244
		182511	180	250	120	174	244
		202011	200	200	110	194	194
		202012	200	200	120	194	194
		212911	210	290	110	204	284
		212912	210	290	120	204	284

Technical data

Name	Data
Max. Rated insulation voltage AC/DC	AC1000V/DC1500V
Impact strength(IK degree)	IK10
Type of protection(IP degree)	IP67
Number of modules	V0
Flammability class according with UL94 (Base part)	960°C
Glow-wire flammability according to IEC/EN 60695-2-11 (Base part)	-25-+80°C
Ambient temperature	Polycarbonate
Base/Cover unit material	Polycarbonate

Wiring diagram



Distribution Box

YCX8-R Waterproof Terminal Box

General

Waterproof, dustproof, corrosion-resistant, high-strength insulation. Holes can be opened at will according to user needs, with complete specifications and easy installation.

Standard: IEC60529 EN60309.

Protection class: IP65.

Type designation

YCX8 - R - ABS - A M 858575

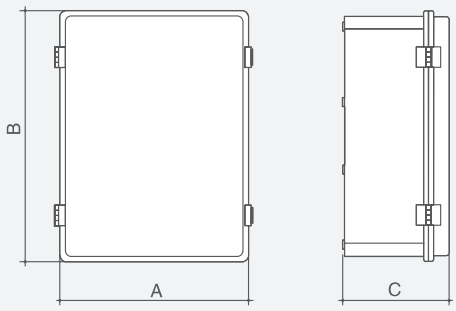
Model	Box type	Material	Door type	Other functions	Dimension	Corresponding overall dimensions(mm)			
YCX8i	R	ABS	A	M	858575	A	B	C	
Plastic distribution box	R: Fully plastic sealed box	PC: Polycarbonate ABS: ABS	A: transparent door B: grey door	/:non M: with inner door	203017	200	300	170	Plastic Hinge Type
					304017	300	400	170	
					405020	400	500	200	
					406022	400	600	220	
					101590	100	150	90	Stainless Steel Hinge Type
					121790	125	175	90	
					151590	150	150	90	
					162110	160	210	100	
					172711	175	275	110	
					203013	200	300	130	
					253515	250	350	150	
					334318	330	430	180	
					435320	430	530	200	
					436323	430	630	230	
					537325	530	730	250	
					638328	630	830	280	

Note: Adding a base plate or opening requires additional costs, please contact us

Technical data

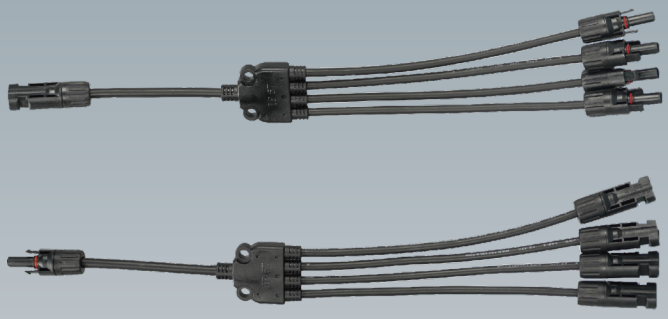
Name	Data
Max. Rated insulation voltage AC/DC	AC1000V/DC1500V
Impact strength(IK degree)	IK08
Type of protection(IP degree)	IP66
Number of modules	4/6/9/12/18/24/36
Flammability class according with UL94 (Base part)	V0
Glow-wire flammability according to IEC/EN 60695-2-11 (Base part)	960°C
Ambient temperature	-25-+80°C
Base/Cover unit material	Polycarbonate

Wiring diagram



Photovoltaic Special Connector

Photovoltaic Cables & Connectors



CNC
ELECTRIC

Photovoltaic Special Connector

PvT Series

General

Mainly used for the connection of solar panels and inverters. With a withstand voltage of up to DC1500V and using the new standard photovoltaic connector.

Standard: IEC62852

Features

Makes photovoltaic power generation safer

Quick connection of photovoltaic cables and easy to install

Extremely low contact resistance

Waterproof and dustproof design

Excellent resistance to high and low temperatures, fire, and UV radiation

Type designation

PvT - P ☐ DC1500

Model		Installation category	Rated current	Rated voltage
PvT	-	P		DC1500
Photovoltaic Special Connector		/: Plug-inconnection P: Panel installation connection Hard connection: LT2: 1-to-2 LT3: 1-to-3 LT4: 1-to-4 LT5: 1-to-5 LT6: 1-to-6 Soft connection: LTY2: 1-to-2 LTY3: 1-to-3 LTY4: 1-to-4	10A 15A 20A	DC1000 DC1500
		D:Diode		
		F:Fuse		DC1000

