

# Solar DC String Box



Customize 1000V 1500V  
Combiner Boxes



# The Best DC Components for The Best Result.



## About ZJBENY

Top 1 manufacturer of DC components and combiner boxes in China.  
With more than 10 years experience in solar DC solutions designing, producing and testing.

We are one of the manufacturers own the DC electrical cycle tester in China, the test equipment is important for keeping the DC switch at high quality level.

The first DC switch listed by UL508i.

The standard DC isolator recommended by Clean Energy Council Australia.

ZJBENY is supplying reliable DC components to top inverter companies and EPCs worldwide.

1000V 1500V solar solutions DC side and AC side is available.



## Solar DC String Box

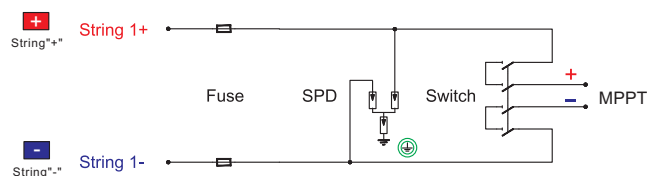
### 1 String Input 1 String Output DC



| General Data                                 |                                         | DC Surge Arrester            | BUD-40/3           |
|----------------------------------------------|-----------------------------------------|------------------------------|--------------------|
| Model No.                                    | BHS-1/1                                 | Max Operation Voltage (Ucpv) | 1000V              |
| Input                                        | 1 string                                | Standard Compliance with     | EN 50539 Type 2    |
| Output                                       | 1 string                                | Maximum Discharge Current    | 40 KA              |
| Maximum Voltage                              | 1000V                                   | Certification                | TUV CE             |
| Max DC Short Circuit Current Per Input (Isc) | 15A (Changeable)                        |                              |                    |
| Maximum Current Output                       | 32A                                     |                              |                    |
| Enclosure                                    |                                         | DC fuse holder               | BR-30              |
| Material Type                                | Polycarbonate/ABS                       | LED Indicator                | Yes                |
| Degree of Protection                         | IP65                                    | Rated Working Voltage        | 1000V              |
| Degree of Resistance to Impacts              | IK10                                    | Fuse Link                    | 10x38mm LITTEL 15A |
| Dimension (WxHxD)                            | 292 x 220 x 120mm                       | Certification                | UL,CB,CE           |
| Cable input Entry                            | PG09 Cable Gland, 2.5-16mm <sup>2</sup> |                              |                    |
| Output Cable Gland                           | PG21 2.5-16mm <sup>2</sup>              |                              |                    |
| DC Switch Disconnecter                       |                                         | Environment                  |                    |
| Rated Insulation Voltage (Ui)                | 1000V                                   | Operating Temperature        | -20°C~+60°C        |
| Rated Current (Ie)                           | 32A                                     | Humidity                     | 99%                |
| Category                                     | DC21B/PV2                               | Altitude                     | 2000M              |
| Standard Compliance with                     | IEC 60947-3                             | Installation                 | Wall Mounting      |
| Certification                                | UL, TUV,KEMA,SAA,CE                     |                              |                    |



**BHS-1/1**



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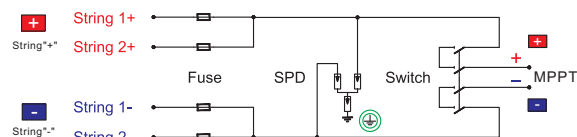
### 2 Strings Input 1 String Output DC



| General Data                                 |                                         | DC Surge Arrester            | BUD-40/3           |
|----------------------------------------------|-----------------------------------------|------------------------------|--------------------|
| Model No.                                    | BHS-2/1                                 | Max Operation Voltage (Ucpv) | 1000V              |
| Input                                        | 2 strings                               | Standard Compliance with     | EN 50539 Type 2    |
| Output                                       | 1 string                                | Maximum Discharge Current    | 40 KA              |
| Maximum Voltage                              | 1000V                                   | Certification                | TUV CE             |
| Max DC Short Circuit Current Per Input (Isc) | 15A (Changeable)                        |                              |                    |
| Maximum Current Output                       | 32A                                     |                              |                    |
| Enclosure                                    |                                         | DC fuse holder               | BR-30              |
| Material Type                                | Polycarbonate/ABS                       | LED Indicator                | Yes                |
| Degree of Protection                         | IP65                                    | Rated Working Voltage        | 1000V              |
| Degree of Resistance to Impacts              | IK10                                    | Fuse Link                    | 10x38mm LITTEL 15A |
| Dimension (WxHxD)                            | 292 x 220 x 120mm                       | Certification                | UL,CB,CE           |
| Cable input Entry                            | PG09 Cable Gland, 2.5-16mm <sup>2</sup> |                              |                    |
| Output Cable Gland                           | PG21 2.5-16mm <sup>2</sup>              |                              |                    |
| DC Switch Disconnecter                       |                                         | Environment                  |                    |
| Rated Insulation Voltage (Ui)                | 1000V                                   | Operating Temperature        | -20°C~+60°C        |
| Rated Current (Ie)                           | 32A                                     | Humidity                     | 99%                |
| Category                                     | DC21B/PV2                               | Altitude                     | 2000M              |
| Standard Compliance with                     | IEC 60947-3                             | Installation                 | Wall Mounting      |
| Certification                                | UL, TUV,KEMA,SAA,CE                     |                              |                    |



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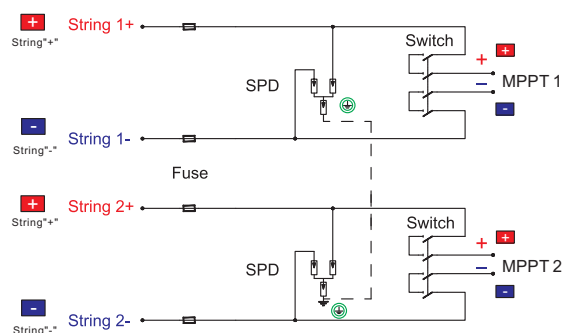
### 2 Strings Input 2 Strings Output DC



| General Data                                 |                                         | DC Surge Arrester            | BUD-40/3           |
|----------------------------------------------|-----------------------------------------|------------------------------|--------------------|
| Model No.                                    | BHS-2/2                                 | Max Operation Voltage (Ucpv) | 1000V              |
| Input                                        | 2 strings                               | Standard Compliance with     | EN 50539 Type 2    |
| Output                                       | 2 strings                               | Maximum Discharge Current    | 40 KA              |
| Maximum Voltage                              | 1000V                                   | Certification                | TUV CE             |
| Max DC Short Circuit Current Per Input (Isc) | 15A (Changeable)                        |                              |                    |
| Maximum Current Output                       | 32A                                     |                              |                    |
| Enclosure                                    |                                         | DC fuse holder               | BR-30              |
| Material Type                                | Polycarbonate/ABS                       | LED Indicator                | Yes                |
| Degree of Protection                         | IP65                                    | Rated Working Voltage        | 1000V              |
| Degree of Resistance to Impacts              | IK10                                    | Fuse Link                    | 10x38mm LITTEL 15A |
| Dimension (WxHxD)                            | 292 x 370 x 132mm                       | Certification                | UL,CB,CE           |
| Cable input Entry                            | PG09 Cable Gland, 2.5-16mm <sup>2</sup> |                              |                    |
| Output Cable Gland                           | PG21 2.5-16mm <sup>2</sup>              |                              |                    |
| DC Switch Disconnecter                       |                                         | Environment                  |                    |
| Rated Insulation Voltage (Ui)                | 1000V                                   | Operating Temperature        | -20°C~+60°C        |
| Rated Current (Ie)                           | 32A                                     | Humidity                     | 99%                |
| Category                                     | DC21B/PV2                               | Altitude                     | 2000M              |
| Standard Compliance with                     | IEC 60947-3                             | Installation                 | Wall Mounting      |
| Certification                                | UL, TUV,KEMA,SAA,CE                     |                              |                    |



