The product data referred to in the company shall be subject to material object. Subject to change without notice. The company has the final right to interpret.

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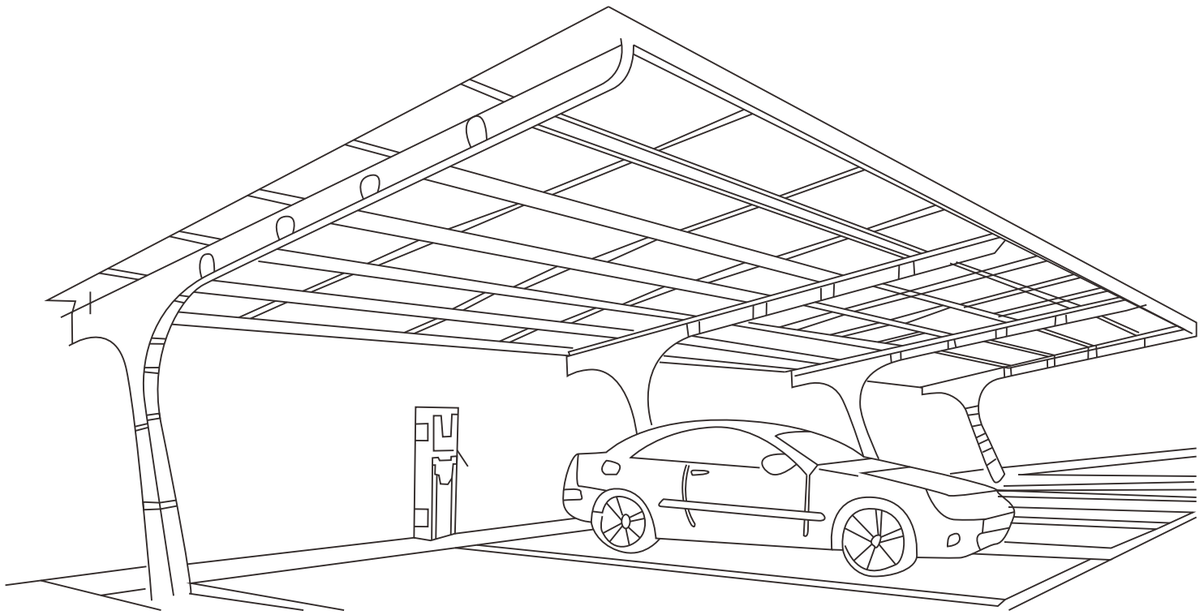
GEYA

Solar Product Catalog



GEYA

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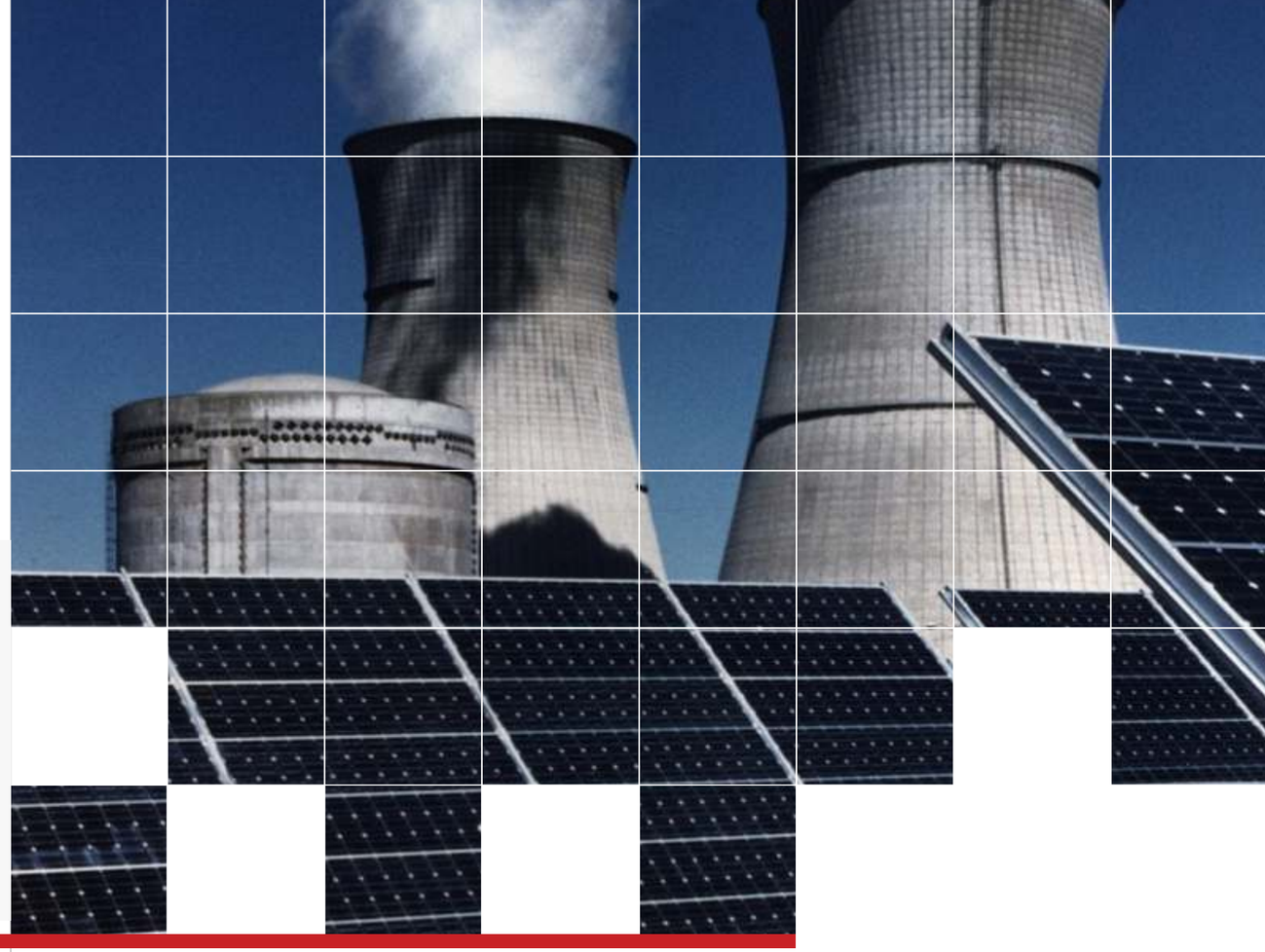
ZHEJIANG GEYA ELECTRICAL CO.,LTD



GEYA®

Do The Best

GEYA®

SOLAR PRODUCT CATALOG

Empower the world with solar energy

ZHEJIANG GEYA ELECTRICAL CO.,LTD

SOLAR

Founded in 2007

ABOUT THE COMPANY

GEYA has been a leading solar system equipment supplier for many years. Founded in 2007, we have - for 15 years - shipped solar equipment all over the world. Our products are utilized in a range of applications, such as commercial and industrial solar installations, grid tie and off-grid systems, residential rooftop systems and more.

We have a proven track record in providing quality equipment that meets the latest industry standards. Our experience in product design and manufacturing is also extensive, and we can help you find what fits your specific project, including customized solar system components.

Commercial and industrial solar installations

Grid tie and off-grid systems

Residential rooftop systems









DIRECTORY

/Contents

Split Type ESS

Energy
4.6KWH ~ 13.82KWH

Cycle Life
6000次

Service Life
10年

All-in-one ESS

Power
3KW ~ 5KW

Energy
4.6KWH ~ 18.43KWH

Cycle Life
6000 times

Service Life
10 YEARS

Split Type Residential ESS (Battery)

Model		GESC-13.82	GESC-9.21	GESC-4.6
System Data	Battery Type	LiFePO4		
	Nominal Energy (kWh) @25°C	13.82	9.21	4.6
	Nominal Voltage (V)	51.2		
	Voltage Range (V)	44.8~57.6		
	Max. Charge Current (A)	110	110	90
	Max. Discharge Current (A)	110	110	90
	Match Inverter Power (kW)	5	5	3
	SOC	Intelligent Algorithm		
	Communication	CAN/RS485		
	Protective function	Over Voltage Protection, Low Voltage Protection, Over Current Protection, Over Temperature Protection, Low Temperature Protection, Short Circuit Protection, Reverse Polarity		
	DC Circuit Breaker	Yes		
General Data	Dimension [W*D*H] (mm)	600X190X1500	600X190X1050	600X190X600
	Weight (kg)	⩽180	⩽126	⩽67
	Installation Location	Indoor / Outdoor		
	Mounting Method	Floor-mounted	Floor-mounted / Wall-mounted	
	Operating Temperature (°C)	-10~55		
	Storage Temperature (°C)	-20~45		
	Humidity	5%~95%		
	Ingress Rating	IP65		
	Maximum Elevation (m)	2000		
	Cooling Strategy	Natural Convection		
	Single BMS Power Consumption	<2W (Work), <50mW (Sleep)		
	Life Span (year)	10		
	Maximum Parallel Connections	2		
	Compliance	IEC 62619, IEC 63056, IEC 62040-1, IEC 61000-6-1, IEC 60068-2-52, UN38.3		

Easy Installation: Support two installation methods: landing and wall hanging.

High Security: Use LiFePO4 battery inner core, which has higher safety and longer cycle life.

Wide Application Scenarios: Both on-grid, off-grid, and backup power functions. Support peak load shifting, power generation used by self, battery priority and other modes.

Easy Maintenance: External interface adopts quick plug connector.

All-in-one Residential ESS (Hybrid Inverter + Battery)

Model		GESC-18.43	GESC-13.82	GESC-9.21	GESC-4.6
PV Input	Max. PV Input Power (W)	7000	7000	7000	4600
	Max. PV Input Voltage (V)	500			
	Startup Voltage (V)	150			
	MPPT Voltage Range (V)	125~500			
	Nominal Input Voltage (V)	360			
	Max. PV Input Current (A)	14			
	Max. Short-circuit Current (A)	14			
	No. of MPPT Trackers	2			
	Strings Per MPPT Tracker	1			
AC Input and Output	Nominal AC Power (W)	5000	5000	5000	3000
	Max. Apparent AC Power (W)	5000	5000	5000	3000
	Nominal AC Voltage [range] (V)	230 (176~270)	230(176~270)	230(176~270)	230(176~270)
	Frequency (Hz)	50/60	50/60	50/60	50/60
	Max. AC Current (A)	21.7	21.7	21.7	13
	Displacement Power Factor	0.8Leading ... 0.8 Lagging			
	Total Harmonic Distortion	⩽2%			
EPS Output	Nominal Power (W)	5000	5000	5000	3000
	Max. Power (W)	5000	5000	5000	3000
	Rated Voltage[AC] (V)	230	230	230	230
	Frequency (Hz)	50/60	50/60	50/60	50/60
	Max. AC Current (A)	21.7	21.7	21.7	13
	Switch Time	10ms			
	Total Harmonic Distortion	⩽2%			
	Parallel Operation	Yes			
	Compatible with The Generator	Yes (Signal provided only)			
Efficiency	European Efficiency	97%			
	Max. Efficiency	97.6%			
Battery Data	Battery Type	LiFePO4			
	Battery Voltage Range (V)	44.8~57.6			
	Nominal Voltage (V)	51.2			
	Max. Charge/Discharge Current (A)	95/110	95/110	95/110	95/62.5
	Operating / Storage Temperature	-10~55°C/-20~45°C			
	Communication	CAN/RS485			
	Reverse Polarity	Yes			
	Cooling Strategy	Natural Convection			
System Data	Dimension [W*H*D](mm)	580X1800X350	580X1800X350	580X1800X350	580X1800X350
	Weight (kg)	⩽260	⩽216	⩽150	⩽105
	Humidity	5%~95%			
	Ingress Rating	IP20			
	Phase	Single - Phase			
	Life Span (year)	10			
	Communication Interface	CAN/RS485/WiFi/LAN/DRM			
	Compliance	EN/IEC 61000-6-1, EN/IEC 61000-6-3/A1/AC, EN/IEC 62109-1, EN/IEC 62109-2, AS/NZS 4777.2			

GESC

Energy storage cube

Application

- Hospital, Bank, Airport, Power plant and Other Systems
- Solar energy storage cabiner
- Long-last UPS battery
- Telephone Switch, Telecom Room SMR, Hospitals

Banks and large and medium-sized enterprises application distributed server room independent UPS

	Model	GESC10L	GESC15L	GESC20L
Electrical Characteristics	Rate voltage(VDC)	48	48	48
	Module rate capacity(AH)	100	100	100
	Built in module quantity	2	3	4
	Energy storage(KWH)	9.6	14.4	19.2
	Cycle life	DOD(⩾1800 cycles to 85% DOD)		
	Months self discharge	⩽2%		
	Efficiency of charge	100% at 0.2C		
	Efficiency of discharge	96~99% at 1C		
	Built in BMS(Yes/No)	YES		
Electrical Characteristics	Charge voltage(Vdc)	54.8±0.2V		
	Charge mode	0.2C to 54.8V, then 54.8V, charge current to 0.02C(CC/CV)		
	Charge current(A)	40	60	80
	Max. Charge current(A)	60	90	120
	Charge cut-off voltage(Vdc)	54.8±0.2V		
Standard Charge	Contiunous current(A)	60	90	120
	Discharge cut-off voltage(VDC)	37.5		
Environmental	Charge temperature	0°C to 45 °C (32F to 113F)@60±25% Relative Humidity		
	Discharge temperature	-20°C to 60 °C (-4F to 140F)@60±25% Relative Humidity		
	Storage temperature	0°C to 40 °C (32F to 104F)@60±25% Relative Humidity		
	IP class	IP60		
Mechanical	Material system	LiFePO4		
	Case material	Metal		
	Dimensions: H*W*D(mm)	1050*600*600		
	Termial	M8		
	Protocol(Optional)	SMBus/RS485/RS232		
	SOC(Optional)	LED/LCD		

GESC

Energy storage cube

Application

- Hospital, Bank, Airport, Power plant and Other Systems
- Solar energy storage cabiner
- Long-last UPS battery
- Telephone Switch, Telecom Room SMR, Hospitals

Banks and large and medium-sized enterprises application distributed server room independent UPS

	Model	GESC10H	GESC15H	GESC20H
Electrical Characteristics	Rate voltage(VDC)	51.2	51.2	51.2
	Module rate capacity(AH)	200	150	200
	Built in module quantity	2	4	4
	Energy storage(KWH)	10.24	15.36	20.48
	Cycle life	DOD(⩾1800 cycles to 85% DOD)		
	Months self discharge	⩽2%		
	Efficiency of charge	100% at 0.2C		
	Efficiency of discharge	96~99% at 1C		
	Built in BMS(Yes/No)	YES		
Electrical Characteristics	Charge voltage(Vdc)	54.8±0.2V		
	Charge mode	0.2C to 54.8V, then 54.8V, charge current to 0.02C(CC/CV)		
	Charge current(A)	40	60	80
	Max. Charge current(A)	60	90	120
	Charge cut-off voltage(Vdc)	54.8±0.2V		
Standard Charge	Contiunous current(A)	60	90	120
	Discharge cut-off voltage(VDC)	40		
Environmental	Charge temperature	0°C to 45 °C (32F to 113F)@60±25% Relative Humidity		
	Discharge temperature	-20°C to 60 °C (-4F to 140F)@60±25% Relative Humidity		
	Storage temperature	0°C to 40 °C (32F to 104F)@60±25% Relative Humidity		
	IP class	IP60		
Mechanical	Material system	LiFePO4		
	Case material	Metal		
	Dimensions: H*W*D(mm)	1050*600*600		
	Termial	M8		
	Protocol(Optional)	SMBus/RS485/RS232		
	SOC(Optional)	LED/LCD		

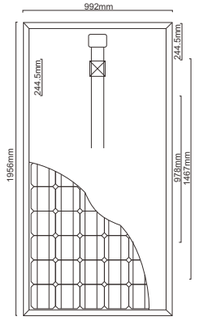
GYSP-250M/300M

Monocrystalline Solar Module

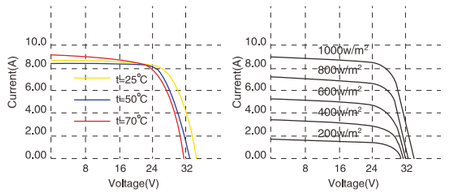
Mechanical Data		
	GYSP-250M	GYSP-300M
Cell type	Mono156.75mm*156.75mm	Mono156.75mm*156.75mm
No.of cells	60 in series(6*10)	72 in series(6*12)
Dimensions	1650*992*35mm	1956*992*35mm

Waranty and Certifications	
Warranty	25 years limited power warranty
	10 years limited product warantty
Certificats	safety class II ,IEC61215, IEC61730

Electrical Data		
(STC: Irradiance 1000w/m^2, module temperate 25°C, AM=1.5)		
Power	250WP	300WP
Open circuit voltage(Voc)	36.91V	44.63V
Max. power voltage(Vmp)	30.73V	37.02V
Short circuit current(Isc)	9.03A	9.23A
Max. power voltage(Imp)	8.14A	8.11A
Power Tolerance	±3%	±3%
Max. system voltage	1000V	1000V
Operating temp.	-40°C~85°C	-40°C~85°C
NOCT	47±2°C	47±2°C
Temp. coefficient Isc	0.06%/°C	0.06%/°C
Temp. coefficient Voc	-0.34%/°C	-0.34%/°C
Temp. coefficient Power	-0.42%/°C	-0.42%/°C



I-V Cures



Capacity: 800MW/Year

Employees: 100 persons

Customers: more than 15 countries

Established: 2010 year

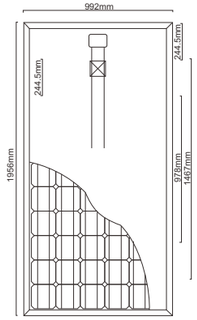
GYSP-320P-335P

Polycrystalline Solar Module

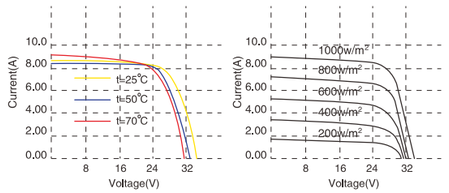
Mechanical Data	
Cell type	Poly 156.75mm*156.75mm
No.of cells	72 in series(6*12)
Dimensions	1956*992*40mm

Waranty and Certifications	
Warranty	25 years limited power warranty
	10 years limited product warantty
Certificats	safety class II ,IEC61215, IEC61730

Electrical Data				
(STC: Irradiance 1000w/m^2, module temperate 25°C, AM=1.5)				
Power	320WP	325WP	330WP	335WP
Open circuit voltage(Voc)	44.60V	45.56V	45.83V	46.10V
Max. power voltage(Vmp)	36.60V	36.90V	37.18V	37.45V
Short circuit current(Isc)	9.25A	9.28A	9.35A	9.42A
Max. power voltage(Imp)	8.78A	8.81A	8.88A	8.95A
Power Tolerance	0-5W			
Max. system voltage	1000V			
Operating temp.	-40°C~85°C			
NOCT	47±2°C			
Temp. coefficient Isc	0.06%/°C			
Temp. coefficient Voc	-0.34%/°C			
Temp. coefficient Power	-0.42%/°C			



I-V Cures



Capacity: 800MW/Year

Employees: 100 persons

Customers: more than 15 countries

Established: 2010 year

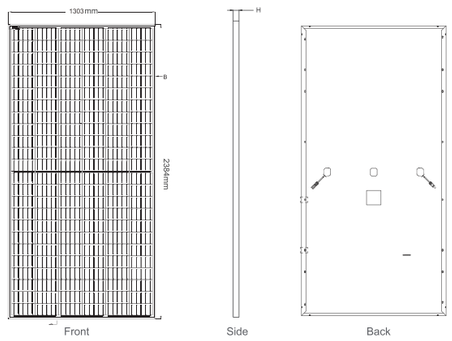
GYSP-HC650M~660M

Monocrystalline Solar Module

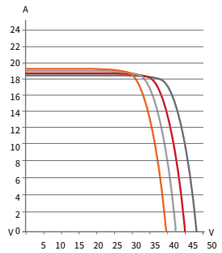
Data	
Cell	Mono PERC 210mm*210mm
Dimensions	2384*1098*35mm
No. of cells	110(5*22)
Front Glass	3.2mm, Anti-Reflection Coating, High Transmission
Frame	Anodized Aluminium Alloy
Junction Box	IP67 Rated
Packaging	31pcs per Pallet
Cable	1x4.0mm^2, 30cm Length or Customized Length

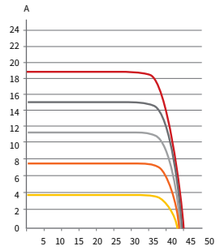
Operating Conditions	
Maximum System	Voltage 1000V/1500V DC(IEC)
Operating Temp	-40°C~+85°C
Maximum Series Fuse	20A
Maximum Static Load, Front	5400Pa
Maximum Static Load, Back	2400Pa
NOCT	45±2°C
Safety Class	Glass II

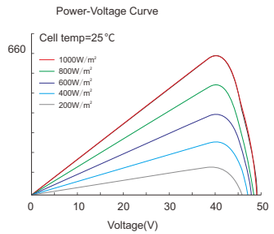
Electrical Parameters at stc			
Max. Power(Pmax)	650W	655W	660W
Max. Power Voltage(Vmp)	37.40V	37.6V	37.8V
Max. Power Current(Imp)	17.38A	17.42A	17.46A
Open-circuit Voltage(Voc)	45.2V	45.4V	45.6V
Short-circuit Current(Isc)	18.46A	18.49A	18.55A
Module Efficiency(%)	20.9%	21.1%	21.2%
Power Tolerance	0~+5W		
Temperature Coefficients of Pmax	-0.55%/°C		
Temperature Coefficients of Voc	-0.29%/°C		
Temperature Coefficients of Isc	0.048%/°C		
STC Irradiance 1000W/m^2, Cell Temperature 25°C, AM=1.5			



Characteristics







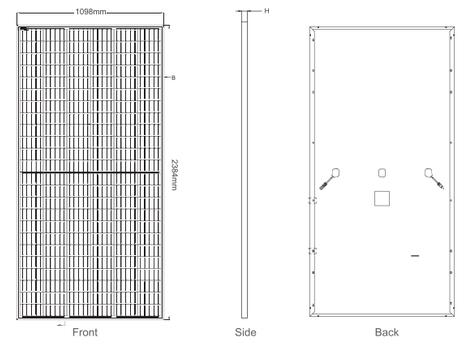
GYSP-210HC540M~550M

Monocrystalline Solar Module

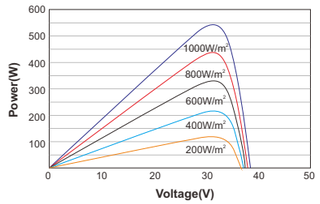
Data	
Cell	Mono PERC 210mm*210mm
Dimensions	2384*1303*35mm
No. of cells	132(6*22)
Front Glass	3.2mm, Anti-Reflection Coating, High Transmission
Frame	Anodized Aluminium Alloy
Junction Box	IP67 Rated
Packaging	31pcs per Pallet
Cable	1x4.0mm^2, 30cm Length or Customized Length

