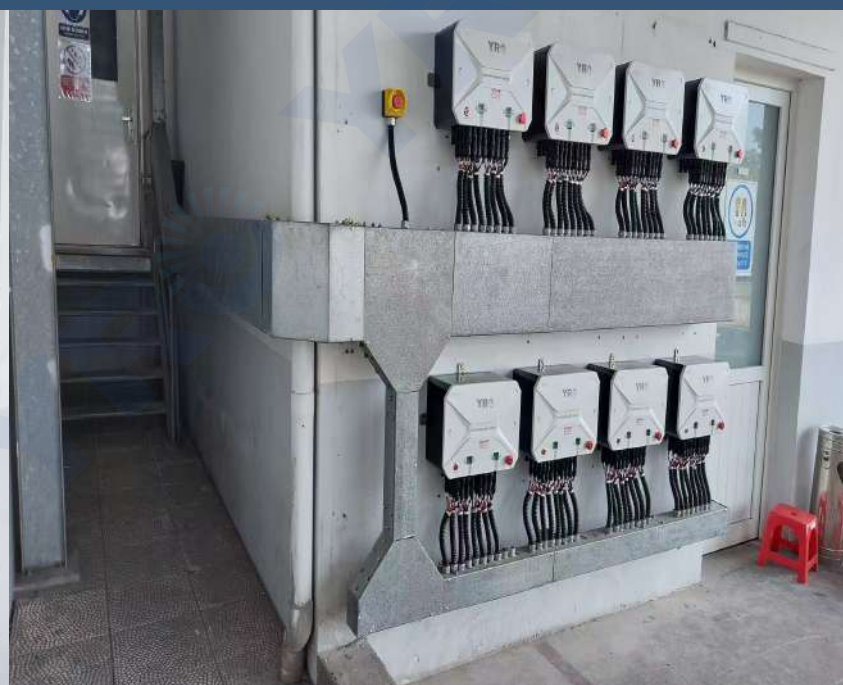


YRO RSD used in 1 MW Solar Project in iloilo, Philippines



YRO RSD used in 0.8 MW Solar Project in Vietnam





PRODUCT SELECTION CATALOGUE

<http://www.yroele.com>

YUEQING YIRUI ELECTRIC APPLIANCE CO., LTD.

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YRO



The future is even more exciting and is already here.

The third relocation upgrade
10000m² 100 employees

2024

2023/11

Achieve cETLus Certification based on UL1741 standard in Nov 2023.



The second relocation upgrade 2022
3000m² 50 employees

2022

2023/3

Achieve KEMA Certification For 6kA&10kA AC MCB in March, 2023.

2021

Achieve TÜV certificates for DC isolator switch, DC fuse, DC SPD etc in 2011.

The first relocation upgrade 2019
1200m² 30 employees



2020

2019

Achieve first TÜV Certification DC MCB 6-63A 1200V 6kA in 2020

built up brand 2017 YR

2017

Establish 2011
600m² 9 workers

2011



SINCE 2011

YR is a new energy company was founded in 2011 and specialized in solar electrical protection, energy storage, EV charger etc.

QUALIFICATION CERTIFICATE



Rapid Shutdown

001-010

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DC Miniature Circuit Breaker

011-030

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DC Mold Case Circuit Breaker

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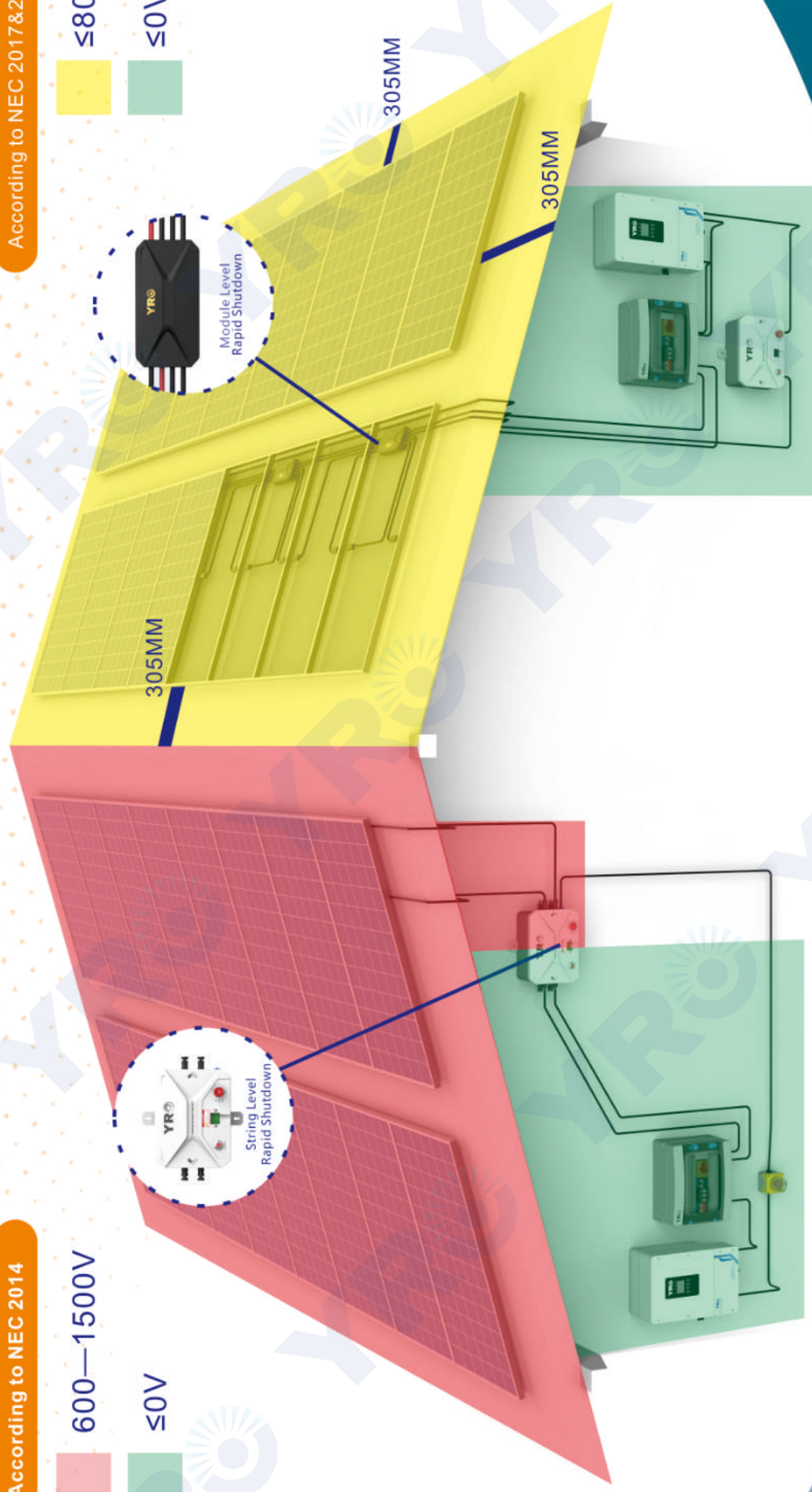


Rapid shutdown

According to NEC 2014



According to NEC 2017&2020



YRSD-P SERIES

Module Level

Rapid Shutdown (DC24V)



YRSD-1P



YRSD-2P



High Craftsmanship and Standards

- Over temperature protection $\geq 85^{\circ}\text{C}$
- Max 20A support
- Flame retardant: UL94-V0
- Ingress protection: $>\text{IP68}$ / NEMA 4X
- Compatible with all inverters, Slim EMC Design
- Easy Installation

Tripping Ways



Temperature
Rise Trigger



AC Supply
Cut-Off



Manual
Operation

Technical data

Type	YRSD-1P	YRSD-2P
Number of PV Inputs	1	2
Number of Modules Recommend	2	4
Maximum Allowed Input Voltage	120V	120V
Maximum Allowed Input Current	20A	
Maximum Output Voltage	120V	240V
System Voltage	1000V/1500V	
Control Compliance	24VDC+ $2 \times 1.5\text{mm}^2$ Cable	
Control Requirements	17V~28V at nomi. 20 mA/unit	
Ambient Operating Temperature	-30°C to $+80^{\circ}\text{C}$	
Protection Temperature	85°C	
IP Level	$>\text{IP68}$, NEMA 4X	
Fire-proof Level	Flame retardant, UL94-V0	
Humidity	0%~90%	
PV Connectors	MC4 (Customized)	
Warranty	12 years	
Size	YRSD-1P: $125 \times 59.7 \times 30.2\text{mm}$; YRSD-2P: $155.8 \times 73.7 \times 30.2\text{mm}$	
Weight	200g (Excluding Cables)	

YRSD-P SERIES

Module Level Rapid Shutdown(DC24V)



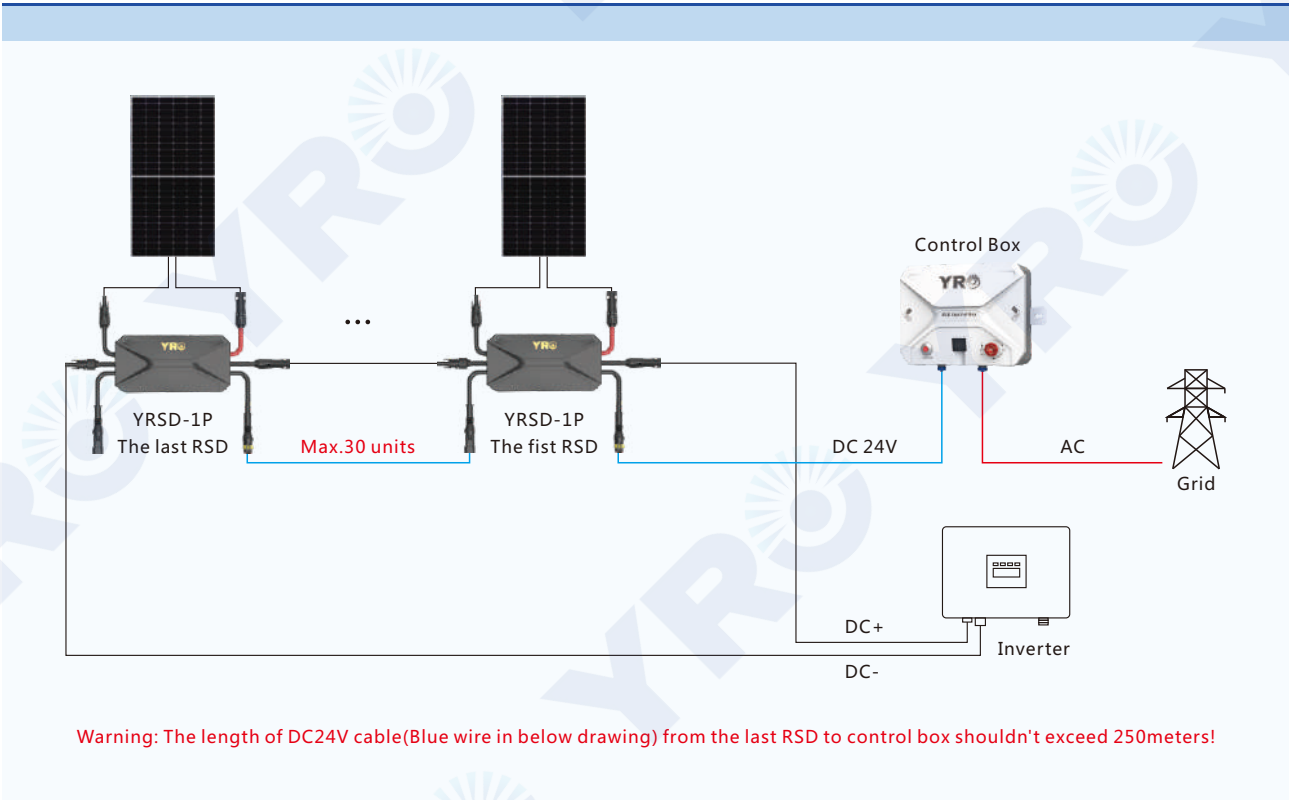
Cable Length	Option I (Default)	
PV1+ Input	1200mm	1200 mm
PV1- Input	1200mm	1200 mm
PV2+ Input	/	1200 mm
PV2- Input	/	1200 mm
Power Output	1800mm+1800mm	1800mm+1800mm
24VDC Control Cable	1800mm+1800mm	1800mm+1800mm
Standard Compliance	NEC2017/2020 (690.12); UL1741; UL3741; IEC/EN62109; IEC/EN61000	

Cable Length	Option II(Optional)			
Type	YRSD-1P		YRSP-2P	
PV1+ Input	120mm	600mm	1200mm	1500mm
PV1- Input	1200mm	1200mm	1200mm	2400mm
PV2+ Input	/	1200mm	/	2400mm
PV2- Input	/	600mm	/	1500mm
Power Output	1250mm+1250mm	1250mm+1250mm	1250mm+1250mm	2450mm+2450mm
24VDC Control Cable	1250mm+1250mm	1250mm+1250mm	1250mm+1250mm	2450mm+2450mm
Standard Compliance	NEC2017/2020 (690.12); UI1741; UL3741; IEC/EN62109; IEC/EN61000			

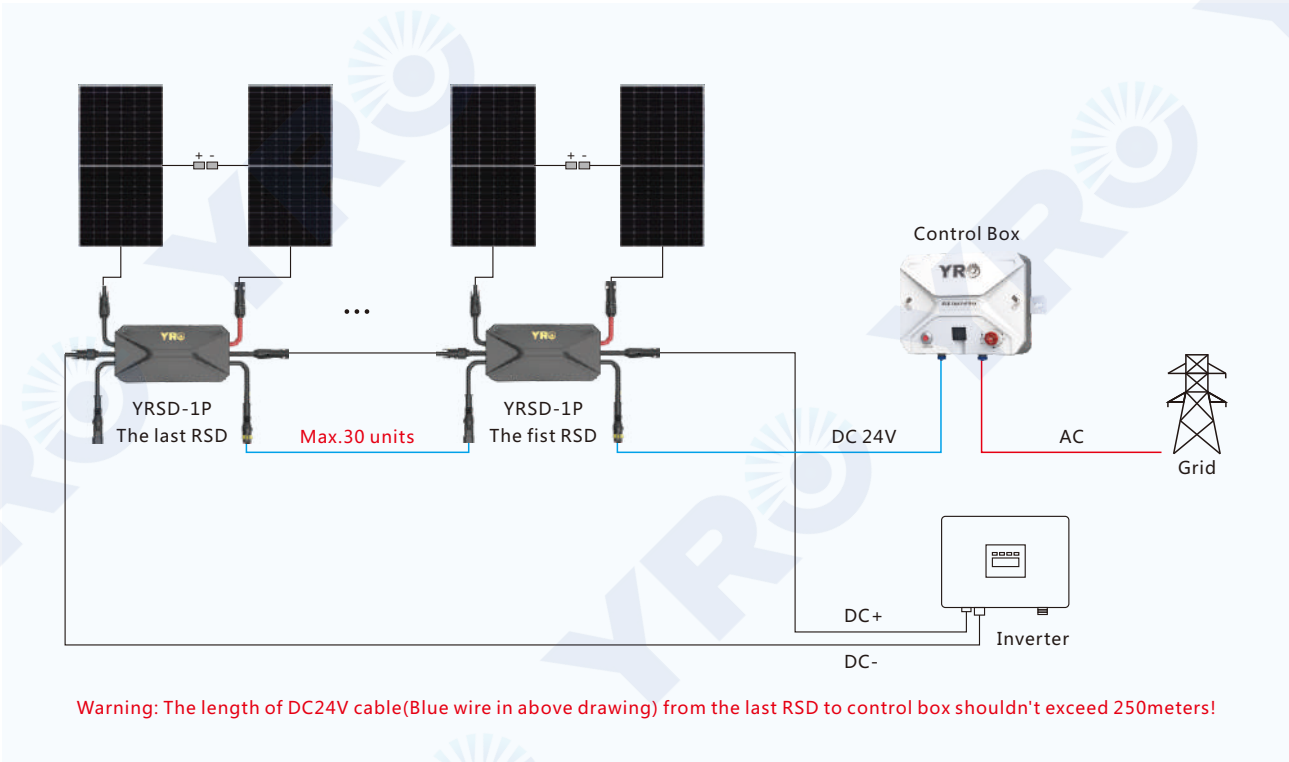
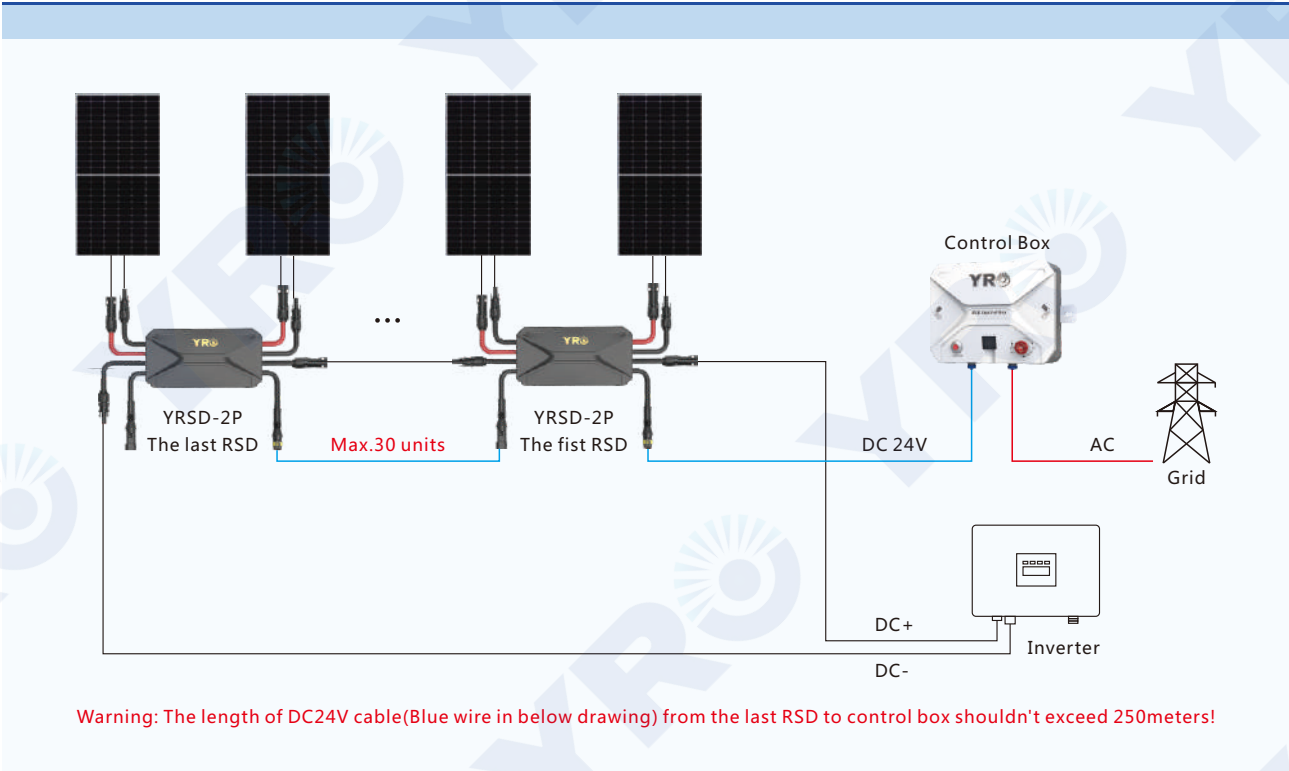
*Suitable for vertical photovoltaic modules

*If the length of cable is not enough, extension cables of 0.6m,1.2m,1.8m and 2.4m can be used.

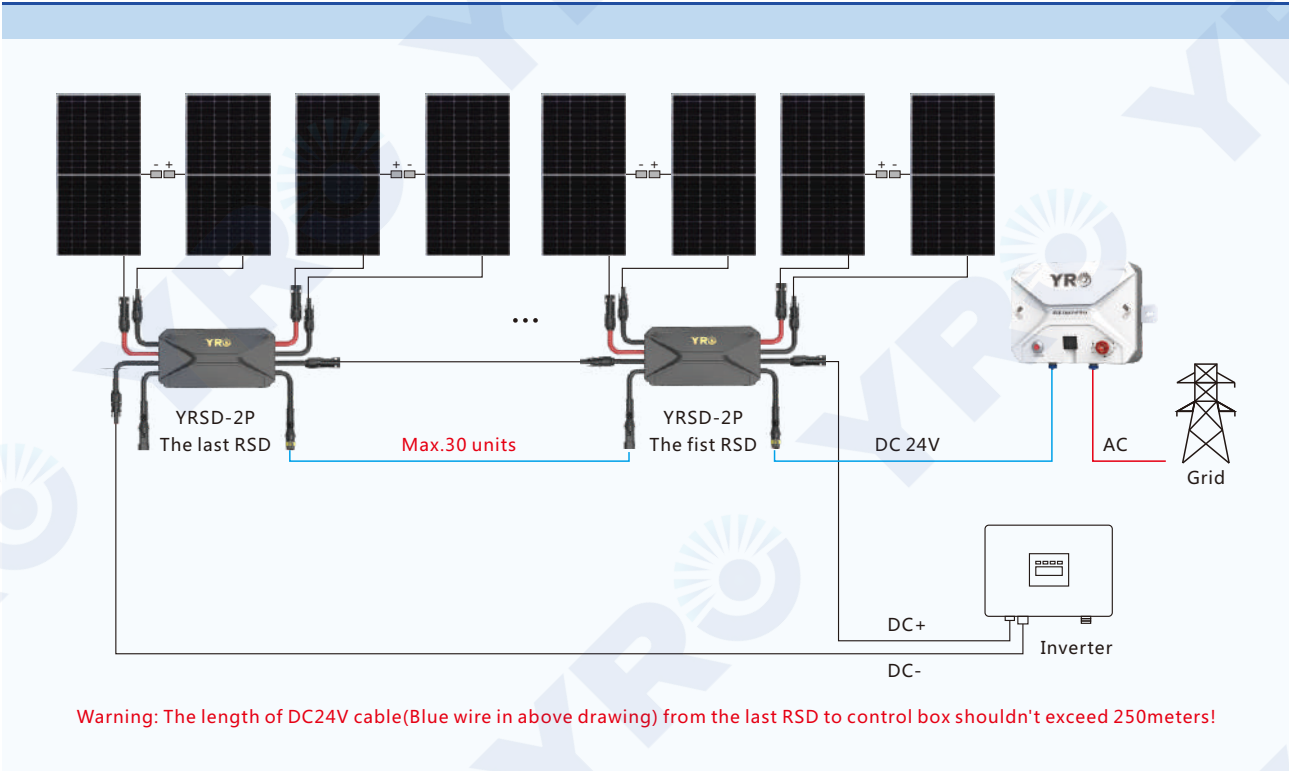
Diagram



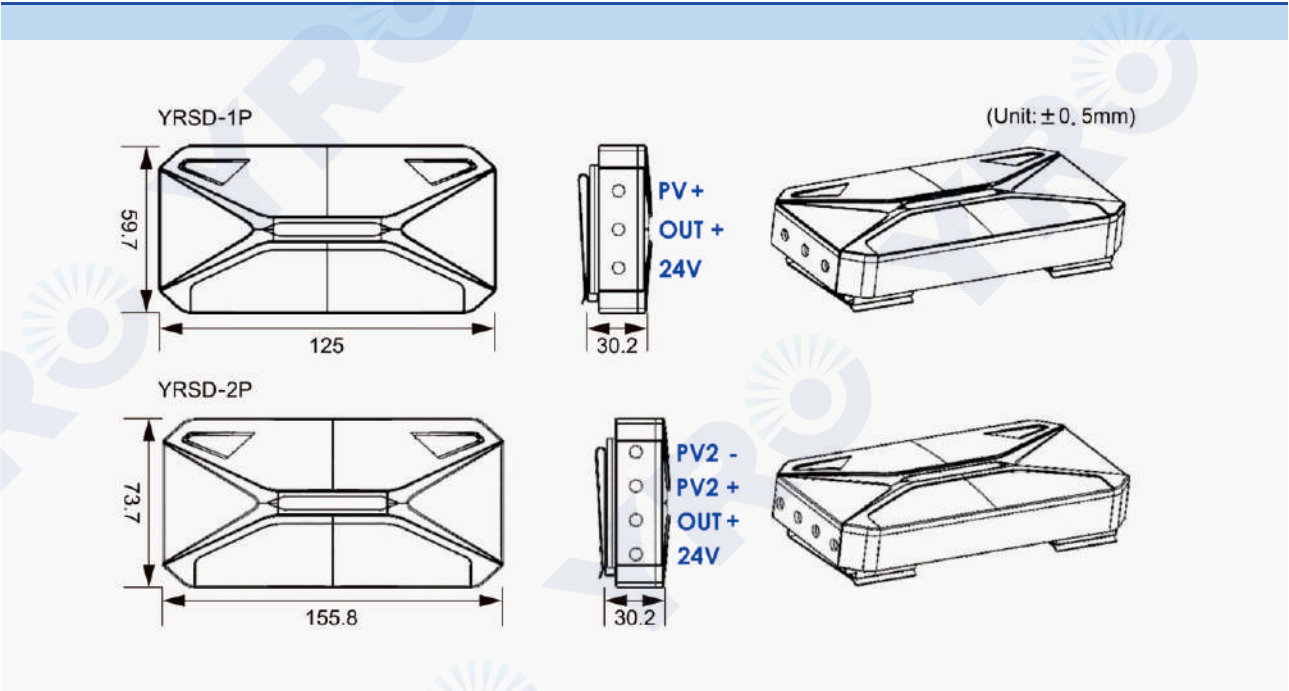
Diagram



Diagram



Dimensions



YRSD-CB SERIES

Rapid Shutdown
Control Box (DC24V)

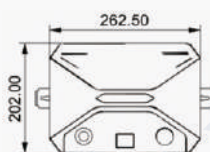


Technical data

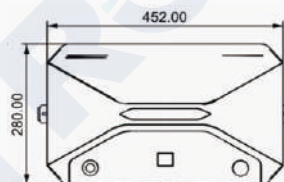
Type	YRSD-CB /60/1	YRSD-CB /180/3	YRSD-CB /500/8
Operating AC voltage range	100-240V	180-264V	180-264V
Normal frequency	50/60 Hz		
Output voltage	24V DC		
Output current	2.2A	8.8A(3 Channels)	17.6A(8 Channels)
24VDC control cable size	1.5mm ² /16AWG		
24VDC control cable length with standard connectors	20m / 30m / 100m		
Spare terminal connectors	Yes		
Maximum PEFS-PL	30 Units	3×30 Units	8×30 Units
Dimensions (mm)	202×262.5×105	280×452×105	280×452×105
With lock	Optional		
Operating temperature range	30°C~+55°C (Can work for 8 hours at 70°C)		
Protection class	IP65		
Mounting	Wall Mounted		
Maximum distance (from controller box to the terminal RSD)	250m		

Dimensions

Unit: mm



YRSD-CB/60/1



YRSD-CB/180/3
YRSD-CB/500/8

YRSD-A SERIES

String Level Rapid Shutdown
(Firefighter Switch 1–10 Strings)



High Craftsmanship and Standards

- Max 1500V, Max 50A
- Flame retardant: UL94-V0
- Easy Installation
- Physical isolation
- Outdoor installation: IP65
- Over temperature protection: > 70°C
- FB1 FB2 function achieves external monitoring

Technical data

Main Parameters	1-2 strings	3-5 strings	6-10 strings
System voltage (Vdc)	300~1500		
Max current (A)	50		
Number of strings	1/2	3/4/5	6/8/10
Poles	2/4	6/8/10	12/16/20
Operating voltage	100VAC~270VAC		
Nominal voltage	230VAC		
Nominal current	30mA	30mA	60mA
Operating temperature	-40°C~+70°C		
Automatically switch off by temperature	+70°C		
FB1 FB2 function (Standard configuration)	Contact Capacity: 250VAC,16A		
Storage temperature	-40°C~+85°C		
Ingress protection level	IP66	IP65	IP65
Protection level	Class II		
Certification	CE		
Regulations compliance	EN 60947-1&3		
Mechanical life	10000		
Electrical life	>1500		

YRSD-A SERIES

String Level Rapid Shutdown (Firefighter Switch 1–10 Strings)

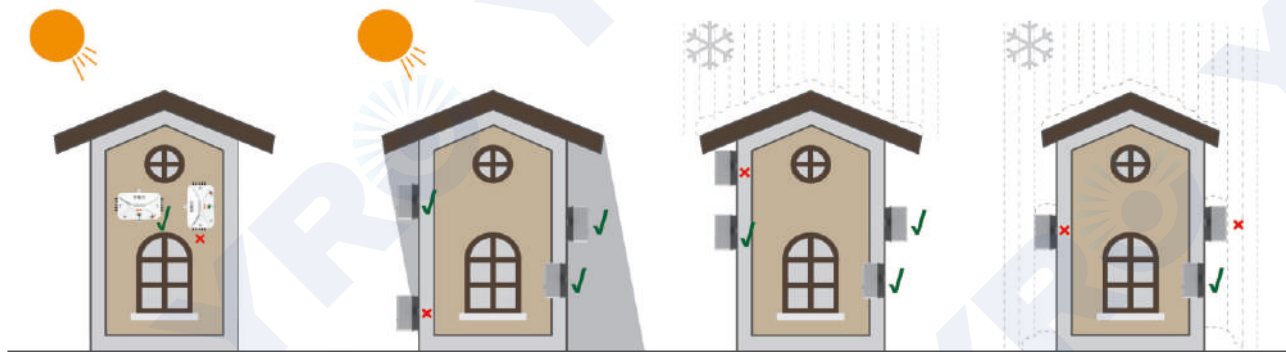


Technical data

PID Recovery Module Spec (optional)		
AC Input	Static Power	<0.5W
	Operating Power	3.75W
	Max. Power	8.75W
DC Output	Rated Output Voltage To Ground	600V
	Rated Output Current	3.3mA
	Max. Short Circuit Current	6.7mA
PV Modules and Inverter Requirements	Max. System Volatage	1500V
	Module Type Required	P Crystalline Silicon Type
	Minimum Insulating Impendance	200kΩ
Other Info	Operating temperature Range	-20°C ~ +60°C
	Operating Relative Humidity	0%~98%
	Max. Altitude Without Derating	4000m

Data of YRSD1 refer to built-in DC isolators. Data according to IEC60947-3(ed.3.2):2015. Utilization category DC-PV1.						1-10 strings	Part Number
300V	600V	800V	1000V	1200V	1500V		
50A	50A	50A	50A	40A	30A	2/4/6/8/10/12/16/20	YRSD-A

Installation



Contact Configuration

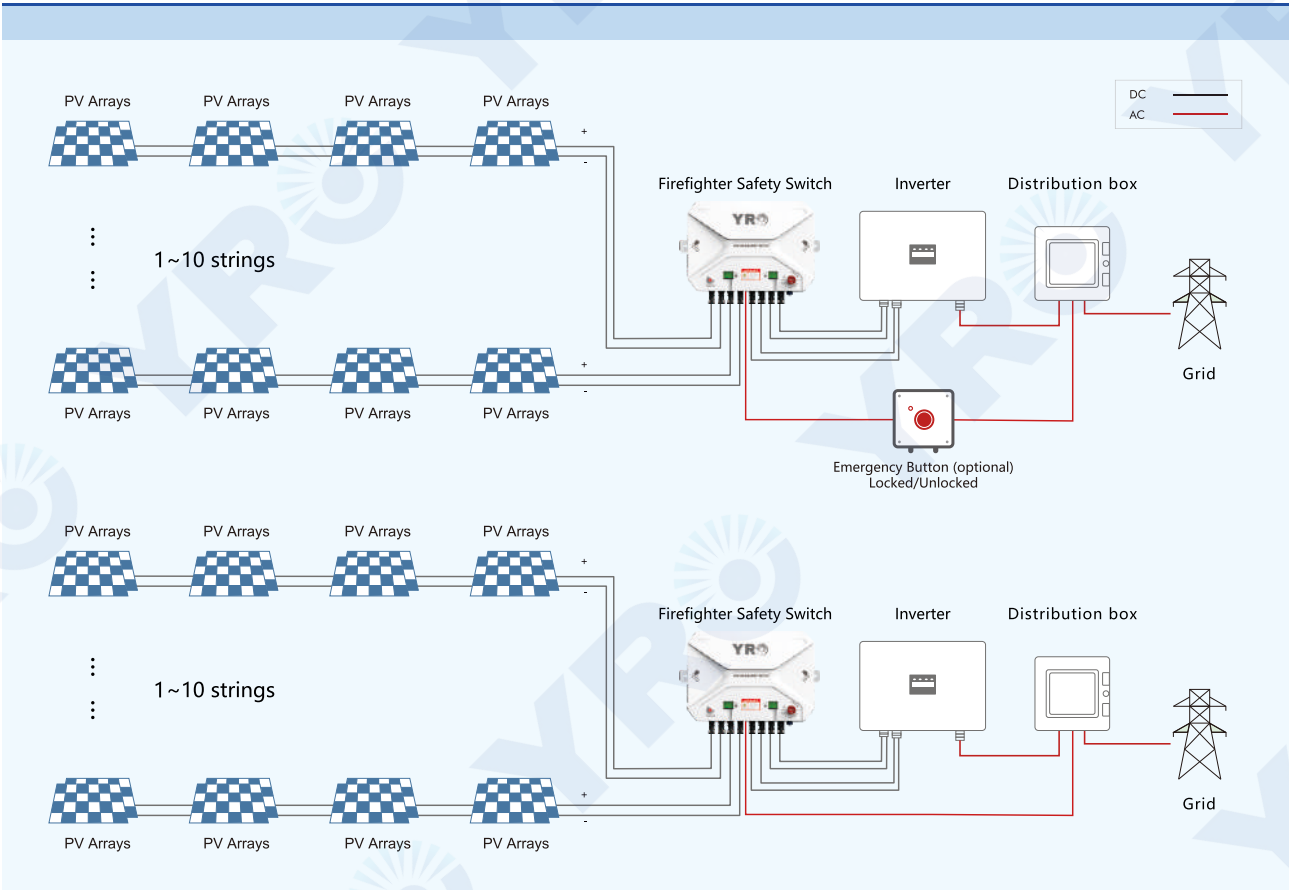
2	4	6/2*6	8/2*8	10/2*10

YRSD-A SERIES

String Level Rapid Shutdown (Firefighter Switch 1–10 Strings)

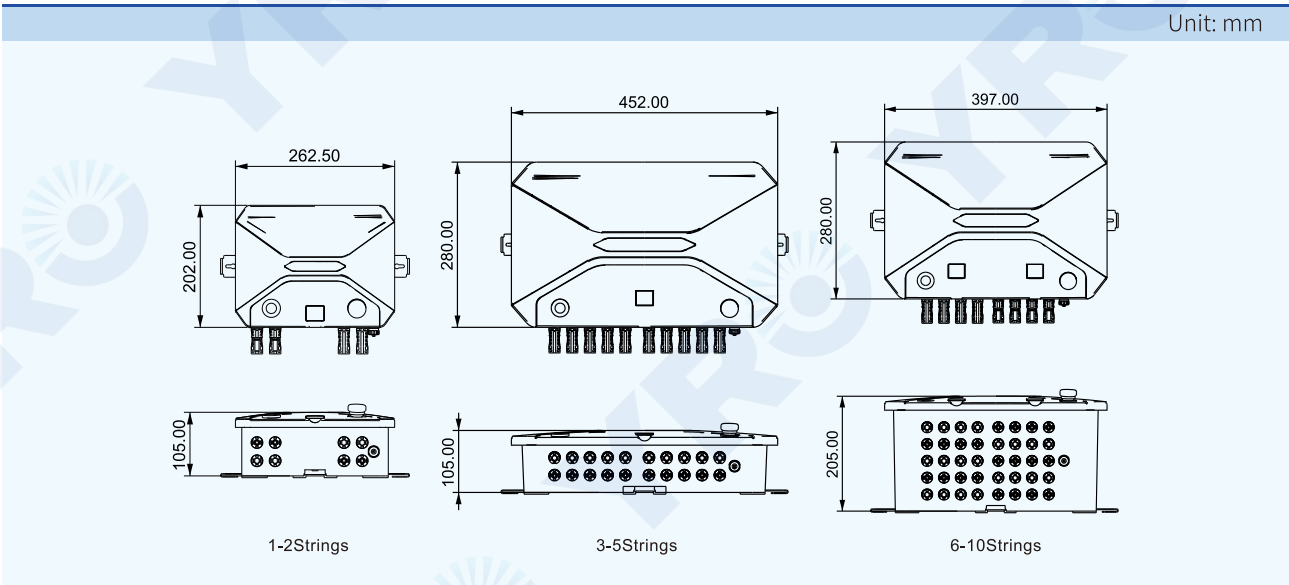


Diagram



Dimensions

Unit: mm



YRSD-A SERIES

String Level Rapid Shutdown Device (WiFi)



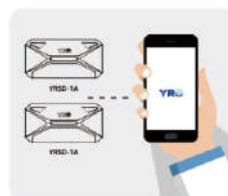
Application

The Rapid Shutdown has been especially developed as a safety device for direct current(DC) photovoltaic installations. The DC disconnect switch is used to disconnect the connected strings of the installation in case of an emergency situation. Such an emergency situation could be in case of fire.



