YUEQING YIRUI ELECTRIC APPLIANCE CO.,LTD

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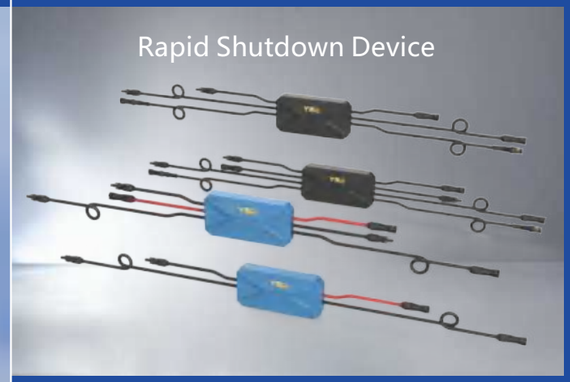
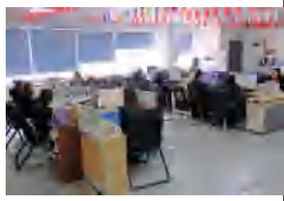
Wechat: yroelectric Http:// www.yroele.com



PRODUCT SELECION CATALOGUE

http://www.yroele.com

YUEQING YIRUI ELECTRIC APPLIANCE CO.,LTD.



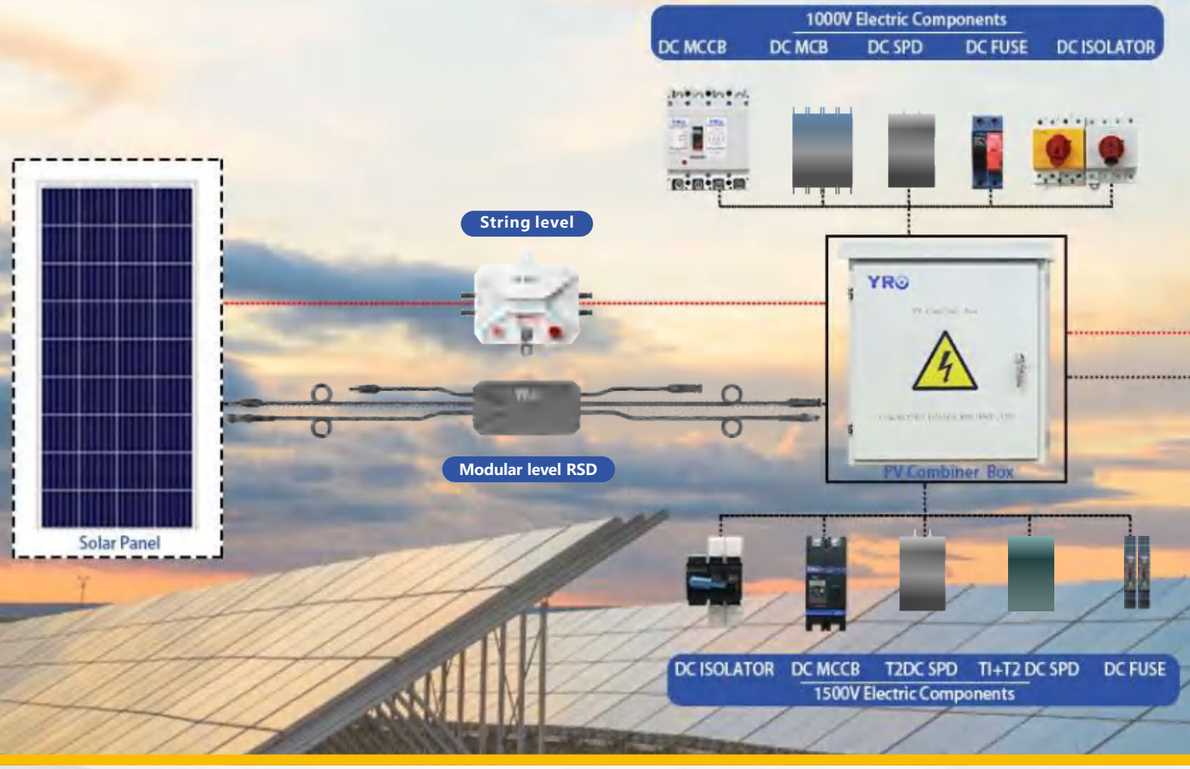
Yirui Electric

Yueqing Yirui Electric Appliance Co ., Ltd is a trusted manu -facturer of protective components(Rapid Shutdown Device, PV combiner box DC Circuit Breaker, Fuse, Surge Protector, Isolator Switch, Solar Connector etc) for photovoltaic systems across the globe . Our experience of working in the electrical industry for more than 10 years allows us to create solar DC components that comply with the latest DC standards.

Quality is the primary goal among each of our workshops since this leads to the best performance and safety for any solar power system. Our commitment to quality increased brand awareness for your company. To achieve our goal , our factory complies with CB, CE,KEMA,UKCA,TUV, ISO9001,and RoHS standards.

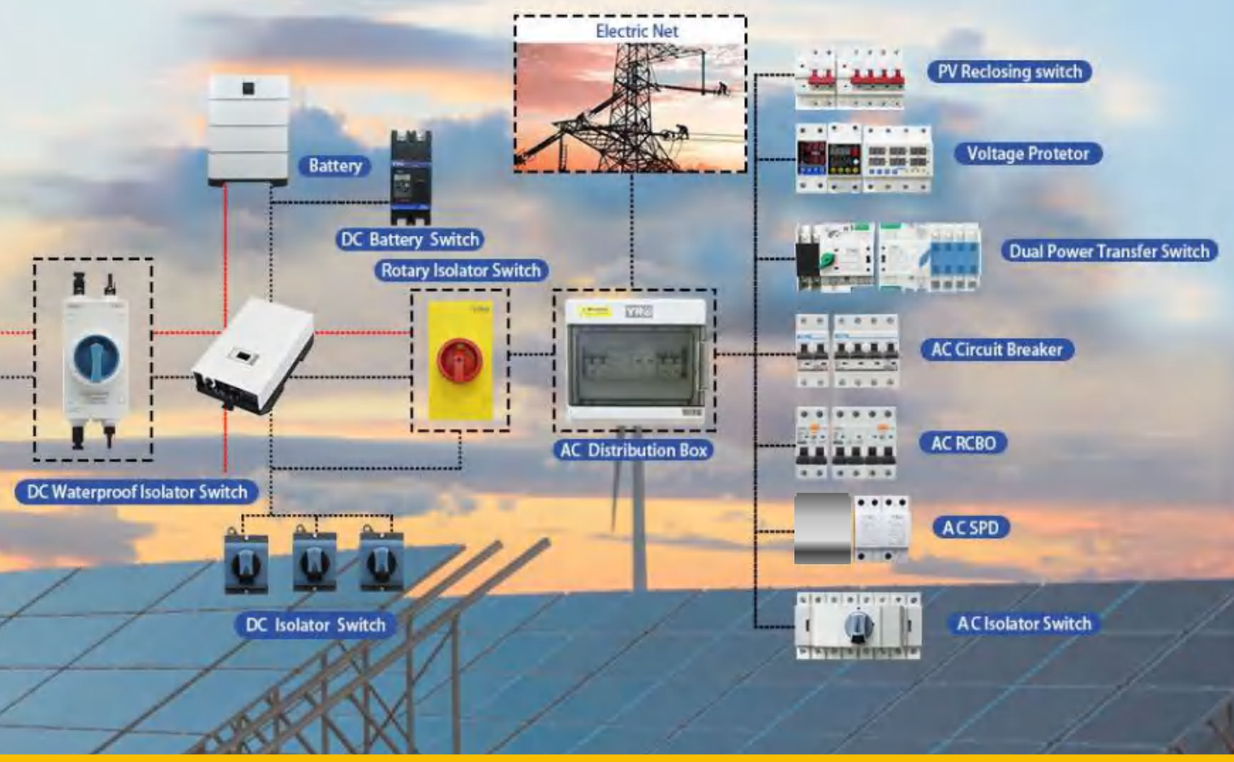
PHOTOVOLTAIC SYSTEM

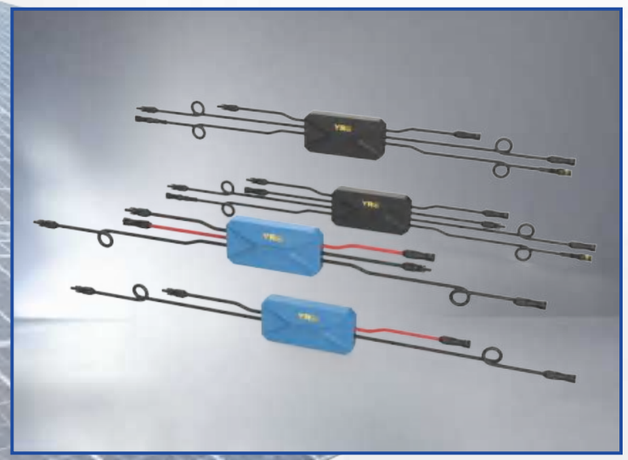
WE PROVIDE CUSTOM SYSTEM DESIGN ACCORDING TO YOUR



DISPLAY DIAGRAM

MARKET, YOU ARE WELCOME TO CONTACT US





ISO9001 certificate

RSD CE

MC4 Connector CE

AC MCB UKCA

AC MCB KEMA

DC MCCB TÜV

DC FUSE LINK TÜV

DC MCB CB

DC SPD CB

AC MCB CB

DC SPD CE

DC MCB CE

MCB TÜV

PV fuse TÜV

PV disconnector TÜV

About us

PRODUCT CATALOG

Yueqing Yirui Electric
Appliance Co ., Ltd.
Good quality electrical/good luck home

About Rapid Shutdown

1.1 Intended Use of the Rapid Shutdown

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.

1.2 Location of the Rapid Shutdown

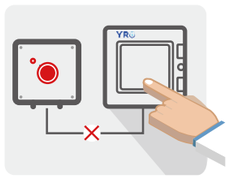
The Rapid Shutdown needs to be placed as close to the solar panels as possible. Due to its enclosure, the switch is protected against external influences like dust and moisture. The whole set-up is conformed to IP66 which makes it suitable for outdoor usage when needed.

Shutdown Mode

Automatic Shutdown

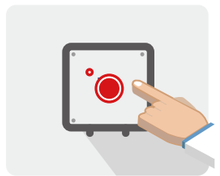
Automatically shutdown the DC power of panels when detecting tempera ture of the area is higher than 70°C.

AC Power Shutdown



Firefighters or homeown-ers can manually turn off the AC power of the distribution box when in an emergency or it can automatic shutdown when the AC power has lose.

Manual Shutdown



In an emergency, it can be shut down manually through the Panel Level Rapid Shutdown Control-ler Box.

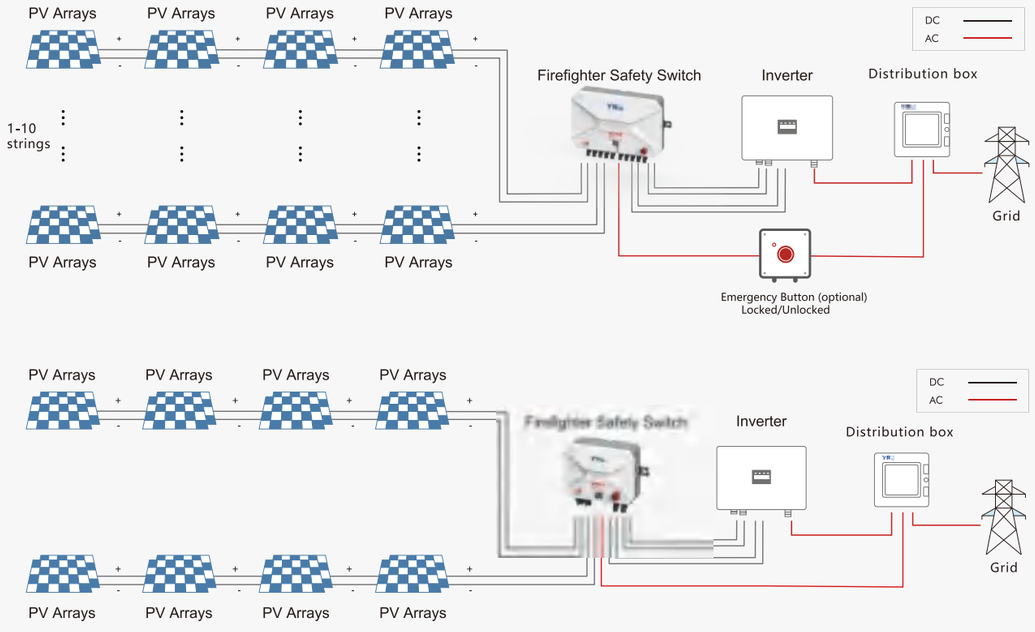
RS485 shutdown Optional

Maintenancers or homeowners can also remotely shutdown through RS485 commu-nication (Optional)

Technical data

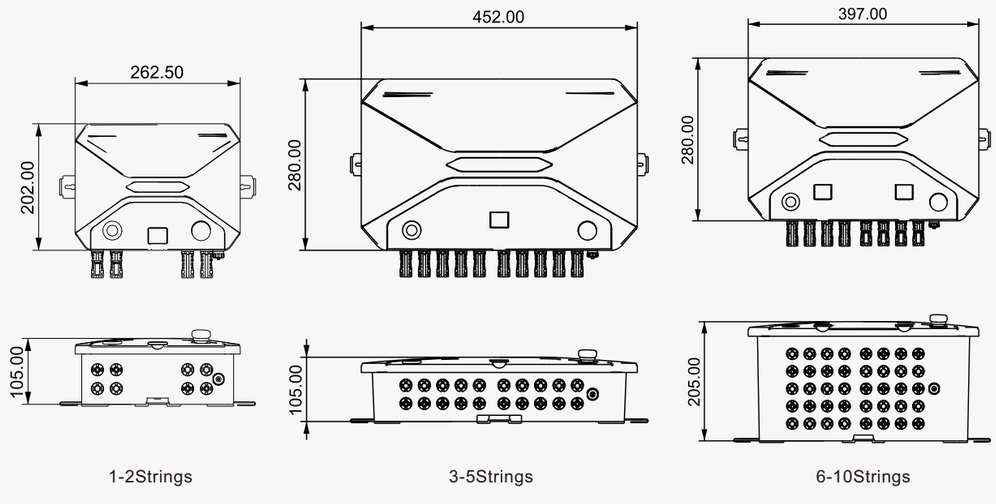
Technical Parameter		
Main Parameters	**YRSD-1A to YRSD-10A**	
String voltages (Vdc)	1000V	1500V
String current (A)	40A	26A
Number of strings	1 to 10	
Switch wiring	2/4	
Operating voltage	100Vac-270Vac	
Nominal voltage	230Vac	
Nominal current	30mA	
Start up (loading) current	average 100mA	
Switch on action current	max 300mA	
Feedback contact	24Vdc-300mA max	
Operating temperature range	-40°C-+70°C	
Max. operating temperature before automatic switch off	+70°C	
Storage temperature range	-40°C-+85°C	
Protection degree	IP66	
Protection level	Class II	
Certiflcation	CE	
DC Switch disconnect according to	EN 60947-1&3	
Number of operations	10000	
Number of operations under load(PV1)	>1500	