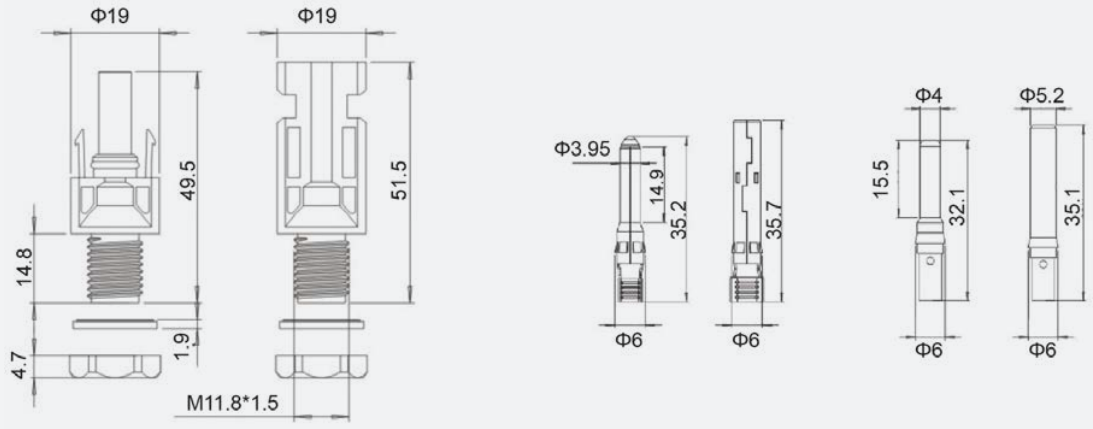
Photovoltaic Special Connector

PvT DC1000 Photovoltaic Connector

Technical data

Connector system	Φ4mm
Rated voltage	1000V DC (IEC)
Rated current	17A (1.5mm²) 22A (2.5mm²; 14AWG) 30A (4mm²; 6mm²; 12AWG, 10AWG)
Test voltage	6kV (50Hz, 1min)
Ambient temperature range	-40°C...+90°C (IEC) -40°C...+75°C (UL)
Upper limiting temperature	+105°C (IEC)
Protection degree, mated	IP67
Touch protection level, unmated	IP2X
Comtact resistance of plug connectors	0.5mΩ
Safety class	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 rest, degree of severity 5	IEC 60068-2-52

Overall and mounting dimensions(mm)



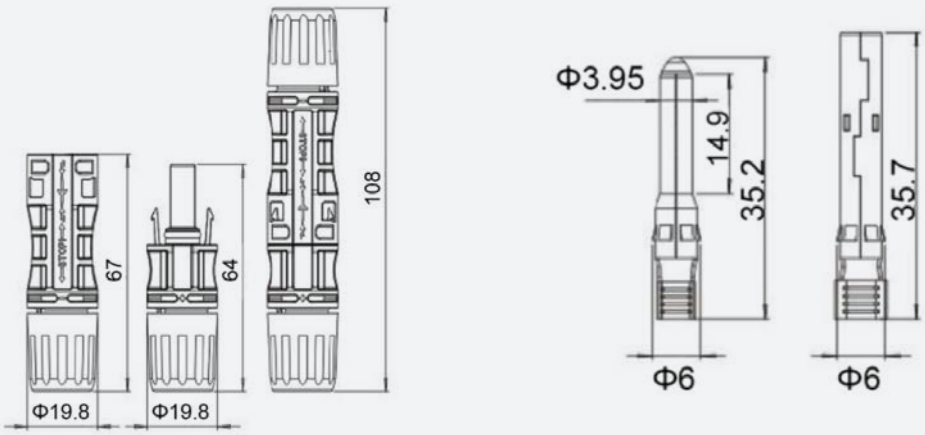
Photovoltaic Special Connector

PvT DC1500 Photovoltaic Connector

Technical data

Connector system	Φ4mm
Rated voltage	1500V DC(IEC) 1000V/1500V DC(UL)
Rated current	17A(1.5mm) 22A(2.5mm²;14AWG) 30A(4mm²;6mm²;10mm²;12AWG,10AWG
Test voltage	6kV(50HZ,1min.)
Ambient temperature range	-40°C...+90°C(IEC) -40C...+75C(UL)
Upper limiting temperature	+105°C(IEC)
Protection degree, mated	IP67
Touch protection level, unmated	IP2X
Comtact resistance of plug connectors	0.5mΩ
Safety class	II
Contact material	Messing,verzinnt Copper Alloy,tin plated
Insulation material	PC/PV
Locking system	Snap-in
Flame class	UL-94-V0
Salt mist spray rest, degree of severity 5	IEC 60068-2-52

Overall and mounting dimensions(mm)



