

1.4 Overview the inverter Axpert VMIII



1 Troubleshooting

1.5 How to do

When the inverter was faulty, normally there are two main symptoms:

- No display at all;
- Fault code or warning code on the LCD;

When the fault occurred, please help to record the fault information and follow “How to check” of part 2.2 to check the inverter, then feedback the checking result to the service center. It will be very helpful for solving the problem as soon as possible.

1.6 Fault condition

Note:

When open the top cover, please have a look first, are there any obviously damaged parts?

When take the main board out, please have a look around, are there any obviously damaged parts?

专案名称: Axpert VM III-5000/VM III-3000

专案编号: S1711171 修订版次: 00 PAGE

2.2.1. Not working at all/ No display

| | |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description | The inverter couldn't startup completely. |
| Possible reason | 1. SPS module damaged. |
| How to check | 1. Firstly, please measure the resistor between BAT+ and BAT-. If it is not shorted, only connect the inverter with battery, and press "ON" button, could the inverter startup? If not, please check the fan. 2. If the LCD couldn't light up and fan doesn't work, please disconnect all the wires and open the top cover, and then take the main board outside by following part 4. 3. Check the main board by following "3.5 and 3.6" |
| How to solve | Repair the main or replace it directly. |

2.2.2. 09 fault

| | |
|-----------------|----------------------------------------------------------------------------------------------------------------|
| Description | Bus soft start fails. |
| Possible reason | DC-DC module was damaged or BUS soft start module was damaged. |
| How to check | 1. Check the main board by following "3.6; 3.7"; 2. Check the main board by following "3.1; 3.2; 3.3; 3.4". |
| How to solve | Repair the main board or replace it directly. |

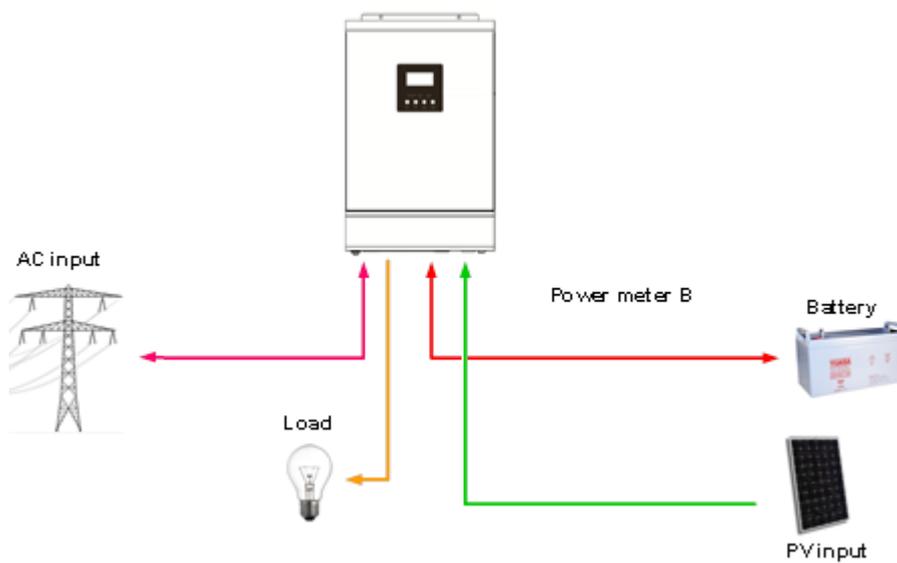
2.2.3.  Warning

| | |
|-----------------|-----------------------------------------------------------------------------------------------------------------|
| Description | Battery couldn't be detected. |
| Possible reason | Wire connection or fuse was burnt. |
| How to check | 1. Check the wire connection, the priority of the battery cable; 2. Check the main board by following "3.1". |
| How to solve | Repair the main board or replace it directly. |

1.7 Test step

After replacing all defected components, testing steps can be used to confirm the repair result and the reliability of the Inverter.

Set up the testing system as below:



2. Checking and measuring guide

2.1 Check the battery side components on MAIN board

Fuse and capacitors

For VMIII-3000 FUCE 150A

For VMIII-5000 FUCE 150A



| Parts | Attribute | Reference values | Failure status |
|-------|-----------|------------------|----------------|
| F5 | Resistor | 0.1 ohm | Open |

For VMIII-3000 C9/C11/C12/C196/C152: (4200uF 35V)

For VMIII-5000 C9/C18/C196: (6800uF 63V)