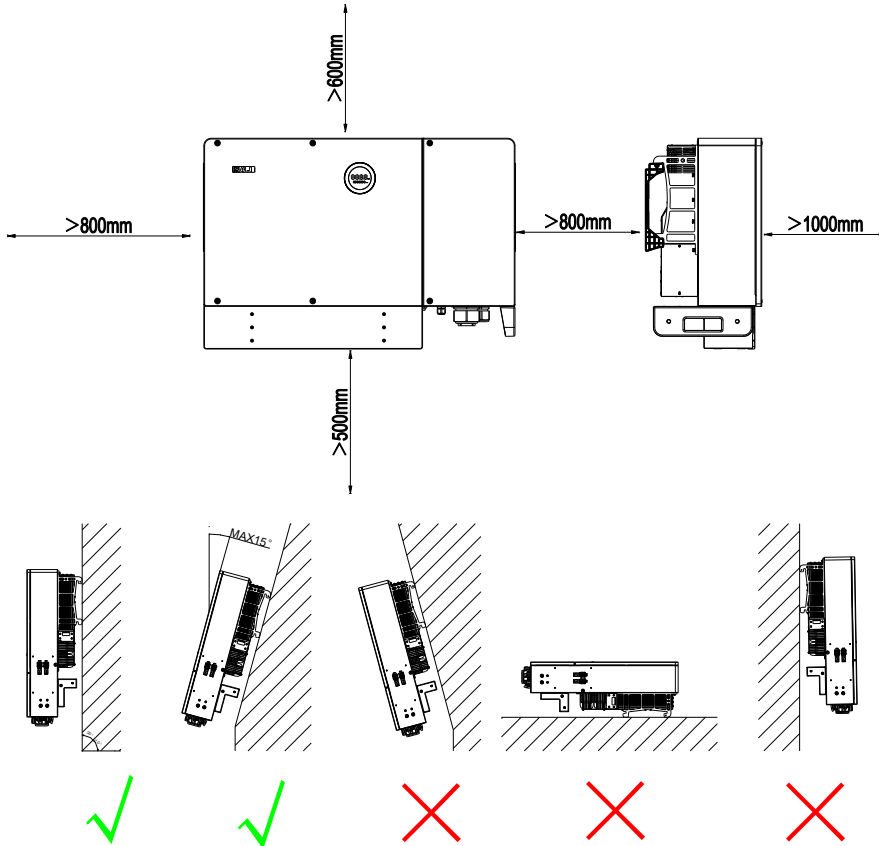


C6 Inverter Quick Installation Guide

The installation of this device must be operated by certified professionals. For details, refer to the inverter user manual.

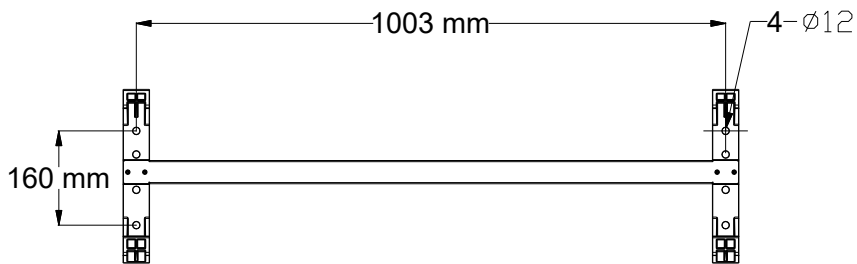
1. Determining the Installation Method and Position



