



Installation Guide

300A Busbar



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Precautions: The connection between the power cord and the busbar is firmly connected together through a fixing device (bolt), which is a rigid connection. This connection method can ensure stable and long-lasting electrical contact, reduce the possibility of loosening due to vibration or other external factors, and at the same time, the contact resistance at the connection is low, which helps to improve current transmission efficiency and reduce heat generation.

When making line connections, it is important to note that:

(1) This product uses bolts to fix the power cord. The appropriate size and type of power cord terminal should be selected according to the size of the bolt, otherwise it may result in insufficient contact area between the busbar and the power cord, which cannot guarantee good electrical continuity.

(2) When connecting the circuit, if the bolts or other fixing devices are not fully tightened, or if the contact parts become loose due to time and mechanical vibration, it will cause an increase in resistance between the contact surfaces, leading to local overheating and arc discharge.

(3) This busbar product uses copper conductor material, and the surface of conductor materials such as copper or aluminum may form oxide layers or other corrosion products during use, which can reduce contact quality, increase contact resistance, and generate heat and arc when current passes through.

(4) The rated load of this product is 300A. Please note that the current in the circuit should not exceed 300A during use. When the actual operating current exceeds the design carrying capacity of the busbar or connector, the temperature rise will cause the material to soften or even melt, thereby damaging the insulation and causing arcing or even fire.

(5) During long-term use or prolonged exposure to high temperatures, humidity, or chemical environments, the insulation material of the product may gradually age and deteriorate, and metal parts may rust or form conductive paths, causing the product to lose its original performance and increasing the risk of arcing.

Therefore, during use, the environment should be kept clean and dry: try to keep the environment around electrical equipment clean and prevent the influence of moisture and pollutants. Regularly inspect the condition of the product to ensure that all connections are secure and show no signs of corrosion, and replace aging components if necessary.

(6) Necessary overcurrent protection devices such as fuses and circuit breakers should be added to the circuit. Once an abnormal situation occurs, these devices can promptly cut off the system power supply to avoid the continuous development of arcs.

Installation steps for busbar.

1. Firstly, install the busbar at the location you need.



2. Remove the protective cover

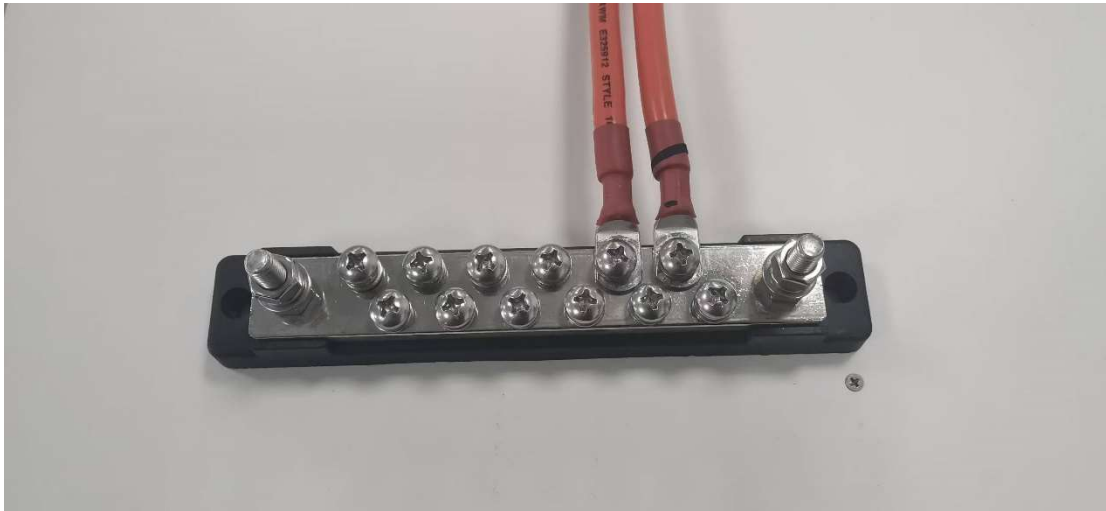


3. We can see that this busbar consists of 12 M6 terminals and two M8 terminals.



4. Remove one of the M6 screws on the busbar, align the hole of the wiring terminal with the screw hole on the busbar, ensure that the wiring terminal surface is tightly attached to the busbar surface, then tighten the screw, repeat the above process, and fix the other power lines.