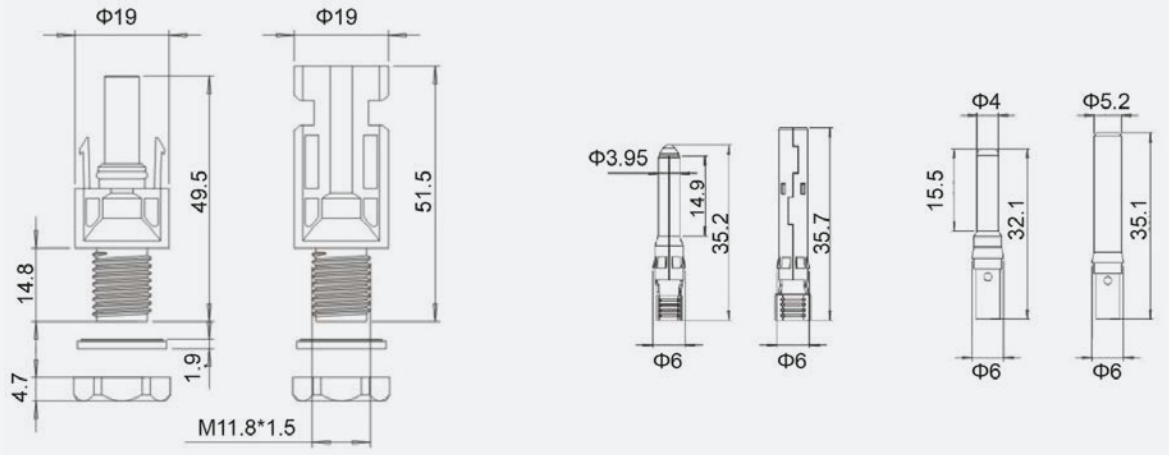
Photovoltaic Special Connector

PvT-P DC1000 Photovoltaic Connector

Technical data

Connector system	Φ4mm
Rated voltage	1000V DC (IEC)
Rated current	17A (1.5mm²) 22A (2.5mm²; 14AWG) 30A (4mm²; 6mm²; 12AWG, 10AWG)
Test voltage	6kV (50Hz, 1min)
Ambient temperature range	-40°C...+90°C (IEC) -40°C...+75°C (UL)
Upper limiting temperature	+105°C (IEC)
Protection degree, mated	IP67
Touch protection level, unmated	IP2X
Comtact resistance of plug connectors	0.5mΩ
Safety class	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 rest, degree of severity 5	IEC 60068-2-52

Overall and mounting dimensions(mm)



Photovoltaic Special Connector

PvT-P DC1500 Photovoltaic Connector

Technical data

Connector system	Φ4mm
Rated voltage	1500V DC(IEC) 1000V/1500V DC(UL)
Rated current	17A(1.5mm) 22A(2.5mm²;14AWG) 30A(4mm²;36mm²;10mm²12AWG,10AWG)
Test voltage	6kV(50HZ,1min.)
Ambient temperature range	-40°C...+90°C(IEC) -40°C...+75°C(UL)
Upper limiting temperature	+105°C(IEC)
Protection degree, mated	IP67
Touch protection level, unmated	IP2X
Comtact resistance of plug connectors	0.5mΩ
Safety class	II
Contact material	Messing,verzinnt Copper Alloy,tin plated
Insulation material	PC/PV
Locking system	Snap-in
Flame class	UL-94-V0
Salt mist spray rest, degree of severity 5	IEC60068-2-52

Overall and mounting dimensions(mm)

Photovoltaic Special Connector

PvT-D DC1000 Photovoltaic Connector (Diode)

Technical data

Connector system	Φ4mm
Rated voltage	1000V DC
Rated current	10A,15A,20A
Test voltage	6kV(50HZ,1min.)
Ambient temperature range	-40°C...+90°C(IEC)
Upper limiting temperature	+105°C(IEC)
Protection degree, mated	IP67
Touch protection level, unmated	IP2X
Comtact resistance of plug connectors	0.5mΩ
Safety class	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 rest, degree of severity 5	IEC60068-2-52

Overall and mounting dimensions(mm)

Photovoltaic Special Connector

PvT-F DC1000 Photovoltaic Connector (Fuse)

Technical data

Connector system	Φ4mm
Rated voltage	1500V DC(IEC) 1000V/1500V DC(UL)
Rated current	10A,15A,20A,30A
Test voltage	6kV(50HZ,1min.)
Ambient temperature range	-40°C...+90°C(IEC)
Upper limiting temperature	+105°C(IEC)
Protection degree, mated	IP67
Touch protection level, unmated	IP2X
Comtact resistance of plug connectors	0.5mΩ
Safety class	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 rest, degree of severity 5	IEC 60068-2-52

Overall and mounting dimensions(mm)