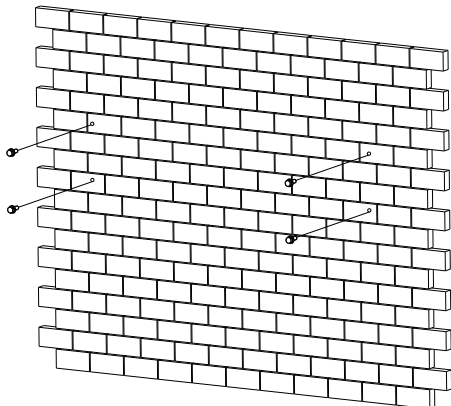
2. Installing the Inverter

Option 1: Mount the inverter on the wall

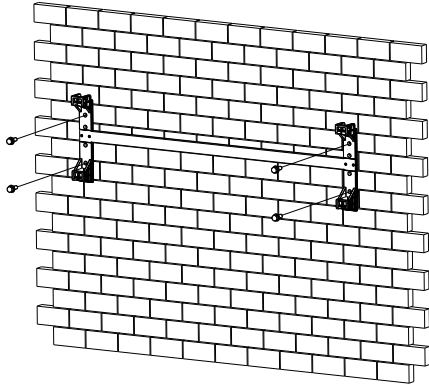
Step 1. Place the mounting bracket onto the wall and mark the drilling positions of the holes.



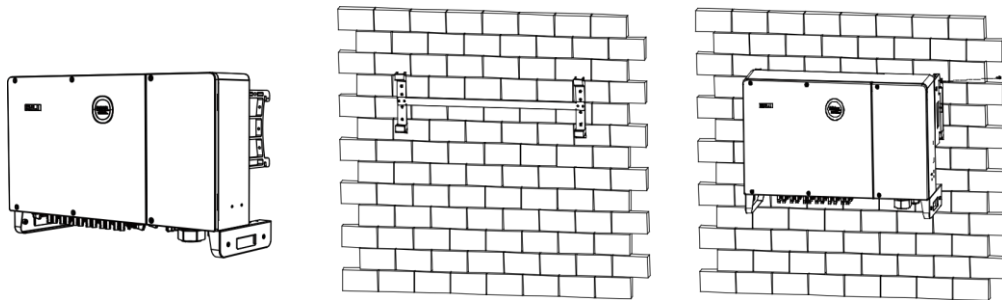
Step 2. Drill four holes in the wall according to the markings, and insert the four M10*100 expansion tubes in the holes using a rubber mallet.



Step 3. Install the mounting bracket onto the wall and secure it with the four M10*100 screws.

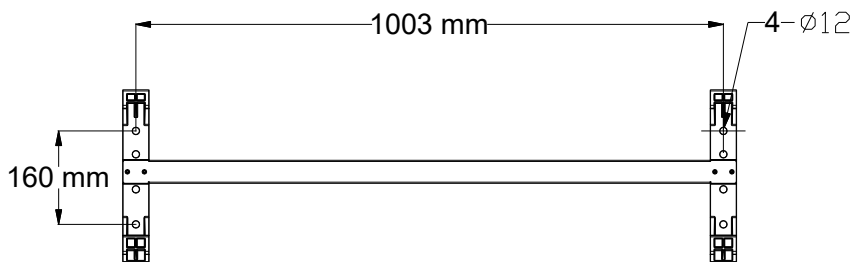


Step 4. Carefully mount the inverter to the mounting bracket. Make sure that the rear part of the inverter is closely mounted to the mounting bracket.

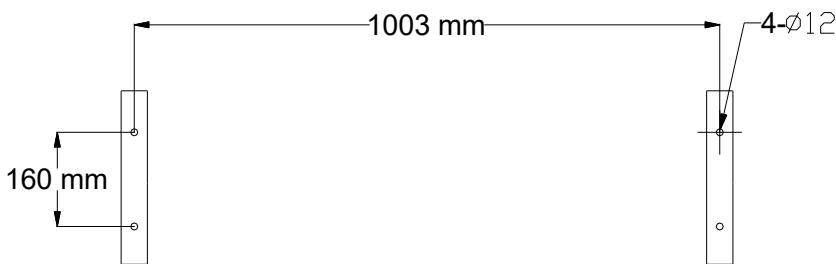


Option 2: Mount the inverter on an external frame

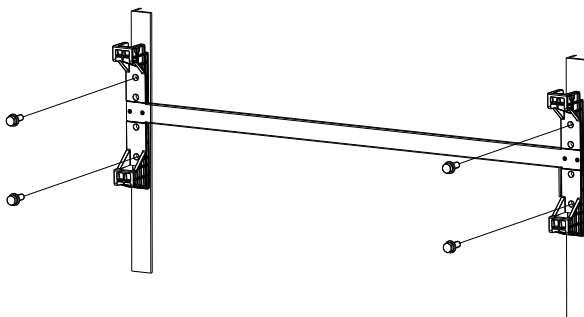
Step 1. Place the mounting bracket onto the frame and mark the drilling positions of the holes.



