Combiner Box

1. Introduction

1.1 Dimension

Figure 1-1 shows the outline dimension of Combiner Box

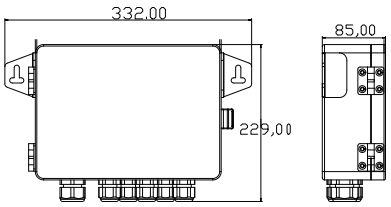


Figure 1-1

1.2 Terminals

Figure 1-2 shows the electrical terminals of Combiner Box

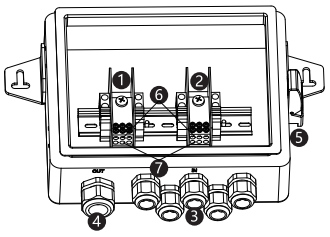


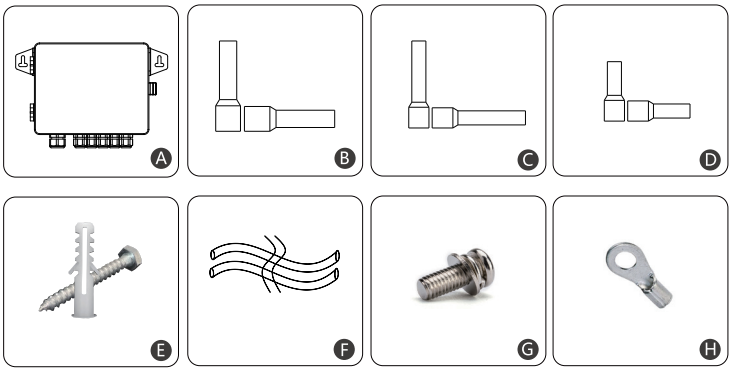
Figure 1-2

1	Positive(+)
2	Negative(-)
3	Battery input ports
4	Battery output port
5	Ground teminal
6	3-core terminal block (for D Tubular terminal)
7	3-core terminal block (for C Tubular terminal)

2. Installation

2.1 Unpacking

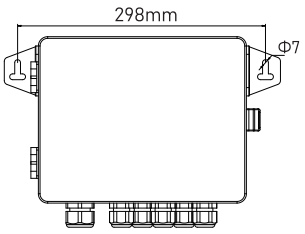
Check the delivery for completeness.Contact your dealer at once if anything is missing.



Object	Quantity	Description
A	1	Combiner Box
B	2	Tubular terminal (18mm,10mm²)
C	6	Tubular terminal (18mm,6mm²)
D	6	Tubular terminal (10mm,6mm²)
E	2	Expansion tubes & Expansion screws
F	5	Power cable (10AWG, including 2.5m BAT+ and 2.5m BAT-)
G	1	M5 Screw
H	1	Earth Terminal

Configuration 1: Including A,B,C,D,E,G,and H.It is suitable for parallel connection of 3 or less than 3 battery sets.
Configuration 2: Including A,B,C,D,E,F,G,and H.It is suitable for parallel connection of 4 or 5 battery sets.

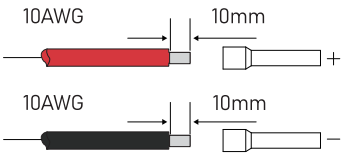
2.2 Installation steps



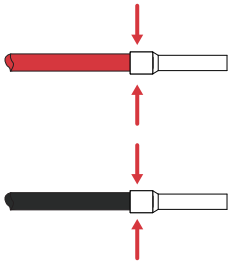
Step 1: Use the Combiner Box as a template to mark the position of the 2 holes

Step2: Hang and screw the Combiner box on the wall.

