Smart String ESS
LUNA2000-(215-2S10, 215-2S12)

Alarm Reference

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About this Document

Purpose

This document describes how to handle all alarms of the following products:

- LUNA2000-215-2S10 Smart String ESS
- LUNA2000-215-2S12 Smart String ESS

Intended Audience

The document is intended for:

- Technical support engineers
- Commissioning engineers
- Maintenance engineers

Change History

The symbols that may be found in this manual are defined as follows.

Symbol	Description
DANGER	Indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.
WARNING	Indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.
CAUTION	Indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.
NOTICE	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance deterioration, or unanticipated results. NOTICE is used to address practices not related to personal injury.

Symbol	Description
NOTE	Supplements the important information in the main text. NOTE is used to address information not related to personal injury, equipment damage, and environment deterioration.

Contents

1 Description of Alarm Reference

Item	Description
Alarm ID	Indicates the ID of an alarm. Unique identifier of an alarm in one product.
Alarm Name	Indicates the name of an alarm. In the same product, alarm names and alarm IDs correspond to each other, which clearly and accurately reflect the meaning of alarms.
Alarm Severity	Alarm severities are defined as follows: • Major: The device is faulty or the external environment is abnormal. As a result, the output power decreases or the device stops feeding to the grid. • Minor: Some components of the device are faulty but the device can still connect to the grid and generate power. • Warning: The device functions normally, but its output power decreases or some authorization functions fail due to external factors.
Alarm Type	Alarms are classified according to their contents. For example, the alarms of the environment system include alarms related to temperature, humidity, and door status.
Clearance Category	• ADAC: After the fault is rectified, this alarm is automatically cleared. • ADMC: This alarm needs to be manually cleared after the fault is rectified.
Introduced Since	Indicates the software version in which the alarm is added.
Impact on the System	Impact on the system or services after an alarm is generated.
Possible Cause	Indicates the possible cause of the alarm, including the cause ID and cause description.
Suggestion	Indicates the procedure for handling the alarm.

2 Alarm Reference

2.1 Battery Pack

2.1.1 PACK

2.1.1.1 3100 Battery Pack and External Power Connected Abnormally

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3100	Battery Pack and External Power Connected Abnormally	Major	Environmental alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The battery pack copper bar experiences overtemperature.	1. Check that the ESS is not charged or does not discharge. Wait for 30 minutes and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface. 3. Wait for 5 minutes, wear protective equipment, take protective measures, open the front panel of the battery pack, and check whether the positive and negative copper bars are loose. If they are loose, tighten the screws. 4. After checking that the screws are tightened, start the ESS on the user interface. 5. If the alarm persists, contact technical support.
2	1	The battery pack copper bar experiences overtemperature.	1. Check that the ESS is not charged or does not discharge. Wait for 30 minutes and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface. 3. Wait for 5 minutes, wear protective equipment, take protective measures, open the front panel of the battery pack, and check whether the positive and negative copper bars are loose. If they are loose, tighten the screws. 4. After checking that the screws are tightened, start the ESS on the user interface. 5. If the alarm persists, contact technical support.

2.1.1.2 3101 Battery Pack Lifespan Reached

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3101	Battery Pack Lifespan Reached	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The battery pack has reached the end of its lifespan.	The battery pack has reached the end of its lifespan. Contact a local recycling agency to dispose of it in compliance with local laws and regulations as well as applicable standards.

2.1.1.3 3102 Battery Pack Overvoltage

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3102	Battery Pack Overvoltage	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The voltage of the battery pack or its cells is too high.	1. Check that the ESS is not charged. Wait for 5 minutes and check whether the alarm is cleared. 2. If the alarm persists, contact technical support.
2	1	The voltage of the battery pack or its cells is too high.	1. Check that the ESS is not charged. Wait for 5 minutes and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and contact technical support.
3	1	The voltage of the battery pack or its cells is too high.	1. Check that the ESS is not charged. Wait for 5 minutes and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and contact technical support.
4	1	The voltage of the battery pack or its cells is too high.	1. Check that the ESS is not charged. Wait for 5 minutes and check whether the alarm is cleared. 2. If the alarm persists, contact technical support.
5	1	The voltage of the battery pack or its cells is too high.	1. Check that the ESS is not charged. Wait for 5 minutes and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and contact technical support.

2.1.1.4 3103 Battery Pack Undervoltage

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3103	Battery Pack Undervoltage	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	1. The voltage of the battery pack or its cells is too low. 2. The battery pack has been stored for extended periods of time when off-grid. 3. The battery pack has been idle for a long time after grid connection.	1. Check that the ESS does not discharge. Wait for 5 minutes and check whether the alarm is cleared. 2. If the alarm persists, connect to the power grid and charge the ESS within 48 hours. 3. If the alarm persists after the batteries are charged for 1 hour, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
2	1	1. The voltage of the battery pack or its cells is too low. 2. The battery pack has been stored for extended periods of time when off-grid. 3. The battery pack has been idle for a long time after grid connection.	1. Check that the ESS does not discharge. Wait for 5 minutes and check whether the alarm is cleared. 2. If the alarm persists, connect to the power grid and charge the ESS within 48 hours. 3. If the alarm persists after the batteries are charged for 1 hour, contact technical support.
3	1	1. The voltage of the battery pack or its cells is too low. 2. The battery pack has been stored for extended periods of time when off-grid. 3. The battery pack has been idle for a long time after grid connection.	1. Check that the ESS does not discharge. Wait for 5 minutes and check whether the alarm is cleared. 2. If the alarm persists, connect to the power grid and charge the ESS within 48 hours. 3. If the alarm persists after the batteries are charged for 1 hour, contact technical support.
4	1	1. The voltage of the battery pack or its cells is too low. 2. The battery pack has been stored for extended periods of time when off-grid. 3. The battery pack has been idle for a long time after grid connection.	1. Check that the ESS does not discharge. Wait for 5 minutes and check whether the alarm is cleared. 2. If the alarm persists, connect to the power grid and charge the ESS within 48 hours. 3. If the alarm persists after the batteries are charged for 1 hour, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
5	1	1. The voltage of the battery pack or its cells is too low. 2. The battery pack has been stored for extended periods of time when off-grid. 3. The battery pack has been idle for a long time after grid connection.	1. Start the ESS on the user interface. Wait for 5 minutes and check whether the alarm is cleared. 2. If the alarm persists, connect to the power grid and charge the ESS immediately. 3. If the lowest cell voltage is still lower than 2.5 V after the ESS has been charged for 1 hour, contact technical support.

2.1.1.5 3104 Battery Overcurrent Protection

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3104	Battery Overcurrent Protection	Major	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The ESS cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The battery pack current exceeds the maximum operating current for a long time due to a system current limiting failure.	1. Check whether the power and communications cables of the ESS are correctly connected. 2. If the cables are correctly connected, clear the alarm and start the ESS on the user interface. 3. If the alarm persists, contact technical support. 4. If cables are incorrectly connected, correct the cable connection according to the user manual and repeat step 2. 5. If the alarm persists, contact technical support.
2	1	The battery pack current exceeds the maximum operating current for a long time due to a system current limiting failure.	1. Check whether the power and communications cables of the ESS are correctly connected. 2. If the cables are correctly connected, clear the alarm and start the ESS on the user interface. 3. If the alarm persists, contact technical support. 4. If cables are incorrectly connected, correct the cable connection according to the user manual and repeat step 2. 5. If the alarm persists, contact technical support.

2.1.1.6 3105 Battery Pack Overtemperature

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3105	Battery Pack Overtemperature	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The Liquid Thermal Management System (LTMS) is faulty.	1. Check that the ESS is not charged or does not discharge. Wait for 30 minutes and check whether the alarm is cleared. 2. If the alarm persists, check whether an alarm related to an LTMS fault is reported. 3. After checking that the LTMS is normal, shut down the ESS on the user interface. 4. Check whether the battery cell NTC is faulty.
	2	The battery cell NTC is faulty, causing overtemperature.	1. Wear protective clothing and take protective measures. Open the front panel of the battery pack, remove the NTC wiring terminal, and check whether the NTC impedance is normal. 2. After checking that the NTC impedance is normal, start the ESS on the user interface. 3. If the alarm persists, contact technical support.
2	1	The LTMS is faulty.	1. Check that the ESS is not charged or does not discharge. Wait for 30 minutes and check whether the alarm is cleared. 2. If the alarm persists, check whether an alarm related to an LTMS fault is reported. 3. After checking that the LTMS is normal, shut down the ESS on the user interface. 4. Check whether the battery cell NTC is faulty.
	2	The battery cell NTC is faulty, causing overtemperature.	1. Wear protective clothing and take protective measures. Open the front panel of the battery pack, remove the NTC terminal, and check whether the NTC impedance is normal. 2. After checking that the NTC impedance is normal, start the ESS on the user interface. 3. If the alarm persists, contact technical support.