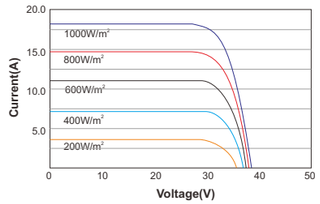
Operating Conditions	
Maximum System	Voltage 1000V/1500V DC(IEC)
Operating Temp	-40°C~+85°C
Maximum Series Fuse	20A
Maximum Static Load, Front	5400Pa
Maximum Static Load, Back	2400Pa
NOCT	45±2°C
Safety Class	Glass II

Electrical Parameters at stc			
Max. Power(Pmax)	540W	545W	550W
Max. Power Voltage(Vmp)	31.20V	31.40V	31.60V
Max. Power Current(Imp)	17.33A	17.37A	17.40A
Open-circuit Voltage(Voc)	37.50V	37.70V	37.90V
Short-circuit Current(Isc)	18.41A	18.47A	18.52A
Module Efficiency(%)	20.70%	20.90%	21.00%
Power Tolerance	0~+5W		
Temperature Coefficients of Pmax	-0.55%/°C		
Temperature Coefficients of Voc	-0.29%/°C		
Temperature Coefficients of Isc	0.048%/°C		
STC Irradiance 1000W/m^2, Cell Temperature 25°C, AM=1.5			



Characteristics





GESP

48100 ESS Battery

51.2V100AH, 5.1KWH

Battery Specifications			
Cell	Capacity	100Ah	
	Nominal Voltage	3.2V	
	Dimension	49X160X118mm	
	Weight	2.0± 0.1kg	
Battery parameters	Combination Method	16A1P	
	Capacity	Nominal Capacity:100Ah	Minimal Capacity:(0.2C)100Ah
	Voltage	Nominal Voltage:51.2V	Cut-off Voltage:43.2V~57.6V
	Charge	Standard Charge:0.2C(20A)	Quick Charge:0.5C(50A)
	Discharge	Discharge Current : 0~70A	
	Weight	43±1Kg	
	Dimension	482×480×133±2mm(not including IO ports and switch)	
	Operating Temperature	Charge:0℃~45℃	Discharge:20℃~60℃
Parallel options	Communication type	CAN for PCS,RS485 for parallel	
	Parallel Qnt	Up to 6 units	
	Circulation current limiting	Yes,10A	

Technical Requirements

Testing Conditions(unless otherwise specified)

Temperature:15~35 ℃

Relative Humidity: 45%~75%

Atmospheric pressure:86~106Kpa

Electrical Characteristics

ITEM	Testing Instruction	Requirements
Standard Charge	Charge the cell initially with 0.5C Constant Current and then with Constant Voltage at 3.6V till charge current declines to 0.05C	
Nominal Capacity	Measure discharge capacity with 1C discharge current to 2.7V cut-off after standard charge.	≥100Ah
Cycle Life	Measure the capacity after 3000 cycles of standard charge and discharge at 0.5C current to 2.70V cut-off	≥80% of Nominal Capacity
Storage Characteri stics	Capacity after 30 days storage at 25℃ after standard charge Capacity after 7days storage at 60 ℃ after standard charge	Retention capacity ≥90%

Environmental Characteristics

ITEM	Testing Instruction	Requirements
Temperature test	Measure capacity with 0.5C constant discharge current to 2.7V cut-off at each temperature after	70% at 0°C 100% at 25°C 96% at 60°C
Constant Temperature /humidity	Keep the battery at 40°C and 90%RH for 96hrs	Recovery capacity ≥ 85%

Mechanical characteristics

ITEM	Testing Instruction	Requirements
Vibration	After standard charge, fixed the cell to vibration table and subjected to vibration cycling that the frequency is to be varied at the rate of 1Hz per minute between 10Hz~55Hz, the excursion of the vibration is 1.6mm. The cell shall be vibrated for 30 minutes per axis of XYZ axes.	The battery shall not rupture, smoke, catch fire, vent or leak.
IFPacting test	After vibration, the battery will be IFPacted 1000±10 times (60±20 times per minute) with the acceleration of 100 m/s2 and pulse lasting time 16ms.	
Free fall	IFPacting, the battery will be dropped free five times in three mutually perpendicular directions from the height of 1.0m onto a hard board with the thickness of 20mm	

Mechanical characteristics

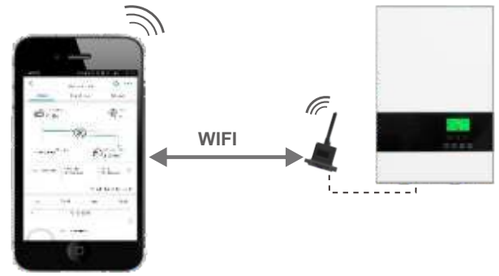
ITEM	Testing Instruction	Requirements
Short Circuit	After standard charge, the battery located in a fume hood is to be short-circuited by connecting the positive and negative terminals with an external load of less than 50 mΩ till the battery case temperature has returned to near ambient temperature.	The battery shall not rupture, smoke, catch fire, vent or leak.
Over Charge Test	After discharge to 2.7V cut-off with 0.5C discharge current, the battery is to be subjected to a 3C charging current. The specified charging current is to be obtained by connecting a resistor of the specified size and rating in series with the battery. The test time is to be calculated using the formula: tc=2.5c/3(Ic)	
Over Discharge Test	After standard charge, the battery will be connected with external with a maximum resistance load of 0.1Ω for 24hrs until it is completely discharged and the battery case temperature has returned to near ambient temperature.	

GVT-E PLUS

Hybrid Energy Storage Inverter

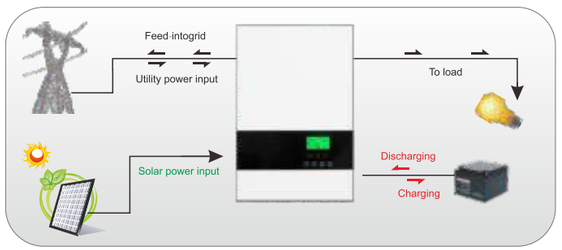
Key Features

- Hybrid solar inverter(on/off grid inverter)
- Output power factor PF=1.0
- On-grid with energy storage
- Configurable AC/Solar Charger priority via LCD setting
- Smart battery charger design for optimized battery performance
- Compatible to mains voltage or generator power
- Overload, Over temperature ,Short circuit protection, Fault record, History record
- External WI-FI devices
- Parallel operation with up to 9 units

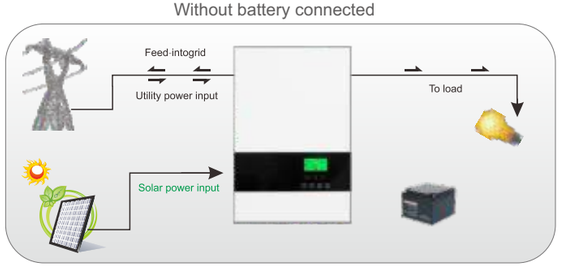


Hybrid Operation

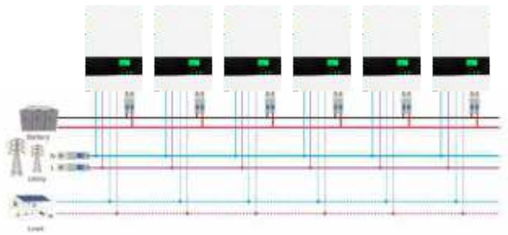
With battery connected



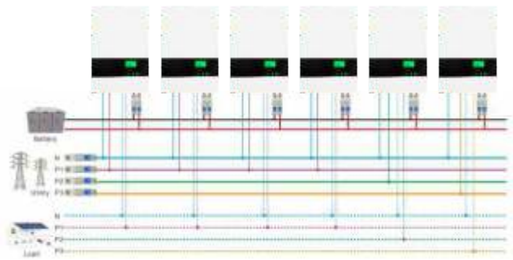
Without battery connected



■Single phase output up to 49.5 KW using 9 units



■ **Three phase output using either 3 units(16.5**KW)**or** max 9 units(49.5KW)



Wall Mounted Integrated Solar Power Inverter Technical Specification
Built-in MPPT Solar Controller

Model	GVT E PLUS 3k-24	GVT E PLUS 3.2k-48	GVT E PLUS 5.5k-48
Max PV Array Power		5000W	
Rated Output Power	3000W	3200W	5500W
Maximum PV Array Open Circuit Voltage		500VDC	
MPPT Range @ Operating Voltage		120-450VDC	
GRID-TIE OPERATIOM			
GRID OUTPUT(AC)			
Nominal Output Voltage		220/230/240VAC	
Output Voltage Range		184-265VAC	
Nominal Output Current	13.6A/13.0A/12.5A	14.5A/13.9A/13.3A	25A/23.9A/22.9A
Efficiency		Up to 93.5%	
OFF-GRID, HYBRID OPERATION			
GRID INPUT			
Acceptable Input Voltage Range		120-280VAC	
Frequency Range		50Hz/60Hz(Auto sensing)	
BATTERY MODE OUTPUT			
Nominal Output Voltage		220/230/240VAC	
Output Wave form		Pure sine wave	
BATTERY & CHARGER			
Nominal DC Voltage	24VDC	48VDC	
Maximum Solar Charge Current		90A	
Maximum AC Charge Current		60A	
Maximum Charge Current		90A	
Emergency output power			
Maximum output Power	3000W	3200W	5500W
Surge Power	6000W	6400W	11000W
Automatic Transfer Time		<8ms	
GENERAL			
INTERFACE			
Parallel Function		Yes	
Communication		USB or RS232/Dry-Contact	
ENVIRONMENT			
Humidity		0~90% RH (No Condensing)	
Operating Temperature		0 to 50℃	
Net Weight(KG)	9	10	
Rough Weight(KG)	10	11	
Dimension(W*D*H)mm		115x300x400	

GVT-II

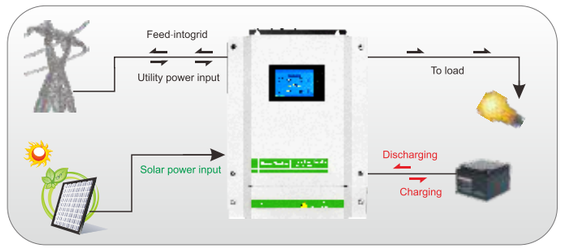
Hybrid Energy Storage Inverter

Battery Optional | On&Off Grid | Wi-Fi Function | 1kW =1kVA | Touch Screen | Bluetooth

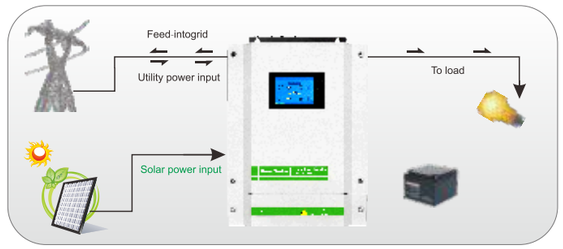
Key Features

- Touch screen display
- PV and utility power the load at the same time (can be set)
- Output power factor PF=1.0
- On&Off Grid with energy storage
- Energy generated record, load record, history information and fault record.
- Structure with dust filter.
- AC charging start and stop time setting.
- External Wi-Fi device optional.
- Parallel operation up to 9 units .
- Connected with battery optional.
- Wide PV input range120-450VDC.
- Independent CPU.
- MAX PV Array power 5500W.
- Solar and Utility supply power to the load When solar power is not sufficient to load.
- The CT sensor will monitor the power consumption of the system and will make sure no excess PV power is delivered to the Grid.

Hybrid Operation



With battery connected



Without battery connected

■Single phase output up to 49.5 KW using 9 units

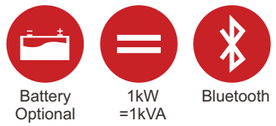
■Three phase output using either 3 units(16.5KW) or max 9 units(49.5KW)

Wall Mounted Integrated Solar Power Inverter Technical Specification
Built-in MPPT Solar Controller

Model	GVT II 3k-24	GVT II 3.2k-48	GVT II 5.5k-48
Max PV Array Power		5000W	
Rated Output Power	3000W	3200W	5500W
MPPT Range @ Operating Voltage		120-450VDC	
GRID-TIE OPERATIOM			
GRID OUTPUT(AC)			
Nominal Output Voltage		220/230/240VAC	
Output Voltage Range		184-265VAC	
Nominal Output Current	13.6A/13.0A/12.5A	14.5A/13.9A/13.3A	25A/23.9A/22.9A
Efficiency		Up to 93.5%	
OFF-GRID, HYBRID OPERATION			
GRID INPUT			
Acceptable Input Voltage Range		120-280VAC or 170-280VAC	
Frequency Range		50Hz/60Hz(Auto sensing)	
BATTERY MODE OUTPUT			
Nominal Output Voltage		220/230/240VAC	
Output Wave form		Pure sine wave	
BATTERY & CHARGER			
Nominal DC Voltage	24VDC	48VDC	
Maximum AC Charge Current		60A	
Maximum Charge Current		90A	
Emergency output power			
Maximum output Power	3000W	3200W	5500W
Surge Power	6000W	6400W	11000W
Automatic Transfer Time		<10ms	
GENERAL			
INTERFACE			
Parallel Function		Yes	
Communication		USB or RS232/WIFI/Generator Dry-Contact	
ENVIRONMENT			
Humidity		0~90% RH (No Condensing)	
Operating Temperature		0 to 50°C	
Net Weight(KG)	11.75	11.9	
Rough Weight(KG)	12.75	13.1	
Dimension(W*D*H)mm		345x476x133.2	

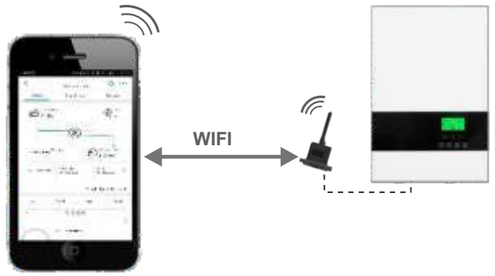
GVT-VM II

Solar Energy Storage Inverter



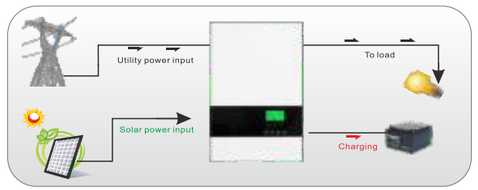
Key Features

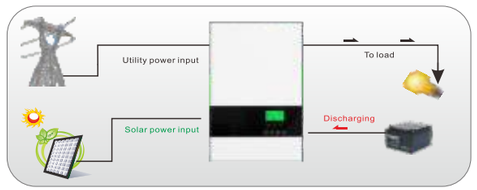
- Output power factor PF=1.0
- Configurable AC/Solar Charger priority via LCD setting
- Compatible to mains voltage or generator power
- Overload , Over temperature, Short circuit protection
- Integrated Bluetooth interface with Android App
- Supports USB On-the-Go function
- Reserved communication port(RS-485,CAN-BUS or RS-232)for BMS
- Battery independency
- User-friendly LCD operation
- Replaceable fan design



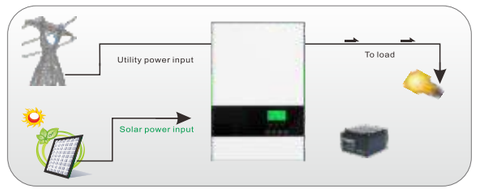
Hybrid Operation

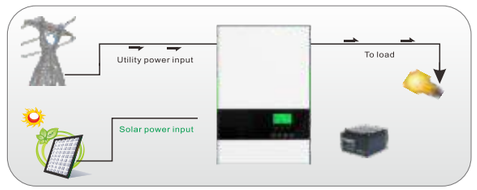
With battery connected





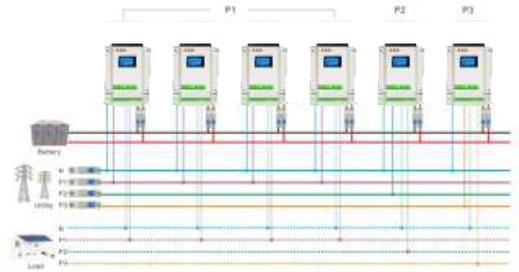
Without battery connected





■Single phase output up to 49.5 KW using 9 units

■Three phase output using either 3 units(16.5KW) or max 9 units(49.5KW)



Wall Mounted Integrated Solar Power Inverter Technical Specification
Built-in MPPT Solar Controller

Model	GVT VM II 3k-24	GVT VM II 5.5k-48
Rated Power	3000VA/3000W	5500VA/3000W
INPUT		
Voltage	230 VAC	
Selectable Voltage Range	170-280 VAC(For Personal Computers);90-280 VAC(For Home Appliances)	
Frequency Range	50 Hz/60 Hz(Auto sensing)	
OUTPUT		
AC Voltage Regulation(Batt.Mode)	230VAC ± 5%	
Surge Power	6000VA	11000VA
Efficiency(Peak)	up to 93.5%	
Transfer Time	10ms (For Personal Computers);20ms(For Home Appliances)	
Waveform	Pure sine wave	
BATTERY		
Battery Voltage	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	33 VDC	63 VDC
SOLAR CHARGER & AC CHARGER		
Maximum PV Array Open Circuit Voltage	500 VDC	
Maximum PV Array Power	5500 W	
MPPT Range @ Operating Voltage	120~450 VDC	
Maximum Solar Charge Current	100A	
Maximum AC Charge Current	80A	
Maximum Charge Current	100A	
PHYSICAL		
Dimension, D X W X H(mm)	100 X 300 X 440	
Net Weight(kgs)	9	10
Communication Interface	USB/RS232	
ENVIRONMENT		
Humidity	5% to 95% Relative Humidity(No-condensing)	
Operating Temperature	-10℃to 50℃	
Storage Temperature	-15℃to 60℃	
SPECIAL FUNCTION		
	Supports lithium battery BMS communication	

Note: Product specifications are subject to change without further notice.

1.5-2.4KW

GVT-VM II PRO

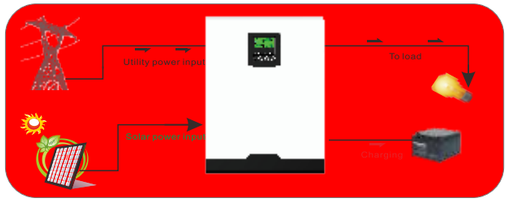
Off Grid Energy Storage Inverter

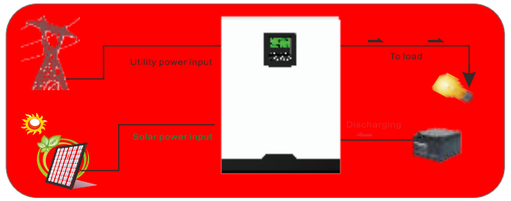
Key Features

- Pure sine wave solar inverter
- High PV input voltage range(90~450VDC)
- Built-in 80A MPPT solar charger
- Built-in anti-dusk kit for harsh environment(optinal)
- Compatibe with lithium-ion battery
- Smart battery charge design to optimize battery life
- Can meet the rich custom needs of customers
- Can work without battery
- Solar energy is provided directly to the load first
- WIFI&GPRS available for IOS and android

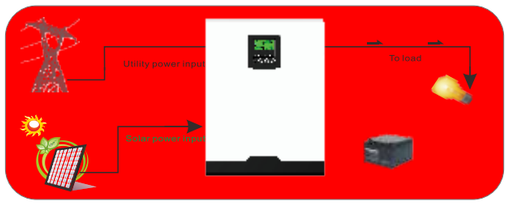
Hybrid Operation

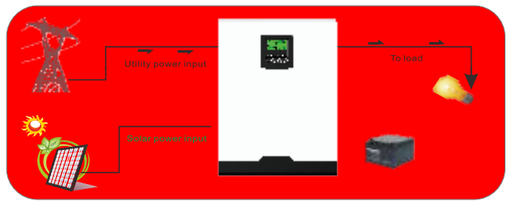
With battery connected





Without battery connected





Wall Mounted Integrated Solar Power Inverter Technical Specification
Built-in MPPT Solar Controller

Model	GVT VM II PRO 1500	GVT VM II PRO 3000
Rated Power	1500VA/1500W	3000VA/2400W
INPUT		
Voltage	230 VAC	
Selectable Voltage Range	170-280 VAC(For Personal Computers);90-280 VAC(For Home Appliances)	
Frequency Range	50 Hz/60 Hz(Auto sensing)	
SOLAR CHARGER & AC CHARGER		
Maximum PV Array Open Circuit Voltage	450 VDC	450VDC
Maximum PV Array Power	2000W	3000W
MPPT Range @ Operating Voltage	90~430 VDC	
Maximum Solar Charge Current	100A	
Maximum AC Charge Current	80A	
Maximum Charge Current	60A	
Maximum Efficienvy	98%	
BATTERY		
Battery Voltage	12 VDC	24 VDC
Floating Charge Voltage	13.5 VDC	27 VDC
Overcharge Protection	16 VDC	33 VDC
OUTPUT		
AC Voltage Regulation(Batt. Mode)	230VAC±5%	
Surge Power	3000VA	4800VA
Efficiency(Peak) BAT to INV	94%	
Efficiency(Peak) PV to INV	97%	
Transfer Time	10 ms(For Personal Computers); 20 ms(For Home Appliances)	
Waveform	Pure sine wave	
PHYSICAL	348 X 270 X 95	
Dimension, D X W X H(mm)	9	10
Net Weight(kgs)	USB/RS232	
Communication Interface	RS232(Standard)GPRS/WIFI(Optional)	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity(No-condensing)	
Operating Temperature	0°C to 55°C	
Storage Temperature	-15°C to 60°C	

Note: Product specifications are subject to change without further notice.

3.5-5.5KW

GVT-VM II PRO

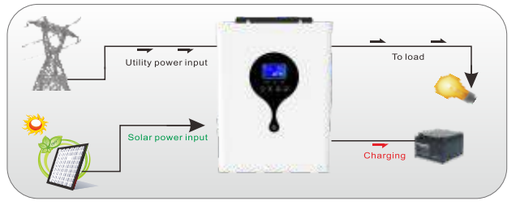
Solar Energy Storage Inverter

Key Features

- Pure sine wave solar inverter
- High PV input voltage range
- Built-in 100A MPPT solar charger
- With touch buttons
- Built-in anti-dusk kit for harsh environment
- Support lithium iron battery
- Battery equalization function to optimize battery performance and extend lifecycle
- Reserved communication port(RS485,CAN-BUS or RS232) for BMS (Optional)

Hybrid Operation

With battery connected



Without battery connected

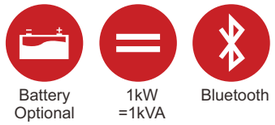
Wall Mounted Integrated Solar Power Inverter Technical Specification
Built-in MPPT Solar Controller

Model	GVT VM II PRO 3.5k-24	GVT VM II PRO 5.5k-48
Rated Power	3500VA/3500W	5500VA/5500W
INPUT		
Voltage	230 VAC	
Selectable Voltage Range	170-280 VAC(For Personal Computers);90-280 VAC(For Home Appliances)	
Frequency Range	50 Hz/60 Hz(Auto sensing)	
SOLAR CHARGER & AC CHARGER		
Maximum PV Array Power	4500W	5500W
MPPT Range @ Operating Voltage	120~450 VDC	
Maximum PV Array Open Circuit Voltage	500 VDC	
Maximum Solar Charge Current	100A	
Maximum AC Charge Current	60A	
Maximum Charge Current	100A	
BATTERY		
Battery Voltage	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	33 VDC	63 VDC
OUTPUT		
AC Voltage Regulation(Batt. Mode)	230VAC±5%	
Surge Power	7000VA	11000VA
Efficiency(Peak)	Up to 93.5%	
Transfer Time	10 ms(For Personal Computers); 20 ms(For Home Appliances)	
Waveform	Pure sine wave	
PHYSICAL		
Dimension, D X W X H(mm)	400 X 300 X 115	
Net Weight(kgs)	8.5	9
Communication Interface	USB/RS232	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity(No-condensing)	
Operating Temperature	-10°C to 50°C	
Storage Temperature	-15°C to 60°C	

Note: Product specifications are subject to change without further notice.