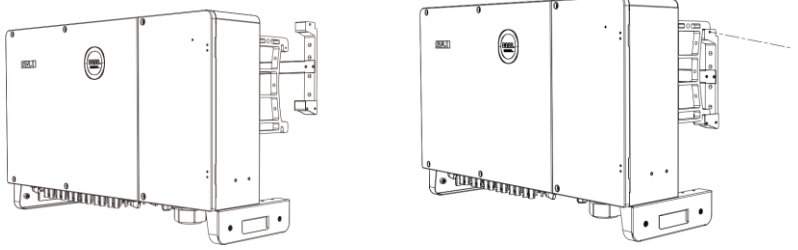
Step 2. Drill four holes on the frame according to the markings.



Step 3. Secure the mounting bracket to the frame with the four M10*45 screws.

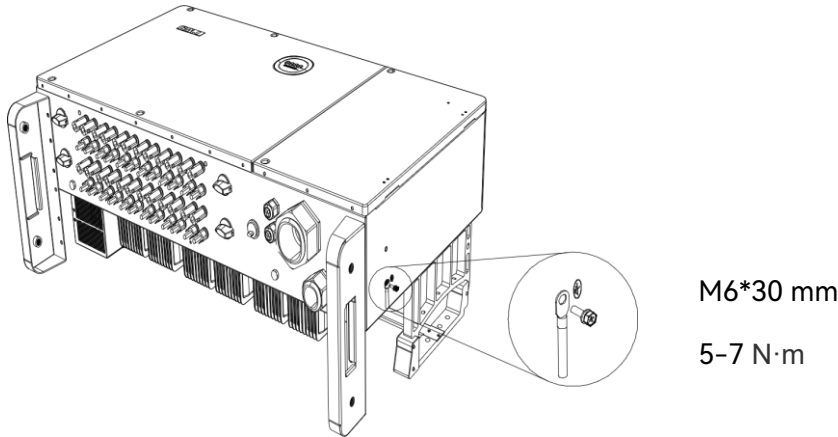


Step 4. Carefully mount the inverter to the mounting bracket. Make sure that the rear part of the equipment is closely mounted to the mounting bracket.



□ 3. Grounding Cable Connection

Remove the screw of the grounding terminal and secure the grounding cable by insert the screw into the screw hole in the OT/DT terminal.



□ 4. AC Side Electrical Connection

Recommended grounding cable specification:

| Cable type | Cross-sectional area of cables (mm ²) | | External diameter (mm) |
|---|---|-----------------------------------|------------------------|
| | Scope (S) | Recommended grounding cable (Spe) | |
| Three-core, four-core, and five-core cables | 95-240 | Spe ≥ S/2 | 38-66 |
| Four single-core cables | | | 14-32 |

Recommended circuit breaker specification:

| Model | Recommended rated voltage | Recommended rated current |
|-----------------------------|---------------------------|---------------------------|
| C6-75K-T6-40 | ≥400V | 160 A |
| C6-99K-T9-40, C6-100K-T9-40 | | 200 A |
| C6-110K-T12-40 | | 225 A |
| C6-125K-T12-40 | | 250 A |