2.1.1.7 3106 Battery Pack Undertemperature

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3106	Battery Pack Undertemperature	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The ambient temperature is too low, reaching the charge undertemperature protection threshold.	1. Check whether an alarm related to an LTMS fault is reported. If yes, rectify the fault. 2. After checking that the LTMS is normal, check that the LTMS works in heating mode on the user interface. Wait for more than 4 hours and check whether the undertemperature protection alarm is cleared. 3. If the alarm persists, contact technical support.
2	1	The ambient temperature is too low, which triggers discharge protection.	1. Check whether an alarm related to an LTMS fault is reported. If yes, rectify the fault. 2. After checking that the LTMS is normal, check that the LTMS works in heating mode on the user interface. Wait for more than 4 hours and check whether the undertemperature protection alarm is cleared. 3. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
3	1	The ambient temperature is too low, which triggers charge protection.	1. Check whether an alarm related to an LTMS fault is reported. If yes, rectify the fault. 2. After checking that the LTMS is normal, check that the LTMS works in heating mode on the user interface. Wait for more than 4 hours and check whether the undertemperature protection alarm is cleared. 3. If the alarm persists, contact technical support.
4	1	The ambient temperature is too low, which triggers discharge protection.	1. Check whether an alarm related to an LTMS fault is reported. If yes, rectify the fault. 2. After checking that the LTMS is normal, check that the LTMS works in heating mode on the user interface. Wait for more than 6 hours and check whether the undertemperature protection alarm is cleared. 3. If the alarm persists, contact technical support.

2.1.1.8 3107 Battery Pack Locked

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3107	Battery Pack Locked	Major	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The ESS cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The copper bar torque does not meet requirements.	1. Clear the alarm on the user interface. 2. Check that the ESS is not charged or does not discharge. Wait for 30 minutes and check whether the alarm is cleared. 3. If the alarm persists, shut down the ESS on the user interface. 4. Wait for 5 minutes, wear protective equipment, take protective measures, open the front panel of the battery pack, and check whether the positive and negative copper bars are loose. If they are loose, tighten the screws. 5. After checking that the screws are tightened, start the ESS and clear the alarm on the user interface. 6. If the alarm persists, contact technical support.
	2	The LTMS does not run properly.	1. Clear the alarm on the user interface. 2. Check that the ESS is not charged or does not discharge. Wait for 30 minutes and check whether the alarm is cleared. 3. If the alarm persists, check whether an alarm related to an LTMS fault is reported. 4. After checking that the LTMS is normal, shut down the ESS on the user interface. 5. Wait for 5 minutes, and start the ESS and clear the alarm on the user interface. 6. If the alarm persists, contact technical support.
2	1	The LTMS runs abnormally.	1. Clear the alarm on the user interface. 2. Check that the ESS is not charged or does not discharge. Wait for 30 minutes and check whether the alarm is cleared. 3. If the alarm persists, check whether an alarm related to an LTMS fault is reported. 4. After checking that the LTMS is normal, shut down the ESS on the user interface. 5. Wait for 5 minutes, and start the ESS and clear the alarm on the user interface. 6. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
3	1	The battery pack has triggered the same fault multiple times.	1. Check that the ESS does not discharge. Clear the alarm on the user interface and check whether the alarm is cleared 5 minutes later. 2. If the alarm persists, connect to the power grid and charge the ESS within 48 hours. 3. Clear the alarm and start the ESS on the user interface to start charging. 4. If the alarm persists after the batteries are charged for 1 hour, contact technical support.
4	1	The battery pack has triggered the same fault multiple times.	1. Check that the ESS does not discharge. Clear the alarm on the user interface and check whether the alarm is cleared 5 minutes later. 3. If the alarm persists, shut down the ESS on the user interface. 3. Wait for 5 minutes. 4. Start the ESS and clear the alarm on the user interface. 5. If the alarm persists, contact technical support.
5	1	The battery pack has triggered the same fault multiple times.	1. Check that the ESS is not charged or does not discharge. Clear the alarm on the user interface and check whether the alarm is cleared 5 minutes later. 3. If the alarm persists, shut down the ESS on the user interface. 3. Wait for 5 minutes. 4. Start the ESS and clear the alarm on the user interface. 5. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
6	1	The cell voltage in the battery pack is too high.	1. Check that the ESS stops charging, clear the alarm on the user interface, wait for 5 minutes, and check whether the alarm is reported again. 2. If the alarm persists, shut down the ESS on the user interface. 3. Wait for 5 minutes. 4. Start the ESS and clear the alarm on the user interface. 5. If the alarm persists, contact technical support.
7	1	1. The voltage of the battery pack or its cells is too low. 2. The battery pack has been stored for extended periods of time when off-grid. 3. The battery pack has been idle for a long time after grid connection.	1. Start the ESS and clear the alarm on the user interface. 2. After the alarm is cleared, connect to the power grid and charge the ESS immediately. 3. If the lowest cell voltage is still lower than 2.5 V after the ESS has been charged for 1 hour, contact technical support.
8	1	The LTMS is faulty.	1. Check that the ESS is not charged or does not discharge. 2. Check whether an alarm related to an LTMS fault is reported. 3. After checking that the LTMS is normal, shut down the ESS on the user interface. 4. Check whether the battery cell NTC is faulty.
	2	The battery cell NTC is faulty, causing overtemperature.	1. Wear protective clothing and take protective measures. Open the front panel of the battery pack, remove the NTC terminal, and check whether the NTC impedance is normal. 2. After checking that the NTC impedance is normal, start the ESS on the user interface. 3. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
9	1	The ambient temperature is too low, which triggers charge protection.	1. Check whether an alarm related to an LTMS fault is reported. If yes, rectify the fault. 2. After checking that the LTMS is normal, check that the LTMS works in heating mode on the user interface. Wait for more than 20 hours and manually clear the undertemperature protection alarm. 3. If the alarm persists, contact technical support.
10	1	The ambient temperature is too low, which triggers discharge protection.	1. Check whether an alarm related to an LTMS fault is reported. If yes, rectify the fault. 2. After checking that the LTMS is normal, check that the LTMS works in heating mode on the user interface. Wait for more than six hours and manually clear the undertemperature protection alarm. 3. If the alarm persists, contact technical support.

2.1.1.9 3108 Battery Faulty

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3108	Battery Faulty	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	A major fault has occurred on the battery pack.	Contact technical support.
2	1	A major fault has occurred on the battery pack.	Contact technical support.
3	1	A major fault has occurred on the battery pack.	Contact technical support.
4	1	The battery pack experiences severe overtemperature, which may cause thermal runaway.	1. Remotely monitor the system for 30 minutes to check whether other exceptions (such as abnormal battery voltage, abnormal battery temperature, and abnormal combustible gas concentration) occur. If yes, remotely power off the system. During remote monitoring, do not approach the ESS or open the ESS cabin doors. 2. If no exception is found during the 30-minute remote monitoring, send trained personnel to the site and observe the system for 30 minutes from a safe distance. If there is smoke or fire, remotely power off the system, evacuate onsite personnel as soon as possible, and call the fire emergency service. 3. If no exception is found after 30 minutes of remote monitoring and onsite observation, clear the alarm and power on the system again.

2.1.1.10 3109 Battery Pack SOH Low

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3109	Battery Pack SOH Low	Warning	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The ESS works properly, and the battery pack may approach the end of its lifespan.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The battery pack SOH is low.	1. Enable SOH calibration. 2. After the calibration is complete, clear the alarm on the user interface. 3. If the alarm persists, the battery pack SOH is low. Pay attention to the operating status and replace the battery pack in advance.

2.1.1.11 3112 Power Connection Sampling of Battery Pack Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3112	Power Connection Sampling of Battery Pack Abnormal	Major	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The ESS cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	A major fault occurs on the internal circuit of the BMU.	1. Confirm the battery pack for which the alarm is generated and shut down the ESS on the user interface. 2. Wear protective equipment, take protective measures, open the front panel of the battery pack, and replace the faulty BMU. 3. Wait for 5 minutes, and start the ESS and clear the alarm on the user interface. 4. If the alarm persists, contact technical support.