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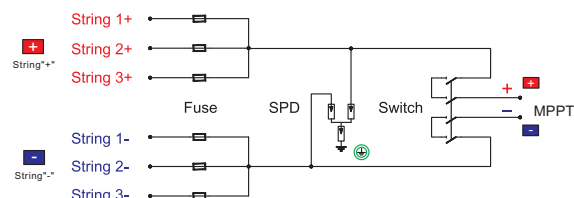
### 3 Strings Input 1 String Output DC



| General Data                                 |                                         | DC Surge Arrester            | BUD-40/3           |
|----------------------------------------------|-----------------------------------------|------------------------------|--------------------|
| Model No.                                    | BHS-3/1                                 | Max Operation Voltage (Ucpv) | 1000V              |
| Input                                        | 3 strings                               | Standard Compliance with     | EN 50539 Type 2    |
| Output                                       | 1 string                                | Maximum Discharge Current    | 40 KA              |
| Maximum Voltage                              | 1000V                                   | Certification                | TUV CE             |
| Max DC Short Circuit Current Per Input (Isc) | 15A (Changeable)                        |                              |                    |
| Maximum Current Output                       | 32A                                     |                              |                    |
| Enclosure                                    |                                         | DC fuse holder               | BR-30              |
| Material Type                                | Polycarbonate/ABS                       | LED Indicator                | Yes                |
| Degree of Protection                         | IP65                                    | Rated Working Voltage        | 1000V              |
| Degree of Resistance to Impacts              | IK10                                    | Fuse Link                    | 10x38mm LITTEL 15A |
| Dimension (WxHxD)                            | 292 x 220 x 120mm                       | Certification                | UL,CB,CE           |
| Cable input Entry                            | PG09 Cable Gland, 2.5-16mm <sup>2</sup> |                              |                    |
| Output Cable Gland                           | PG21 2.5-16mm <sup>2</sup>              |                              |                    |
| DC Switch Disconnecter                       |                                         | Environment                  |                    |
| Rated Insulation Voltage (Ui)                | 1000V                                   | Operating Temperature        | -20°C~+60°C        |
| Rated Current (Ie)                           | 32A                                     | Humidity                     | 99%                |
| Category                                     | DC21B/PV2                               | Altitude                     | 2000M              |
| Standard Compliance with                     | IEC 60947-3                             | Installation                 | Wall Mounting      |
| Certification                                | UL, TUV,KEMA,SAA,CE                     |                              |                    |



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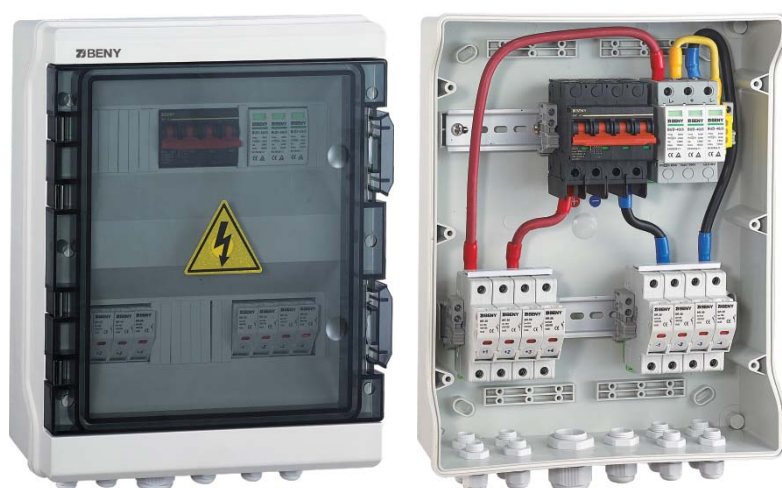


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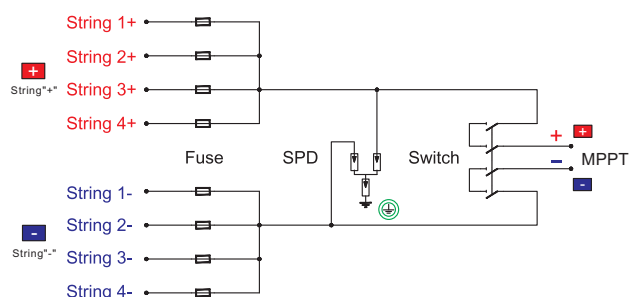
### 4 Strings Input 1 String Output DC



| General Data                                 |                                         | DC Surge Arrester            | BUD-40/3           |
|----------------------------------------------|-----------------------------------------|------------------------------|--------------------|
| Model No.                                    | BHS-4/1                                 | Max Operation Voltage (Ucpv) | 1000V              |
| Input                                        | 4 strings                               | Standard Compliance with     | EN 50539 Type 2    |
| Output                                       | 1 string                                | Maximum Discharge Current    | 40 KA              |
| Maximum Voltage                              | 1000V                                   | Certification                | TUV CE             |
| Max DC Short Circuit Current Per Input (Isc) | 15A (Changeable)                        |                              |                    |
| Maximum Current Output                       | 63A                                     |                              |                    |
| Enclosure                                    |                                         | DC fuse holder               | BR-30              |
| Material Type                                | Polycarbonate/ABS                       | LED Indicator                | Yes                |
| Degree of Protection                         | IP65                                    | Rated Working Voltage        | 1000V              |
| Degree of Resistance to Impacts              | IK10                                    | Fuse Link                    | 10x38mm LITTEL 15A |
| Dimension (WxHxD)                            | 292 x 370x 132mm                        | Certification                | UL,CB,CE           |
| Cable input Entry                            | PG09 Cable Gland, 2.5-16mm <sup>2</sup> |                              |                    |
| Output Cable Gland                           | PG21 2.5-16mm <sup>2</sup>              |                              |                    |
| DC Switch Disconnecter                       |                                         | Environment                  |                    |
| Rated Insulation Voltage (Ui)                | 1000V                                   | Operating Temperature        | -20°C~+60°C        |
| Rated Current (Ie)                           | 63A                                     | Humidity                     | 99%                |
| Category                                     | DC21B                                   | Altitude                     | 2000M              |
| Standard Compliance with                     | IEC 60947-3                             | Installation                 | Wall Mounting      |
| Certification                                | CB, CE                                  |                              |                    |