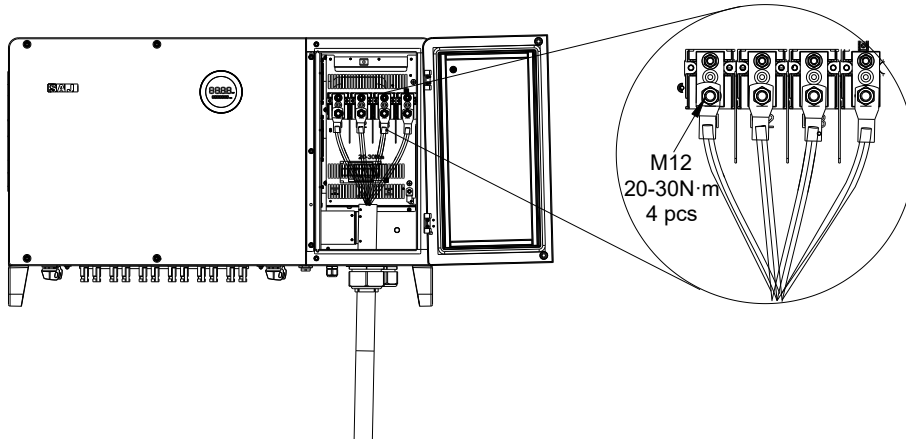
Recommended RCD specification:

| Model | Recommended rated current |
|---|---------------------------|
| C6-75K-T6-40 | 750 mA |
| C6-99K-T9-40 C6-100K-T9-40 C6-110K-T12-40 C6-125K-T12-40 | 1000 mA |

To connect AC-side cables:

- Step 1. Strip off the wire insulation skin and AC cable insulation skin at proper length.
- Step 2. Crimp the AC cable with OT/DT terminals.
- Step 3. Disconnect the AC circuit breaker, and open the wiring cabinet cover.
- Step 4. Insert the cable through the waterproof cable gland and housing.
- Step 5. Insert the conductors into the corresponding ports and fix them with screws.
- Step 6. Secure the cable gland by fastening the sealing nut.

Step 7. Plug the AC connector into the AC connector port of the inverter.

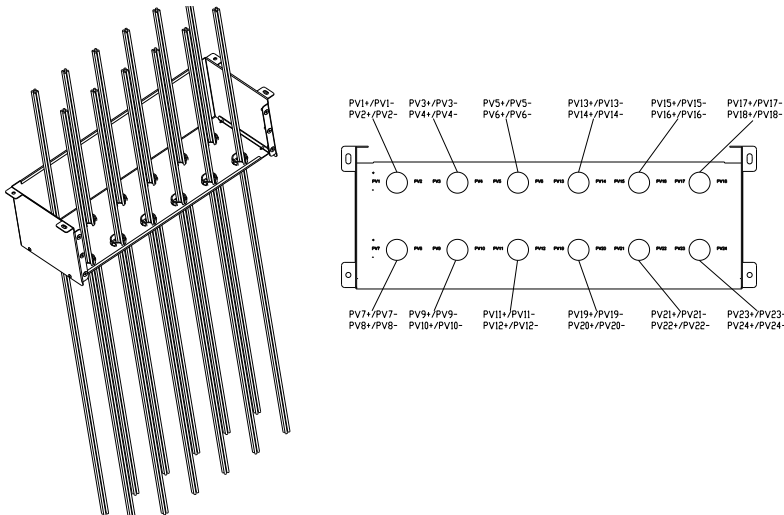


5. DC Side Electrical Connection

Recommended specifications of DC cable

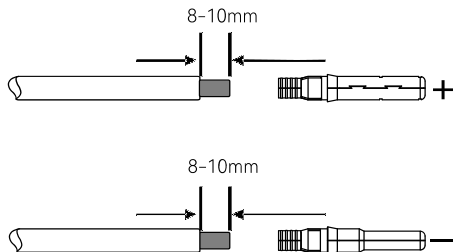
| Cross-sectional area of cables (mm ²) | External diameter of the cables (mm) |
|---|--------------------------------------|
| Scope | 6-9 |
| 4 ≤ S ≤ 6 | |

Step 1. Pass the prepared DC cables through the PV cover one by one.