2.1.1.12 3113 Battery Pack Configuration Data Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3113	Battery Pack Configuration Data Abnormal	Major	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The ESS cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The differentiated data and backup data of each BMU are inconsistent or some data is corrupted.	1. If the BCU has been replaced, replace it on the "Device Replacement" page of the SmartLogger WebUI. 2. If only the BMU or battery pack is replaced or no spare part is replaced, check the SN on the battery pack label and connect to the FusionSolar app beside the ESS. 3. On the alarm screen of the app, tap "Proceed" to go to the SN confirming screen and select the SN displayed on the battery pack label. If the SN is not the one displayed on the battery pack label, data errors may occur and safety risks may occur during system running. 4. After the SN is confirmed, the device automatically synchronizes data and restarts. 5. If the alarm persists, contact technical support.
2	1	The differentiated data and backup data on each BMU are corrupted.	1. If the BMU and BCU have been replaced, replace them on the "Device Replacement" page of the SmartLogger WebUI. 2. If the alarm persists, contact technical support.

2.1.1.13 3114 Battery Pack and System Specifications Mismatched

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3114	Battery Pack and System Specifications Mismatched	Major	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The ESS cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	1. The versions of the rack controller and battery packs are inconsistent. 2. The update fails. 3. The battery pack has been replaced.	1. The battery pack model is incompatible with the system. Replace the battery pack with the original one. 2. If the alarm persists, contact technical support.

2.1.1.14 3115 Cell Temperature Rises Abnormally

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3115	Cell Temperature Rises Abnormally	Major	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The ESS cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The battery pack has thermal runaway risks.	1. Remotely monitor the system for 30 minutes to check whether other exceptions (such as abnormal battery voltage, abnormal battery temperature, and abnormal combustible gas concentration) occur. If yes, remotely power off the system. During remote monitoring, do not approach the ESS or open the ESS cabin doors. 2. If no exception is found during the 30-minute remote monitoring, send trained personnel to the site and observe the system for 30 minutes from a safe distance. If there is smoke or fire, remotely power off the system, evacuate onsite personnel as soon as possible, and call the fire emergency service. 3. If no exception is found after 30 minutes of remote monitoring and onsite observation, clear the alarm and power on the system again.

2.1.1.15 3116 PACK Thermal Runaway

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3116	PACK Thermal Runaway	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The battery pack has thermal runaway risks.	1. Remotely monitor the system for 30 minutes to check whether other exceptions (such as abnormal battery voltage, abnormal battery temperature, and abnormal combustible gas concentration) occur. If yes, remotely power off the system. During remote monitoring, do not approach the ESS or open the ESS cabin doors. 2. If no exception is found during the 30-minute remote monitoring, send trained personnel to the site and observe the system for 30 minutes from a safe distance. If there is smoke or fire, remotely power off the system, evacuate onsite personnel as soon as possible, and call the fire emergency service. Notify professional firefighters and provide them with relevant product information, including but not limited to battery pack types, ESS capacity, and battery pack location and distribution. 3. Do not enter the affected building or equipment area under any circumstances, and do not open the ESS cabin doors. Isolate and monitor the site. Keep irrelevant personnel away from the site. 4. After calling the fire emergency service, remotely power off the system (such as the Smart Transformer Station, Smart PCS, auxiliary power supply devices, and combiner box power supply) while ensuring your own safety. 5. After professional firefighters arrive, provide relevant product information, including but not limited to battery pack types, ESS capacity, battery pack location and distribution, and user manuals. 6. After the fire is extinguished, the site must be handled by professionals in accordance with local laws and regulations. Do not open the ESS cabin doors without permission.

2.1.1.16 3117 Battery Pack Charging Failed

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3117	Battery Pack Charging Failed	Major	Communications alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The ESS cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	Charging failed.	1. Shut down the ESS on the user interface. 2. Wait for 5 minutes and check whether cables to the ESS are correctly connected by referring to the user manual. 3. After checking that the cable connections are correct, start the ESS on the user interface. 4. If the alarm persists, contact technical support.

2.1.2 Balancing Module

2.1.2.1 3161 Balancing Module Overcurrent Protection

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3161	Balancing Module Overcurrent Protection	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The balancing DCDC stops working.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	Overload or a short circuit occurs.	1. If the alarm is automatically cleared after a short period of time and the system recovers, the module may be overloaded for a short period of time. In this case, no manual intervention is required. 2. If an overcurrent fault occurs due to long-term overcurrent protection, rectify the fault by referring to the suggestions for overcurrent faults.
2	1	Overload or a short circuit occurs.	1. If the alarm is automatically cleared after a short period of time and the system recovers, the module may be overloaded for a short period of time. In this case, no manual intervention is required. 2. If an overcurrent fault occurs due to long-term overcurrent protection, rectify the fault by referring to the suggestions for overcurrent faults.

Reason ID	No.	Possible Cause	Suggestion
3	1	Overload or a short circuit occurs.	1. If the alarm is automatically cleared after a short period of time and the system recovers, the module may be overloaded for a short period of time. In this case, no manual intervention is required. 2. If an overcurrent fault occurs due to long-term overcurrent protection, rectify the fault by referring to the suggestions for overcurrent faults.
4	1	Overload or a short circuit occurs.	1. If the alarm is automatically cleared after a short period of time and the system recovers, the module may be overloaded for a short period of time. In this case, no manual intervention is required. 2. If an overcurrent fault occurs due to long-term overcurrent protection, rectify the fault by referring to the suggestions for overcurrent faults.

2.1.2.2 3162 Balancing Module Internal Error

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3162	Balancing Module Internal Error	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The balancing DCDC stops working.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The communication circuit is not properly connected or the communication circuit components are damaged.	1. If the alarm is automatically cleared after a short period of time and the system recovers, the communication may be abnormal for a short period of time. In this case, no manual intervention is required if services are not affected. 2. If the alarm is repeatedly generated for a long time, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
2	1	The communication circuit is not properly connected or the communication circuit components are damaged.	1. If the alarm is automatically cleared after a short period of time and the system recovers, the communication may be abnormal for a short period of time. In this case, no manual intervention is required if services are not affected. 2. If the alarm is repeatedly generated for a long time, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
3	1	The communication circuit is not properly connected or the communication circuit components are damaged.	1. If the alarm is automatically cleared after a short period of time and the system recovers, the communication may be abnormal for a short period of time. In this case, no manual intervention is required if services are not affected. 2. If the alarm is repeatedly generated for a long time, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
4	1	The board hardware circuit is damaged.	1. If the alarm is automatically cleared after a short period of time, no manual intervention is required if services are not affected. 2. If the alarm is generated for more than three times, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
5	1	Overcurrent occurs on the bus side.	1. If the alarm is automatically cleared after a short period of time, no manual intervention is required if services are not affected. 2. If the alarm is generated for more than three times, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
6	1	The EEPROM is faulty or the I2C communication is abnormal.	1. If the alarm is automatically cleared after a short period of time, no manual intervention is required if services are not affected. 2. If the alarm is generated for more than three times, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
7	1	The EEPROM is faulty or the I2C communication is abnormal.	1. If the alarm is automatically cleared after a short period of time, no manual intervention is required if services are not affected. 2. If the alarm is generated for more than three times, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
8	1	The temperature sampling circuit is damaged.	1. If the alarm is automatically cleared after a short period of time, no manual intervention is required if services are not affected. 2. If the alarm is generated for more than three times, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
9	1	The temperature sampling circuit is damaged.	1. If the alarm is automatically cleared after a short period of time, no manual intervention is required if services are not affected. 2. If the alarm is generated for more than three times, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
10	1	The MCU on the battery side is abnormal.	1. If the alarm can be automatically cleared after a short period of time, the MCU may work abnormally in a short period of time. No manual intervention is required. 2. If the alarm is generated for more than three times, shut down the ESS and replace the ESS with a new one by referring to the user manual or maintenance guide. 3. If the fault persists after the module is replaced, contact technical support for assistance.
11	1	The MCU on the bus side is abnormal.	1. If the alarm can be automatically cleared after a short period of time, the MCU may work abnormally in a short period of time. No manual intervention is required. 2. If the alarm is generated for more than three times, shut down the ESS and replace the ESS with a new one by referring to the user manual or maintenance guide. 3. If the fault persists after the module is replaced, contact technical support for assistance.

Reason ID	No.	Possible Cause	Suggestion
12	1	The lightning current causes the SPD to trip.	1. If the alarm is automatically cleared after a short period of time, no manual intervention is required if services are not affected. 2. If the alarm is generated for more than three times, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.