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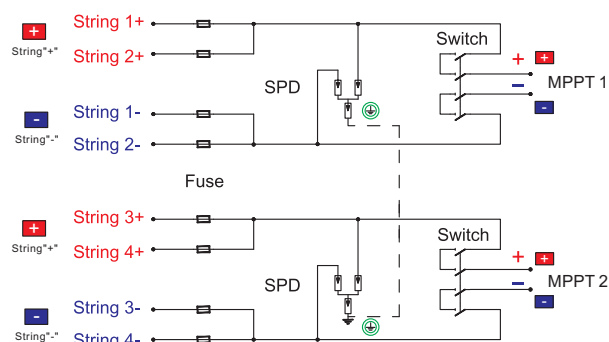
### 4 Strings Input 2 Strings Output DC



| General Data                                 |                                         | DC Surge Arrester            | BUD-40/3           |
|----------------------------------------------|-----------------------------------------|------------------------------|--------------------|
| Model No.                                    | BHS-4/2                                 | Max Operation Voltage (Ucpv) | 1000V              |
| Input                                        | 4 strings                               | Standard Compliance with     | EN 50539 Type 2    |
| Output                                       | 2 strings                               | Maximum Discharge Current    | 40 KA              |
| Maximum Voltage                              | 1000V                                   | Certification                | TUV CE             |
| Max DC Short Circuit Current Per Input (Isc) | 15A (Changeable)                        |                              |                    |
| Maximum Current Output                       | 32A                                     |                              |                    |
| Enclosure                                    |                                         | DC fuse holder               | BR-30              |
| Material Type                                | Polycarbonate/ABS                       | LED Indicator                | Yes                |
| Degree of Protection                         | IP65                                    | Rated Working Voltage        | 1000V              |
| Degree of Resistance to Impacts              | IK10                                    | Fuse Link                    | 10x38mm LITTEL 15A |
| Dimension (WxHxD)                            | 292 x370 x 132mm                        | Certification                | UL,CB,CE           |
| Cable input Entry                            | PG09 Cable Gland, 2.5-16mm <sup>2</sup> |                              |                    |
| Output Cable Gland                           | PG21 2.5-16mm <sup>2</sup>              |                              |                    |
| DC Switch Disconnecter                       |                                         | Environment                  |                    |
| Rated Insulation Voltage (Ui)                | 1000V                                   | Operating Temperature        | -20°C~+60°C        |
| Rated Current (Ie)                           | 32A                                     | Humidity                     | 99%                |
| Category                                     | DC21B/PV2                               | Altitude                     | 2000M              |
| Standard Compliance with                     | IEC 60947-3                             | Installation                 | Wall Mounting      |
| Certification                                | UL, TUV,KEMA,SAA,CE                     |                              |                    |



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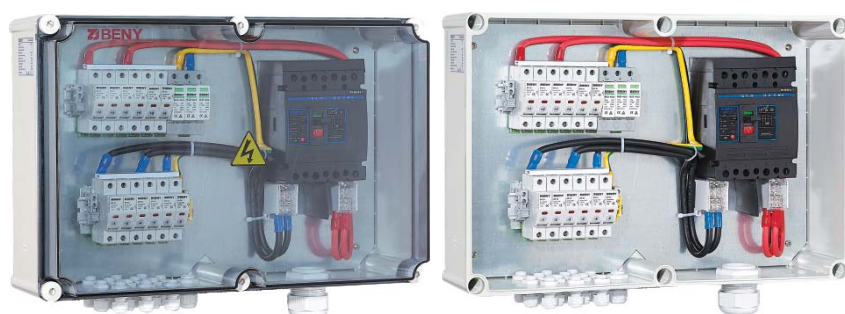


## Solar DC String Box

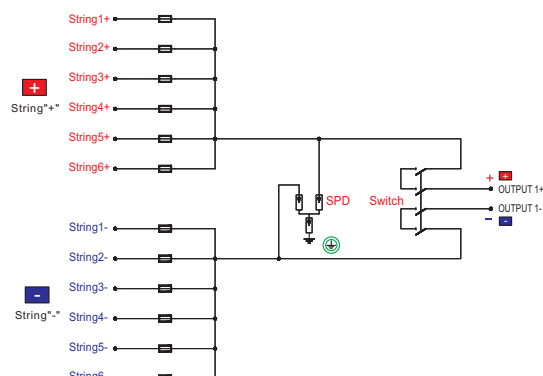
### 6 Strings Input 1 String Output DC



| General Data                                 |                                         | DC Surge Arrester            | BUD-40/3           |
|----------------------------------------------|-----------------------------------------|------------------------------|--------------------|
| Model No.                                    | BHS-6/1                                 | Max Operation Voltage (Ucpv) | 1000V              |
| Input                                        | 6 strings                               | Standard Compliance with     | EN 50539 Type 2    |
| Output                                       | 1 string                                | Maximum Discharge Current    | 40 KA              |
| Maximum Voltage                              | 1000V                                   | Certification                | TUV CE             |
| Max DC Short Circuit Current Per Input (Isc) | 15A (Changeable)                        |                              |                    |
| Maximum Current Output                       | 80A                                     |                              |                    |
| Enclosure                                    |                                         | DC fuse holder               | BR-30              |
| Material Type                                | Polycarbonate/ABS                       | LED Indicator                | Yes                |
| Degree of Protection                         | IP65                                    | Rated Working Voltage        | 1000V              |
| Degree of Resistance to Impacts              | IK10                                    | Fuse Link                    | 10x38mm LITTEL 15A |
| Dimension (WxHxD)                            | 540 x 360x 180mm                        | Certification                | UL,CB,CE           |
| Cable input Entry                            | PG09 Cable Gland, 2.5-16mm <sup>2</sup> |                              |                    |
| Output Cable Gland                           | PG36 50-70mm <sup>2</sup>               |                              |                    |
| DC Switch Disconnecter                       |                                         | Environment                  |                    |
| Rated Insulation Voltage (Ui)                | 1000V                                   | Operating Temperature        | -20°C~+60°C        |
| Rated Current (Ie)                           | 125A                                    | Humidity                     | 99%                |
| Standard Compliance with                     | IEC 60947-3                             | Altitude                     | 2000M              |
| Certification                                | CB, CE                                  | Installation                 | Wall Mounting      |



BHS-6/1



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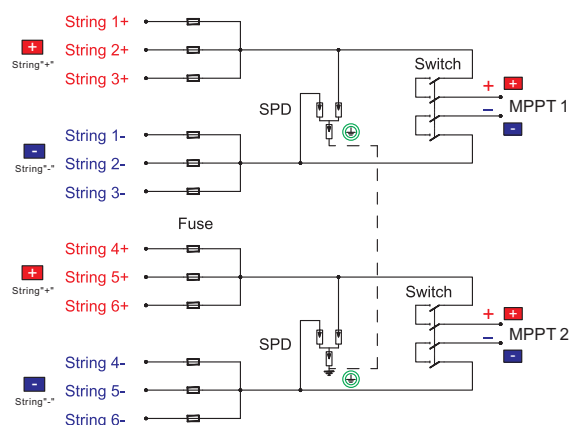
### 6 Strings Input 2 Strings Output DC