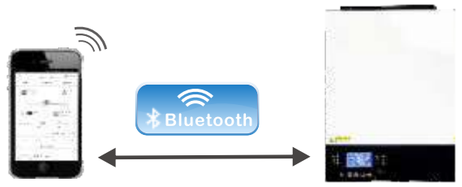
GVT-VM III

Solar Energy Storage Inverter



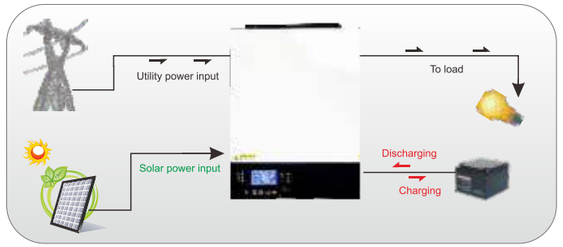
Key Features

- Output power factor PF=1.0
- Configurable AC/Solar Charger priority via LCD setting
- Compatible to mains voltage or generator power
- Overload , Over temperature, Short circuit protection
- Integrated Bluetooth interface with Android App
- Supports USB On-the-Go function
- Reserved communication port(RS-485,CAN-BUS or RS-232)for BMS
- Battery independency
- User-friendly LCD operation
- Replaceable fan design

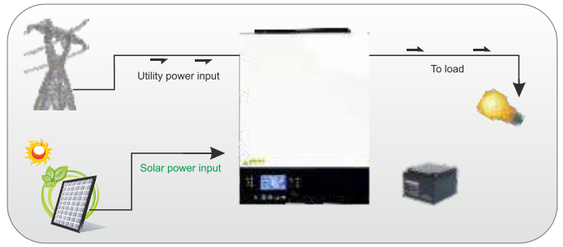


Hybrid Operation

With battery connected



Without battery connected



Detachable LCD control module with various communications

This detachable LCD control module can be taken off as a remote panel .Users can install the LCD panel in accessible area awayfrom inverter up to 20 meters.

Wall Mounted Integrated Solar Power Inverter Technical Specification
Built-in MPPT Solar Controller

Model	GVT VM III 3k-24	GVT VM III 5k-48
Rated Power	3000VA/3000W	5000VA/5000W
INPUT		
Voltage	230 VAC	
Selectable Voltage Range	170-280 VAC(For Personal Computers);90-280 VAC(For Home Appliances)	
Frequency Range	50 Hz/60 Hz(Auto sensing)	
SOLAR CHARGER & AC CHARGER		
Solar Charger type	MPPT	
Maximum PV Array Power	4000W	5000W
MPPT Range @ Operating Voltage	120~450 VDC	
Maximum PV Array Open Circuit Voltage	500 VDC	
Maximum Solar Charge Current	80A	
Maximum AC Charge Current	60A	
Maximum Charge Current	80A	
BATTERY		
Battery Voltage	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	33 VDC	63 VDC
OUTPUT		
AC Voltage Regulation(Batt. Mode)	230VAC±5%	
Surge Power	6000VA	10000VA
Efficiency(Peak)	Up to 93.5%	
Transfer Time	10 ms(For Personal Computers); 20 ms(For Home Appliances)	
Waveform	Pure sine wave	
PHYSICAL		
Dimension, D X W X H(mm)	100 X 300 X 440	
Net Weight(kgs)	9	10
Communication Interface	USB/RS232	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity(No-condensing)	
Operating Temperature	-10°C to 50°C	
Storage Temperature	-15°C to 60°C	

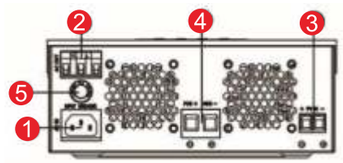
Note: Product specifications are subject to change without further notice.

GVT-VP/VM

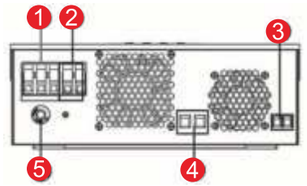
Solar Energy Storage Inverter

Key Features

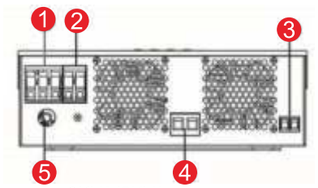
- Pure sine wave solar inverter
- Output power factor 1
- Selectable high power charging current
- Wide DC input range
- Selectable input voltage range for home appliances and personal computers
- Configurable AC/Solar input priority cia LCD setting
- Compatible to AC mains or generator power
- Auto restart while AC is recovering
- Overload and short circuit protection
- Smart battery charger design for optimized performance
- Cold start function
- Optional anti-dusk kit



1KVA/2KVA



3KVA



3KVA/5KVA

1. AC input
2. AC output
3. PV input
4. Battery input
5. Circuit breaker

Wall Mounted Integrated Solar Power Inverter Technical Specification
Built-in MPPT Solar Controller

Model	GVT VP 1000-12	GVT VM 1200-12	GVT VP 2000-24	GVT VM 2200-24	GVT VP 3000-24	GVT VM 3200-24	GVT VP 5000-48	GVT VM 5000-48
Rated Power	1000VA /1000W	1200VA /1200W	2000VA /2000W	2200VA /2200W	3000VA /3000W	3200VA /3200W	5000VA/5000W	
INPUT								
Voltage	230 VAC							
Selectable Voltage Range	170-280 VAC(For Personal Computers);90-280 VAC(For Home Appliances)							
Frequency Range	50 Hz/60 Hz(Auto sensing)							
SOLAR CHARGER & AC CHARGER								
Solar Charger type	PWM	MPPT	PWM	MPPT	PWM	MPPT	PWM	MPPT
Maximum PV Array Power	55VDC	102VDC	80VDC	102VDC	80VDC	102VDC	105VDC	145VDC
MPPT Range @ Operating Voltage	600W	700W	1200W	1400W	1200W	1800W	2400W	3000W
Maximum PV Array Open Circuit Voltage	N/A	17~80VDC	N/A	30~80VDC	N/A	30~80VDC	N/A	60~115VDC
Maximum Solar Charge Current	50A	50A	50A	50A	50A	65A	50A	65A
Maximum AC Charge Current	20A	20A	20A	20A	25A	25A	60A	60A
Maximum Charge Current	50A	60A	50A	60A	70A	80A	110A	120A
BATTERY								
Battery Voltage	12 VDC		24 VDC				48 VDC	
Floating Charge Voltage	13.5VDC		27 VDC				54 VDC	
Overcharge Protection	16 VDC		31VDC		33VDC		63 VDC	
OUTPUT								
AC Voltage Regulation(Batt. Mode)	230 VAC ± 5%							
Surge Power	2000VA		4000VA		6000VA		10000VA	
Efficiency(Peak)	90%~93%							
Transfer Time	10 ms (For Personal Computers); 20 ms (For Home Appliances)							
Waveform	Pu							
PHYSICAL								
Dimension, D X W X H(mm)	88x225 x320	103x225 x320	88x225 x320	103x245 x330	100x285 x334	118.3x285 x360.4	100x300 x440	100x302 x440
Net Weight(kgs)	4.4	4.4	5	5	6.3	6.5	8.5	9.7
Communication Interface	USB/RS232							
OPERATING ENVIRONMENT								
Humidity	5% to 95% Relative Humidity(Non-condensing)							
Operating Temperature	-10 °C to 50 °C							
Storage Temperature	-15 °C to 60 °C							

Note: Product specifications are subject to change without further notice.

GVFD-308

Solar Pump Inverter Features and Specifications

Main Features:(Power range:0.75kw-11kw 220V, 0.75kw-400kw 380V)

- Built-in MPPT function and efficiency up to 99.6%
- Could drive both AM and PMSM pump
- Advanced software technology and perfect in driving PMSM pump
- Perfect stability in output frequency
- Remote control and monitoring by GPRS system(Available in PC and mobile)
- Dry run function to protect the pump
- Automatic start and stop function
- DC and AC as input power source accepted
- Low voltage input down to 60VDC input for 110V/220V pump solution

Data	
Recommended MPPT voltage range	Vmpp 280 to 375 VDC for 2S model(150V to 450VDC input, 3PH 220 to 240VAC output) Vmpp 486 to 750 VDC for 4T model(250V to 800VDC input, 3PH 380 to 440VAC output)
Recommended input voltage (Voc and Vmpp)	Voc 355V DC, Vmpp 310V DC for 2S model or 220V AC pumps Voc 620V DC, Vmpp 540V DC for 4T model or 380V AC pumps
Motor type	Control for permanent magnet synchronous motor(PMSM) and asynchronous motor(AM)
Input power	DC power from solar arrays or AC grid power
Maximum DC power input	450VDC for 220V AC Pump / 800VDC for 380V AC Pump
Rated output voltage	3-phase 220V or 3-phase 380V/440V
Output frequency range	0~50/60Hz
MPPT efficiency	99.60%
Ambient temperature range	-10℃ to 50℃
Solar pump control special performance	MPPT (maximum power point tracking), CVT (constant voltage tracking),auto/manual operation, dry run protection, low stop frequency protection, minimum power input, motor maximum current protection, flow calculating, energy generated calculating
Protection function	Phase loss protection, phase short circuit protection, ground to phase circuit protection, input and output short circuit protection. Stall protection
Protection degree	IP20-Air force cooling
Running mode	MPPT,CVT, variable frequency mode
Altitude	Below 1000m; above 1000m, derated 1% for every additional 100m
Standard	CE certificate.Design based on vector control inverter

Model Selection List

SN	Model No.	Rate current	Output voltage (3PH AC)	Applicable for pumps	External of frive size(mm)	MPPT voltage (VDC)	Weight (kg)
Economic type 2S series: Input 150-450V DC or 200 to 240V AC, VOC 350V DC							
1	GVFD308-2S-OP7G-M	4A	0-220VAC	0.75kW	132*85*123.5	260 to 375	1.2
2	GVFD308-2S-1P5G-M	7A	0-220VAC	1.5kW	132*85*123.5	260 to 375	1.2
3	GVFD308-2S-2P2G-M	10A	0-220VAC	2.2kW	151*100*127	260 to 375	1.4
Economic type 4T series: Input 350 to 800V DC or 380 to 460V AC, VOC 620V DC							
1	GVFD308-4T-OP7G-M	2.5A	380V-440V	0.75kW	132*85*123.5	486 to 750	1.2
2	GVFD308-4T-1P5G-M	3.7A	380V-440V	1.5kW	132*85*123.5	486 to 750	1.2
3	GVFD308-4T-2P2G-M	5A	380V-440V	2.2kW	132*85*123.5	486 to 750	1.2
4	GVFD308-4T-004G-M	10A	380V-440V	4kW	151*100*127	486 to 750	1.4
General type 2S series : Input 150 to 450V DC or 200 to 240V AC, VOC 350 VDC							
1	GVFD308-2S-OP7G	4A	220V/240V	0.75kW	252*195*230	260 to 375	2
2	GVFD308-2S-1P5G	7A	220V/240V	1.5kW	252*195*230	260 to 375	2
3	GVFD308-2S-2P2G	10A	220V/240V	2.2kW	252*195*230	260 to 375	2.5
4	GVFD308-2S-004G	16A	220V/240V	4.0kW	315*235*253	260 to 375	4.3
General type 4T series : Input 350 to 800V DC or 380 to 460V AC, VOC 620V DC							
1	GVFD308-4T-OP7G	2.5A	380V/440V	0.75kW	252*195*230	486 to 750	2
2	GVFD308-4T-1P5G	3.7A		1.5kW	252*195*230		3
3	GVFD308-4T-2P2G	5A		2.2kW	252*195*230		3
4	GVFD308-4T-004G	10A		4.0kW	315*235*253		3
5	GVFD308-4T-5P5G	13A		5.5kW	315*235*253		4.2
6	GVFD308-4T-7P5G	17A		7.5kW	315*235*253		4.3
7	GVFD308-4T-011G	22A		11kW	395*295*275		4.5
8	GVFD308-4T-015G	30A		15kW	395*295*275		7.3
9	GVFD308-4T-018G	37A		18kW	395*295*275		7.5
10	GVFD308-4T-022G	45A		22kW	640*410*390		12
11	GVFD308-4T-030G	60A		30kW	640*410*390		17
12	GVFD308-4T-037G	75A		37kW	640*410*390		17.5
13	GVFD308-4T-045G	91A		45kW	700*410*460		35
14	GVFD308-4T-055G	110A		55kW	700*410*460		36
15	GVFD308-4T-075G	150A		75kW	680*485*415		45
16	GVFD308-4T-093G	180A		93kW	680*485*415		51
17	GVFD308-4T-110G	220A		110kW	680*485*415		54
18	GVFD308-4T-132G	250A		132kW	885*535*370		86
19	GVFD308-4T-160G	310A		160kW	885*535*370		90
20	GVFD308-4T-***G	***		185-400kW	*********		***

GMPPT-E

Solarcharge Controller

Features

- It has an efficient MPPT algorithm, MPPT efficiency ≥99.5%, and converter efficiency up to 98%.
- Charge mode: three stages (constant current, constant voltage, floating charge), it prolongs service life of the batteries.
- Four types of load mode selection: ON/OFF, PV voltage control, Dual Time control, PV+Time control .
- Battery system voltage automatic recognition.
- Three kinds of commonly used lead- acid battery (Seal\(Gel\F looded) parameter settings fcan be selected by the user,and the user can also customize the parameters for other battery charging.
- It has a current limiting charging function. When the power of PV is too large, the controller automatically keeps the charging power, and the charging current will not exceed the rated value.
- High definition LCD display function to check the device running data and working status, also can support modify the controller display parameter.
- RS485 communication, we can offer communication protocol to convenient user' S integrated management and secondary development. Support PC software monitoring and WiFi module to realize APP cloud monitoring.
- CE, RoHS, FCC certifications approved, we can assist clients to pass various certifications.
-

Model			E20	E30	E40	E50	E60
Product category	Controller Type		MPPT(maximum power point tracking)				
	MPPT efficiency		⩾99. 5%				
	Standby power		0.5W~1.2W				
	System voltage		Automatic recognition				
	Heat-dissipating method		Intelligent fan cooling				
Input Characteristics	Max.PV input voltage(VOC)		DC150V				
	Start the charge voltage point		Battery voltage + 3V				
	Low input voltage protection point		Battery voltage + 2V				
	Over voltage protection point		DC150V				
	Rated PV Power	12V system	260W	390W	520W	650W	780W
		24V system	520W	780W	1040W	1300W	1560W
		36V system	780W	1170W	1560W	1950W	2340W
		48V system	1040W	1560W	2080W	2600W	3120W
Charge Characteristics	Selectable Battery Types(Default Gel Battery)		Sealed lead acid, Gel battery, Flooded (Other types of the batteries also can be defined)				
	Charge rated current		20A	30A	40A	50A	60A
	Charge Method		3-Stage:constant current (fase charging)-constant voltage-floating charge				
LOAD Characteristics	Load voltage		The same as the battery voltage				
	Load rated current		40A			60A	
	Load control mode		On/Off mode, PV voltage control mode, Dual-time control mode, PV+Time control mode				
Display& Communication	Display mode		High-definition LCD segment code backlight display				
	Communication mode		8-pin RJ45 port/RS485/support PC software monitoring/support WIFI module to realize APP cloud monitoring				
Other Parameters	Protect function		Input - otuput over/under voltage protection, Prevention of connection reverse protection, battery shedding protection etc.				
	Operation Temperature		-20°C~ +50°C				
	Storage Temperature		-40°C~ +75°C				
	IP(Ingress protection)		IP21				
	Max. connection size		20mm^2			30mm^2	
	Net Weight(kg)		2.3			2.6	
	Gross Weight(kg)		3			3. 5	
	Product Size(mm)		240*168*66			270*180*85	
	Packing Size(mm)		289*204*101			324*223*135	

GYPV/1-1 DC
Combiner Box

Overview

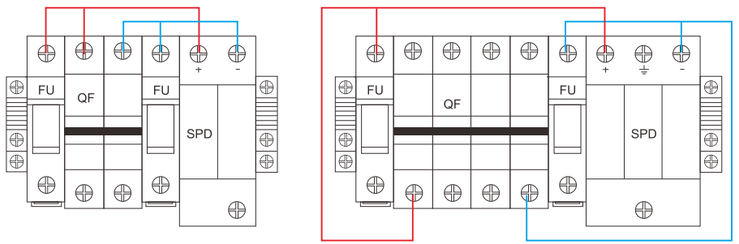
High reliability
With DC FUSE
With DC Surge Protection Device
With DC Circuit breaker or DC load isolation switch.

Strong adaptability
IP65 design, waterproof, anti dust and anti ultraviolet.
Strict test for high and low temperature, used widely.
The simple installation, the simplified system wiring, the convenient wiring.
The box body is made of cold rolled steel and other metal materials.

Flexible configuration
Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modifed.

Description

GYPV/1-1 combiner box is suitable for inverter (MAX input voltage DC550V /DC1000V, 1 PV input channel, 1 output channel, single MPPT inverter). Box body is made of PVC engineering materials, with test for fire retardant, temperature rise, anti impact, anti ultraviolet, and other testing. IP65 protection grade.
Design and configuration strictly accordance with the “Technical specification for photovoltaic junction equipment” CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.

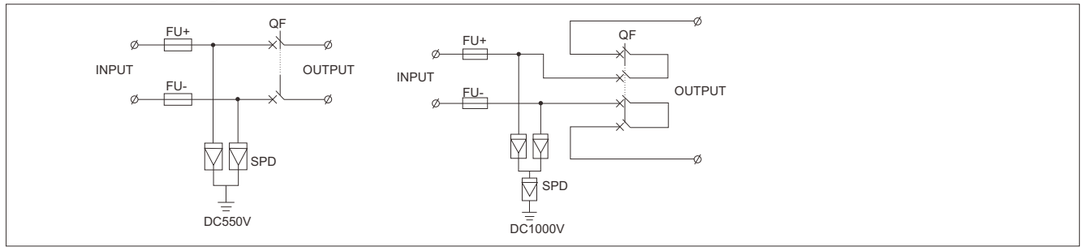


DC 550V DC 1000V

Data

Electric parameter		
System maximum dc voltage	550	1000
Maximum input current for each string	15A	
Maximum input strings	1	
Maximum output switch current	16A/20A	
Number of inverter MPPT	1	
Number of output strings	1	
Lightning protection		
Category of test	II Grade protection	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	2.5kV	3.8kV
Maximum continuous operating voltage Uc	630V	1050V
Poles	2P	3P
Structure characteristic	Plug-push module	
System		
Protection grade	IP65	
Output switch	DC isolation switch (standard)/DC circuit breaker(optional)	
MC4R waterproof connectors	Standard	
PV DC fuse	Standard	
PV surge protector	Standard	
Monitoring module	Optional	
Preventing diode	Optional	
Box material	PVC	
Installation method	Wall mounting type	
Operating Temperature	-25℃ ~+55℃	
Elevation of temperature	2km	
Permissible relative humidity	0-95%, no condensation	
Mechanical parameter		
Width x High x Depth(mm)	300 x 260 x140	

Schematic diagram



GYPV/2-1 DC
Combiner Box

Overview

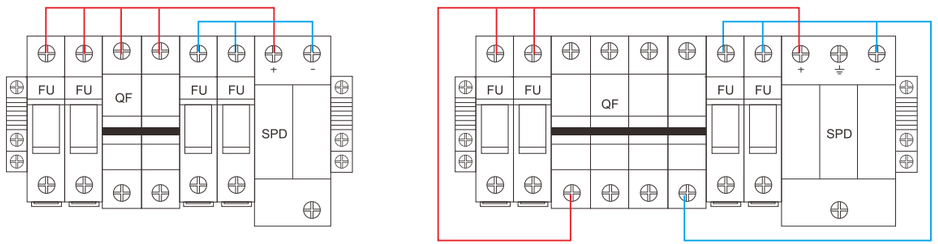
High reliability
With DC FUSE
With DC Surge Protection Device
With DC Circuit breaker or DC load isolation switch.

Strong adaptability
IP65 design, waterproof, anti dust and anti ultraviolet.
Strict test for high and low temperature, used widely.
The simple installation, the simplified system wiring, the convenient wiring.
The box body is made of cold rolled steel and other metal materials.

Flexible configuration
Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modifed.

Description

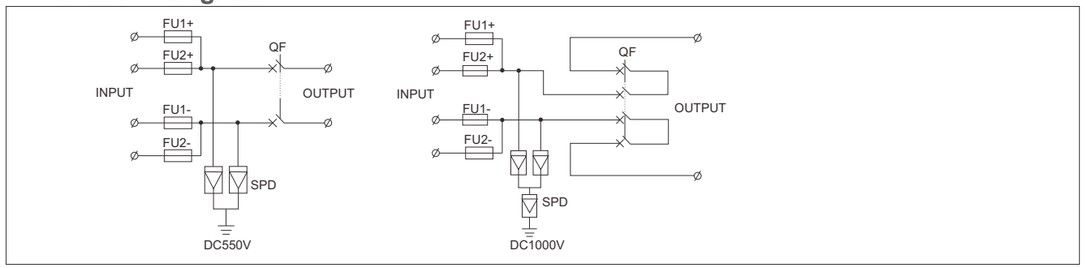
GYPV/2-1 combiner box is suitable for inverter (MAX input voltage DC550V /DC1000V, 2 PV input channel, 1 output channel, single MPPT inverter). Box body is made of PVC engineering materials, with test for fire retardant, temperature rise, anti impact, anti ultraviolet, and other testing. IP65 protection grade.
Design and configuration strictly accordance with the “Technical specification for photovoltaic junction equipment” CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.