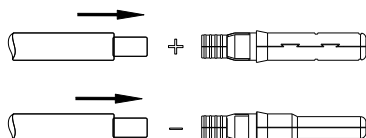


Step 2. Loosen the lock screws on the positive and negative connectors.

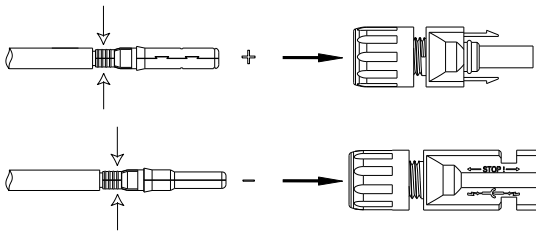
Step 3. Use a 3-mm wide-bladed screwdriver to strip the insulation layer by 8 to 10 mm from one end of each cable.



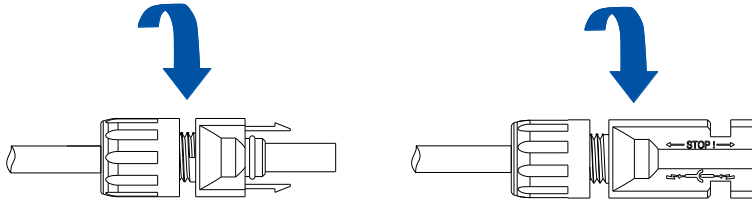
Step 4. Insert the cable ends to the sleeves. Use a crimping plier to assembly the cable ends.



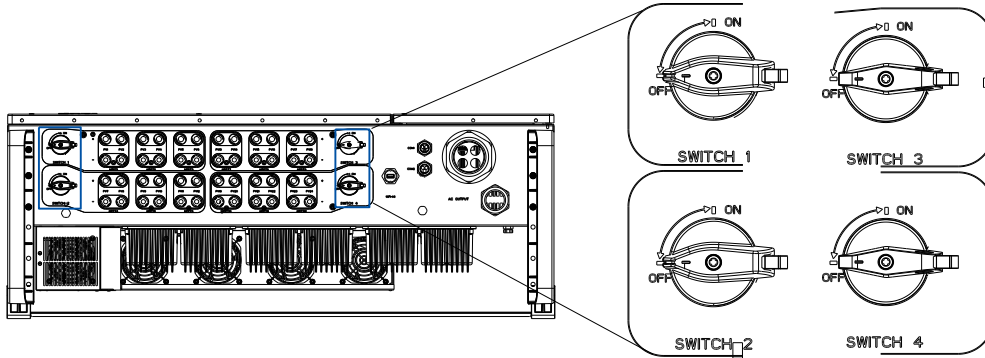
Step 5. Insert the assembled cable ends into the blue positive and negative connectors. Gently pull the cables backwards to ensure firm connection.



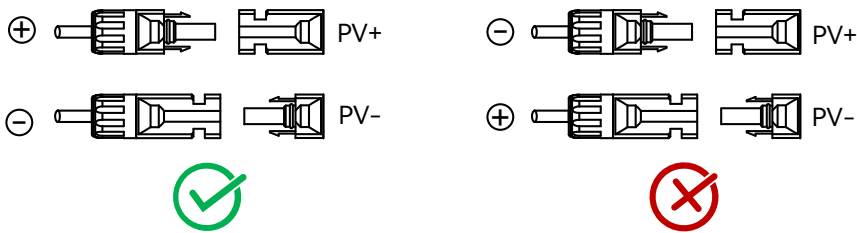
Step 6. Tighten the lock screws on the positive and negative cable connectors.