| General Data                                 |                                         | DC Surge Arrester            | BUD-40/3           |
|----------------------------------------------|-----------------------------------------|------------------------------|--------------------|
| Model No.                                    | BHS-6/2                                 | Max Operation Voltage (Ucpv) | 1000V              |
| Input                                        | 6 strings                               | Standard Compliance with     | EN 50539 Type 2    |
| Output                                       | 2 strings                               | Maximum Discharge Current    | 40 KA              |
| Maximum Voltage                              | 1000V                                   | Certification                | TUV CE             |
| Max DC Short Circuit Current Per Input (Isc) | 15A (Changeable)                        |                              |                    |
| Maximum Current Output                       | 32A                                     |                              |                    |
| Enclosure                                    |                                         | DC fuse holder               | BR-30              |
| Material Type                                | Polycarbonate/ABS                       | LED Indicator                | Yes                |
| Degree of Protection                         | IP65                                    | Rated Working Voltage        | 1000V              |
| Degree of Resistance to Impacts              | IK10                                    | Fuse Link                    | 10x38mm LITTEL 15A |
| Dimension (WxHxD)                            | 292 x 370x 132mm                        | Certification                | UL,CB,CE           |
| Cable input Entry                            | PG09 Cable Gland, 2.5-16mm <sup>2</sup> |                              |                    |
| Output Cable Gland                           | PG21 2.5-16mm <sup>2</sup>              |                              |                    |
| DC Switch Disconnecter                       |                                         | Environment                  |                    |
| Rated Insulation Voltage (Ui)                | 1000V                                   | Operating Temperature        | -20°C~+60°C        |
| Rated Current (Ie)                           | 32A                                     | Humidity                     | 99%                |
| Category                                     | DC21B/PV2                               | Altitude                     | 2000M              |
| Standard Compliance with                     | IEC 60947-3                             | Installation                 | Wall Mounting      |
| Certification                                | UL, TUV, KEMA, SAA, CE                  |                              |                    |



BHS-6/2



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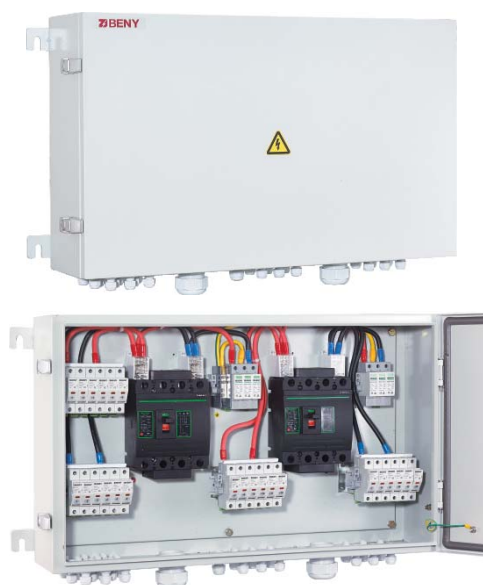


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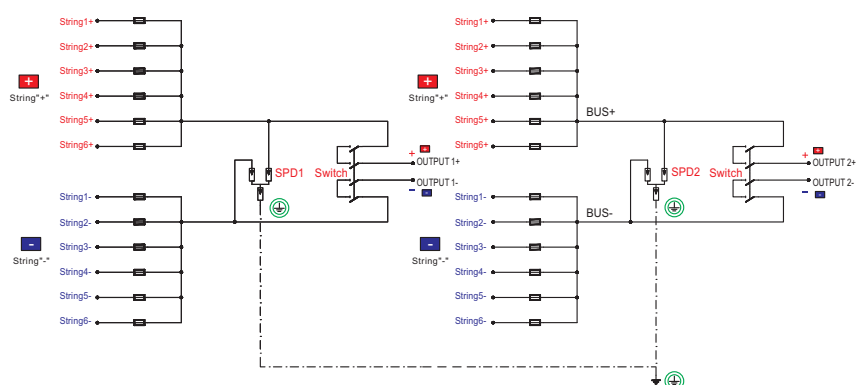
12 Strings Input 2 Strings Output DC



| General Data                                 |                                         | DC Surge Arrester                     | BUD-40/3           |
|----------------------------------------------|-----------------------------------------|---------------------------------------|--------------------|
| Model No.                                    | BHT-12/2                                | Max Operation Voltage (Ucpv)          | 1000V              |
| Input                                        | 12 strings                              | Standard Compliance with              | EN 50539 Type 2    |
| Output                                       | 2 strings                               | Maximum Discharge Current             | 40 KA              |
| Maximum Voltage                              | 1000V                                   | Certification                         | TUV CE             |
| Max DC Short Circuit Current Per Input (Isc) | 15A (Changeable)                        | String Monitoring Device              | Yes (optional)     |
| Maximum Current Output                       | 125A                                    | Diode for the Function of Anti-Reflux | Yes (optional)     |
| Enclosure                                    |                                         | DC fuse holder                        | BR-30              |
| Material Type                                | Metal                                   | LED Indicator                         | Yes                |
| Degree of Protection                         | IP65                                    | Rated Working Voltage                 | 1000V              |
| Degree of Resistance to Impacts              | IK10                                    | Fuse Link                             | 10x38mm LITTEL 15A |
| Dimension (WxHxD)                            | 750x450x180mm                           | Certification                         | UL,CB,CE           |
| Cable input Entry                            | PG09 Cable Gland, 2.5-16mm <sup>2</sup> |                                       |                    |
| Output Cable Gland                           | PG36 50-70mm <sup>2</sup>               |                                       |                    |
| DC Switch Disconnecter                       |                                         | Environment                           |                    |
| Rated Insulation Voltage (Ui)                | 1000V                                   | Operating Temperature                 | -20°C~+60°C        |
| Rated Current (Ie)                           | 125A                                    | Humidity                              | 99%                |
| Standard Compliance with                     | IEC 60947-3                             | Altitude                              | 2000M              |
| Certification                                | CB                                      | Installation                          | Wall Mounting      |



BHT-12/2



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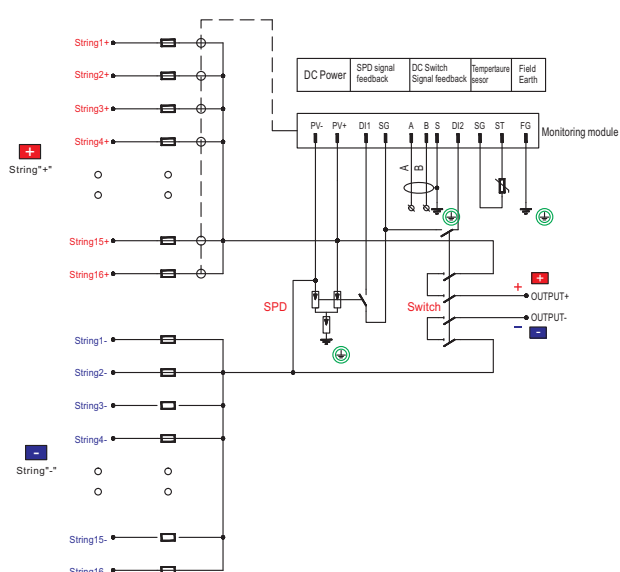
### 16 Strings Input 1 String Output DC