Automatic Shutdown

Automatically shutdown the DC power of panels when detecting temperature of the area is higher than 70°C.



RS485 shutdown optional

Maintenancers or homeowners can also remotely shutdown through RS485 communication (Optional)

Technical data

Main Parameters		
Type Code	YRSD-xA/wifi; x=1~10 Strings	
String voltage	DC1000V	DC1500V
String current	32A(40A optional)	26A
Rated voltage	AC230V~	
Operation voltage	AC100-270V~	
Operation temp	-40~+85°C	
Protection temp	+70°C	
Protection level	IP66	
Standard	IEC 60947-1&3/NEC 2014	
Communication	2.4G wifi/RS485	
App	YRO SMART	

App menu



Scan to
download
YRO Smart



DC Miniature Circuit Breaker



YRL7-63DC SERIES

Non-polarity DC Miniature Circuit Breaker



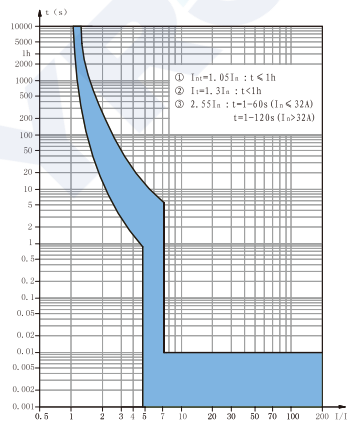
Application

YRL7-63DC series non-polarity DC miniature circuit breaker has passed the IEC 60947-2 and EN 60947-2, standard tests TUV, CE, CB. Mainly used in photovoltaic, energy storage and other DC systems that need to be disconnected and protected when overcurrent or short circuit occurs.

Advantages

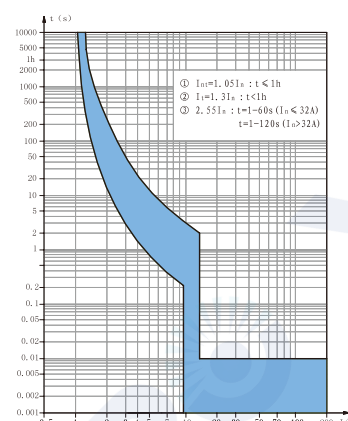
- Full current specification
- Non-polar design
- High breaking capacity
- Adapt to high & low temperature environment
- Long mechanical and electrical life
- Flame retardant material, more secure

Tripping Characteristics



B Curve 4-6In(1±20%)

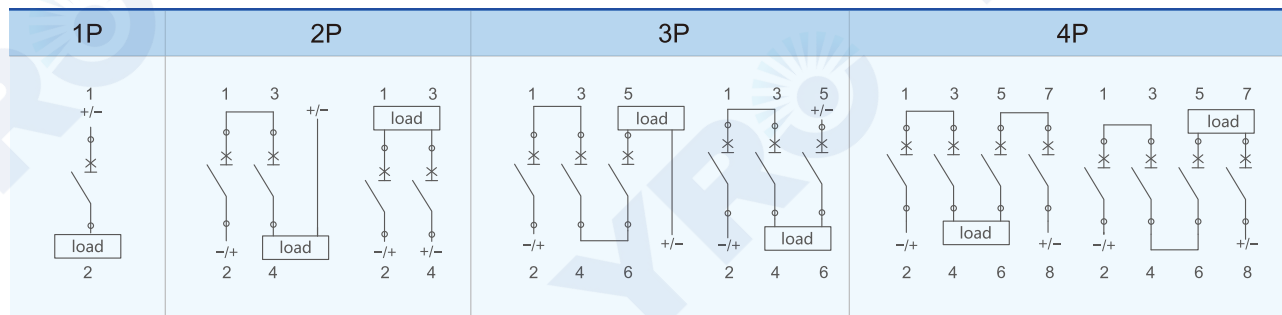
- Suitable for pure resistive load and microinductive circuit
- Available to rated current of 6A ~ 63A(63A Frame)
- Instantaneous tripping range: 4-6In±20%



C Curve 8-10In(1±20%)

- Suitable for general load and power distribution circuit
- Available to rated current of 6A ~ 63A(63A Frame)
- Instantaneous tripping range: 8-10In±20%

Contact Configuration



YRL7-63DC SERIES

Non-polarity DC Miniature Circuit Breaker



Technical Data

According to EN/ IEC 60947-2					
Pole		1P	2P	3P	4P
Rated Working Voltage Ue		300 V DC	600/800 V DC	900 V DC	1200 V DC
Frame Current		63A			
Rated Current In		63A, 50A, 40A, 32A, 25A, 20A,16A,10A,6A			
Rated Insulation Voltage Ui		1200V			
Rated Impulse Withstand Voltage Uimp		4-8kV			
Tripping Characteristics		B/C			
Tripping Type		Thermal Magnetic			
Rated Ultimate Short-Circuit Breaking Capacity Icu		6kA (2P 800V 4.5kA)			
Rated Service Short-Circuit Interrupting Capacity Ics		6kA (2P 800V 4.5kA)			
Electrical Life	Actual	> 1000 Cycles			
	Standard	1000 Cycles			
Mechanical Life	Actual	>20000 Cycles			
	Standard	8500 Cycles			
Overvoltage Category		III			
Pollution Degree		3			
Ingress Protection		IP40; Wiring port IP20			
Resistance to humidity and heat		Class 2			
Relative Humidity		≤ 95 %			
Wiring capacity		14 ~ 2 AWG			
Wiring knob		2.5 Nm			
Ambient Temperature		-30°C~70°C			
Storage Temperature		-40°C~85°C			
Installation Method		DIN			
Elevation		≤2000m			
Dimension		Width:72mm (4P); 54mm (3P) ; 36mm (2P)			
		High: 108mm			
		Depth: 76mm			
Weight		0.13kg/Pole			

Package Information					Storage
Current	Pole	Box	Carton		
63A/32A	1P	12	120		Products should be stored in the warehouse where there is ventilation. The relative humidity there should not exceed 80%, and the ambient temperature there is between -40°C to + 85°C. In addition, there should not be acidic, alkaline and corrosive gas in the air.
	2P	6	60		
	3P	4	40		
	4P	3	30		

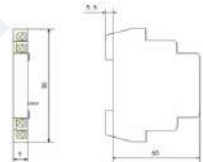
YRL7-63DC SERIES

Non-polarity DC Miniature Circuit Breaker



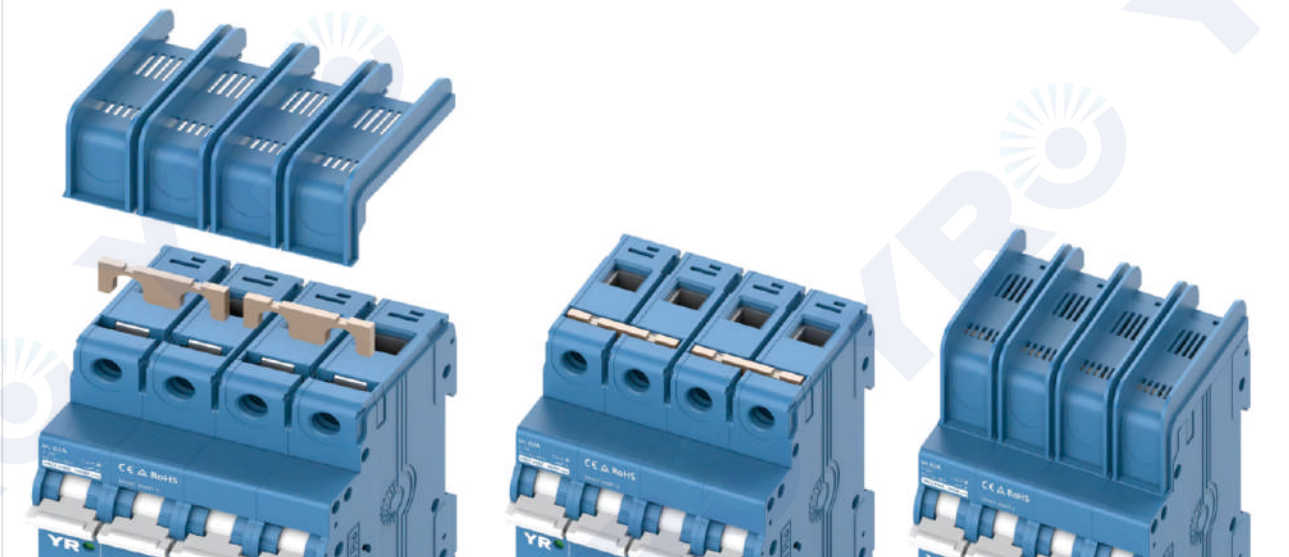
Accessories

Shunt trip release ,MX	
Rated insulation voltage	250V
Rated control voltage Us	DC: 12 ~ 24V
	DC: 24 ~ 48V
The maximum deduction time of MX	<10ms
Power access terminal of MX	Upper terminal or lower terminal (Nonpolarity)
Mechanical life	10000 times
Electrical life	4000 times
Torque	2Nm
Range of working temperature	-30 °C ~ +70 °C
Applicable circuit breaker model	YRL7-63DC
Environmental conditions	There should be no medium that causes the danger of explosion, nor does it have no harmful gases and electric conductivity dust that corrodes and damage insulation.
Assembly position	Left side of the circuit breaker
Installation conditions	DIN35mm
Dimensions	

Auxiliary contact, OF	
Rated insulation voltage	250V
Auxiliary contact's capacity	3A: AC400V
	1A: DC110V
The minimum operating voltage of the auxiliary contact	<10ms
Agreed heating current of auxiliary contact	5V
	4A
Terminals for auxiliary contact	11, 12 terminals: NC; ,21,22terminals: NO
Wiring ability	1 ~ 2.5mm ²
Torque	0.3 ~ 0.5Nm
Applicable circuit breaker model	YRL7-63DC
Environmental conditions	There should be no medium that causes the danger of explosion, nor does it have no harmful gases and electric conductivity dust that corrodes and damage insulation.
Assembly position	Left side of the circuit breaker
Installation conditions	DIN35mm
Dimensions	

Structure Diagram

Inner Bus-bar design for 4P connect in series



Reduction Coefficient

Temperature reduction coefficient																				
	-30°C	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C	
16A	1.24	1.22	1.20	1.18	1.16	1.14	1.11	1.09	1.07	1.05	1.02	1.00	1.00	1.00	1.00	0.90	0.87	0.84	0.81	
20A	1.23	1.21	1.19	1.17	1.15	1.13	1.11	1.09	1.07	1.05	1.02	1.00	1.00	1.00	1.00	0.90	0.87	0.84	0.81	
25A	1.24	1.22	1.20	1.18	1.16	1.14	1.11	1.09	1.07	1.05	1.02	1.00	1.00	1.00	1.00	0.90	0.87	0.85	0.82	
32A	1.23	1.21	1.19	1.17	1.15	1.13	1.11	1.09	1.07	1.04	1.02	1.00	1.00	1.00	1.00	0.91	0.88	0.85	0.78	
40A	1.23	1.21	1.19	1.17	1.15	1.13	1.11	1.09	1.07	1.05	1.02	1.00	1.00	1.00	1.00	0.91	0.88	0.85	0.82	
50A	1.23	1.21	1.19	1.17	1.15	1.13	1.11	1.09	1.07	1.05	1.02	1.00	1.00	1.00	1.00	0.91	0.88	0.85	0.82	
63A	1.27	1.25	1.22	1.20	1.18	1.15	1.13	1.11	1.08	1.05	0.87	1.00	1.00	1.00	1.00	0.88	0.85	0.82	0.78	
80A	1.27	1.25	1.22	1.20	1.18	1.15	1.13	1.11	1.08	1.05	0.87	1.00	1.00	1.00	1.00	0.88	0.85	0.82	0.78	

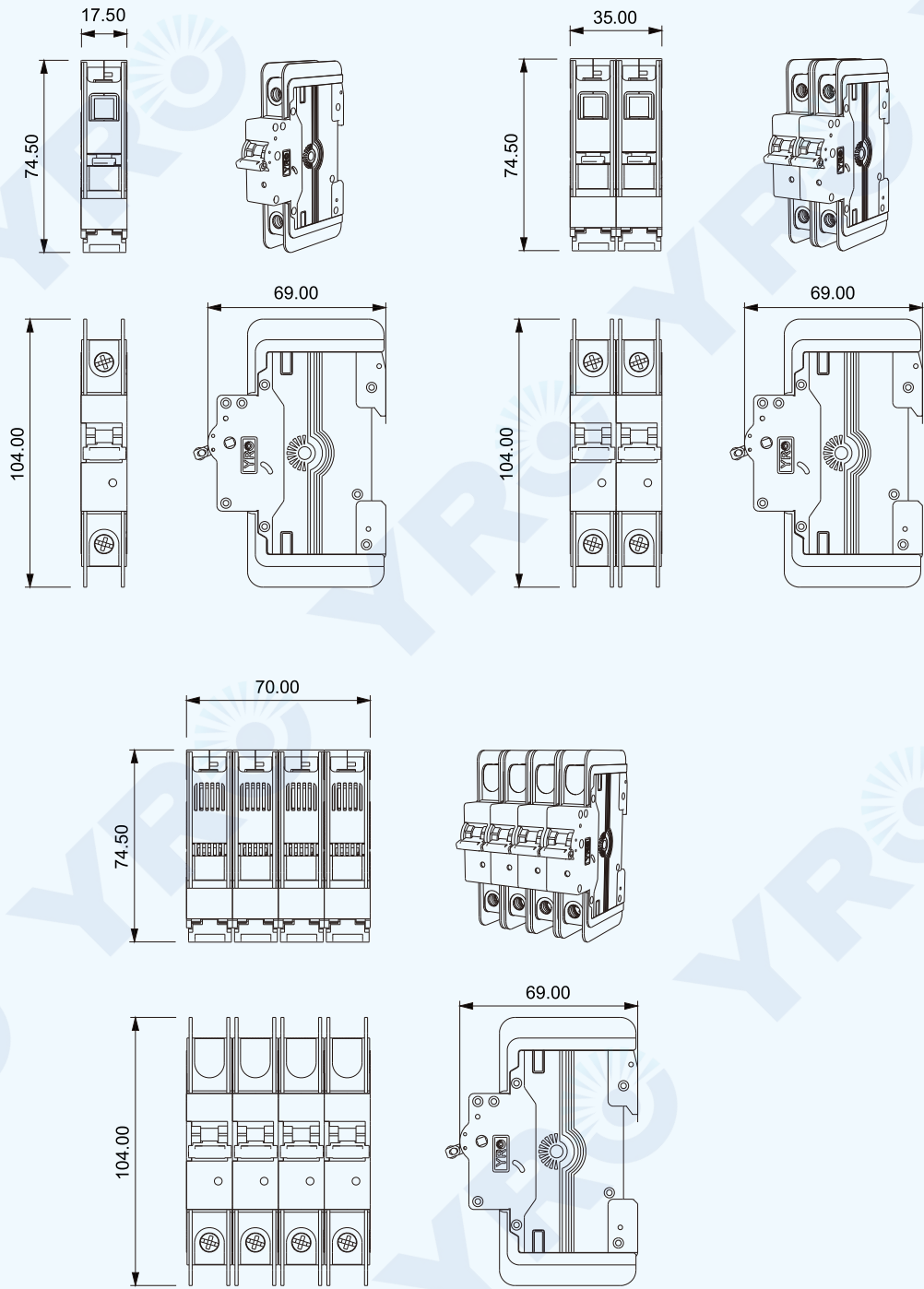
Altitude reduction coefficient				
Altitude (m)	2000	3000	4000	5000
Rated Current (In)	1	0.97	0.91	0.86
Rated Insulation (Ui)	1	0.90	0.82	0.76
Power-Frequency Dielectric Strength	1	0.90	0.82	0.76
Rated Impact Tolerance Voltage (Uimp)	1	0.90	0.82	0.76
Values Of Rated Shour-Circuit Capacity (Icn)	1	0.87	0.77	0.67
Electrical Life (Cycles)	1	0.87	0.77	0.67

YRL7-63DC SERIES
Non-polarity DC Miniature Circuit Breaker



Dimensions

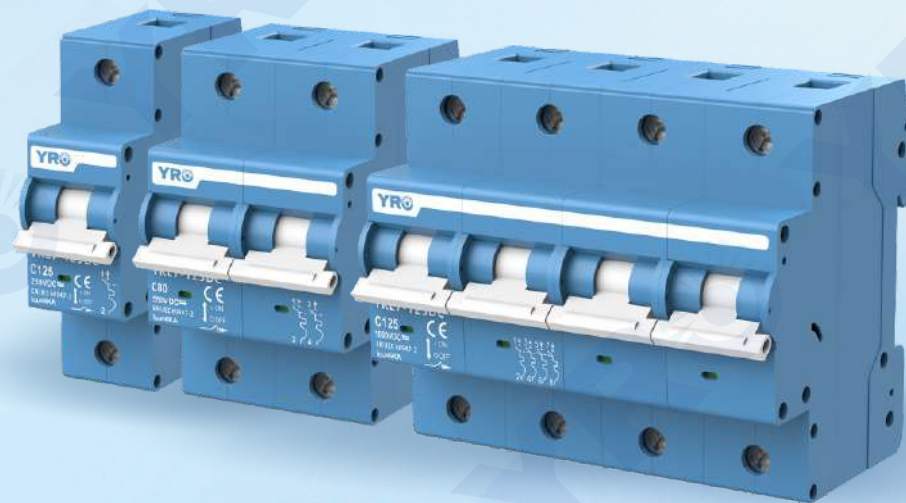
Unit: mm



* Note: Tolerance is generally within $\pm 0.3\text{mm}$

YRL7-125DC SERIES

Non-polarity DC Miniature
Circuit Breaker



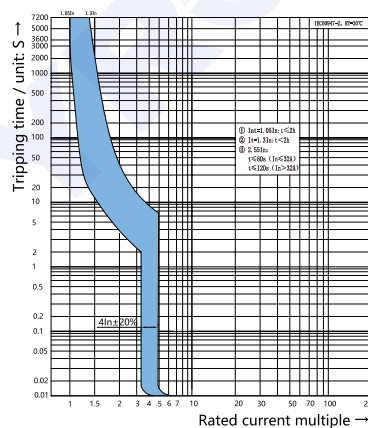
Application

YRL7-125DC series polarity DC miniature circuit breaker are mainly used in photovoltaic, energy storage and other DC systems that need to be interrupted and protected when overcurrent or short circuit occurs.

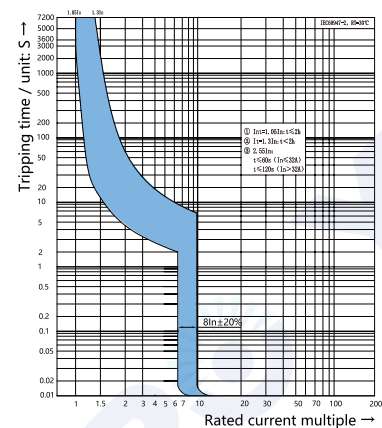
Advantages

- Full current specification
- High breaking capacity
- Non-polar design
- Adapt to high and low temperature environment
- Long mechanical and electrical life
- Flame retardant material, safer
- Maximum rated voltage 1000VDC, rated current up to 125A

Tripping Characteristics

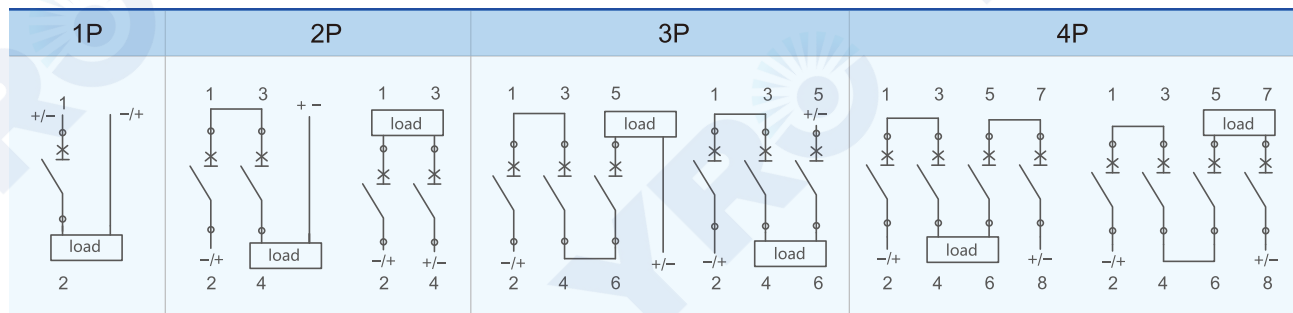


B Curve 4In ± 20%
Applicable rated current 80A-125A



C Curve 8In ± 20%
Applicable rated current 80A-125A

Contact Configuration



YRL7-1 25DC SERIES

Non-polarity DC Miniature Circuit Breaker



Technical Data

According to EN60947-2, AS/NZS IEC 60947.2					
Pole		1P	2P	3P	4P
Rated Working Voltage Ue		250 V DC	550 V DC	750 V DC	1000 V DC
Frame Current		125A			
Rated Current In		80A, 100A, 125A			
Rated Insulation Voltage Ui		1000V			
Rated Impulse Withstand Voltage Uimp		6kV			
Tripping Characteristics		B/C			
Tripping Type		Thermal Magnetic			
Rated Ultimate Short-Circuit Breaking Capacity Icu		6kA			
Rated Service Short-Circuit Interrupting Capacity Ics		6kA			
Electrical Life	Actual	Average 1000 Cycles			
	Standard	200 Cycles			
Mechanical Life	Actual	> 10000 Cycles			
	Standard	9700 Cycles			
Overvoltage Category		III			
Pollution Degree		3			
Ingress Protection		IP40; Wiring port IP20			
Resistance to humidity and heat		Class 2			
Relative Humidity		≤ 95 %			
Vibration		acc. to IEC60068-2-6			
Shocks		acc. to IEC60068-2-27			
Terminal capacity		2.5~35mm²			
Fastening Torque of Terminals		3.5 Nm			
Ambient Temperature		-30℃~70℃			
Storage Temperature		-40℃~85℃			
Installation Method		DIN35mm			
Elevation		≤2000m			
Dimension		length: 81mm			
		Width: 108mm (4P), 81mm (3P), 54mm (2P),27mm (1P)			
		High: 75.5mm			
Weight		0.17kg/Pole			

Package Information					Storage
Current	Pole	Box	Carton	Unit Weight	Products should be stored in the warehouse where there is ventilation. The relative humidity there should not exceed 80%, and the ambient temperature there is between -40°C to + 85°C. In addition, there should not be acidic, alkaline and corrosive gas in the air.
125A	1P	8	80	0.16kg	
	2P	4	40	0.32kg	
	3P	2	20	0.48kg	
	4P	2	20	0.64kg	

YRL7-1 25DC SERIES

Non-polarity DC Miniature Circuit Breaker



Accessories

Technical parameter of shunt trip release, MX	
Working voltage US	DC: 24 ~ 48V
Maximum deduction time	< 10ms
Coil resistance	1.8Ω
Mechanical life	10000 times
Electrical life	4000 times
Torque	0.3 ~ 0.8Nm
Wiring ability	1 ~ 2.5mm ² (hard line), 1 ~ 2.5mm ² (soft line, with hoop line terminal)
Range of working temperature	-30 °C ~ +70 °C
Environmental conditions	There should be no medium that causes the danger of explosion, nor does it have no harmful gases and electric conductivity dust that corrodes and damage insulation.
Assembly position	Left side of the circuit breaker
Installation conditions	DIN35mm

Technical parameters auxiliary contact, OF	
Contact capacity of OF	AC13: Ie=3A; Ue=250V AC15: Ie=2A; Ue=250V DC12: Ie=0.5A; Ue=110V
Minimum operating voltage	5V
Minimum operating current	10mA
Rated insulation voltage	415V
Rating restricted short -circuit current I _k	1000A
Conventional thermal current I _{th}	4A
Mechanical life	10000 times
Electrical life	4000 times
Torque	0.3 ~ 0.8Nm
Wiring ability	1 × 1.0 ~ 1 × 2.5mm ²
Range of working temperature	-30 °C ~ +70 °C
Number of contacts	1 NO contact, 1 NC contact
Environmental conditions	There should be no medium that causes the danger of explosion, nor does it have no harmful gases and electric conductivity dust that corrodes and damage insulation.
Assembly position	Left side of the circuit breaker
Installation conditions	DIN35mm

Reduction Coefficient

Temperature reduction coefficient																				
Temperature	-30°C	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C	15°C	20°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C
The rated work current coefficient	1.242	1.223	1.204	1.182	1.161	1.143	1.127	1.103	1.079	1.063	1.047	1	0.984	0.968	0.952	0.922	0.904	0.891	0.872	0.844

YRL7-1 25DC SERIES

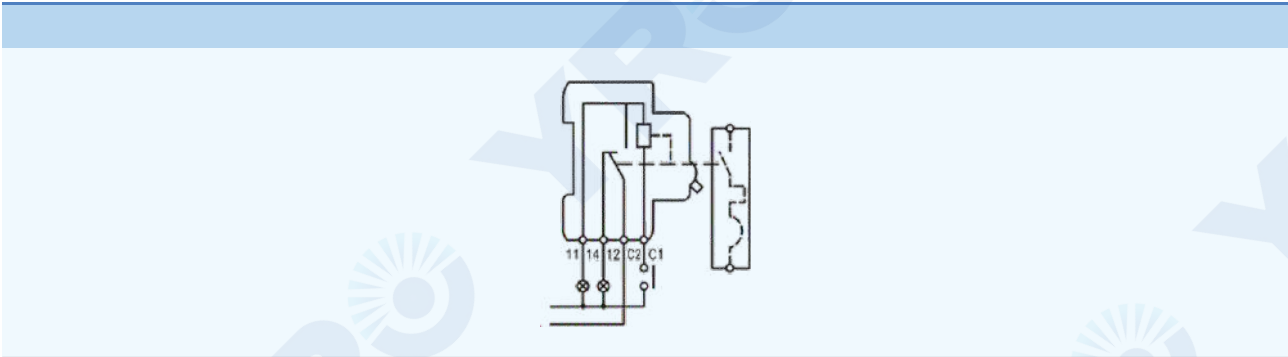
Non-polarity DC Miniature Circuit Breaker



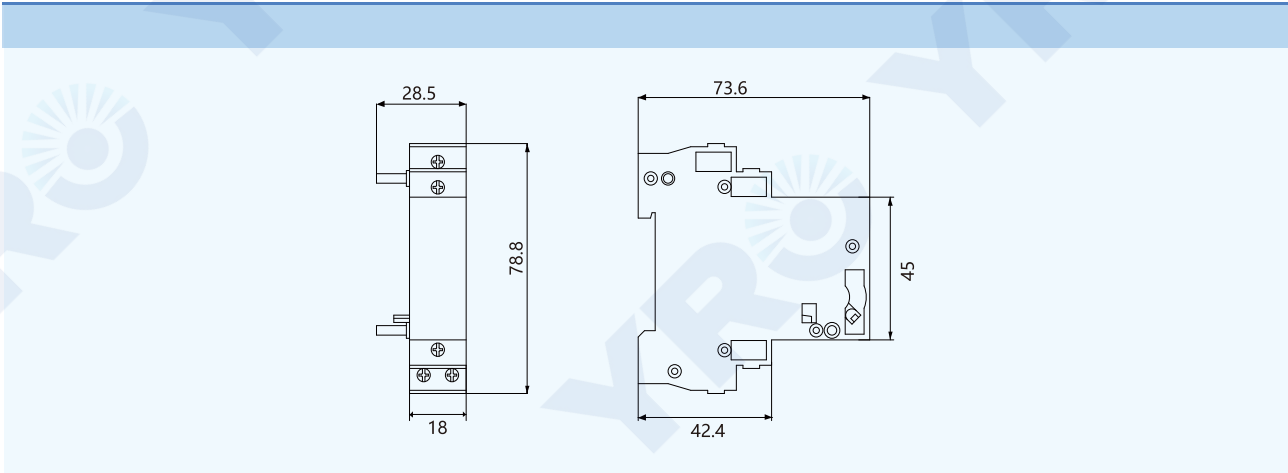
Altitude reduction coefficient				
Altitude m	2000	3000	4000	5000
The rated working current coefficient	1	0.96	0.91	0.86
The rated work voltage coefficient	1	1	1	1
Rated industrial frequency resistance coefficient	1	0.9	0.82	0.71
The rated impact tolerance voltage coefficient	1	0.9	0.82	0.71
The rated ultimate short-circuit capacity and electronic life coefficient	1	0.82	0.7	0.6

MCB Side -by -side installation reduction coefficient					
Number of MCBs	1	2 ~ 3	4 ~ 5	6 ~ 8	9 ~ 10
In≤25A coefficient	1	0.96	0.9	0.8	0.7
32A≤In≤63A coefficient	1	0.92	0.8	0.7	0.6
80A≤In≤125A coefficient	1	0.9	0.8	0.7	/

Wiring Diagrams



Dimensions of MX+OF



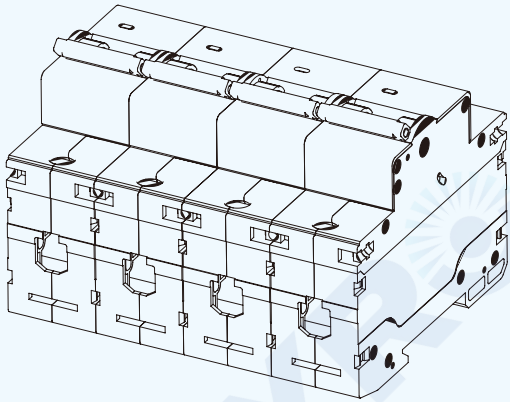
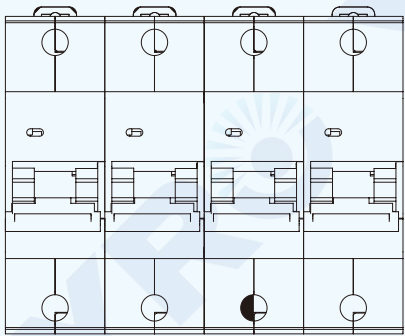
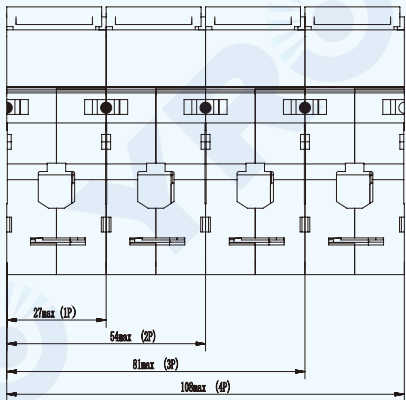
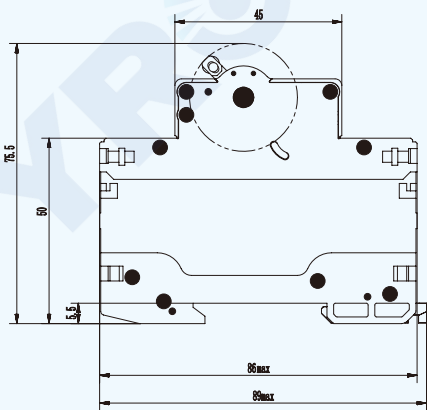
YRL7-125DC SERIES

Non-polarity DC Miniature Circuit Breaker



Dimensions

Unit: mm



YRL7-63DC SERIES

Polarity DC Miniature
Circuit Breaker



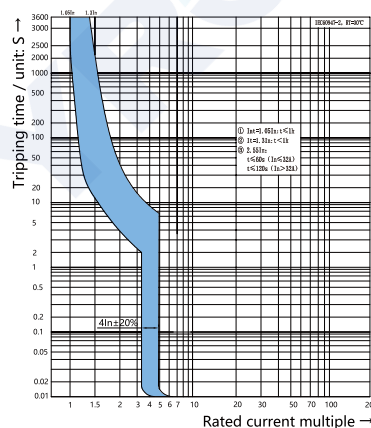
Application

YRL7-63DC series polarity DC miniature circuit breaker are mainly used in photovoltaic, energy storage and other DC systems that need to be interrupted and protected when overcurrent or short circuit occurs.

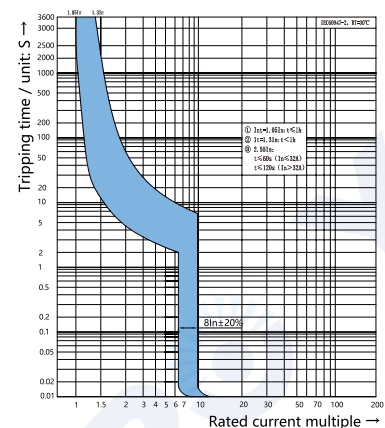
Advantages

- Full current specification
- High breaking capacity
- Adapt to high and low temperature environment
- Long mechanical and electrical life
- Flame retardant material, safer
- Maximum rated voltage 1000VDC, rated current up to 63A

Tripping Characteristics

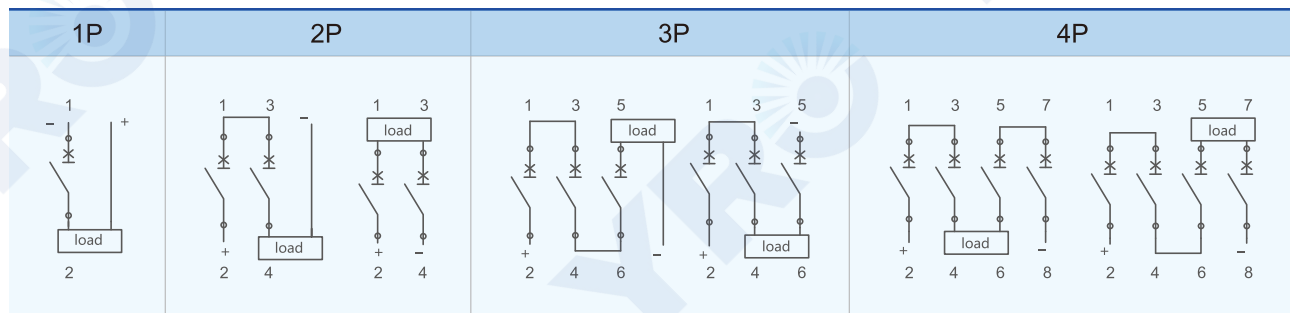


B Curve 4-6In±20%
Applicable rated current ≤63A



C Curve 8-10In±20%
Applicable rated current ≤63A

Contact Configuration



Note:

- The polarity type DC breaker must connect according to the above wiring direction.
- The "+" and "-" means current direction which is from "+" to "-".