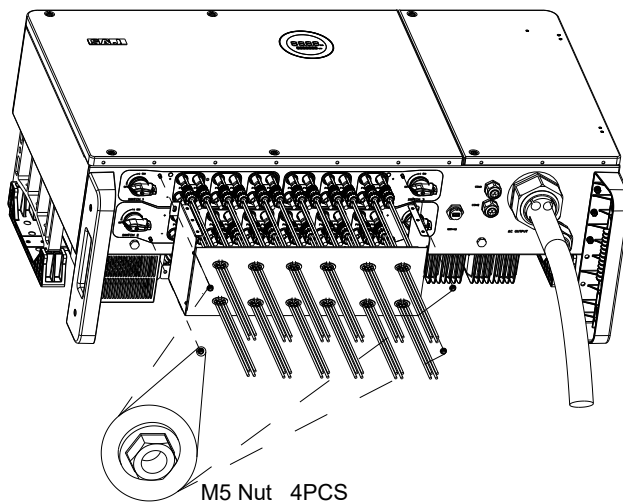
Step 7. Make sure all the DC switches are at OFF position. For further safety consideration, recommend using a reliable tool (such as a lock with a key) to lock the switch and make sure that others cannot unlock it easily.



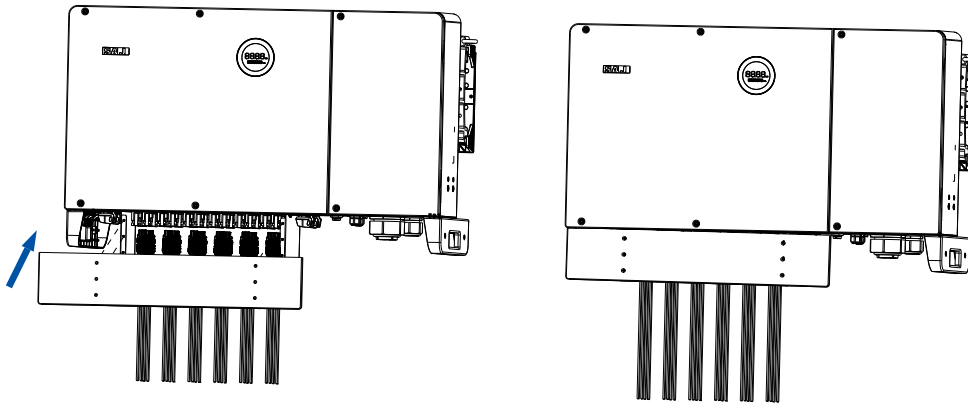
Step 8. Insert the positive and negative cable connectors into the positive and negative PV ports on the inverter until you hear a “click” sound to ensure firm connection.



Step 9. Secure the PV cover to the inverter.

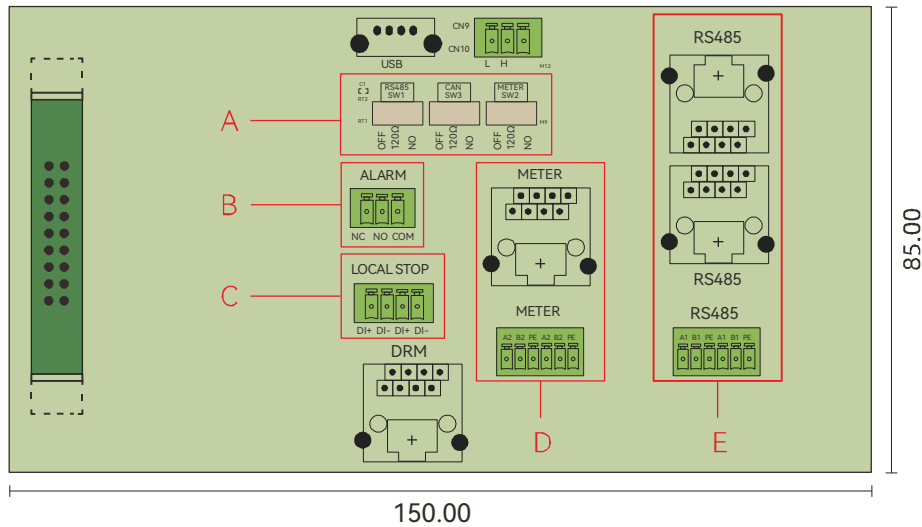


Step 10. Install the PV upper cover to the PV cover with screws.