Data

Electric parameter		
System maximum dc voltage	550	1000
Maximum input current for each string	15A	
Maximum input strings	1	
Maximum output switch current	20A/32A	
Number of inverter MPPT	1	
Number of output strings	1	
Lightning protection		
Category of test	II Grade protection	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	2.5kV	3.8kV
Maximum continuous operating voltage Uc	630V	1050V
Poles	2P	3P
Structure characteristic	Plug-push module	
System		
Protection grade	IP65	
Output switch	DC isolation switch (standard)/DC circuit breaker(optional)	
MC4R waterproof connectors	Standard	
PV DC fuse	Standard	
PV surge protector	Standard	
Monitoring module	Optional	
Preventing diode	Optional	
Box material	PVC	
Installation method	Wall mounting type	
Operating Temperature	-25℃ ~+55℃	
Elevation of temperature	2km	
Permissible relative humidity	0-95%, no condensation	
Mechanical parameter		
Width x High x Depth(mm)	300 x 260 x140	

Schematic diagram



GYPV/4-1 DC
Combiner Box

Overview

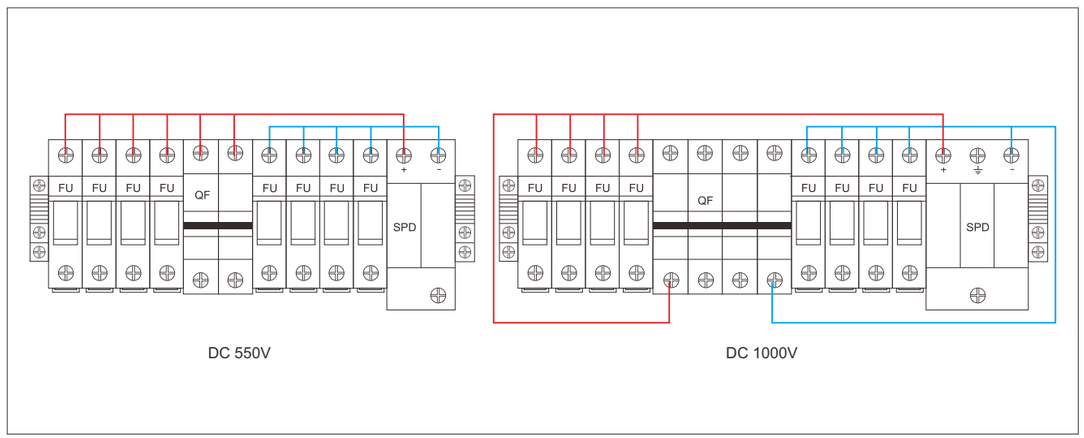
High reliability
With DC FUSE
With DC Surge Protection Device
With DC Circuit breaker or DC load isolation switch.

Strong adaptability
IP65 design, waterproof, anti dust and anti ultraviolet.
Strict test for high and low temperature, used widely.
The simple installation, the simplified system wiring, the convenient wiring.
The box body is made of cold rolled steel and other metal materials.

Flexible configuration
Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modifed.

Description

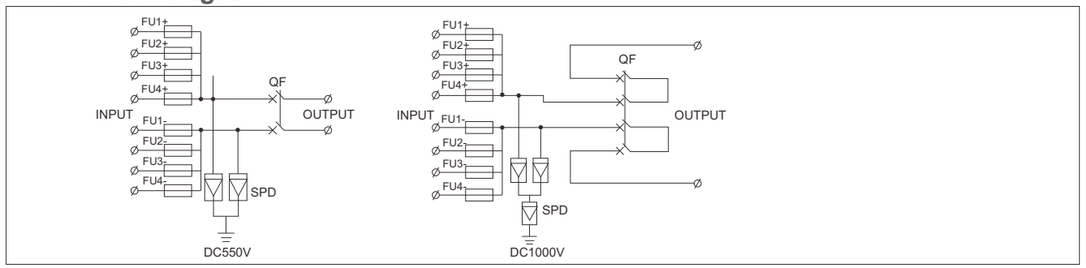
GYPV/4-1 combiner box is suitable for inverter (MAX input voltage DC550V /DC1000V, 4 PV input channel, 1 output channel, single MPPT inverter). Box body is made of PVC engineering materials, with test for fire retardant, temperature rise, anti impact, anti ultraviolet, and other testing. IP65 protection grade.
Design and configuration strictly accordance with the “Technical specification for photovoltaic junction equipment” CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.



Data

Electric parameter		
System maximum dc voltage	550	1000
Maximum input current for each string	15A	
Maximum input strings	4	
Maximum output switch current	50A/63A	
Number of inverter MPPT	1	
Number of output strings	1	
Lightning protection		
Category of test	II Grade protection	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	2.8kV	3.8kV
Maximum continuous operating voltage Uc	630V	1050V
Poles	2P	3P
Structure characteristic	Plug-push module	
System		
Protection grade	IP65	
Output switch	DC isolation switch (standard)/DC circuit breaker(optional)	
MC4R waterproof connectors	Standard	
PV DC fuse	Standard	
PV surge protector	Standard	
Monitoring module	Optional	
Preventing diode	Optional	
Box material	PVC	
Installation method	Wall mounting type	
Operating Temperature	-25℃ ~+55℃	
Elevation of temperature	2km	
Permissible relative humidity	0-95%, no condensation	
Mechanical parameter		
Width x High x Depth(mm)	410 x 285 x140	

Schematic diagram



GYPV/6-1 DC
Combiner Box

Overview

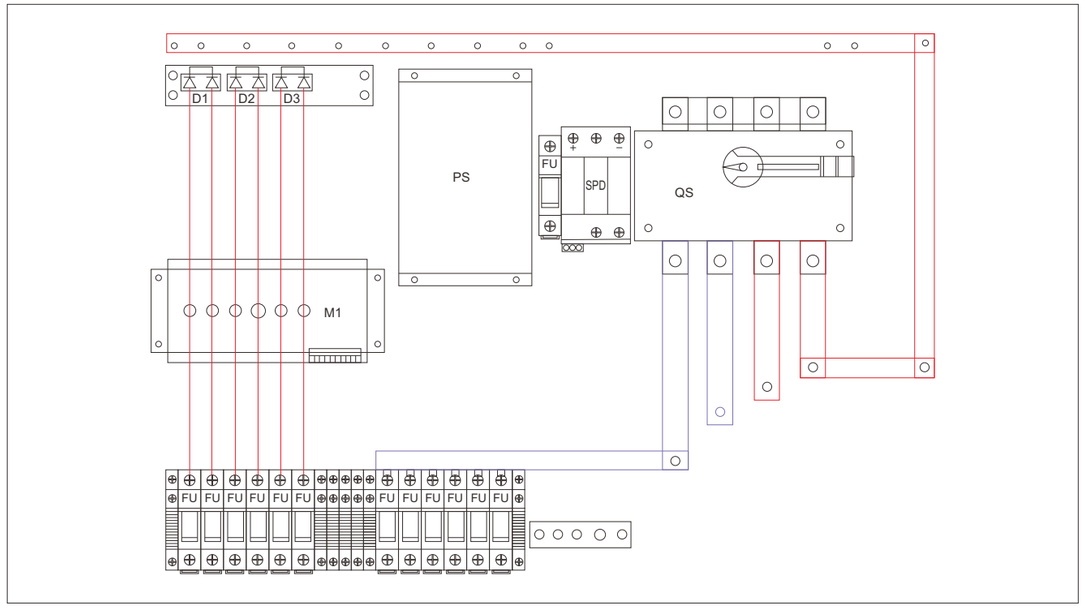
High reliability
With DC FUSE
With DC Surge Protection Device
With DC Circuit breaker or DC load isolation switch.

Strong adaptability
IP65 design, waterproof, anti dust and anti ultraviolet.
Strict test for high and low temperature, used widely.
The simple installation, the simplified system wiring, the convenient wiring.
The box body is made of cold rolled steel and other metal materials.

Flexible configuration
Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modifed.

Description

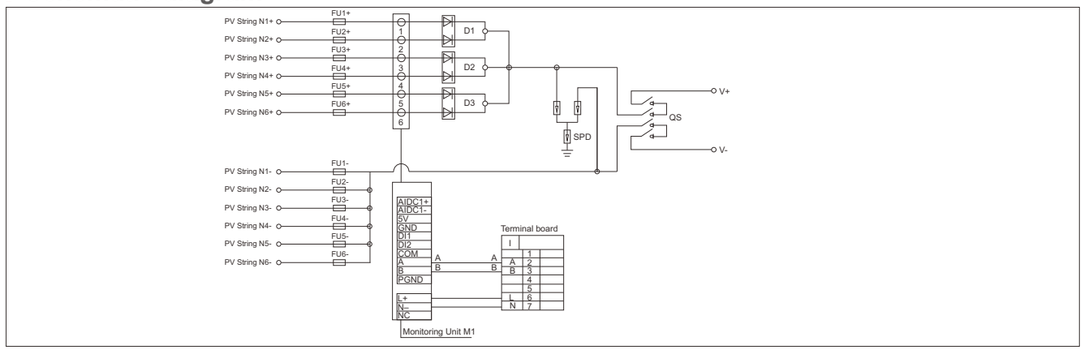
GYPV/6-1 PV combiner box bus synthetic DC input of 6 PV components to 1 output. Each channel is with a fuse. Output side is equipped with lightning protection and circuit breaker. It greatly simplify input wiring of DC power distribution cabinet and inverter. Realize lightning protection, short circuit protection and grounding protection. PV combiner box divided into two types: intelligent box and non-intelligent box. Intelligent PV combiner box is equipped with monitoring unit, then detect input current of each string, detect inside temperature, detect lightning protection status, detect circuit breaker status and summarize output voltage and so on.
Design and configuration strictly accordance with the “Technical specification for photovoltaic junction equipment” CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.
The product adopts outdoor wall mounted type, which adapt to the harsh environment. In addition to the core components, the other can be customized by user requirements.

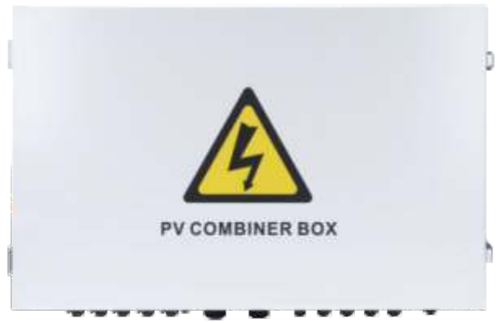


Data

Electric parameter	
System maximum dc voltage	1000
Maximum input current for each string	15A
Maximum input strings	6
Maximum output switch current	80A/90A
Number of inverter MPPT	1
Number of output strings	1
Lightning protection	
Category of test	II Grade protection
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage Uc	1050V
Poles	3P
Structure characteristic	Plug-push module
System	
Protection grade	IP65
Output switch	DC isolation switch (standard)/DC circuit breaker(optional)
MC4R waterproof connectors	Standard
PV DC fuse	Standard
PV surge protector	Standard
Monitoring module	Optional
Preventing diode	Optional
Box material	PVC
Installation method	Wall mounting type
Operating Temperature	-25℃ ~+55℃
Elevation of temperature	2km
Permissible relative humidity	0-95%, no condensation
Mechanical parameter	
Width x High x Depth(mm)	440 x 400 x180

Schematic diagram





GYPV/8-1 DC
Combiner Box

Overview

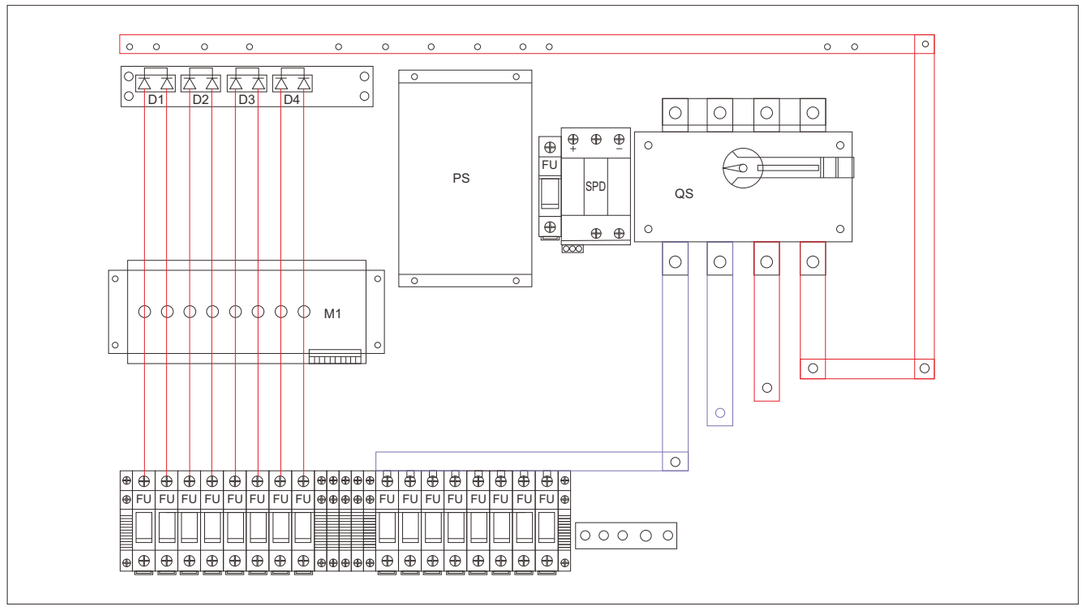
High reliability
With DC FUSE
With DC Surge Protection Device
With DC Circuit breaker or DC load isolation switch.

Strong adaptability
IP65 design, waterproof, anti dust and anti ultraviolet.
Strict test for high and low temperature, used widely.
The simple installation, the simplified system wiring, the convenient wiring.
The box body is made of cold rolled steel and other metal materials.

Flexible configuration
Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modifed.

Description

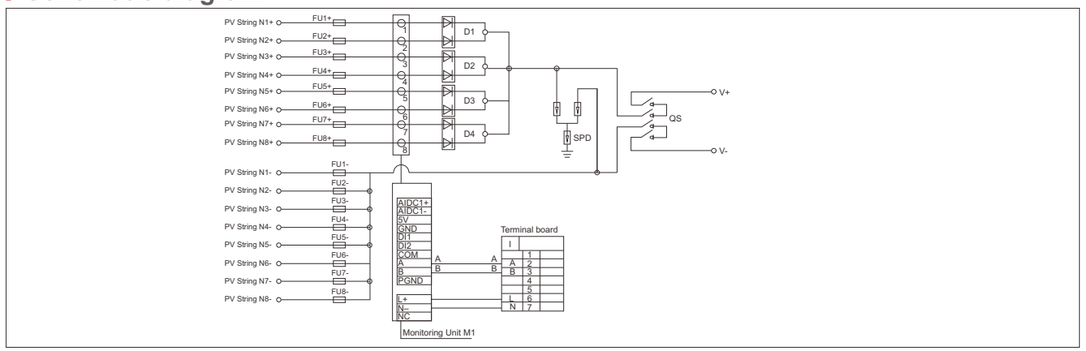
GYPV/8-1 PV combiner box bus synthetic DC input of 8 PV components to 1 output. Each channel is with a fuse. Output side is equipped with lightning protection and circuit breaker. It greatly simplify input wiring of DC power distribution cabinet and inverter. Realize lightning protection, short circuit protection and grounding protection. PV combiner box divided into two types: intelligent box and non-intelligent box. Intelligent PV combiner box is equipped with monitoring unit, then detect input current of each string, detect inside temperature, detect lightning protection status, detect circuit breaker status and summarize output voltage and so on.
Design and configuration strictly accordance with the “Technical specification for photovoltaic junction equipment” CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.
The product adopts outdoor wall mounted type, which adapt to the harsh environment. In addition to the core components, the other can be customized by user requirements.



Data

Electric parameter	
System maximum dc voltage	1000
Maximum input current for each string	15A
Maximum input strings	8
Maximum output switch current	125A
Number of inverter MPPT	1
Number of output strings	1
Lightning protection	
Category of test	II Grade protection
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage Uc	1050V
Poles	3P
Structure characteristic	Plug-push module
System	
Protection grade	IP65
Output switch	DC isolation switch (standard)/DC circuit breaker(optional)
MC4R waterproof connectors	Standard
PV DC fuse	Standard
PV surge protector	Standard
Monitoring module	Optional
Preventing diode	Optional
Box material	PVC
Installation method	Wall mounting type
Operating Temperature	-25℃ ~+55℃
Elevation of temperature	2km
Permissible relative humidity	0-95%, no condensation
Mechanical parameter	
Width x High x Depth(mm)	500 x 400 x190

Schematic diagram



GYPV/12-1 DC
Combiner Box

Overview

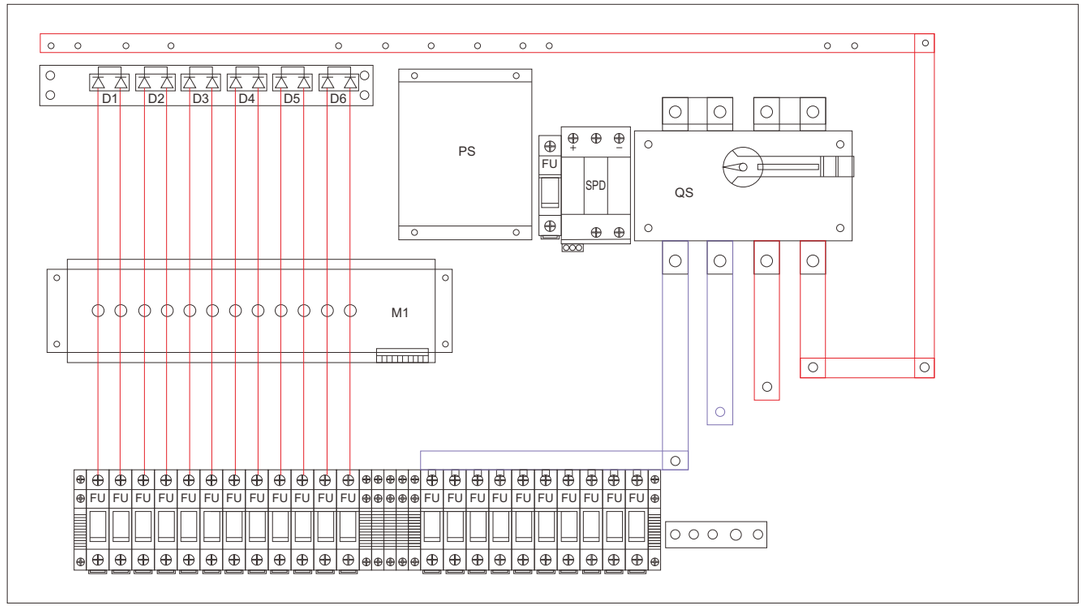
High reliability
With DC FUSE
With DC Surge Protection Device
With DC Circuit breaker or DC load isolation switch.

Strong adaptability
IP65 design, waterproof, anti dust and anti ultraviolet.
Strict test for high and low temperature, used widely.
The simple installation, the simplified system wiring, the convenient wiring.
The box body is made of cold rolled steel and other metal materials.

Flexible configuration
Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modifed.

Description

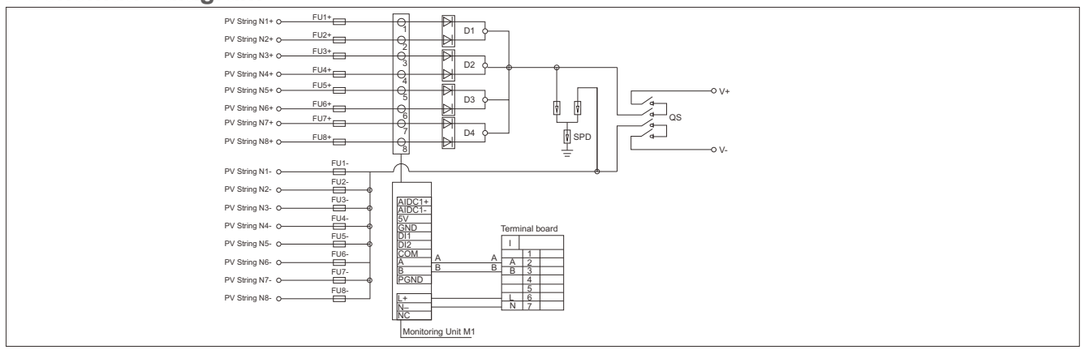
GYPV/12-1 PV combiner box bus synthetic DC input of 12 PV components to 1 output. Each channel is with a fuse. Output side is equipped with lightning protection and circuit breaker. It greatly simplify input wiring of DC power distribution cabinet and inverter. Realize lightning protection, short circuit protection and grounding protection. PV combiner box divided into two types: intelligent box and non-intelligent box. Intelligent PV combiner box is equipped with monitoring unit, then detect input current of each string, detect inside temperature, detect lightning protection status, detect circuit breaker status and summarize output voltage and so on.
Design and configuration strictly accordance with the “Technical specification for photovoltaic junction equipment” CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.
The product adopts outdoor wall mounted type, which adapt to the harsh environment. In addition to the core components, the other can be customized by user requirements.



Data

Electric parameter	
System maximum dc voltage	1000
Maximum input current for each string	15A
Maximum input strings	12
Maximum output switch current	180A
Number of inverter MPPT	1
Number of output strings	1
Lightning protection	
Category of test	II Grade protection
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage Uc	1050V
Poles	3P
Structure characteristic	Plug-push module
System	
Protection grade	IP65
Output switch	DC isolation switch (standard)/DC circuit breaker(optional)
MC4R waterproof connectors	Standard
PV DC fuse	Standard
PV surge protector	Standard
Monitoring module	Optional
Preventing diode	Optional
Box material	PVC
Installation method	Wall mounting type
Operating Temperature	-25℃ ~+55℃
Elevation of temperature	2km
Permissible relative humidity	0-95%, no condensation
Mechanical parameter	
Width x High x Depth(mm)	640 x 450 x180

Schematic diagram



GYPV/16-1 DC
Combiner Box

Overview

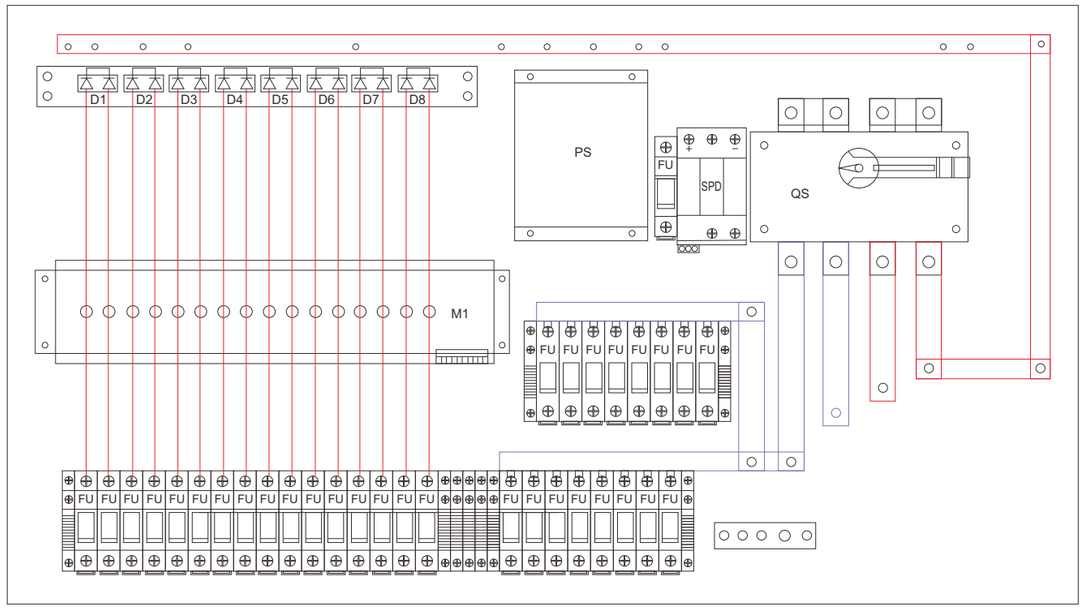
High reliability
With DC FUSE
With DC Surge Protection Device
With DC Circuit breaker or DC load isolation switch.