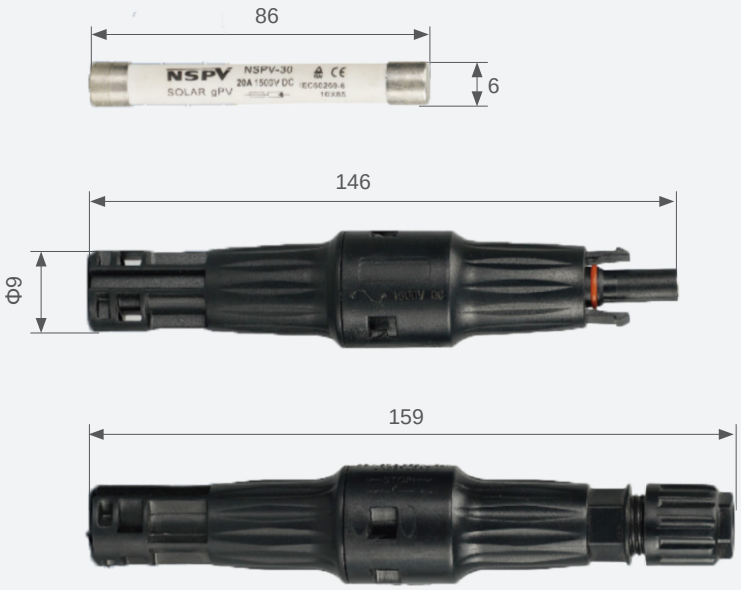
Photovoltaic Special Connector

PvT-F DC1500 Photovoltaic Connector (Fuse)

Technical data

Connector system	Φ4mm
Rated voltage	1500V DC(IEC)
Rated current	17A(1.5mm²) 22A(2.5mm²;14AWG) 30A(4mm²;6mm²;12AWG,10AWG)
Test voltage	6kV(50HZ,1min.)
Ambient temperature range	-40°C...+90°C(IEC) -40°C...+75°C(UL)
Upper limiting temperature	+105°C(IEC)
Protection degree, mated	IP67
Touch protection level, unmated	IP2X
Comtact resistance of plug connectors	0.5mΩ
Safety class	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 rest, degree of severity 5	IEC60068-2-52

Overall and mounting dimensions(mm)



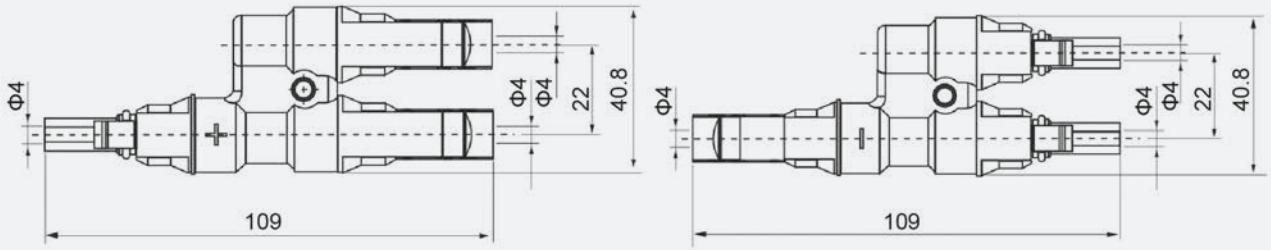
Photovoltaic Special Connector

PvT-LT2 DC1000 Photovoltaic Connector

Technical data

Insulation material	PPO
Contact material	Copper, Tin plated
Suitable current	50A
Rated voltage	1000V (TUV) 600V (UL)
Test voltage	6kV (TUV50Hz, 1min)
Contact resistance	< 0.5mΩ
Protection degree	IP67
Ambient temperature range	-40°C~+85°C
Flame class	UL 94-VO
Safety class	II
Pin dimensions	Φ4mm

Overall and mounting dimensions(mm)



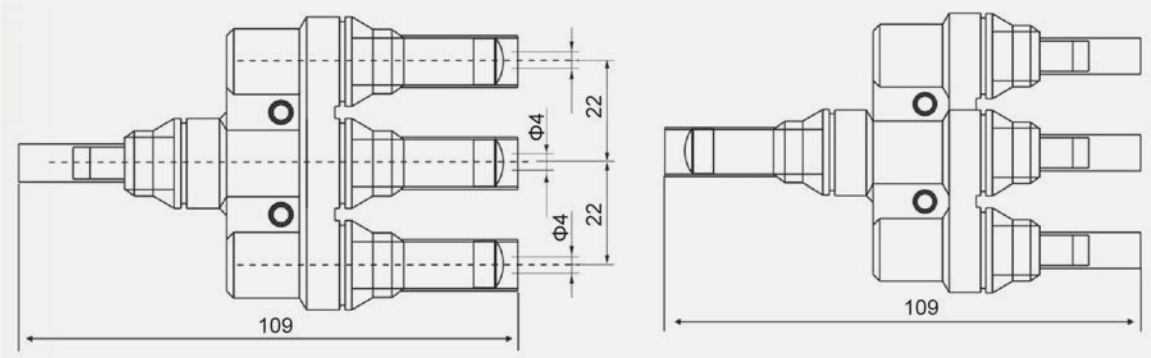
Photovoltaic Special Connector

PvT-LT3 DC1000 Photovoltaic Connector

Technical data

Insulation material	PPO
Contact material	Copper, Tin plated
Suitable current	50A
Rated voltage	1000V (TUV) 600V (UL)
Test voltage	6kV (TUV50Hz, 1min)
Contact resistance	< 0.5mΩ
Protection degree	IP67
Ambient temperature range	-40°C~+85°C
Flame class	UL 94-VO
Safety class	II
Pin dimensions	Φ4mm