6. Communication Connection

1. Communication Terminal Overview



| Callout | Description |
|---------|----------------------------|
| A | DIP Switch |
| B | Alarm Output Dry Contact |
| C | Emergency Stop Dry Contact |
| D | Meter Output |
| E | RS485 Communication Port |

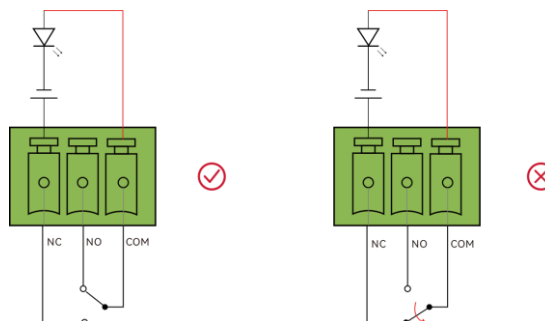
2. Dry Contact Connection

The inverter is integrated with an alarm output dry contact and an emergency stop dry contact.

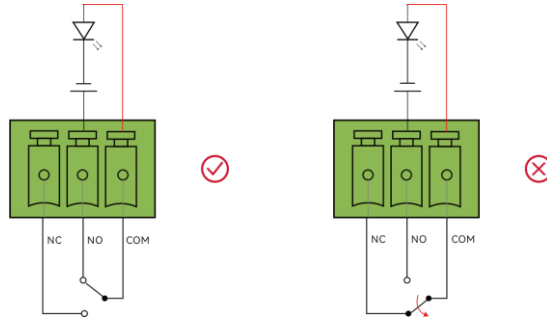
Alarm output dry contact:

The relay can be set to normal open contact (COM&NO) or normal close contact (COM&NC). When the inverter is in alarm/fault state, the fault status can be indicated by LED indicator or other external display device.

- The LED indicator works as the alarm/fault indicator. When the relay is in normal close contact (NC) and no alarm/fault occurs, the LED indicator is on; When a fault occurs, the relay is in normal open contact (NO), and the LED indicator is off.

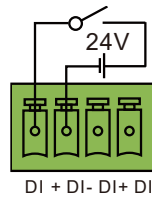


2. When the relay is on normal open contact (NO) and no alarm/fault occurs, the LED indicator is off; When a fault occurs, the relay is on normal close contact (NC), and the LED is on.

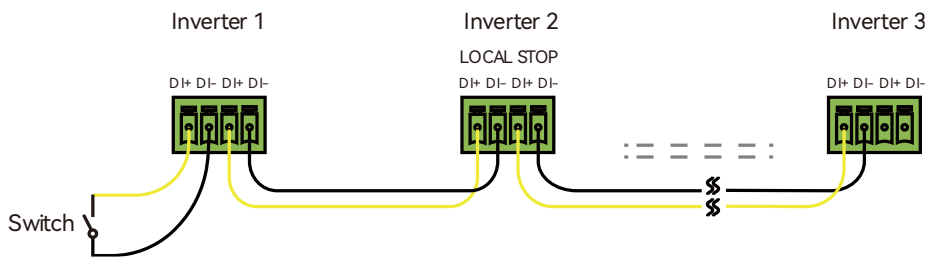


Emergency stop dry contact:

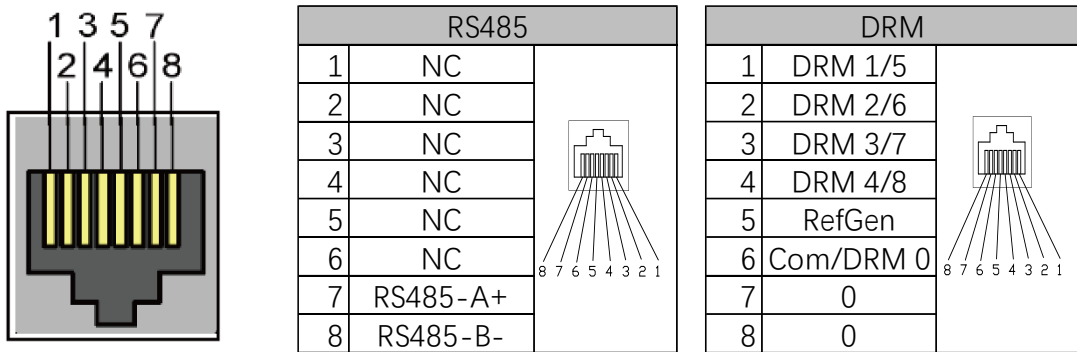
When the DI+ and DI- contacts are shorted by an external controlled switch, the inverter stops immediately.