2.1.2.3 3163 Balancing Module Bus Voltage Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3163	Balancing Module Bus Voltage Abnormal	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The balancing DCDC stops working.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The voltage control loop in the discharging state is out of control.	1. If the alarm is automatically cleared after a short period of time and the system recovers, the bus voltage may be abnormal for a short period of time. In this case, no manual intervention is required. 2. If the alarm is repeatedly generated for a long time, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
2	1	The bus voltage control loop is out of control.	1. If the alarm is automatically cleared after a short period of time and the system recovers, the bus voltage may be abnormal for a short period of time. In this case, no manual intervention is required. 2. If the alarm is repeatedly generated for a long time, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
	2	Cables on the bus side are not connected or BCU scheduling is abnormal.	1. Shut down the ESS on the user interface and check whether the DCDC battery circuit is short-circuited. 2. If the circuit is normal, contact technical support. 3. If a short circuit occurs, rectify the fault. After the fault is rectified, power on the system again.

Reason ID	No.	Possible Cause	Suggestion
3	1	The bus voltage control loop is out of control.	1. If the alarm is automatically cleared after a short period of time and the system recovers, the bus voltage may be abnormal for a short period of time. In this case, no manual intervention is required. 2. If the alarm is repeatedly generated for a long time, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.

2.1.2.4 3164 Balancing Module Battery Voltage Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3164	Balancing Module Battery Voltage Abnormal	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The balancing DCDC stops working.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The PACK voltage is too high.	1. Check whether the PACK voltage is within the normal range of 162 V to 216 V on the user interface. 2. If overvoltage does not occur on the battery port, shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 3. If the alarm persists, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 4. If the alarm persists, contact technical support.
2	1	The PACK voltage is too low.	1. Check whether the PACK voltage is within the normal range of 162 V to 216 V on the user interface. 2. If undervoltage does not occur on the battery port, shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 3. If the alarm persists, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 4. If the alarm persists, contact technical support.

2.1.2.5 3165 Overtemperature Protection Inside the Balancing Module

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3165	Overtemperature Protection Inside the Balancing Module	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The balancing DCDC stops working.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The output is overloaded, a component is abnormal (MOS short-circuited), or the ambient temperature is too high.	1. After the overtemperature alarm is generated, the module is automatically powered off. When the temperature drops to a proper range, the module automatically recovers. No manual intervention is required if services are not affected. 2. Check whether alarms are generated for the ESS heat dissipation fan and LTMS, without affecting services. If yes, rectify the faults first. 3. If overtemperature protection occurs for more than five times, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 4. If the alarm persists, contact technical support.
2	1	The output is overloaded, a component is abnormal (MOS short-circuited), or the ambient temperature is too high.	1. After the overtemperature alarm is generated, the module is automatically powered off. When the temperature drops to a proper range, the module automatically recovers. No manual intervention is required if services are not affected. 2. Check whether alarms are generated for the ESS heat dissipation fan and LTMS, without affecting services. If yes, rectify the faults first. 3. If overtemperature protection occurs for more than five times, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 4. If the alarm persists, contact technical support.

2.1.2.6 3166 MCU Overtemperature Protection on the Battery Side of the Balancing Module

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3166	MCU Overtemperature Protection on the Battery Side of the Balancing Module	Minor	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The balancing DCDC stops working.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The MCU is short-circuited.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.

2.1.2.7 3167 Overtemperature Protection for the Wiring Terminal of the Balancing Module

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3167	Overtemperature Protection for the Wiring Terminal of the Balancing Module	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The balancing DCDC stops working.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The bus port is not properly connected.	1. After the overtemperature alarm is generated, the module is automatically powered off. When the temperature drops to a proper range, the module automatically recovers. No manual intervention is required if services are not affected. 2. Shut down the ESS on the user interface, check whether the wiring terminal on the bus side is securely connected, restart the system on the user interface, and check whether the alarm is cleared. 3. If the terminal on the bus side is properly connected and overtemperature protection occurs for more than five times, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 4. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
2	1	The battery port is not properly connected.	1. After the overtemperature alarm is generated, the module is automatically powered off. When the temperature drops to a proper range, the module automatically recovers. No manual intervention is required if services are not affected. 2. Shut down the ESS on the user interface, check whether the wiring terminal on the battery side is securely connected, restart the system on the user interface, and check whether the alarm is cleared. 3. If the terminal on the battery side is properly connected and overtemperature protection occurs for more than five times, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 4. If the alarm persists, contact technical support.

2.1.2.8 3169 Balancing Module Bus Soft-Start Failed

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3169	Balancing Module Bus Soft-Start Failed	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The balancing DCDC stops working.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	Exceptions, such as soft-start with load, occur.	1. Shut down the ESS on the user interface. Check whether the wiring terminal on the bus side is properly connected. Use a multimeter to check whether a cable on the bus side is disconnected. Restart the system and check whether the alarm is cleared after ensuring that the cables are intact and properly connected. 2. If the alarm persists, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.

2.1.2.9 3170 Balancing Module Version Mismatch

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3170	Balancing Module Version Mismatch	Minor	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The balancing DCDC stops working.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	An error occurs during software loading.	1. Obtain the matching version and perform an update. 2. If the alarm persists, shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 3. If the alarm persists, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 4. If the alarm persists, contact technical support.

2.1.2.10 3171 Balancing Module Address Pairing Timeout

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3171	Balancing Module Address Pairing Timeout	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The balancing DCDC stops working.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	Failed to save the address.	1. If the alarm is automatically cleared after a short period of time and the system recovers, the communication may be abnormal for a short period of time. In this case, no manual intervention is required. 2. If the alarm persists, contact technical support.

2.1.2.11 3172 Soft-Start MOS of Balancing Module Short-Circuited

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3172	Soft-Start MOS of Balancing Module Short-Circuited	Minor	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The balancing DCDC stops working.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The soft-start resistor is short-circuited.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.

2.1.2.12 3173 Balancing Module Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3173	Balancing Module Abnormal	Minor	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The balancing DCDC stops working.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The auxiliary power circuit is abnormal.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
2	1	The auxiliary power circuit is abnormal.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
3	1	The auxiliary power circuit is abnormal.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
4	1	The EEPROM is faulty or the I2C communication is abnormal.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
5	1	The EEPROM is faulty or the I2C communication is abnormal.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
6	1	The MOS tube on the bus side is short-circuited.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
7	1	The MOS tube on the battery side is short-circuited.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
8	1	The relay control loop fails or relay adhesion exists.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
9	1	Open circuit: The relay control loop fails. Short circuit: A high current causes shutdown and then adhesion.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
11	1	The voltage control loop in the discharging state is out of control.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
14	1	The MCU is damaged or the sampling circuit is abnormal.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
16	1	The board is short-circuited.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
17	1	The interrupt task is blocked or the task times out.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
18	1	Electromagnetic interference or a memory access exception occurs.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
19	1	Electromagnetic interference or a memory access exception occurs.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
20	1	The communication link is interfered.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the alarm is generated again for the same module, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.

2.1.2.13 3174 Balancing Module Overcurrent Fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3174	Balancing Module Overcurrent Fault	Minor	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The balancing DCDC stops working.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	Overload or a short circuit occurs.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the same module experiences overcurrent again, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
2	1	Overload or a short circuit occurs.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the same module experiences overcurrent again, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
3	1	Overload or a short circuit occurs.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the same module experiences overcurrent again, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.
4	1	Overload or a short circuit occurs.	1. Manually clear the alarm on the user interface, restart the system, and check whether the alarm is cleared. 2. If the same module experiences overcurrent again, shut down the ESS on the user interface and replace the balancing DCDC by referring to the user manual or maintenance guide. 3. If the alarm persists, contact technical support.

2.2 RCM

2.2.1 BCU

2.2.1.1 3222 BMU Internal Short Circuit

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3222	BMU Internal Short Circuit	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system is powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The pins are short-circuited due to foreign objects inside the BMU.	1. Replace the BMU, run the new BMU, and check whether the alarm persists. 2. If the alarm persists after the BMU is replaced, replace the battery pack.
2	1	The pins are short-circuited due to foreign objects inside the BMU.	1. Replace the BMU, run the new BMU, and check whether the alarm persists. 2. If the alarm persists after the BMU is replaced, replace the battery pack.
3	1	The pins are short-circuited due to foreign objects inside the BMU.	1. Replace the BMU, run the new BMU, and check whether the alarm persists. 2. If the alarm persists after the BMU is replaced, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
4	1	The pins are short-circuited due to foreign objects inside the BMU.	1. Replace the BMU, run the new BMU, and check whether the alarm persists. 2. If the alarm persists after the BMU is replaced, replace the fuse temperature sampling cable bundle. 3. If the alarm persists after the fuse temperature sampling cable bundle connected to the J3 connector (4-pin) on the BMU is replaced, replace the battery pack.
5	1	The pins are short-circuited due to foreign objects inside the BMU.	1. Replace the BMU, run the new BMU, and check whether the alarm persists. 2. If the alarm persists after the BMU is replaced, replace the positive and negative busbar temperature sampling cable bundles connected to the J3 connector (4-pin) on the BMU. 3. If the alarm persists after the positive and negative busbar temperature sampling cable bundles are replaced, replace the battery pack.