Overall and mounting dimensions(mm)



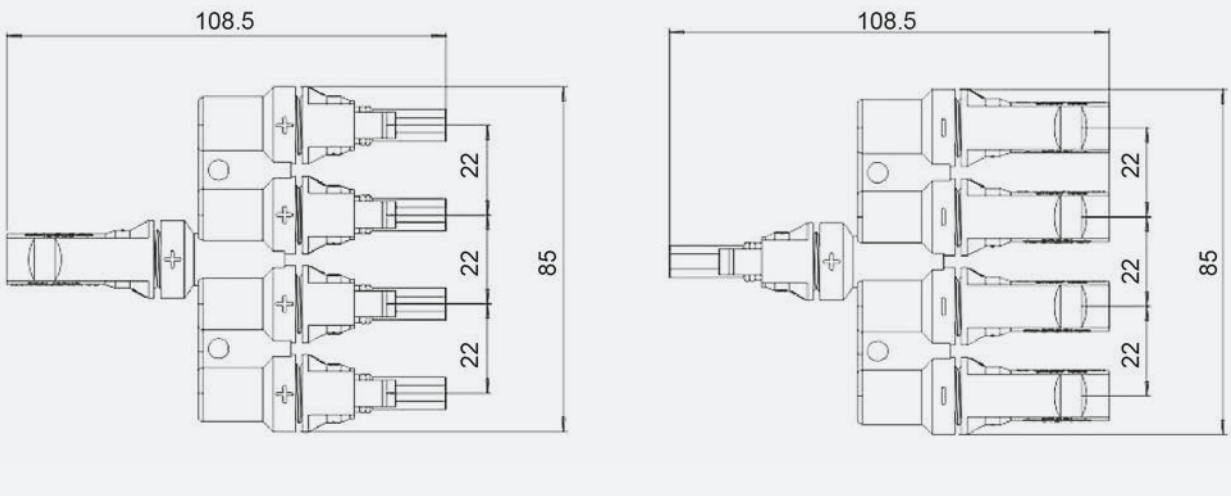
Photovoltaic Special Connector

PvT-LT4 DC1000 Photovoltaic Connector

Technical data

Insulation material	PPO
Contact material	Copper, Tin plated
Suitable current	30A
Rated voltage	1000V (TUV) 600V (UL)
Test voltage	6kV (TUV50Hz, 1min)
Contact resistance	< 0.5mΩ
Protection degree	IP67
Ambient temperature range	-40°C~+85°C
Flame class	UL 94-VO
Safety class	II
Pin dimensions	Φ4mm

Overall and mounting dimensions(mm)