Strong adaptability
IP65 design, waterproof, anti dust and anti ultraviolet.
Strict test for high and low temperature, used widely.
The simple installation, the simplified system wiring, the convenient wiring.
The box body is made of cold rolled steel and other metal materials.

Flexible configuration
Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules. Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modifed.

Description

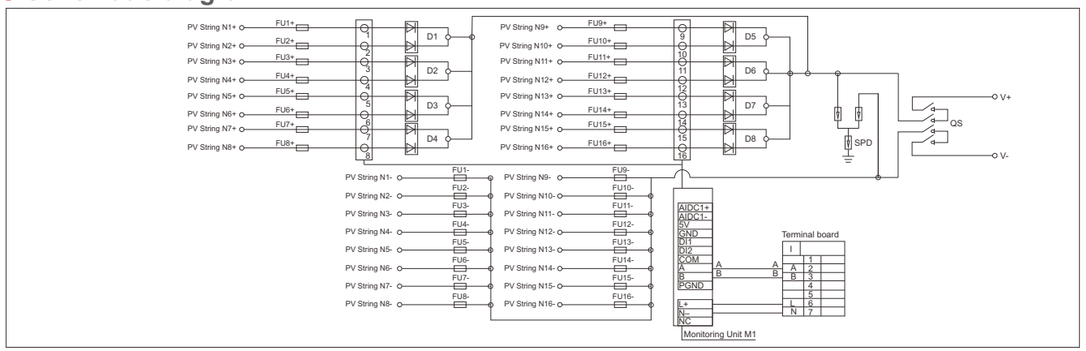
GYPV/16-1 PV combiner box bus synthetic DC input of 16 PV components to 1 output. Each channel is with a fuse. Output side is equipped with lightning protection and circuit breaker. It greatly simplify input wiring of DC power distribution cabinet and inverter. Realize lightning protection, short circuit protection and grounding protection. PV combiner box divided into two types: intelligent box and non-intelligent box. Intelligent PV combiner box is equipped with monitoring unit, then detect input current of each string, detect inside temperature, detect lightning protection status, detect circuit breaker status and summarize output voltage and so on.
Design and configuration strictly accordance with the “Technical specification for photovoltaic junction equipment” CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.
The product adopts outdoor wall mounted type, which adapt to the harsh environment. In addition to the core components, the other can be customized by user requirements.



Data

Electric parameter	
System maximum dc voltage	1000
Maximum input current for each string	15A
Maximum input strings	16
Maximum output switch current	240A
Number of inverter MPPT	1
Number of output strings	1
Lightning protection	
Category of test	II Grade protection
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage Uc	1050V
Poles	3P
Structure characteristic	Plug-push module
System	
Protection grade	IP65
Output switch	DC isolation switch (standard)/DC circuit breaker(optional)
MC4R waterproof connectors	Standard
PV DC fuse	Standard
PV surge protector	Standard
Monitoring module	Optional
Preventing diode	Optional
Box material	PVC
Installation method	Wall mounting type
Operating Temperature	-25℃ ~+55℃
Elevation of temperature	2km
Permissible relative humidity	0-95%, no condensation
Mechanical parameter	
Width x High x Depth(mm)	800 x 500 x180

Schematic diagram



W2R

Automatic Transfer Switch

Oveview

Series dual power automatic transfer switches are newly developed miniature household power transfer switches. This switch is mainlused to test whether the normal or standby power supply is normal When the normal power supply is abnormal, the backup power supply will work immediately to ensure the continuity, reliability and safety of the power supply. This product is specially designed for home track TV installation and is specicllly used for Pz30 distribution box.

Series of automatic transfer switches are suitable for emergency power system 400V, 60A with AC rated current of 50v or 60HZ, compact structure, reliable conversion, easy installation and maintenance. long life. It is widely used in various occasions where continuous power failure is not allowed. It can be operated electrically or manually by ATS and the controller.

Complies with requirements of Low-voltage Switch Gear and Control Gearspecified by IEC 60947-6-1 and EC60947-3: functional equipment andtransfer switch equipme.

Data

Rated current Ie A	16 20 25 32 40 50 63 100		
Insulation voltage Ui	AC 690V		
Rated voltage Ue	AC 400V		
Grade	Grade PC: able to male and withstand not to break short-circuit current		
Use categoty		AC-33iB	
Pole	2P	3P	4P
Weight(kg)	0.62	0.72	0.81
Life	Electrial:2000times;Mechanical:5000times		
Rated conditional short-circuit current Iq	50kA		
SCPD(fuse)	RT16-00-63A		
Rated impulse withstand voltage	8kV		
Control circuit	Rated control voltage Us: AC220V, 50Hz Correct working condition 85%Us~110%Us		
Auxiliary circuit	AC220V/AV110V 50/60Hz		
Contact transfer time	<50ms		
Operating transfer time	<50ms		
Return transfer time	<50ms		
Off-time	<50ms		
Temperature range	-40°C ...40°C(IEC) average te,perature not more than 35°C in 24 hours		

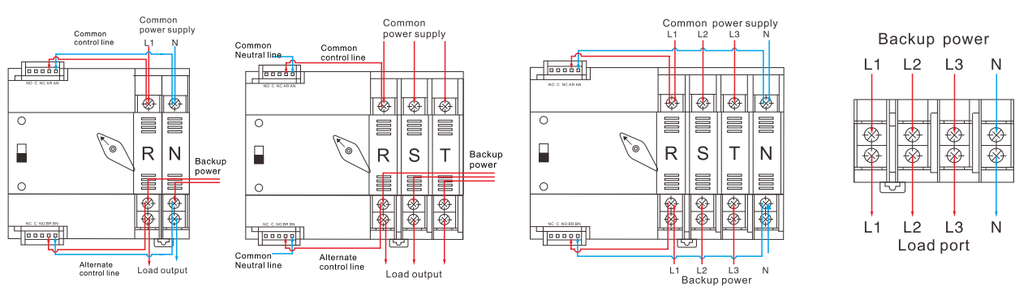
Normal working conditions and installation conditions

Ambient temperature : the upper limit does not exceed + 40℃ . The average value of 24h does not exceed + 35℃ , and the lower limit is not lower than-5℃.
The altitude is higher than the installation site and the altitude does not exceed 2000m.
When the highest atmospheric temperature is + 40℃ , the relative humidity of the atmosphere at the installation site should not exceed 50% . At lower temperatures , higher relative humidity is allowed , for example , temperature +25 ℃ , relative humidity is 90% . Due to temperature changes , occasionally measures should be taken to prevent condensation on the surface of the product.
Pollution degree The pollution degree of TSE complies with the level 3 specified by IEC . The installation category of 60947-6-1 and IEC 60947-34.5 installation category TSE conforms to the category specified by IEC60947-6-14.6 . Installation conditions can be installed vertically in a control cabinet or power distribution cabinet . Make sure : the installation distance S is as shown in the figure . 1...

Matters needing attention

Manual/automatic operation can ensure the on and off performance in electrical operation, but in manual operation, it cannot be guaranteed due to the difference in the operators on and off speed. In manual peration, excessive silver alloy loss may occur. Therefore, only after cutting off all power to check and maintain the operating system and contact information, can the selector switch be pulled to the manual position. Normally, please pull the selector switch to the electric position. When manual operation is required, pull the selector switch to the manual position. After the manual operation is completed, pull the selector switch from the manual position to the automatic position.
The control circuit TSE is excited instantly. After the conversion iS completed, the internal switch will damage the coil in the control circuit. The coil can work normally at 85%-110% of the rated working voltage. Too low input voltage may cause the coil to heat up and burn.

Wiring diagram of controller



1. (Must be connected) Take zero line and fire line from the common control incoming line to connect AR (live wire) / AN (neutral line)

2. (Must be connected) Take zero line and fire line from the backup control incoming line to connect BR (live wire) / BN (neutral line)

3. The power indication signal is passive output , and the generator signal is taken (common) and (normally closed)

4 . Connect the load end at the lower end of the (standby power supply side) , Stepped wiring

5 . There is an isolation board on the load . When wiring . first remove the isolation board, connect the load and then install the isolation board (it is recommended to connect the load first , then connect the backup power supply)

Note : Normal type wiring same as solar type . For solar type , the backup power must be connected to the city power.

GYM3DC

AC/DC Molded 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 , UNITE Electric has developed the GYM3 (DC) - (HU) series of AC and DC Molded Circuit Breaker for New Energy.
Product Characteristic
-for GYM3- (HU) series Molded Circuit Breaker , The maximum rated voltage is AC 1140V and the maximum current is 400A.
-for GYM3- (HU) series Molded Circuit Breaker , in the voltage of AC 800V , the maximum breaking capacity is 36.5KA , which can ensure reliable short-circuit protection of the system.
-forGYM3DC- (HU) series Molded Circuit Breaker , The maximum rated voltage Is AC1500V and the maximum current is 400A.
-for GYM3DC- (HU) 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.

Standard

GIYM3(DC)-(HU) series AC/DC molded case circuit breaker meet the following standards
IEC 60947-1 GB/T14048.1 General Provisions
IEC 60947-2 GB/T14048.2 circuit breaker

Class

According to operation mode:
1.Direct operation
2.Electric operator mechanism operation
3.Rotary handle operation

According to the protection form:
1.Line protection
2.Line isolation

According to the wiring form:
1.Front-board wiring
2.Rear-panel wiring
3.Plug-in wiring

Applied Environment

1.The altitude is not higher than 2000m;
2.It is resistant to damp air (three-proof type)
3.It is resistant to the influence of salt fog and oil fog(three-proof type);
4.It is resistant to the influence of mold (three-proof type);
5.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.

Model preparation meaning

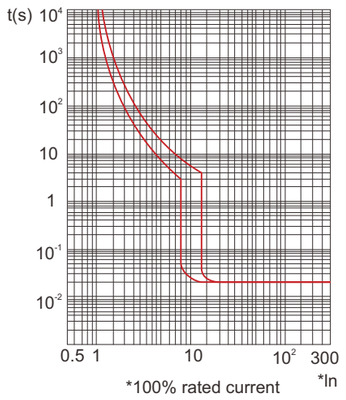
GY	M	3	DC	-	250	HU	/	3	+	300	+	D	DC1500V	200A

GY	geya
M	Molded Case
3	Design No.
DC	AC altemating curren, DC direct current
250	Shell frame gradecurrent 250,320,400
HU	Rated short-circuit breaking capacity rating. HU:high breaking
3	Phase No.
300	Stripper mode and attachment code(see Table)
D	External accessories D Auto operation Z Manual operation
DC1500V	Rated voltage AC800/1140/1000V, DC250/500/750/1000/1250/1500V
200A	Rated current

Model	GYM3DC-250HU			GYM3DC-320HU			GYM3DC-400HU		
Rated current of shell frame grade Inm(A)	250			320			400		
Rated current In(A)	125,140,160,180,200,225,250			280,315,320			200,225,280,300,315,350,400		
Pole Number	2	3	3	2	3	3	4	4	4
Rated working voltage Ue(V)AC	1000	1250	1500	1000	1250	1500	1000	1250	1500
Rated insulation voltage Ui(V)	1000	1500	1500	1000	1500	1500	1500	1500	1500
Rated impulse withstand voltage Uimp(kV)	12								
Extreme short-circuit breaking capacity Icu(kA)	20								
Running short-circuit breaking capacity Ics(kA)	20								
Wiring mode	Up incoming and down outcoming								
Mechanical life(Total times)	10000								
Electrical life(Total times)	5000								
Insolation feature	yes								
Standard	IEC 60947-2 GB/T 14048.2								
Allowable ambient temperature	-40°C ...70°C								
Levels of protection	IP20								
Quality certificate	CCC CB TUV 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 dimensions L*W*H(mm)	180*76(2P)/107(3P)*105			180*76(2P)/107(3P)*105			258*198*107		
Installation way	fixed type, plug-in type								

Action characteristic curve of the circuit breaker

IYM3DC-(HU)Action characteristic curve



GYRD9L-125

Photovoltaic special reclosing miniature circuit breaker

Automatic Reclosing Miniature Circuit
Breaker for Photovoltaic System

Product overview

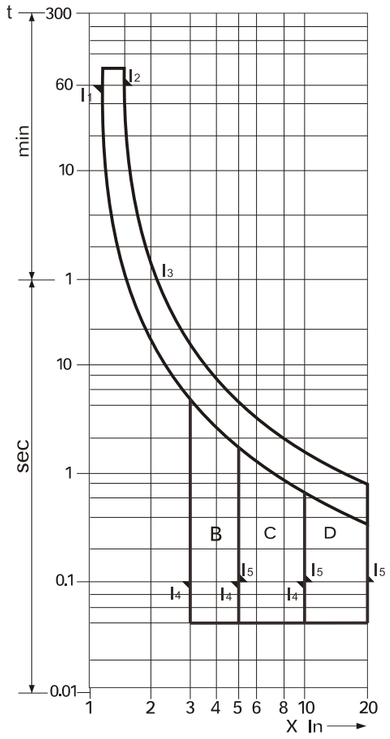
GYRD9L-125 series photovoltaic special reclosing miniature circuit breaker (hereinafter referredto as the circuit breaker), suitable for the line of AC 50HZ, rated workingvoltage to 400V, ratedcurrent to 125A with overvoltage,undervoltage, voltage loss, overload shortcircuit protection function. At present, broadly used in photovoltaic distributiobox.
Accord with GB10963.1 IEC80198.1

Electrical Characteristics

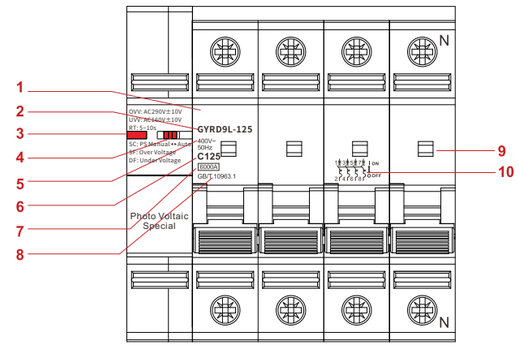
Data	
Behaviour of electricity	
Number of poles	2P、4P
Function	overvoltage,undervoltage,voltageloss,overload short circuit protection
Shell rating rating Inm	125A
Rated operating voltage: Ue	400V
Rated current In	32、40、50、63、80、100、125A
The type of deduction at the time of the case	C
Rated short-circuit breaking capacity	Ics=Icn=6000A
Mechanical life	10000 Times
Electricity life	4000 Times
Overcurrent trip characteristics	See also in Table 1 and Figure 1
Protection function	
Over-voltage protection value	285V±5V
Over-voltage protection recovery value	275V±5V
Over-voltage protection action delay	1s
Under-voltage protection value	150V±5V
Under-voltage protection recovery value	160V±5V
Delay of under-voltage protection action	1s
Extreme operating voltage	300V
Loss of voltage protection function	Yes
Reset delay	20s~40s
Power consumption	0.5W
Normal working conditions and installation	
Levels of protection	IP20
Connection capacity	1-35mm^2
Use ambient temperature	-40X:-70Z
Anti-wet touch	Class 2
height	w 2000m
Class of pollution	2
Circuit breaker corresponds to the sectional areaof copper wire	See, 2
Installation environment	No significant) medium strike and vibration place
Install the category	III
installation	DIN standard guide rail

Num	Rated current	Start state	Test current	Specified time	Expected result
1	32,40,50,63	Cold State	1.13In	t≤1h	Not Trip
	80,100,125			t≤2h	
2	32,40,50,63	Immediately after the previous test	1.45In	t<1h	Trip
	80,100,125			t<2h	
1	In≤32	Cold State	2.55In	1s<t<60s	Trip
	In>32			1s<t<120s	
4	all model	Cold State	5In	t≤0.1s	Trip
			10In	t<0.1s	Not Trip

Graph 2										
Rated current(A)	≤6	10	16,20	25	32	40,50	63	80	100	125
wire area (mm^2)	1	1.5	2.5	4	6	10	16	25	35	50



Use and operation indication



1:Brand
2:Model
3:Control signal indicator
4:Manual/Auto transfer switch
5:Rated working voltage
6:Tripping curve and Rated current
7:Rated short-circuit capacity
8:Indicator window
9:Electrical wiring diagram

GYM9DC

DC MCB

General

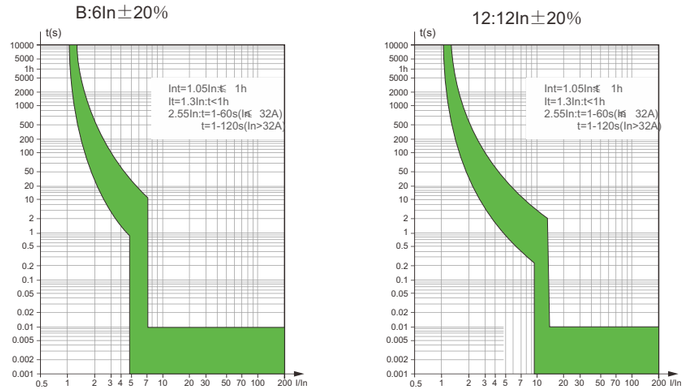
GYM9DC circuit breaker is used for DC rated voltage to 1000V, rated current to 63A line, for overload and short circuit protection, and can also be used as an infrequent operation of the line.Circuit breakers are used in DC applications such as communications and photovoltaic syst.

- In complicance with IEC6094.2

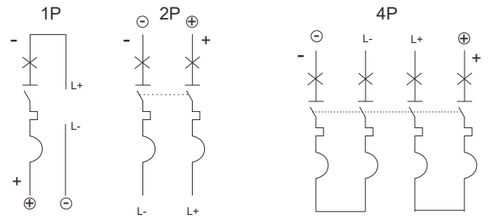
Data	
Rated current In	1-63A
Poles	1P 2P 3P 4P
Rated voltage Ue	1P:250V~ 2P:500V 3P:750V 4P:1000V
Insulation voltage Ui	1000V
Rated breaking capacity Ics=Icu	6000A
Rated impulse withstand voltage(1.2/50) Uimp	6KV
Thermo-magnetic release characteristic	B:6In±20% C:12In±20%
Mechanical life	20000

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

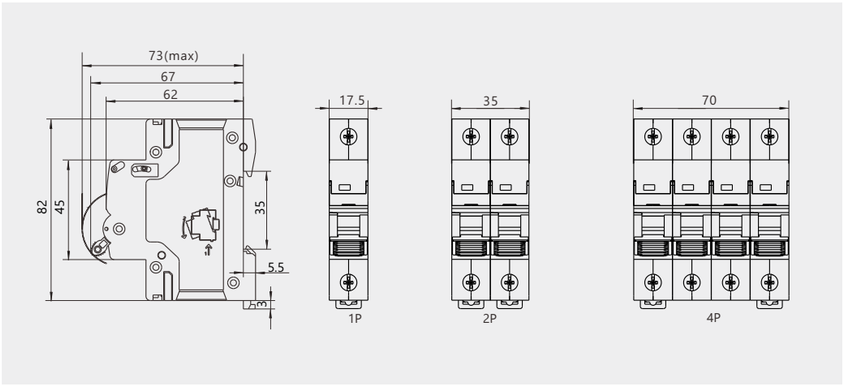
Tripping graph



Wiring diagram of DC ap



Overall and mounting dimensioned chart

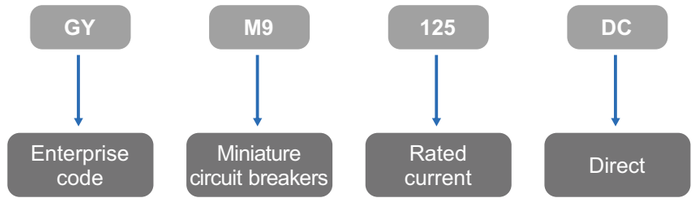


GYM9-125DC

DC Miniature Circuit Breakers

Scope of application

GYM9-125DC series DC miniature circuit breakers (hereinafter referred to as circuit breakers) are suitable for lines with a rated current of 125A and below DC and a rated DC voltage of 250V and 500V. It is used for overload and short-circuit protection of the facilities and electrics of the DC power distribution system, and can be widely used in electric power, post and telecommunications, AC, industrial and mining enterprises and other industries. This product complies with GB14048.2, IEC60947-2 standard requirements.



Product applicable working conditions and working environment

- The ambient air temperature should not exceed +40°C at the highest, and -5°C at the lowest, and the average value should not exceed +35.
- The altitude of the installation site should not exceed 2000m.
- The relative humidity of the atmosphere does not exceed 50% when the highest ambient temperature is +40°C, and can have higher relative humidity at lower temperatures. The monthly average maximum relative humidity of the wettest month is 90%, and the monthly average relative humidity of the month is 90%. The average minimum temperature is +25°C, taking into account condensation on the product surface due to temperature changes.
- The pollution level is 2.
- The installation category is Class II and Class III.
- Use TH35-7.5 steel mounting rail to install.
- The inclination of the installation surface and the vertical surface should not exceed 5°.
- Compress the wiring with screws.
-

Scope of application

GYM9-125DC DC circuit breaker is composed of shell, operating mechanism, thermal release, electromagnetic release contact system, arc extinguishing system, etc. It has overload and short circuit protection functions, unique design structure and powerful permanent magnet arc extinguishing The system enables the product to have a short-circuit capacity of 10kA, a mechanical life of more than 20,000 times, and a beautiful appearance. The installation guide rail is TH35-7.5 standard steel installation rail, and has the following characteristics: The handle is designed above the front face, and it has a strong sense of safety during operation. , feel comfortable, must pay attention to the "+, -" polarity when wiring, the power supply is in and out, which is in line with the characteristics of the power supply line, easy to install and save wires.