2.2.1.2 3223 BMU Sampling Cable Disconnected

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3223	BMU Sampling Cable Disconnected	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system is powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The FPC connector is loose, the cable is disconnected, or the board is faulty.	1. Remove and reinstall the FPC connector to the BMU and check whether the alarm persists. If yes, replace the BMU. 2. If the alarm persists after the BMU is replaced, replace the battery pack. 3. If the alarm persists, contact technical support.
2	1	The FPC connector is loose, the cable is disconnected, or the board is faulty.	1. Remove and reinstall the FPC connector to the BMU and check whether the alarm persists. If yes, replace the BMU. 2. If the alarm persists, contact technical support.
3	1	The FPC connector is loose, the cell temperature sampling cable is disconnected, or the board is faulty.	1. Remove and reinstall the FPC connector to the BMU and check whether the alarm persists. If yes, replace the BMU. 2. If the alarm persists after the BMU is replaced, replace the battery pack. 3. If the alarm persists, contact technical support.
4	1	The BMU is faulty.	1. Replace the BMU, run the new BMU, and check whether the alarm persists. 2. If the alarm persists after the BMU is replaced, contact technical support.
5	1	The battery pack fuse temperature detection NTC is faulty, the temperature sampling cable is disconnected, the battery pack fuse temperature detection connector is loose, or the BMU is faulty.	1. Remove and reinstall the J3 connector (4-pin) to the BMU and check whether the alarm persists. If yes, replace the BMU. 2. If the alarm persists after the BMU is replaced, replace the fuse temperature sampling cable bundle. 3. If the alarm persists after the fuse temperature sampling cable bundle connected to the J3 connector (4-pin) on the BMU is replaced, replace the battery pack.

Reason ID	No.	Possible Cause	Suggestion
6	1	The positive and negative busbar temperature detection NTC is faulty, the temperature sampling cables are disconnected, the positive and negative busbar temperature detection connector is loose, or the BMU is faulty.	1. Remove and reinstall the J3 connector (4-pin) to the BMU and check whether the alarm persists. If yes, replace the BMU. 2. If the alarm persists after the BMU is replaced, replace the positive and negative busbar temperature sampling cable bundles connected to the J3 connector (4-pin) on the BMU. 3. If the alarm persists after the positive and negative busbar temperature sampling cable bundles are replaced, replace the battery pack.

2.2.1.3 3224 BMU Faulty

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3224	BMU Faulty	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system may be powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The EEPROM of the BMU is faulty.	1. Replace the BMU, run the new BMU, and check whether the alarm persists. 2. If the alarm persists after the BMU is replaced, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
2	1	An internal fault has occurred in the BMU.	1. Replace the BMU, run the new BMU, and check whether the alarm persists. 2. If the alarm persists after the BMU is replaced, contact technical support.
3	1	An internal fault has occurred in the BMU.	1. Replace the BMU, run the new BMU, and check whether the alarm persists. 2. If the alarm persists after the BMU is replaced, contact technical support.
4	1	An internal fault has occurred in the BMU.	1. Replace the BMU, run the new BMU, and check whether the alarm persists. 2. If the alarm persists after the BMU is replaced, contact technical support.
5	1	An internal fault has occurred in the BMU.	1. Replace the BMU, run the new BMU, and check whether the alarm persists. 2. If the alarm persists after the BMU is replaced, contact technical support.
6	1	An internal fault has occurred in the BMU.	1. Replace the BMU, run the new BMU, and check whether the alarm persists. 2. If the alarm persists after the BMU is replaced, contact technical support.
7	1	An internal fault has occurred in the BMU.	1. Replace the BMU, run the new BMU, and check whether the alarm persists. 2. If the alarm persists after the BMU is replaced, contact technical support.
8	1	An internal fault has occurred in the BMU.	1. Replace the BMU, run the new BMU, and check whether the alarm persists. 2. If the alarm persists after the BMU is replaced, contact technical support.
9	1	An internal fault has occurred in the BMU.	1. Replace the BMU, run the new BMU, and check whether the alarm persists. 2. If the alarm persists after the BMU is replaced, contact technical support.
10	1	The BMU detects that the MOS of the balancing circuit is faulty.	1. Replace the BMU, run the new BMU, and check whether the alarm persists. 2. If the alarm persists after the BMU is replaced, contact technical support.

2.2.1.4 3226 Disconnection Between BMUs

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3226	Disconnection Between BMUs	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

If the alarm spreads, the system may be powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The communication is disconnected or a BMU is faulty.	1. Check whether the BMU communications cable is loose, disconnected, or incorrectly connected. If yes, reconnect the cable. 2. If the alarm persists, contact technical support.

2.2.1.5 3229 BMU Communication Failure

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3229	BMU Communication Failure	Major	Communications alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS is powered off and the BMU cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	1. The communications cable is not properly connected. 2. The communication failed because the BMU is faulty.	1. Check whether the communications cable is loose, disconnected, or incorrectly connected. If yes, rectify the cable connection fault. 2. Check whether the BMU is powered on. If not, rectify the power supply fault. 3. If the alarm persists, replace the BMU.
	2	The bases for the upper and lower COM connectors of the battery pack are incorrectly installed.	Remove the front panel of the battery pack, and exchange the installation positions of the bases for the upper and lower COM connectors.

2.2.1.6 3352 Abnormal Total Voltage of Battery Rack

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3352	Abnormal Total Voltage of Battery Rack	Major	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The system is powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	1. The detected total voltage of the battery rack is incorrect.	1. Check whether the number of battery packs configured on the user interface is consistent with the number of battery packs installed onsite. 2. Check whether the voltage sampling is normal.

2.2.1.7 3353 Total Voltage of Battery Rack and Total Cell Voltage Inconsistent

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3353	Total Voltage of Battery Rack and Total Cell Voltage Inconsistent	Major	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The system is powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	1. The detected total voltage of the battery rack is incorrect.	1. Check whether the number of battery packs configured on the user interface is consistent with the number of battery packs installed onsite. 2. Check whether the voltage sampling is normal.

2.2.1.8 3354 Battery Pack Mixed Use Failed

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3354	Battery Pack Mixed Use Failed	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system is powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	Different models of battery packs are used together.	The mixed use rules are not met. Contact technical support.

2.2.1.9 3355 BCU Chip Overtemperature

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3355	BCU Chip Overtemperature	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

Continuous overtemperature may power off the system.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The internal circuit is faulty.	Replace the BCU. If the alarm persists, contact technical support.

2.2.1.10 3356 BCU Internal Exception

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3356	BCU Internal Exception	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system is powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The internal power supply circuit is faulty.	1. Reset the ESS or power off the ESS on the user interface, and then power off the BCU. If the alarm is cleared, no further action is required. 2. If the alarm persists, replace the BCU.
2	1	The internal power supply circuit is faulty.	1. Reset the ESS or power off the ESS on the user interface, and then power off the BCU. If the alarm is cleared, no further action is required. 2. If the alarm persists, replace the BCU.

Reason ID	No.	Possible Cause	Suggestion
3	1	The internal sampling circuit is faulty.	1. Reset the ESS or power off the ESS on the user interface, and then power off the BCU. If the alarm is cleared, no further action is required. 2. If the alarm persists, replace the BCU.
4	1	The internal sampling circuit is faulty.	1. Reset the ESS or power off the ESS on the user interface, and then power off the BCU. If the alarm is cleared, no further action is required. 2. If the alarm persists, replace the BCU.
5	1	The chip or program is faulty.	1. Reset the ESS or power off the ESS on the user interface, and then power off the BCU. If the alarm is cleared, no further action is required. 2. If the alarm persists, update the ESS software on the user interface. If the alarm is cleared after the update, no further action is required. 3. If the alarm persists after the software update, replace the BCU.

2.2.1.11 3357 Balancing Module Software Versions Inconsistent

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3357	Balancing Module Software Versions Inconsistent	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

Some value-added features may be unavailable.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The balancing module software versions are inconsistent.	1. If the component version is inconsistent with the system software package version due to a manual update failure, the system running is not affected. You are advised to perform the update at a proper time. 2. If the version is inconsistent with the system software package version due to component replacement, the system automatically clears the alarm. If the alarm persists for more than 20 minutes, perform a manual update. 3. If the update fails for several times, contact technical support.