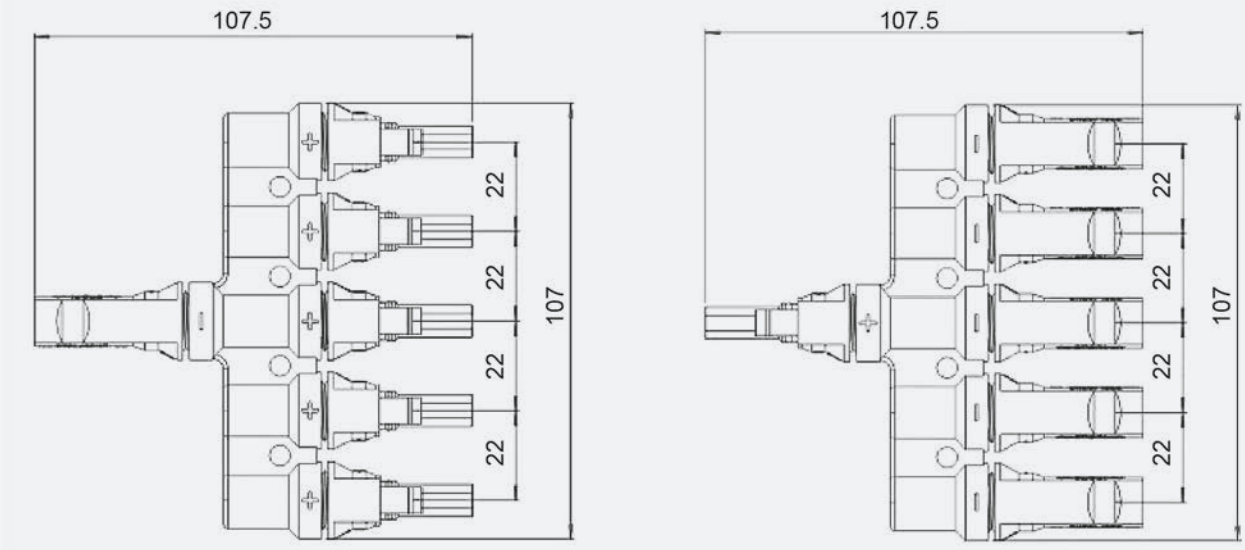
Photovoltaic Special Connector

PvT-LT5 DC1000 Photovoltaic Connector

Technical data

Insulation material	PPO
Contact material	Copper, Tin plated
Suitable current	30A
Rated voltage	1000V (TUV) 600V (UL)
Test voltage	6kV (TUV50Hz, 1min)
Contact resistance	< 0.5mΩ
Protection degree	IP67
Ambient temperature range	-40°C~+85°C
Flame class	UL 94-VO
Safety class	II
Pin dimensions	Φ4mm

Overall and mounting dimensions(mm)



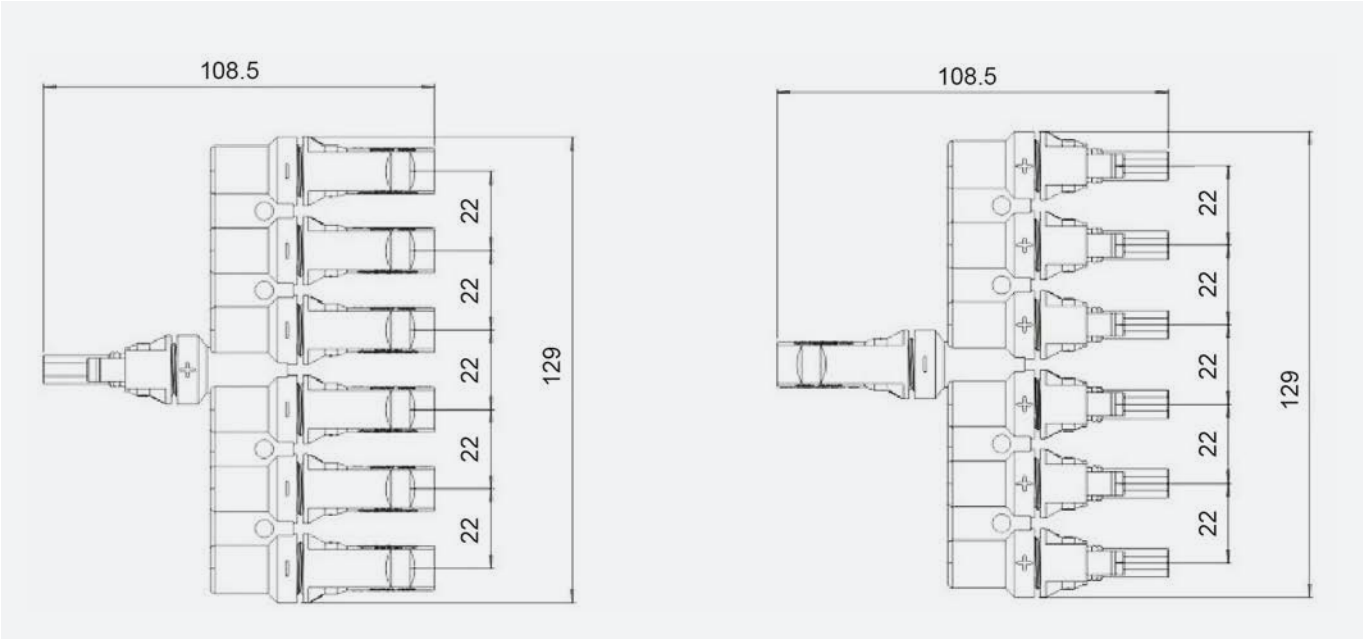
Photovoltaic Special Connector

PvT-LT6 DC1000 Photovoltaic Connector

Technical data

Insulation material	PPO
Contact material	Copper, Tin plated
Suitable current	30A
Rated voltage	1000V (TUV) 600V (UL)
Test voltage	6kV (TUV50Hz, 1min)
Contact resistance	< 0.5mΩ
Protection degree	IP67
Ambient temperature range	-40°C~+85°C
Flame class	UL 94-VO
Safety class	II
Pin dimensions	Φ4mm

Overall and mounting dimensions(mm)