Technical Data

According to EN/ IEC 60947-2					
Pole		1P	2P	3P	4P
Rated Working Voltage Ue		250 V DC	550/800 V DC	750 V DC	1000 V DC
Frame Current		63A			
Rated Current In		63A, 50A, 40A, 32A, 25A, 20A,16A,10A, 6A			
Rated Insulation Voltage Ui		1000V			
Rated Impulse Withstand Voltage Uimp		6kV			
Tripping Characteristics		B/C			
Tripping Type		Thermal Magnetic			
Rated Ultimate Short-Circuit Breaking Capacity Icu		6kA (800V 4.5kA)			
Rated Service Short-Circuit Interrupting Capacity Ics		6kA (800V 4.5kA)			
Electrical Life	Actual	Average 800 Cycles			
	Standard	300 Cycles			
Mechanical Life	Actual	> 10000 Cycles			
	Standard	9700 Cycles			
Overvoltage Category		III			
Pollution Degree		3			
Ingress Protection		IP40; Wiring port IP20			
Resistance to humidity and heat		Class 2			
Relative Humidity		≤ 95 %			
Vibration		acc. to IEC60068-2-6			
Shocks		acc. to IEC60068-2-27			
Terminal capacity		2.5~35mm²			
Fastening Torque of Terminals		2.0Nm			
Ambient Temperature		-30°C~70°C			
Storage Temperature		-40°C~85°C			
Installation Method		DIN35mm			
Elevation		≤2000m			
Dimension		length: 81mm			
		Width: 72mm (4P), 54mm (3P), 36mm (2P), 18mm (1P)			
		High: 87.5mm			
Weight		0.11kg/Pole			

Package Information					Storage
Current	Pole	Box	Carton		
63A/32A	1P	12	120		Products should be stored in the warehouse where there is ventilation. The relative humidity there should not exceed 80%, and the ambient temperature there is between -40°C to + 85°C. In addition, there should not be acidic, alkaline and corrosive gas in the air.
	2P	6	60		
	3P	4	40		
	4P	3	30		

Accessories

Technical parameter of shunt trip release, MX	
Working voltage US	DC: 24 ~ 48V (note:DC10~24V is specially used by BYD)
Maximum deduction time	< 10ms
Coil resistance	5Ω
Limited current	≥1.6A
Mechanical life	10000 times
Electrical life	4000 times
Torque	2.0 ~ 3.5N · m
Wiring ability	1 ~ 35mm ² (hard line), 1 ~ 35mm ² (Soft line, with hoop line terminal)
Range of working temperature	-30 °C ~+70 °C
Environmental conditions	There should be no medium that causes the danger of explosion, nor does it have no harmful gases and electric conductivity dust that corrodes and damage insulation.
Assembly position	Left side of the circuit breaker
Installation conditions	DIN35mm

Technical parameters auxiliary contact, OF	
Contact capacity of OF	AC13: Ie=3A; Ue=250V AC15: Ie=2A; Ue=250V DC12: Ie=0.5A; Ue=110V
Minimum operating voltage	5V
Minimum operating current	10mA
Rated insulation voltage	500V
Rating restricted short -circuit current I _k	1000A
Conventional thermal current I _{th}	4A
Mechanical life	10000 times
Electrical life	4000 times
Torque	0.3 ~ 0.8Nm
Wiring ability	1 × 1.0 ~ 1 × 2.5mm ²
Range of working temperature	-30 °C ~+70 °C
Number of contacts	1 NO contact, 1 NC contact
Environmental conditions	There should be no medium that causes the danger of explosion, nor does it have no harmful gases and electric conductivity dust that corrodes and damage insulation.
Assembly position	Left side of the circuit breaker
Installation conditions	DIN35mm

Reduction Coefficient

Temperature reduction coefficient																				
Temperature	-30°C	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C	15°C	20°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C
The rated work current coefficient	1.242	1.223	1.204	1.182	1.161	1.143	1.127	1.103	1.079	1.063	1.047	1	0.984	0.968	0.952	0.922	0.904	0.891	0.872	0.844

YRL7-63DC SERIES

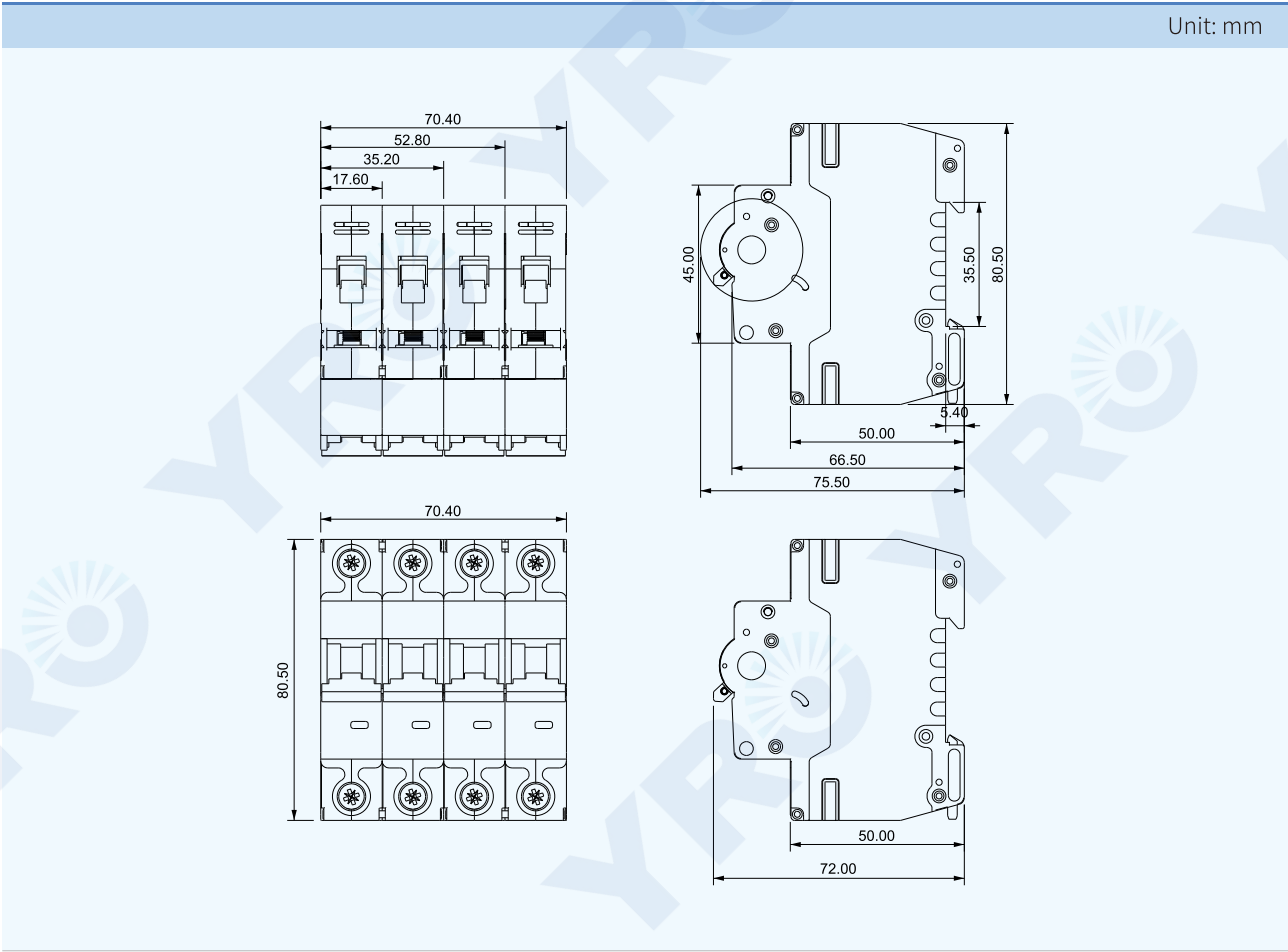
Polarity DC Miniature Circuit Breaker



Altitude reduction coefficient					
Altitude m	2000	3000	4000	5000	
The rated working current coefficient	1	0.96	0.91	0.86	
The rated work voltage coefficient	1	1	1	1	
Rated industrial frequency resistance coefficient	1	0.9	0.82	0.71	
The rated impact tolerance voltage coefficient	1	0.9	0.82	0.71	
The rated ultimate short-circuit capacity and electronic life coefficient	1	0.82	0.7	0.6	

MCB Side -by -side installation reduction coefficient					
Number of MCBs	1	2 ~ 3	4 ~ 5	6 ~ 8	9 ~ 10
In≤25A coefficient	1	0.96	0.9	0.8	0.7
32A≤In≤63A coefficient	1	0.92	0.8	0.7	0.6
80A≤In≤125A coefficient	1	0.9	0.8	0.7	/

Dimensions



YRCB-125DC SERIES

Polarity DC Miniature
Circuit Breaker



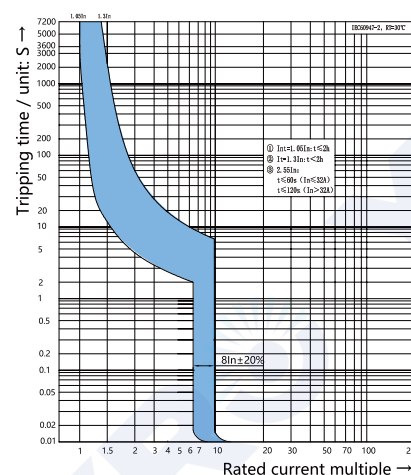
Application

YRCB-125DC series low voltage DC miniature circuit breakers are mainly used in photovoltaic, energy storage and other DC systems that require disconnection and protection. The maximum rated voltage is 1000VDC, the rated current is 125A, and it has scientific arc extinguishing and current limiting mechanisms. It can quickly disconnect the fault current on the DC side to ensure the reliable operation of the DC system. The product complies with EN60947-2, AS/NZS/IEC 60947.2:2015. standards.

Advantages

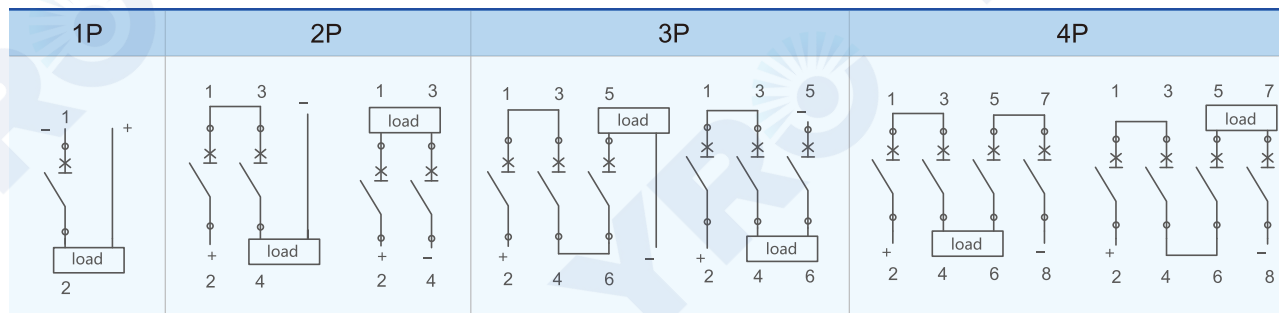
- Short circuit protection and overload protection
- High breaking capacity, up to 10kA
- Non-polar, easy to install
- Rated operating current up to 125A
- Rated working voltage up to 1000V
- Perfect match for photovoltaic, energy storage and other DC systems

Tripping Characteristics



C Curve 8In±20%
Applicable rated current 80A-125A

Contact Configuration



Technical Data

According to EN60947-2, AS/NZS IEC 60947.2					
Pole		1P	2P	3P	4P
Rated Working Voltage Ue		12-250 V DC	12-550 V DC	12-750 V DC	12-1000 V DC
Frame Current		125A			
Rated Current In		80A, 100A, 125A			
Rated Insulation Voltage Ui		1000V			
Rated Impulse Withstand Voltage Uimp		6kV			
Tripping Characteristics		C/D			
Tripping Type		Thermal Magnetic			
Rated Ultimate Short-Circuit Breaking Capacity Icu		10kA			
Rated Service Short-Circuit Interrupting Capacity Ics		7.5kA			
Electrical Life	Actual	Average 800 Cycles			
	Standard	200 Cycles			
Mechanical Life	Actual	> 10000 Cycles			
	Standard	9700 Cycles			
Overvoltage Category		III			
Pollution Degree		3			
Ingress Protection		IP40; Wiring port IP20			
Resistance to humidity and heat		Class 2			
Relative Humidity		≤ 95 %			
Vibration		acc. to IEC60068-2-6			
Shocks		acc. to IEC60068-2-27			
Terminal capacity		2.5~35mm²			
Fastening Torque of Terminals		3.5 Nm			
Ambient Temperature		-30℃~70℃			
Storage Temperature		-40℃~85℃			
Installation Method		DIN35mm			
Elevation		≤2000m			
Dimension	length: 86mm				
	Width: 27mm (1P), 54mm (2P)				
	High: 76.5mm				
Weight		0.17kg/Pole			

Package Information					Storage
Current	Pole	Box	Carton		Products should be stored in the warehouse where there is ventilation. The relative humidity there should not exceed 80%, and the ambient temperature there is between -40°C to + 85°C. In addition, there should not be acidic, alkaline and corrosive gas in the air.
125A	1P	8	80		
	2P	4	40		
	4P	2	20		

Accessories

Technical parameter of shunt trip release, MX	
Working voltage US	DC: 24 ~ 48V
Maximum deduction time	< 10ms
Coil resistance	1.8Ω
Mechanical life	10000 times
Electrical life	4000 times
Torque	0.3 ~ 0.8Nm
Wiring ability	1 ~ 2.5mm ² (hard line), 1 ~ 2.5mm ² (soft line, with hoop line terminal)
Range of working temperature	-30 °C ~ +70 °C
Environmental conditions	There should be no medium that causes the danger of explosion, nor does it have no harmful gases and electric conductivity dust that corrodes and damage insulation.
Assembly position	Right side of the circuit breaker
Installation conditions	DIN35mm

Technical parameters auxiliary contact, OF	
Contact capacity of OF	AC13: Ie=3A; Ue=250V AC15: Ie=2A; Ue=250V DC12: Ie=0.5A; Ue=110V
Minimum operating voltage	5V
Minimum operating current	10mA
Rated insulation voltage	415V
Rating restricted short -circuit current I _k	1000A
Conventional thermal current I _{th}	4A
Mechanical life	10000 times
Electrical life	4000 times
Torque	0.3 ~ 0.8Nm
Wiring ability	1 × 1.0 ~ 1 × 2.5mm ²
Range of working temperature	-30 °C ~ +70 °C
Number of contacts	1 NO contact, 1 NC contact
Environmental conditions	There should be no medium that causes the danger of explosion, nor does it have no harmful gases and electric conductivity dust that corrodes and damage insulation.
Assembly position	Right side of the circuit breaker
Installation conditions	DIN35mm

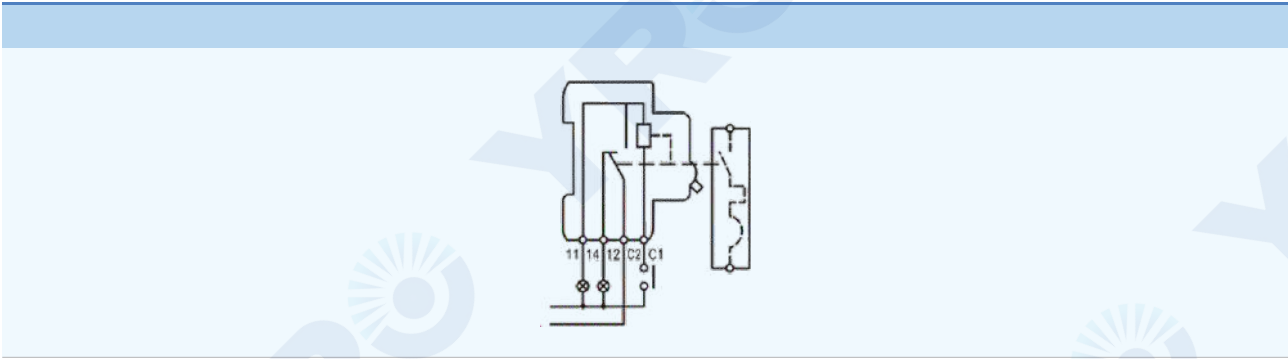
Reduction Coefficient

Temperature reduction coefficient																				
Temperature	-30°C	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C	15°C	20°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C
The rated work current coefficient	1.242	1.223	1.204	1.182	1.161	1.143	1.127	1.103	1.079	1.063	1.047	1	0.984	0.968	0.952	0.922	0.904	0.891	0.872	0.844

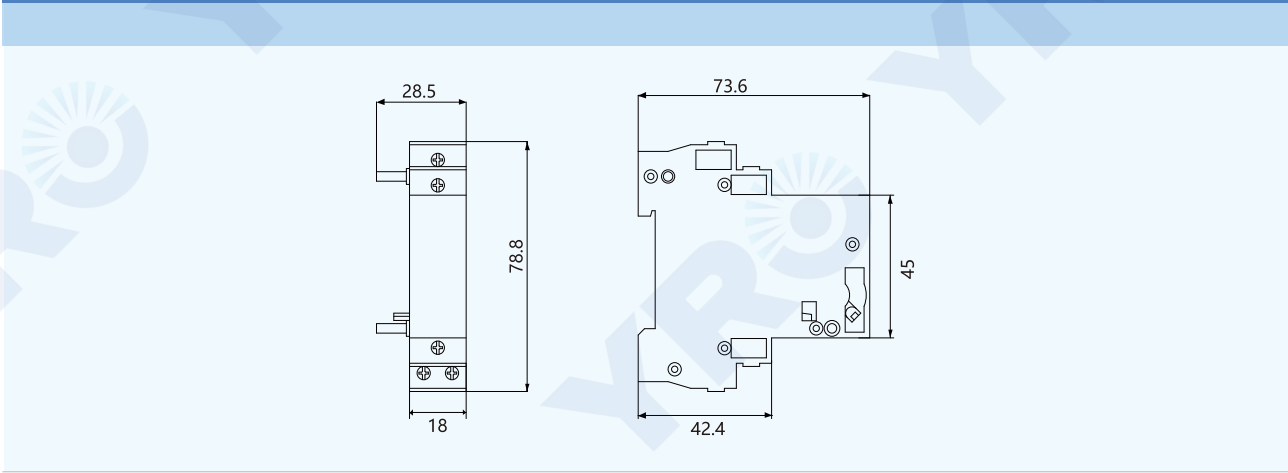
Altitude reduction coefficient				
Altitude m	2000	3000	4000	5000
The rated working current coefficient	1	0.96	0.91	0.86
The rated work voltage coefficient	1	1	1	1
Rated industrial frequency resistance coefficient	1	0.9	0.82	0.71
The rated impact tolerance voltage coefficient	1	0.9	0.82	0.71
The rated ultimate short-circuit capacity and electronic life coefficient	1	0.82	0.7	0.6

MCB Side -by -side installation reduction coefficient					
Number of MCBs	1	2 ~ 3	4 ~ 5	6 ~ 8	9 ~ 10
$I_n \leq 25A$ coefficient	1	0.96	0.9	0.8	0.7
$32A \leq I_n \leq 63A$ coefficient	1	0.92	0.8	0.7	0.6
$80A \leq I_n \leq 125A$ coefficient	1	0.9	0.8	0.7	/

Wiring Diagrams

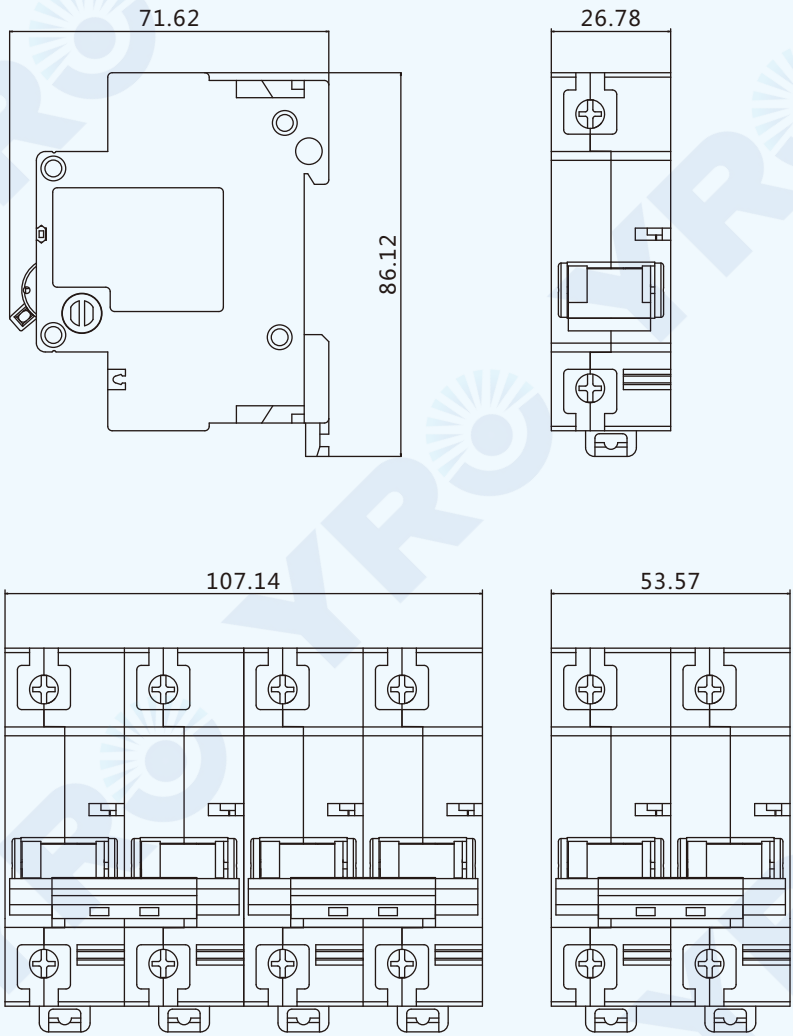


Dimensions of MX+OF



Dimensions

Unit: mm



DC Surge Protective Device



YRSP-D2 SERIES

Type 2 Surge Protective Device
For Photovoltaic Systems



Technical Parameters

Technical Data	
Location of Use	String box, Inverter
Mode of Protection	(DC+) - PE, (DC-) - PE, (DC+) - (DC-)
Surge Ratings	$I_n = 20\text{kA}$ (8/20 μs) $I_{\text{Total}} = \text{up to } 40\text{kA}$ (8/20 μs)
IEC/EN Category	Class II / Type 2
Protective Elements	High Energy MOV
Housing	Pluggable Design
Compliance	IEC 61643-31:2018 EN 50539-11:2013+A1:2014



IEC ELECTRICAL		2P			3P	
YRSP-D2		600	800	1000	1000	1500
Maximum Continuous Operating DC Voltage	(DC+) - PE, (DC-) - PE U_{CPV}	600V	800V	1000V	1000V	1500V
	(DC+) - (DC-) U_{CPV}	-	800V	1000V	1000V	1500V
Nominal Discharge Current (8/20 μs)	I_n	20 kA				
Total Discharge Current (8/20 μs)	I_{Total}	40 kA				
Maximum Discharge Current (8/20 μs)	I_{max}	40 kA				
Voltage Protection Level	(DC+) - PE, (DC-) - PE U_p	2800V	3200V	3200V	3600V	5200V
	(DC+) - (DC-) U_p	-	3200V	3200V	3600V	5200V
Residual Current at U_c	I_{PE}	$\leq 0.5\text{ mA}$				
Response Time	t_A	< 25ns				
Short-Circuit Current Rating	I_{SCPV}	2000 A				
Number of Ports		1				

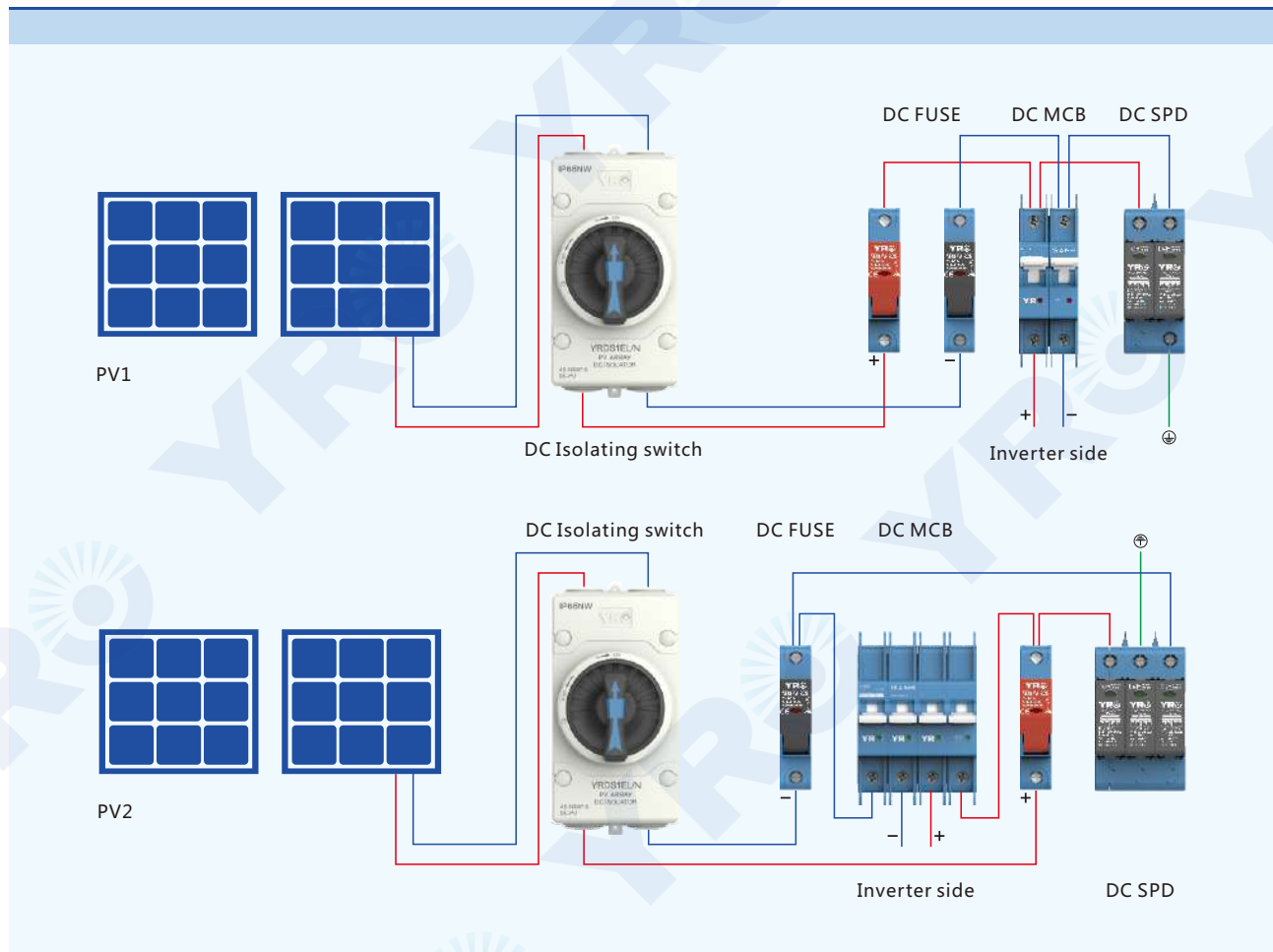
YRSP-D2 SERIES

Type 2 Surge Protective Device For Photovoltaic Systems



Mechanical & Environmental		
Operating Temperature Range	T_a	-40 °F to +158 °F [-40 °C to +70 °C]
Permissible Operating Humidity	RH	5%...95%
Atmospheric pressure and altitude		80k Pa ... 106k Pa / -500 m ... 2000 m
Terminal Screw Torque	M_{max}	39.9 lbf-in [4.5Nm]
Conductor Cross Section (max)		5 AWG (Solid, Stranded) / 5 AWG (Flexible)
		16 mm ² (Solid, Stranded) / 16 mm ² (Flexible)
Mounting		35 mm DIN Rail, EN 60715
Degree of Protection		IP 20 (built-in)
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0
Thermal Protection		Yes
Operating State/Fault Indication		Green ok / Red defect
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250V/0.5A; DC: 250V/0.1A; 125V/0.2A; 75V/0.5A
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)

Wiring Diagram

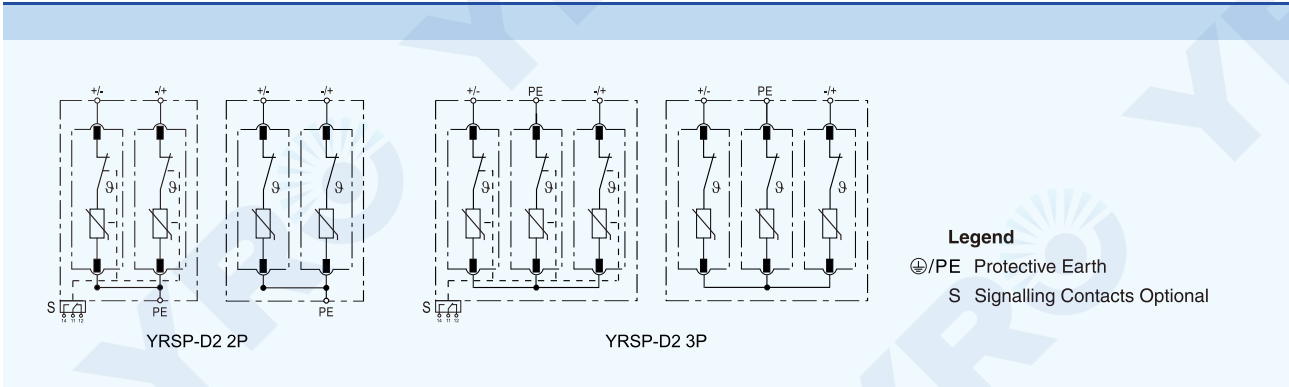


YRSP-D2 SERIES

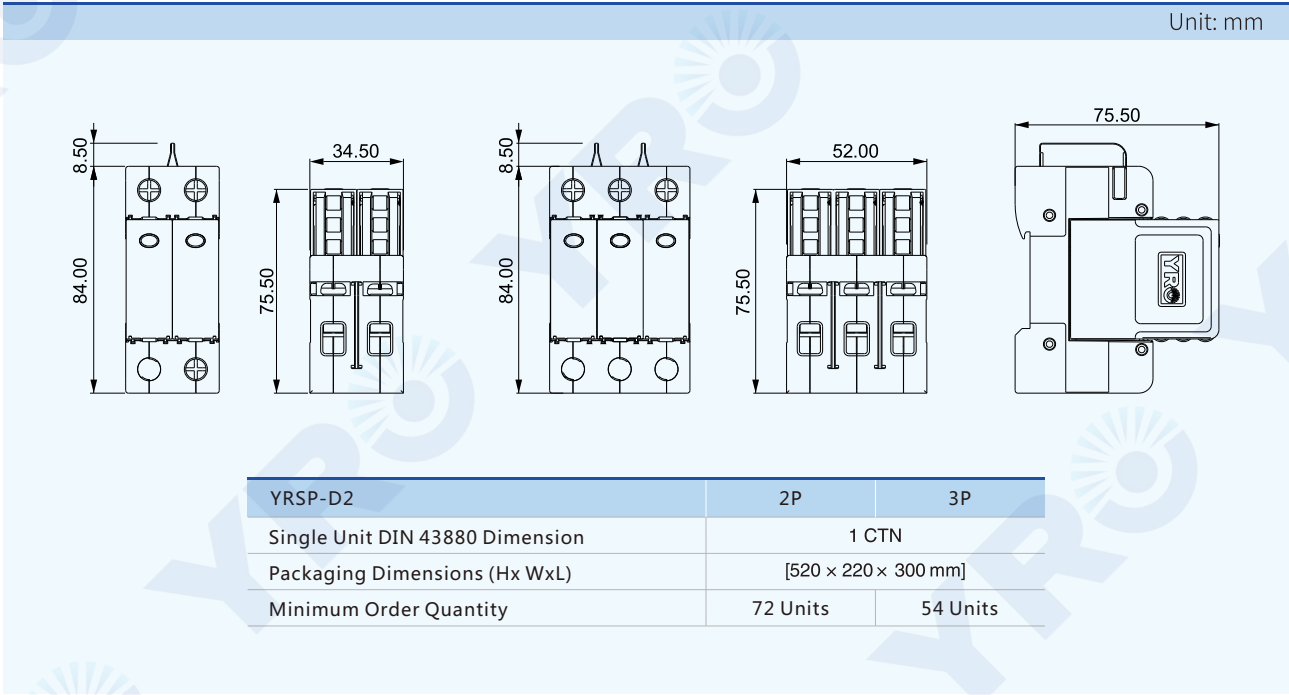
Type 2 Surge Protective Device For Photovoltaic Systems



Internal Configuration



Dimensions & Packaging



YRSP-D2 T1 + T2 SERIES

Type1+Type2 Surge Protective Device
For Photovoltaic Systems



Technical Parameters

Technical Data	
Location of Use	String box, Inverter
Mode of Protection	(DC+) - PE, (DC-) - PE, (DC+) - (DC-)
Surge Ratings	I_{Total} = up to 12.5kA (10/35 μ s)
	I_{Total} = up to 40kA (8/20 μ s)
IEC/EN Category	Class I+II / Type 1+2
Protective Elements	High Energy MOV
Housing	Pluggable Design
Compliance	IEC 61643-31 EN 50539-11+A1



IEC ELECTRICAL		2P	3P	
YRSP-D2 T1+T2		600	1000	1500
Maximum Continuous Operating DC Voltage	(DC+) - PE, (DC-) - PE U_{CPV}	600V	1000V	1500V
	(DC+) - (DC-) U_{CPV}	-	1000V	1500V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA		
Impulse Discharge Current (10/350 μ s)	I_{imp}	6.25 kA		
Total Discharge Current (10/350 μ s)	I_{Total}	12.5 kA		
Total Discharge Current (8/20 μ s)		40 kA		
Maximum Discharge Current (8/20 μ s)	I_{max}	40 kA		
Voltage Protection Level	(DC+) - PE, (DC-) - PE U_p	2200V	4000V	5200V
	(DC+) - (DC-) U_p	-	4000V	5200V
Response Time	t_A	<25ns		
Short-Circuit Current Rating	I_{SCP}	1000A		
Number of Ports		1		