| General Data                                 |                                         | DC Surge Arrester                     | BUD-40/3           |
|----------------------------------------------|-----------------------------------------|---------------------------------------|--------------------|
| Model No.                                    | BHTZ-16/1                               | Max Operation Voltage (Ucpv)          | 1000V              |
| Input                                        | 16 strings                              | Standard Compliance with              | EN 50539 Type 2    |
| Output                                       | 1 string                                | Maximum Discharge Current             | 40 KA              |
| Maximum Voltage                              | 1000V                                   | Certification                         | TUV CE             |
| Max DC Short Circuit Current Per Input (Isc) | 15A (Changeable)                        | String Monitoring Device              | Yes (optional)     |
| Maximum Current Output                       | 250A                                    | Diode for the Function of Anti-Reflux | Yes (optional)     |
| Enclosure                                    |                                         | DC fuse holder                        | BR-30              |
| Material Type                                | Metal                                   | LED Indicator                         | Yes                |
| Degree of Protection                         | IP65                                    | Rated Working Voltage                 | 1000V              |
| Degree of Resistance to Impacts              | IK10                                    | Fuse Link                             | 10x38mm LITTEL 15A |
| Dimension (WxHxD)                            | 650 x 600x 210mm                        | Certification                         | UL,CB,CE           |
| Cable input Entry                            | PG09 Cable Gland, 2.5-16mm <sup>2</sup> |                                       |                    |
| Output Cable Gland                           | PG36 50-70mm <sup>2</sup>               |                                       |                    |
| DC Switch Disconnecter                       |                                         | Environment                           |                    |
| Rated Insulation Voltage (Ui)                | 1000V                                   | Operating Temperature                 | -20°C~+60°C        |
| Rated Current (Ie)                           | 250A                                    | Humidity                              | 99%                |
| Standard Compliance with                     | IEC 60947-3                             | Altitude                              | 2000M              |
| Certification                                | CB                                      | Installation                          | Wall Mounting      |



BHTZ-16/1



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## AC Box BBXW-1 AC Distribution Box



### General Data

|                                 |              |
|---------------------------------|--------------|
| Model No.                       | BBXW-1       |
| Main circuit rated Voltage      | AC 230V/400V |
| Auxiliary circuit rated voltage | AC230V       |
| Rated Current                   | 0-500A       |
| Rated frequency                 | 50-60Hz      |

### AC Surge Arrester

|                           |                             |
|---------------------------|-----------------------------|
| Electric rating           | 220V~400V, 50-60HZ, 3 phase |
| Maximum Discharge Current | 40 KA                       |
| Standard Compliance with  | EN 61643                    |
| Certification             | CE                          |

### Enclosure

|                      |       |
|----------------------|-------|
| Material Type        | Metal |
| Degree of Protection | IP65  |

### Power Meter

|                           |                                               |
|---------------------------|-----------------------------------------------|
| Rated supply voltage (Us) | 100~277 V AC(45~65 Hz)/173~480 V AC(45~65 Hz) |
| Network frequency         | 50 Hz /60 Hz                                  |
| Rated current (In)        | 1 A /5 A                                      |
| Poles description         | 3P /3P + N                                    |
| Power consumption in VA   | 5 VA                                          |
| Display type              | Backlit LCD                                   |

### Modular measurement and control relays NH40

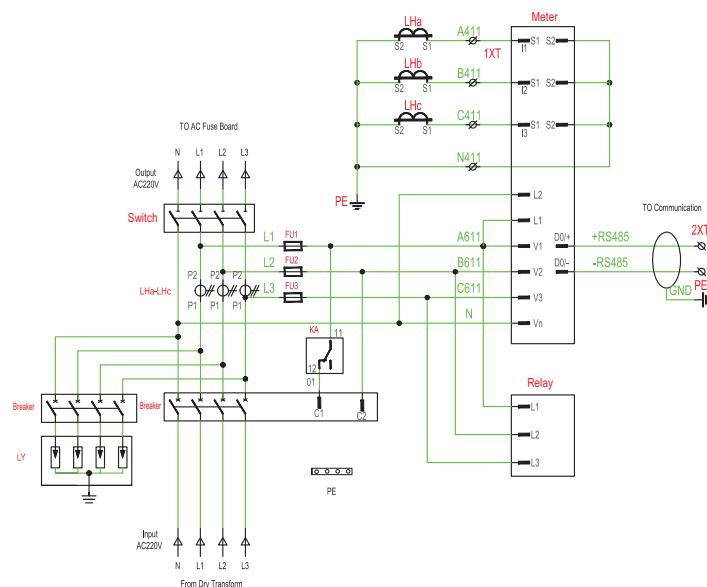
|                          |                      |
|--------------------------|----------------------|
| Network number of phases | 3 phases             |
| Rated Current            | 0-500A               |
| Measurement range        | 220V~400V voltage AC |
| Supply frequency         | 50~60 Hz +/- 10 %    |

### Environment

|                       |               |
|-----------------------|---------------|
| Operating Temperature | -20°C~+60°C   |
| Humidity              | 99%           |
| Altitude              | 2000M         |
| Installation          | Wall Mounting |



BBXW-1



ZJBENY design and assemble AC combiner box and AC distribution box for solar PV systems AC side string protection and distribution. To reduce the system connection cable length and improve the reliability of the system, it is necessary to use the AC grid box between the inverter and the network cabinet. AC combine box has lightning protection and switch isolation, set aside energy measurement function, for single-phase energy and three-phase energy measurement and control management.



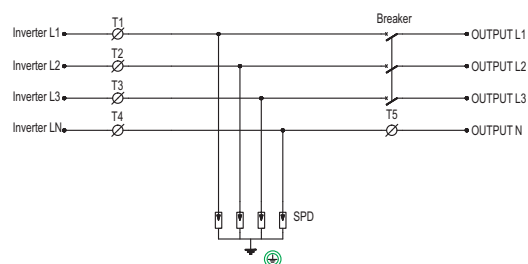
## AC Box BBXW AC Distribution Box



| General Data                           |                            | AC Surge Arrester         |                    |
|----------------------------------------|----------------------------|---------------------------|--------------------|
| Model No.                              | BBXW                       | Electric rating           | 220V~440V, 50-60HZ |
| Rated Voltage                          | AC 220V~400V               | Maximum Discharge Current | 40 KA              |
| Rated Current                          | 0-125A                     | Standard Compliance with  | EN 61643-11        |
| Rated frequency                        | 50-60Hz                    | Certification             | CE                 |
| Enclosure                              |                            | Environment               |                    |
| Material Type                          | Polycarbonate/ABS          | Operating Temperature     | -20°C~+60°C        |
| Degree of Protection                   | IP65                       | Humidity                  | 99%                |
| Degree of Resistance to Impacts        | IK10                       | Altitude                  | 2000M              |
| Dimension (WxHxD)                      | 292 x 220x 120mm           | Installation              | Wall Mounting      |
| Cable input Entry                      | PG25 2.5-25mm <sup>2</sup> |                           |                    |
| Output Cable Gland                     | PG25 2.5-25mm <sup>2</sup> |                           |                    |
| Modular measurement and control relays |                            |                           |                    |
| Network number of phases               | Single Phase/3 Phases      |                           |                    |
| Rated Current                          | 0-125A                     |                           |                    |
| Measurement range                      | 220V~400V voltage AC       |                           |                    |
| Supply frequency                       | 50~60 Hz $\pm$ 10%         |                           |                    |



BBXW



ZJBENY design and assemble AC combiner box and AC distribution box for solar PV systems AC side string protection and distribution. To reduce the system connection cable length and improve the reliability of the system, it is necessary to use the AC grid box between the inverter and the network cabinet. AC combine box has lightning protection and switch isolation, set aside energy measurement function, for single-phase energy and three-phase energy measurement and control management.