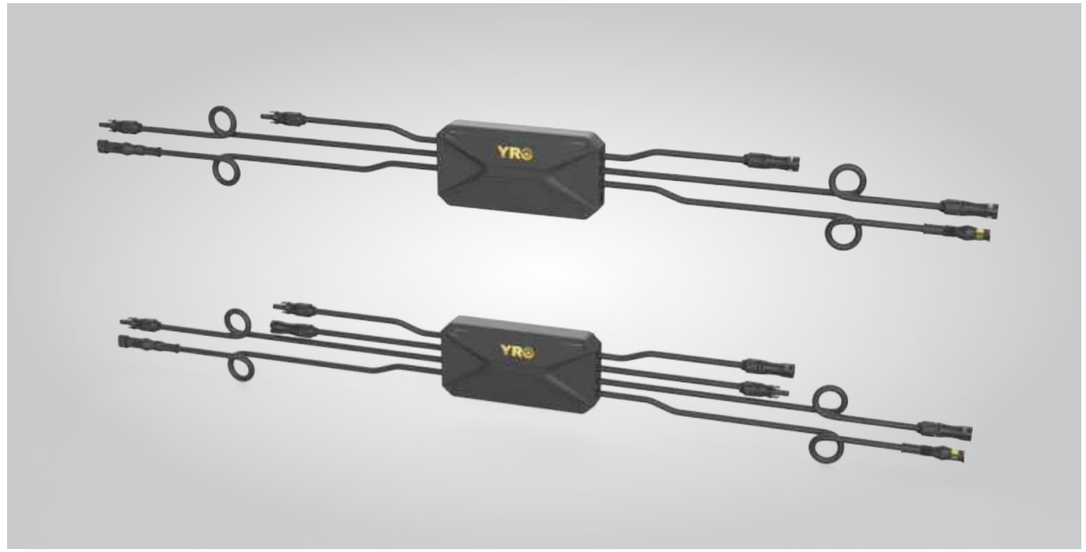
Diagram



Dimensions of YRSD

YRSD-1A Series 1-10 String





High Craftsmanship and Standards

- Over temperature protection≥85℃
- Max 25A support
- Flame retardant: UL94-V0
- Ingress protection: >IP68/NEMA 4X
- Anti-interference with high reliability and stability
- long lifespan for 25 years
- Compatible with all inverter brands and friendly for EMC Slim Design, Extremely Easy Installation

Technical Data

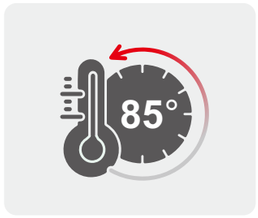
Type	YRSD-1P	YRSD-2P
Number of PV Inputs	1	2
Number of Modules Recommend	1-2	2-4
Maximum Allowed Input Voltage	120V	
Maximum Allowed Input Current	18A / 25A	
Maximum Output Volt age	120V	240V
System Volt age	1000V / 1500V	
Control Compliance	24VDC + 2 x 0.8mm² Cable	
Control Requirements	21.6V~26.4V at nomi. 27~36mA/unit	
Ambient Operating Temperature	-30°C to +60°C	
Protection Temperature	85°C	
IP Level	>IP68, NEMA 4X	
Fire-proof Level	Flame retardant, UL94-V0	
Humidity	0%~90%	
PV Connectors	MC4 (Customized)	
Design Life Span	25 years	
Size	155.8*73.7*30.2	155.8*73.7*30.2
Weight	< 200g (Excluding Cables)	
Cable Length, PV1+ Input	300mm	300mm
Cable Length, PV1- Input	300mm	300mm
Cable Length, PV2+ Input	/	300mm
Cable Length, PV2- Input	/	300mm
Cable Length, Power Out put	1800mm	1800mm
Cable Length, 24Vdc Control Cable	1800mm	1800mm
andard Comliance	NEC2017/2020 (690.12); UL1741; UL3741; IEC/EN62109; IEC/EN61000	

YRO Modular level RSD DC 24V Series www.yroele.com

Summary

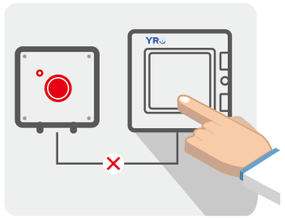
The YRO Modular level RSD DC 24V Series Overview is designed to be installed at solar panel level and provides safety shutdown of the DC supply to ZERO VOLTS in case of emergency. Shutdown is initiated in 3 ways - Manual Operation, AC Supply Cut-Off or Temperature Rise Trigger as follows:

Temperature Rise Trigger



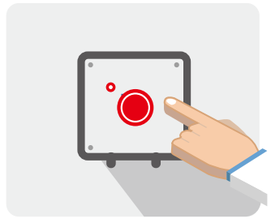
Automatic shutdown occurs if the temperature sensor on board of the RSD detects an ambient temperature rise above 85℃.

AC Supply Cut-Off



Disconnection of the external AC supply, by whatever means, causes automatic remote operation of the Emergency Rapid Shutdown Switch and solar panel shutdown.

Manual Operation



Manual shutdown is initiated within less than 0.1 second of operation by pressing the emergency pushbutton on the Emergency Rapid Shutdown Switch.
The Emergency Switch can be conveniently located at ground level for easy access or multiple switches can be installed in different multi-level building zones.

Inverter Compatibility

The RSD is compatible with all string inverters and does not affect their operation or perfor mance in any way.

Fail-Safe Operation

The RSD is designed for fail-safe opera tion ensuring that, will not compromise the solar panel isolation and shutdown status, maintaining full zero volt isola tion.

Emergency Shutdown Switches

The Emergency Shutdown Switches offer a 24VDC power supply suitable for up to 480 panels opera tion, with LED indicator to signal.

North American Solar Market Approvals

The RSD has been extensively tested by cTÜVus to meet the various PV standards required within the North American market.

Ul1741 PVRSE Certification

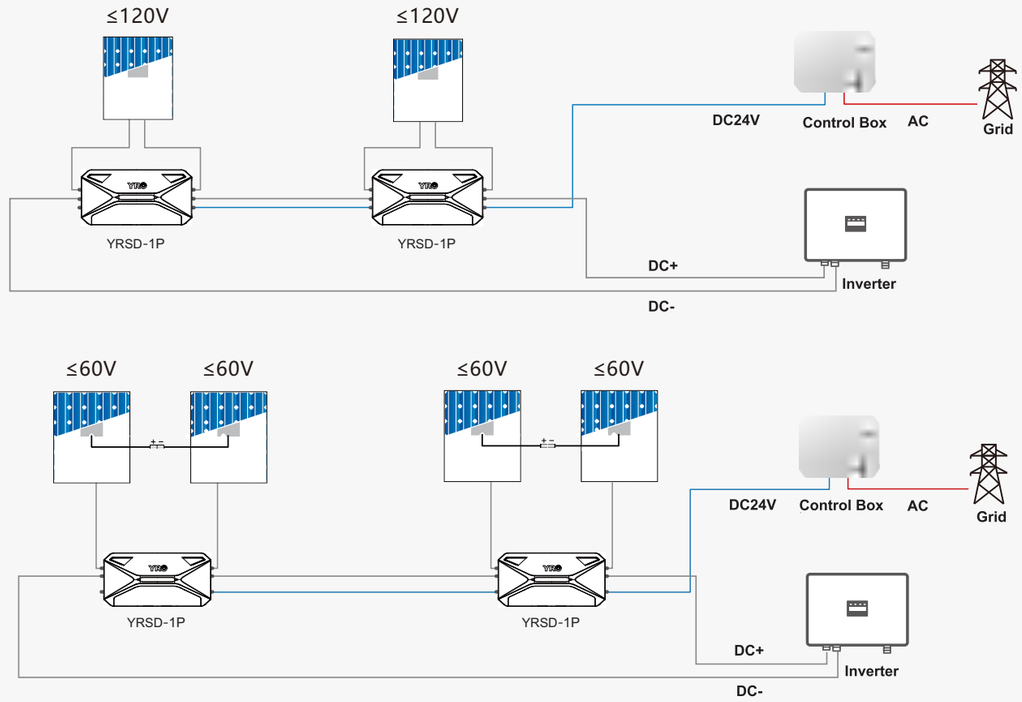
The RSD is fully certified to UL1741 PVRSE (PV Rapid Shutdown Equipment) for applications.
As a dedicated RSD operating as a safety switching without com munications protocols, which is compatible with any PV inverter unit.

Ul3741 PVRSS Certification

The RSD is fully certified to UL3741 PVRSS (PV Rapid Shutdown System) for applications.
As a dedicated RSD operating as a safety switching without com munications protocols, which is compatible with any PV inverter unit.

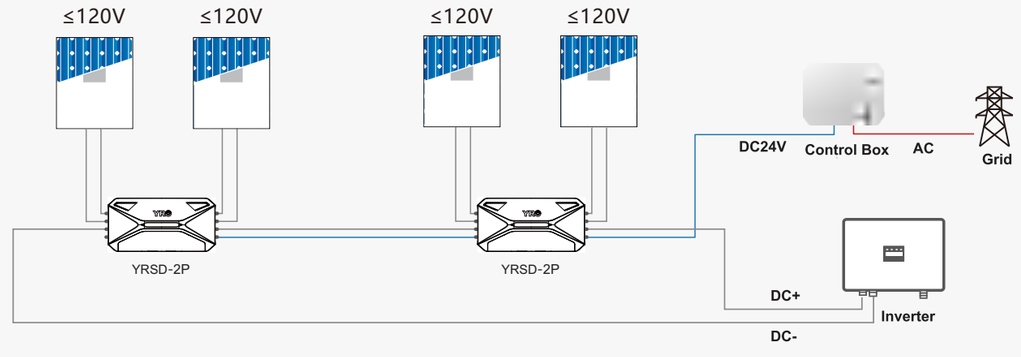
YRO Modular level RSD DC 24V Series www.yroele.com

• YRSD-1P 1-to-1 wiring

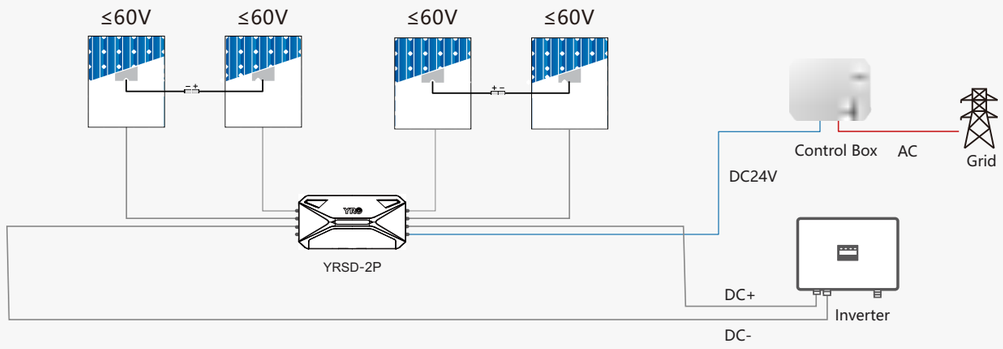


Not: For NEC 2017 /2010 compliance PV panels should be <40v for 2-to-1 wiring and >=40v for 1-to-1 wiring (For YRSD -1P)

• YRSD-2P 2-to-1 wiring

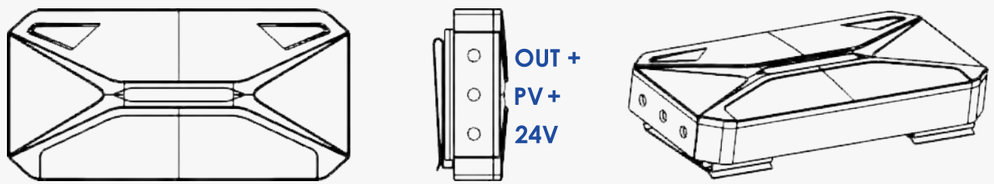


YRSD-1P/2P Series

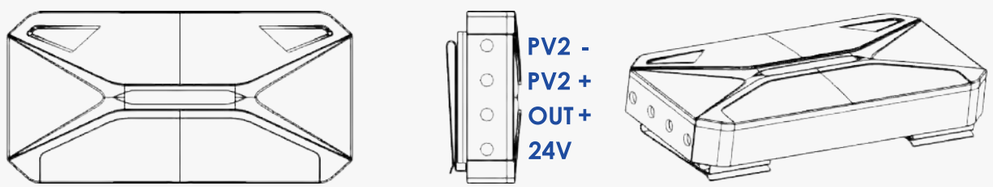


Dimension

YRSD-1P (Unit: ±0.5mm)



