1-phase Hybrids-FAQ

Fault code and troubleshooting steps of SHxxRS

Applicable to: SHxxRS series

Battery instantaneous overvoltage fault (Code 711)

Fault name	Battery instantaneous overvoltage fault (fault code: 711)
Fault type	Fault
Fault condition	When the inverter is not in standby/fault/power-off states, the BDC voltage is 10V+ higher than the limited charge voltage for 125s.
Steps and methods of troubleshooting	1. Check whether all cables between battery and inverter are connected correctly. 2. Check whether the battery voltage is lower than the normal range. 3. If the fault continues and cannot be recovered, check the battery wiring and use a multimeter to test the polarity.

Average battery overvoltage fault (Code 712)

Fault name	Average battery overvoltage fault (fault code: 712)
Fault type	Fault
Fault condition	In non-equalized charging mode, the battery port voltage 3V+ higher than the limited charge voltage for 1.5s.
Steps and methods of troubleshooting	1. Check whether all cables between battery and inverter are connected correctly. 2. Check whether the battery voltage is lower than the normal range. 3. If the fault continues and cannot be recovered, check the battery wiring and use a multimeter to test the polarity.

Abnormal BMS communication (Code 714)

Fault name	Abnormal BMS communication (fault code: 714)
Fault type	Fault
Fault condition	A communication wire between a battery and the inverter is disconnected; Any battery or inverter communication terminal is not connected securely.
Steps and methods of troubleshooting	1. Check whether any communication wire and its terminal are abnormal, and if so, ensure reliable connection. 2. Reconnect the battery communication wire. 3. Measure, if communication voltage is between 3.3V – 5.0V. 4. Exchange the communication cable between the inverter and battery. 5. If voltage differs from that, please contact SUNGROW Service.

Battery hardware overvoltage fault (Code 715)

Fault name	Battery hardware overvoltage fault (fault code: 715)
Fault type	Fault
Fault condition	BDC hardware overvoltage occurs multiple times.
Steps and methods of troubleshooting	1. If the battery voltage is abnormal, check, if the battery power cord connection is abnormal (reversed polarity, looseness, etc.). If yes, please connect the battery power cord correctly. 2. If the battery power cord is connected correctly, check whether the real-time voltage of the battery is abnormal.

Battery hardware overvoltage fault (Code 716)

Fault name	Battery hardware overvoltage fault (fault code: 716)
Fault type	Fault
Fault condition	In non-operation state, the voltage sampling on the battery side is less than-100V
Steps and methods of troubleshooting	1. Check whether all cables between battery and inverter are connected correctly. 2. Check whether the battery voltage is lower than the normal range. 3. If the fault continues and cannot be recovered, check the battery wiring and use a multimeter to test the polarity.

For further information, please download the user manual here.

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.

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