CX series-FAQ

Fault codes and troubleshooting steps

Applicable to: SGxxCX-seires

Reversed String Polarity Fault and Reversed String Polarity Alarm

Fault Name	Reversed string polarity fault and reversed string polarity alarm 1. Code 448 ~ 471 are corresponding to string 1 ~ 24 respectively. 2. Code 532 ~ 547 are corresponding to string 1 ~ 16 respectively. 3. Code 564 ~ 571 are corresponding to string 16 ~ 24 respectively.
Fault Type	Fault/Alarm
Fault Condition	1. When a reverse current of 3A in a certain string it is detected for 5 minutes, the inverter turns into alarm run status. 2. When a reverse current of 5A in a certain string it is detected for 10 s, the inverter stops.
Troubleshooting steps and methods	1. Measure the string open circuit voltage. If it is negative, the wiring is wrong. 2. Modules in strings that are connected to the same MPPT should be of the same specifications, quantity, orientation and angle (abnormal protection tracking system). If not, it may lead to open circuit voltage of each string. If there is a voltage difference in open circuit voltage, it may cause the reversed polarity fault and alarm. 3. In the running state, check whether the MPPT current and the string current of both polarities are consistent with the current measured by the clamp meter. If the MPPT current is abnormal and the string current is normal, the MPPT current sensor may fail. If the MPPT current is normal and the string current is abnormal, the string current sensor may fail.

For further information, please download the user manual for:
SG30-50CX
SG110CX

This manual is intended for professional technicians who are responsible for

installation, operation, maintenance and troubleshooting of inverters, and users who need to check inverter parameters. The inverter must only be installed by professional technicians.

The professional technician is required to meet the following requirements:

- Know electronic, electrical wiring and mechanical expertise, and be familiar with electrical and mechanical schematics.
- Have received professional training related to the installation, commissioning and troubleshooting of electrical equipment.
- Be able to quickly respond to hazards or emergencies that occur during installation, commissioning and troubleshooting.
- Be familiar with local standards and relevant safety regulations of electrical systems.
- Read this manual thoroughly and understand the safety instructions related to operations.