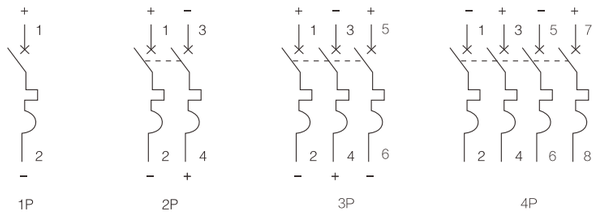
Main specifications and techical paramters

Frame rating rated current Inm (A)	number of poles	Rated voltage (V)	Rated current In (A)	Rated ultimate short-circuit capacity		Instantaneous tripping current
				Breaking current Icu (A)	Time constant T(ms)	
63	1	DC250V	1,2,3,4,6,10 16,20,25,32 40,50,63	10000	10	8In-12In
	2,3	DC500V				
	4	DC1000V				
125	1	DC250V	80, 100, 125	10000	10	8In-12In
	2,3	DC500V				
	4	DC1000V				

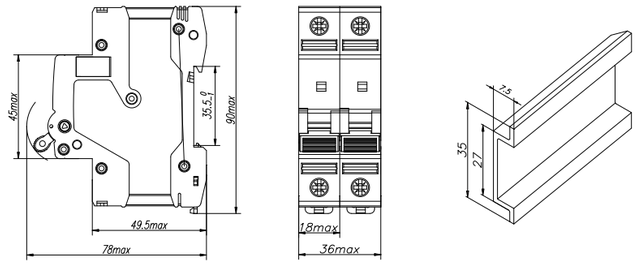
Standard Time-Current

Test	DC test current	Starting state	Trip or no-trip time limit	Expercted putcome	Remark
a	1.05In	Cold state	t≥1h(In≤63A) t≥2h(In>63A)	Does not trip	
b	1.3In	Immediately after a test	t<2h(In>63A) t<1h(In≤63A)	trip	The current rises steadily to the specified value within 5S
c	8In	Cold state	t≥0.2s	Does not trip	Close the auxiliary switch power on
	12In		t<0.2s	trip	

Wiring diagram



Dimensions



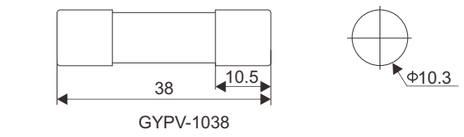
GYPV-1038

Solar Fuse

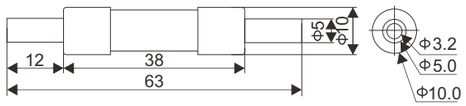
Model		
GYPV-1038	1A-32A	1000V DC
GYPVD-1038	1A-32A	1000V DC
GYPVS-1038	1A-32A	1000V DC

Parameter	
Fuse Size	10x38mm
Class of Operation	gPV
Standard	GB/T 13539.6 IEC60269-6
Breaking Capacity	20kA
Time Constant	1-3ms

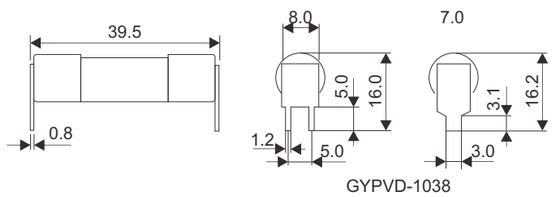
Dimensions(mm)



GYPV-1038



GYPVS-1038



GYPVD-1038

Specifications

Model	Rated current	$I^2T(A^2S)$	
		Pre-arcing	Total
GYPV-1038	1	0.15	0.4
	2	1.2	3.3
	3	3.9	11
	4	10	27
	5	18	48
	6	31	89
	8	3.1	31
	10	7.2	68
	12	16	136
	15	24	215
	16	28	255
	20	38	392
	25	71	508
	30	102	821
	32	176	976

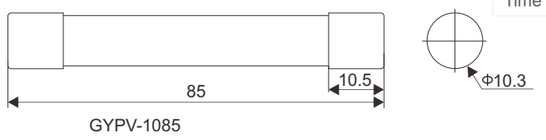
GYPV-1085

Solar Fuse

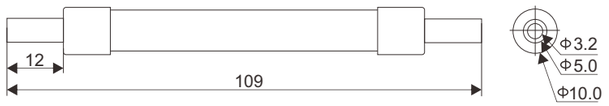
Model		
GYPV-1085	2A-32A	1500V DC
GYPVS-1085	2A-32A	1500V DC

Parameter	
Fuse Size	10x85mm 10X109mm
Class of Operation	gPV
Standard	GB/T 13539.6 IEC60269-6
Breaking Capacity	20kA
Time Constant	1-3ms

Dimensions(mm)



GYPV-1085



GYPVS-1085

Specifications

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

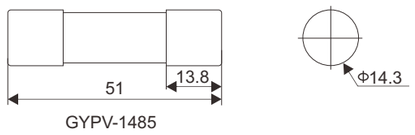
GYPV-1485

Solar Fuse

Model		
GYPV-1085	15A-50A	1000V DC
GYPVB-1085	15A-32A	1500V DC

Parameter	
Fuse Size	14x51mm 14x85mm
Class of Operation	gPV
Standard	GB/T 13539.6 IEC60269-6
Breaking Capacity	20kA
Time Constant	1-3ms

Dimensions(mm)



Specifications

Model	Rated current	$I^2T(A^2S)$	
		Pre-arcing	Total
GYPV-1485	15	330	275
	20	220	578
	25	275	956
	30	380	1160
	32	405	1830
	40	600	2430
	50	850	3050

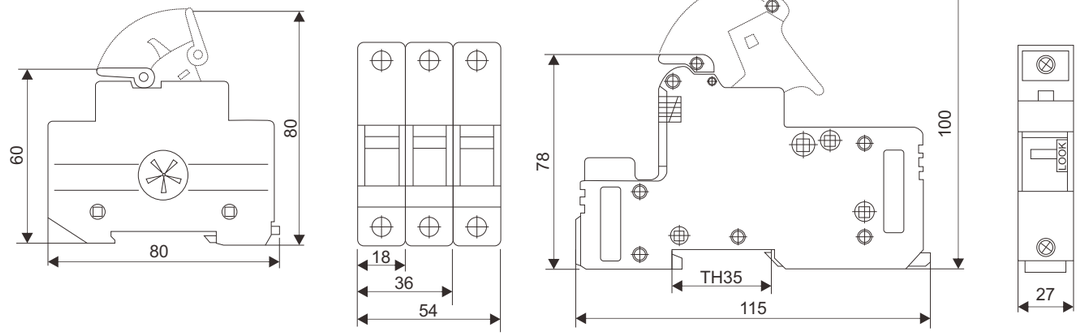
GYPV-32/50/63

Fuse Base

Model		
GYPV-32	32A	1000V DC(10X38)
GYPV-50	50A	1500V DC(14X51)
GYPV-32L	50A	1500V DC(10X85)(14X85)
GYPV-63	63A	(22X58)

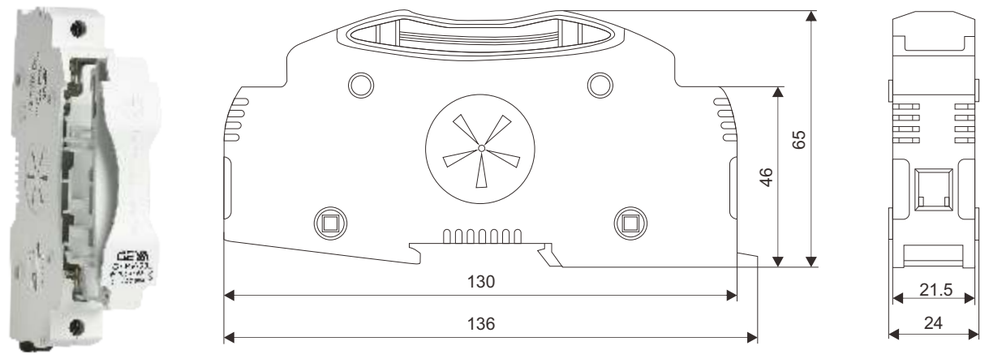
Parameter	
Rated Voltage	1000V.dc 1500V.dc
Class of Operation	gPV
Standard	GB/T 13539.6 IEC60269-6

Dimensions(mm)



GYPV-32

GYPV-63



GYPV-63L

GSP9-C40

PV surge protective device

Application

This DC surge protective device is applied low voltage standard IEC EN 61643-11 to protect against DC power line system and other equipment from over voltage and instantaneous over voltage damage. Widely used in photovoltaic comber box, power inverter, DC distribution cabinet etc. It has advantages of large discharge current, fast respond time, low residual voltage. Max. PV voltage up to UCPV ≤1000V dc.

Main Features

1.High discharge capacity, quick response, module pluggable;
2.Fast response time, din rail installation;
3.Double thermal disconnection devices, provide more reliable protection;
4.Green window means normal, red means defect, need to change module;
5.Remote alarm terminal optional.
6.T1+T2 surge protection.

Model	GPS9-C40 PV	
Test standard	IEC/EN 61643-11; GB18802.11	
IEC test classification	T1+T2/Class I+II	
Max.PV voltage [Uc pv]	600V DC	1000V DC
Nominal discharge current(8/20μs)	20kA	
Maximum discharge current(8/20μs)	40kA	
Limp current(10/350μs)	6.25kA	
Poles	2P	2P/3P
Voltage protection level Up pv	≤2.6	⩽3. 6
Response time Ta	25ns	
Connecting cable	$4mm^2$(L-N);$6mm^2$(PE)	
Method of installation	35mm Din Rail	
Matched fuse or circuit breaker	32A	
Type of remote signaling contact	Switching contact(Optional)	
	C+NC:Normally closed	
	C+NO:Normally open	
	C:Common contact	
Switching capacity	AC:250V/0.5A DC:250V/0.1A, 125V/0.2A,75V/0.5A	
Cross-sectional area for remote signal contact	Max.1.5mm^2 solid / flexible	
Operating temperature range	40℃...+80℃	

GSP9-C40

PV surge protective device

Application

This DC surge protective device is applied low voltage standard IEC EN 61643-11 to protect against DC power line system and other equipment from over voltage and instantaneous over voltage damage. Widely used in photovoltaic comber box, power inverter, DC distribution cabinet etc. It has advantages of large discharge current, fast respond time, low residual voltage. Max. PV voltage up to UCPV ≤1500V dc.

Main Features

1. High discharge capacity, quick response, module pluggable;
2. Fast response time, din rail installation;
3. Double thermal disconnection devices, provide more reliable protection;
4. Green window means normal, red means defect, need to change module;
5. Remote alarm terminal optional.
6. T1+T2 surge protection.

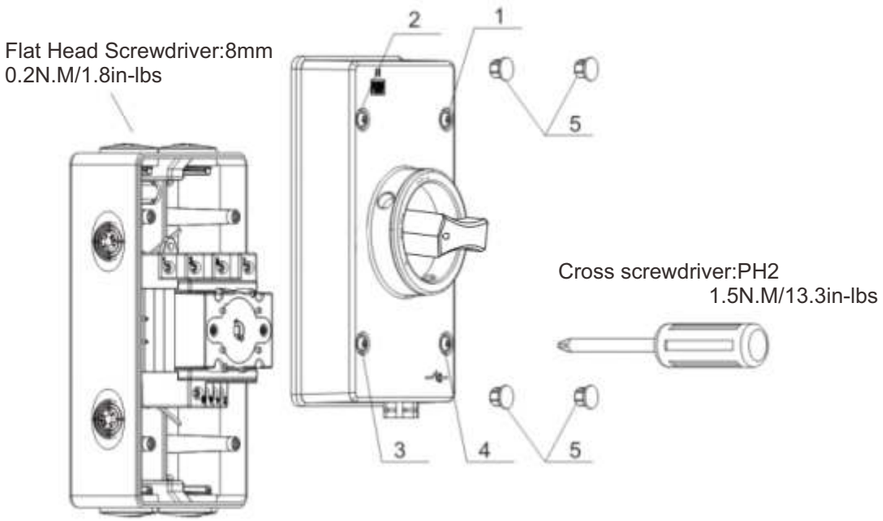
Model	GPS9-C40 PV
Test standard	IEC/EN 61643-11; GB18802.11
IEC test classification	T1+T2/Class I+II
Max.PV voltage [Uc pv]	1500V DC
Nominal discharge current(8/20μs)	20kA
Maximum discharge current(8/20μs)	40kA
Limp current(10/350μs)	6.25kA
Poles	3P
Voltage protection level Up pv	≤5.6kV
Response time Ta	25ns
Connecting cable	$4mm^2$(L-N);$6mm^2$(PE)
Method of installation	35mm Din Rail
Matched fuse or circuit breaker	32A
Type of remote signaling contact	Switching contact(Optional)
	C+NC:Normally closed
	C+NO:Normally open
	C:Common contact
Switching capacity	AC:250V/0.5A DC:250V/0.1A, 125V/0.2A,75V/0.5A
Cross-sectional area for remote signal contact	Max.1.5mm^2 solid / flexible
Operating temperature range	40℃...+80℃

GSW-N32/4

Enclosure DC Isolator

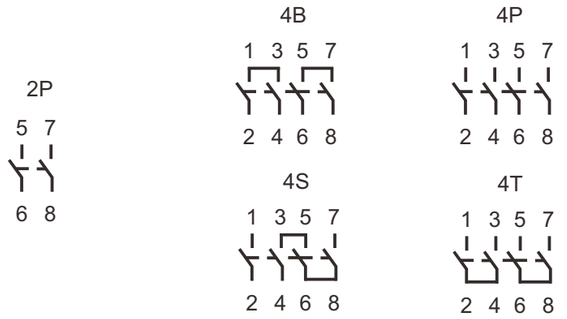
Instructions for installation and operation

- Be sure number (1,3,5,7) on switch and “IP66NW” on cover are not inverted
- Rotate Handel to the “OFF” position and locate shaft into switch body.
- Tighten screw 1,3,2,4 IN THAT ORDER.
- Make sure that number(5) is assembled on cover

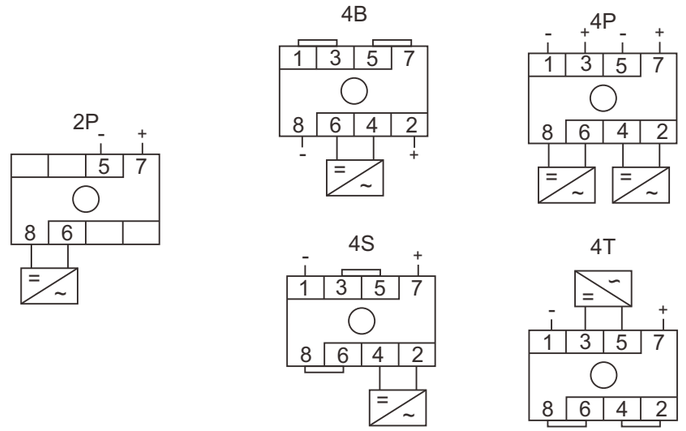


The switch with a box is suitable for outdoor use, Ithe solar at 40℃=32A, Ithe solar at 60℃=29A
Please note that all connections (including bridging link connections) should be tightening before energization.

DC Switch Disconnector for Photovoltaics Wiring diagram



Switch examples



Cable cross sections

Rigid(Stranded or solid)

4-16mm², AWG 11-5

4-10mm², AWG 11-7

Screwdriver, Tightening torque

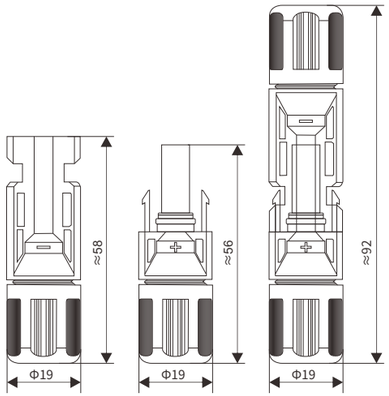
M4

1.2-1.8Nm

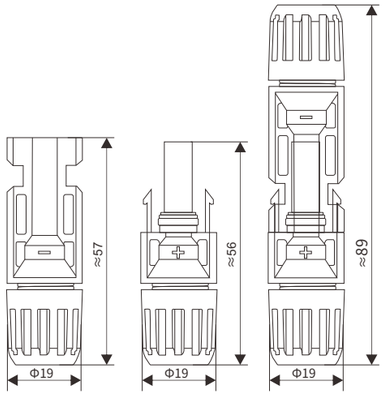
Mounting Type	Enclosure(IP66NW)	Vertically or Horizontally
	Switch body(IP20)	Vertically

Solar DC Connector

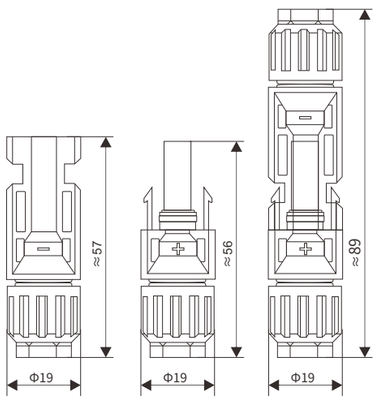
GSC4-TM4(1000V)
GSC4-TM4-1(1000V)



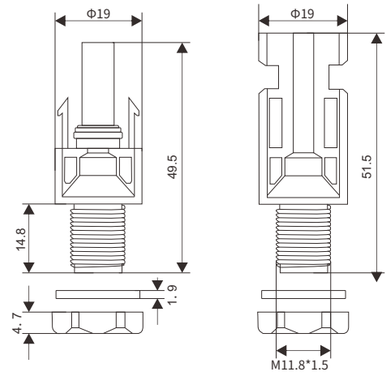
GSC4-TM3(1000V)
GSC4-TM3-1(1000V)



GSC4-TM2(1000V)
GSC4-TM2-1(1000V)

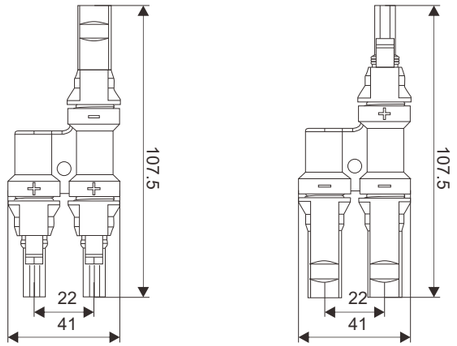


GSC4-TM1(1000V)
GSC4-TM1-1(1000V)

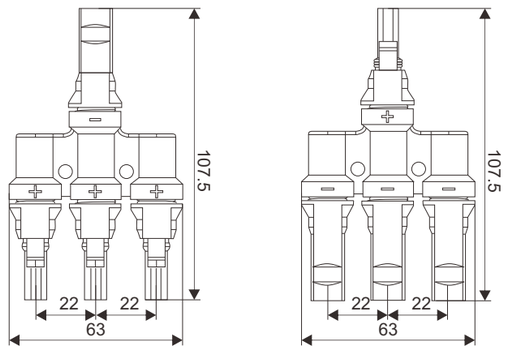


Data	
Connector system	Φ4mm
Rated voltage	1000V DC(IEC)[1]
Rated current	17A(1.5mm²) 22A(2.5mm²;14AWG) 30A(4mm²,6mm²;12AWG,10AWG)
Test voltage	6kV(50HZ,1min)
Ambient temperature range	-40°C ...90°C(IEC) -40°C ...75°C(IEC)
Upper limiting temper ature	+105°C(IEC)
Degree of protection,mated	IP67
Unmated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

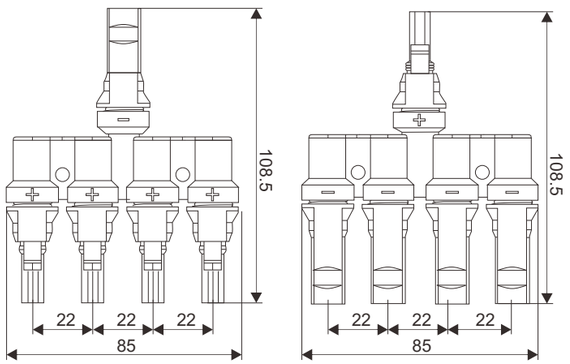
GSC4-T2 Branch Connector



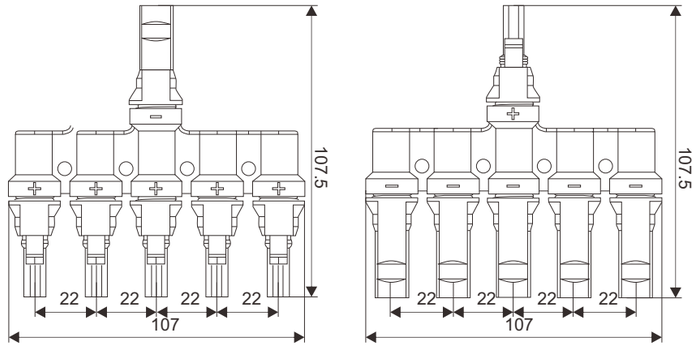
GSC4-T3



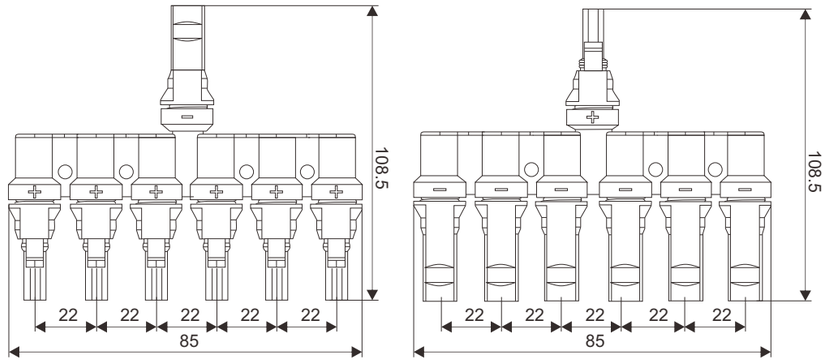
GSC4-T4



GSC4-T5



GSC4-T6

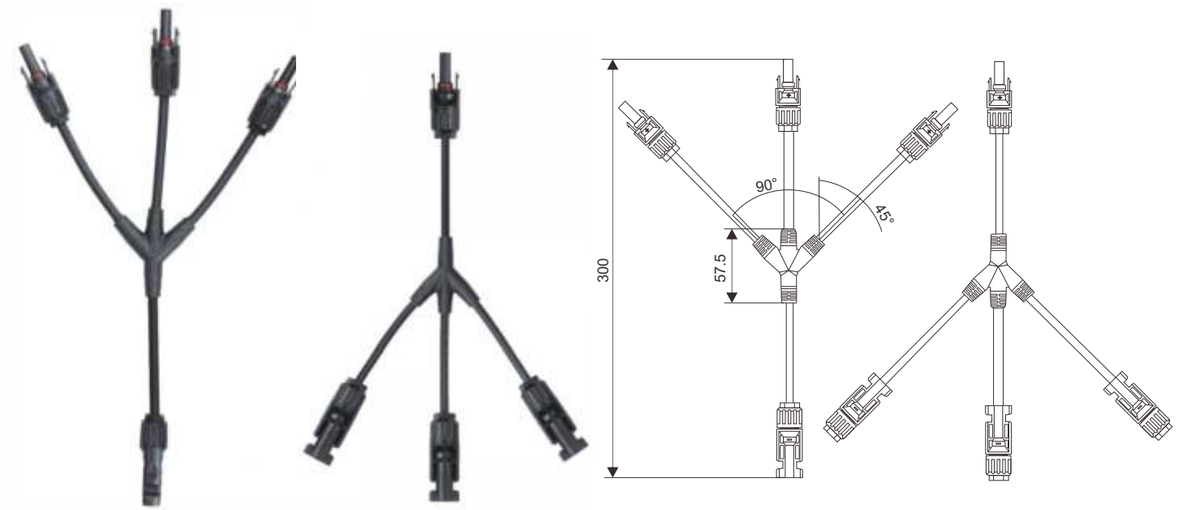


Data

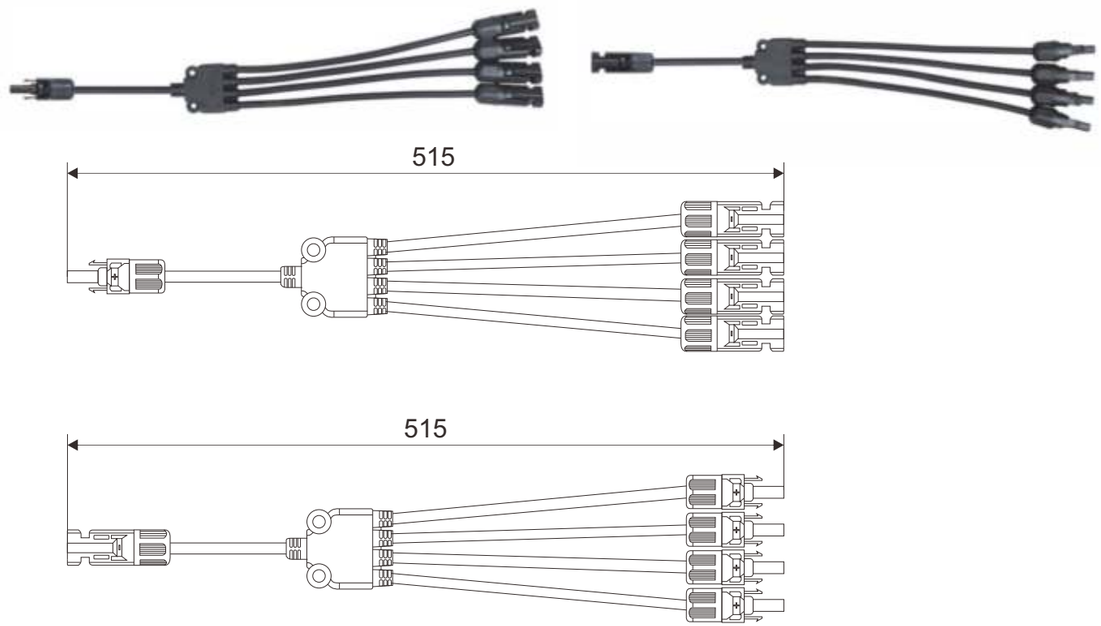
Insulation Material	PPO
Contact Material	Copper, Tin plated
Suitable Current	30A
Rated Voltage	1000V(TUV) 600V(UL)
Test Voltage	6kV(TUV50HZ,1min)
Contact Resistance	<0.5mΩ
Degree Of Protection	IP67
Ambient Temperature Range	-40°C ~ +85°C
Flame Class	UL 94-V0
Safety Class	II
Pin Dimensions	Φ4mm