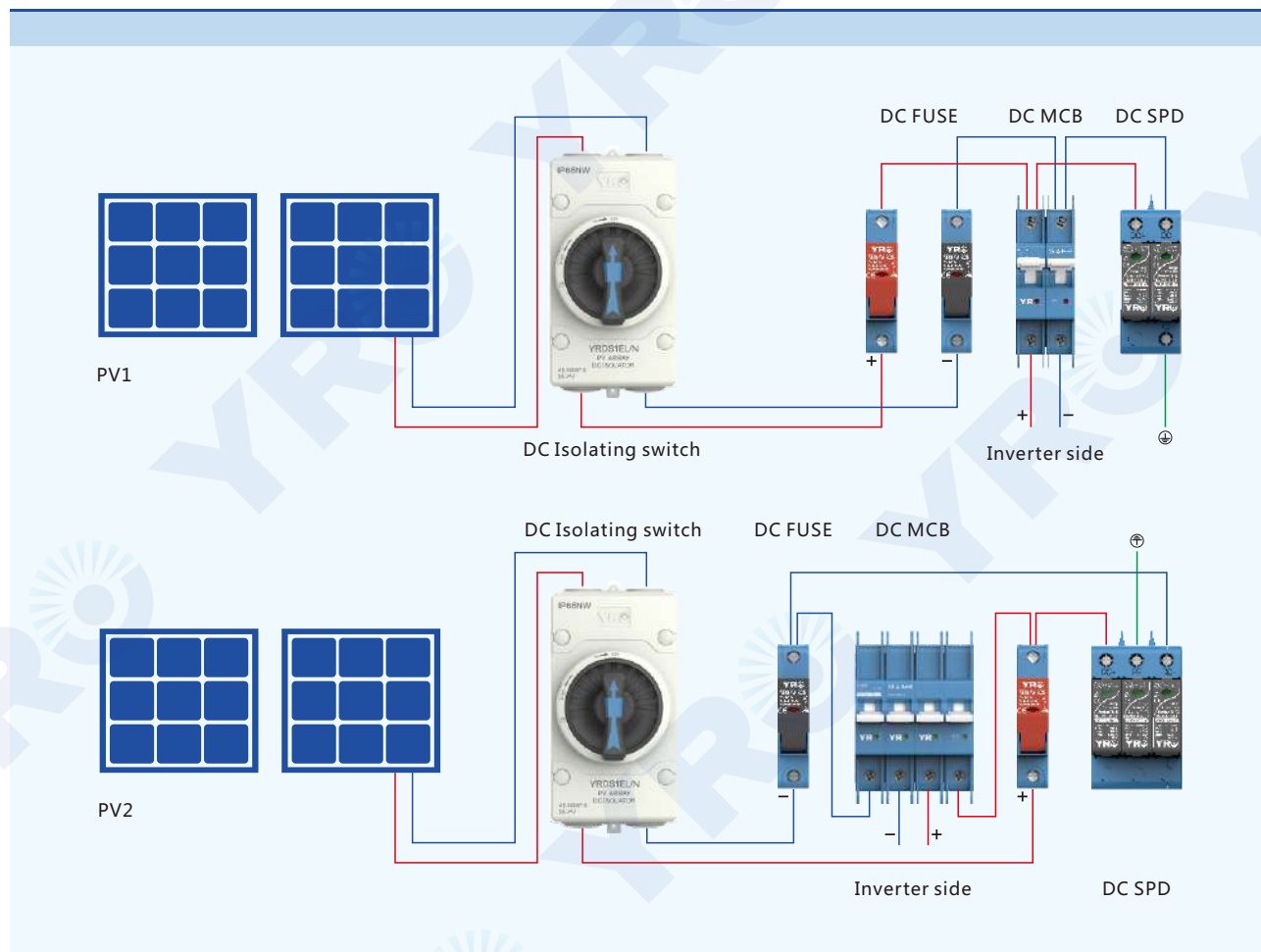
YRSP-D2 T1 + T2 SERIES

Type1+Type2 Surge Protective Device For Photovoltaic Systems



Mechanical & Environmental		
Operating Temperature Range	T_a	-40 °F to +158 °F [-40 °C to +70 °C]
Permissible Operating Humidity	RH	5%...95%
Atmospheric pressure and altitude		80k Pa ... 106k Pa / -500 m ... 2000 m
Terminal Screw Torque	M_{max}	39.9 lbf-in [4.5Nm]
Conductor Cross Section (max)		5 AWG (Solid, Stranded) / 5 AWG (Flexible)
		16 mm ² (Solid, Stranded) / 16 mm ² (Flexible)
Mounting		35 mm DIN Rail, EN 60715
Degree of Protection		IP 20 (built-in)
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0
Thermal Protection		Yes
Operating State/Fault Indication		Green ok / Red defect
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250V/0.5A; DC: 250V/0.1A; 125V/0.2A; 75V/0.5A
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)

Wiring Diagram

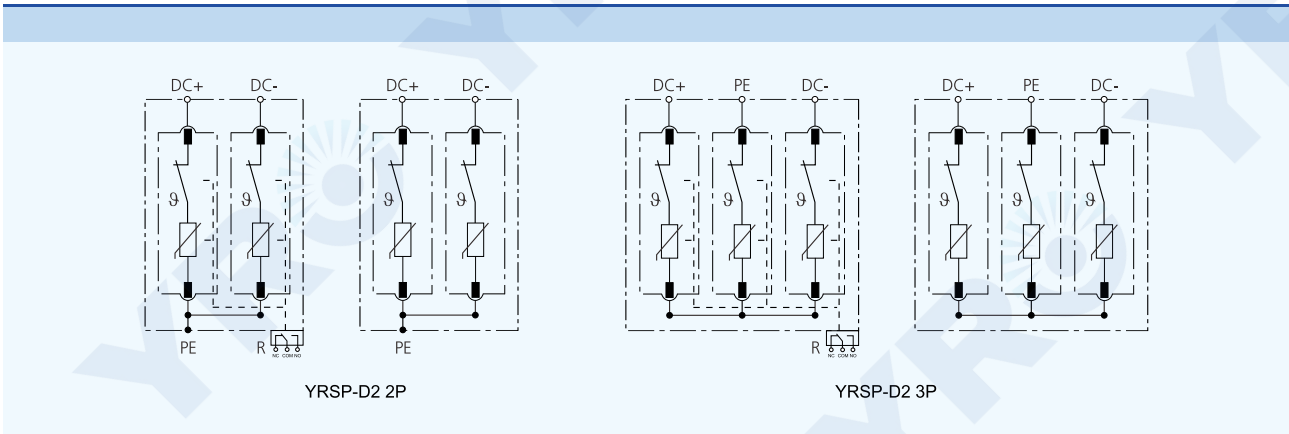


YRSP-D2 T1 + T2 SERIES

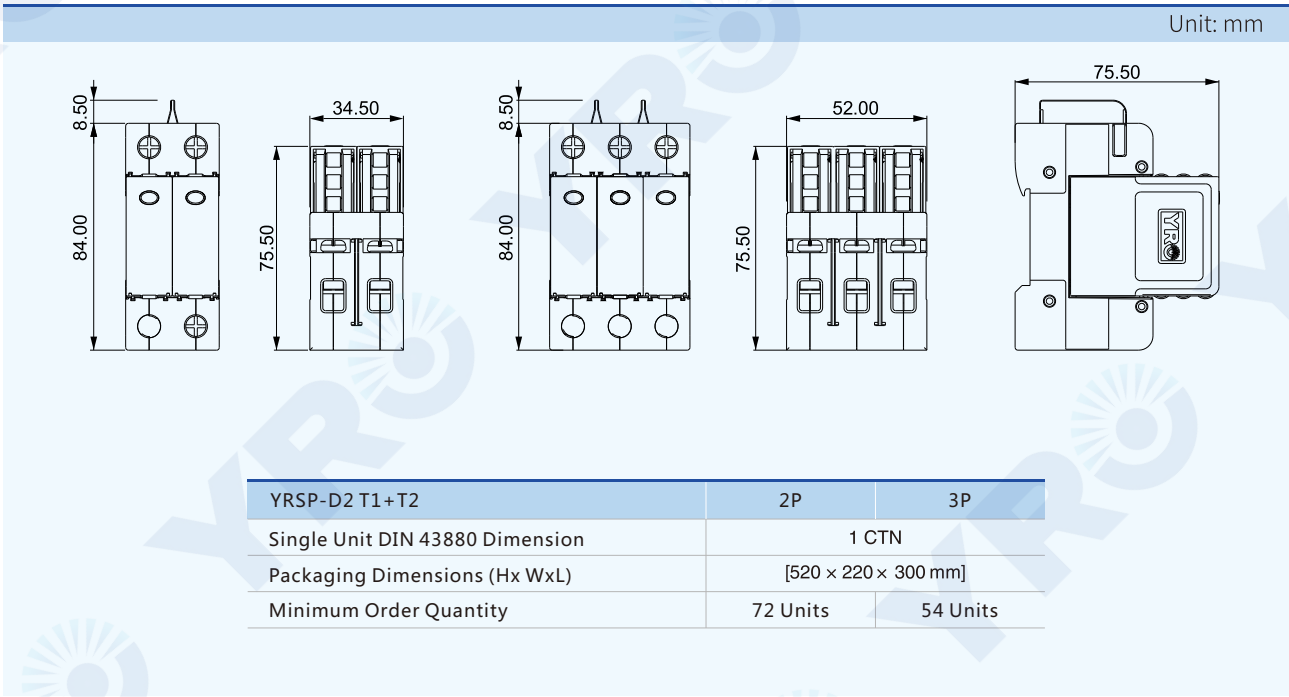
Type1+Type2 Surge Protective Device For Photovoltaic Systems



Internal Configuration



Dimensions & Packaging



DC Isolation Switch



YRDS1 N32 SERIES

DC Isolation Switch



Application

YRDS1 series isolation switch is suitable for a power system with rated voltage DC 1200V or below and rated current 32A or below. The product can be used for infrequent switching-on and switching-off and can disconnect 1-2 MPPT lines at the same time. It is especially suitable for isolating lines in HVDC transmission and distribution systems, such as cutting off the high voltage DC current between solar panels and inverters.

Advantages

- UV resistance and V0 flame retardant material
- Contact Silver Plating, silver layer thickness up to the industry's highest standards
- Arcing Time in 3 ms
- No Polarity
- Lockable at OFF position
- IEC/EN60947.3 standard and AS 60947.3
- IP66 degree of protection

Technical Data

According to IEC/EN60947-3:AS60947.3, UL508i, GB/T14048.3. Utilization category DC-PV1/DC-PV2.

Main Parameters			
Rated Insulation Voltage	Ui	V	1500
Rated thermal current	Ith	A	32
Rated impulse withstand voltage	Uimp	V	8000
Rated short-circuit making capacity	Icw	A	1 kA,1 S
Maximum cable section(incl.jumper)			
Solid	mm ²		4-16
Flexible	mm ²		4-10
Flexible(+ multicore cable end)	mm ²		4-10
Torque			
Tightening torque terminal screws M4.	Nm		1.2-1.8
Tightening torque shell mounting screws ST4.2(304 stainless steel)	Nm		1.5-2.0
Tightening torque knob screws M3	Nm		0.5-0.7
Switching on or off torque	Nm		0.9-1.3
The wiring torque on base	Nm		1.1-1.4

YRDS1 N32 SERIES

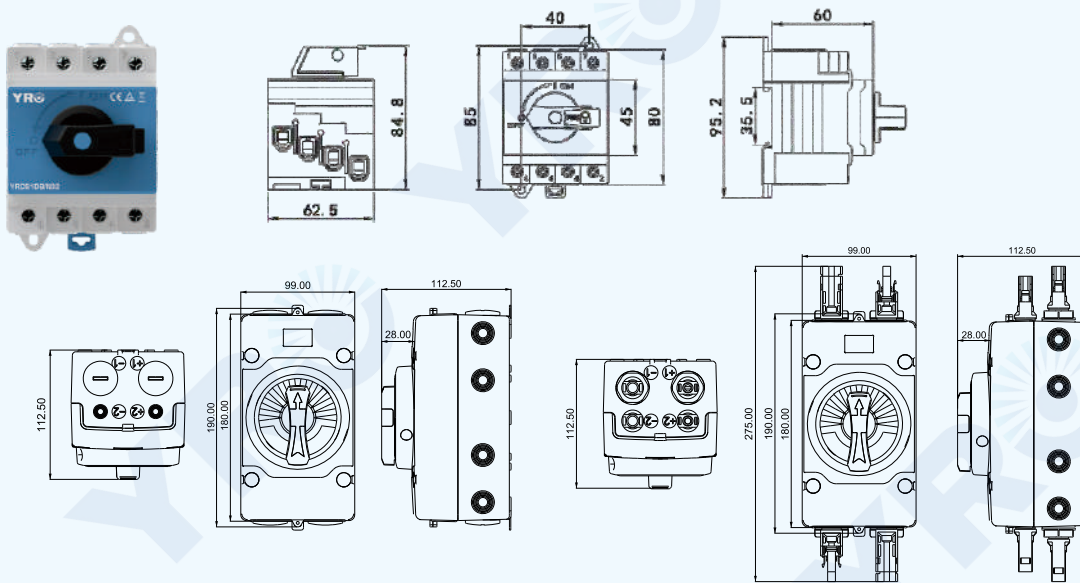
DC Isolation Switch



General parameters			
Knob positions			12 o'clock OFF, 3 o'clock ON (9 o'clock OFF, 12 o'clock, ON)
Electrical life	Actual		3000 Cycles
	Standard		300 Cycles
Mechanical life	Actual		10000 Cycles
	Standard		10000 Cycles
Number of DC poles			2 or 4
Operation temperature		°C	-40 to +85
Storage temperature		°C	-40 to +85
Pollution degree			3
Overvoltage category			III
IP rating of shafte and mounting nut			IP66

Dimensions

Unit: mm



Technical Data

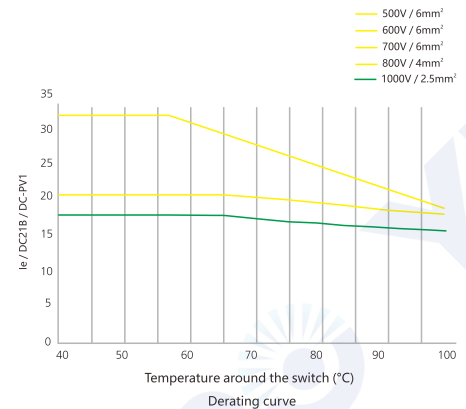
According to IEC/EN60947-3: AS60947.3, Utilization category DC-PV1, DC-PV2

300V		600V		800V		1000V		1200V		Pole	No. of Strings	Part Number
PV1	PV2	PV1	PV2	PV1	PV2	PV1	PV2	PV1	PV2			
32	32	32	32	32	16	16	9	13	9	2	1	YRDS1/S32/2
32	32	32	32	32	16	16	9	13	9	4	2	YRDS1/S32/4
32	32	32	32	32	32	32	32	32	32	4	1	YRDS1/S32/4S
32	32	32	32	32	32	32	32	32	32	4	1	YRDS1/S32/4B
32	32	32	32	32	32	32	32	32	32	4	1	YRDS1/S32/4T

Data according

Main Contacts	Voltage	YRDS1/N32
Rated thermal current I_{the}		32A
Rated insulation voltage U_i		1500V
Distance of contacts(per pole)		8mm
Rated operational current I_e (DC-PV2)		
4 layers, only 2layers in series, with two load <u>1</u> / <u>2</u> / —	300V	32A
	600V	32A
	800V	16A
	1000V	9A
	1200V	9A
4 layers, 4 layers in series, with one load <u>1</u> / <u>2</u> / <u>3</u> / <u>4</u> / —	300V	32A
	600V	32A
	800V	32A
	1000V	32A
	1200V	32A

Type	
Number of poles	4-pole
Terminal designation, main circuit	1, 3, 5, 7, 2, 4, 6, 8
Type of terminal, main circuit	Screw terminal
Cable section	4.0-16mm ²
Type of Conductor	4.0-16mm² (Rigid: Solid or Stranded) 4.0-10mm² (Flexible)
Number of conductors per terminal	1
Required preparation of the conductor	Yes
Stripping length (mm), main circuit	8mm
Tightening torque (M4), main circuit	1.2~1.8N.m



Switching Configurations

Type	2-pole	4-pole	4-pole with input & output on top	4-pole with input&output bottom	4-pole with input on top output bottom
	2	4	4T	4B	4S
Contacts Wiring graph					
Schematic diagram					

YRDS1DB/S32 SERIES

DC Isolation Switch



Advantages

- Non-polarity DC Isolator Switch
- Modular design, optional 2-10 levels.
- Positive contact or reverse contact optional.
- Single Hole Mounting, Panel Mounting, Distribution Board, Door Clutch or Enclosure optional.
- Dynamic sealing design and world class sealing materials guarantee an IP66 protection rate.
- DC 1500V insulation voltage design, passed IEC/EN60947-3:2009+A1+A2, AS60947.3, UL508I, GB/T14048.3 test, with TUV, CE, CCC certifications.

Technical Data

According to EN60947-3, AS 60947-3. Utilization category DC-PV1 / DC-PV2.

Main Parameters							
Model		A	13	20	25	40	50
Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500
Rated thermal current	Ith	A	32	40	55	55	55
Rated impulse withstand voltage	Uimp	V	8000				
Rated short-time withstand current (1s)	Icw	A	780				
Rated short-time making capacity	Icn	A	1200				
Maximum cable section(incl.jumper)							
Solid			mm ²	4-16			
Flexible			mm ²	4-16			
Flexible(+ multicore cable end)			mm ²	4-16			
Torque							
Tightening torque terminal screws M4.			Nm	1.2-1.8			
Tightening torque single hole mounting nut M16			Nm	2.0-2.3			
Tightening torque knob screws M3			Nm	0.5-0.7			
Switching on or off torque			Nm	0.9-1.3			

YRDS1DB / S32 SERIES

DC Isolation Switch



General parameters			
Knob positions			12 o'clock OFF, 3 o'clock ON (9 o'clock OFF, 12 o'clock, ON)
Electrical life	Actual		3000 Cycles
	Standard		300 Cycles
Mechanical life	Actual		10000 Cycles
	Standard		10000 Cycles
Number of DC poles			2 or 4
Operation temperature		°C	-40 to +85
Storage temperature		°C	-40 to +85
Pollution degree			3
Overvoltage category			III
IP rating of shafte and mounting nut			IP66

Technical Data

According to EN60947-3, AS/NZS 60947-3. Utilization category DC-PV2 / DC-PV1.

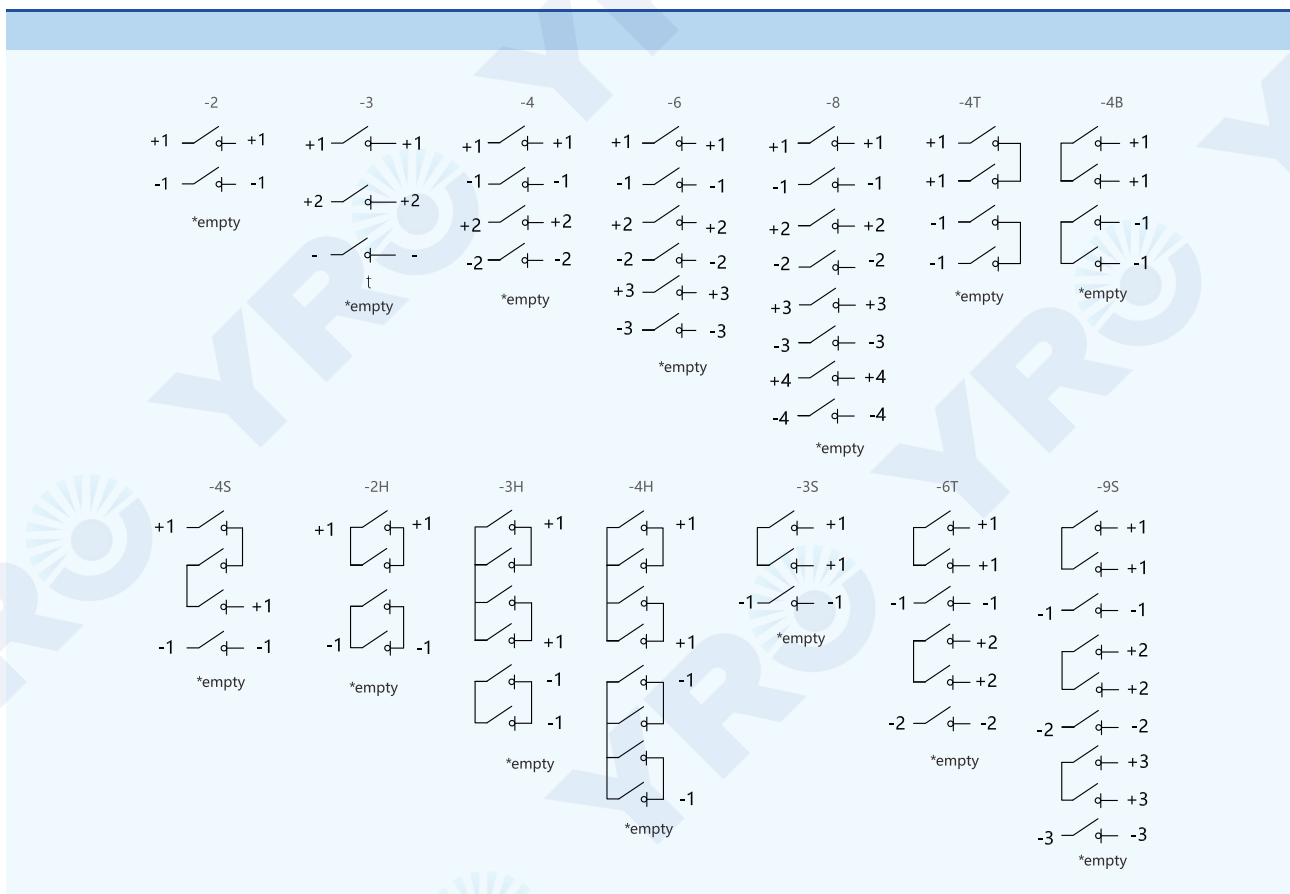
Layers	Voltage / current (DC-PV1)				
	600VDC	800VDC	1000VDC	1200VDC	1500VDC
2/3/4/6/8/10	32	26	13	10	5
	40	30	20	12	6
	55	45	25	15	8
	/	50	40	30	20
	/	55	50	40	30
4T/B/S	/	/	32	26	12
	/	/	40	30	20
	/	/	55	40	30
	/	/	/	/	45
	/	/	/	/	50
3T/6T/9T	/	/	32	23	10
	/	/	40	30	13
	/	/	55	40	20
	/	/	/	45	30
	/	/	/	50	40
2H	50	26	13	10	5
	64	30	20	12	6
	80	45	25	15	8
	90	50	40	30	20
	100	55	50	40	30
3H	/	50	13	10	5
	/	64	20	12	6
	/	80	25	15	8
	/	90	40	30	20
	/	100	50	40	30
4H	/	/	50	10	5
	/	/	64	12	6
	/	/	80	15	8
	/	/	90	30	20
	/	/	100	40	30

Layers	Voltage / current (DC-PV2)				
	600VDC	800VDC	1000VDC	1200VDC	1500VDC
2/3/4/6/8/10	13	13	6	4	3
	20	15	8	6	4
	25	23	10	8	5
	40	30	20	15	8
	50	40	25	18	10
4T/B/S 3T/6T/9T	/	/	12	/	/
	/	/	18	/	/
	/	/	20	/	/
	/	/	40	/	/
	/	/	50	/	/

According to UL 508i

Layers	Voltage / current (UL 508i)		
	600VDC	800VDC	1000VDC
2/3/4/6/8/10	30	30	13
	30	30	20
	30	30	25
	30	30	30

Note* 10P products needs to be customized, please kindly contact us if need them



YRDS1DB / S32 SERIES

DC Isolation Switch



Dimensions

Unit: mm



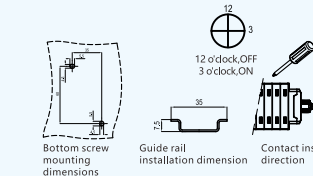
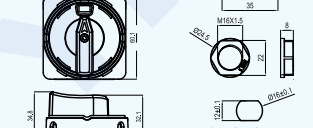
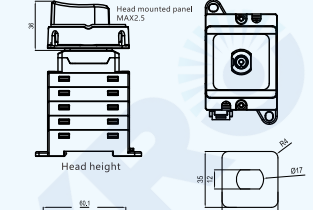
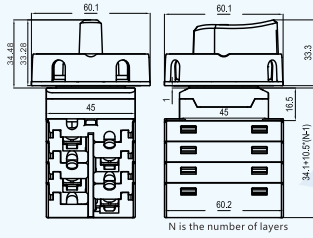
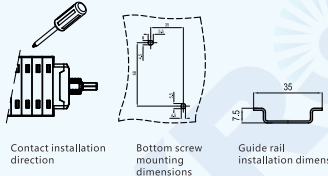
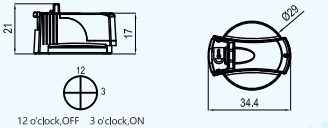
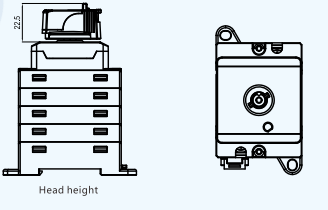
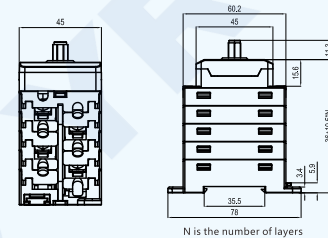
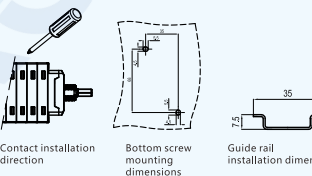
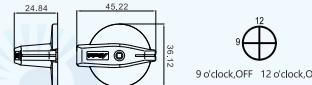
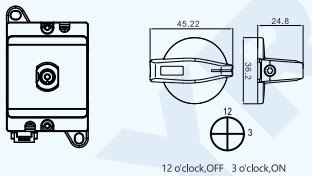
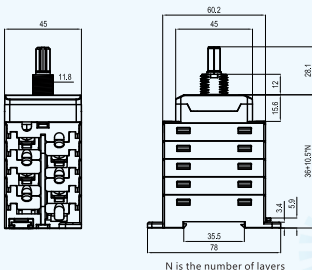
YRDS1DBR



YRDS1DB



YRDS1PMR



YRDS1DB/S32 SERIES

DC Isolation Switch
(With Inverter)



Advantages

- Non-polarity DC Isolator Switch
- Modular design, available 2-10 levels.
- Single Hole Mounting, Panel Mounting, Distribution Board, Door Clutch or Enclosure available.
- Dynamic sealing design and world class sealing materials guarantee an IP66 protection rate.
- DC 1500V insulation voltage design, passed IEC/EN60947-3, AS60947.3, UL508i, GB/T14048.3 test, TUV, CE, CB, SAA, UL, CCC available.
- Impact resistance: IK08
- Rated current: 13A, 20A, 25A, 40A, 50A.

Technical Data

According to IEC/EN60947-3, AS60947.3:2018, UL508i, GB/T14048.3, Utilization category DC-PV1/DC-PV2

Main Parameters							
Model		A	13	20	25	40	50
Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500
Rated thermal current	Ith	A	32	40	55	55	55
Rated impulse withstand voltage	Uimp	V	8000				
Rated short-time withstand current (1s)	Icw	A	780				
Rated short-time making capacity	Icn	A	1200				
Maximum cable section(incl.jumper)							
Solid			mm ²		4-16		
Flexible			mm ²		4-16		
Flexible(+ multicore cable end)			mm ²		4-16		
Torque							
Tightening torque terminal screws M4.			Nm		1.2-1.8		
Tightening torque single hole mounting nut M16			Nm		2.0-2.3		
Tightening torque knob screws M3			Nm		0.5-0.7		
Switching on or off torque			Nm		0.9-1.3		

YRDS1DB / S32 SERIES

DC Isolation Switch(With Inverter)



General parameters			
Knob positions			9 o'clock OFF, 12 o'clock ON, / 12 o'clock OFF, 3 o'clock ON
Electrical life	Actual		3000 Cycles
	Standard		300 Cycles
Mechanical life	Actual		10000 Cycles
	Standard		10000 Cycles
Distance of contacts (per pole)		mm	8
Operation temperature		°C	-40 to +85
Storage temperature		°C	-40 to +85
Pollution degree			3
Overvoltage category			III
IP rating of shafte and mounting nut			IP66

Technical Data

According to EN60947-3, AS/NZS 60947-3. Utilization category DC-PV2 / DC-PV1.

Layers	Voltage / current (DC-PV1)				
	600VDC	800VDC	1000VDC	1200VDC	1500VDC
2/3/4/6/8/10	32	26	13	10	5
	40	30	20	12	6
	55	45	25	15	8
	/	50	40	30	20
	/	55	50	40	30
4T/B/S	/	/	32	26	12
	/	/	40	30	20
	/	/	55	40	30
	/	/	/	/	45
	/	/	/	/	50
3T/6T/9T	/	/	32	23	10
	/	/	40	30	13
	/	/	55	40	20
	/	/	/	45	30
	/	/	/	50	40
2H	50	26	13	10	5
	64	30	20	12	6
	80	45	25	15	8
	90	50	40	30	20
	100	55	50	40	30
3H	/	50	13	10	5
	/	64	20	12	6
	/	80	25	15	8
	/	90	40	30	20
	/	100	50	40	30
4H	/	/	50	10	5
	/	/	64	12	6
	/	/	80	15	8
	/	/	90	30	20
	/	/	100	40	30

YRDS1DB / S32 SERIES
DC Isolation Switch(With Inverter)



Layers	Voltage / current (DC-PV2)				
	600VDC	800VDC	1000VDC	1200VDC	1500VDC
2/3/4/6/8/10	13	13	6	4	3
	20	15	8	6	4
	25	23	10	8	5
	40	30	20	15	8
	50	40	25	18	10
4T/B/S 3T/6T/9T	/	/	12	/	/
	/	/	18	/	/
	/	/	20	/	/
	/	/	40	/	/
	/	/	50	/	/

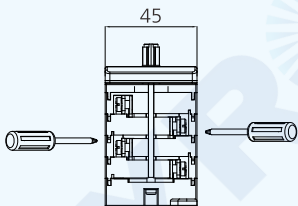
According to UL 508i

Layers	Voltage / current (UL 508i)		
	600VDC	800VDC	1000VDC
2/3/4/6/8/10	30	30	13
	30	30	20
	30	30	25
	30	30	30

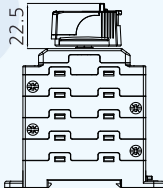
Note* 10P products needs to be customized, please kindly contact us if need them

Dimensions

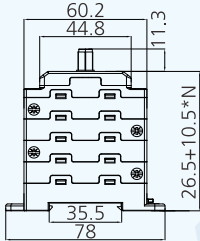
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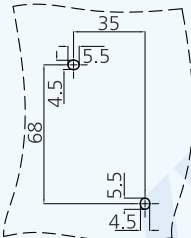
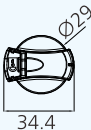
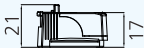
Wiring diagram



Head height



N is the number of layers



Bottom screw
installation size



Rail installation size



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

YRDS1 S32 SERIES

DC Isolation Switch(1500V)



Application

YRDS1 DC Isolator is developed for 1500V commercial solar rooftops and installed between photovoltaic panels and inverters to guarantee safety. The product has optional aluminum box and plastic box (optional breathable valve) and is produced by patented arc interrupter and UL certified materials to ensure the highest quality and solar DC safety.

Advantages

- IP66, UV Resistance
- Arcing Time < 1ms
- Earth Terminal
- IEC60947-3, AS60947.3
- 2 Poles, 4 Poles Available(Single | Double String)
- DC-PV2 / DC-21B: 55A up to 1500VDC

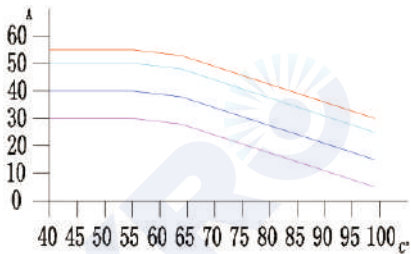
Technical Data

According to IEC/EN60947-3: AS60947.3, UL508i, GB/T14048.3. Utilization category DC-PV1/DC-PV2.

Main Parameters							
Model		A	13	20	25	40	50
Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500
Rated thermal current	Ith	A	32	40	55	55	55
Rated impulse withstand voltage	Uimp	V	8000				
Rated short-time withstand current (1s)	Icw	A	780				
Rated short-time making capacity	Icn	A	1200				
Maximum cable section(incl.jumper)							
Solid			mm ²		4-16		
Flexible			mm ²		4-16		
Flexible(+ multicore cable end)			mm ²		4-16		
Torque							
Tightening torque terminal screws M4.			Nm		1.2-1.8		
Tightening torque single hole mounting nut M16			Nm		2.0-2.3		
Tightening torque knob screws M3			Nm		0.5-0.7		
Switching on or off torque			Nm		0.9-1.3		

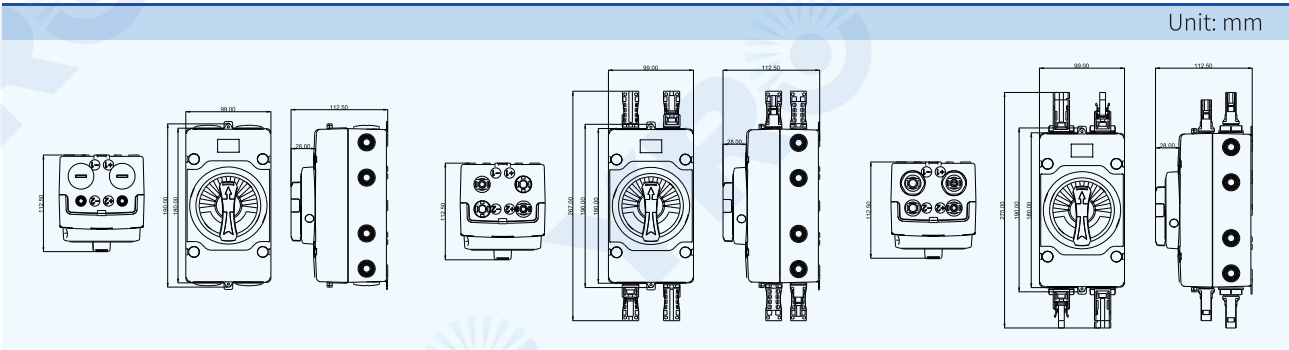
General parameters					
Knob positions			9 o'clock OFF, 12 o'clock ON		
Electrical life	Actual		3000 Cycles		
	Standard		300 Cycles		
Mechanical life	Actual		10000 Cycles		
	Standard		10000 Cycles		
Number of DC poles			2 or 4 (6/8 geek choice)		
Distance of contacts (per pole)		mm	8		
Operation temperature		°C	-40 to +85		
Storage temperature		°C	-40 to +85		
Pollution degree			3		
Overvoltage category			III		
IP rating of shafte and mounting nut			IP66		
Layers	Voltage / current (DC-PV1)				
2/4	600VDC	800VDC	1000VDC	1200VDC	1500VDC
	35	26	13	10	5
	40	30	20	12	6
	55	45	25	15	8
	/	50	40	30	20
	/	55	50	40	30
4T/B/S	/	/	32	26	13
	/	/	40	30	20
	/	/	55	40	30
	/	/	/	/	45
	/	/	/	/	50

Type		
Cable section		4.0-16mm ²
Type of Conductor		4.0-16mm ² (Rigid: Solid or Stranded)
		4.0-10mm ² (Flexible)
Number of conductors per terminal		1
Required preparation of the conductor		Yes
Stripping length (mm), main circuit		8mm
Tightening torque (M4), main circuit		1.2~1.8N.m



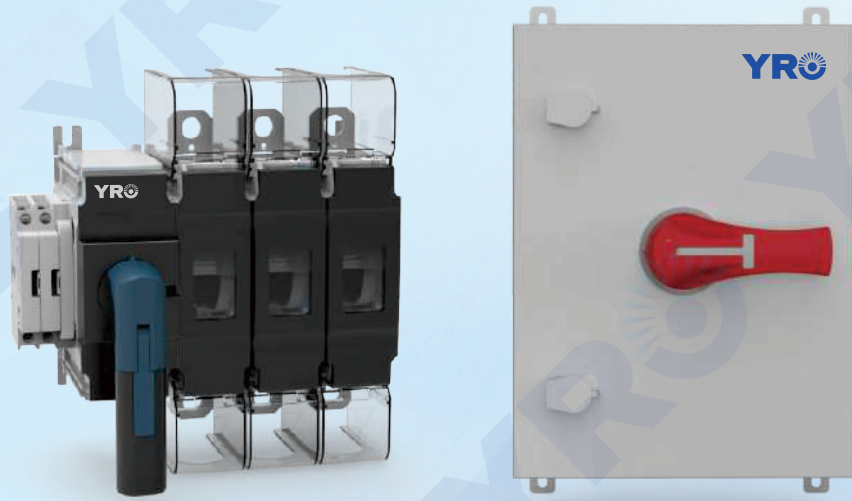
Note: As the temperature increases, the current decreases

Dimensions



YRHD SERIES

High Voltage DC Disconnect



Advantages

Easy to install

Wiring: Switch is non-polarized, all types of wiring and connections are possible.
Easy access without tools, and auxiliary contacts can be integrated without tools.
The operating mechanism can be centered to meet the installation requirements.