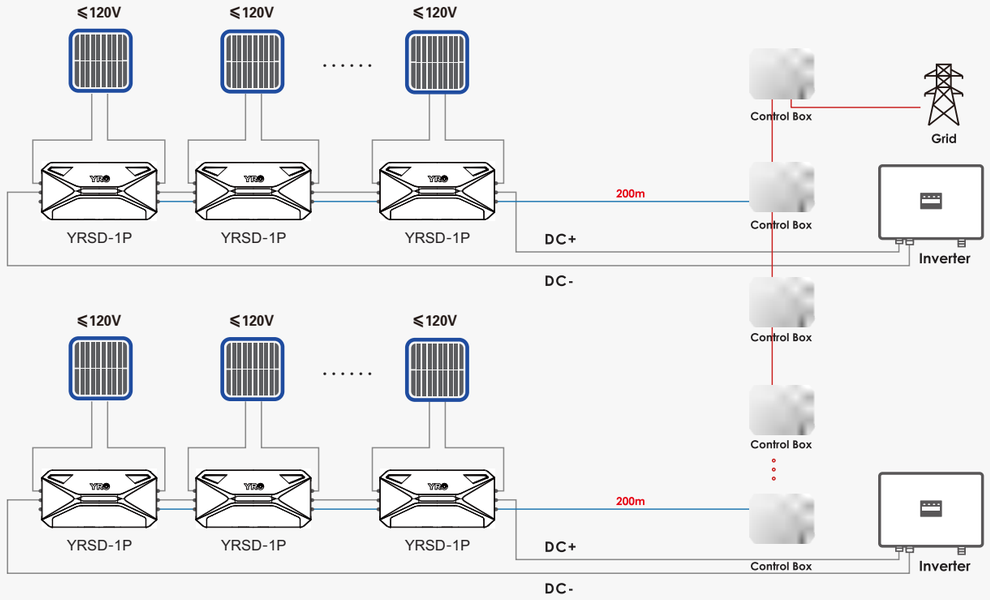
YRSD-2P

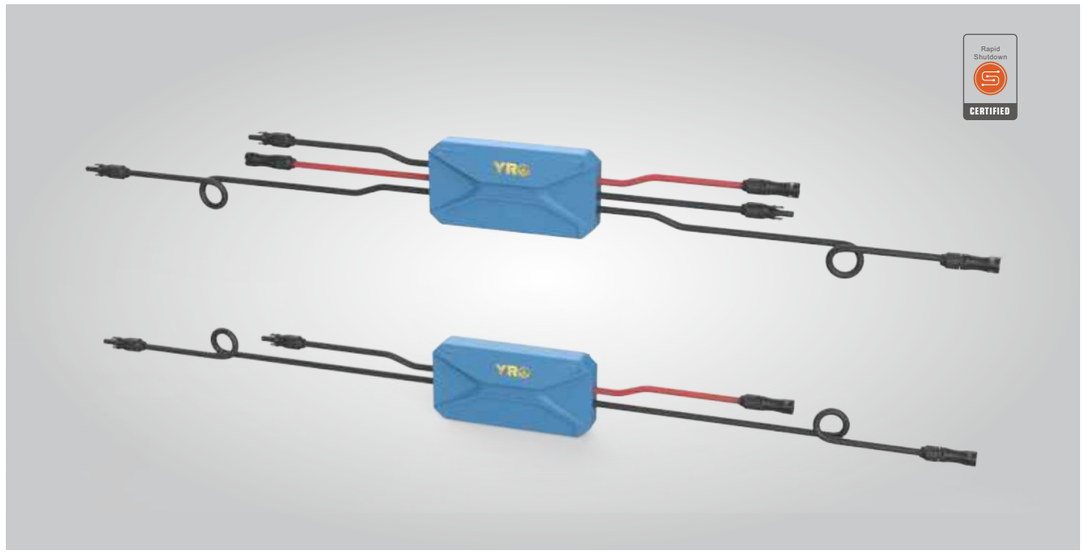


Technical Specification

Model	YRSD-CB
Operating AC Voltage Range	100 V-240 V
Nominal Frequency	50/60 Hz
Output Voltage	24V DC
Output Current/Power	2.2A/50W
24Vdc Control Cable Size	0.823 mm² / 18 AWG
24Vdc Control Cable Length With Standard Connectors	20 m / 30 m / 100 m
Spare Terminal Connectors	Yes
Maximum YRSD-1P	60 Units
Maximum YRSD-2P	30 Units
Dimensions (mm)	250*210*210
Lockable	Optional (IP54)
Operating Temperature Range	-30°C~+70°C(50°C No degradation)
Protection Class	IP65
Mounting	Wall Mounted
Maximum Distance (Last RSD to Controller Box)	200m

Parallel connection of multiple control boxes





High Craftsmanship and Standards

- Over temperature protection≥85℃
- Anti-interference with high reliability and stability
- Max 25A support
- long lifespan for 25 years
- Flame retardant: UL94-V0
- Compatible with all inverter brands and friendly for EMC Slim Design, Extremely Easy Installation
- Ingress protection: >IP68/NEMA 4X

YRSD Modular level PLC type www.yroele.com

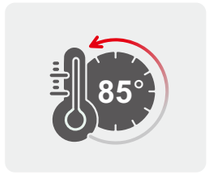
Technical Data

Type	YRSD-1P	YRSD-2P
Number of PV Inputs	1	2
Number of Modules Recommend	1-2	2-4
Maximum Allowed Input Voltage	120V	
Maximum Allowed Input Current	18A / 25A	
Maximum Output Volt age	120V	240V
System Volt age	1000V / 1500V	
Control Compliance	PLC	
Ambient Operating Temperature	-30°C to +60°C	
Protection Temperature	85°C	
IP Level	>IP68, NEMA 4X	
Fire-proof Level	Flame retardant, UL94-V0	
Humidity	0%~90%	
PV Connectors	MC4 (Customized)	
Design Life Span	25 years	
Size	155.8*73.7*30.2	155.8*73.7*30.2
Weight	< 200g (Excluding Cables)	
Cable Length, PV1+ Input	300mm	300mm
Cable Length, PV1- Input	300mm	300mm
Cable Length, PV2+ Input	/	300mm
Cable Length, PV2- Input	/	300mm
Cable Length, Power Out put	1800mm	1800mm
Standard Compliance	NEC2017/2020 (690.12); UL1741; UL3741; IEC/EN62109; IEC/EN61000	

YRSD Modular level PLC type

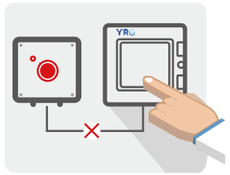
The YRSD Modular level PLC type is designed to be installed at solar panel level and provides safety shutdown of the DC supply to ZERO VOLTS in case of emergency. Shutdown is initiated in 4 ways - Manual Operation, AC Supply Cut-Off or Temperature Rise Trigger sunspec Inverter as follows:

Temperature Rise Trigger



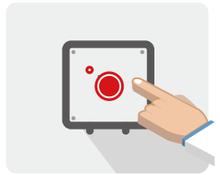
Automatic shutdown occurs if the temperature-sensor on board of the RSD detects an ambient temperature rise above 85℃.

AC Supply Cut-Off



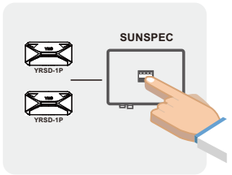
Disconnection of the external AC supply, by whatever means, causes automatic remote operation of the Emergency Rapid Shutdown Switch and solar panel shutdown.

Manual Operation



Manual shutdown is initiated within less than 0.1 second of operation by pressing the emergency pushbutton on the Emergency Rapid Shutdown Switch. The Emergency Switch can be conveniently located at ground level for easy access or multiple switches can be installed in different multi-level building zones.

Command Trigger



Following SUNSPEC, inverter can send command directly to RSDs to shutdown.

Fail-Safe Operation

The RSD is designed for fail-safe opera tion ensuring that, will not compromise the solar panel isolation and shutdown status, maintaining full zero volt isolation.

North American Solar Market Approvals

The RSD has been extensively tested by cTUVus to meet the various PV standards required within the North American market.

Ul1741 PVRSE Certification

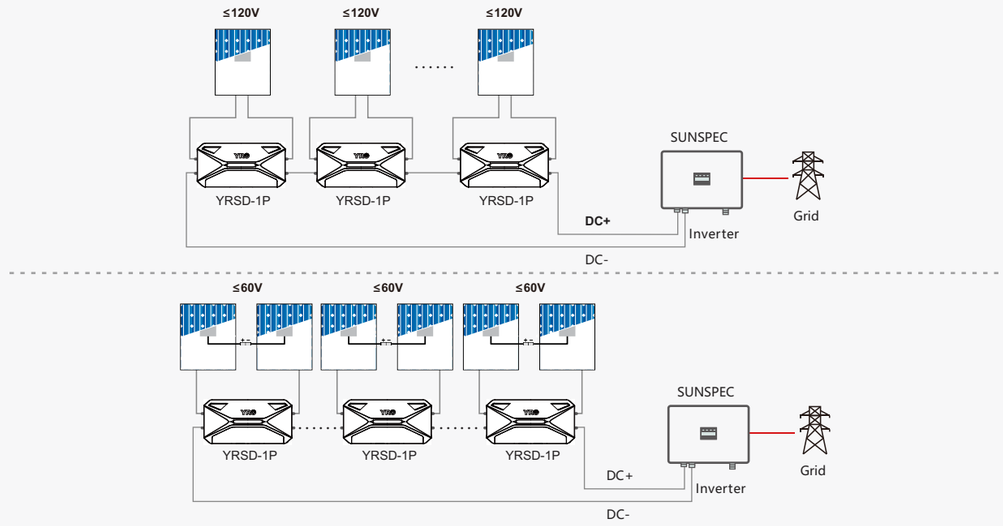
The RSD is fully certified to UL1741 PVRSE (PV Rapid Shutdown Equipment) for applications.
As a dedicated RSD operating as a safety switching without communications protocols, which is compatible with any PV inverter unit.

Ul3741 PVRSS Certification

The RSD is fully certified to UL3741 PVRSS (PV Rapid Shutdown System) for applications.
As a dedicated RSD operating as a safety switching without communications protocols, which is compatible with any PV inverter unit.

YRSD-1P

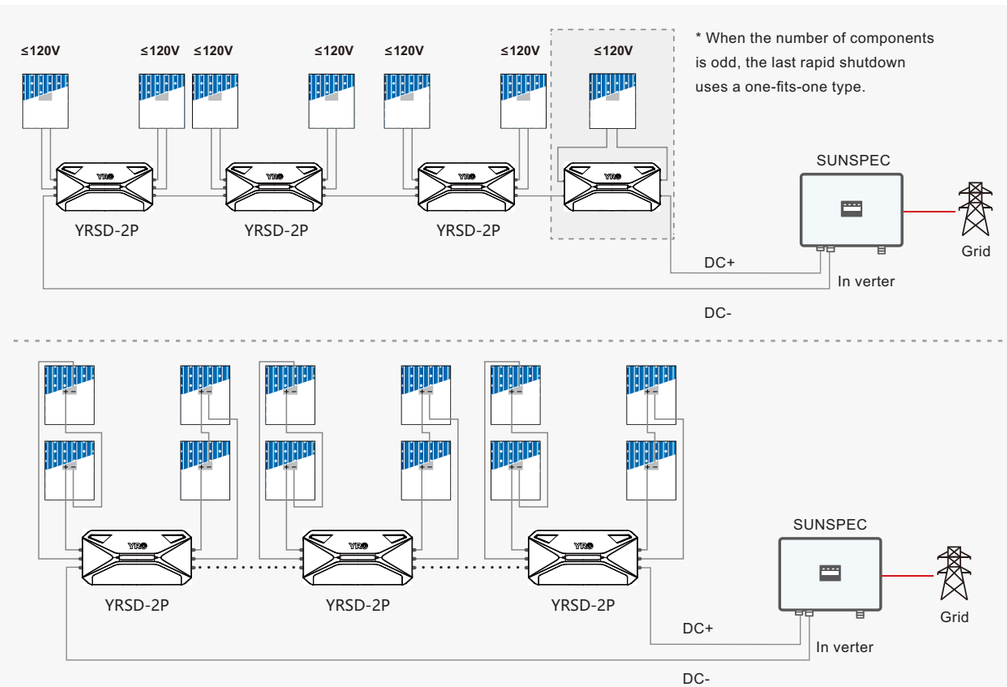
When the open-circuit voltage of PV panel is below 120V.



Not：For NEC 2017&2020 compliance PV panels should be <80v

YRSD-2P

When the open-circuit voltage of PV panel is below 120V.



Specifications

□ 3% ~ 25% optimization, retrieve power generation loss
□ Δ < 10℃ Anti-Hotspot, more safe and durable
□ Applies to all types of modules, Optimization +Voltage Limiting +Anti-Hotspot
□ Based on power optimization chip, eliminate panel or cell level mismatch
□ Solve the current mismatch issues caused by shading gradients, aging variations, temperature gradients, soiling gradients, etc
□ Optimize power generation, lower LCOE, improve solar system reliability, extend the service life of module
□ TUV Certification

Parameters

Product Model	YHQ-460	YHQ-600
Maximum Input Power	460W	600W
Operating Voltage Range	9~55V	3~70V
MPPT Voltage Range	13~50V	8~70V
Maximum Input Current	13A	15A
Over-current Protection	16A	18A
Over-temperature Protection	150℃	160℃
Maximum Output Current	13A	17A
Output Voltage Limiting Threshold	42V	42V
Total Maximum System Voltage	1500V	1500V
72 Type Module String@1500 V	36Modules	36Modules
72 Type Module String@1100 V	26Modules	26Modules
72 Type Module String@1000 V	24Modules	24Modules
Peak Conversion Efficiency	99.50%	99.50%
Power Consumption @5 A	0.9W	0.9W
Power Consumption @8 A	1.4W	1.4W
Power Consumption @12 A	2.9W	2.9W
Power Consumption @15A	4.5W	3.8W
Power Consumption @20 A	7.2W	/
Dimensions(L×W×H)	105*105*20mm	105*105*20mm
Weight	500g	500g
Cable	4.0mm²	4.0mm²
	Input Wire100 cm * 2Pcs	Input Wire 50 cm * 2Pcs
	Output Wire70 cm* 2Pcs	Output Wire 70 cm* 2Pcs
Connector	MC4(Compatible)	MC4(Compatible)
Operating Temperature Range	-40℃~ +65℃	-40℃~ +85℃
Protection Degree	IP68	IP68
Designed Life	25 Years	30 Years
Quality Commitment	12 Years	12 Years
Standard Features	Optimization;Anti-Hotspot	Optimization; Voltage Limiting; Anti-Hotspot

YHQ-460/YHQ-600 PV MPPT Optimizer

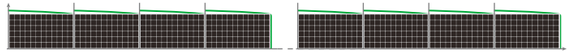
Advantage of Long String Installation (Voltage Limiting)

YHQ-460			
Module & Inverter *	Conventional Module	Optimized Module	Cost Reduction
Maximum Module Qty/String	1000V ÷ 53V=18pcs	1000V ÷ 42V = 24pcs	Module Qty add 33%
Power/String	18pcs x 450W = 8100W	24pcs x 450W = 10800W	Power add 33%
Tandem Inverter (2 strings)	8100W x 2strings = 16.2kW	10800W x 2strings = 21.6kW	Cost /Wp ↓
Cable	DC Cable	String Qty/Labor Cost/consumption /Line Loss↓	Cost /Wp ↓
String Operating Voltage	600V~700V	800V~930V	Higher System Efficiency
YHQ-600			
Module & Inverter *	Conventional Module	Optimized Module	Cost Reduction
Maximum Module Qty/String	1100V ÷ 53V=20pcs	1100V ÷ 42V = 26pcs	Module Qty add 30%
Power/String	20pcs x 370W = 7400W	26pcs x 370W = 9620W	Power add 30%
Combiner Box (16 strings)	7400W x 16strings = 118.4kW	9620W x 16strings = 153.9kW	Cost /Wp ↓
Central Inverter (16 strings)	118.4kW x 16strings =1894kW	153.9kW x 16strings =2463kW	Cost /Wp ↓
Cable	DC Cable	String Qty/Labor Cost/Line Loss↓	Cost /Wp ↓
String Operating Voltage	750V~780V	850V~900V	Higher System Efficiency