GSC4-TY2

GSC4-TY3



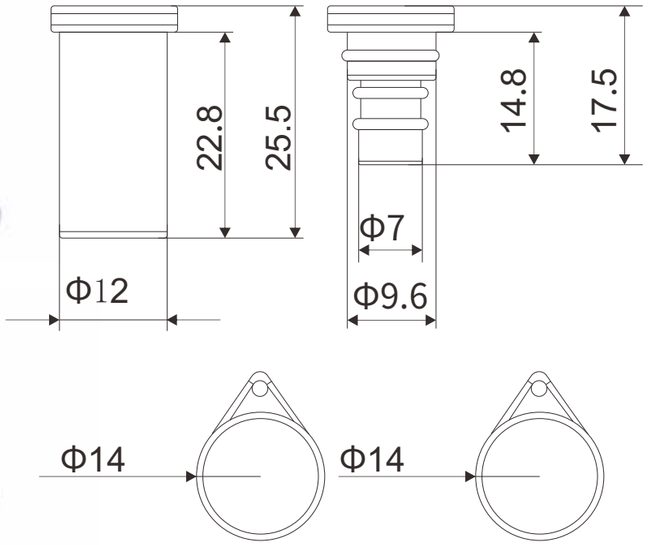
GSC4-TY4



Data	
Connector system	Φ4mm
Rated voltage	1000V DC(IEC)[1]
Rated current	30A
Test voltage	6kV(50HZ,1min)
Ambient temperature range	-40°C ...90°C(IEC) -40°C ...75°C(IEC)
Upper limiting temper ature	+105°C(IEC)
Degree of protection,mated	IP67
Unmated	IP2X
Comtact resistance of plug connectors	0.5mΩ
Safetyclass	II
Contact material	Messing, verzinnt Copper Alloy, tin plated
Insulation material	PC/PA
Locking system	Snap-in
Flame class	UL-94-VO
Salt mist spray test, degree of severity 5	IEC 60068-2-52

GSC4-T008

Protection caps



GSC4-T006

Tow-set spanners

PV-LTM5(1500V)

PV-LTM2/4(1000V)

GSC4-T001

Crimping Tool

GSC4-T002

GSC4-T003

GSC4-T005

MAIN SPECOALITY

Suitable for crimping the cable of 2.5~6.0mm2 (AWGl0-14)

Suitable for solar system installation site,flexible application

GSC1S

Single Pole Connector
30~180A

Model	Current Rating (Amps)	Voltage Rating (Volts)	Terminal Material	Plastic Shell Material	Flammability	Internal shrapnel (mm^2)	Operating Temperature Range(°C)	Connector Specification (mm^2)
GSC1S-30A	30	600V	Cu/Ep&Ag	PC	UL94V-0	65Mn	-20°C~105°C	1.5-4
GSC1S-75A	75							4-16
GSC1S-120A	120							10-25
GSC1S-180A	180							10-50

GSC2S

Two Pole Connector
40~350A

Model	Current Rating (Amps)	Voltage Rating (Volts)	Terminal Material	Plastic Shell Material	Flammability	Internal shrapnel (mm^2)	Operating Temperature Range(°C)	Connector Specification (mm^2)
GSC2S-40A	40	600V	Cu/Ep&Ag	PC	UL94V-0	65Mn	-20°C~105°C	4-6
GSC2S-50A	50							4-12
GSC2S-120A	120							10-25
GSC2S-175A	175							10-50
GSC2S-350A	350							10-70

50A~120A
Accessories-connector
Handles

175A~350A
Accessories-connector
Handles

50A~350A
Accessories-connector
Dust Cover

GSC3S 50A
Waterproof Plug of
Parking Air Conditioner

GSC4S-320A
Four Pole Connector

GSCBS-1
Boiler High Temperature Resistant
Liquid Level Electrode Rod

GSC001

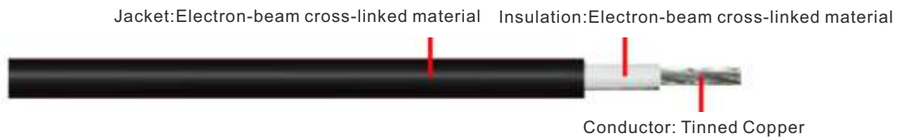
GSC002

GSC003

GISC004

Solar Cable

TüV 2PfG 1169 PV1-F 1X1.5mm² ~ 35mm² Multiple color



Construction	Conductor Construction	Conductor Outer	Cable Outer	Resistance Max.	Current Carring Capacity AT 60°C
mm²	n x mm	mm	mm	Ω/Km	A
1 x 1.5	30 x 0.25	1.58	4.9	13.7	30
1 x 2.5	48 x 0.25	2.02	5.45	8.21	41
1 x 4.0	56 x 0.3	2.35	6.10	5.09	55
1 x 6.0	84 x 0.3	3.20	7.20	3.39	70
1 x 10	142 x 0.3	4.60	9.00	1.95	98
1 x 16	228 x 0.3	5.60	10.20	1.24	132
1 x 25	361 x 0.3	6.95	12.00	0.795	176
1 x 35	494 x 0.3	8.30	13.80	0.565	218

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

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°C
Max. Temperature at conductor	+120°C
Service life	>25 year (-40°C~+90°C)
Refer toshortcirauit 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

white
black

SAE J1772 Connector

GWEV

Type1 Wallbox EV Charger

Data				
Model	GWEV-AM3-16	GIWEV-AM3-32	GWEV-AM3-40	GWEV-AM3-50
Current(adjustable current)	16A(8/10/13/16A)	32A(8/10/13/16/32A)	16A(12/24/28/30/32/40A)	50A(12/24/28/30/32/40/48/50A)
Voltage	240V	240V	240V	240V
Power	3.5KW	7KW	9.6KW	12KW
Frequency	50/60Hz			
RCD (Optional)	Type A RCD /Type A+DC 6mA RCD			
Communication(Optional)	Wifi, Bluetooth, App(Tuya)			
User interface	LED indicator + LCD display(2.8 inch)+ card swiping			
Certificate	CE, TUV			
Standard	EN IEC 61851-1:2019, EN IEC 61000-6-1/2/3/4:2019			
Charging interface	Type 1+5M cable or custom cable lengths			
Cable specification	3G2.5mm^2+2*0.5mm^2	3G6mm^2+2*0.5mm^2	3G8mm^2+2*0.5mm^2	5G10mm^2+6mm^2+1.5mm^2
Degree of protection	Charging gun: IP55, charging station:IP65			
Operating temperature	-30℃ to 55℃			
Operating humidity	5%-95%			
Product dimensions(H*W*D)mm	310*161*79.8mm			
Net weight	3kg	3.5kg	4kg	5kg

Product performance

Over voltage protection, Undervoltage protection, Overload protection, Leakage Protection, Ground protection,
Over temperature protection, Lightning protection, Short circuit protection

white
black

IEC 62196-2 Connector

GWEV

Type2 Wallbox EV Charger

Data				
Model	GWEV-AM3-16	GWEV-AM3-32	GWEV-AM3-16P3	GWEV-AM3-32P3
Current(adjustable current)	16A(8/10/13/16A)	32A(8/10/13/16/32A)	16A(8/10/13/16A)	32A(8/10/13/16/32A)
Voltage	250V	250V	415V	415V
Power	3.5KW	7KW	11KW	22KW
Frequency	50/60Hz			
RCD (Optional)	Type A RCD /Type A+DC 6mA RCD			
Communication(Optional)	Wifi, Bluetooth, App(Tuya)			
User interface	LED indicator + LCD display(2.8 inch)+ card swiping			
Certificate	CE, TUV			
Standard	EN IEC 61851-1:2019, EN IEC 61000-6-1/2/3/4:2019			
Charging interface	Type 2+5M cable or custom cable lengths			
Cable specification	3G2.5mm^2+2*0.5mm^2	3G6mm^2+2*0.5mm^2	5G2.5mm^2+2*0.5mm^2	5G6mm^2+2*0.5mm^2
Degree of protection	Charging gun: IP55, charging station:IP65			
Operating temperature	-30℃ to 55℃			
Operating humidity	5%-95%			
Product dimensions(H*W*D)mm	310*161*79.8mm			
Net weight	3kg	3.5kg	4kg	5kg

Product performance

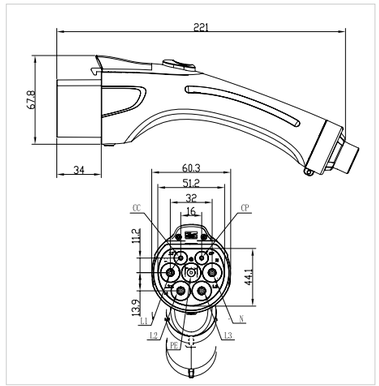
Over voltage protection, Undervoltage protection, Overload protection, Leakage Protection, Ground protection,
Over temperature protection, Lightning protection, Short circuit protection

GPEC-E-AC

AC Charger(Car End)

Data	
Environmental performance	
Operating temperature	-30℃~+50℃
Degree of protection	IP55
Electrical performance	
Rated current	16A/20A/32A/40A
Operation voltage	250/480V
Insulation resistance	>1000MΩ(DC500V)
Contact Resistance	0. 5mΩ Max
Terminal temperature rise	<50K
Withstand voltage	2500V
Mechanical properties	
Mechanical life	no-load plug in/out >10000times
Coupled insertion force	45N<F<100N
Impact of external force	It can withstand 1m height drop and 2t vehicle rolling
Applied Materals	
Case material	Thermoplastic, flame retardant grade UL94 V-0; Shell color: white/black optional
Terminal	Copper alloy, silver plating

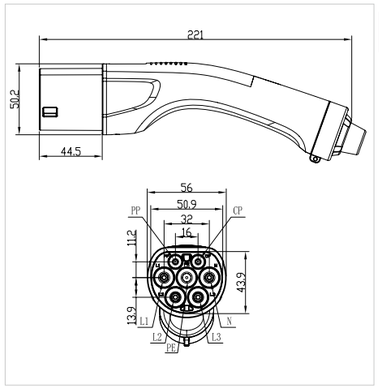
Product Model	Rated current	Rated current	Remarks
GPEC-AC-016-F501-X	16A	Single phase 3x2.5mm²+2x0.5mm²/	
GPEC-AC-020-F501-X	20A	TPU, Φ10.5±0.5	“X”after the model represents the wire length
GPEC-AC-016-F701-X	16A	Three phase 5x2.5mm²+2x0.5mm²/	
GPEC-AC-020-F701-X	20A	TPU, Φ13±0.5	
GPEC-AC-032-F501-X	32A	Single phase 3x6mm²+2x0.5mm²/	Cable color: black/orange optional
GPEC-AC-040-F501-X	40A	TPU, Φ13±0.5	
GPEC-AC-032-F701-X	32A	Single phase 5x6mm²+2x0.5mm²/	
GPEC-AC-040-F701-X	40A	TPU, Φ16±0.5	



GPEC-E-AC

AC Charger(Pile End)

Data	
Environmental performance	
Operating temperature	-30℃~+50℃
Degree of protection	IP55
Electrical performance	
Rated current	16A/20A/32A/40A
Operation voltage	250/480V
Insulation resistance	>1000MΩ(DC500V)
Contact Resistance	0. 5mΩ Max
Terminal temperature rise	<50K
Withstand voltage	2500V
Mechanical properties	
Mechanical life	no-load plug in/out >10000times
Coupled insertion force	45N<F<100N
Impact of external force	It can withstand 1m height drop and 2t vehicle rolling
Applied Materals	
Case material	Thermoplastic, flame retardant grade UL94 V-0; Shell color: white/black optional
Terminal	Copper alloy, silver plating



Product Model	Rated current	Rated current	Remarks
GPEC-AP-016-F501-X	16A	Single phase 3x2.5mm²+2x0.5mm²/	
GPEC-AP-020-F501-X	20A	TPU, Φ10.5±0.5	“X”after the model represents the wire length
GPEC-AP-016-F701-X	16A	Three phase 5x2.5mm²+2x0.5mm²/	
GPEC-AP-020-F701-X	20A	TPU, Φ13±0.5	
GPEC-AP-032-F501-X	32A	Single phase 3x6mm²+2x0.5mm²/	Cable color: black/orange optional
GPEC-AP-040-F501-X	40A	TPU, Φ13±0.5	
GPEC-AP-032-F701-X	32A	Single phase 5x6mm²+2x0.5mm²/	
GPEC-AP-040-F701-X	40A	TPU, Φ16±0.5	

GPEC-E

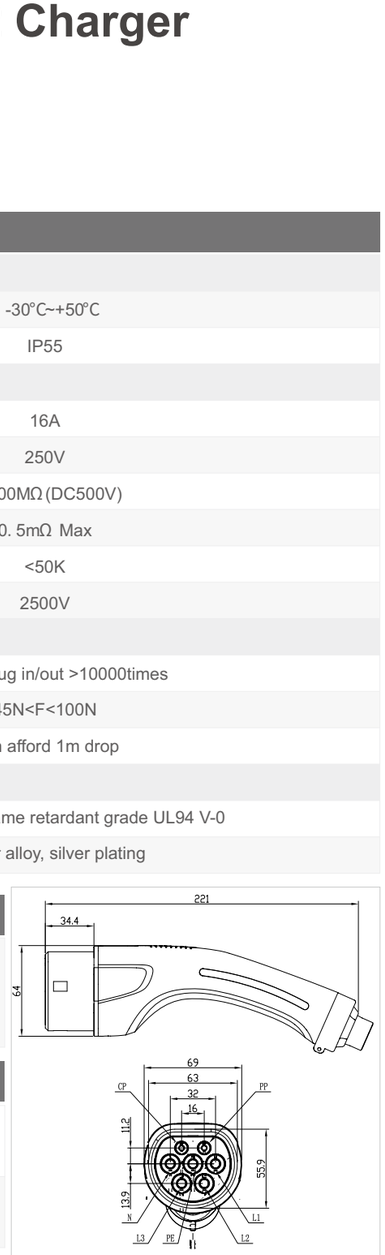
Mode 2 Charger

Data	
Environmental performance	
Operating temperature	-30℃~+50℃
Degree of protection	IP55
Electrical performance	
Rated current	16A
Operation voltage	250V
Insulation resistance	>1000MΩ(DC500V)
Contact Resistance	0. 5mΩ Max
Terminal temperature rise	<50K
Withstand voltage	2500V
Mechanical properties	
Mechanical life	no-load plug in/out >10000times
Coupled insertion force	45N<F<100N
Impact of external force	Can afford 1m drop
Applied Materals	
Case material	Thermoplastic, flame retardant grade UL94 V-0
Terminal	Copper alloy, silver plating

Product Model	Remarks
GPEC-AC-B01-016-XA	“X”after the model represents the wire length,such as “5A,6A...” Cable color: black/orange optional
GPEC-AC-B01-016-XB	
GPEC-AC-B01-016-XC	

Control Box Function

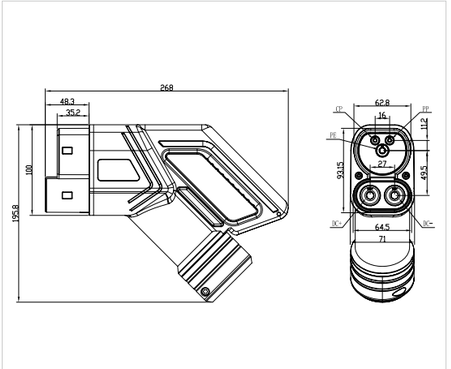
Leakage protection	Over load protection	Grounding protection
Overvoltage under-voltage protection	Lightning protection	Over temperature protection



GPEC-E

DC Charger

Data	
Environmental performance	
Operating temperature	-30℃~+50℃
Degree of protection	IP55
Electrical performance	
Rated current	63A/80A/125A/160A/200A
Operation voltage	1000V
Insulation resistance	>1000MΩ(DC500V)
Contact Resistance	0. 5mΩ Max
Terminal temperature rise	<50K
Withstand voltage	3500V
Mechanical properties	
Mechanical life	no-load plug in/out >10000times
Coupled insertion force	45N<F<100N
Impact of external force	It can withstand 1m height drop and 2t vehicle rolling
Applied Materals	
Case material	Thermoplastic, flame retardant grade UL94 V-0; Shell color: white/black optional
Terminal	Copper alloy, silver plating



Product Model	Rated current	Rated current
GPEC-DC-063-F501-X	63A	2x16mm²+1X16mm²+P(5X0.75mm²+1X0.75mm²) /TPU, Φ23±1
GPEC-DC-080-F501-X	80A	
GPEC-DC-125-F701-X	125A	2x35mm²+1X25mm²+P(5X0.75mm²+1X0.75mm²) /TPU, Φ29±1
GPEC-DC-160-F701-X	160A	2x50mm²+1X25mm²+P(5X0.75mm²+1X0.75mm²) /TPU, Φ32±1
GPEC-DC-200-F501-X	200A	2x70mm²+1X25mm²+P(5X0.75mm²+1X0.75mm²) /TPU, Φ35±1

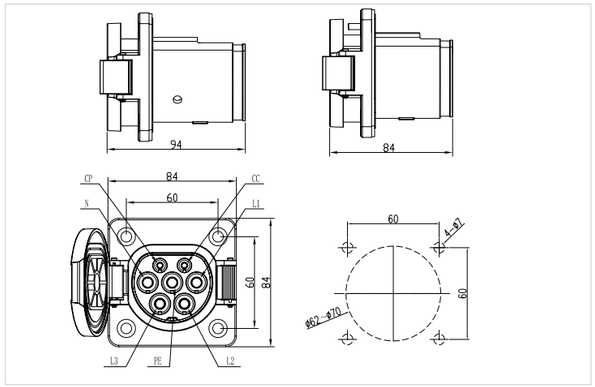
Remarks “X”after the model represents the wire length
Cable color: black/orange optional

GEVC

GB AC Charging Socket

Data	
Environmental performance	
Operating temperature	-40℃~+1050℃
Degree of protection	IP55
Electrical performance	
Rated current	16A/32A
Operation voltage	250V/440V
Insulation resistance	>1000MΩ (DC500V)
Contact Resistance	0. 5mΩ Max
Terminal temperature rise	<50K
Withstand voltage	2500V
Mechanical properties	
Mechanical life	no-load plug in/out >10000times
Coupled insertion force	45N<F<100N
Applied Materals	
Case material	Thermoplastic, flame retardant grade UL94 V-0; Shell color: white/black optional
Insert sleeve	Copper alloy, silver plating
Sealing element	Rubber or silica gel

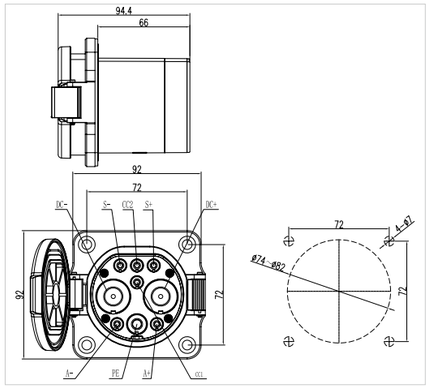
Product Model	Remarks
GEVC-AC-016-G501-WX	
GEVC-AC-016-G701-WX	“X”after the model represents the wire length,such as “W5,W6...”
GEVC-AC-032-G501-WX	Cable color: black/orange optional
GEVC-AC-032-G701-WX	



GEVC

GB DC Charging Socket

Data	
Environmental performance	
Operating temperature	-40℃~+1050℃
Degree of protection	IP55
Electrical performance	
Rated current	80A/250A
Operation voltage	1000V
Insulation resistance	>2000MΩ (DC500V)
Contact Resistance	0. 5mΩ Max
Terminal temperature rise	<50K
Withstand voltage	3500V
Mechanical properties	
Mechanical life	no-load plug in/out >10000times
Coupled insertion force	45N<F<100N
Applied Materals	
Case material	Thermoplastic, flame retardant grade UL94 V-0; Shell color: white/black optional
Insert sleeve	Copper alloy, silver plating
Sealing element	Rubber or silica gel



Product Model	Rated current	Rated current
GEVC-DC-080-G901-CX	80A	2x25mm²+25mm²+2X4mm²+7X0.75mm² /Single core wire
GEVC-DC-080-G901-CX	125A	2x35mm²+25mm²+2X4mm²+7X0.75mm² /Single core wire
GEVC-DC-080-G901-CX	160A	2x50mm²+25mm²+2X4mm²+7X0.75mm² /Single core wire
GEVC-DC-080-G901-CX	250A	2x70mm²+25mm²+2X4mm²+7X0.75mm² /Single core wire

Remarks “X”after the model represents the wire length,such as “C5,C6...”
Cable color: black/orange optional