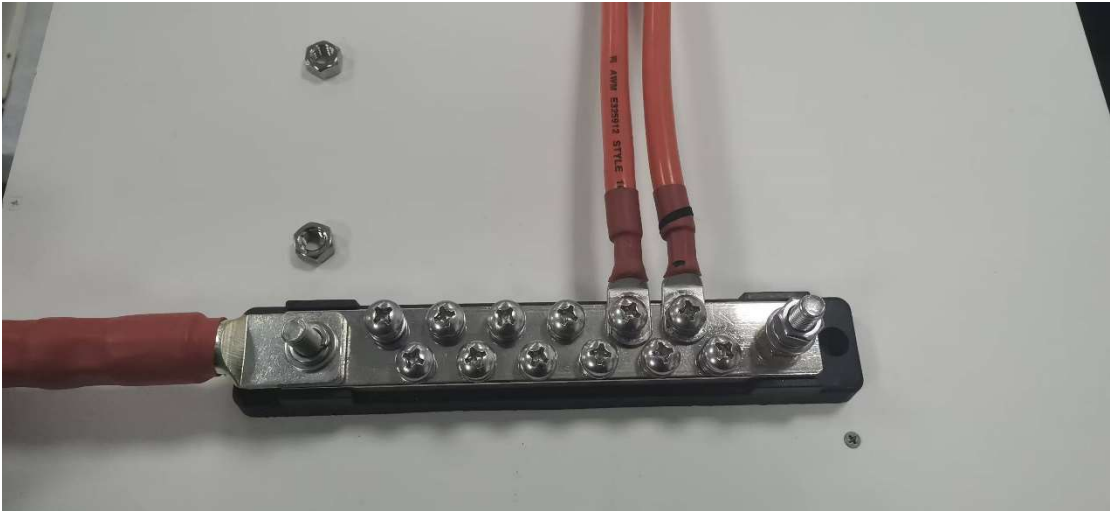
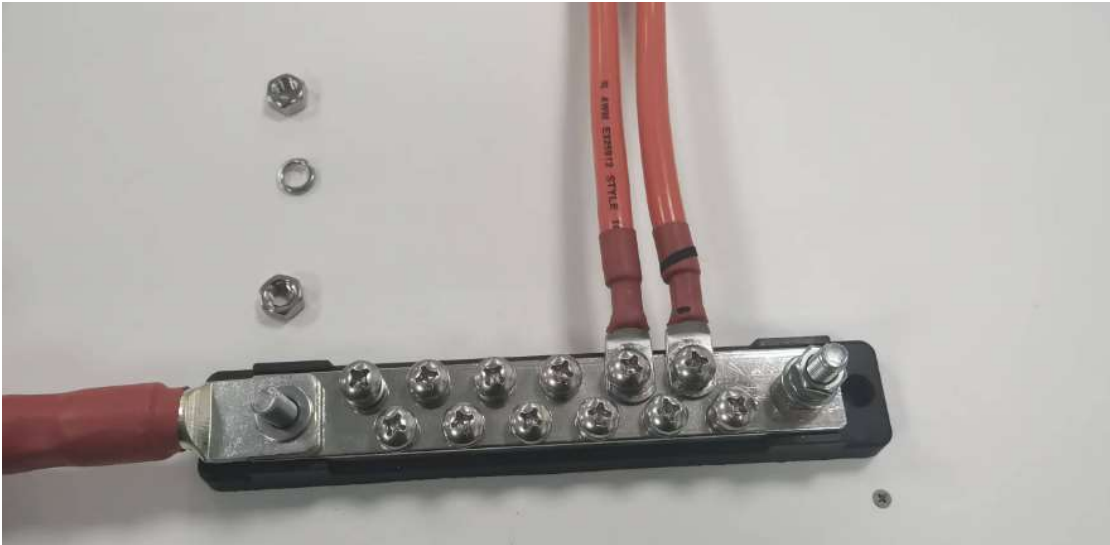
5. Afterwards, fix the main power cable: remove the flat washer, spring washer, nut 1, and nut 2 on one end of the M8 screw of the busbar



6. Align the holes of the wiring terminals of the main power cable with the M8 bolts on the busbar.



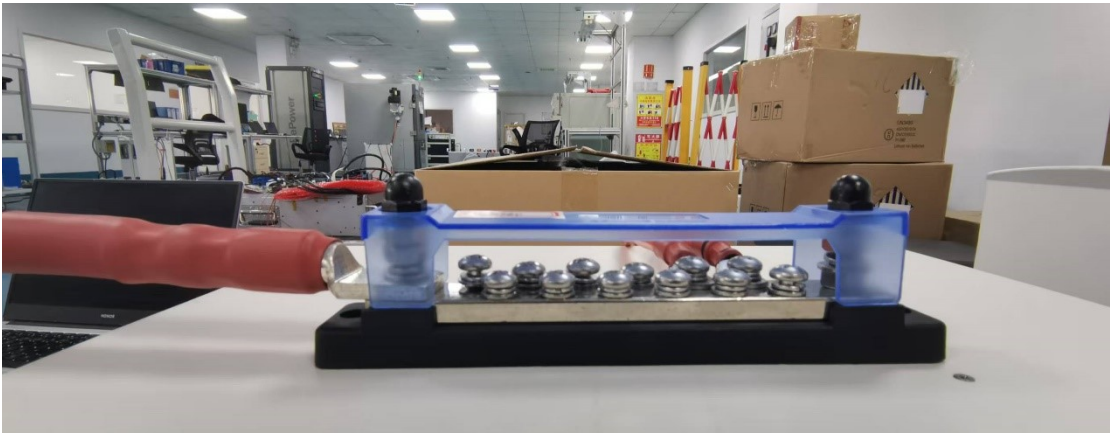
7. First, install the flat pad and spring pad, then install nut 1 and tighten it firmly



8. Continue installing nut 2. The double nut locking mechanism can effectively prevent the bolt from loosening. When tightening nut 2, use wrench 1 to secure nut 1. Use wrench 2 to hold nut 2 and tighten it firmly (wrench 1 should not rotate). This way, when tightening nut 2, nut 1 will not rotate with nut 2, causing the internal thread of the nut and the external thread of the bolt to squeeze each other, thereby achieving better anti loosening effect.



9. Close the protective cover to complete the installation





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