YHQ-460

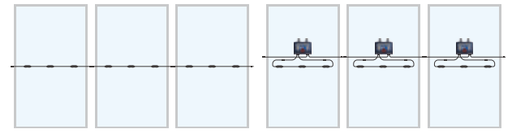
*166 Battery| 72 Type| 450Wp Mono Module, 1000V| 20K Tandem Inverter

Conventional Module:
18 pcs/ string@ 1000V, 20 pcs/ string@ 1100V, 28 pcs/ string@ 1500V



Conventional Module:
24 pcs/ string@ 1000V, 26 pcs/ string@ 1100V, 36 pcs/ string@ 1500V

Module Assembly Diagram

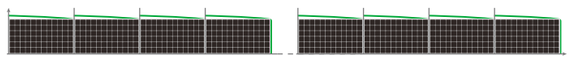


Conventional External Optimizer YHQ-460

YHQ-600

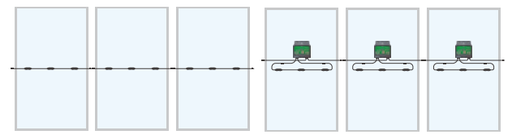
*72 Type 370Wp Mono Module, 1100V Inverter

Conventional Module: 20 pcs/ string@ 1100V, 28 pcs/ string@ 1500V



Conventional Module: 26 pcs/ string@ 1100V, 36 pcs/ string@ 1500V

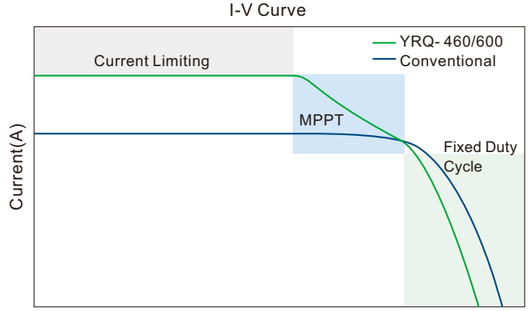
Module Assembly Diagram



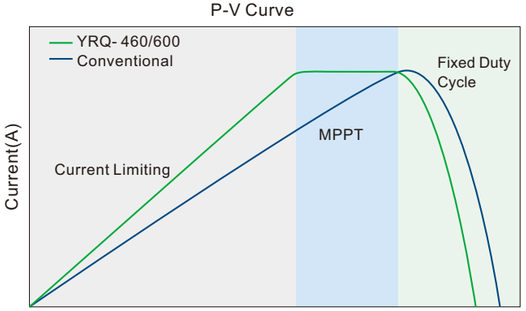
Conventional External Optimizer YHQ-600

Curve

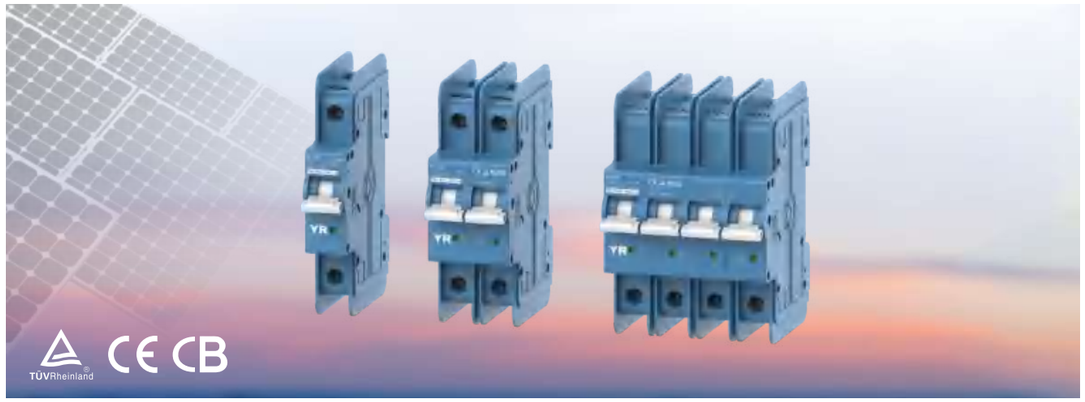
I-V Curve



P-V Curve



YRL7-63DC Non-Polarity DC Circuit Breaker



Application

YRL7-63DC Series Non-polarity PV Mini Circuit Breakers are mainly applied to DC solar combiner box or as battery switch. The main function including overload protection Anti-reflux protection and short-circuit protection. Scientific design of arc-extinguishingsystem keep solar system more safe. Max Voltage up to 1200V DC, current up to 80A.

Specifications

YRL7-63DC PV Series Circuit Breaker		YRL7-63DC			
Frame degree rated current(A)		63			
Electrical performance					
Ue Rated operating voltage(V DC)		1P:300V	2P:600V,800V	3P:900V	4P:1200V
Rated Current In (A)		6 -10 -16 -20 -25 -32 -40 -50 -63 -80			
Rated insulation voltage Ui(V DC)		2P: 1000V 4P: 1500V			
Rated Impact voltage Uimp (kV)		8			
Ultimate breaking capacity Icu (kA)		6	6	6	6
Run breaking capacity Ics (%Icu)		100%	100%	100%	100%
Curve type		B C			
Trip type		Thermal-magnetic			
MECHANICAL	Actual average value	20000			
	Standard value	8500			
ELECTRIC	Actual average value	2500			
	Standard value	1500			
Control and indication					
Shunt release (SHT) Mx		Option			
Under voltage release (UNT)					
Auxiliary contact (AX) OF					
Alarm contact (AL) SD					
Wiring capacity (mm²)		In≤32A,1.5~16 mm² 1≥40A,6-25mm²			
Ambient temperature (°C)		-20 ~70			
Altitude		≤2000			
Relative humidify		≤95%			
Pollution Level		3			
Installation Environment		No obvious shock and vibration			
Installation category		Class III			
Installation		DIN Standard rail			
Dimensions(W)x(H)x(Deep)	(W)	17.5	35	52.5	70
	(H)	80	80	80	80
	(Deep)	71	71	71	71
Weight (kg)		0.13	0.26	0.39	0.53

YRL7-125DC Non-Polarity DC Circuit Breaker

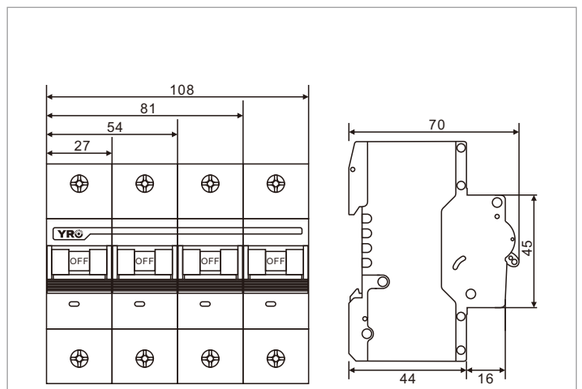
Application

YRL7-125DC is mainly used in photovoltaic combiner box, energy storage and other DC systems that need to be disconnected and protected when overcurrent or short circuit occurs. Non-plarity design can fit battery charge and discharge system perfectly.

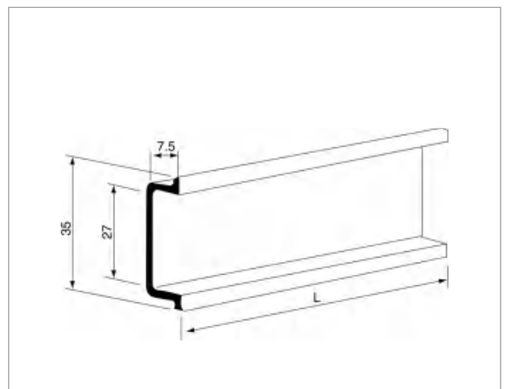
Specifications

Rated Current	80,100,125A			
Rated Voltage	250VDC	550V/800VDC	750VDC	1000VDC
No. of Pole	1P	2P	3P	4P
Mechanical Life	20000 times(C.O.)			
Electrical Life	1500 times(C.O.)		125A: 1000 Times	
Icu:	6KA			
Ics:	63,80,100A:6KA		125A: 6KA	
Weight(G)	160	320	480	640

Dimensions



Installation



YRM1Z Non-Polarity DC Moulded Case Circuit Brea

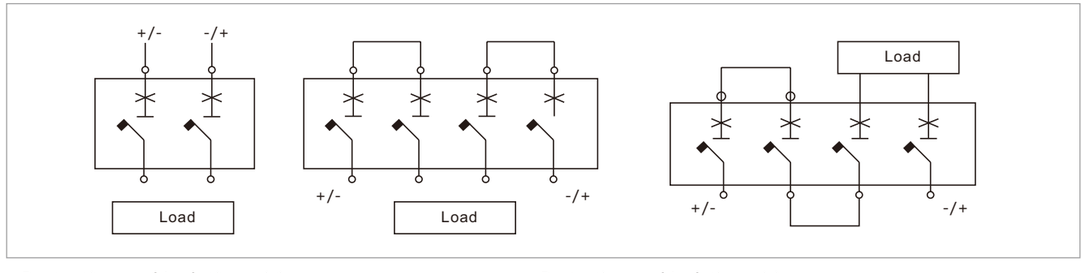
• Function

□ Reliable protection at high ambient temperatures
□ Loadable:string protection up to
YRM1Z-125(size)：63A,80A,100A,125A YRM1Z-630(size)：500A,630A
YRM1Z-250(size)：160A,200A,225A,250A YRM1Z-800(size)：800A
YRM1Z-400(size)：315A,400A YRM1Z-1250(size)：1000A,1250A
□ Tested:Ultimate short circuit breaking capacity 25kA according to IEC IEC60947-2
□ Fast: reclosable for minimum standstill times
□ Safe: reliable disconnector properties switching under load
□ Approval:Provided on request

• Specifications

Rated Current In (A)	125:63A,80A,100A,125A,250:160A,200A,225A,250A,400:315A,400A:630:500A,630A,800:800A,1250:1000A,1250A
Ue Rated operating voltage (VDC)	YRM1Z:1P 250V; 2P 550V; 3P 750V; 4P 1000V
Rated insulation voltage Ui (VDC)	DC1000V
Rated Impact voltage Uimp (kV)	8KV
Ultimate breaking capacity Icu (kV)	25KV
Trip type	Thermal-magnetic
Ambient temperature (P)	-20℃ ~70℃
Altitude	2000M
Installation	Fixed,plug-in
Accessories	Auxiliary .Alarm,Shunt release,Manually operated and electric operation

• Wiring digaram



□ Protection and Isolation wiring
□ The load should be≤DC 1 000V
The connection considered for a network in which the middle point of the supply source is earthed
In this case the breaker protects and isolates the load

□ Protection and Isolation wiring
□ The load should be≤DC 1 000V
The Negative pole (-) could be earthed,but in both cases the breaker protects and isolates the load

YRM3DC Non-Polarity DC Moulded Case Circuit Brea

• Application

YRO YRM3DC series Non-Polarity PV DC Molded Case Circuit Breaker (MCCB) are mainly used in large solar power system, which are applied for Energy storage battery, solar DC combiner box .inverter and DC power distribution cabinet. Rated voltage up to 1500V DC, current up to 800A , with the function of overload protection and short-circuit protection.

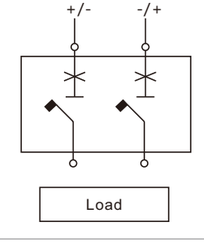
• Function

□ Reliable protection at high ambient temperatures
□ Loadable:string protection up to
YRM3DC-250HU：63A,80A,100A,125A,160A,200A,250A
YRM3DC-320HU：250A,320A YRM3DC-630HU：500A,630A
YRM3DC-400HU：400A YRM3DC-800HU：800A
□ Tested:Ultimate short circuit breaking capacity 20kA according to IEC IEC60947-2
□ Fast: reclosable for minimum standstill times
□ Safe: reliable disconnector properties switching under load
□ Approval:Provided on Installation

• Specifications

Rated Current In (A)	250HU:63A,80A,100A,125A,160A,200A,250A,320HU:250A,320A,400HU:400A,630HU:500A,630A,800HU:800A
Ue Rated operating voltage (VDC)	2P 1000V; 3P 1500V
Rated insulation voltage Ui (VDC)	DC1000V/DC1500V
Rated Impact voltage Uimp (kV)	12KV
Ultimate breaking capacity Icu (kV)	20KV
Trip type	Thermal-magnetic
Ambient temperature (P)	-20℃ ~70℃
Altitude	2000M
Operation	Fixed,plug-in
Accessories	Auxiliary .Alarm,Shunt release,Manually operated and electric lighting

• Wiring digram



YRSP-D2 T2 PV Surge Protective Device

Application

YRSP-D2 surge protective device, protect against lighting surge voltages in solar system (photovoltaic power supply system). These units must be installed in parallel on the DC networks to be protected and provide common and different modes' protection. Its installed location is recommended at both ends of the DC power supply line (solar panel side and inverter/converter side), if the line routing is external and long.High energy MOVs equipped with specific thermal disconnectors and related failure indicators.

Specifications

YRSP-D2 series surge protector			YRSP-D2				
PV DC-specific (IEC 61643-31/EN 61643-31/EN50539-11)							
Pole			2P			3P	
Electrical Parameter							
Classified test			II				
UCPV(V DC)			600	800	1000	1000	1500
In(8/20) μs (kA)			20				
Imax(8/20)μs (kA)			40				
Up (kV)			2.8	3.0	3.2	3.5	5.2
Curve type							
Indication window			√				
Plug-in Module			√				
Remote signal contact			opinional				
Remote signal contact	maximum working voltage(V)		250 AC/30V DC				
	maximum working current (A) 1A(250V/AC)		1A(250V/AC)				
	1A(30V DC)		1A(30V/AC)				
Wiring & installation							
Wiring capacity (mm^2)	Hard wire		4~25				
	Flexible wire		4~16				
Stripping length(mm)			10				
Terminal screw			M5				
Torque(Nm)	Main circuit		3.5				
	Remote signal contact		0.25				
	All profile		IP40				
Protection class	Connection port		IP20				
Installation Environment			No obvious shock and vibration				
Altitude (m)			<2000				
Working Temperature			-3.0~+70				
Relative humidity			30%~90%				
How to Install			Installed with H35-7.5/DIN35 steel mounting rail				
Size(mm)(WxHxL)		(W)	36			54	
		(H)	92			92	
		(L)	76			76	
Weight (kg)			0.24			0.36	

No metal covers are in the area of the module release buttons as shown.