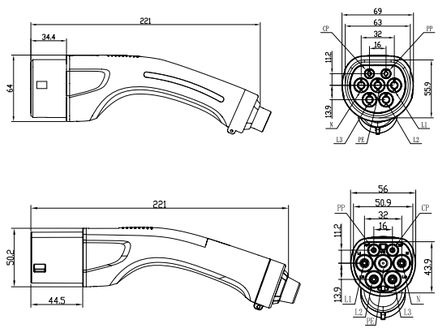
GPEC-E

Double Charger

Data	
Environmental performance	
Operating temperature	-30℃~+50℃
Degree of protection	IP55
Electrical performance	
Rated current	16A/20A/32A/40A
Operation voltage	250/480V
Insulation resistance	>1000MΩ(DC500V)
Contact Resistance	0. 5mΩ Max
Terminal temperature rise	<50K
Withstand voltage	2500V
Mechanical properties	
Mechanical life	no-load plug in/out >10000times
Coupled insertion force	45N<F<100N
Impact of external force	It can withstand 1m height drop and 2t vehicle rolling
Applied Materals	
Case material	Thermoplastic, flame retardant grade UL94 V-0; Shell color: white/black optional
Terminal	Copper alloy, silver plating

Product Model	Rated current	Rated current
GPEC-ACP-016-F501-X	16A	Single phase 3x2.5mm²+2x0.5mm²/
GPEC-ACP-020-F501-X	20A	TPU, Φ10.5±0.5
GPEC-ACP-016-F701-X	16A	Three phase 5x2.5mm²+2x0.5mm²/
GPEC-ACP-020-F701-X	20A	TPU, Φ13±0.5
GPEC-ACP-032-F501-X	32A	Single phase 3x6mm²+2x0.5mm²/
GPEC-ACP-040-F501-X	40A	TPU, Φ13±0.5
GPEC-ACP-032-F701-X	32A	Single phase 5x6mm²+2x0.5mm²/
GPEC-ACP-040-F701-X	40A	TPU, Φ16±0.5

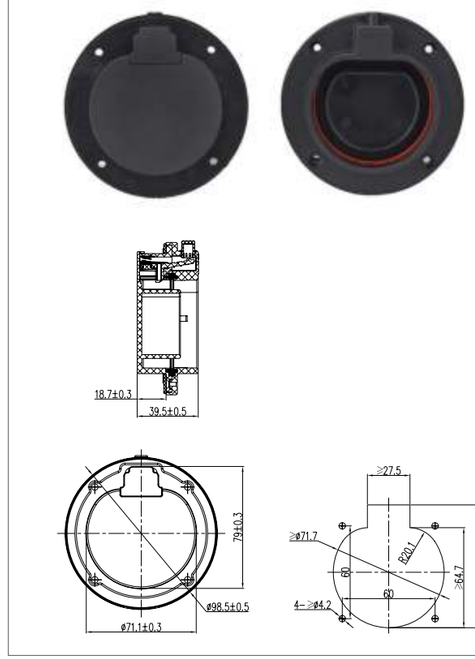
Remarks "X"after the model represents the wire length
Cable color: black/orange optional



GEVC

IEC Empty Sockets And Accessories

IEC AC Empty Socket



IEC DC Empty Socket

AC Empty socket installation screw accessories
M4 nut/4 pcs
Φ 4 spring cushion/4 pcs
Φ 4 flat washer/4 pcs
Hexagon socket countersunk head screws M4 X 20/4 pcs

DC Empty socket installation screw accessories
M6 nut/4 pcs
Φ 6 spring cushion/4 pcs
Φ 6 flat washer/4 pcs
Hexagon socket countersunk head screws M4 X 20/4 pcs

GYPC2-C

Type2 Wallbox EV Charger

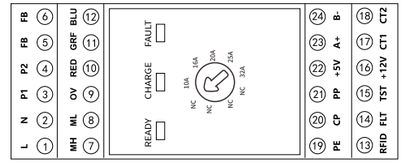
Brief description

Control the communication of the electric vehicle AC charging process complies with IEC 61851 or SAEJ1772 standards.
Conform to DINEN60715 installation requirements.
The output of the relay is used to connect the AC contactor that switches on/off the load.
The operating status of the EV interface is indicated by three-color LED lights.
The controller additional functions include: non-contact IC card connection module, DC leakage detection module(RCMU), RS485 communication interface equipment, plug lock device, external emergency stop button, etc. These functions must be NOTED when ordering.

Data	
Operating voltage	AC230V ± 10% 50Hz
Output the PWM signal	10A/16A/20A/25A/32A/63A
Output control AC contactor	Passive contacts
Additional connection function(optional)	1.RCNU leakage monitoring mode(0-20mA/0-200mA) 2.Non-contact IC Card 3.DLB cuttent balance mode 4.Current sensor access mode (DC+12V Output 0-5V) 5.With LCD display
Communication function(optional)	1way RS485(Modebus-RTU)/RS232
Output auxiliary voltage	DC 12V/100mA DC5V/100mA
Ambient temperature	-40°C~+50°C
Humidity	⩽85%
IP degree	IP22
Cooling method	Natural cooling
Installation method	DIN rail standard
Weight	40g

Maximum charging capacity indication 10A,16A,20A,25A,32A, Through the internal dial switch

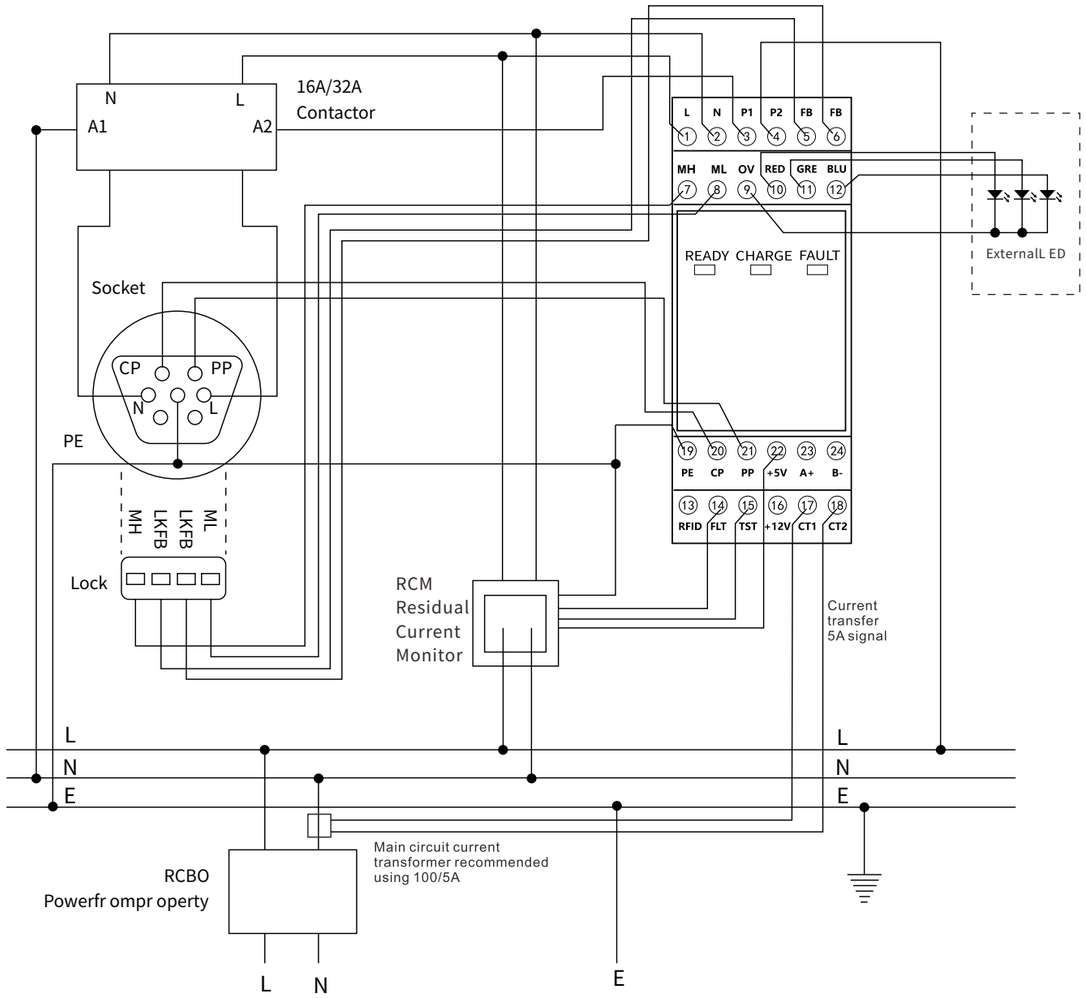
Terminal description of the controller



Terminal function description

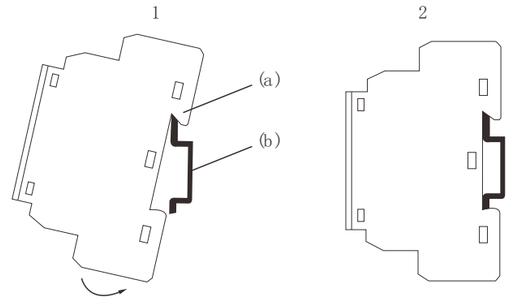
Serial number	Mark	Function	
1	L	Live line	Product working power supply:AC230V± 10% 50Hz
2	N	Neutral line	
3	P1	Relay coil A1	AC contactor connected to the connection load of charging station
4	P2	Relay coil A2	
5	FB	Reflect signal of the electromagnetic lock	This is the feeback signal on the electromagnetic lock directly to the passive contact output terminal of the electromagnetic lock
6	FB		
7	LK+	Electromagnetic lock positive voltage	Provide positive and negative pulse voltage of tlectromagnetic lock, duty cycle of output pulse(1:3)and total pulse output maximum driving capacity of 500ms
8	LK-	Electromagnetic lock positive voltage	
9	0V	Earth terminal	External indicator light, DC 5V/10mA drive capability
10	RED	Red LED	
11	GRE	Blue LED	
12	BLU	Green LED	
13	IC	IC card-controlled input signal	The signal of external non-contact IC card reading module, input is TTL voltage signal,DC3.5V/5V
14	FLT	RCMU fault signal(DC3.3V/5V)output terminal	When the controller detects this end signal,means this line occur fault(including >DC6mA leakage signal),the controller will cut off the charging power,untill this fault signal is solved, the controller will automatic resumes the charging state.
15	TST	RCMU test signal(DC3.3V/5V),the input terminal	The controller outputs the test signal before each charging, using to check that the working of the RCMU whether normal
16	+12V	+12V Power Supply	DC+12V/100mA Power output
17	CT1	Current transformer	When the controller requires DLB function, it requires connect to current transformer signal, the signal is:AC0-1.0V/0-50A.This function can dynamically balance the power load, adjust the output in time, control the charging current, and protect the safety of the power supply line.
18	CT2		
19	PE	Power supply	Earth terminal
20	CP	Connect to the vehicle CP	Communication connection with electric vehicle, output PWM wave
21	PP	Charging cable current identification	When this end is a socket tyoe charging station,it identify the current specification of charging cable
22	+5V	+5V Power Supply	Supply DC 5V/100mA power output
23	A+	A+ for RS485 Communications	It can communicate with RS485 equipment. The communication standard conforms to Modbus-RTU slave mode. Baud rate:38400,N,8,1 address number defaule:255 (Broadcast address) See Table A for details
24	B-	B+ for RS485 Communications	

Application circuit diagram

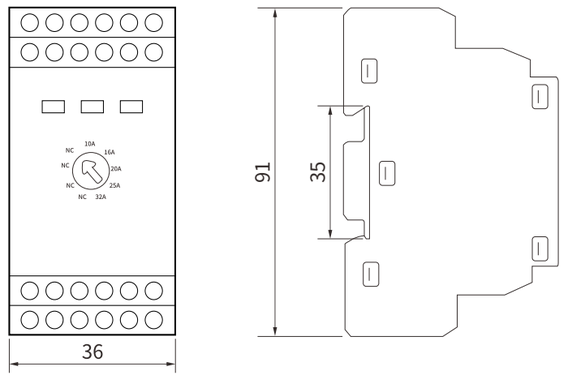


Easy installation

1. Install the controller(a) vertically onto the horizontal DIN rail(b)
2.Rotate the controller down until the cilp into the Din
(Note: DIN rail accordance with German industrial standars)



Overall dimension(mm)



GHC9

AC Contactor

Introduce

GHC9 series household AC contactors have independent intellectual property rights, which is different from the imitation Schneider product structure in the market and is limited in foreign markets.
The design of S series household AC contactor solves the four common sore points in the market: Improve the dust-proof performance of the product; Optimize the wiring mode and improve the wiring capacity; Enhance the wall thickness of the body and improve the hand feel and texture of the product; Optimize and improve the heat insulation parts.

Scope of application

GHC9 series household AC contactors (hereinafter referred to as Contactors) are mainly used in circuits with AC 50Hz (or 60Hz), rated working voltage to 400V and rated working current to 63A to control low (micro) inductance load of household appliances and similar purposes; It can also be used to control the load of household motor. At this time, the control power shall be reduced accordingly.
The products are used in families, hotels, apartments and other places to implement the automation function, and are applied to the large-scale production of household appliances.
Standards: GB / T 17885, IEC / EN 61095.

Normal working and installation conditions	
Ambient air temperature	The temperature shall not be higher than +60°Cor lower than -5°C.When the product is installed in the power distribution box, thermal insulation parts must be assembled on both sides to facilitate heat dissipation
Altitude	Not exceeding 2000m
Atmospheric conditions	The relative humidity of the air at the installation site shall not exceed 50% when the maximum temperature is +40°C ;Higher relative humidity is allowed at lower temperature, such as 90% at +20°C .And special measures shall be taken for occasional condensation due to temperature changes.
Atmospheric condition pollution level	Level 2
Installation category	level II
Shock vibration	There shall be no significant shock and vibration at the installation position
Installation mode	TH35-7.5 profile steel mounting rail is used for installation
Installation conditions	The installation position shall be vertical, and the inclination in each direction shall not exceed±5°
Degree of protection	IP20
Action conditions	Pull in voltage under operating conditions(85%~110%)Us; The release voltage is (20%~75%)Us

Main parameters and technical performance

Classification by number of poles: contactors are divided into 1P/2P/3P/4P

Normal working and installation conditions							
Parameter			Product model					
			16A	20A	25A	32A	40A	63A
Rated current In(A)		AC-7a	16	20	25	32	40	63
		AC-7b	6	7	8.5	12	15	20
Agreed heating current Ith(A)			25	25	25	63	63	63
Rated insulation voltage Ui(V)			500					
Rated working voltage Ue(V)			250V(1P 2P) 400V(3P 4P)					
Number of main contacts		1P	1NO / 1NC					
		2P	2NO / 2NC / 1NO1NC					
		3P	3NO / 3NC					
		4P	4NO / 4NC / 2NO2NC / 3NO1NC					
Control power Pe(kW)	AC-7a	230V	3.5	4.5	5.5	8	9	14
		400V	6.5	8	10	12	16	25
	AC-7b	230V	1.4	1.6	2	3	3.5	4.5
		400V	2.4	2.8	3.4	4.5	6	8
Electrical life(10000 times)			10					
Mechanical life(10000 times)			100					
Rated power supply voltage Us(V)			AC24V AC230V					
Rated working system	Intermittent working system		30 times/h load factor 40%					
	Eight-hour day		Basic working system					
Wiring capacity(mm^2)	Control loop	Hard wire	1.5~2.5	2x1.5				
		Flexible cord	1.5~2.5	2x2.5				
	Power circuit	Hard wire	1.5~6	6~25				
		Flexible cord	1~4	6~16				
Tightening torque(N.m)	Control loop	Specification of wiring screw	M3.5	M3.5				
		Torque(N.m)	0.8	0.8				
	Power circuit	Specification of wiring screw	M3.5	M5				
		Torque(N.m)	0.8	3.5				

Product features

IHC9 household AC contactors adopt direct acting flip structure , which is different from existing Schneider products and has multiple patent rights.
The product is a modular control electrical appliance with novel structure and small volume. It is characterized by modular size, artistic modeling (matching with the appearance of C65N circuit breaker) and safe use (greatly improving the dust-proof effect). It can be combined with small circuit breaker and installed in the control and lighting box. The use of high-quality insulating materials greatly improves the safety. Beautiful appearance, low noise, suitable for hotels, hospitals and other places.

GYL9 A

RCCB

Scope of application

GYL9 residual current circuit breaker (without overcurrent protection) is suitable for AC 50Hz, rated voltage 240V for two poles, 415V for four poles,andratedcurrentupto80A.Itcanquickly cutoffthefaultpowerinaveryshorttime,
To protect the safety of people and electrical equipment, it can also be used for infrequent switchingoflines.
It's suitable for terminal distribution lines in commercial office buildings, residential and generalindustrialuse.
Compliantwith:IEC61008-1,GB16916.1

Technical parameter

Electrical Characteristics

Classification	Protection type		Poles	Rated current(In)	Rated sensitivity (I△n)	Sensitivity		Rated voltage(Ue)
	ELE	ELM				Instantaneous	Delayed	
A	■	■	1P+N,3P+N	25/40/63/80A	10/30/100/300mA	■	■	1P+N:240V~ 3P+N:415V~

Rated insulation voltage(Ui)	Rated frequency	Rated impulse withstand voltage(Uimp)	Rated residual making and breaking capacity I△m	Short-circuit current Inc=I△c	Rated residual non-operating current	Break time(Instantaneous)		
						Residual current I△=1I△n	Residual current I△=2I△n	Residual current I△=5I△n
500V	50/60Hz	4kV	500A (below 63A) 10In(63A and above)	10kA (below 63A) 10kA(63A and above)	0.5I△n	0.1s	0.08s	0.04s

Mechanical properties

Mechanical life /Electric life	Protection class		Ambient temperature	Storage temperature
	Direct install	In distribution boxI		
4000	Ip20	Ip40	-25°C+60°C	-25°C+70°C

Other characteristics

Wiring size		Contact Status Indication	Fault Indication	Circuit identification	Connection	Assemblable accessories
Copper/Hard Wire	Cord/Hoop Terminals					
1-35mm²	1-25mm²	——	■	——	Top and bottom (ELM) Top line(ELE)	——

GYL9-B

RCCB

Scope of application

GYL9-Bresidual current operated circuit breaker is suitable for AC 50Hz, rated voltage 240V for two poles, 415V for four poles, rated current up to 63A, used to detect AC leakage, pulsating DC leakage, smooth DC leakage, compound wave leakage and high frequency leakage current up to 1kHz. When people come to electric shock or the leakage current of the circuit exceeds the specified value, it automatically cuts off the faulty power supply in a very short time to protect the safety of people and electrical equipment. It can also be used for infrequent switching operations in normal condition.
Compliant with:IEC62423,IEC 61008-1, GB22794,GB16916.1

Technical parameter

Electrical Characteristics

Classification	Application		Poles	Rated current (In)	Rated sensitivity (I△n)	Rated Voltage (Ue)
B	Electric car charging station, charging pile	Equipment circuit controlled by three -phase inverter	1P+N,3P+N	25、40、63、80A	30、100、300mA	1P+N:240V~ 3P+N:415V~

Rated Insulation voltage (Ui)	Rated frequency	Rated impulse withstand voltage (Uimp)	Rated short-circuit current Inc=rated residual short circuit current△ I m	Rated residual connecting and breaking capacity Inc=I△c	Rated residual non-operating current
500V	50/60Hz	4kV	500A (63A below) 10In (63A and above)	6kA	0.5I△n

Mechanical properties

Mechanical life /Electric life	Protection class		Ambient temperature	Storage temperature
	Direct install	In distribution boxI		
4000	Ip20	Ip40	-25°C+60°C	-25°C+70°C

Other characteristics

Wiring size		Contact Status Indication	Fault Indication	Circuit identification
Copper/Hard Wire	Cord/Hoop Terminals			
1-35mm²	1-25mm²	——	■	——

GYL9 A+EV

RCCB

Scope of application

GYL9 type A+EV leakage current circuit breaker is suitable for protection of AC facilities with charging mode 3, DC leakage current of more than6mA.whenthereisaresidualfaultcurrent of more than 6mA in the system, it can automatically cuts off the fault power in very short time.
It is used to detect the DC residual current greater than 6mA in the AC system. According to the IEC61851 standard, it should be used with the RCD with type A residual current protection characteristics,which provides protection against possible ground faults.

Technical parameter

Electrical Characteristics

Residual current operating type	Rated current (In)	Poles	Rated voltage	Rated Insulation voltage(Ui)	Rated frequency	Rated sensitivity (I△n)	DC current operating sensitivity I△ndc
A+EV	25/40/63A	2P/4P	240/415V	500V	50/60Hz	30mA	6mA

Rated short circuit current Inc	Rated limited short-circuit current I△c	Rated switch-on segment capacity Im	Rated switch-on segment capacity I△m	Fuse selection	Rated impulse withstand voltage(1.2/50)	Dielectric test voltage	Pollution level
6kA/10kA	6kA/10kA	500A(25A,40A) 630A(63A)	500A(25A,40A) 630A(63A)	Matching silver wire	4000V	2500V/1min	2

Mechanical features

Mechanical life	Electrical life	Leakage trip indication	Protection class	Ambient temperature (≤35°C)	Storage temperature	Wiring size	Installed	Wiring location
10000	4000	■	IP20	-5~ +60°C	-25~ +70°C	35mm²	DIN 60715	Wiring up

Rated residual current breaking time

Mechanical life	Rated sensitivity(I△n)	Residual current segment time(S)		
		I△n	2I△n	5I△n
25/40/63A0	30	0.1	0.08	0.04
	Rated sensitivity(I△n)	Residual current segment time(S)		
		6mA	60mA	200mA
	30	10	0.3	0.1

GYL10-A

RCCB

Scope of application

GYL10 residual current circuit breaker (without overcurrent protection) is suitable for AC 50Hz, rated voltage 240V for two poles, 415V for four poles,and rated current up to 63A. It can quickly cut off the fault power in a very short time,
To protect the safety of people and electrical equipment, it can also be used for infrequent switching of lines.
Compliant with :GB/T 16916.1, IEC 61008-1,CE, CBmarked.

Technical parameter

Electrical Characteristics

Classification	Protection type		Poles	Rated current(In)	Rated sensitivity (I△n)	Sensitivity		Rated voltage(Ue)
	ELE	ELM				Instantaneous	Delayed	
A	■	■	1P+N,3P+N	25/40/63A	10/30/100/ 300mA	■	■	1P+N:240V~ 3P+N:415V~

Rated insulation voltage(Ui)	Rated frequency	Rated impulse withstand voltage (Uimp)	Rated residual making and breaking capacity I△m	Short-circuit current Inc=I△c	Rated residual non-operating current	Break time(Instantaneous)		
						Residual current I△=1I△n	Residual current I△=2I△n	Residual current I△=5I△n
500V	50/60Hz	4kV	500A (below 63A) 10In(63A and above)	6kA	0.5I□n	0.1s	0.08s	0.04s

Mechanical properties

Mechanical life/Electric life	Protection class		Ambient temperature	Storage temperature
	Direct install	In distribution box		
4000	Ip20	Ip40	-25°C+60°C	-25°C+70°C

Other characteristics

Wiring size		Contact Status Indication	Fault Indication	Circuit identification	Connection	Assemblable accessories
Copper/Hard Wire	Cord/hoop Terminals					
1-25mm²	1-16mm²	——	■	——	Top and bottom(ELM) Top line(ELE)	——