2.2.1.12 3358 BCU Auxiliary Power Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3358	BCU Auxiliary Power Abnormal	Major	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

If the power supply to the smoke sensor, water sensor, temperature and humidity sensor, CO sensor, or audible and visual alarm is abnormal, the ESS works properly. If multiple power supplies are abnormal at the same time, the ESS may be powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	1. The power supply circuit is faulty. 2. A short circuit has occurred due to a sensor fault.	1. Remove the connector from the COM2/12 V port (all sensors are disconnected), reset or restart the BCU, and check whether the alarm is cleared. If the alarm persists, replace the BCU. 2. If the alarm is cleared, connect the cable bundle and sensor one by one to locate the faulty cable bundle or sensor. Then, rectify the fault.
2	1	1. The power supply circuit is faulty. 2. A short circuit has occurred due to a sensor fault.	1. Remove the connectors from the COM1/12V port and COM3/12V port (all sensors are disconnected), reset or restart the BCU, and check whether the alarm is cleared. If the alarm persists, replace the BCU. 2. If the alarm is cleared, connect the cable bundle and sensor one by one to locate the faulty cable bundle or sensor. Then, rectify the fault.
4	1	1. The power supply circuit is faulty. 2. An external short circuit has occurred.	Check whether an external short circuit has occurred. If yes, rectify the short circuit. If not, replace the BCU.
5	1	1. The power cable bundle is not properly connected. 2. The BCU or RCM is faulty.	1. Check whether the power cable bundle is properly connected to the DC_IN port on the rear panel. If yes, remove and reconnect the power cable bundle. 2. If the alarm persists, replace the BCU. 3. If the alarm persists, replace the RCM.

2.2.1.13 3359 BCU Memory Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3359	BCU Memory Abnormal	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

Alarm and performance data cannot be recorded.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	1. The storage space is insufficient. 2. The memory is faulty.	Replace the BCU. If the alarm persists, contact technical support.
2	1	The EEPROM of the BCU is faulty.	Replace the BCU. If the alarm persists, contact technical support.

2.2.1.14 3360 RPCB Communication Failure

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3360	RPCB Communication Failure	Major	Communications alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS is powered off.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	The communications cable is disconnected.	1. Check whether the cable between the RPCB and the BCU is loose, disconnected, or incorrectly connected. If yes, reconnect the cable. If not, contact technical support.

2.2.1.15 3361 DCDC Communication Failure

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3361	DCDC Communication Failure	Major	Communications alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS is powered off.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	The communications cable is disconnected.	Check whether the cable between the DCDC and the BCU is loose, disconnected, or incorrectly connected. If yes, reconnect the cable. If not, contact technical support.

2.2.1.16 3362 PCS Communication Failure

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3362	PCS Communication Failure	Major	Communications alarm	ADAC	LUNA2000B V200R024C00

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	The communications cable is disconnected.	Check whether the cable connections of the PCS communication port, J9 communication port of RPCB, and the CON3 and CON4 ports of the RCM are loose, disconnected, or incorrectly connected. If yes, reconnect the cables. If not, contact technical support.
2	1	The communications cable is disconnected.	Check whether the cable connections of the PCS communication port and the CON3 port of the RCM are loose, disconnected, or incorrectly connected. If yes, reconnect the cables. If not, contact technical support.

2.2.1.17 3363 Balancing Module Communication Failure

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3363	Balancing Module Communication Failure	Minor	Communications alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS is working properly and the active balancing function is disabled.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	The communications cable is disconnected.	1. Check whether the cable between the Balancing Module and the BCU is loose, disconnected, or incorrectly connected. If yes, reconnect the cable. 2. After the fault is rectified, choose "Activate Balancing Module" on the user interface. Wait for 1 minute and check whether the alarm is automatically cleared. 3. If the alarm persists, contact technical support.

2.2.1.18 3369 ESS SOH Calibration

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3369	ESS SOH Calibration	Warning	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

During full charge/discharge, the ESS cannot respond to normal power scheduling.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	ESS SOH calibration is in progress.	The SOH calibration in the ESS is in progress. During the calibration, the end-of-charge/discharge SOC settings will be overridden to preferentially charge the battery rack to the full capacity during the charge process and preferentially discharge the full capacity of the battery rack during the discharge process. Then, the battery capacity will be calculated. The charge and discharge response will be affected during the calibration. If you do not want to affect the charge and discharge functions, disable "Automatic SOH calibration" and enable it at a proper time. During SOH calibration, you are advised to wait for 30 to 60 minutes after the system is fully charged and after the discharge is complete if you want to manually send a switching command.
2	1	SOH calibration has not been performed for the ESS for a long time.	The SOH calibration in the ESS will be performed recently. During the calibration, the end-of-charge/discharge SOC settings will be overridden to preferentially charge the battery rack to the full capacity during the charge process and preferentially discharge the full capacity of the battery rack during the discharge process. Then, the battery capacity will be calculated. The charge and discharge response will be affected during the calibration. If you do not want to affect the charge and discharge functions, disable "Automatic SOH calibration" and enable it at a proper time. During SOH calibration, you are advised to wait for 30 to 60 minutes after the system is fully charged and after the discharge is complete if you want to manually send a switching command.

2.2.1.19 3371 Battery Rack Voltage Exceeding Threshold

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3371	Battery Rack Voltage Exceeding Threshold	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The charge and discharge are forbidden and the system is powered off

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	The detected total voltage of the battery rack is high.	1. Check that the ESS is not charged. Wait for 30 minutes and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface. 3. Wait for 5 minutes. 4. Start the ESS on the user interface. 5. If the alarm persists, contact technical support.
2	1	The detected total voltage of the battery rack is too high.	1. Check that the ESS is not charged. Wait for 30 minutes and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface. 3. Wait for 5 minutes. 4. Start the ESS on the user interface. 5. If the alarm persists, contact technical support.

Reason ID	Cause ID	Possible Causes	Suggestion
3	1	The detected total voltage of the battery rack is far too high.	1. Check that the ESS is not charged. Wait for 30 minutes and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface. 3. Wait for 5 minutes. 4. Start the ESS on the user interface. 5. If the alarm persists, contact technical support.
4	1	The detected total voltage of the battery rack is low.	1. Check that the ESS does not discharge. Wait for 30 minutes and check whether the alarm is cleared. 2. If the alarm persists, connect to the power grid and charge the ESS within 48 hours. 3. If the alarm persists after the batteries are charged for 1 hour, contact technical support.
5	1	The detected total voltage of the battery rack is too low.	1. Check that the ESS does not discharge. Wait for 30 minutes and check whether the alarm is cleared. 2. If the alarm persists, connect to the power grid and charge the ESS within 48 hours. 3. If the alarm persists after the batteries are charged for 1 hour, contact technical support.
6	1	The detected total voltage of the battery rack is far too low.	1. Check that the ESS does not discharge. Wait for 30 minutes and check whether the alarm is cleared. 2. If the alarm persists, connect to the power grid and charge the ESS within 48 hours. 3. If the alarm persists after the batteries are charged for 1 hour, contact technical support.

2.2.1.20 3373 Battery Pack Sampling Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3373	Battery Pack Sampling Abnormal	Major	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The ESS cannot work properly.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	A major fault has occurred on the internal circuit of the BMU.	1. Replace the BMU and clear the alarm on the alarm management interface. 2. If the alarm persists, contact technical support.
2	1	A major fault has occurred on the internal circuit of the BMU.	1. Replace the BMU and clear the alarm on the alarm management interface. 2. If the alarm persists, contact technical support.
3	1	A major fault has occurred on the internal circuit of the BMU.	1. Replace the BMU and clear the alarm on the alarm management interface. 2. If the alarm persists, contact technical support.
4	1	A major fault has occurred on the internal circuit of the BMU.	1. Replace the BMU and clear the alarm on the alarm management interface. 2. If the alarm persists, contact technical support.
5	1	An NTC open-circuit or short-circuit fault has occurred inside the BMU.	1. Replace the BMU and clear the alarm on the alarm management interface. 2. If the alarm persists, contact technical support.

2.2.1.21 3375 Battery Voltage Inconsistent

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3375	Battery Voltage Inconsistent	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

If the battery voltage inconsistency reaches level 3, the system will be powered off.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	1. The cell inconsistency is severe or passive balancing fails. 2. A battery pack is replaced in the battery rack, but the balancing is not complete.	1. If a battery pack is replaced, the alarm is automatically cleared after the balancing is complete. 2. Restart the ESS. If the alarm persists, contact technical support.
2	1	1. The cell inconsistency is severe or passive balancing fails. 2. A battery pack is replaced in the battery rack, but the balancing is not complete.	1. If a battery pack is replaced, the alarm is automatically cleared after the balancing is complete. 2. Restart the ESS. If the alarm persists, contact technical support.