YRSP-D2 B+C/T1+T2 DC Surge Protective Device

Function

YRSP-D2 B+C is a Type1+2 surge protector specially designed for photovoltaic power generation,it is installed at the out let of photovoltaic panels with high risk of direct lighting strike, it is suitable for photovoltaic system protection with DC voltages of 1000V and 1500V.

Fuatures

- □ Type 1+2 surge protective device for Photovoltaic
- □ Uc to 1500VDC
- □ Impulse currents limp/Itotal: 5/20μs & 10/350μs
- □ Common and different mode protection
- □ Remote Signaling(option)
- □ No leakage, no operating currents
- □ Plug-in modules
- □ EN 61643-31

Specifications

Model		YRSP-D2		
Description		Type 1+2 PV DC surge protector		
Poles		2P	3P	3P
Protection mode		CM/DM		
Max. operating voltage	Ucpv	600 Vdc	1000 Vdc	1500 Vdc
Current withstand short-circuft	Iscpv	1000A		
Operating current - to the voltage Ucpv	Icpv	none		
Leakage current - to the voltage Ucpv	Ipe	none		
Follow current	If	none		
Nominal discharge current -8/20 μs	In	20 KA		
Max discharge current by pole - 8/20 μs	Imax	50 KA		
Max. Lightning current by pole - 10/350 μs	limp	6.25KA		
Total lightning curent - 10/350 μs	Itotal	12.5KA		
Total Maximal discharge current - 8/20 μs	Itotal	60KA		
Protection level CM/DM (at In)	Up	2.2 KV	3.5 KV	5.2 KV
Mechanical characteristics				
Dimensions		See diagram		
Connection		Screw terminal for 2.5-25 mm^2 wire		
Disconnection indic ator		1 mechanical indicator by pole		
Remote signaling		Option YRSP-D2 - Output on changeover contact		
Mounting		Symmetrical rail 35 mm(EN60715)		
Operating temperature		-40℃ ~+85℃		
Protection class		IP20		
Housing material		Thermoplastic UL94-V0		
Standards compliance		EN50539-11/IEL61643-31		

YROPV-30 Photovoltaic DC fuse

Application

YRO PV DC YROPV-30 Fuse and YROPV-32B Fuse Holder was designed and manufactured , complying with the standard IEC60269-6 and IEC60947-3. The Rated Current up to 32A,rated voltage up to1000V DC. It applied for PV DC combiner box, inverter etc, with the main function of over-current protection and effective disconnection.

Structure

□ According to IEC60269-6 □ Rated voltage: DC 1000V
□ Operating class gPV for Solar protection □ Rated current: 1-32A □ Rated breaking capacity: DC 20KA

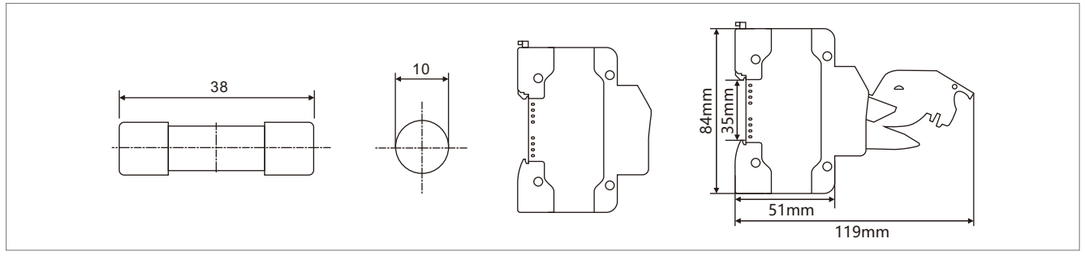
Specifications

Pole	Rated Voltage Ue (V DC)	Rated Current In (A)	Rated breaking capacity(KA)	The Most High Power Consumption(W)
1P	1000	1,2,3,4,5,6,8,10,12,15,20,25,30,32	20	3.5

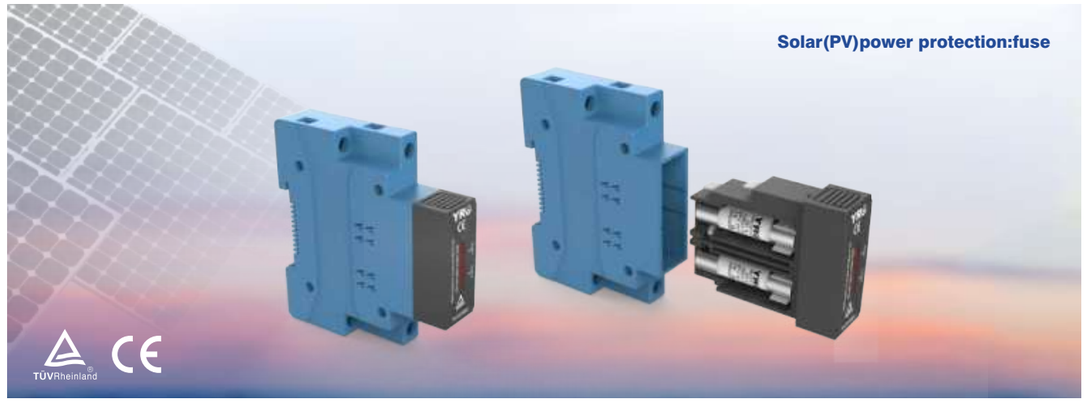
Connection and Installation

Connection(mm²)	2 .5-1 0
Working temperature(°C)	-30-+70
Resistance And Damp Hot	Class 2
Altitude(m)	<2000
Relative Humidity	<95%
Protection Class/Degree	IP20
Pollution	3
Installation Environment	No obvious shock and vibration
Installation Class/Type	Class III/DIN rail

Dimension



YROPV-32BD Photovoltaic DC fuse



Application

YRO YROPV-32BD is a 1000V DC fuse holder with 2 poles input combines and 2 pole output, holding 2 pieces of 10*38mm 1000V fuse link up to 32A. The fuse holder can be application in 1000V solar combiner box, solar inverter and solar equipments.Protect the DC circuit from over-current damaging

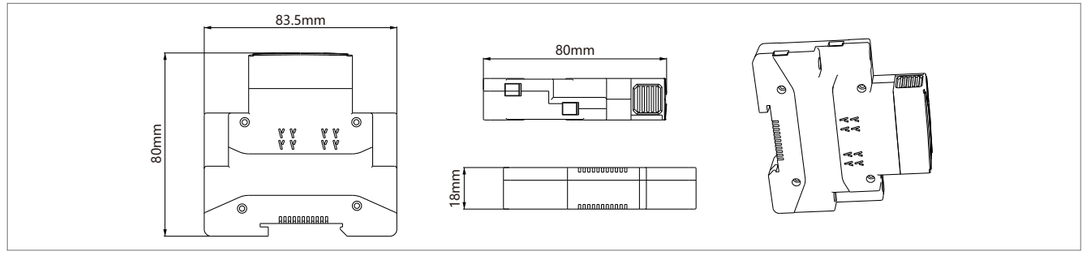
Specifications

Pole	Rated Voltage Ue (V DC)	Rated Current In (A)	Rated breaking capacity(KA)	The Most High Power Consumption(W)
2P	1000	1,2,3,4,5,6,8,10,12,15,20,25,30,32	20	7

Connection and Installation

Connection(mm²)	2 .5-1 0
Working temperature(°C)	-30-+70
Resistance And Damp Hot	Class 2
Altitude(m)	<2000
Relative Humidity	<95%
Protection Class/Degree	IP20
Pollution	3
Installation Environment	No obvious shock and vibration
Installation Class/Type	Class III/DIN rail

Dimension



YROPV-32H Photovoltaic DC fuse

Normal service Conditions

The around temperature Max value can be up to 90 ℃， min limit value up to -40 ℃, the installation altitude is not over 2000m (our company can customize based on one's request if you need some special)

Use category

gPV means all range DC breaking protection in solar photovoltaic power generation system .

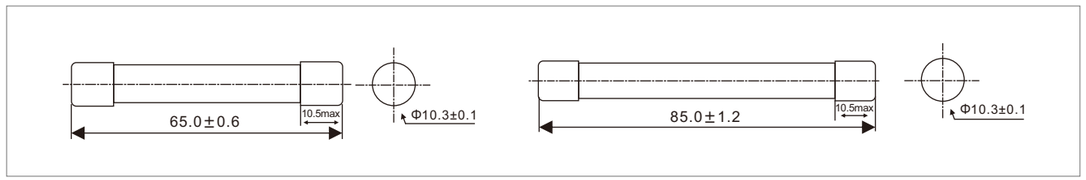
Structure

This series of products is a variable cross-section melt made of 1# (99.99) pure silver tape (or silver wire wound), welded with environmentally friendly low-temperature tin and encapsulated in a melt tube made of high-strength 95 porcelain. The melt tube The medium is filled with high-purity quartz sand that has been chemically treated and treated with a special process as an arc extinguisher The two ends of the medium and the melt are firmly electrically connected with the contacts by spot welding. The fuse base is made of a plastic pressed shell equipped with contacts and fuse-carrying parts, or connected by riveting, and can be used as a supporting part for fuse-links of corresponding sizes. This series of fuses have small size, convenient installation, safe use and appearance features such as beautiful appearance.

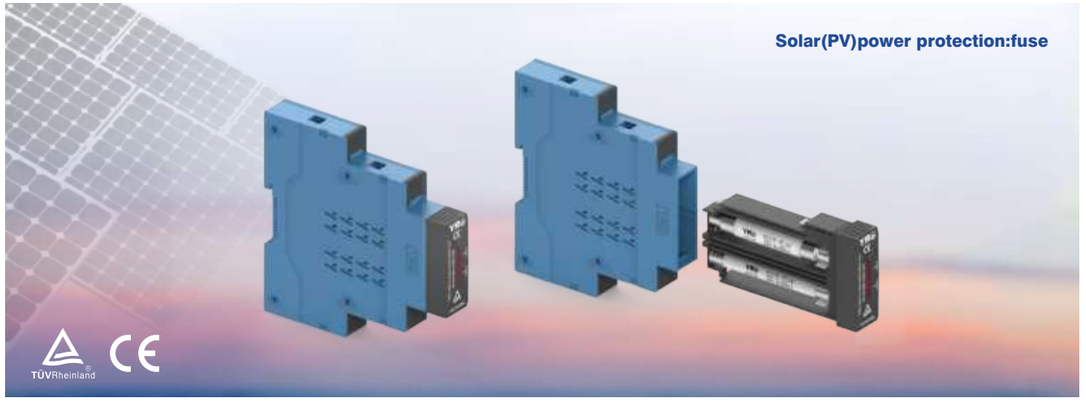
Technical Data

Volts	1500V
Amps	2A-32A
Fusible Core Specification(1)	10 X 65mm
Fusible Core Specification(2)	10 X 85mm
Class of Operation	gPV
Standard	GB/T 13539.6 IEC 60269-6
Breaking Capacity	20kA

Dimension



YROPV-32HBD Photovoltaic DC fuse



Application

YRO YROPV-32HBD is a 1500V DC fuse holder with 2 poles input combines and 2 pole output, holding 2 pieces of 10*85mm or 14*85mm 1500V fuse link up to 63A. The fuse holder can be application in 1500V solar combiner box, solar inverter and solar equipments.Protect the DC circuit from over-current damaging

Use category

gPV means all range DC breaking protection in solar photovoltaic power generation system .

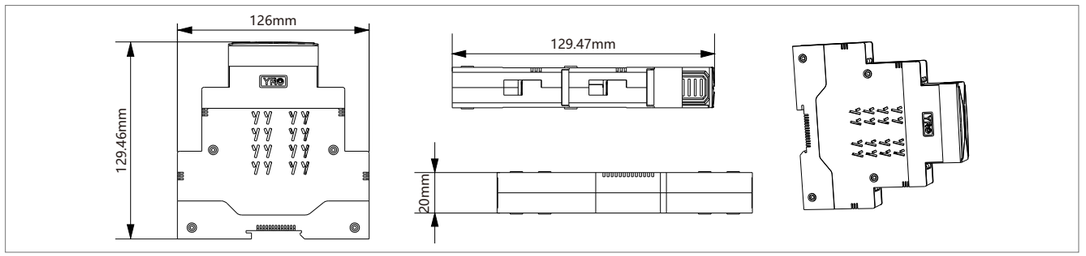
Structure

This series of products is a variable cross-section melt made of 1# (99.99) pure silver tape (or silver wire wound), welded with environmentally friendly low-temperature tin and encapsulated in a melt tube made of high-strength 95 porcelain. The melt tube The medium is filled with high-purity quartz sand that has been chemically treated and treated with a special process as an arc extinguisher The two ends of the medium and the melt are firmly electrically connected with the contacts by spot welding. The fuse base is made of a plastic pressed shell equipped with contacts and fuse-carrying parts, or connected by riveting, and can be used as a supporting part for fuse-links of corresponding sizes. This series of fuses have small size, convenient installation, safe use and app earance features such as beautiful appearance.

Technical Data

Volts	1500V
Amps	2A-63A
Fusible Core Specification(1)	14 X 85mm
Fusible Core Specification(2)	10 X 85mm
Class of Operation	gPV
Standard	GB/T 13539.6 IEC 60269-6
Breaking Capacity	20kA

Dimension

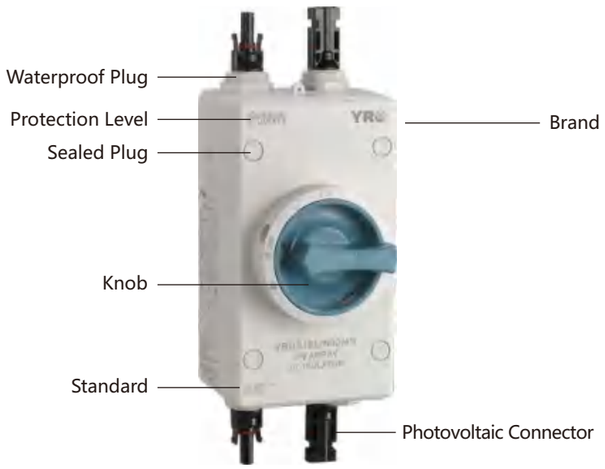


Application

YRDS1 series isolator 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 1~2MPPT 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 direct current between solar panels and inverters.