Safe reliable operation

Reliable position indicator through visible contacts.
The opening and closing of the switch is fully independent from the speed of operation, ensuring safe operation under all conditions.
High temperature withstand: no derating up to 70°C.
Ambient Temperature: -40°C to +70°C.

Designed for harsh environments

Vibration testing (from 13.2 to 100Hz at 0.7g).
Shock testing (15 g during three cycles).
Humid temperature testing (2 cycles, 55°C/131°F with 95% humidity level).
Salt mist testing (3 cycles with humidity storage, 40°C/104°F, 93% humidity after each cycle).

AUX. contact easy-mounting

Side mount PE pole
Side mount auxiliary contact: 1NC1NO or 2NO

Technical Data

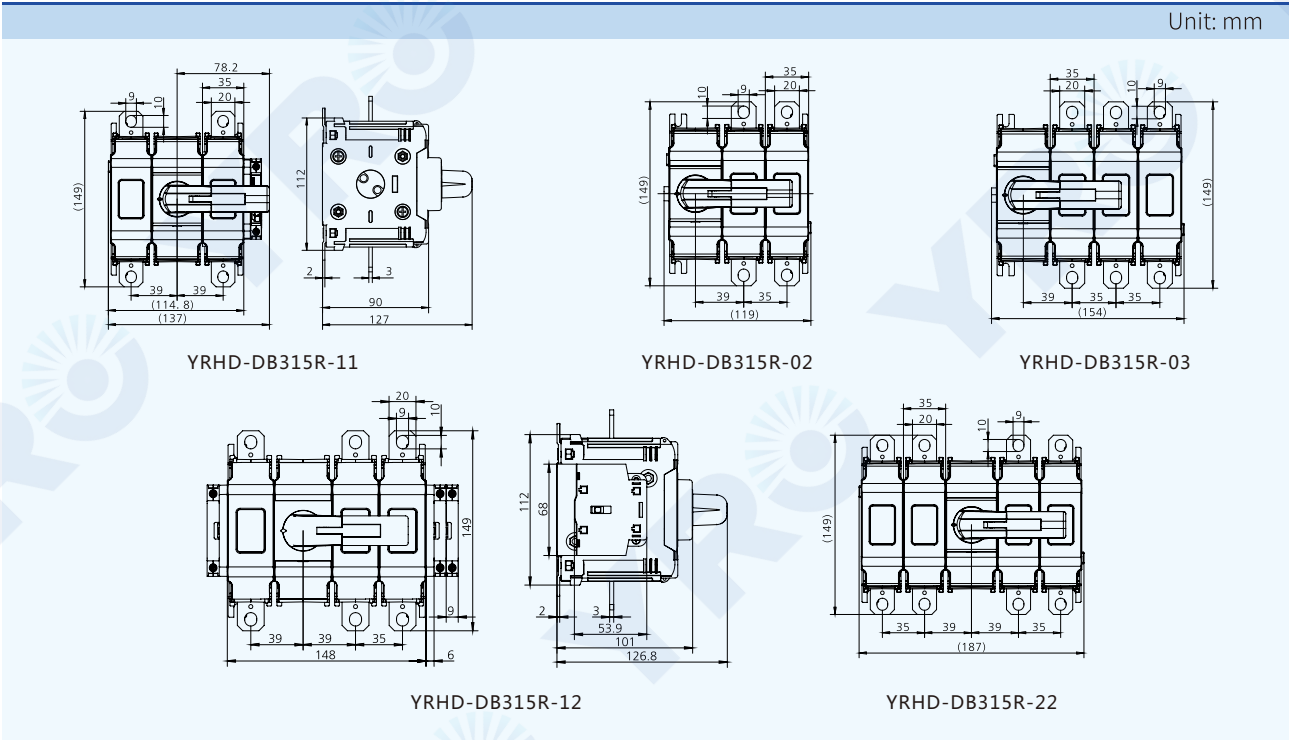
Rated current Ie					160A	250A	315A	315H	400A	630A	800A
Frame size					YRHD-315				YRHD-630		
Thermal current (Ith)					160	250	315	400	400	630	800
Rated insulation voltage (Ui)					1500	1500	1500	1500	1500	1500	1500
Rated impulse withstand voltage Uimp (KV)					12	12	12	12	12	12	12
Code	Number of poles		Rated voltage	Utilisation category	Ie(A)	Ie(A)	Ie(A)	Ie(A)	Ie(A)	Ie(A)	Ie(A)
YRHDN	2P(1P+,1P-)	4P(2P+,2P-)	1000VDC	DC-PV1/DC-21B	160	250	315	400	400	630	800
YRHDT	2P(1P+,1P-)	4P(2P+,2P-)	1500VDC	DC-PV1/DC-21B	160	250	315	400	400	630	800
YRHDT	3P(2P+,1P-)	6P(4P+,2P-)	1500VDC	DC-PV1/DC-21B	/	/	/	/	/	/	/
	Number of poles		Rated voltage	Utilisation category	Ie(A)	Ie(A)	Ie(A)	Ie(A)	Ie(A)	Ie(A)	Ie(A)
YRHDN	2P(1P+,1P-)	4P(2P+,2P-)	1000VDC	DC-PV2	160	250	315	/	400	630	/
YRHDT	2P(1P+,1P-)	4P(2P+,2P-)	1500VDC	DC-PV2	100	160	250	/	400	630	/
YRHDT	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 I _{cs} 1s (kA _{eff})	I _{cs}	5	5	5	5	8	8	8
Rated short-circuit making capacity I _{cm} (kA peak)-60 ms	I _{cm}	10	10	10	10	10	10	10
Cable								
Recommended Cu rigid cable cross section(mm)		70	120	185	185	240	2×185	2×240
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

Add-on Auxiliary Contacts

Type	YRS80-P1	YRS80-P2	
Contacts	1NO+1NC	2NO	
Width	9mm	9mm	
Parameter	AC-13: 10A, 230V~ AC-15: 6A,230V~		
Function	1NO+1NC 1321 1422	2NO 1323 1424	

Dimensions Frame315,Ith=160A,250A,315A,400A



YROPV-30 DC FUSE& YROPV-32B FUSE HOLDER



Specifications

- Rated voltage: 1000VDC
- Rated current: 2A~30A
- Protection category: gPV-Full range protection of PV system
- Standard: IEC60269-6

Typical Application

- PV combiner box-Solar PV module protection

Product Features

- Low temperature rise, low power consumption and long service life
- Standardized size and compact structure

Applicable Holder & Base

- YROPV-32B

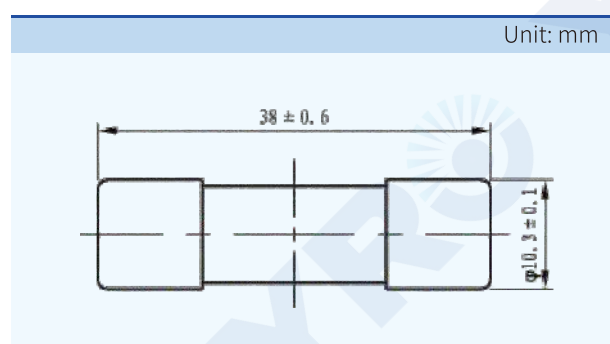
Product Parameter

Product code	Rated current	Breaking capacity	Safety certificate		Power loss 1.0In (W)	Net weight
				CE		
YROPV30/02NF	2A	1000 VDC TUV&CE: 20kA	●	●	0.9	10g
YROPV30/03NF	3A		●	●	1.0	
YROPV30/04NF	4A		●	●	1.2	
YROPV30/05NF	5A		●	●	1.3	
YROPV30/06NF	6A		●	●	1.5	
YROPV30/08NF	8A		●	●	1.8	
YROPV30/10NF	10A		●	●	2.2	

Time-current Characteristic

Standard; IEC60269-6	
113%In	145%In
>1h non fusing	<1h fusing

Dimensions



Product code	Rated current	Breaking capacity	Safety certificate		Power loss 1.0In (W)	Net weight
				CE		
YROPV30/12NF	12A	1000 VDC TUV&CE: 20kA	●	●	2.3	10g
YROPV30/15NF	15A		●	●	2.7	
YROPV30/20NF	20A		●	●	3.2	
YROPV30/25NF	25A		●	●	3.8	
YROPV30/30NF	30A		●	●	4.5	
YROPV30/32NF	32A		●	●	5.1	
			●	●		

Electrical Technical Reference

Product Model	YROPV-32B
Citation standards	IEC/EN60947-1 IEC/EN 60947-3
Rated insulation voltage Ui	1100V
Rated service voltage Ue	DC1000V
Rated service current (Ie)	2/3/4/5/6/8/10/12/15/16/20/25/30A/32A
Rated impulse withstand voltage Uimp	6kV
Rated acceptable power dissipation	4W
Numbers of poles	1P
Rated limiting short circuit current	20kA
Fuse dimensions for use	10mm×38mm
Ingress protection	IP20
Use category	PV-0

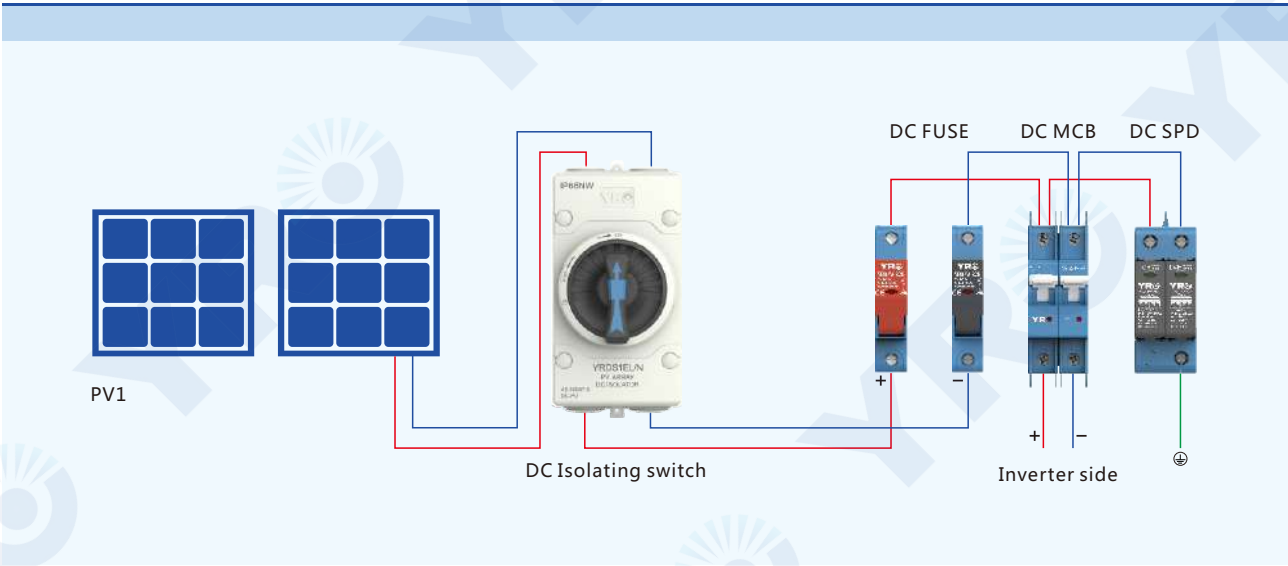
Aerating Parameters

Poles(P)	Ambient temperature	Temperature in cabinet (°C reference) volume: 0.1m³	Derating factor
1~4	25	30	1
1~4	30	40	0.93
1~4	40	50	0.9
1~4	50	60	0.85
5~24	-11	30	0.9
5~24	3	40	0.85
5~24	18	50	0.75
5~24	40	60	0.6
5~24	55	65	0.5
5~24	60	70	0.45
5~24	65	75	0.6

Installation

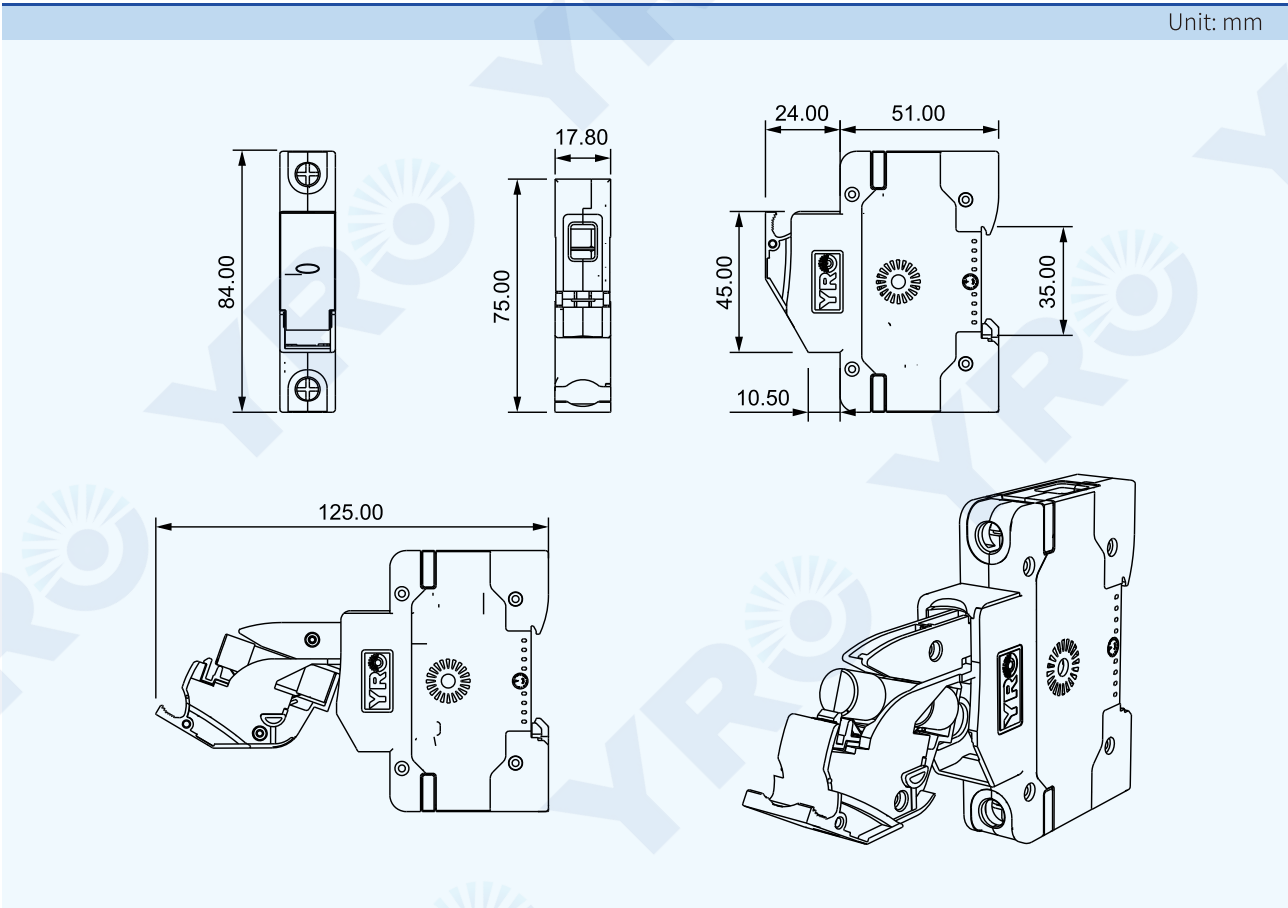


Wiring Diagram



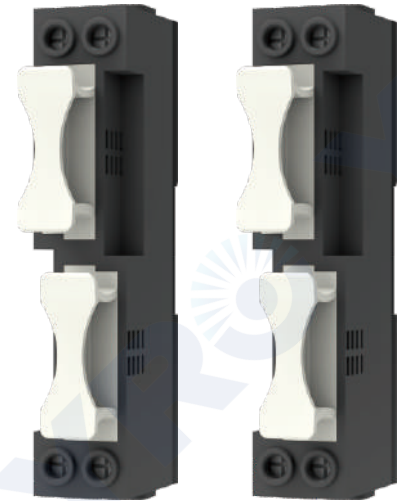
Dimensions

Unit: mm



Main Technical Data

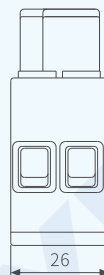
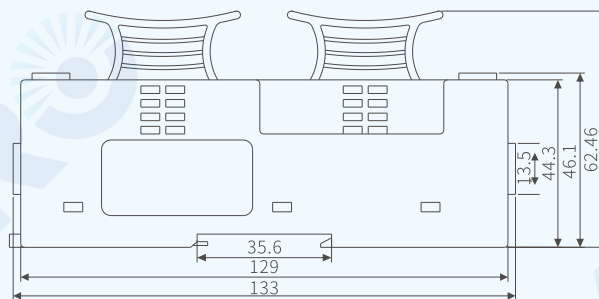
- Rated voltage: 1100VDC
- Rated current: 32A
- Suitable fusible core specification: 10 x 38mm
- Protection characteristics: gPV
- Shell material: PA66
- Temperature tolerance: -40°C~120°C
- Fitted rail specification: TH35
- Terminal screw torque: 2.5N.m~3N.m
- Conductor cross-sectional area: 2.5~16mm²
- Installation support: rail
- l_{pk} rated peak withstand current: 20kA
- Product certification: TUV, CE, RoHS
- Protective treatment: TH
- Storage environment temperature: -40~80°C
- Standard: GB14048 IEC60269



YROPV-32/2

Dimensions

Unit: mm



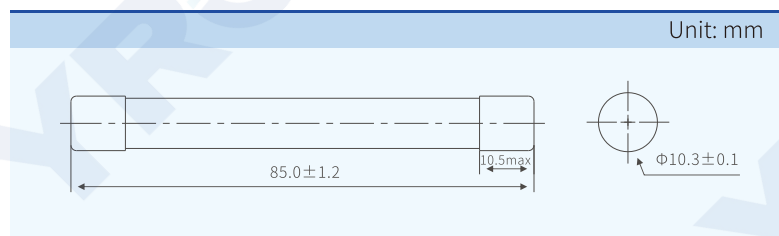
YROPV-30H DC FUSE & YROPV-32HB FUSE HOLDER



Specifications

- Volts: 1500V
- Amps: 2A-25A
- Fusible Core Specification: 10 x 85mm
- Class of Operation: gPV
- Standard: GB/T 13539.6, IEC 60269-6
- Breaking Capacity: 20kA

Dimensions



Technical Data

Current Rating	Joule integral I ² T(A ² S)		Watts Loss	
	Pre-arcing	Total clear	0.8In	1.0In
2	4	8	1.0	2.0
3	6	11	1.1	2.1
4	8	14	1.2	2.2
5	11	22	1.4	2.4
6	15	30	1.5	2.6
8	9	35	1.8	3.0
10	10	98	2.2	3.5
12	12	120	2.5	3.8
15	14	170	3.0	4.8
20	34	400	3.5	6.2
25	65	550	4.0	7.2

Main Technical Data

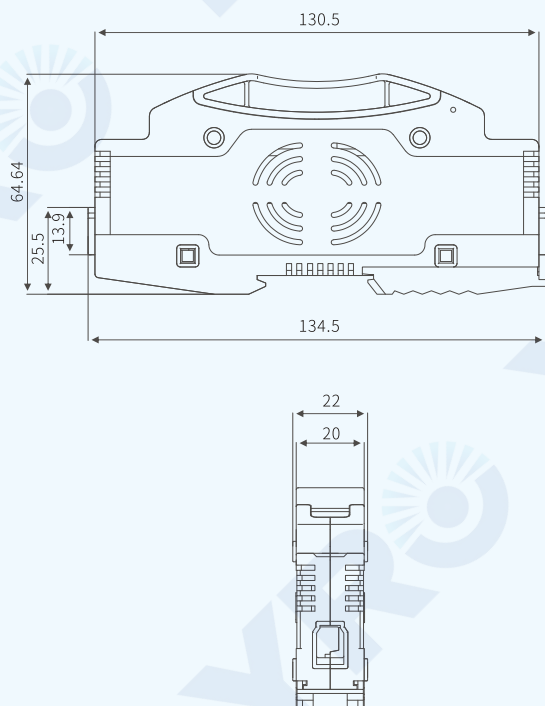
- Rated voltage: 1500VDC
- Rated current: 50A
- Suitable fusible core specification: 10/14 x 85mm
- Protection characteristics: gPV
- Shell material: BPT
- Temperature tolerance: -40°C~120°C
- Fitted rail specification: TH35
- Terminal screw torque: 2.5N.m~3N.m
- Conductor cross-sectional area: 2.5~16mm²
- Installation support: rail
- l_{pk} rated peak withstand current: 20kA
- Product certification: TUV, CE, RoHS
- Protective treatment: TH
- Storage environment temperature: -40~80°C
- Standard: GB14048, IEC60269



YROPV-32B(X)/1500V-10(14) 85

Dimensions

Unit: mm



YROPV-63 SERIES

DC Solar PV Thermal Fuse



Overview

1000VDC 63A 14x51mm Solar PV Fuse Link

YROPV-63 1000VDC solar PV thermal fuse link was designed specifically for protecting and isolating Solar Photovoltaic (PV) strings. This cylindrical style fuse link with a 14x51mm compact size can protect 1000VDC Photovoltaic (PV) systems safely. The solar PV thermal fuse link offers multiple ampere ratings from 10A to 40A, which are capable of interrupting overload current associated with faulted Photovoltaic (PV) systems.

1000VDC 63A 14x51mm Solar PV DIN Rail Fuse Holder

YROPV-63 1000VDC 14x51mm PV fuse holder was designed specifically for protecting and isolating Solar Photovoltaic (PV) strings. The recommended fuse link size is 14x51mm, which can safely protect 1000VDC Photovoltaic (PV) systems.

Features & Benefits

- 1000VDC Photovoltaic (PV) system available
- 10-63A ampere ratings available
- Meets IEC60269-6 standard for global acceptance
- Compact cylindrical construction
- Low power dissipation and temperature rise features for longer life cycle
- DIN Rail mountable

Applications

- Inverters
- Combiner boxes
- Battery charge controllers

Parameters

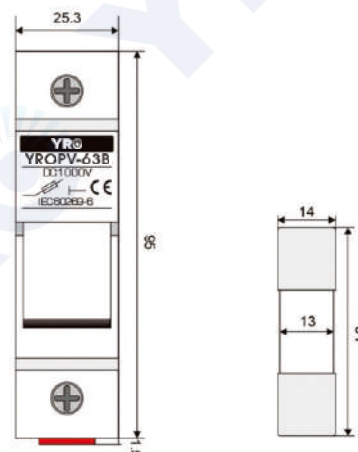
Product code	YROPV-63
Rated current	10-63A
Breaking capacity	1000VDC:25kA
Power loss 1.0In	6.3W
Net weight	24.5g

Time-current Characteristic

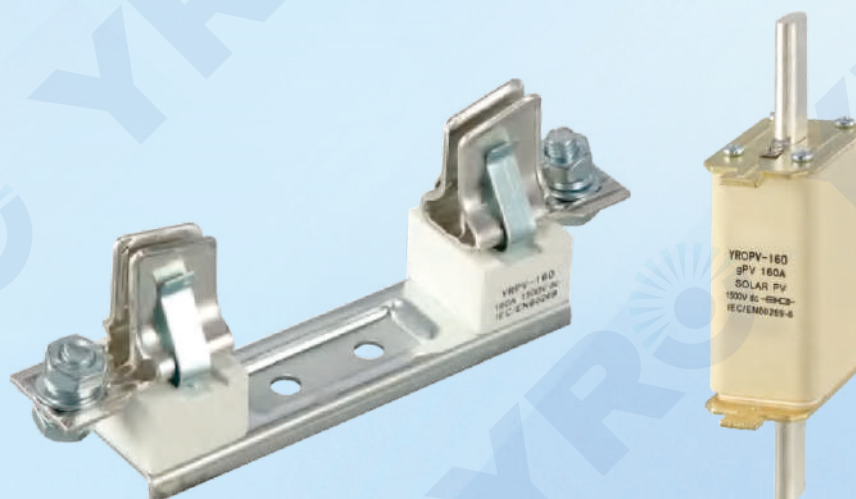
113%In	145%In
> 1h non fusing	< 1h fusing

Dimensions

Unit: mm



YROPV-1 60 DC FUSE & YROPV-1 60B FUSE HOLDER



Specifications

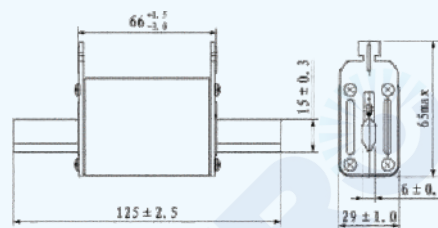
- Rated voltage: 1000VDC
- Rated current: 40A~160A
- Protection category: gPV-Full range protection of PV system
- Standard: IEC60269-6, GB/T13539.6

Applicable Holder & Base

- YROPV-160B

Dimensions

Unit: mm



Typical Application

- Protecting the PV combiner box, isolating switch and inverter, and breaking the fault overload current generated by the PV array.

Product Features

- Low temperature rise, low power consumption and long service life
- Standardized size and compact structure

Product Parameter

Product code	Rated current	Breaking capacity	Safety certificate	Power loss 1.0I _n (W)	Net weight
			CE		
YPOPV-160/40NH	2A	1000 VDC CE: 20kA	•	5.5	0.275kg
YPOPV-160/50NH	3A		•	6.2	
YPOPV-160/63NH	4A		•	7.0	
YPOPV-160/80NH	5A		•	8.4	
YPOPV-160/100NH	6A		•	10.8	
YPOPV-160/125NH	8A		•	13.6	
YPOPV-160/160NH	10A		•	17.4	

YROPV-1 60 DC FUSE&
YROPV-1 60B FUSE HOLDER

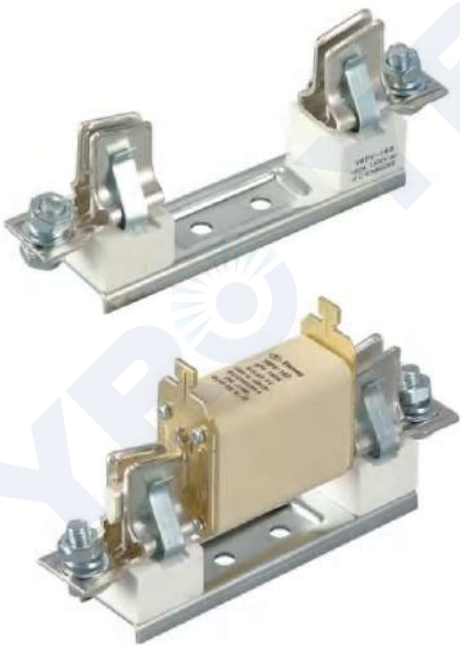


Main Technical Data

- Rated voltage: 1000VDC/1500VDC
- Rated current: 160A
- ≥24h salt spray test, resistance to acid environment
- Silver-plated copper terminal blocks, low temperature rise
- Standard: IEC60269-6, EN60269-6

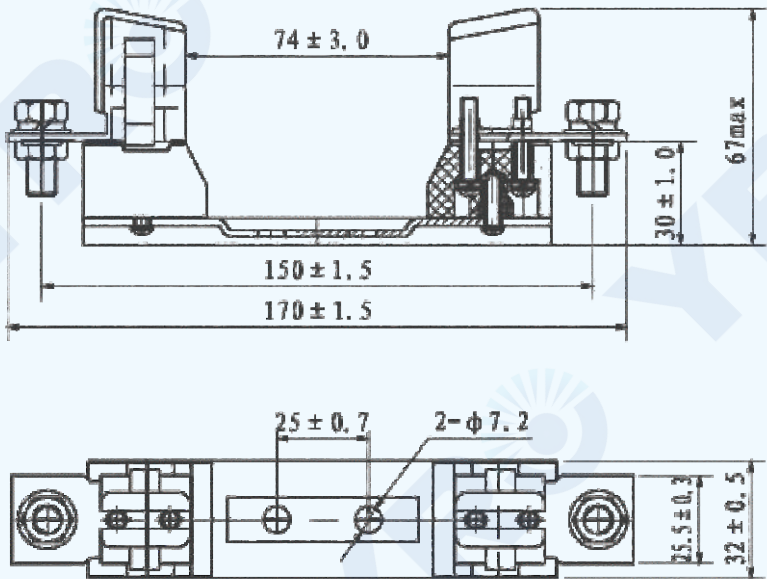
Product Parameter

Product code	Rated current	Breaking capacity	Safety certificate CE	Net weight
YROPV160B	160A	1000VDC 1500VDC	•	0.322kg

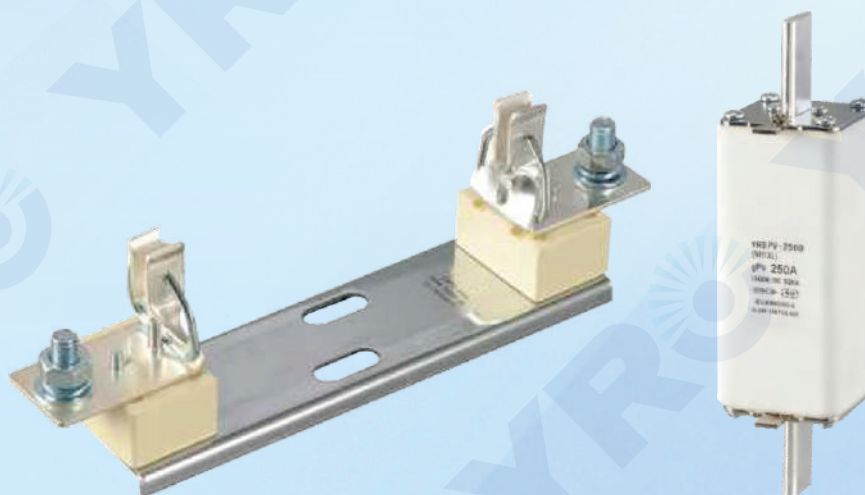


Dimensions

Unit: mm



YROPV-250 DC FUSE & YROPV-250B FUSE HOLDER



Specifications

- Rated voltage: 1000VDC
- Rated current: 80A~250A
- Protection category: gPV-Full range protection of PV system
- Standard: IEC60269-6, GB/T13539.6

Typical Application

- Protecting the PV combiner box, isolating switch and inverter, and breaking the fault overload current generated by the PV array.

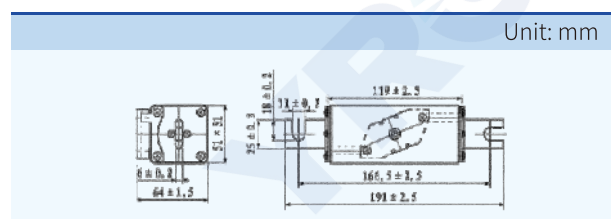
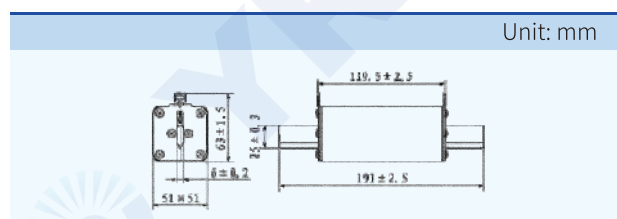
Product Features

- Low temperature rise, low power consumption and long service life
- Standardized size and compact structure

Applicable Holder & Base

- YROPV-250B

Dimensions



Product Parameter

Product code	Rated current	Breaking capacity	Safety certificate CE	Power loss 1.0In (W)	Net weight
YROPV-250/80NH	80A	1000 VDC CE: 50kA	●	16.0	960g
YROPV-250/100NH	100A		●	18.9	
YROPV-250/125NH	125A		●	21	
YROPV-250/160NH	160A		●	29.5	
YROPV-250/200NH	200A		●	34.6	
YROPV-250/250NH	250A		●	37.5	

Product code	Rated current	Breaking capacity	Safety certificate CE	Power loss 1.0In (W)	Net weight
YROPV-250/80SH	80A	1000 VDC CE: 50kA	●	16.0	925g
YROPV-250/100SH	100A		●	18.9	
YROPV-250/125SH	125A		●	21	
YROPV-250/160SH	160A		●	29.5	
YROPV-250/200SH	200A		●	34.6	
YROPV-250/250SH	250A		●	37.5	

YROPV-250 DC FUSE &
YROPV-250B FUSE HOLDER

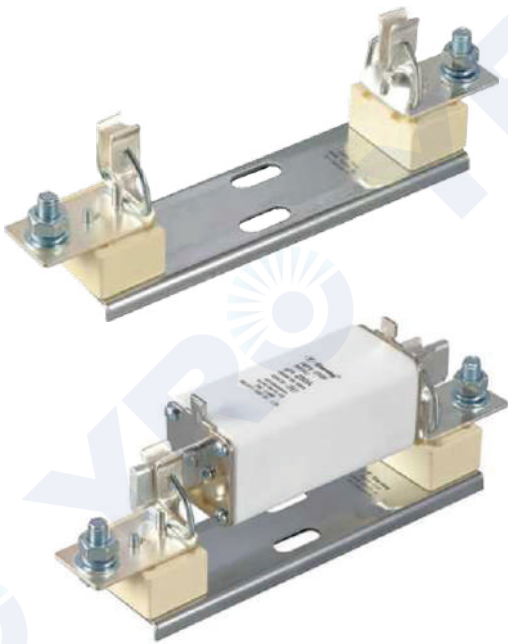


Main Technical Data

- Rated voltage: 1000VDC/1500VDC
- Rated current: 250A
- ≥24h salt spray test, resistance to acid environment
- Silver-plated copper terminal blocks, low temperature rise
- Standard: IEC60269-1, EN60269-6

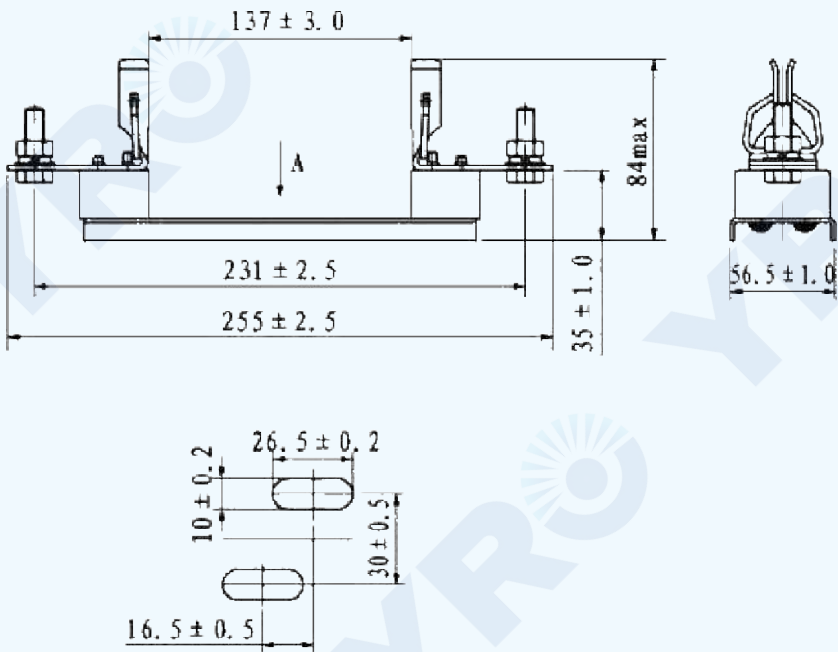
Product Parameter

Product code	Rated current	Breaking capacity	Safety certificate CE	Net weight
YROPV250B	250A	1000VDC 1500VDC	●	0.59kg



Dimensions

Unit: mm



YROPV-160/250 SERIES

Fuse Type Isolating Switch



Description

YROPV-160/250 series fuse-type isolating switches works with NH00 and NH01 type fuses. Has a working voltage range of 0-1000V DC and 0-690V AC with a maximum current of 800A. The working current varies according to size of fuse used.