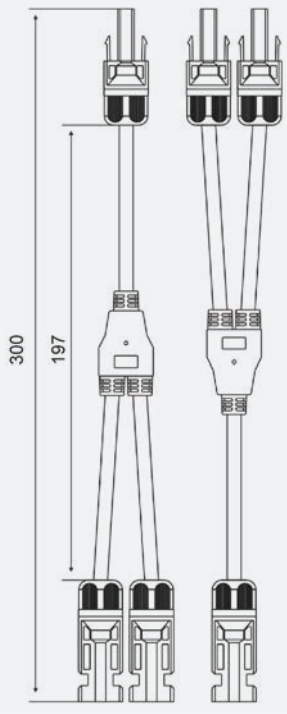
Photovoltaic Special Connector

PvT-LTY2 DC1000 Photovoltaic Connector

Technical data

Connector system	Φ4mm
Rated voltage	1000VDC (IEC)
Rated current	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)
Protection degree	IP67
Touch protection level, unmated	IP2X
Comtact resistance of plug connectors	0.5mΩ
Safety class	II
Contact material	Messing, verzinnt Copper Alloy, tin plated
Insulation material	PC/PA
Locking system	Snap-in
Flame class	UL-94-VO
Salt mist spray test, degree of severity 5	IEC 60068-2-52

Overall and mounting dimensions(mm)



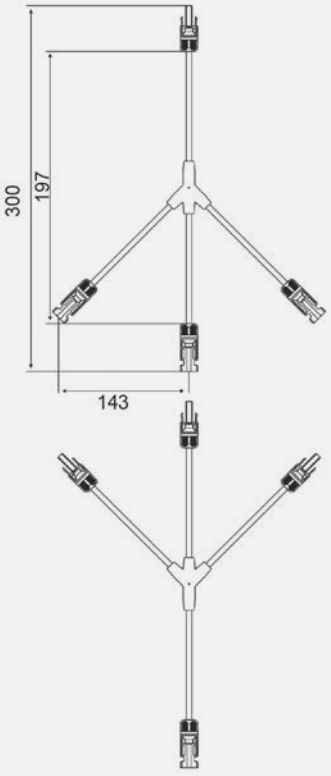
Photovoltaic Special Connector

PvT-LTY3 DC1000 Photovoltaic Connector

Technical data

Connector system	Φ4mm
Rated voltage	1000VDC (IEC)
Rated current	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)
Protection degree	IP67
Touch protection level, unmated	IP2X
Comtact resistance of plug connectors	0.5mΩ
Safety class	II
Contact material	Messing, verzinnt Copper Alloy, tin plated
Insulation material	PC/PA
Locking system	Snap-in
Flame class	UL-94-VO
Salt mist spray test, degree of severity 5	IEC 60068-2-52

Overall and mounting dimensions(mm)



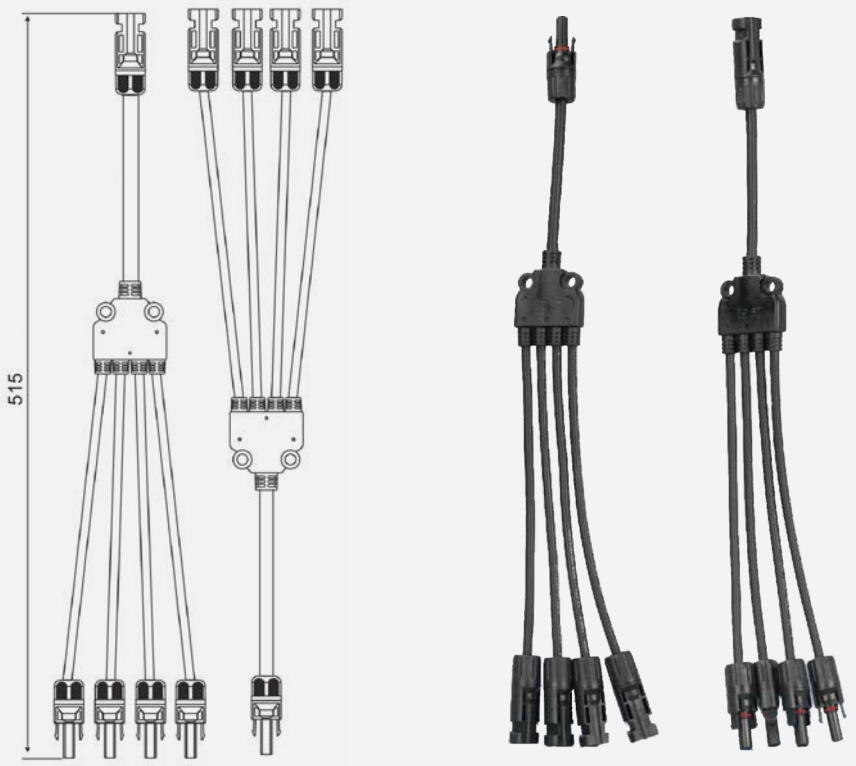
Photovoltaic Special Connector

PvT-LTY4 DC1000 Photovoltaic Connector

Technical data

Connector system	Φ4mm
Rated voltage	1000VDC (IEC)
Rated current	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)
Protection degree	IP67
Touch protection level, unmated	IP2X
Comtact resistance of plug connectors	0.5mΩ
Safety class	II
Contact material	Messing, verzinnt Copper Alloy, tin plated
Insulation material	PC/PA
Locking system	Snap-in
Flame class	UL-94-VO
Salt mist spray test, degree of severity 5	IEC 60068-2-52

Overall and mounting dimensions(mm)



PV Photovoltaic DC Cable

General

Solar PV Cable is mainly used to interconnect solar panels and inverters in solar system. We use the XLPE material for insulatlon and jacket so that the cable can resist sun irradiate, it also can be used in high and low temperature environment.