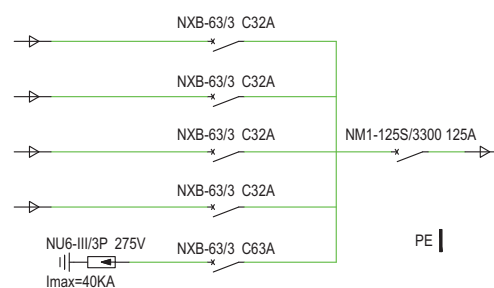
## AC Combiner box BBXW-4



| General Data                     |                                               | Relay                 |                                                                                       |
|----------------------------------|-----------------------------------------------|-----------------------|---------------------------------------------------------------------------------------|
| Model No.                        | BBXW-4                                        | Relay function        | Phase sequence detection, overvoltage, undervoltage protection, phase loss protection |
| Rated Voltage                    | 400V/480V/690VAC                              | Metering              | Optional                                                                              |
| Rated Current Per Input          | 0-100A                                        |                       |                                                                                       |
| Input                            | 4 strings                                     |                       |                                                                                       |
| Output                           | 1 string                                      |                       |                                                                                       |
| Electrical Characteristics       |                                               | Enclosure             |                                                                                       |
| Applicable system                | Three-phase four-wire / three-phase five-wire | Material Type         | 304 stainless steel, cold rolled steel, galvanized steel                              |
| Maximum Breaking Capacity Input  | MCCB 35KA(400V); 8KA(690V)                    | Degree of Protection  | IP65                                                                                  |
| Maximum Breaking Capacity Output | MCCB 50KA(400V); 10KA(690V)                   |                       |                                                                                       |
| AC Surge Arrester(8/20μs)        | T2, In=20KA, I <sub>max</sub> =40KA           |                       |                                                                                       |
| Rated Insulation level           |                                               | Environment           |                                                                                       |
| Electrical insulation            | Clearance ≥ 14mm, creepage distance ≥ 25mm    | Operating Temperature | -20°C~+50°C                                                                           |
| Main circuit to earthing         | AC3000V 5s                                    | Altitude              | ≤ 2000m                                                                               |
| Between phases                   | AC3000V 5s                                    | Installation          | Wall Mounting                                                                         |



**BBXW-4**



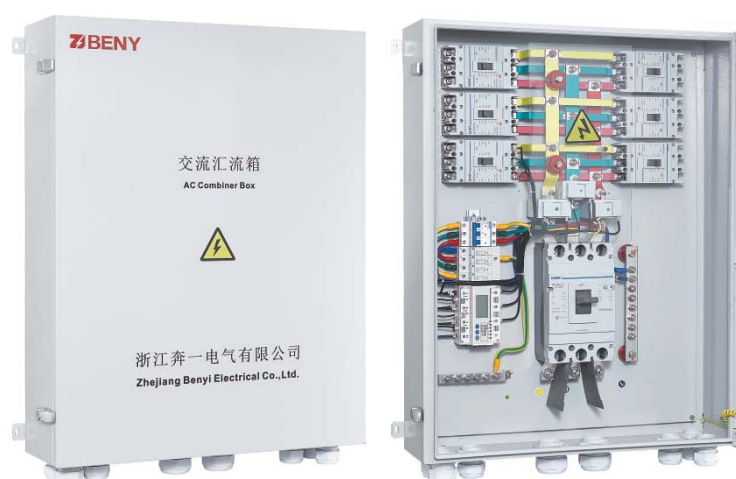
ZJBENY design and assemble AC combiner box and AC distribution box for solar PV systems AC side string protection and distribution. To reduce the system connection cable length and improve the reliability of the system, it is necessary to use the AC grid box between the inverter and the network cabinet. AC combine box has lightning protection and switch isolation, set aside energy measurement function, for single-phase energy and three-phase energy measurement and control management.



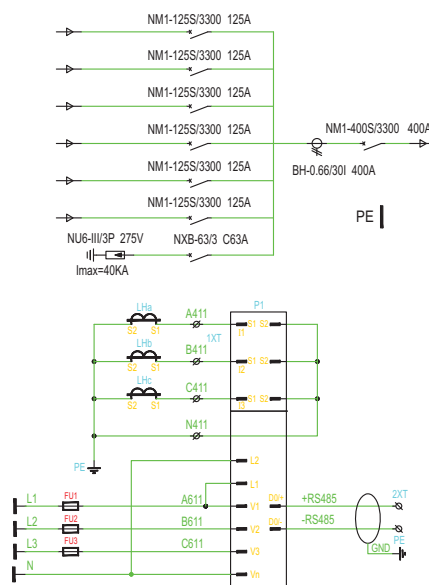
## AC Combiner box BBXW-6



| General Data                     |                                               | Relay                 |                                                                                       |
|----------------------------------|-----------------------------------------------|-----------------------|---------------------------------------------------------------------------------------|
| Model No.                        | BBXW-6                                        | Relay function        | Phase sequence detection, overvoltage, undervoltage protection, phase loss protection |
| Rated Voltage                    | 400V/480V/690VAC                              | Metering              | Optional                                                                              |
| Rated Current Per Input          | 0-100A                                        |                       |                                                                                       |
| Input                            | 6 strings                                     |                       |                                                                                       |
| Output                           | 1 string                                      |                       |                                                                                       |
| Electrical Characteristics       |                                               | Enclosure             |                                                                                       |
| Applicable system                | Three-phase four-wire / three-phase five-wire | Material Type         | 304 stainless steel, cold rolled steel, galvanized steel                              |
| Maximum Breaking Capacity Input  | MCCB 35KA(400V); 8KA(690V)                    | Degree of Protection  | IP65                                                                                  |
| Maximum Breaking Capacity Output | MCCB 50KA(400V); 10KA(690V)                   |                       |                                                                                       |
| AC Surge Arrester(8/20μs)        | T2, In=20KA, I <sub>max</sub> =40KA           |                       |                                                                                       |
| Rated Insulation level           |                                               | Environment           |                                                                                       |
| Electrical insulation            | Clearance ≥ 14mm, creepage distance ≥ 25mm    | Operating Temperature | -20°C~+50°C                                                                           |
| Main circuit to earthing         | AC3000V 5s                                    | Altitude              | ≤ 2000m                                                                               |
| Between phases                   | AC3000V 5s                                    | Installation          | Wall Mounting                                                                         |



BBXW-6



ZJBENY design and assemble AC combiner box and AC distribution box for solar PV systems AC side string protection and distribution. To reduce the system connection cable length and improve the reliability of the system, it is necessary to use the AC grid box between the inverter and the network cabinet. AC combine box has lightning protection and switch isolation, set aside energy measurement function, for single-phase energy and three-phase energy measurement and control management.