Application

- 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

Structure

The switch is composed of a base, a cover and a contact bridge. The fuse is installed inside the cover. The cover can rotate in a fan shape along the support. It has a large electrical isolation distance to meet the requirements of the isolating switch. The cover can be easily removed from the base. Removable, making it easy to install and replace the fuse link.

There are two sets of mounting holes on the base, which can meet the installation requirements in various switch cabinets and on panels. On both sides of the switch, auxiliary contacts can be installed as needed to send signals indicating the opening and closing status of the switch.

The relationship between switches and fuses

Agreed heating current (A)	Fuse link model	Rated working voltage (V)	Optional fuse (A)
Max 160	NT00 RT16-00	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
Max 250	NT1 RT16-1	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

Switch technical parameters

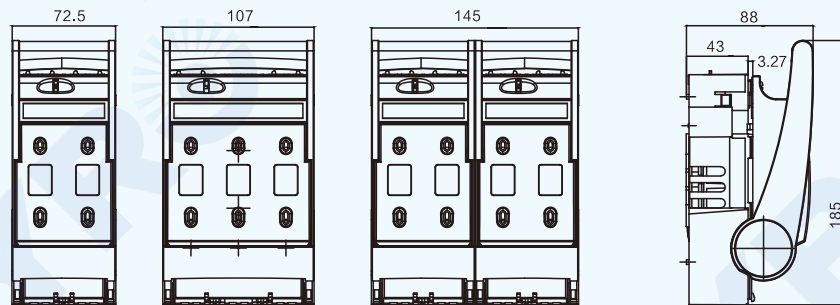
Model	YROPV-160				YROPV-250		
Number of poles	2P				2P		
Rated operational voltage Ue AC (V)	--	--	500	690	--	500	690
Rated operational voltage Ue DC (V)	220	500	--	--	500	--	--
Rated operational current Ie (A)	160	125	160	125	250	250	200
Thermal current with fuse-link Ith (A)	160	160	160	160	250	250	250
Utilization category	DC22B	DC22B	AC22B	AC21B	DC22B	AC22B	AC21B
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	Open				IP20		
	Closed				IP30		

The rated voltage of the auxiliary switch is AC 380V, the agreed heating current is 5A, the usage category is AC-15, and the rated working power is 300VA.

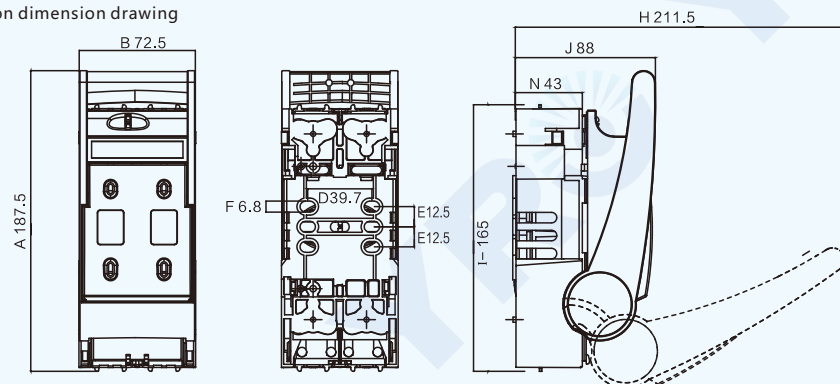
Outline and installation dimensions

Unit: mm

YROPV-160 External dimension drawing



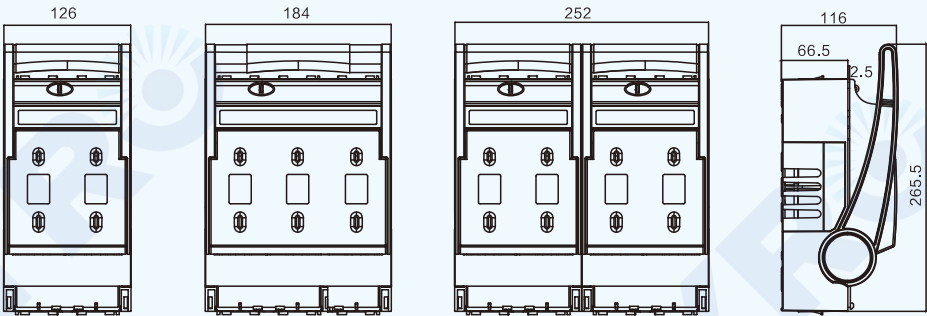
YROPV-160 Installation dimension drawing



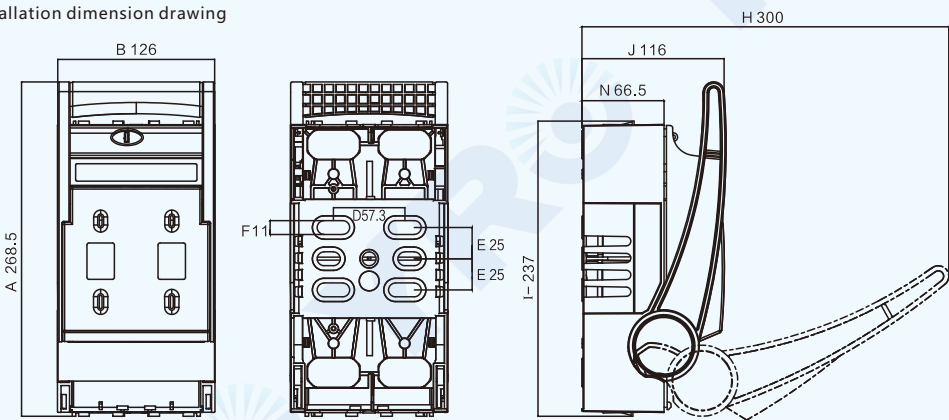
Outline and installation dimensions

Unit: mm

YROPV-250 External dimension drawing



YROPV-250 Installation dimension drawing



Size	Specifications	
	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	165	237
N	43	66.5

YROPV-160~1250 SERIES

Fuse Type Isolating Switch



Specifications

- Rated voltage: 1000VDC
- Rated current: 125A~400A
- Protection category: gPV-Full range protection of PV system
- Standard: IEC60269-6, GB/T13539.6

Product Features

- Low temperature rise, low power consumption and long service life
- Standardized size and compact structure

Typical Application

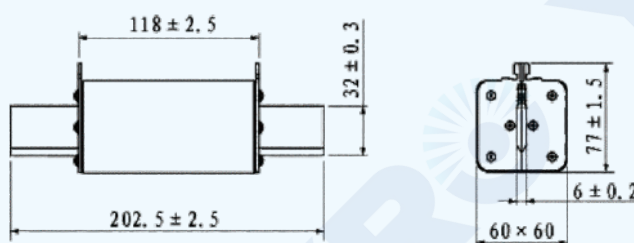
- Protecting the PV combiner box, isolating switch and inverter, and breaking the fault overload current generated by the PV array.

Applicable Holder & Base

- YROPV-400B

Dimensions

Unit: mm



YROPV-160 SERIES

Fuse Type Isolating Switch



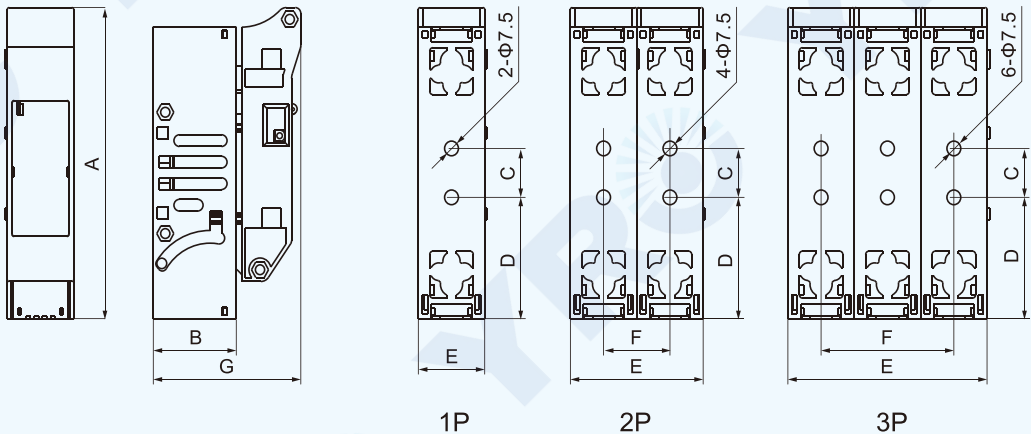
Product Parameter

Breaking capacity: AC400V/120KA, AC690V/50KA, functional level: aR/gR-gG/gL-aM/gM-gtr

Product code	Rated voltage (V)	Agreed heating current (A)	Dimensions						
			A	B	C	D	E	F	G
YROPV-160/1P	AC400/690	160/100	159	45	25	62	36	/	80
YROPV-160/2P	AC400/690	160/100	159	45	25	62	72	36	80
YROPV-160/3P	AC400/690	160/100	159	45	25	62	108	72	80

Dimensions

Unit: mm



YROPV-250 SERIES

Fuse Type Isolating Switch

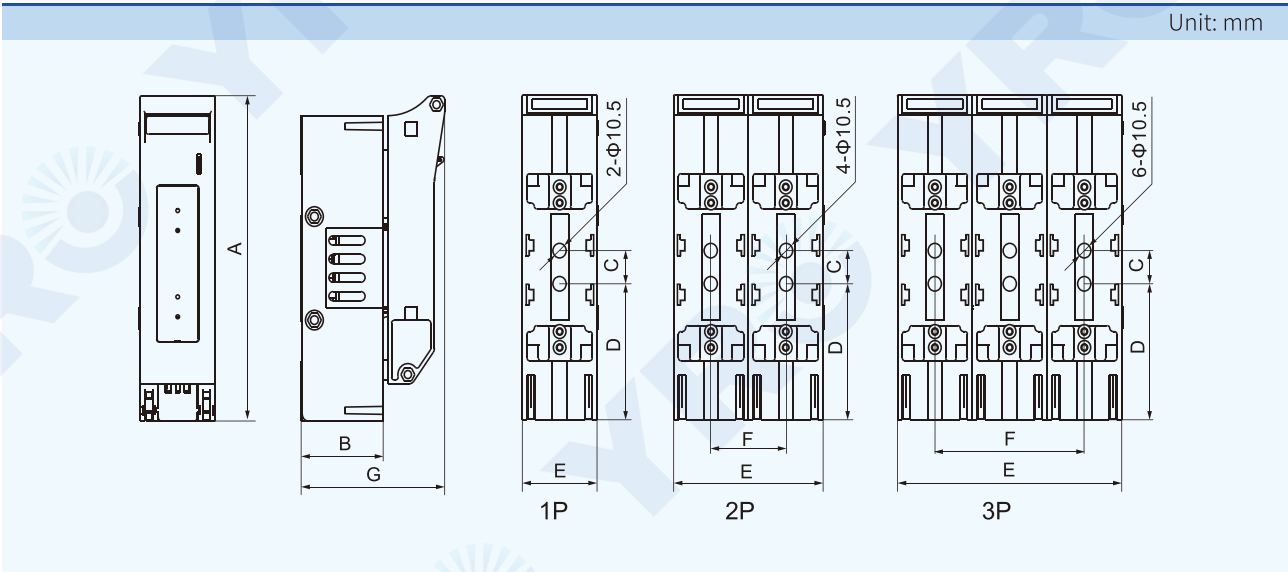


Product Parameter

Breaking capacity: AC400V/120KA, AC690V/50KA, functional level: aR/gR-gG/gL-aM/gM-gtr

Product code	Rated voltage (V)	Agreed heating current (A)	Dimensions						
			A	B	C	D	E	F	G
YROPV-250/1P	AC400/690	250/200	245	67	25	102.5	62	30	118
YROPV-250/2P	AC400/690	250/200	245	67	25	102.5	124	62	118
YROPV-250/3P	AC400/690	250/200	245	67	25	102.5	186	124	118

Dimensions



YROPV-400 SERIES

Fuse Type Isolating Switch



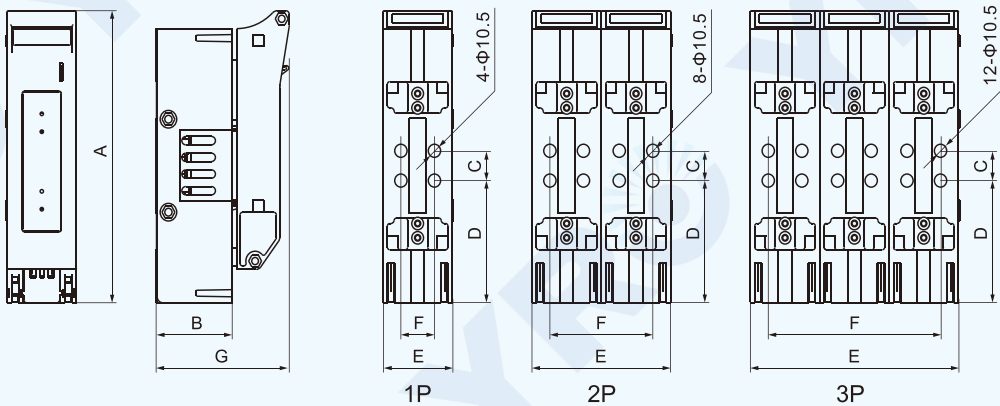
Product Parameter

Breaking capacity: AC400V/120KA, AC690V/50KA, functional level: aR/gR-gG/gL-aM/gM-gtr

Product code	Rated voltage (V)	Agreed heating current (A)	Dimensions						
			A	B	C	D	E	F	G
YROPV-400/1P	AC400/690	400/315	272	81	25	115.5	70	30	133
YROPV-400/2P	AC400/690	400/315	272	81	25	115.5	140	100	133
YROPV-400/3P	AC400/690	400/315	272	81	25	115.5	210	170	133

Dimensions

Unit: mm



3P products can be configured with fuse monitors.



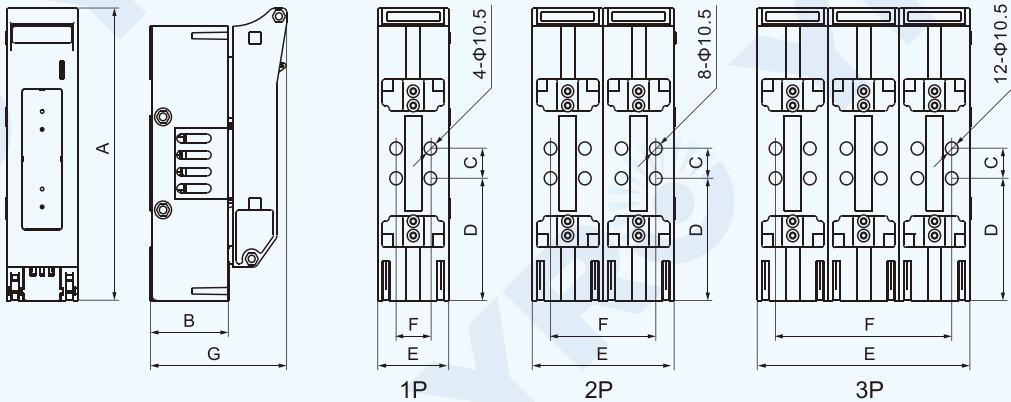
Product Parameter

Breaking capacity: AC400V/120KA, AC690V/50KA, functional level: aR/gR-gG/gL-aM/gM-gtr

Product code	Rated voltage (V)	Agreed heating current (A)	Dimensions						
			A	B	C	D	E	F	G
YROPV-630/1P	AC400/690	630/500	285	96	25	122.5	85	30	147
YROPV-630/2P	AC400/690	630/500	285	96	25	122.5	170	115	147
YROPV-630/3P	AC400/690	630/500	285	96	25	122.5	255	200	147

Dimensions

Unit: mm



3P products can be configured with fuse monitors.

YROPV-1250 SERIES

Fuse Type Isolating Switch

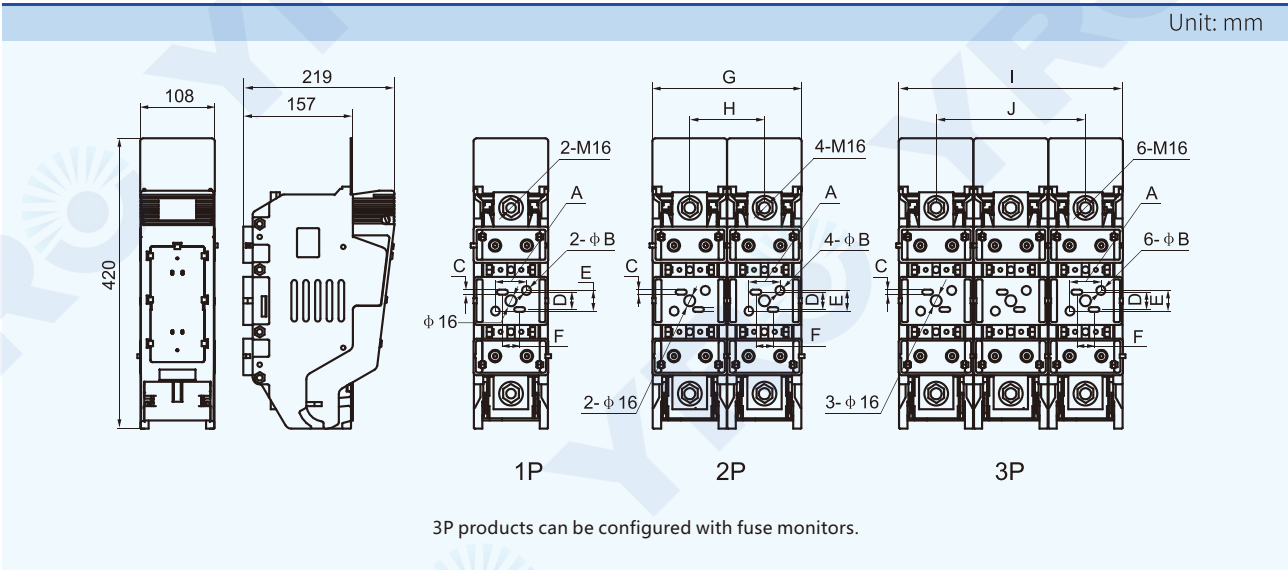


Product Parameter

Breaking capacity: AC400V/120KA, AC690V/50KA, functional level: aR/gR-gG/gL-aM/gM-gtr

Product code	Rated voltage (V)	Current level (A)	Dimensions									
			A	B	C	D	E	F	G	H	I	J
YROPV-1250/1P	AC400/500,DC440	1250	45	13	7	25	30	25	/	/	/	/
YROPV-1250/2P	AC400/500,DC440	1250	45	13	7	25	30	25	216	108	/	/
YROPV-1250/3P	AC400/500,DC440	1250	45	13	7	25	30	25	/	/	324	216

Dimensions



DC Mold Case Circuit Breaker



YRM3DC SERIES

High Voltage DC Mold Case Circuit Breaker



Function Introduction

Through many years of dedicated research on the actual system operation situation and customer needs of new energy at home and abroad, has developed the YRM3HU/DC series of AC/DC molded circuit breaker for new energy.

YRM3HU/DC series AC/DC molded case circuit breakers meet the following standards

- IEC 60947-1 GB/T14048.1 General Provisions
- IEC 60947-2 GB/T14048.2 Circuit Breaker

Use and Maintenance

Various characteristics and accessories of the circuit breaker shall be fixed by the manufacturer and shall not be adjusted in the use. Under the compliance with custody and use conditions, from the date of 24 months from the manufacturer delivery and in the situation of the circuit breaker intact seals, if the product is damaged or not used normally due to manufacturing quality problems, the manufacturer shall be responsible for replacement and repair without charge.

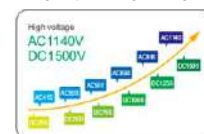
Product Characteristic

- YRM3HU series Molded Circuit Breaker, The maximum rated voltage is AC 1140V, and the maximum current is 800A.
- YRM3HU series Molded Circuit Breaker, in the voltage of AC 800V, the maximum breaking capacity is 50kA, which can ensure reliable short-circuit protection of the system.
- YRM3DC series Molded Circuit Breaker, The maximum rated voltage is AC 1500V, and the maximum current is 800A.
- YRM3DC series Molded Circuit Breaker, in the voltage of DC 1500V, the maximum breaking capacity is 20kA, which can ensure reliable short-circuit protection of the system.

Applied Environment

- The altitude is not higher than 5500 m;
- It is resistant to damp air (three-proof type);
- It is resistant to the influence of salt fog and oil fog (three-proof type);
- It is resistant to the influence of mold (three -proof type);
- In a medium without explosion risk, and the medium is not enough to corrode the metal and destroy the insulation of the gas and conductive dust.
- Note: The three-prevention products should be specially customized, please indicate TH.

High operating voltage



High range applications



High breaking capacity

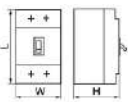


YRM3DC SERIES

High Voltage DC Mold Case Circuit Breaker



Main Technical Parameter

Appearance							
Model		YRM3DC-320			YRM3DC-400		
Rated current of shell frame grade Inm(A)		320			400		
Rated current In(A)		20, 32, 63, 80, 100, 125, 140, 160, 180, 200, 225, 250, 280, 315, 320			225, 250, 315, 350, 400		
Pole Number		2		3	2		3
Rated working voltage Ue (V)DC		500	1000	1500	250/500	750/1000	1250/1500
Rated insulation voltage Ui (V)		1250		1500	1500		
Rated impulse withstand voltage Uimp (kV)		8		12	12		
Extreme short-circuit breaking capacity Icu (kA)	H Type	50	20	20	65	35	15
	R Type	/	/	/	70	40	20
Running short-circuit breaking capacity Ics (kA)	H Type	Ics=100%Icu					
	R Type						
Wiring mode		Up incoming and Down outcoming, Down incoming and Up outcoming (2P, 320/3P) Down incoming and Down outcoming, Up incoming and Up outcoming (3P)					
Mechanical life (Total times)		20000			10000		
Electrical life (Total times)		3000	2000	1500	1000	1000	700
Insolation feature		Yes					
Standard		IEC 60947-2, GB/T 14048.2					
Allowable ambient temperature		-35~+70°C					
Levels of protection		IP20					
Quality certificate		CCC, CE, TÜV certificate					
With accessories		Auxiliary, alarm, off load, Hand operation, Electric operation					
Arcing distance (mm)		≤50 (Zero arc, with arcing cover)					
Transient Action value		10In					
Overall		L	180	180	250		250
dimensions		W	76	107	124		182
L×W×H(mm)		H	126	126	165		165

Note: 320 shell frame is not divided into H: high breaking, R: current limiting type.

YRM3DC SERIES

High Voltage DC Mold Case Circuit Breaker



Main Technical Parameter

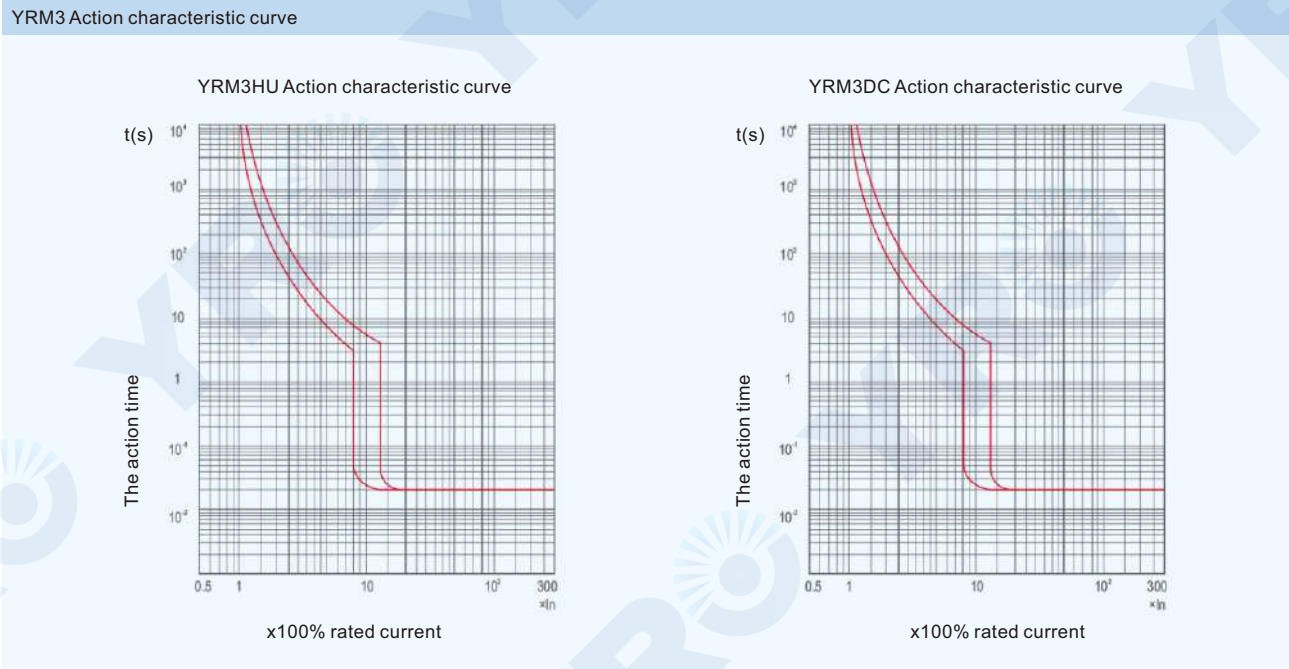
Appearance



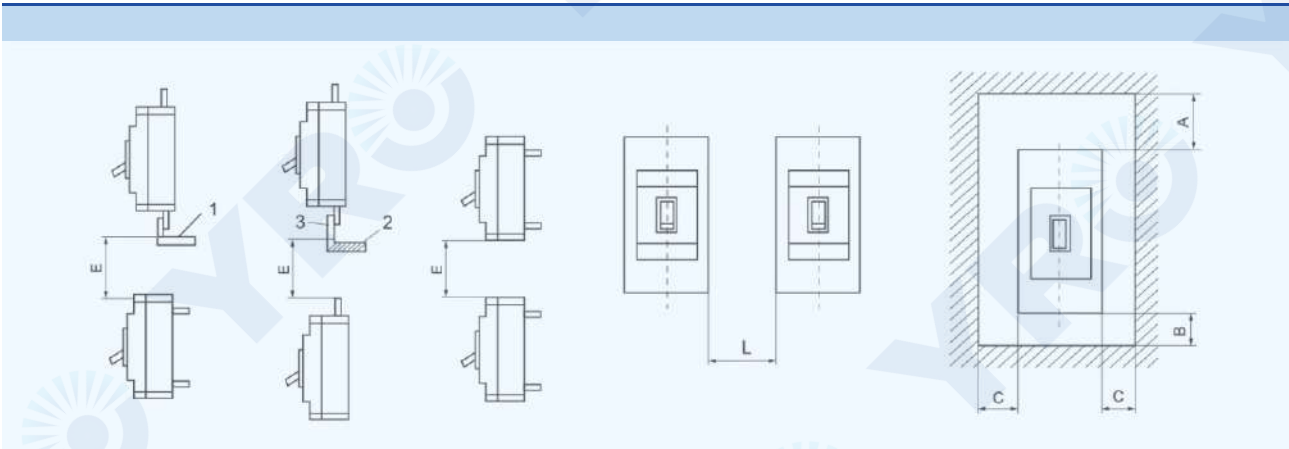
Model		YRM3DC-630				YRM3DC-800			
Rated current of shell frame grade Inm(A)		630				800			
Rated current In(A)		500,630				700,800			
Pole Number		2		3		2		3	
Rated working voltage Ue (V)DC		250/500	750/1000	1250/1500	1250/1500	250/500	750/1000	1250/1500	1250/1500
Rated insulation voltage Ui (V)		1500				1500			
Rated impulse withstand voltage Uimp (kV)		12				12			
Extreme short-circuit breaking capacity Icu (kA)	H Type	65	35	15	15① 20②	65	35	15	15① 20②
	R Type	70	40	20	15① 20②	70	40	20	15① 20②
Running short-circuit breaking capacity Ics (kA)	H Type	Ics=100%Icu							
	R Type								
Wiring mode		Up incoming and Down outcoming, Down incoming and Up outcoming (2P, 320/3P) Down incoming and Down outcoming, Up incoming and Up outcoming (3P)							
Mechanical life (Total times)		5000							
Electrical life (Total times)		1000	1000	700	500	1000	1000	700	500
Insolation feature		Yes							
Standard		IEC 60947-2, GB/T 14048.2							
Allowable ambient temperature		-35~+70℃							
Levels of protection		IP20							
Quality certificate		CCC, CE, TÜV certificate							
With accessories		Auxiliary, alarm, off load, Hand operation, Electric operation							
Arcing distance (mm)		≤50 (Zero arc, with arcing cover)							
Transient Action value		10In							
Overall		L	250	250		250		250	
dimensions		W	124	182		124		182	
L×W×H(mm)		H	165	165		165		165	

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

Action Characteristic Curve of The Circuit Breaker



Safe Distance During Circuit Breaker Installation



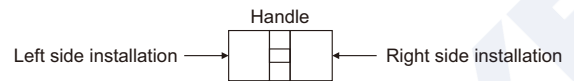
Model	L	A		B	C	L	
		Without zero arcing cover	With zero arcing cover			Without zero arcing cover	With zero arcing cover
YRM3-320	40	50	65	25	25	50	130
YRM3-400		100	65	25	25	100	130
YRM3-630	70	100	65	25	25	100	130
YRM3-800		100	65	25	25	100	130

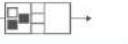
In above picture, there is 1. No insulated links 2. Insulated wires 3. Cable terminals

Release Way and Accessory Code

300: delay protection +instantaneous protection

☐ Alarm ☒ Auxiliary contacts ● Shunt release
☐ under voltage release → Lead line direction



Code	Name	YRM3HU-250/320	YRM3HU-400/630/800	M3DC-250/320	M3DC-400/630/800
300	Without inner accessory	—	—	—	—
308	Alarm Contact	← 	← 	← 	← 
310	Shunt release	← 	← 	← 	← 
320	Auxiliary contact (1NO1NC)	← 	← 	← 	← 
302	Auxiliary contact (2NO2NC)	—	← 	—	← 
330	Under voltage releas	—	—	—	—
340	Shunt release +Auxiliary contact (1NO1NC)	← 	← 	← 	← 
312	Shunt release +Auxiliary contact (2NO2NC)	—	—	—	—
350	Shunt release+Under voltage contact	—	—	—	—
360	Group 2 auxiliary contact (2NO2NC)	← 	—	← 	—
322	Group 2 auxiliary contact (3NO3NC)	—	—	—	—
323	Group 2 auxiliary contact (4NO4NC)	—	—	—	—
370	Under Voltage Release +Auxiliary contact (1NO1NC)	—	—	—	—
332	Under Voltage Release +Auxiliary contact (2NO2NC)	—	—	—	—
318	Shunt release + Alarm Contact	—	← 	—	← 
328	Auxiliary contact (1NO1NC) + Alarm Contact	← 	← 	← 	← 
338	Under voltage releas + Alarm Contact	—	—	—	—
348	Shunt release Auxiliary contact (1NO1NC) +Alarm Contact	—	← 	—	← 
	Shunt release Auxiliary contact (2NO2NC) +Alarm Contact	—	—	—	—
368	Group 2 auxiliary contact (2NO2NC) +Alarm Contact	← 	← 	← 	← 
	Group 2 auxiliary contact (4NO4NC) +Alarm Contact	—	—	—	—
305	Group 2 auxiliary contact (3NO3NC)+Alarm Contact	—	—	—	—
378	Group 2 auxiliary contact (1NO1NC)+Under voltage releas +Alarm Contact	—	—	—	—
	Group 2 auxiliary contact (2NO2NC)+Under voltage releas +Alarm Contact	—	—	—	—

YRM3DC SERIES

High Voltage DC Mold Case Circuit Breaker



Product Accessories

1. Ontology
2. Undervoltage release (customer purchase)
3. Shunt release (customer purchase)
4. Alarm contact (customer purchase)
5. Auxiliary contact (customer purchase)
6. Electric operating mechanism (customer purchase)
7. Hand-operated mechanism (customer purchase)
8. Terminal guard (customer purchase)
9. Front wiring board (customer option)
10. Arc partition (standard with the main body)



②



⑥

④



YRM3DC SERIES

High Voltage DC Mold Case Circuit Breaker



Product Accessories

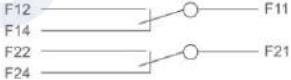


Auxiliary Contact

Auxiliary contact current parameters

Rated current of shell frame class	Agreed heating current	Rated operating current at AC 400V
Inm<250	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

Alarm contact and its combination

Alarm Contact Ue= 220V,Ith=3A	
When the circuit breaker is the "off" and " on" positions	
When the circuit breaker is in the "free trip" position	

Shunt Release

Generally installed in the circuit breaker A phase, and between 70%-110% of the rated control power supply voltage, the distributor shall reliably buckle the circuit breaker under all operating conditions.

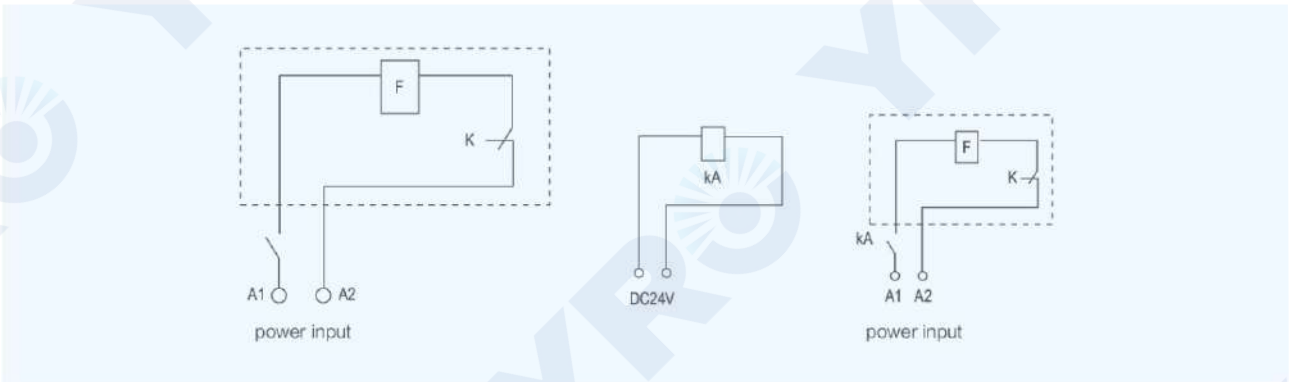
Control voltage: General: AC50Hz, 110V, 230V, 400V, DC 24V, 100V, 220V

Note: when the control circuit power supply is DC24V, it is recommended to use the following figure for the excitation control circuit design.

KA: is a DC24V intermediate relay with a contact current capacity of 1A.

The micro switch in series between the K: tap and the coil is normally closed contact. When the circuit breaker is disconnected, the contact is disconnected by itself and closed when closed.