Application



Structure

- □ Installed at any angle can achieve IP66 waterproof level
- □ UV resistance and V0 flame retardant material
- □ Contact Silver Plating, silver layer thickness to the industry's highest standards
- □ Arcing Time in 3ms
- □ No Polarity
- □ Lockable at OFF position
- □ Breather valve attached on the bottom of the isolator
- □ AS 60947.3:2018 and IEC 60947.1:2015 Standard
- □ 5 years warranty, product insurance, and recall insurance available

Technical Data

Data according to IEC/EN60947-3:2009+A1 + A2, AS60947.3, Utilization category DC-PV1, DC-PV2

Main Parameters			YRDS1EL/N32/4
Rated Insulation Voltage	Ui	V	1500
Rated thermal current	Ith	A	32
Rated impulse withstand voltage	Uimp	V	8000
Rated short circuit breaking capacity	Icw	A	1000
Maximum cable cross-sections(incl.jumper)			
Solid standard		mm²	4-16
Flexible		mm²	4-10
Flexible(+multicore cable end)		mm²	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
General parameters			
Knob Positions			OFF at 9 hr, ON at 12 hr, ON at 3hr
Mechanical life			1000
Number of DC poles			2 or 4(6.8 optional)
Operation temperature		℃	-40 to +85
Storage temperature		℃	-40 to +85
Pollution degree			2
Overvoltage category			III
IP rating			IP66

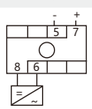
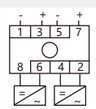
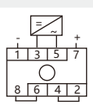
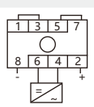
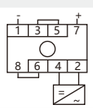
YRDS1 Dc Isolator Switch

Technical Data

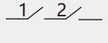
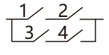
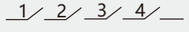
Data according to IEC/EN60947-3 2009+A1+A2. AS60947.3, Utilization category DC-PV1, DC-PV2

300V		600V		800V		1000V		Pole	No.of Strings	Part Number
PV1	PV2	PV1	PV2	PV1	PV2	PV1	PV2			
32	32	32	32	32	16	16	9	2	1	YRDS1EL(DB)/N32-2
32	32	32	32	32	16	16	9	4	2	YRDS1EL(DB)/N32-4
32	32	32	32	32	32	32	32	4	1	YRDS1EL(DB)/N32-4S
32	32	32	32	32	32	32	32	4	1	YRDS1EL(DB)/N32-4B
32	32	32	32	32	32	32	32	4	1	YRDS1EL(DB)/N32-4T

Switching Configurations

Type	2-pole	4-pole	4-pole with Input and Output on top	4-pole with Input and Output bottom	4-pole with Input on top Output bottom
-	2	4	4T	4B	4S
Contancts Wiring graph					
Switching example					

Data according AS60947-3:2018

Main Contacts		Type	YRDS1EL(DB)/N32	Appendix B5
Rated thermal current	Ithe	A	32	\
Rated insulation voltage	Ui	V	1000	\
Distance of contacts (per pole)		mm	8	5x
Rated operational current Ie (DC-PV2)				operations
1 pole 1 	300V	A	25	100
	400V	A	10	40
	500V	A	8	32
	600V	A	8	32
	800V	A	3	12
	1000V	A	2	8
4-pole 2 pole in series 4 	500V	A	32	128
	600V	A	13	52
	700V	A	9	36
	800V	A	9	36
	900V	A	9	36
	1000V	A	9	36
2-pole 4 pole in series 2H 	500V	A	40	160
	600V	A	/	/
	700V	A	/	/
	800V	A	/	/
	900V	A	/	/
	1000V	A	/	/
2-pole 4 pole in series 4B 	500V	A	32	128
	600V	A	32	128
	700V	A	32	128
	800V	A	32	128
	900V	A	32	128
	1000V	A	32	128

YRHD High Voltage Dc Disconnector

Features

Designed for harsh environments

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

Easy to install

- □ Wiring: Since the 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 mechanical device can be centered to meet the installation requirements.

Safe reliable operation

- □ Reliable position indication through visible contacts.
- □ The opening and closing of the switch is fully independent of the speed of operation, ensuring safe operation under all conditions.
- □ High temperature withstand: no derating up to 55 C(131F),functional from -40 to+122F(-40 to +50°C).

Technical Data Characteristics according to IEC 60947-3

Rated current Ie			160A	250A	315A	400A
Frame size			F2	F2	F2	F3
Thermal current at 40°C (A)			160	250	315	400
Thermal current at 50°C (A)			160	250	315	400
Thermal current at 60°C (A)			160	250	315	400
Rated insulation voltage (Ui)			1500	1500	1500	1500
Rated impulse withstand voltage Uimp (KV)			12	12	12	12
Number of circuits	Rated voltage	Utilization category	Ie(A)	Ie(A)	Ie(A)	Ie(A)
1 circuit	1000VDC(1)	DC-21B	160	250	315	400
1 circuit	1500VDC(2)	DC-21B	160	250	315	400
Number of circuits	Rated voltage	Utilization category	Ie(A)	Ie(A)	Ie(A)	Ie(A)
1 circuit	1000VDC(1)	PV2	—	—	—	—
1 circuit	1500VDC(2)	PV2	160	250	315	400
2 circuit	1500VDC(2)	PV2	—	—	—	400
The short-circuit capacity is between1000 and 1500VDC (no protection) Rated short time withstand current Icw 1 s (kAeff)			5	5	5	8
Rated short-circuit making capacity Icm(kA peak)- 60 ms			10	10	10	10
Connection Recommended Cu rigid cable aross-section(mm²)			70	120	185	240
Recommended Cu busbar width(mm²)			20	20	20	25
Mechanical characteristics Durability (number of operating cycles)			8000	8000	8000	8000
Number of tipping operations			1000	1000	1000	1000
Power loss/pole (W/Pole)			4.5	11.2	13	13

YSC-1K MC4 Solar Connector

Introduce

□ Simple on-site processing.

□ Accommodates PV cable with different insulation diameters.

□ Multiple plugging and unplugging cycles.

□ Mating safety provided by keyed housings.

□ High current carrying capacity.

YSC-1K MC4 CONNECTOR 1000V

Technical Data

OrderNO.	P/N Part P/N		Cable special	
	Connector	Terminal	Conductor size(mm²)	CableOD((j)Dmm)
YSC-1K-2.5	YSC-CMMM-H	YSC-CM-T14	AWG14(2.5 mm²)	4)4.5- 4)8.5
YSC-1K-4		YSC-CM-T12	AWG12(4.0 mm²)	
YSC-1K-6		YSC-CM-T10	AWG10(6.0 mm²)	
YSC-1K-10		YSC-CM-T7	AWG7(10 mm²)	
YSC-1.5K-2.5	YSC-CFPM-H	YSC-CM-T14	AWG14(2.5 mm²)	4)4.5- 4)8.5
YSC-1.5K-4		YSC-CM-T12	AWG12(4.0 mm²)	
YSC-1.5K-6		YSC-CM-T10	AWG10(6.0 mm²)	

Technical Data

Rated Current	30A(2.5-6mm2) 45A(4-6mm2)
Rated Voltage	1000V DC |1500V DC
lest Voltage	6000V(50Hz, 1min)
Overvoltage type/Pollution Degree	2 CAT III /2
Contact Resistance Of Plug Connector	ImΩ
Contact Material Copper, Tin-plated	Copper, Tin-plated
Insulation Material	PPO/PC
Degree Of Protection	IP2X/IP67
Flame Class	UL94-V0
Safety Class	II
Suitable Cable	OD 4.5-8.5(2.5-6.0mm2)
Insertion Force/Withdrawal Force	< 50N/ > 50N
Connecting System	Crimp connection
Temperature Range	-40°C ~ +125C

YSC-BT/BY MC4 Branch Connector

Introduce

YSC-BT2

YSC-BT3

YSC-BT4

YSC-BY2-1K

YSC-BY2-1.5K

Technical Data

Type And Meaning	
Available Branch Type	2-1, 3-1, 4-1, 5-1
Rated Current	30A
Rated Voltage	1000V DC|1500V DC
test Voltage	6000V(50Hz, 1min)
Overvoltage type/Pollution Degree	2 CAT III /2
Contact Resistance Of Plug Connector	ImΩ
Contact Material	Copper, Tin-plated
Insulation Material	PPO
Degree Of Protection	UL94-VO
Flame Class	IP2*/IP67
Safety Class	II
Insertion Force	<50N
Withdrawal Force	>50N
Temperature Range	-40°C ~ +110°C

1in 1out DC550V

PV Combiner Box

PC+ABS shell is flame retardant and UV resistant	100Vdc 15A fuse x2
1 in 1 out	550Vdc 32A circuit Breaker x1
Ip65 8way box	600Vdc 40kA surge protector x1

1in 1out DC1000V

PV Combiner Box

PC+ABS shell is flame retardant and UV resistant	1000Vdc 15A fuse x2
1 in 1 out	1000Vdc 32A Isolating switch x1
Ip65 8way box	1000Vdc 40kA Surge protector x1

2in 1out DC550V

PV Combiner Box

PC+ABS shell is flame retardant and UV resistant	1000Vdc 15A fuse x4
2 in 1 out	550Vdc 32A circuit Breaker x1
IP65 12way box	600Vdc 40kA Surge protector x1

2in 1out DC1000V

PV Combiner Box

PC+ABS shell is flame retardant and UV resistant	1000Vdc 15A fuse x4
2 in 1 out	1000Vdc 32A circuit Breaker x1
Ip65 12way box	1000Vdc 40kA Surge protector x1

2in 2out DC550V

PV Combiner Box

PC+ABS shell is flame retardant and UV resistant	1000Vdc 15A fuse x4
2 in 1 out	550Vdc 32A circuit Breaker x2
Ip65 12way box	600Vdc 40kA Surge protector x2

2in 2out DC1000V

PV Combiner Box

PC+ABS shell is flame retardant and UV resistant	1000Vdc 15A fuse x4
2 in 2 out	1000Vdc 32A Isolating switch x2
Ip65 18way box	1000Vdc 40kA Surge protector x2

4in 1out DC550V

PV Combiner Box

PC+ABS shell is flame retardant and UV resistant	1000Vdc 15A fuse x4
4 in 1 out	550Vdc 63A circuit Breaker x1
IP65	600Vdc 40kA Surge protector x1

4in 1out DC1000V

PV Combiner Box

PC+ABS shell is flame retardant and UV resistant	1000Vdc 15A fuse x8
4 in 1 out	1000Vdc 63A circuit Breaker x1
IP65	1000Vdc 40kA Surge protector x1

6in 1out DC550V

PV Combiner Box

PC+ABS shell is flame retardant and UV resistant	1000Vdc 15A fuse x6
6 in 1 out	550Vdc 63A circuit Breaker x1
IP65	600Vdc 40kA Surge pprotector x1

6in 1out DC1000V

PV Combiner Box

PC+ABS shell is flame retardant and UV resistant	1000Vdc 15A 2P fuse x3
6 in 1 out	1000Vdc 63A circuit Breaker x1
IP65	1000Vdc 40kA Surge protector x1

12in 1out DC1000V

PV Combiner Box

Steel Enclosure	1000Vdc 15A fuse x24
12 in 1 out	1000Vdc 250A circuit breaker x1
IP65	1000Vdc 40kA Surge protector x1

16in 1out DC1000V

PV Combiner Box

Steel Enclosure	1000Vdc 15A fuse x32
16 in 1 out	1000Vdc 250A circuit breaker x1
IP65	1000Vdc 40kA Surge protector x1

24in 1out DC1000V

PV Combiner Box

Steel Enclosure	1000Vdc 15A fuse x48
24 in 1 out	1000Vdc 400A circuit breaker x1
IP65	1000Vdc 40kA Surge protector x1

16 in 1out with Monitoring unit

PV Combiner Box

SMC shell flame retardant and UV resistant	1000Vdc 15A fuse x33
16 in 1 out	1000Vdc 250A circuit breaker x1
IP65	1000Vdc 40kA Surge protector x1

16 in 1out DC1500V with Monitoring unit

PV Combiner Box

SMC shell flame retardant and UV resistant	1500Vdc 15A fuse x33
16 in 1 out	1500Vdc 250A Isolator Switch x1
IP65	1500Vdc 40kA Surge protector x1

2in 2out DC1000V Out-cabinet Operation

PV Combiner Box

PC+ABS shell is flame retardant and UV resistant	1000Vdc 15A fuse x4
2 in 2 out	1000Vdc 40A Isolating switch x1
IP65	1000Vdc 40kA Surge protector x2

2in 1out DC1000V Out-cabinet Operation

PV Combiner Box

PC+ABS shell is flame retardant and UV resistant	1000Vdc 15A fuse x4
2 in 1 out	1000Vdc 40A Isolating switch x1
IP65	1000Vdc 40kA Surge protector x1

4in 2out DC1000V Out-cabinet Operation

PV Combiner Box

PC+ABS shell is flame retardant and UV resistant	1000Vdc 15A fuse x8
4 in 2 out	1000Vdc 40A Isolating switch x1
IP65	1000Vdc 40kA Surge protector x2

4in 1out DC1000V Out-cabinet Operation

PV Combiner Box

PC+ABS shell is flame retardant and UV resistant	1000Vdc 15A fuse x4
4 in 1 out	1000Vdc 40A Isolating switch x1
IP65	1000Vdc 40kA Surge protector x1

4in 1out DC1000V Out-cabinet Operation

PV Combiner Box

PC+ABS shell is flame retardant and UV resistant	1000Vdc 15A fuse x8
4 in 1 out	1000Vdc 32A Isolating switch x1
IP65	1000Vdc 40kA Surge protector x1

YRPVB Photovoltaic Combiner Box

1in 1out DC1000V Out-cabinet Operation

PV Combiner Box

PC+ABS shell is flame retardant and UV resistant	1000Vdc 15A fuse x2
1 in 1 out	1000Vdc 40A Isolating switch x1
IP65	1000Vdc 40kA Surge protector x1

YRJB-DP10/1

AC dual power distribution Box

PC+ABS shell is flame retardant and UV resistant	2P 63A circuit breaker x3
IP65	2P 275V SPD x1
10kW	63A undervoltage x1
2P100A Dual power supply x1	1P+N 63A Leakage circuit breaker x1

YRPVB-AD3/1

Integrated box for junction and distribution

PC+ABS shell is flame retardant and UV resistant	230Vac/16A
IP65	1000Vdc/32A
3kW	

YRPVB-AD10/3

Integrated box for junction and distribution

PC+ABS shell is flame retardant and UV resistant	400Vac/32A
IP65	1000Vdc/32A
10kW	

YRPVB-AD20/3

Integrated box for junction and distribution

PC+ABS shell is flame retardant and UV resistant	400Vac/63A
IP65	1000Vdc/32A
20kW	

5.12KWh Stacked Lithium Energy Storage Battery

Product introduction

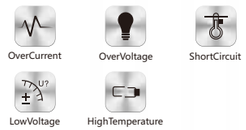
The stacked lithium energy storage battery use long working life LiFePO4 cell, high performance BMS to protect and manage the battery system.The max parallel is 15pcs,free combination for the capacity and meet all kinds of demand for home/industry.