Features

Cable Full Name:

Halogen-free low smoke cross-linked polyolefin insulated and sheathed cables for photovoltaic power generation systems.

Conductor Structure:

En60228 (IEC60228) Type five conductor and must be tinned copper wire.

Cable Color:

Black or Red (The insulation material shall be extruded halogen-free material, which shall be composed of one layer or several tightly adhered layers. The insulation shall be solid and uniform in material, and the insulation itself, the conductor and the tin layer shall be as for as possible not damaged when the insulation is peeled off)

Cable Characteristics Double insulated construction, Higher systems bear voltage, UV radiation, Low and High tem-perature resistant environment.

Type designation

PV15 - 1.5

Model		Installation category
PV15	-	1.5
Photovoltaic cable PV10: DC1000 PV15: DC1500		1.5mm² 2.5mm² 4mm² 6mm² 10mm² 16mm² 25mm² 35mm²

Technical data

Rated voltage	AC:Uo/U=1.0/1.0KV,DC:1.5KV
Voltage test	AC:6.5KV DC:15KV,5min
Ambient temperature	-40°C~90°C
Maximum conductor temperature	+120°C
Service life	>25 years(-40°C~+90°C)
Reference short-circuit allowable temperature	200°C 5 (seconds)
Bending radius	IEC60811-401:2012,135±2/168h
Compatibility test	IEC60811-401:2012,135±2/168h
Acid and alkali resistance test	EN60811-2-1
Cold bending test	IEC60811-506
Damp heat test	IEC60068-2-78
Sunlight resistance tTest	IEC62930
Cable ozone resistance test	IEC60811-403
Flame retardant test	IEC60332-1-2
Smoke density	IEC61034-2,EN50268-2
Evaluate all non-metallic materials for halogens	IEC62821-1

PV Photovoltaic DC Cable

Extension cord customization (1000V, 1500V)

- 2.5m²

- 2.5m²

- 2.5m²

- 4m²

- 4m²

- 4m²

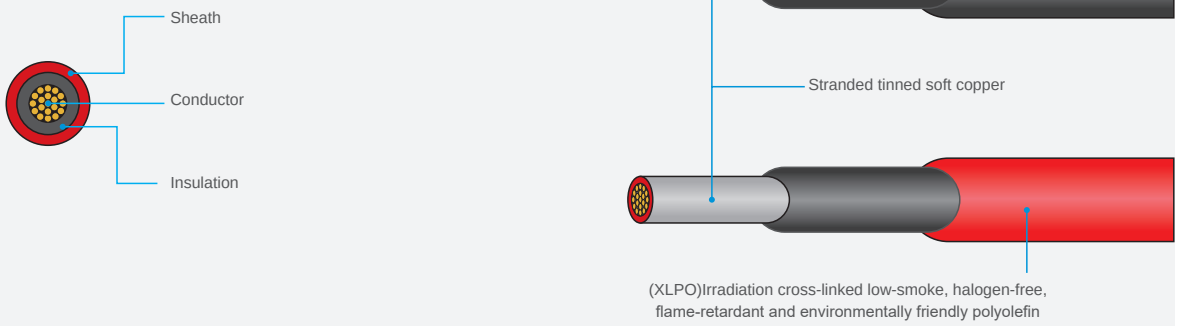
- 6m²

- 6m²

- 6m²

PV Photovoltaic DC Cable

Details



Photovoltaic cable structure and recommended current carrying capacity table

Construction	Conductor Construction	Conductor Quter	Cable Outer	Resistance Max.	Current CarringCapacity AT 60C
mm²	nxmm	mm	mm	Ω/Km	A
1X1.5	30X0.25	1.58	4.9	13.7	30
1X2.5	48X0.25	2.02	5.45	8.21	41
1X4.0	56X0.3	2.35	6.10	5.09	55
1X6.0	84X0.3	3.2	7.20	3.39	70
1X10	142X0.3	4.6	9.00	1.95	98
1x16	228X0.3	5.6	10.20	1.24	132
1x25	361X0.3	6.95	12.00	0.795	176
1x35	494X0.3	8.30	13.80	0.565	218

The current-carrying capacity is under the situation of laying the single cable in air.