Wiring diagram of excitation tripping

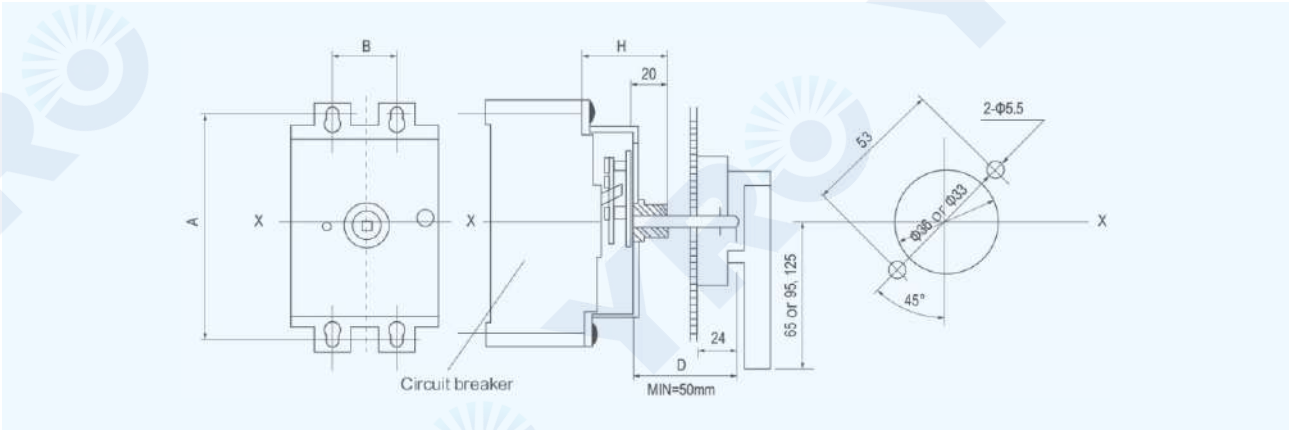


Installation Method and Overall Dimension of External Accessories

Turning the operating handle mechanism type and specification

Model	Installation dimension (mm)				Operator handle relative to circuit breaker center value (mm)
	A	B	H	D	
CZ2-320/M3	157	35	55	50-150	0
CZ2-400/M3	224	48	78	50-150	±5

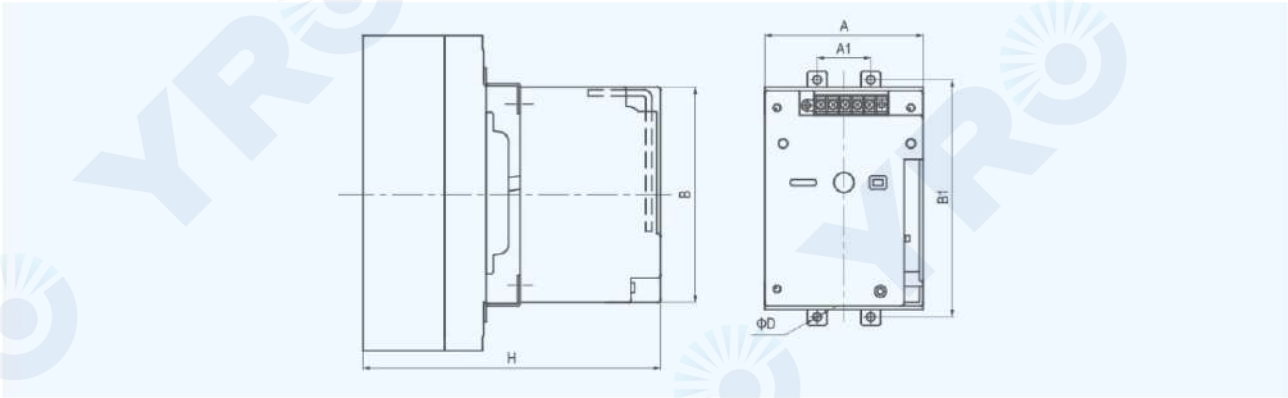
Schematic of CS1-A handle



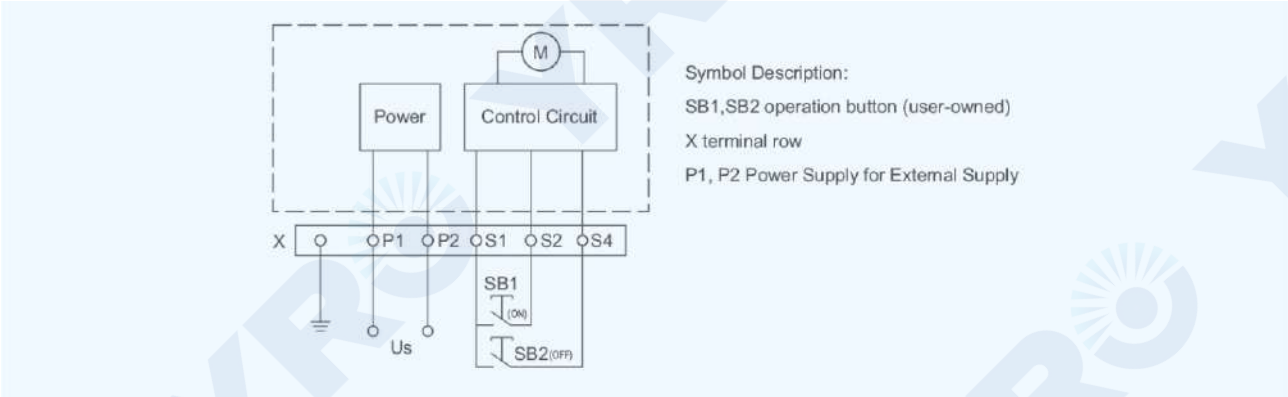
Model and specification of electric operating mechanism

Model	H	B	B1	A	A1	D
YRM3-320	188.5	116	126	90	35	4.2
YRM3-400	244	176	194	130	48	6.5

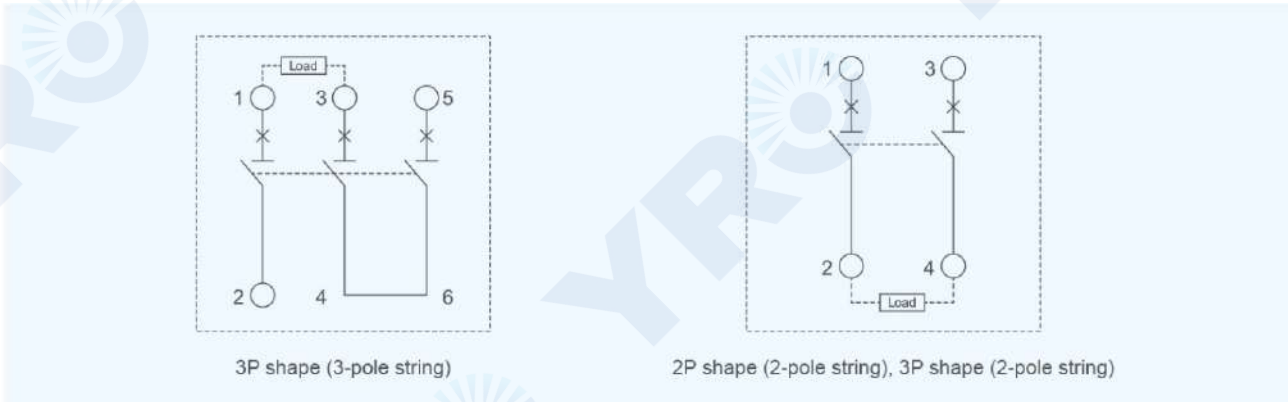
CD2 Outline and installation dimensions schematic diagram



Electric power operator mechanism wiring diagram

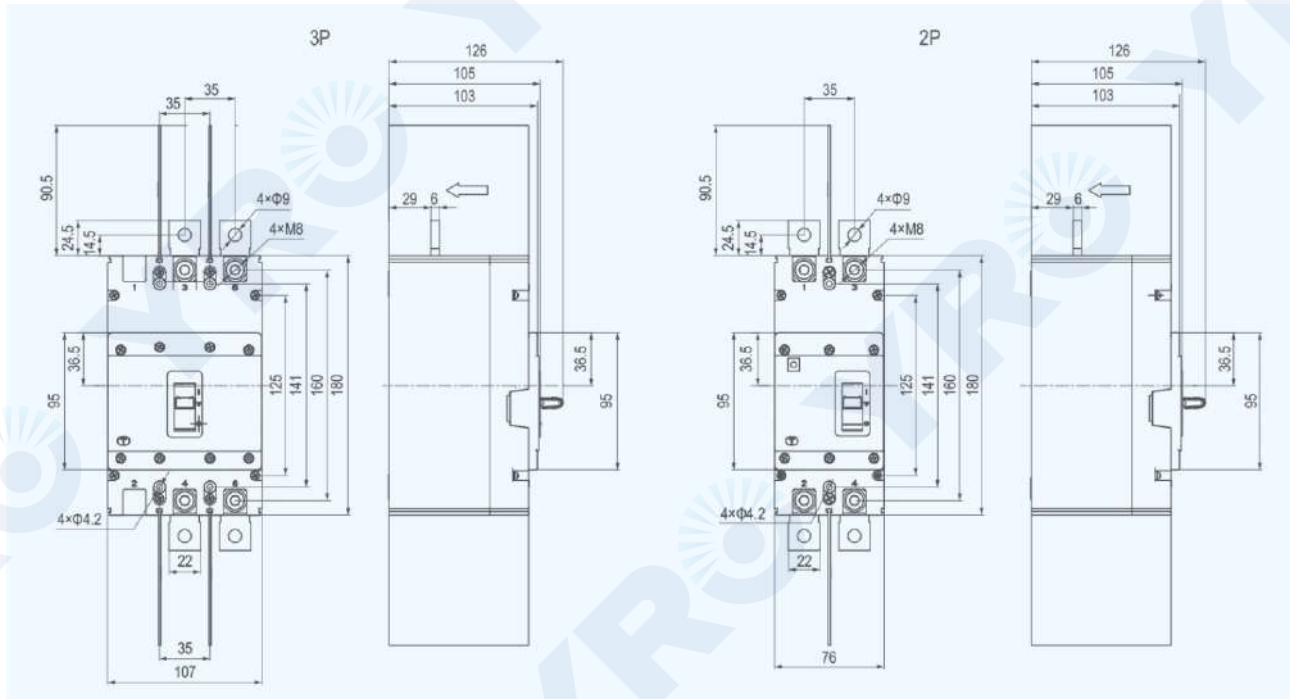


Connection Mode of DC Circuit Breaker

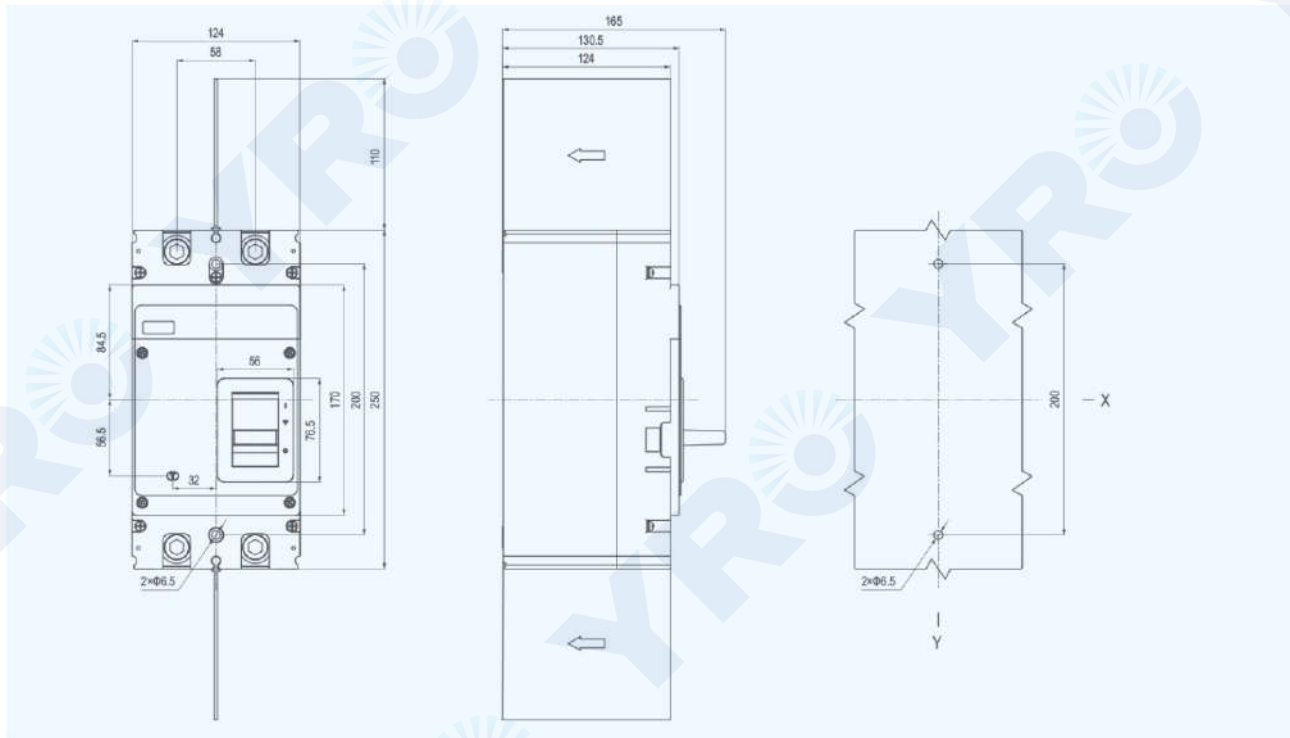


Outline and Installation Dimension Method and Its Overall Dimension

YRM3DC-250/320,YRM3HU-320 Outline and installation of hole opening dimensions



YRM3DC-400/630/800 Outline and installation of hole opening dimensions (2P)

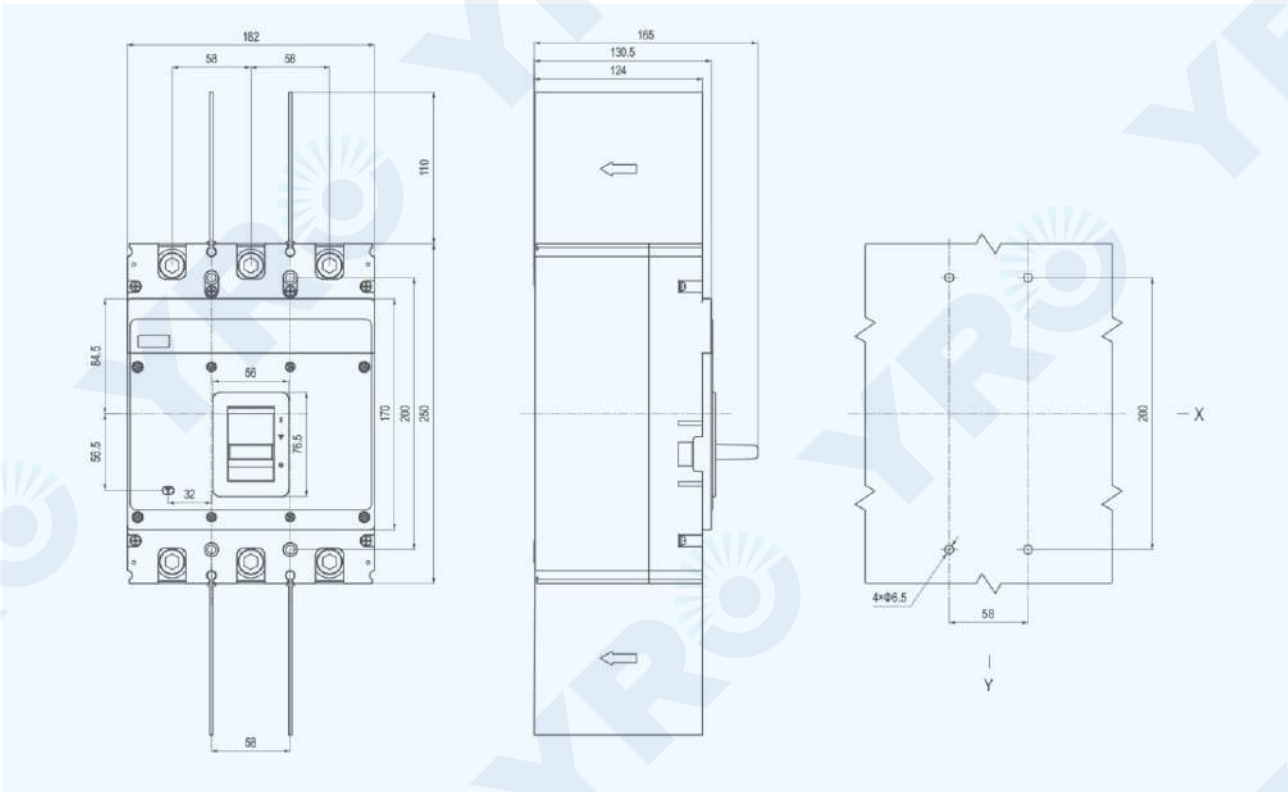


YRM3DC SERIES

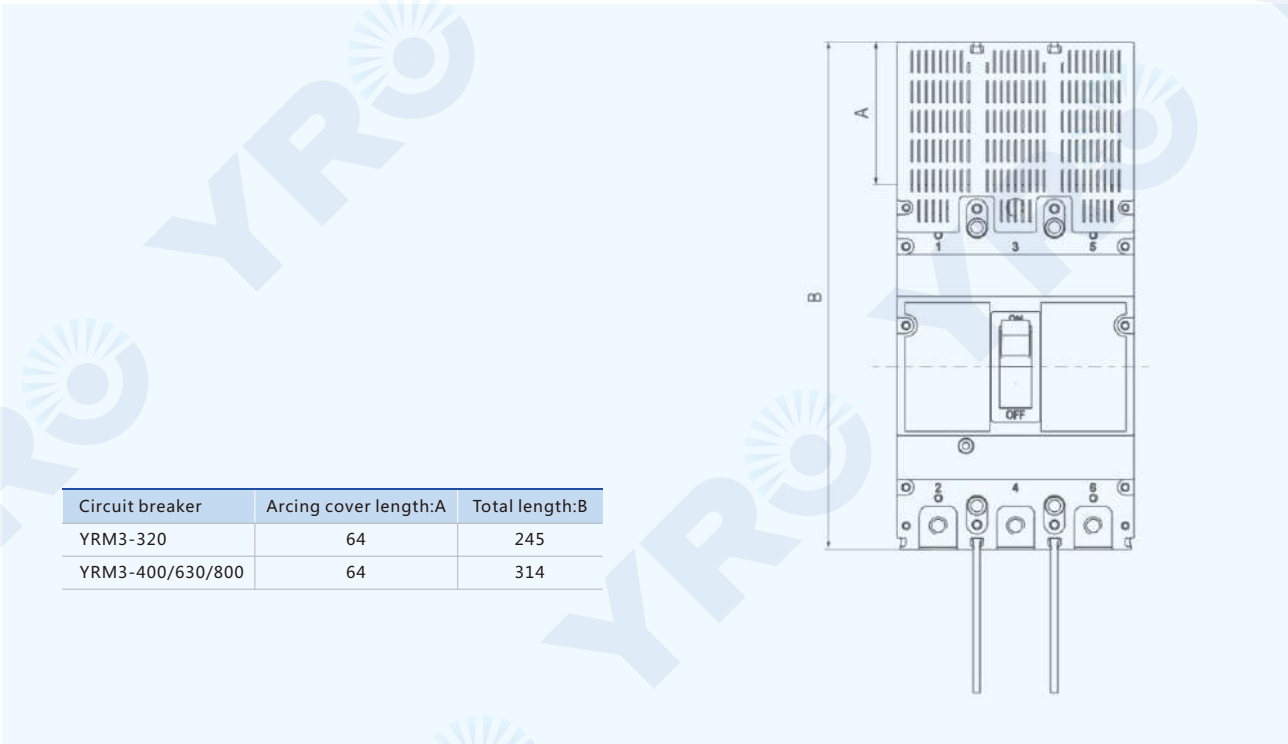
High Voltage DC Mold Case Circuit Breaker



YRM3DC-400/630/800, YRM3HU-400/630/800 Outline and installation of hole opening dimensions (3P)



YRM3 with arc cover installationdrawing



YHM SERIES

Waterproof distri-bution box



Environment

It is applicable for special waterproof, dustproof and corro-sion-proof locations

Standard

Executive standard IEC60529 EN 60309 I P65

New style



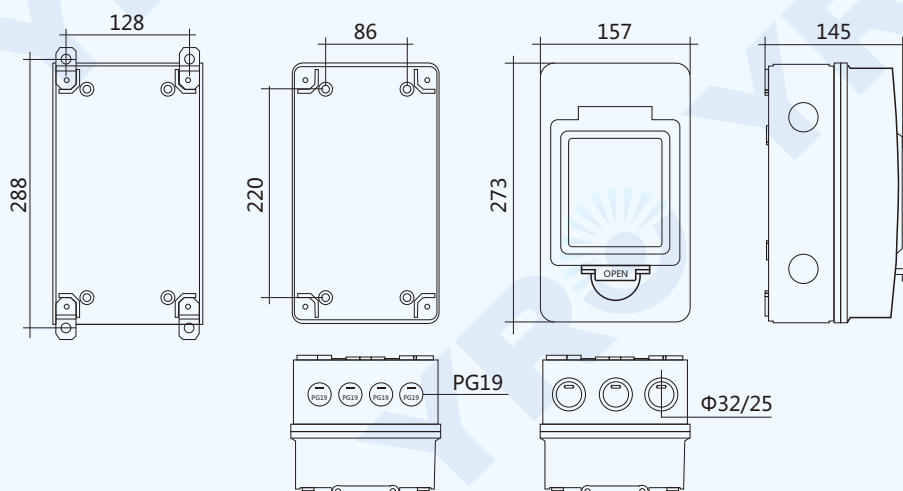
Internal zero and ground terminals
Φ8 euro type connection handle



Angle fitting

Outline dimensional drawing

Unit:mm



YRM1Z SERIES

DC Molded Case Circuit Breaker



Application

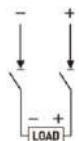
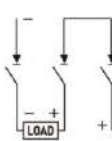
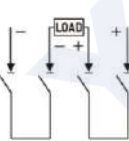
YRM1Z DC series molded case circuit breaker is used for low-voltage power generation, transmission and distribution lines of rated voltage of DC 12~1000V, AC 90~690V, rated current of 63A~1250A to provide isolation, overload and short circuit protection, DC MCCB can also be used for infrequent making and breaking of circuits under normal circumstances. The DC MCCB are widely used in photovoltaic power generation systems, wind power generation systems, roof building power generation systems, rail transit power distribution systems and infrastructure construction and other low-voltage DC generation, transmission and distribution application occasions.

YRM1Z circuit breaker can be mounted vertically (upright) or horizontally (transverse).

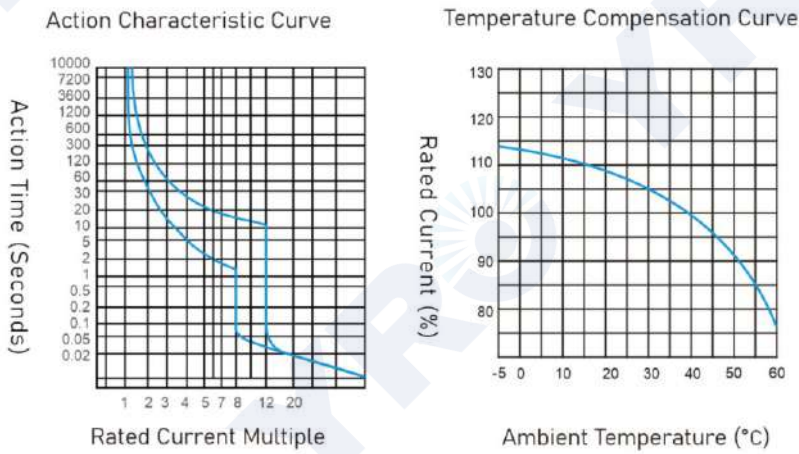
YRM1Z circuit breaker meets the standard: IEC60947-2 low-voltage switchgear and control equipment, Part 2: circuit breakers.

Technical Parameters

Rated Current	63A, 100A, 120A, 160A, 200A, 250A, 300A, 350A, 400A, 500A, 600A			
Poles	1P	2P	3P	4P
Rated Voltage U_e	DC 250V	DC 500V	DC 750V	DC 1000V
Insulation Voltage U_i	1000V			
Rated Impulse Withstand Voltage(1.2/50) U_{imp}	8 kV			
Rated Breaking Capacity (Ics)	25kA			
Rated Operating Short-circuit Breaking Capacity I_{cu} (kA)	35kA			
Thermo-Magnetic Release Characteristic	A-Curve (8-12In)			
Electrical Life	1000			
Mechanical Life	2000			
Installation	Panel Screw Installation			
Ambient Temperature	-5°C~+70°C			
Terminal Connection Type	Hexagon Screw			
Tightening Torque	5.0 N.m			
Adapter Cable	10-200mm ² 7-4/0AWG			
Arcing Distance	<50mm			
Use Category	A			

Poles	1P	2P	3P	4P
Breaking Capacity	25kA			
DC Wiring Diagram				

Tripping Characteristic Curve



Temperature Compensation

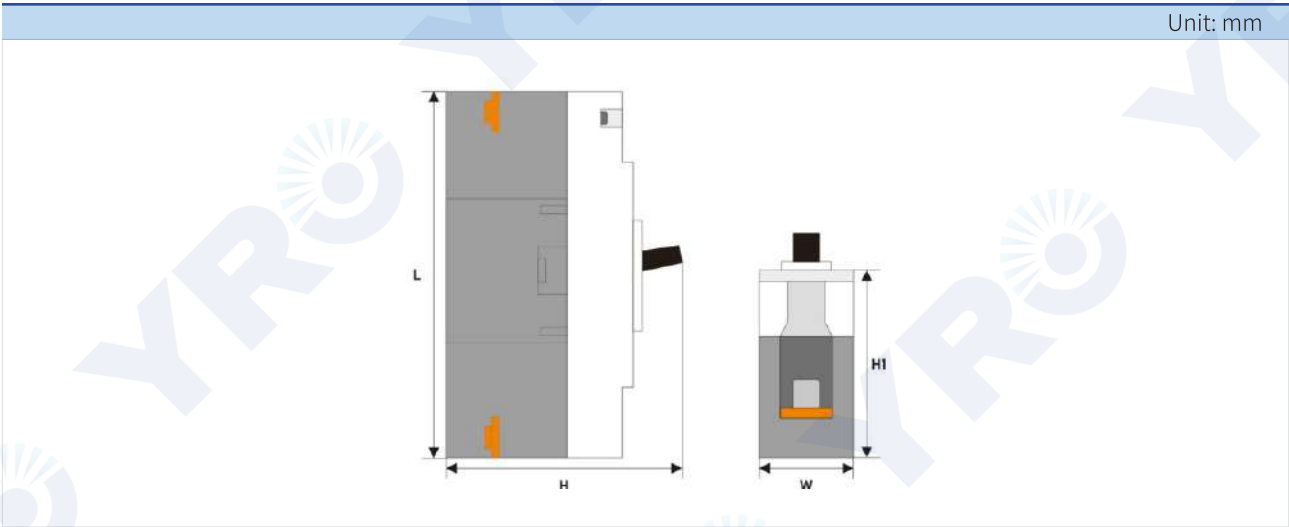
When the ambient temperature is not a benchmark of 30 degrees , the reference correction factor is as follows.

Ambient Temperature	-20℃	-10℃	0℃	10℃	20℃	30℃	40℃	50℃	60℃
Current Correction Coefficient	1.25	1.20	1.15	1.10	1.05	1.00	0.95	0.90	0.85

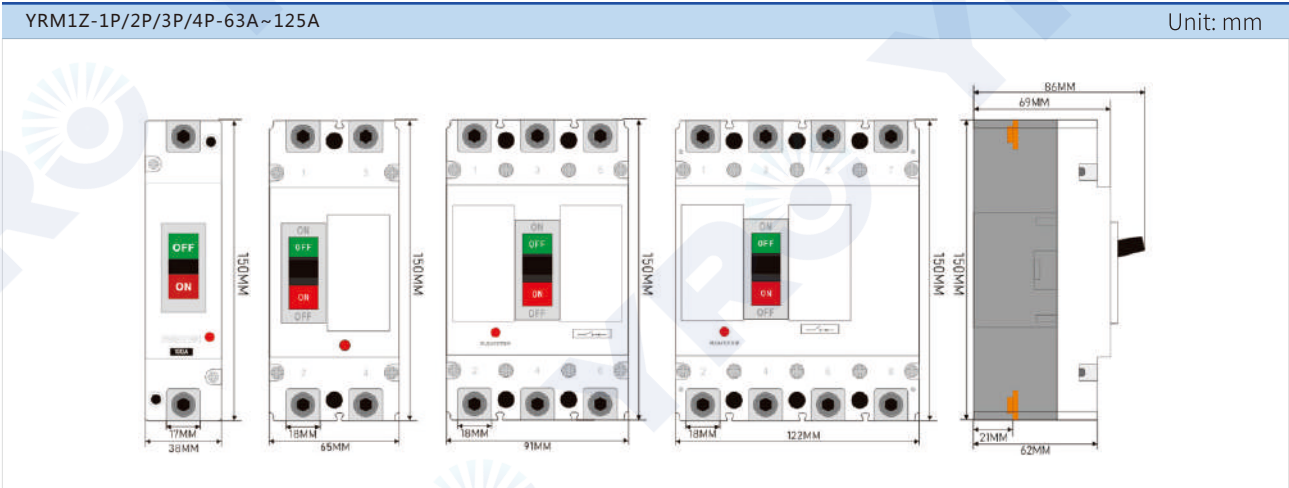
Connection

Rated Current	Minimum Adapter Copper Wire
100A	35 mm ² /2AWG
125A	50 mm ² /0AWG
160A	70 mm ² /00AWG
200A / 225A	95 mm ² /000AWG
250A	120 mm ² /0000AWG
300A / 350A	185 mm ² /2×000AWG
400A	240 mm ² /2×0000AWG
500A	2x150 mm ² / 3×000AWG
630A	2x185 mm ² / 4×000AWG

Outline and installation dimensions



Model	H (mm)	H1 (mm)	W (mm)	L (mm)
YRM1Z-1P 63-125A	86	69	38	150
YRM1Z-2P 63-125A	86	69	65	150
YRM1Z-3P 63-125A	86	69	91	150
YRM1Z-4P 63-125A	86	69	122	150
YRM1Z-1P 160-250A	108	85	43	166
YRM1Z-2P 160-250A	108	85	74	164
YRM1Z-3P 160-250A	108	85	104	164
YRM1Z-4P 160-250A	108	85	140	164
YRM1Z-2P 300-400A	153	105	148	260
YRM1Z-3P 300-400A	153	105	148	260
YRM1Z-4P 300-400A	153	105	195	260
YRM1Z-2P 500-600A	160	115	182	270
YRM1Z-3P 500-600A	160	115	182	270
YRM1Z-4P 500-600A	160	115	240	270



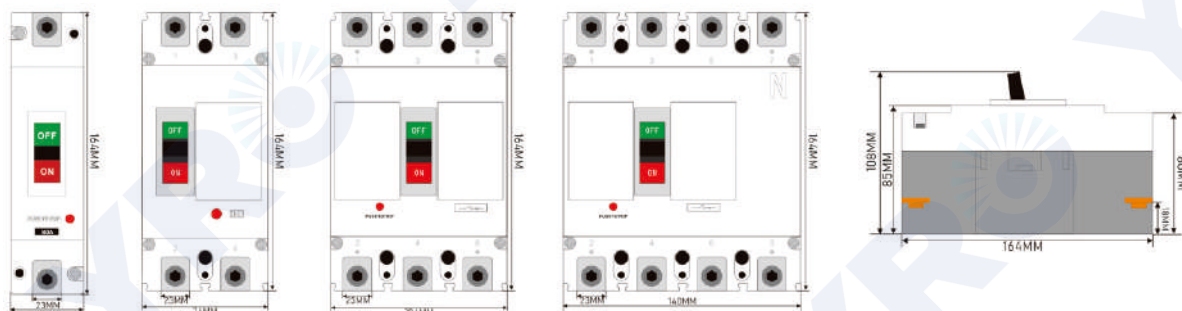
YRM1Z SERIES

DC Molded Case Circuit Breaker



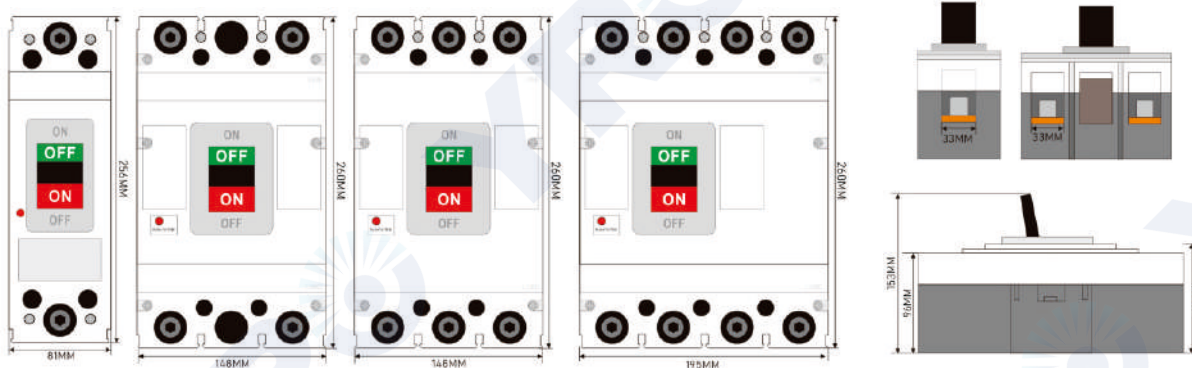
YRM1Z-1P/2P/3P/4P-160A~250A

Unit: mm



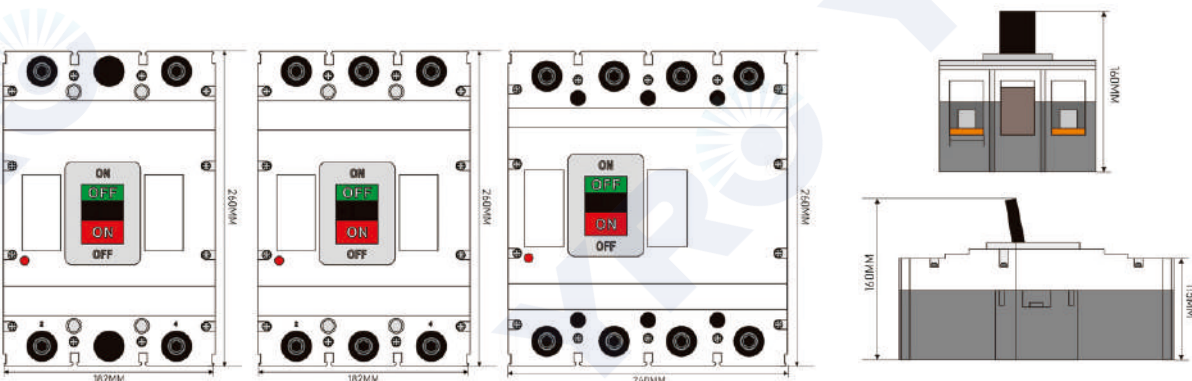
YRM1Z-1P/2P/3P/4P-300A~400A

Unit: mm



YRM1Z-1P/2P/3P/4P-500A~630A

Unit: mm



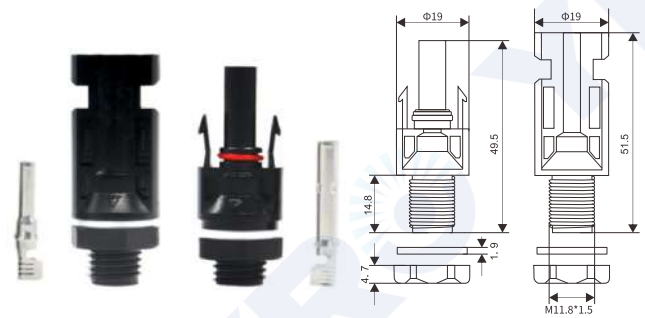
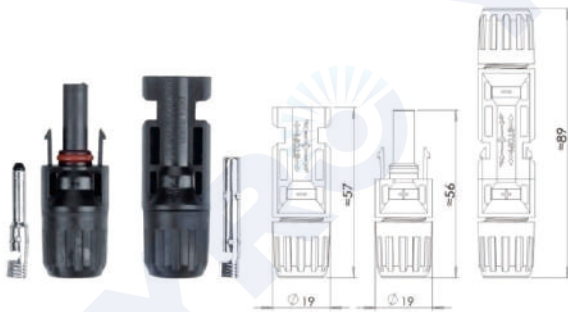
YMC4 SERIES