## Solar DC String Box

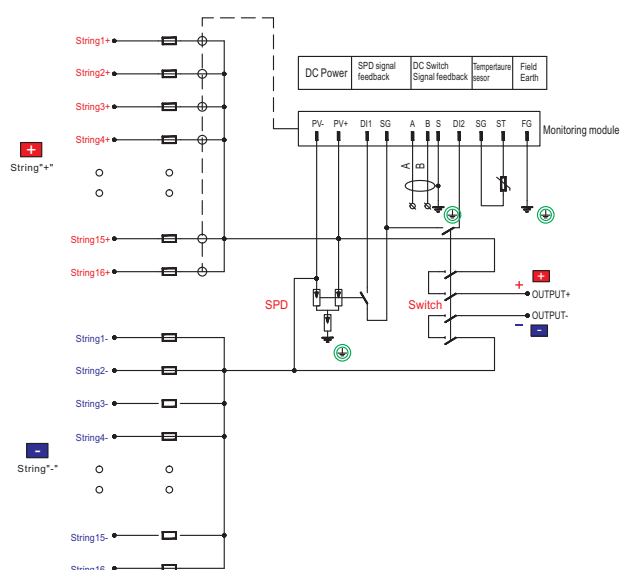
### 16 Strings Input 1 String Output DC



| General Data                                 |                                         | DC Surge Arrester                     | BUD-1500          |
|----------------------------------------------|-----------------------------------------|---------------------------------------|-------------------|
| Model No.                                    | BHTZ-16/1 1500V                         | Max Operation Voltage (Ucpv)          | 1500V             |
| Input                                        | 16 strings                              | Standard Compliance with              | EN 50539 Type 2   |
| Output                                       | 1 string                                | Maximum Discharge Current             | 40 KA             |
| Maximum Voltage                              | 1500V                                   | Certification                         | TUV CE            |
| Max DC Short Circuit Current Per Input (Isc) | 15A (Changeable)                        | String Monitoring Device              | Yes (optional)    |
| Maximum Current Output                       | 250A                                    | Diode for the Function of Anti-Reflux | Yes (optional)    |
| Enclosure                                    |                                         | DC fuse holder                        |                   |
| Material Type                                | Metal                                   | LED Indicator                         | Yes               |
| Degree of Protection                         | IP65                                    | Rated Working Voltage                 | 1500V             |
| Degree of Resistance to Impacts              | IK10                                    | Fuse Link                             | BUSSMAN 1500V 15A |
| Dimension (WxHxD)                            | 1000 x 670x 300mm                       | Certification                         | UL,CB,CE          |
| Cable input Entry                            | PG09 Cable Gland, 2.5-16mm <sup>2</sup> |                                       |                   |
| Output Cable Gland                           | PG36 50-70mm <sup>2</sup>               |                                       |                   |
| DC Switch Disconnecter                       |                                         | Environment                           |                   |
| Rated Insulation Voltage (Ui)                | 1500V                                   | Operating Temperature                 | -20°C~+60°C       |
| Rated Current (Ie)                           | 250A                                    | Humidity                              | 99%               |
| Standard Compliance with                     | IEC 60947-3                             | Altitude                              | 2000M             |
| Certification                                | UL TUV CE                               | Installation                          | Wall Mounting     |



**BHTZ-16/1 1500V**



1500V solar PV systems requires higher voltage level equipments, also require higher level protection. ZJBENY is supplying more cost efficient 1500V DC protection solutions to EPCs.



## PV Waterproof Box

### 08 Modules



#### Protection

|                                                     |                                                               |
|-----------------------------------------------------|---------------------------------------------------------------|
| Protection class                                    | IP 65                                                         |
| Insulation                                          | Class II                                                      |
| Material                                            | polycarbonate/ABS                                             |
| Shock resistance                                    | IK10                                                          |
| Protection against chemicals and weather conditions | Water, saline solutions, acids, basics, mineral oils, UV rays |
| Operating temperature                               | -25°C~+100°C                                                  |

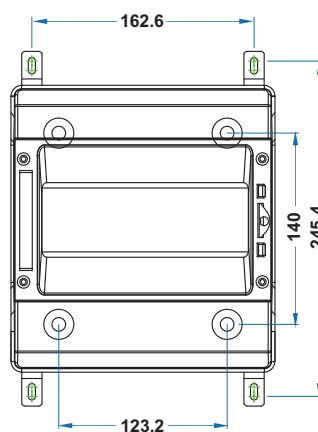
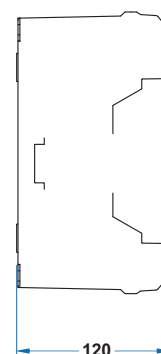
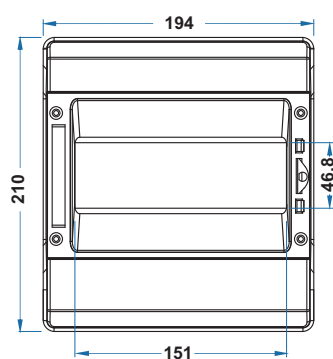
#### Performance

|                                        |                   |
|----------------------------------------|-------------------|
| Nominal insulation voltage             | 1000V AC~1500V DC |
| Flexibility WxHxD, external dimensions | 210x194x120mm     |

Unit:mm



**BX08**



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## PV Waterproof Box

### 13 Modules



#### Protection

|                                                     |                                                               |
|-----------------------------------------------------|---------------------------------------------------------------|
| Protection class                                    | IP 65                                                         |
| Insulation                                          | Class II                                                      |
| Material                                            | polycarbonate/ABS                                             |
| Shock resistance                                    | IK10                                                          |
| Protection against chemicals and weather conditions | Water, saline solutions, acids, basics, mineral oils, UV rays |
| Operating temperature                               | -25°C~+100°C                                                  |

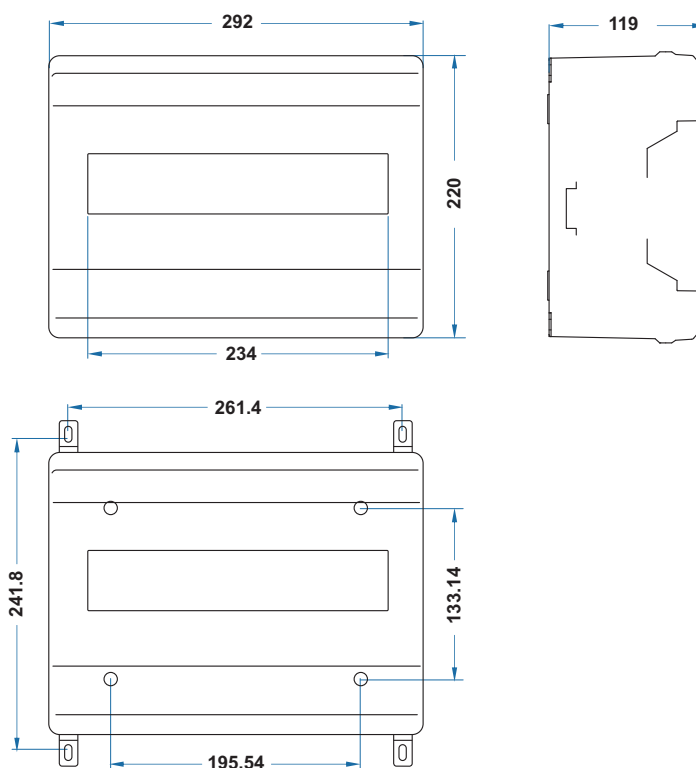
#### Performance

|                                           |                   |
|-------------------------------------------|-------------------|
| Nominal insulation voltage                | 1000V AC~1500V DC |
| Flexibility WxHxD,<br>external dimensions | 292x220x119mm     |