3. Electrical Connection

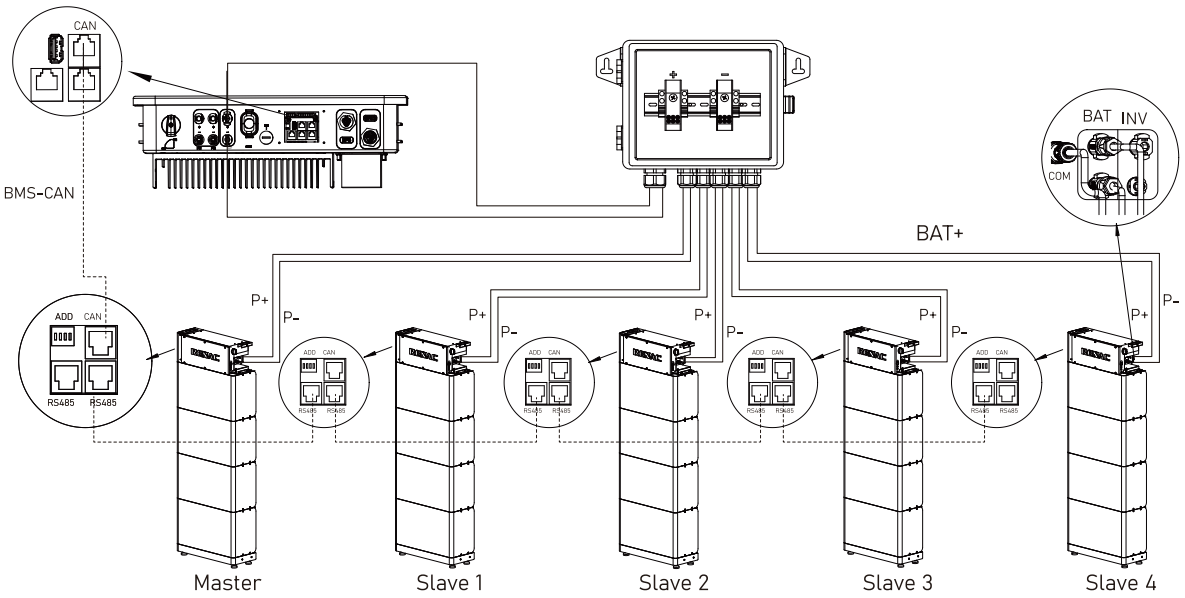


- Strip 10mm of the conductor with stripping plier (D tubular terminal is 10mm,B and C tubular terminal are 18mm). Use a suitable stripping tool for this (e.g. , "PV-AZM-410")
- Insert striped cable into Tubular terminal and ensure all conductor strands are captured in the terminal.
- Crimp pin contact by using a crimping pliers (e.g. , "PV-CZM-22100"). Put the pin contact with striped cable into the corresponding crimping pliers and crimp the contact.
- After securing the cable tightly, connect it to corresponding ports of combiner box.



4. Overview for all battery sets connectionst

4.1 Cables connection

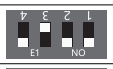
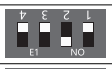
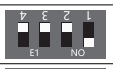
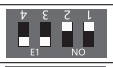
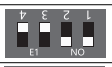
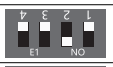


Note:

- For the parallel connection of **2 battery sets and 3 battery sets**, please use the power cable in **accessory bag of battery package** to do the connection.
- For the parallel connection of **4 battery sets and 5 battery sets**, please use the power cable in **accessory bag of combiner box** to do the connection.
- **The length of power cables between battery sets and combiner box must be the same.**

4.2 Dip switch description

- ADD switch is a 4-bit dial switch to manually distribute the communication address of battery sets.1-3 bit means the communication address of battery sets,the status of 4th bit means if this BMC is the master or not. **For the master, the communication address is largest and the fourth digit must be ON status.**
- Please refer to the table below to set the ADD switch for parallel connection of different battery sets.

	Master	Slave 1	Slave 2	Slave 3	Slave 4
1 battery set					
2 battery sets					
3 battery sets					
4 battery sets					
5 battery sets					

4.3 Switch on the battery system

Turn on DC breakers sets (on BMC) of all battery sets.

Turn on the DC switch of inverter or AC breaker, all battery sets will be powered on automatically.

Or push the start button on **master BMC** when the running LED flashes, all battery sets will be powered on.

If it is failed to switch on the battery system, please check if all the electrical connections are correct or not push the start button of master battery set.