Reason ID	Cause ID	Possible Causes	Suggestion
3	1	1. The cell inconsistency is severe or passive balancing fails. 2. A battery pack is replaced in the battery rack, but the balancing is not complete.	1. If a battery pack is replaced, the alarm is automatically cleared after the balancing is complete. 2. Restart the ESS. If the alarm persists, contact technical support.
4	1	1. The cell inconsistency is severe or passive balancing fails. 2. A battery pack is replaced in the battery rack, but the balancing is not complete.	1. If a battery pack is replaced, the alarm is automatically cleared after the balancing is complete. 2. Restart the ESS. If the alarm persists, contact technical support.
5	1	1. The cell inconsistency is severe or passive balancing fails. 2. A battery pack is replaced in the battery rack, but the balancing is not complete.	1. If a battery pack is replaced, the alarm is automatically cleared after the balancing is complete. 2. Restart the ESS. If the alarm persists, contact technical support.
6	1	1. The cell inconsistency is severe or passive balancing fails. 2. A battery pack is replaced in the battery rack, but the balancing is not complete.	1. If a battery pack is replaced, the alarm is automatically cleared after the balancing is complete. 2. Restart the ESS. If the alarm persists, contact technical support.

Reason ID	Cause ID	Possible Causes	Suggestion
7	1	1. The battery pack inconsistency is severe. 2. The battery pack balancing module is faulty. 3. A battery pack is replaced in the battery rack, but the balancing is not complete.	1. If a battery pack is replaced, the alarm is automatically cleared after the balancing is complete. 2. Check whether the balancing module is faulty. If yes, rectify the fault according to the handling suggestions. 3. Restart the ESS. If the alarm persists, contact technical support.
8	1	1. The battery pack inconsistency is severe. 2. The battery pack balancing module is faulty. 3. A battery pack is replaced in the battery rack, but the balancing is not complete.	1. If a battery pack is replaced, the alarm is automatically cleared after the balancing is complete. 2. Check whether the balancing module is faulty. If yes, rectify the fault according to the handling suggestions. 3. Restart the ESS. If the alarm persists, contact technical support.
9	1	1. The battery pack inconsistency is severe. 2. The battery pack balancing module is faulty. 3. A battery pack is replaced in the battery rack, but the balancing is not complete.	1. If a battery pack is replaced, the alarm is automatically cleared after the balancing is complete. 2. Check whether the balancing module is faulty. If yes, rectify the fault according to the handling suggestions. 3. Restart the ESS. If the alarm persists, contact technical support.

Reason ID	Cause ID	Possible Causes	Suggestion
10	1	1. The battery pack inconsistency is severe. 2. The battery pack balancing module is faulty. 3. A battery pack is replaced in the battery rack, but the balancing is not complete.	1. If a battery pack is replaced, the alarm is automatically cleared after the balancing is complete. 2. Check whether the balancing module is faulty. If yes, rectify the fault according to the handling suggestions. 3. Restart the ESS. If the alarm persists, contact technical support.
11	1	1. The battery pack inconsistency is severe. 2. The battery pack balancing module is faulty. 3. A battery pack is replaced in the battery rack, but the balancing is not complete.	1. If a battery pack is replaced, the alarm is automatically cleared after the balancing is complete. 2. Check whether the balancing module is faulty. If yes, rectify the fault according to the handling suggestions. 3. Restart the ESS. If the alarm persists, contact technical support.
12	1	1. The battery pack inconsistency is severe. 2. The battery pack balancing module is faulty. 3. A battery pack is replaced in the battery rack, but the balancing is not complete.	1. If a battery pack is replaced, the alarm is automatically cleared after the balancing is complete. 2. Check whether the balancing module is faulty. If yes, rectify the fault according to the handling suggestions. 3. Restart the ESS. If the alarm persists, contact technical support.

2.2.1.22 3376 Battery Temperature Inconsistent

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3376	Battery Temperature Inconsistent	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The battery temperature inconsistency is severe.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	1. The cell inconsistency is severe. 2. The cell temperature sampling is abnormal.	1. Keep the BMU still for 30 minutes and check whether the alarm is cleared. If the alarm persists, replace the BMU. 2. After replacing the BMU, restart the ESS. If the alarm persists, contact technical support.
2	1	1. The cell inconsistency is severe. 2. The cell temperature sampling is abnormal.	1. Keep the BMU still for 30 minutes and check whether the alarm is cleared. If the alarm persists, replace the BMU. 2. After replacing the BMU, restart the ESS. If the alarm persists, contact technical support.
3	1	1. The cell inconsistency is severe. 2. The cell temperature sampling is abnormal.	1. Keep the BMU still for 30 minutes and check whether the alarm is cleared. If the alarm persists, replace the BMU. 2. After replacing the BMU, restart the ESS. If the alarm persists, contact technical support.

Reason ID	Cause ID	Possible Causes	Suggestion
4	1	1. The cell inconsistency is severe. 2. The cell temperature sampling is abnormal.	1. Keep the BMU still for 30 minutes and check whether the alarm is cleared. If the alarm persists, replace the BMU. 2. After replacing the BMU, restart the ESS. If the alarm persists, contact technical support.
5	1	1. The cell inconsistency is severe. 2. The cell temperature sampling is abnormal.	1. Keep the BMU still for 30 minutes and check whether the alarm is cleared. If the alarm persists, replace the BMU. 2. After replacing the BMU, restart the ESS. If the alarm persists, contact technical support.
6	1	1. The cell inconsistency is severe. 2. The cell temperature sampling is abnormal.	1. Keep the BMU still for 30 minutes and check whether the alarm is cleared. If the alarm persists, replace the BMU. 2. After replacing the BMU, restart the ESS. If the alarm persists, contact technical support.

2.2.1.23 3902 Component Software Versions Inconsistent

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3902	Component Software Versions Inconsistent	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

Some value-added features may be unavailable.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The liquid cooling controller software is inconsistent.	1. If the component version is inconsistent with the system software package version due to a manual update failure, the system running is not affected. You are advised to perform the update at a proper time. 2. If the version is inconsistent with the system software package version due to component replacement, the system automatically clears the alarm. If the alarm persists for more than 20 minutes, perform a manual update. 3. If the update fails for several times, contact technical support.
2	1	The software of the RPCB is inconsistent.	1. If the component version is inconsistent with the system software package version due to a manual update failure, the system running is not affected. You are advised to perform the update at a proper time. 2. If the version is inconsistent with the system software package version due to component replacement, the system automatically clears the alarm. If the alarm persists for more than 20 minutes, perform a manual update. 3. If the update fails for several times, contact technical support.
3	1	The DCDC software versions are inconsistent.	1. If the component version is inconsistent with the system software package version due to a manual update failure, the system running is not affected. You are advised to perform the update at a proper time. 2. If the version is inconsistent with the system software package version due to component replacement, the system automatically clears the alarm. If the alarm persists for more than 20 minutes, perform a manual update. 3. If the update fails for several times, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
4	1	The PCS software versions are inconsistent.	1. If the component version is inconsistent with the system software package version due to a manual update failure, the system running is not affected. You are advised to perform the update at a proper time. 2. If the version is inconsistent with the system software package version due to component replacement, the system automatically clears the alarm. If the alarm persists for more than 20 minutes, perform a manual update. 3. If the update fails for several times, contact technical support.
5	1	The display module software versions are inconsistent.	1. If the component version is inconsistent with the system software package version due to a manual update failure, the system running is not affected. You are advised to perform the update at a proper time. 2. If the version is inconsistent with the system software package version due to component replacement, the system automatically clears the alarm. If the alarm persists for more than 20 minutes, perform a manual update. 3. If the update fails for several times, contact technical support.

2.2.1.24 3911 Display Module Communication Failure

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3911	Display Module Communication Failure	Minor	Communications alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The SOC indicator and status indicator on the cabinet door cannot correctly indicate the corresponding status.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	1. The communications cable is disconnected. 2. The display module is faulty and cannot communicate.	1. Check whether the communications cable is loose, disconnected, or incorrectly connected. If yes, reconnect the cable. 2. Check whether the display module is powered on. If not, rectify the power supply fault. 3. If the alarm persists, contact technical support.