Product features

- □ High power, friendly interface, free combination
- □ Max parallel is 15pcs with large capacity
- □ Free combination,Stacked design
- □ CAN/RS485/WiFi/4G/Bluetooth Communication
- □ BMS customization supported

BMS Protection

- □ Energy storage system, control system, alarm system, power system, database
- □ Emergency lighting system, emergency power supply, UPS
- □ Telecommunication, communication, fire fighting system



Products Specification

Single module capacity	5.12KWH				
Module number	1PCS	2PCS	3PCS	4PCS	5PCS
Total capacity	5.12KWH	10.24KWH	15.36KWH	20.48KWH	25.6KWH
Standard voltage	51.2V				
Working voltage	43.2V-57.6V				
Standard discharge current	100A	200A	300A	400A	500A
Standard charge current	50A	100A	150A	200A	250A
Suggested DOD	80%				
Humidity	20%-60%				
Installation	Stacked				
IP rating	IP20				
Communication	CAN/RS485/RS232(WiFi/bluetooth/4Goptional)				
Product size/unit	620*550*480mm	620*550*760mm	620*550*1040mm	620*550*1320mm	620*550*1600mm
N.W./unit	50kg	80kg	120kg	150kg	190kg

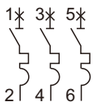
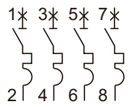
Summary

Model	YRL7-63 6KA	YRL7-63Por 10KA
Electrical Features		
Rated current In	1,2,3,6,10,16,20,25,32,40,50,63,80,100A	
Poles	1P,1P+N,2P,3P,3P+N,4P	
Rated voltage Ue	230/400V~	240/415V~
Insulation voltage Ui	500V	
Rated frequency	50/60Hz	
Rated breaking capacity	6,000A	10,000A
Energy limiting class	3	
Rated impulse withstand voltage(1.5/50) Uimp	4,000V	
Dielectric test voltage at ind. Freq. for 1 min	2kV	
Pollution degree	2	
Thermal-magnetic release characteristic	B,C,D	
Mechanical Features		
Electrical life	8,000 Cycles	
Mechanical life	20,000 Cycles	
Contact position indicator	Yes	
Protection degree	IP20	
Reference temperature for setting of thermal element	30℃	
Ambient temperature(with daily average≤35℃)	-5℃~+40℃	
Storage temperature	-25℃~+70℃	

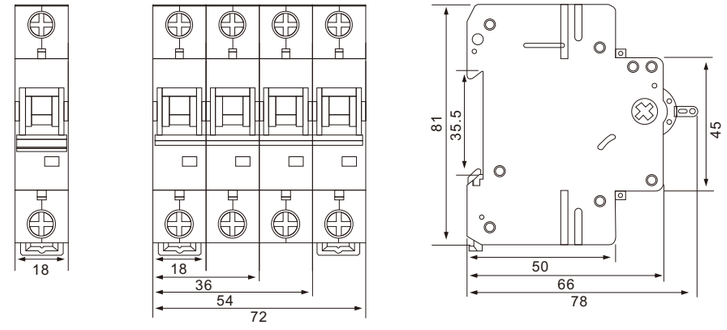
Summary

Model	YRL7-63 6KA	YRL7-63Por
Installation		
Terminal connection type	Cable/Pin-type busbar/U-type busbar	
Terminal size top/bottom for cable	25mm2 18-3AWG	
Terminal size top/bottom for busbar	25mm2 18-3AWG	
Tightening torque	2.5Nm 22in-lbs	
Mounting	On DIN rail EN60715(35mm)by means of fast clip device	
Connection	From top and bottom	
Combination with accessories		
Auxiliary contact	OF	
Alarm contact	FB	
Shunt release	MX	
Over/Under voltage release	MV+MN	

Circuit diagram

Pole	1P	2P	3P	4P
Contacts Configurations				

Dimension(mm)



YRL7-63LE 6KA RCBO(Electromagnetic Type)Standard:IEC61009-1

Summary

Model	YRL7-63LE	YRL7-63L
Electrical Features		
Mode	Electromagnetic	
Type	AC,A	B
Rated current In	6,8,10,13,16,20,25,32, 40A,50A,63A,100A	
Poles	1P+N/2P/3P+N/4P	
Rated voltage Ue	230/240V/400/415V~	
Insulation voltage Ui	500V	
Rated frequency	50/60Hz	
Rated residual operating current(n)	30,100,300mA	
Break time under	≤0.1s	
Rated breaking capacity	6,000A	
Energy limiting class	3	
Rated impulse withstand voltage(1.5/50) Uimp	4,000V	
Dielectric test voltage at ind. Freq. for 1min	2kV	
Pollution degree	2	
Thermo-magnetic release characteristic	B.C	
Mechanical Features		
Electrical life	4,000 Cycles	
Mechanical life	10,000 Cycles	
Contact position indicator	Yes	
Protection degree	IP20	
Reference temperature for setting of thermal element	30℃	
Ambient temperature(with daily average≤35℃)	-5℃~+40℃	
Storage temperature	-25℃~+70℃	
Installation		
Terminal connection type	Cable/Pin-type busbar/	
	U-type busbar	
Terminal size top/bottom for cable	25mm2 18-3AWG	
Terminal size top/bottom for busbar	25mm2 18-3AWG	
Tightening torque	2.5Nm 22In-lbs	
Mounting	On DIN rail EN60715(35mm)	
	by means of fast clip device	
Connection	From top and bottom	
Combination with accessories		
Auxiliary contact	OF	
Alarm contact	FB	
Shunt release	MX	

YRSP-A2 AC Surge Protective Device

Product application

YRSP-A2 AC surge protectors are designed according to IEC 61643-11 and GB standards.With strong surge discharge capacity, the maximum discharge current of 20-80kA (8/20us), suitable for all levels of distribution system protection. Multiple combinations can be selected according to the different distribution systems (TT/TNIT).

Product benefits

- □ High power surge protection
- □ Standard modular installation
- □ Built-in instantaneous over current breaker
- □ Plug able and changeable module
- □ Single module maximum discharge current 20-80kA(8/20us)
- □ Remote signal(optional)
- □ Approval:Provided on request

Technical data

Type	YRSP-A2			
Pole	1P	2P	3P	4P
SPD Port	One-port			
SPD Type	combination type SPD			
Test categories	Ⅱ test			
Rated Voltage	220V AC 50~60Hz			
Max.Continuous Operating Voltage	275/385/420/440/480			
Nominal Discharge Current	10kA	20kA	30kA	40kA
Max.Discharge Current	20kA	40kA	60kA	80kA
Protection level	1.45kA	1.8kA	2.2kA	2.5kA
Fuse or Circuit Breaker/Backup Protector	125AgL/gG			
Response Time	≤25ns			
Dimensions	18*90*69	36*90*69	54*90*69	72*90*69
Disconnection Indicator	Green: normal Red: invalid			
Install Traverse Area	6~25mm^2			
Mounting	35mm Standard Guide Rail(EN50022/DIN46277-3)			
Operating Temperature	-40~85℃			
Housing Material	UL94V-0			
Protection Rating	IP20			
Certification	CE, type test			
Remote Communication Alarm	Normally open/normally closed contact terminals (optional)			
Teleport Connection Capacity	Maximum 1.5mm2 single strand/flexible cord			

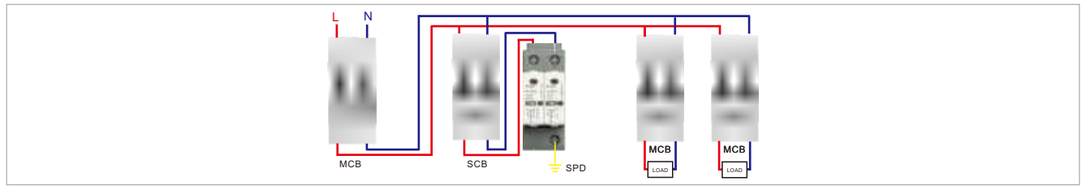
YRSP-A12 T1+T2(B+C)AC Surge Protective Device

Product features

- □ Class I+II / Type 1+2 surge protective devices.
- □ For using in the lightning protection zones concept at boundary 1-2.
- □ The core parts are metal oxide vristor components with high discharge capacity.
- □ Reliable control thanks to Thermo Dynamic Control disconnector.
- □ Fault indication via red mark in the inspection window.
- □ Without remote signaling contact for control device.
- □ Protection mode --- L-PE , N-PE.

Technical Parameter

Model. No.	YRSP-A12	
SPD protection conforms to IEC 61643-11 / EN 61643-11	Type 1+2	
Protection level conforms to DIN VDE0675-6	B+C	
Type of Network	TT , TN	
Protection mode	L→PE , N→PE	
Nominal Voltage UN	230 Vac/50(60)Hz	
Maximum continuous operating voltage UC	275 Vac/50(60)Hz	
Short-circuit withstand capability Isccr	40 kA	
Continuous operating current IC	<20 μA	
Rated load current IL	80 A	
Residual current IPE	≤20 μA DC ≤500 μA AC	
Standby power consumption PC	≤25 mVA	
Maximum discharge current (8/20μs) Imax	50 kA	60 kA
Nominal discharge current (8/20μs) In	20 kA	30 kA
Impulse discharge current (10/350μs) Iimp	7kA/12.5 kA	
Voltage protection level Up	≤1.7 kV	
Isolation resistance Risol	> 1000 MΩ	
Response time	≤25 ns	
I/O Connections	By screw terminal:10-35mm²By connection bus	
Mounting type	Symmetrical rail (EN50022/DIN46277-3)	
Degree of protection	IP20	
Housing material	UL94V-0	
Ambient temperature	-40°C ~+80°C	
Altitude	≤2000 m (amsl (above mean sea level	
Permissible humidity	30%~90%	



YRQ2PC Dual Power Automatic Transfer Switch (ATS)

Summary

YRQ2PC series dual power automatic transfer switch is a newly developed miniature household power transfer switch.
The switch is mainly used to check whether the normal or alternative power supply is normal. When the normal performance is abnormal, replace the power supply and work immediately to ensure the continuity, reliability and safety of network components. This product is specially used for household rail type installation, especially for DIN rail type distribution box.
YRQ2PC series automatic transfer switch is suitable for emergency power supply system with 50 or 60 Hz AC rated 400V and 125A. It has compact structure, reliable conversion, convenient installation and maintenance, and long service life. It is widely used in various occasions where continuous power failure is not allowed.It can be operated either electrically or manually.YTS series automatic transfer switch meets the requirements of low voltage switchgear and control cabinet specified in IEC 60947-6-1.This dual power supply is specially designed for photovoltaic inverter, and the standby power supply can also connect the generator.

Note1: The Generator type mustn't connect to the Inverter.

Note 2: The source B of inverter type must power on,otherwise the Inverter type ATS won't work.

Basic specification

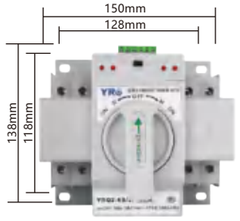
Model	YRQ2PC-125		YRQ2PC-125PV
Rated Current Ie	63A,100A,125A		
Insulation Voltage Ue	AC690V 50/60Hz		
Grade	AC400V 50/60Hz		
Pole	PC level; no overload and short circuit protection		
Pole	2P	3P	4P
Weight (kg)	0.65	0.75	0.85
Electrical life	2000		
Mechanical life	5000		
Reted Conditional short circuit Electricity capacity	50KA		
SCPD (backup)	RT16-00-63A		
Reted Impulse withstand voltage	8KV		
Control Circuit Us AC220V	AC220V 50/60Hz		
Working Voltage Range	85%-110%Us		
Auxiliary Circuit	2Independent Relays with 2 transfer contact. Contact Capacity: AC220V 50/60Hz, Ie=5A		
Contact Transfer Time	30ms		
Operation Transfer Time	30ms		
Return Transfer Time	30ms		
Off-Time	30ms		
Source A	On Grid Power		Solar Inverter
Source B	On Grid Power/Generator		On Grid Power

YRQ2CB Dual Power Automatic Transfer Switch (ATS)

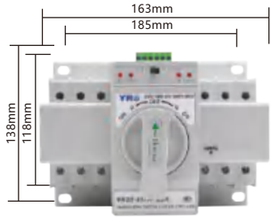
Product features

The dual power automatic switch is used to switch between two power sources. It is divided into common power supply and standby power supply. When the common power supply is powered off, the standby power supply is used. When the common power supply is called, the common power supply is restored), if you do not need automatic switching in special circumstances, you can also set it to manual switching (this type of manual / automatic dual-use, arbitrary adjustment).