Solar DC Connector (1000V)



YSC-1K(1000V) Cable Connector

YSC-1K Panel Mounting Connector



PV-LTM4(1000V) 4/6mm² 30A

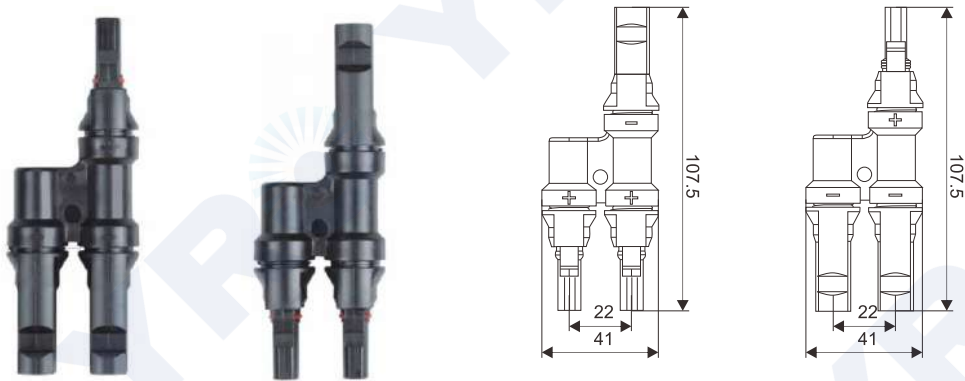
PV-LTM4(1000V) 4/6mm² 45A



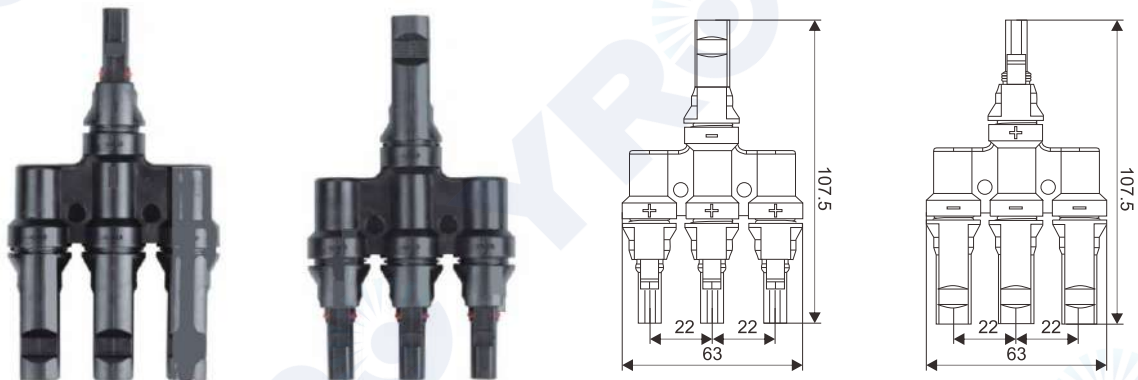
Technical Data

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

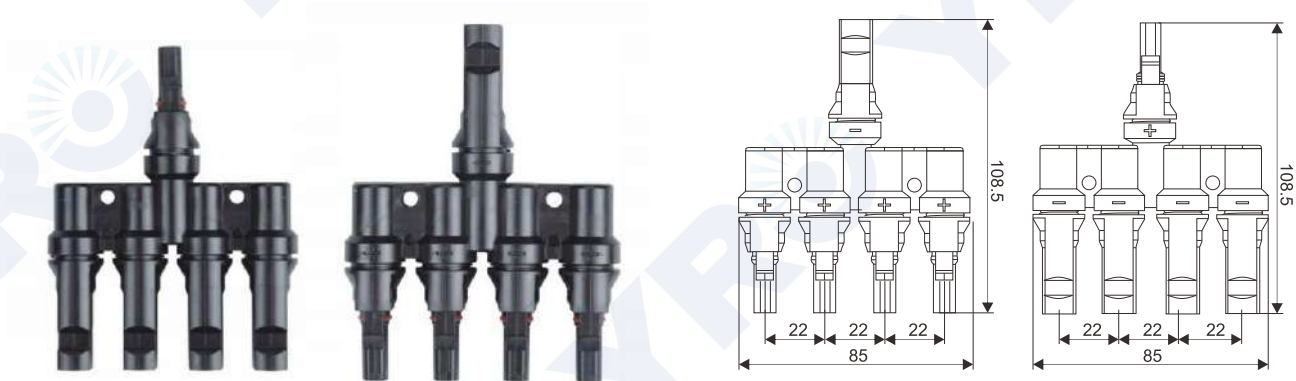
YMC4T-2 Branch Connector



YMC4T-3 Branch Connector



YMC4T-4 Branch Connector

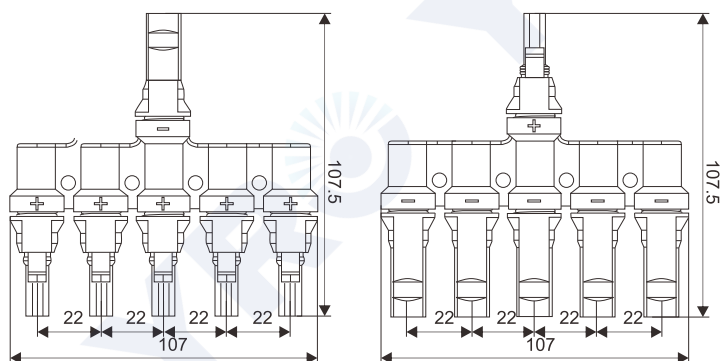


YMC4 SERIES

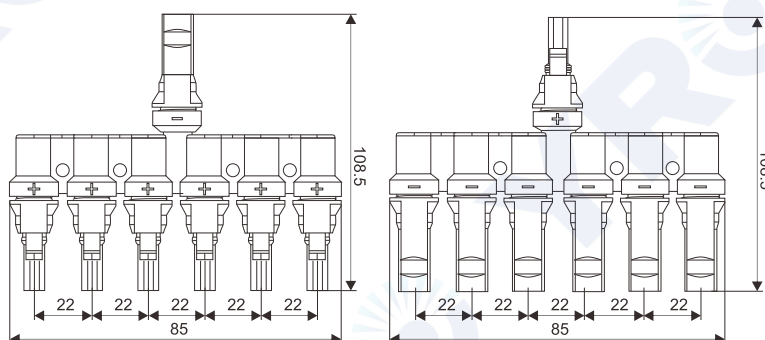
Solar DC Connector (1000V)



YMC4T-5 Branch Connector



YMC4T-6 Branch Connector



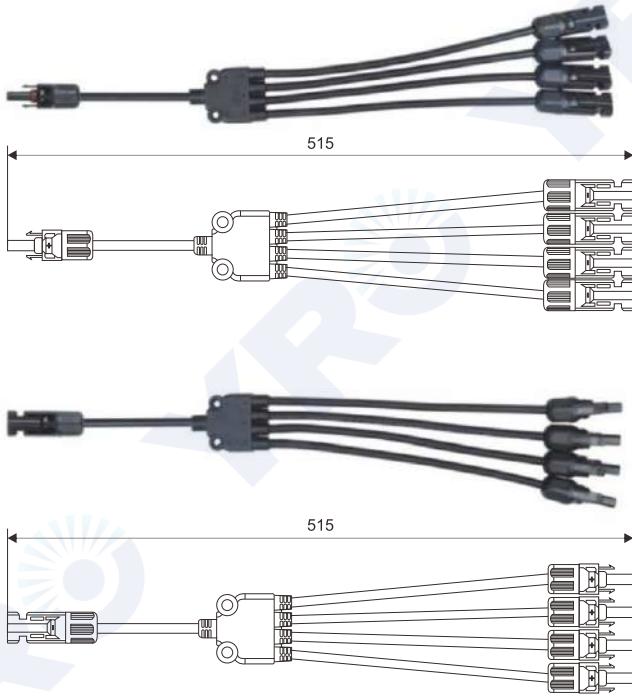
Technical Data

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
Degree Of Protection	IP67
Ambient Temperature Range	-40°C ~ +85°C
Flame Class	UL 94-VO
Safety Class	II
Pin Dimensions	Φ4mm

YMC4Y-2 Branch Connector



YMC4Y-4 Branch Connector



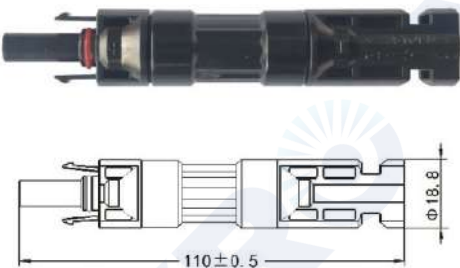
YMC4Y-3 Branch Connector



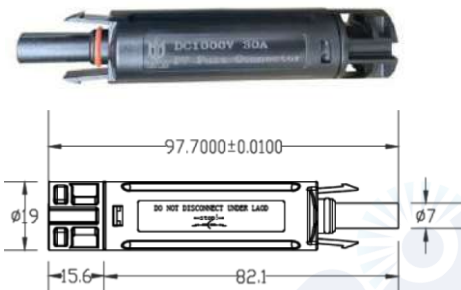
Technical Data

Data	
Connector system	Φ4mm
Rated voltage	1000V DC(IEC)
Rated current	30A
Test voltage	6kV(50HZ,1min)
Ambient temperature range	-40°C...90°C(IEC)
Upper limiting temperature	+105°C(IEC)
Degree of protection,mated	IP67
Unmated	IP2X
Contact resistance of plug connectors	0.5mΩ
Safetyclass	II
Contact material	Messing, verzinkt 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

YMC4H 20A



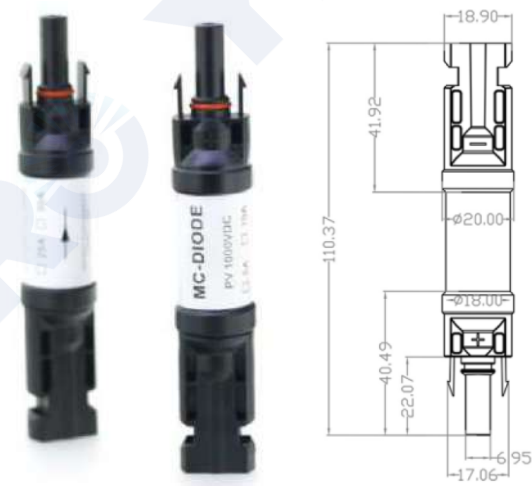
YMC4H 25-32A



Technical Data

Data	
Connector system	Φ4mm
Rated voltage	1000V DC
Rated current	10A,15A,20A 25-32A
Test voltage	12kV
Ambient temperature range	-40°C...+85°C
Degree of protection,mated	IP68
Unmated	IP2X
Contact resistanceof plug connectors	≤0.5mΩ
Safetyclass	II
Contact material	Messing, verzinkt Copper Alloy, tin plated
Insulation material	PC/PPO
Locking system	Snap-in
Flame class	UL-94-VO
Salt mist spray test,degree of severity 5	IEC 62852

YMC4D 10-20A



Technical Data

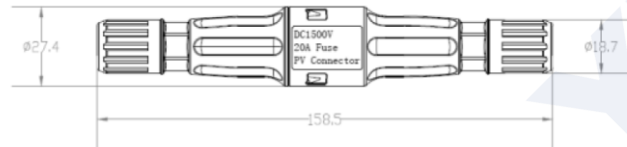
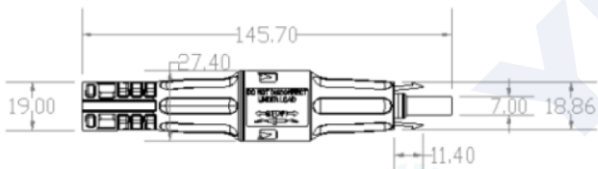
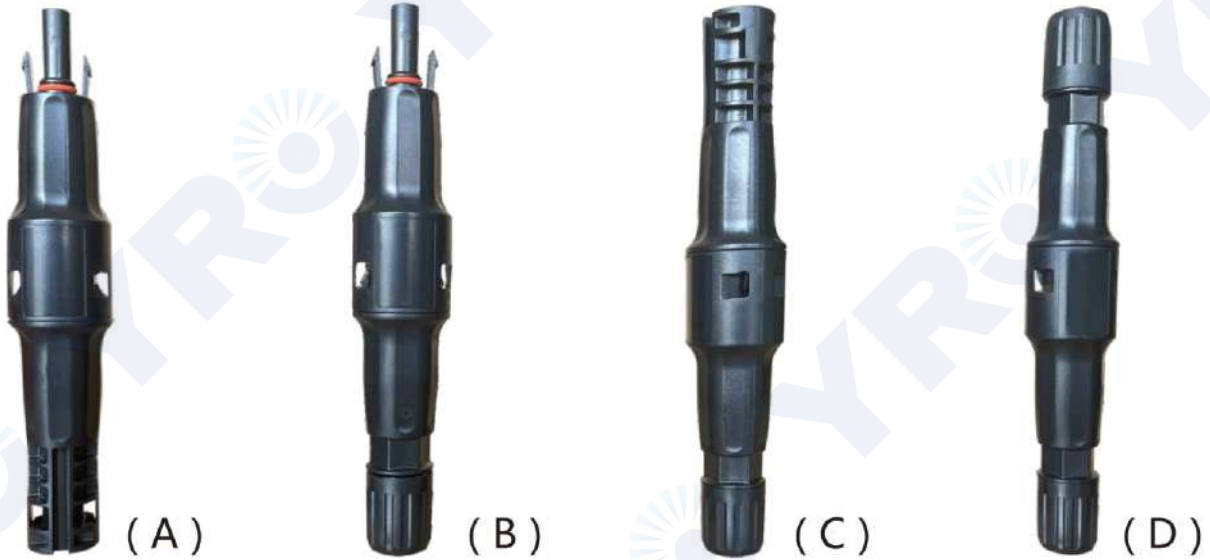
Data	
Rated voltage	1000V
Insulation material	PPO
Conductor material	Copper tin-plated
Ambient temperature	-40°C ~ +95°C
Product temperature	-40°C ~ +135°C
Security class	DCII
Waterproof grade	IP68
Contact resistance	≤0.35mΩ
Connection system	Multi-point connection
Self-locking system	Embedded
Insertion force	≤50N
Pulling out force	≥250N
Rated current	10A/15A/20A/30A
Flame retardant rating	UL94-VO

YMC4 SERIES

Solar DC Connector (1500V)



YMC4H PV Fuse Connector (1500V)



Technical Data

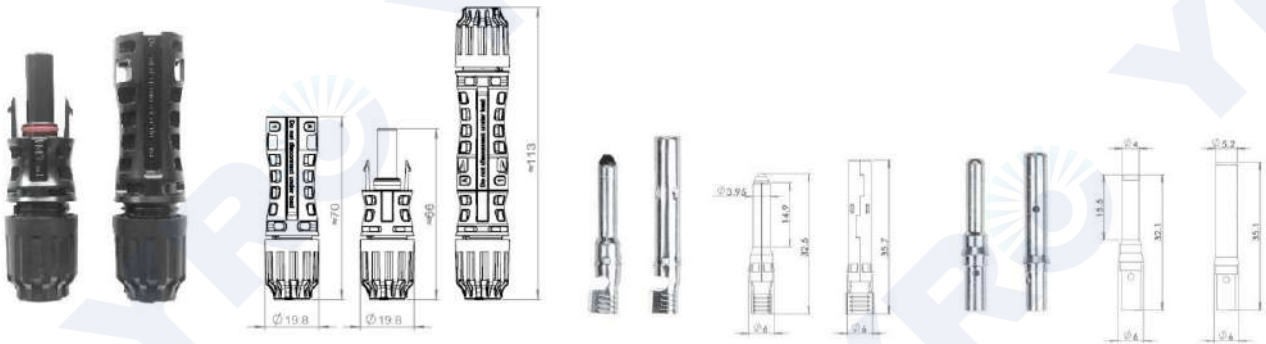
Product Name	YMC4H-1.5K/A	YMC4H-1.5K/B	YMC4H-1.5K/C	YMC4H-1.5K/D
Rated voltage	1500V	1500V	1500V	1500V
Insulation material	PPO	PPO	PPO	PPO
Conductor material	Copper tin-plated	Copper tin-plated	Copper tin-plated	Copper tin-plated
Ambient temperature	-40°C ~ +95°C	-40°C ~ +95°C	-40°C ~ +95°C	-40°C ~ +95°C
Product temperature	-40°C ~ +135°C	-40°C ~ +135°C	-40°C ~ +135°C	-40°C ~ +135°C
Security class	DCII	DCII	DCII	DCII
Waterproof grade	IP68	IP68	IP68	IP68
Contact resistance	≤0.35mΩ	≤0.35mΩ	≤0.35mΩ	≤0.35mΩ
Connection system	Multi-point connection	Multi-point connection	Multi-point connection	Multi-point connection
Self-locking system	Embedded	Embedded	Embedded	Embedded
Insertion force	≤50N	≤50N	≤50N	≤50N
Pulling out force	≥50N	≥50N	≥50N	≥50N
Rated current	10A/15A/20A/30A	10A/15A/20A/30A	10A/15A/20A/30A	10A/15A/20A/30A
Flame retardant rating	UL94-VO	UL94-VO	UL94-VO	UL94-VO

PV-LTM4 SERIES

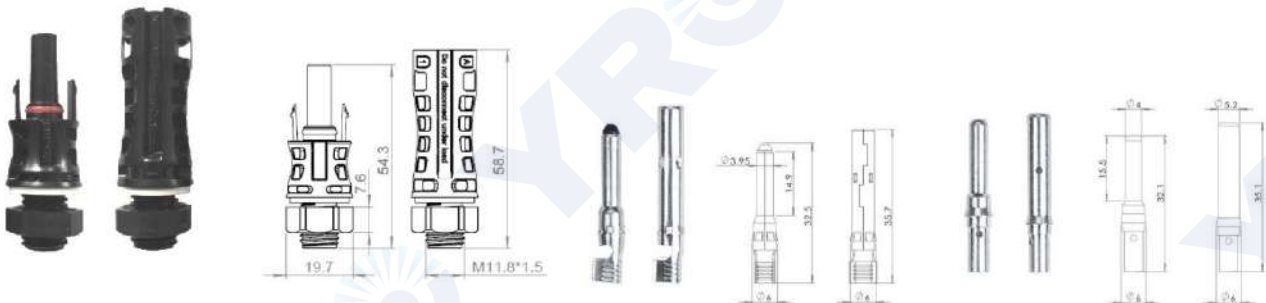
Solar DC Connector (1500V)



PV-LTM4 1500V Cable Connector 30A/50A



PV-LTM4 1500V Panel connector 30A/50A



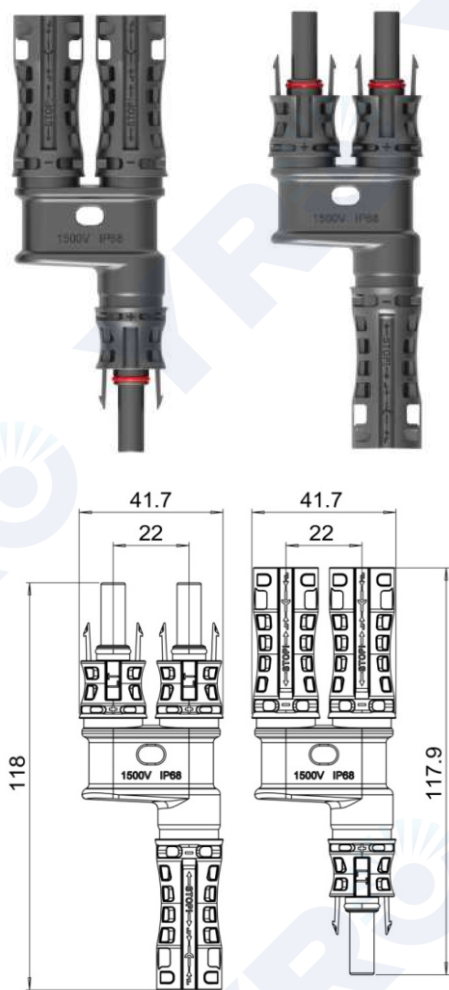
Technical Data

Data	
Connector system	Φ4mm
Rated voltage	1500V DC
Rated current	30A, 4mm ² / 40A, 6mm ² / 50A, 10mm ²
Test voltage	16kV
Ambient temperature range	-40°C...+85°C
Degree of protection,mated	IP68
Unmated	IP2X
Contact resistanceof plug connectors	≤0.5mΩ
Safetyclass	II
Contact material	Messing, verzinkt Copper Alloy, tin plated
Insulation material	PC/PPO
Locking system	Snap-in
Flame class	UL-94-VO
Salt mist spray test,degree of severity 5	IEC 62852

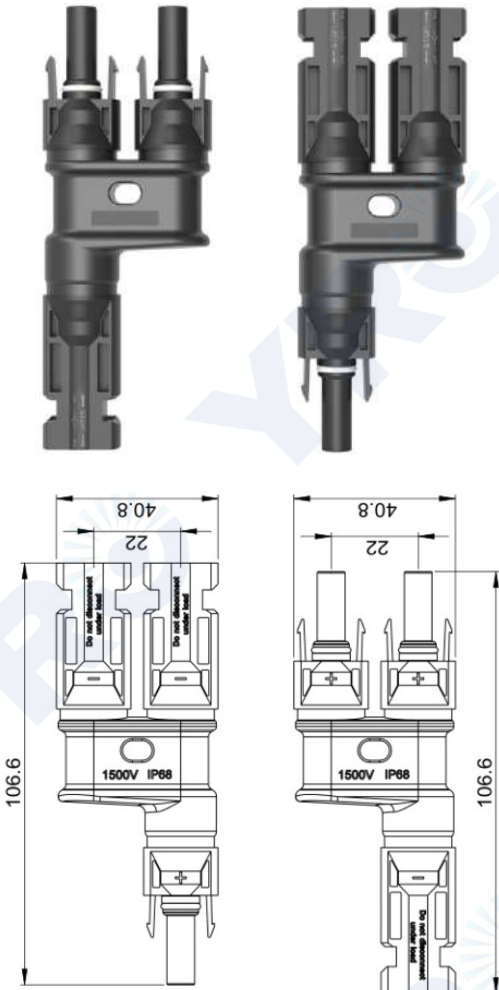
PV-LTM4 SERIES
Solar DC Connector (1500V)



PV-LT2-A Branch Connector



PV-LT2-B Branch Connector



Technical Data

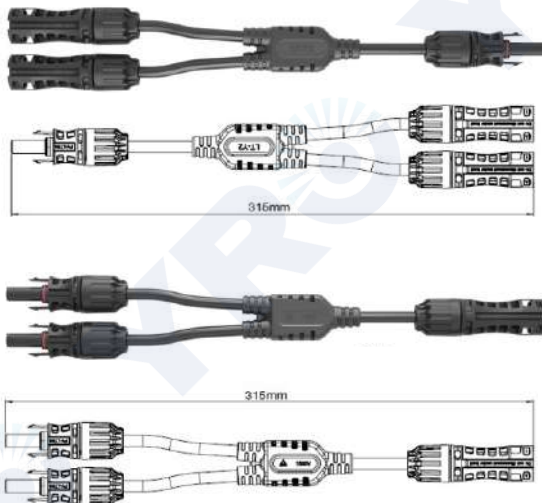
Data	
Insulation Material	PPO
Contact Material	Copper, Tin plated
Suitable Current	50A
Rated Voltage	1500V
Test Voltage	16KV
Contact Resistance	<0.5mΩ
Degree Of Protection	IP68
Ambient Temperature Range	-40℃~+85℃
Flame Class	UL 94-VO
Safety Class	II
Pin Dimensions	Φ4mm

PV-LTM4 SERIES

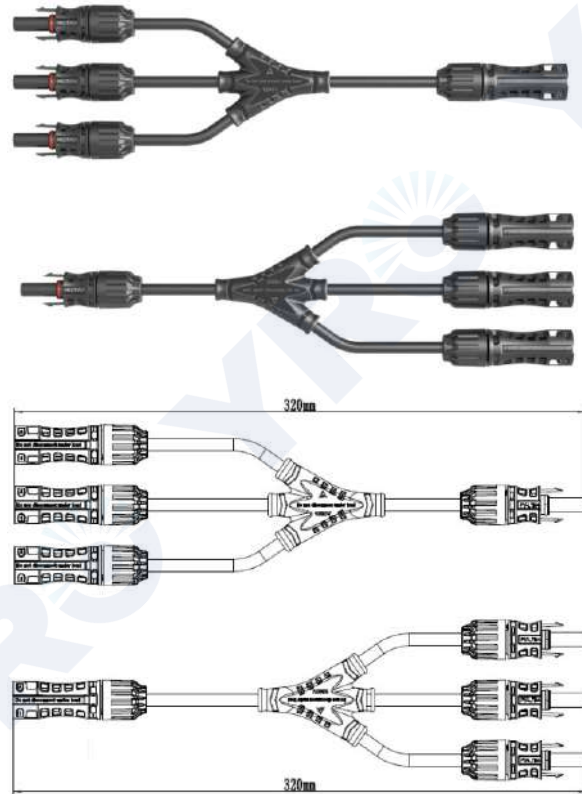
Solar DC Connector (1500V)



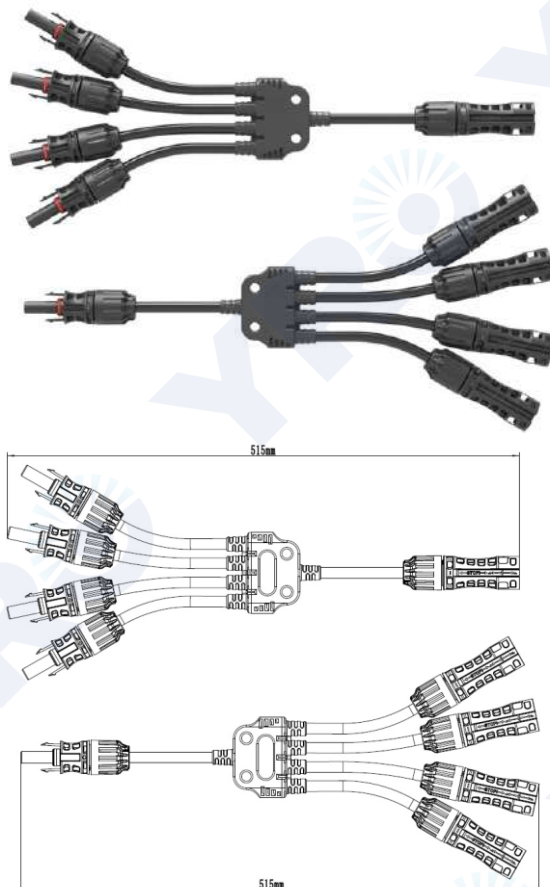
PV-LT-Y2 Branch Connector



PV-LT-Y3 Branch Connector



PV-LT-Y4 Branch Connector



Technical Data

Data	
Connector system	Φ4mm/Φ6mm
Rated voltage	1500V DC
Rated current	30A-50A
Test voltage	16kV
Ambient temperature range	-40°C...90°C
Degree of protection, mated	IP67
Unmated	IP2X
Contact resistance of plug connectors	≤0.5mΩ
Safety class	II
Contact material	Messing, verzinkt Copper Alloy, tin plated
Insulation material	PC/PPO
Locking system	Snap-in
Flame class	UL-94-VO
Salt mist spray test, degree of severity 5	IEC 62852

PV-CONNECTOR

Tool Kits & PV Cable



Tool Kit 1



Tool Kit 2



A2546B Crimping Tool



WX-206 Cable Cutter



WX-700 Cable Stripper



WX-0626 Cable Stripper



WX-700B: 1-3.2mm
WX-700M: 2.5-6mm

Suitable for crimping the cable of
2.5-6.0mm² (AWG10-14)

Suitable for 0.6-2.6mm

Suitable for solar system installation
site, flexible application

PV-CONNECTOR

Tool Kits & PV Cable



PV-connector tool kits



① CRIMPING PLIERS

- Capacity: 2.5-6mm²
- Length: 270mm
- Weight: 0.74Kg

② WIRE CUTTERS

③ SUNNY TWINS PV SPECIAL TOOL

④ WIRE STRIPPER

- Automatic rebound spring, no damage conductor
- Stripping length: <30mm
- Wire stripping: 0.9-6.0 mm²
- Length: 165mm
- Weight: 0.16kg

⑤ LARGE CRIMPING PLIERS

- Capacity: 6-50mm²



Tow-set spanners



PV-LTM5(1500V)



PV-LTN4(1500V)



PV-LTM2/M4(1000V)



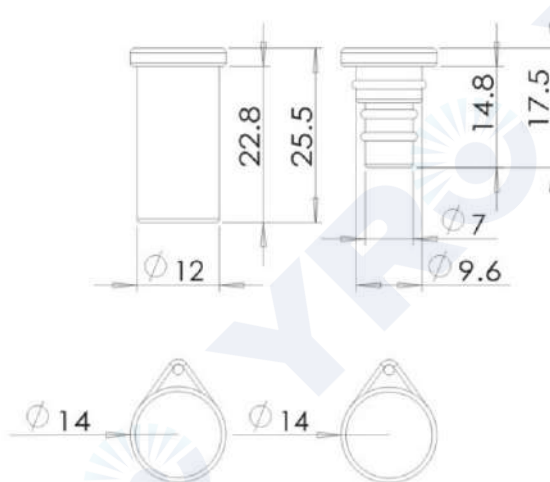
PV-LTM2(1000V)

PV-CONNECTOR

Tool Kits & PV Cable



Protection caps



PV Cable

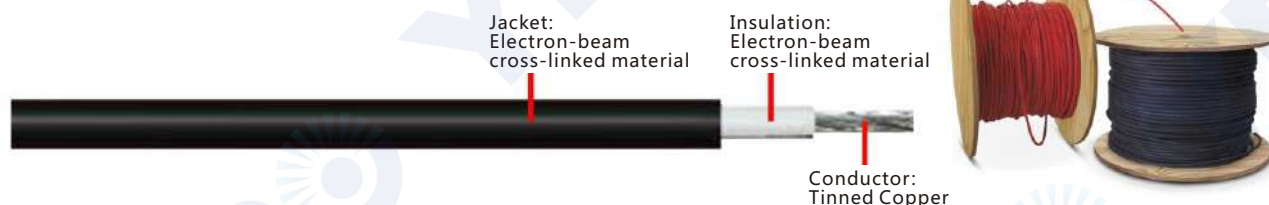
This cable is specifically designed for connecting photovoltaic system components inside and outside of building and equipment.

Features

- Insulation material: Halogen free cross-linked polyolefin(XLPO)
- Contact material: Stranded tinned copper
- Sheath material: Halogen free cross-linked polyolefin(XLPO)
- Rated voltage: 1000V/1500V
- Anti-aging, UV resistant
- Certificate: TUV



Solar Cable (1.5mm²~35mm² Multiple color)



Construction (mm ²)	Conductor construction (n×mm)	Conductor outer (mm)	Cable outer (mm)	Resistance Max. (Ω/Km)	Current carrying capacity AT 60°C (A)
1×1.5	30×0.25	1.58	4.90	13.7	30
1×2.5	48×0.25	2.02	5.45	8.21	41
1×4.0	56×0.3	2.35	6.10	5.09	55
1×6.0	84×0.3	3.20	7.20	3.39	70
1×10	142×0.3	4.60	9.00	1.95	98
1×16	228×0.3	5.60	10.20	1.24	132
1×25	361×0.3	6.95	12.00	0.795	176
1×35	494×0.3	8.30	13.80	0.565	218

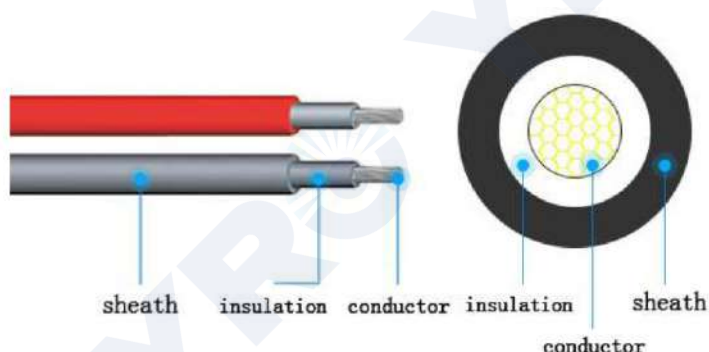
The current-carrying capacity is under the situation of laying the single cable in air

Type	Cross Section (mm ²)	Strand design No. x ϕ (mm)	Conductor diameter (mm)	Conductor resistance (Ω/Km)	Outer diameter Ax B (mm)	Rated voltage VAC/DC	Rated current A
Twin Core							
PV-2 x 1.5mm ²	1.5	30 x ϕ 0.25	1.6	13.9	5.80 x 9.30	1000/1800	20
PV-2 x 2.5mm ²	2.5	50 x ϕ 0.25	2.0	8.06	6.20 x 9.90	1000/1800	30
PV-2 x 4.0mm ²	4.0	56 x ϕ 0.3	2.6	4.97	6.9 x 11.30	1000/1800	50
PV-2 x 6.0mm ²	6.0	81 x ϕ 0.3	3.3	3.52	7.1 x 14.30	1000/1800	70

Technical Data

Data	
Nominal voltage	DC:1.8KV AC:0.6/1.0KV
Voltage test on completed cable	AC:6.5KV DC:15KV,5MIN
Ambient temperature	-40°C~+90°
Max. Temperature at conductor	+120°C
Service life	> 25 year (-40°C~+90°C)
Refer to short circuit allows the temperature	200°C, 5s
Bending radius	≥4Xϕ(D<8mm), ≥6Xϕ(D<8mm)
Resistance against acid and alkaline solution	EN60811-2-1
Cold bending test	EN60811-1-4
Weathering/UV- resistance	HD605/A1
0-zone resistance at complete cable	EN50396
Test under fire conditions	EN60332-1-2

Single core wire structure



Tiem	Unit	Technical parameter		
Rated temperature	°C	-40~+90		
Rated Rating	AC/DC(kV)	AC U ₀ /U _{0.6} ~1.0kV,DC1.5kV		
Cable Core	No.	1		
Cross-Section Area	mm ²	2.5	4.0	6.0
Diameter of wires/ Number	NO./mm	36/0.285mm	56/0.285mm	84/0.285mm
Thickness of the Insulation	mm	≥0.65	≥0.75	≥0.8
Thickness of the Sheath	mm	≥0.65	≥0.7	≥0.75
Outer Dia.	mm	5.3±0.1	5.8±0.1	6.6±0.1
Conductor resistance(20°C)	Ω/km	≤8.21	≤5.09	≤3.39
Voltage test on completed cable	kV/min	6.5/5 No breakdown		

Double core wire structure



Tiem	Unit	Technical parameter		
Rated temperature	°C	-40~+90		
Rated Rating	AC/DC(kV)	AC U ₀ /U _{0.6} ~1.0kV,DC1.5kV		
Cable Core	No.	2		
Cross-Section Area	mm ²	2.5	4.0	6.0
Diameter of wires/ Number	NO./mm	36/0.285mm×2	56/0.285mm×2	84/0.285mm×2
Thickness of the Insulation	mm	≥0.65	≥0.75	≥0.8
Thickness of the Sheath	mm	≥0.65	≥0.7	≥0.75
Outer Dia.	mm	11.5×5.3±0.2	13.0×5.8±0.2	15×7.0±0.2
Conductor resistance(20°C)	Ω/km	≤8.21	≤5.09	≤3.39
The service life of the theory	kV/min	6.5/5 No breakdown		

Remarks: Structure and outsider diameter adjustment with standard requirements without further notified.