

CX series-FAQ

Fault codes and troubleshooting steps

Applicable to: SGxxCX-series

Leak Current Sampling Channel Fault (Code 041)

Fault Name	Leakage current sampling channel fault (fault code: 041)
Fault Type	Failure shutdown
Fault Condition	The sampling channel is abnormal (hardware detection is carried out when the inverter is started, and no detection is carried out during operation.)
Troubleshooting steps and methods	Replace the inverter.

Current Imbalance Fault (Code 042)

Fault Name	Current imbalance fault (fault code: 042)
Fault Type	Failure shutdown
Fault Condition	The inverter detects current differences between two phases is greater than 20 A, inverter jumps to a standby status. If this fault happens three times, the inverter stops.
Troubleshooting steps and methods	<ol style="list-style-type: none"> 1. Check the AC grid voltage for anomalies. Check if there is a phase loss. 2. If the voltage is normal and the current is abnormal, it is a sampling problem. It is recommended to replace the inverter.

Low Ambient Temperature (Code 043)

Fault Name	Low ambient temperature (fault code: 043)
Fault Type	Failure shutdown
Fault Condition	<ol style="list-style-type: none"> 1. The internal temperature is lower than -32.5°C for 20 seconds. 2. The temperature in the machine is higher than 0°C, but the IGBT temperature is lower than -39°C.
Troubleshooting steps and methods	<ol style="list-style-type: none"> 1. Check whether the ambient temperature is normal. If the displayed internal temperature is abnormal, it is recommended to replace the inverter. 2. Check whether the DSP-control board is normal. If not, it is recommended to replace the inverter.

Phase R I Sampling Chann Flt, Phase S I Sampling Chann Flt, Phase T I Sampling Chann Flt (Code 048/049/050)

Fault Name	<ol style="list-style-type: none"> 1. Phase R I sampling chann flt (fault code: 048) 2. Phase S I sampling chann flt (fault code: 049) 3. Phase T I sampling chann flt (fault code: 050)
Fault Type	Failure shutdown
Fault Condition	Exception in AC current sampling channel. (The fault only happens during hardware self-check when the inverter is starting, and cannot be detected during operation)
Troubleshooting steps and methods	It is recommended to replace the inverter.

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.