Unit:mm



**BX13**



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## PV Waterproof Box

### 15 Modules



#### Protection

|                                                     |                                                               |
|-----------------------------------------------------|---------------------------------------------------------------|
| Protection class                                    | IP 65                                                         |
| Insulation                                          | Class II                                                      |
| Material                                            | polycarbonate/ABS                                             |
| Shock resistance                                    | IK10                                                          |
| Protection against chemicals and weather conditions | Water, saline solutions, acids, basics, mineral oils, UV rays |
| Operating temperature                               | -25°C~+100°C                                                  |

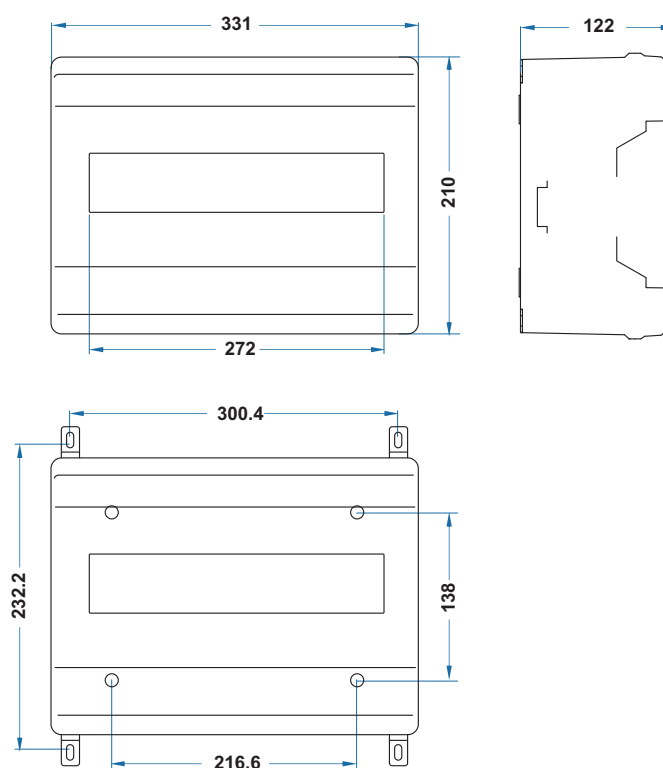
#### Performance

|                                           |                   |
|-------------------------------------------|-------------------|
| Nominal insulation voltage                | 1000V AC~1500V DC |
| Flexibility WxHxD,<br>external dimensions | 331x210x122mm     |

Unit:mm



**BX15**



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## PV Waterproof Box

### 26 Modules



#### Protection

|                                                     |                                                               |
|-----------------------------------------------------|---------------------------------------------------------------|
| Protection class                                    | IP 65                                                         |
| Insulation                                          | Class II                                                      |
| Material                                            | polycarbonate/ABS                                             |
| Shock resistance                                    | IK10                                                          |
| Protection against chemicals and weather conditions | Water, saline solutions, acids, basics, mineral oils, UV rays |
| Operating temperature                               | -25°C~+100°C                                                  |

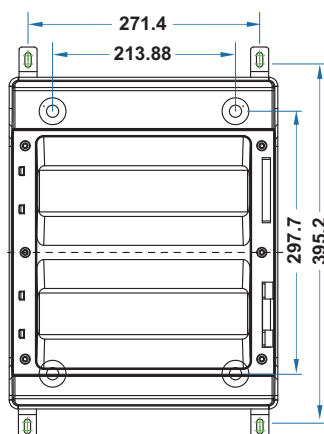
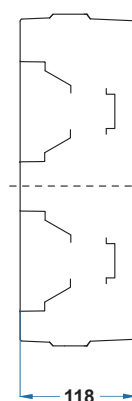
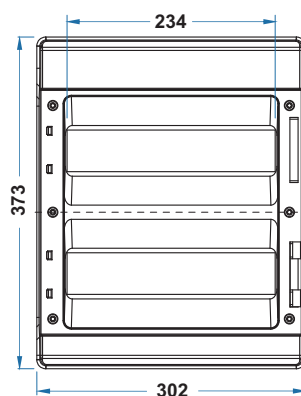
#### Performance

|                                           |                   |
|-------------------------------------------|-------------------|
| Nominal insulation voltage                | 1000V AC~1500V DC |
| Flexibility WxHxD,<br>external dimensions | 302x373x118mm     |

Unit:mm



**BX26**



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## PV Waterproof Box

### 39 Modules



#### Protection

|                                                     |                                                               |
|-----------------------------------------------------|---------------------------------------------------------------|
| Protection class                                    | IP 65                                                         |
| Insulation                                          | Class II                                                      |
| Material                                            | polycarbonate/ABS                                             |
| Shock resistance                                    | IK10                                                          |
| Protection against chemicals and weather conditions | Water, saline solutions, acids, basics, mineral oils, UV rays |
| Operating temperature                               | -25°C~+100°C                                                  |

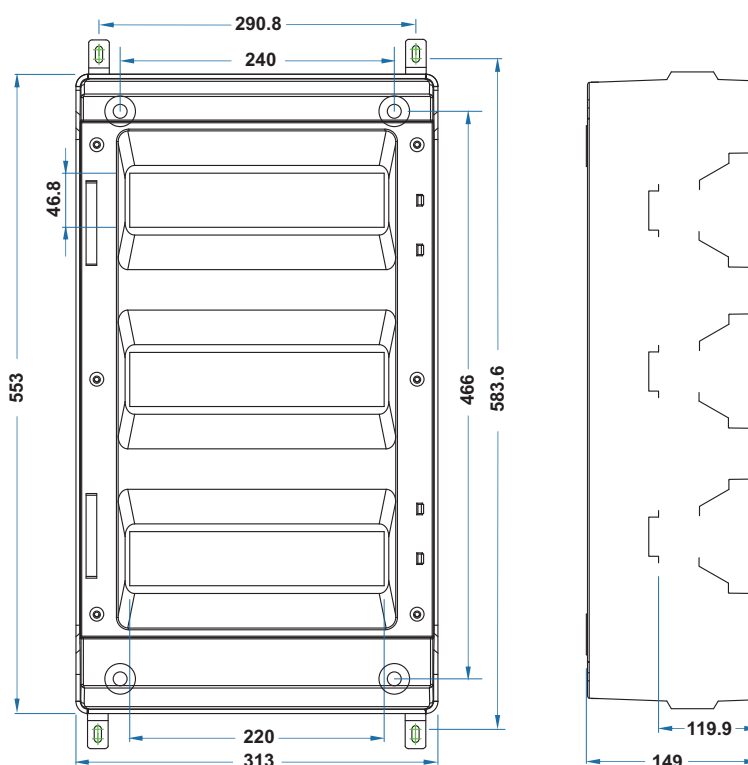
#### Performance

|                                           |                   |
|-------------------------------------------|-------------------|
| Nominal insulation voltage                | 1000V AC~1500V DC |
| Flexibility WxHxD,<br>external dimensions | 313x553x149mm     |

Unit:mm



**BX39**



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# Memorandum

## ZJBENY String Boxes In Projects



- ◆ 73% market share in AU of DC switch
- ◆ Top 1 DC components manufacturer in China
- ◆ Top 1 Solar String Box manufacturer in China



### ZHEJIANG BENYI ELECTRICAL CO., LTD.

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⚠ If the models and specifications in this product catalogue is changed due to the change of products, we will not inform.



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