Multiple-inverters dry contact connection:



3. RS485 Communication Connection



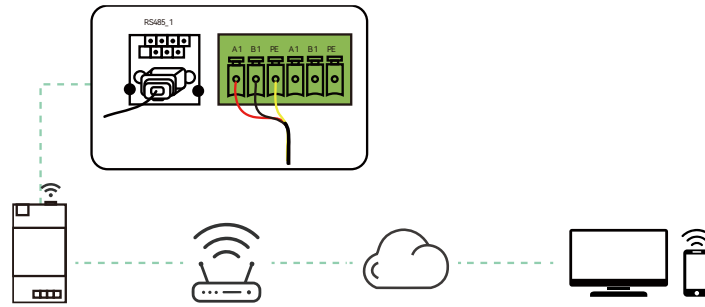
Note: Meter and RS485 communication have two kinds of interfaces: the RJ45 terminal and the terminal block. The two ports perform the same function but with different wiring. Choose either interface for cable connection.

Terminal block:

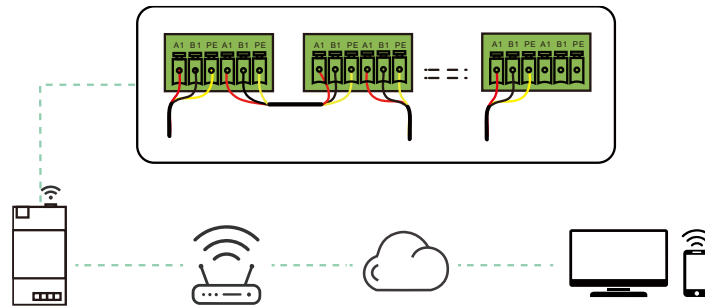
| Pin | Name | Function |
|-----|----------|--|
| A1 | RS485-A+ | RS485 in, RS485A differential signal + |
| B1 | RS485-B | RS485 in, RS485B differential signal - |
| PE | PE | GND, shielded earthing point |
| A1 | RS485-A+ | RS485 in, RS485A differential signal + |
| B1 | RS485-B | RS485 in, RS485B differential signal - |
| PE | PE | GND, shielded earthing point |

Note: When there are multiple inverters connected, connect a terminating resistor between A1 and B1 by switching the RS485 DIP switch to ensure the communication quality.

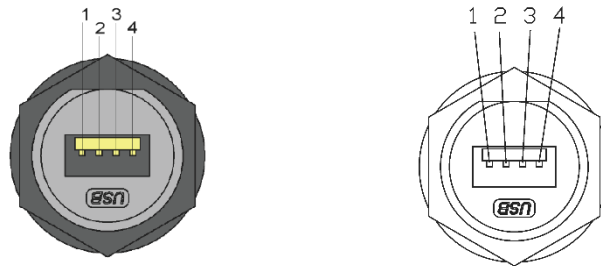
Single-inverter terminal block connection:



Multiple-inverters terminal block connection:



4. RS232/USB Connection



| Pin Number | Description | Function |
|------------|-------------|--------------|
| 1 | +5V | Power supply |
| 2 | RS-232 TX | Send data |
| 3 | RS-232 RX | Receive data |
| 4 | GND | Ground wire |

This USB port is used to connect an eSolar Wi-Fi/4G/AIO3 communication module. For details, refer to the Quick Installation Guide of the communication module at <https://www.saj-electric.com/>.

Installer: _____