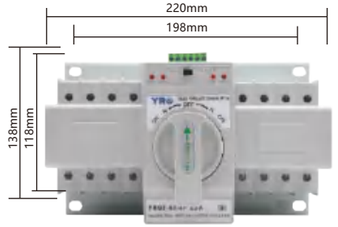
YRQ2CB-63(63A)



2P Dimensions

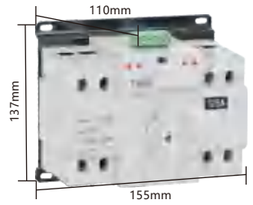


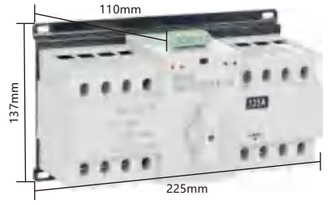
3P Dimensions



4P Dimensions

YRQ2CB-125(125A)





Product parameters

Product brand	YRO	Display function	Indicator display
Product name	Dual power automatic transfer switch	Product Size	185mm x 138mm x 115mm
Product number	YRQ2CB-63(63A) | YRQ2CB-125(125A)	Operation method	Automatic and manual
Working frequency	50Hz/60Hz	ATS level	CB Class
Rated voltage	AC400V	Conversion time	≤2s
Operating Voltage	AC220V	Current specifications	10A-63A-125A
Standards compliant	IEC60947-6-1	Conversion method	Self-return

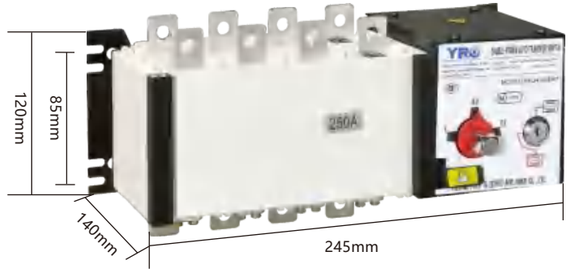
YRQ4PC Dual Power Automatic Transfer Switch (ATS)

Product parameters

Product brand	YRO	Display function	External indicator
Product name	Dual power automatic transfer switch	Current specifications	32A-3200A
Product number	YRQ4-4P	Operation method	Automatic and manual
Working frequency	50Hz	ATS level	PC grade
Rated voltage	AC400V	Conversion time	≤1s
Certified Product	CE Certification	Use level	AC-33iB
Standards compliant	IEC6094-6-1	Conversion method	Self-return

Product wiring

YRQ4PC-125/4P Dimensions



YRMTS Manual Transfer Switch (MTS)

Summary

YRMTS-63 and YRMTS-125 Series can be used as a hand-operated miniature dual power transfer switch. In the case of YRMTS Series is suitable for use in industrial, shopping malls, shops. one side breaker turn on, the other side of the circuit breaker can only be kept disconnected, and the protection functions of the common power supply (mains) and standby power supply line switching can be realized.
hospitals, mines, schools, government agencies and other special places with two main lines, often used with voltage regulators and other electrical appliances.

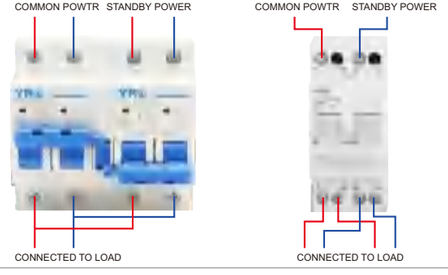
Product Features

The product has increased the interlocking function, that is, in the case of the closing of one side of the circuit breaker, the other side of the circuit breaker can only maintain the disconnected state, and realize the protection functions such as line switching.
The product has overload and short circuit protection functions, can be automatically disconnected when a fault occurs on the line, protect the line.
Power in and out, in line with the characteristics of the power line, easy installation.

Technical Parameters

Name	Manual transfer switch	
Rated current	16-63A	80-125A
Pole	1P, 2P,3P,4P	
Rated working voltage	230/400VAC; 250/550VDC	
Frequency	50/60HZ	
Rated short circuit breaking capacity	6000A	10000A

Wiring drawing



YRAS80-DB AC Isolator Din-Rail Mounting

Rail mounting

Mounting and removal of the fourth pole and auxiliary contact are quick and simple tool-free.

Add-on Auxiliary Contacts
The isolating switch adopts the same auxiliary contact, and the auxiliary contact and the main pole of the switch act at the same time.A normally open contact with pre-disconnect function can be provided as required.
The isolation switch can be installed with up to four auxiliary accessories (2 on the right, 2 on the left)

Switch body
Aswich switch adopts compression contact opening and closing technology, and has the function of complete disconnection indication.According to its mechanical principle, this switch can work normally in any position, without having to consider the problem of dropping passengers..

Terminal shrouds
The isolation switch terminal shroud has a simple appearance design, high-quality transparent PC material, flame-retardant, high strength,no color change after long-term use, high-quality waterproof and easy to install.

Rotating Handle Parts
Rotating handle, with anti-misoperation padlock design to prevent misoperation, safe and reliable; using high-quality flame-retardant materials, insulation and impact resistance; elegant and stylish design,beautiful and durable.

Side Mount Add-on Fourth Pole
Simultaneous or early contact operation of the fourth pole with respect to the switch disconnector poles.

Parameter

Type		YRAS80-DB16R-3	YRAS80-DB20R-3	YRA580-D825R-3	YRAS80-DB32R-3	YRASB0-DB40R-3	YRAS80-DB63R-3	YRAS80-DB8OR-3
	4P	YRAS80-D816R-4	YRA580-DB20R-4	YRAS80-D825R-4	YRAS80-DB32R-4	YRAS80-DB40R-4	YRAS80-DB63R-4	YRAS80-DB8OR-4
Current(≤40°C Agreed heating current		16A	20A	25A	32A	40A	63A	80A
IEC rated operational current Ie AC-21A/B(≤690v)		16A/16A	20A/20A	25A/25A	32A/32A	40A/40A	63A/63A	80A/80A
IEC rated operational current Ie AC-22A/B	415V	16A/16A	20A/20A	25A/25A	32A/32A	40A/40A	63A/63A	80A/80A
	500V							
	690V					32A/40A	40A/63A	63A/80A
IEC rated operational current Ie AC-23A/B	415V	16A/16A	20A/20A	25A/25A	32A/32A	40A/40A	63A/63A	80A/80A
	500V				25A/25A			63A/63A
	690V							40A/40A
IEC rated operational current Ie DC-21B	110VDC	16A①	20A①	25A①	32A①	40A①	63A①	80A①
	250VDC	16A②	20A②	25A②	32A②	40A②	63A②	80A②
	400VDC	16A③	20A③	25A③	25A③			40A③
IEC rated operational power(3 phase) AC-23A/B	415V	7.5KW	9Kw 11Kw	11KW	15KW	18.5KW	30Kw	37KW
	500V							
	690v		11KW	15KW				
Short circuit withstand current of fuse protection (kA rms expected value)								
Fuse class	415V	16A	20A	25A	32A	40A	63A	80A
Cross area of terminals		1.5~16mm2				2.5~35mm2		
Rated insulation voltage Ui		800V						
Rated impulse withstand voltage Uimp		8kv						
Mechanical Endurance		100000						
Ambient Temperature		Operating -25…+55°C Storage -40…+70°C						

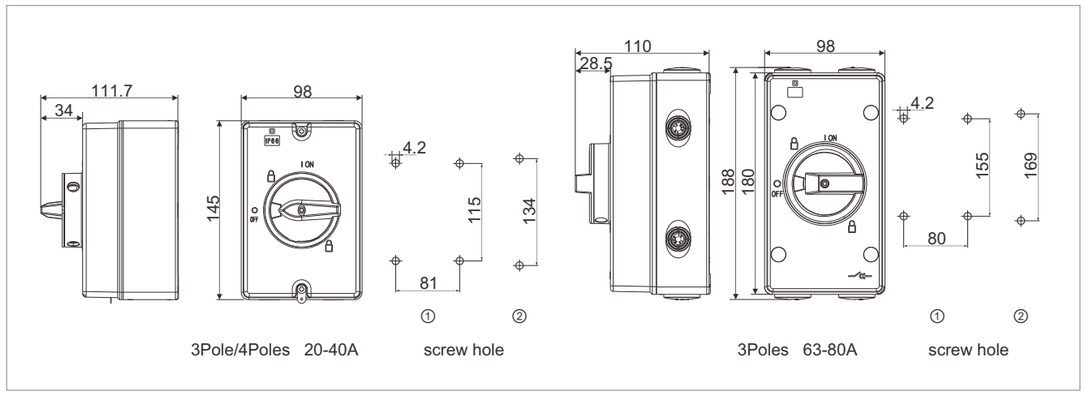
1.Each pole is used as positive and negative 2.Three poles are used in series with positive and negative poles, of which two poles are in series, and the other is negative
3.Four poles are used in series with positive and negative poles

YRAS69 AC Isolator 690V 80A

Summary

Current		20A	32A	40A	63A	80A
Type		EAS69-EL20R-4	EAS69-EL32R-4	EAS69-EL40R-4	EAS69-EL63R-3	EAS69-EL80R-3
Rated carry current		20A	32A	40A	63A	80A
Rated operating current AC-23A		16A	25A	32A	45A	45A
Rated operating current AC-3		12A	23A	30A	37A	37A
Rated power control	240V	4KW	7.5KW	9KW	15KW	15KW
AC-23A	440V	7.5KW	12.5KW	16KW	22KW	22KW
Rated power control	240V	3KW	5.5KW	7.5KW	11KW	11KW
AC-3	440V	5.5KW	11KW	15KW	18.5KW	18.5KW
UL-CSA	240V	3KW	5KW	5KW	10KW	10KW
Motor load	440V	7.5KW	10KW	10KW	20KW	20KW
Rated short-time withstand current		250A	400A	500A	600A	850A
Cable		0.5-10MM^2			1-16MM^2	
Screw torque		0.8-1.7N·m			1.5-2N·m	
Rated insulation voltage		690V				

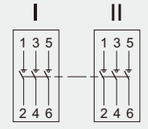
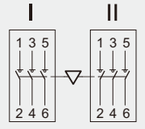
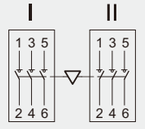
Dimension(mm)



YRAS80-DB80R AC Isolator Din-Rail Mounting

Parameter

		YRAS80-DB80R-IM2 105mm			YRAS80-DB80R-IM31 105mm			YRAS80-DB80R-IM32 105mm		
		Mechanical combination system: for 6/8			Mechanical interlock mechanism: for 3/4 pole I-I- I-II -II-II conversion			Mechanical interlock mechanism: for 3/4 pole I-O-II conversion		
										
Current(≤40°C Agreed heating current		63A	80A	100A	63A	80A	100A	63A	80A	100A
IEC rated operational current leAC-21 A/B(≤690v)		63A/63A	80A/80A	100A/100A	63A/63A	80A/80A	100A/100A	63A/63A	80A/80A	100A/100A
IEC rated operational current le AC-22A/B	415V	63A/63A	80A/80A	100A/100A	63A/63A	80A/80A	100A/100A	63A/63A	80A/80A	100A/100A
	500V	63A/63A	80A/80A	100A/100A	63A/63A	80A/80A	100A/100A	63A/63A	80A/80A	100A/100A
	690V	40A/63A	63A/80A	63A/80A	40A/63A	63A/80A	63A/80A	40A/63A	63A/80A	63A/80A
IEC rated operational current le AC-23A/B	415V	63A/63A	80A/80A	100A/100A	63A/63A	80A/80A	100A/100A	63A/63A	80A/80A	100A/100A
	500V		63A/63A			63A/63A			63A/63A	
	690V		40A/40A			40A/40A			40A/40A	
IEC rated operational current le DC-21B	110VDC	63A①	80A①	100A①	63A①	80A①	100A①	63A①	80A①	100A①
	250VDC	63A②	80A②	100A②	63A②	80A②	100A②	63A②	80A②	100A②
	400VDC		40A②			40A③			40A③	
IEC rated operational power(3phase) AC-23A/B	415V 500V 690V	30KW	37KW	45KW	30Kw	37Kw	45Kw	30Kw	37Kw	45Kw
Short circuit withstand current of fuse protection (kA rms expected value)										
Fuse class	415V	63A	80A	100A	63A	80A	100A	63A	80A	100A
Cross area of terminals		2.5~35mm2								
Rated insulation voltage Ui		800V								
Rated impulse withstand voltage Uimp		8kv								
Mechanical Endurance		100000								
Ambient Temperature		Operating -25...+55°C Storage -40...+70°C								

Type	YRAS80-IM280	YRAS80-IM3180	YRAS80-IM3280	YRAS80-SF150	YRAS80-SF200	YRAS80-SF320
Applied to	For the main body switch of 63A to 80A	For the main body switch of 63A to 80A	For the main body switch of 63A to 80A	150mm	200mm	320mm
Description	Mechanical combination system: for 6/8	Mechanical interlock mechanism: for 3/4 pole I-I-I+II-II-II conversion	Mechanical interlock mechanism: for 3/4 pole I-O-II conversion			
						

1.Each pole is used as positive and negative 2.Three poles are used in series with positive and negative poles, of which two poles are in series, and the other is negative
3.Four poles are used in series with positive and negative poles

YRVP Adjustable Over&Under Voltage Protector

• YRVP Series

YRVP Series Adjustable Over & Under Voltage Relay is a new generation of household electrical equipment protector, made by our company according to current city power condition. The control circuit is made up of imported elements. The product is made according to the modularization standard. It is of excellent and reliable performances and can work normally under abnormal voltage.

This series of product is of compact structure and beautiful appearance.

This product is in great demand in the market.

• Parameter

	YRVP-3	YRVP-4	YRVP-5	YRVP-6	YRVP-7	YRVP-6wifi	YRVP-3/3
Rated Voltage, Frequency:	230Vac 50/60Hz	230Vac 50/60Hz					380Vac 50/60Hz
Max.Loading Power	40A,60A,80A	63A					63A,100A
Over Voltage Protection:	230V~300V (default: 270V)						
Under Voltage Protection:	140V~210V (default: 170V)						
Delay Time:	1S~500S (default: 30S)						
Protection Action Time	0.1S~30S (default: 0.5S)						
Leakage Protection	×	✓	✓	×	×	×	×
Lightning Protection	×	×	✓	×	×	×	×
Energy meter (kwh)	×	×	×	✓	✓	✓	×
APP (wifi)	×	×	×	×	×	✓	×

YSH/YHT Distribution Box

• Summary

YHA /YHT series distribution box use high-quality fire-resistant and ABS materials reach IP65 protection .Degree the max current can be 125A.Can be used in outdoor environment to protect the heavy weather.

• Specification

Model	Product Quantity	Product Size	Product Weight
YHT-5WAY	40	118.5x159x88.6	0.39KG
YHT-8WAY	30	200.5x154.5x88.9	0.58KG
YHT-12WAY	20	255x200x106	0.89KG
YHT-15WAY	10	310x197.5x106	1.07KG
YHT-18WAY	10	364x197.5x106	1.25KG
YHT-24WAY	10	275.51x356.16x106.2	1.5KG
YHA-4WAY	30	142.8x99.5x210.3	0.63kg
YHA-8WAY	20	215x209x98	0.9kg
YHA-12WAY	10	298x259x140	1.7kg
YHA-18WAY	5	411x286.3x137.8	2 Row 2.36kg
YHA-26WAY	5	323.5x420x139.5	3 Row 2.72kg

• Dimensions