2.2.2 RPCB

2.2.2.1 3300 RPCB Voltage Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3300	RPCB Voltage Abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system is powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	Overvoltage occurs on the battery.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS and check whether the alarm is cleared. 2. If the alarm persists, contact technical support.
2	1	Undervoltage occurs on the battery.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS and check whether the alarm is cleared. 2. If the alarm persists, connect to the power grid and charge the ESS within 48 hours. 3. If the alarm persists after the ESS is charged for 1 hour, contact technical support. 4. If the alarm persists, contact technical support.
3	1	1. The bus or battery voltage sampling circuit fails. 2. The sampling is interfered or the calculation is abnormal.	1. If the alarm occurs occasionally, the external circuit may be abnormal temporarily. The device will automatically recover after the fault is rectified. 2. If the alarm occurs frequently, shut down the ESS and replace the RPCB. Then check whether the alarm is cleared. 3. If the alarm persists, contact technical support.

2.2.2.2 3301 RPCB Port Short-Circuited

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3301	RPCB Port Short-Circuited	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system is powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The PCS/DCDC is damaged or short-circuited, or the RPCB is short-circuited.	1. Shut down the ESS on the user interface, manually turn off the circuit breaker, and remove the power cable between the RPCB and the PCS. 2. Use a multimeter to check whether the removed positive and negative power cables are short-circuited. If yes, replace them. 3. Use a multimeter to check whether the positive and negative bus terminals on the right of the RPCB are short-circuited. If yes, replace the RPCB. 4. Use a multimeter to check whether the positive and negative output bus terminals of the PCS are short-circuited. If yes, replace the PCS. 5. After replacing the device or power cable, restart the ESS on the user interface and check whether the alarm is cleared. If the alarm persists, contact technical support.
2	1	The PCS/DCDC is damaged or short-circuited, or the RPCB is short-circuited.	1. Shut down the ESS on the user interface and manually turn off the circuit breaker. 2. Use a multimeter to check whether the BAT+/– of the RPCB is short-circuited. If yes, replace the RPCB. 3. After the replacement, restart the ESS on the user interface and check whether the alarm is cleared. If the alarm persists, contact technical support.

2.2.2.3 3302 Internal RPCB Temperature Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3302	Internal RPCB Temperature Abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system is powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The output is overloaded.	1. Check whether output overcurrent protection or an overcurrent fault occur in the ESS. Rectify the fault by referring to the maintenance manual. After the system temperature is restored to the normal level, the overtemperature alarm is automatically cleared. Restart the ESS on the user interface. 2. If the alarm persists, shut down the ESS on the user interface, replace the RPCB, and restart the ESS to check whether the alarm is cleared. 3. If the alarm persists, contact technical support. Download address: https://support.huawei.com/enterprise/en/category/fusionsolar-pid-1600073963553?submodel=software
2	1	The heat dissipation fan is faulty.	1. Check whether output overcurrent protection or an overcurrent fault occur in the ESS. Rectify the fault by referring to the maintenance manual. After the system temperature is restored to the normal level, the overtemperature alarm is automatically cleared. Restart the ESS on the user interface. 2. If the alarm persists, shut down the ESS on the user interface, replace the RPCB, and restart the ESS to check whether the alarm is cleared. 3. If the alarm persists, contact technical support. Download address: https://support.huawei.com/enterprise/en/category/fusionsolar-pid-1600073963553?submodel=software

Reason ID	No.	Possible Cause	Suggestion
3	1	The wiring terminal on the bus side is improperly connected.	1. Shut down the ESS on the user interface and manually turn off the external circuit breaker of the RPCB. Check whether the BUS +/– power terminals on the right of the RPCB are securely connected. If the terminals are loose, secure them, manually turn on the circuit breaker, restart the ESS on the user interface, and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface, replace the RPCB, and restart the ESS to check whether the alarm is cleared. 3. If the alarm persists, contact technical support.
4	1	The wiring terminal on the battery side is improperly connected.	1. Shut down the ESS on the user interface and manually turn off the external circuit breaker of the RPCB. Check whether the BAT +/– power terminals on the right of the RPCB are securely connected. If the terminals are loose, secure them, manually turn on the circuit breaker, restart the ESS on the user interface, and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface, replace the RPCB, and restart the ESS to check whether the alarm is cleared. 3. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
5	1	The output is overloaded. The heat dissipation fan is faulty.	1. Check whether output overcurrent protection or an overcurrent fault occurs in the ESS. Rectify the fault by referring to the maintenance manual. After the system temperature is restored to the normal level, the overtemperature alarm is automatically cleared. Restart the ESS on the user interface. 2. If the alarm persists, shut down the ESS on the user interface, replace the RPCB, and restart the ESS to check whether the alarm is cleared. 3. If the alarm persists, contact technical support. Download address: https://support.huawei.com/enterprise/en/category/fusionsolar-pid-1600073963553?submodel=software
6	1	The NTC is short-circuited or open-circuited.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.

2.2.2.4 3303 RPCB Overcurrent Fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3303	RPCB Overcurrent Fault	Major	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The system is powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	Overcurrent occurs on the charge and discharge ports of the RCM.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, contact technical support.
2	1	Overload occurs during battery discharging.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, contact technical support.
3	1	Overload occurs during battery charging.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, contact technical support.

2.2.2.5 3304 Battery-Side ISO Insulation Detection Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3304	Battery-Side ISO Insulation Detection Abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system is powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The battery side is short-circuited to the ground.	1. Shut down the ESS on the user interface. Check that the PE cable of the device is correctly connected according to the maintenance manual. 2. Check whether the system enclosure and PE cable are damaged. If they are damaged, replace them. 3. Use an insulation resistance meter to check whether the ground impedance of BAT+ or BAT– is less than 50 kΩ. If yes, contact technical support. 4. If the alarm persists, contact technical support.
	2	The battery is in a humid environment and the insulation between the circuit and ground is poor.	1. Shut down the ESS on the user interface. Check that the PE cable of the device is correctly connected according to the maintenance manual. 2. Check whether the system enclosure and PE cable are damaged. If they are damaged, replace them. 3. Use an insulation resistance meter to check whether the ground impedance of BAT+ or BAT– is less than 50 kΩ. If yes, contact technical support. 4. If the alarm persists, contact technical support.

2.2.2.6 3305 RPCB Power Loop Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3305	RPCB Power Loop Abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system is powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The battery input is in reverse polarity.	1. Check whether the positive and negative cables on the battery side of the RPCB are connected in reverse polarity by referring to the maintenance manual. 2. If the alarm persists, contact technical support.
1	2	The battery input is in reverse polarity.	1. Check whether the positive and negative cables on the battery side of the RPCB are connected in reverse polarity by referring to the maintenance manual. 2. If the alarm persists, contact technical support.
3	1	Overload, a short circuit, or a bus voltage detection failure occurs.	1. Shut down the ESS on the user interface. Use a multimeter to check whether the positive and negative power cables are short-circuited. If yes, replace the power cables. 2. Use a multimeter to check whether the positive and negative bus terminals on the right of the RPCB are short-circuited. If yes, replace the RPCB. 3. After steps 1 and 2 are complete, start the ESS on the user interface and check whether the alarm is cleared. 4. If the alarm persists, contact technical support.

2.2.2.7 3306 RPCB Version Mismatch

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3306	RPCB Version Mismatch	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system is powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The software version is incompatible with the hardware version, or an incorrect software version is loaded.	1. Obtain the latest software version based on the product model and SN by calling the technical support hotline. Then upgrade the software on the user interface. 2. If the alarm persists, contact technical support. Download address: https://support.huawei.com/enterprise/en/category/fusionsolar-pid-1600073963553?submodel=software

2.2.2.8 3307 RPCB Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3307	RPCB Abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system is powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The contactor is damaged or stuck.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface, replace the corresponding RPCB. After the replacement, restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.
2	1	The contactor is damaged.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.
3	1	The contactor is damaged or the cable connection is abnormal.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
4	1	Both the AC and DC auxiliary power supplies are faulty.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.
5	1	The auxiliary power is faulty.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.
6	1	Multiple soft-start faults occur.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.
7	1	The MCU is damaged or the sampling circuit is abnormal.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
8	1	The MCU is damaged or the sampling circuit is abnormal.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.
9	1	The MCU is damaged.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.
10	1	The EEPROM is faulty.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.
11	1	The RCD circuit is abnormal.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
12	1	The auxiliary power is faulty.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.
13	1	The black start button is stuck.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.
15	1	The interrupt usage is too high.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.
16	1	The chip is abnormal.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
17	1	EEPROM read data is abnormal or damaged.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.
18	1	EEPROM read data is abnormal or damaged.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.
19	1	Current sampling is abnormal.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, shut down the ESS on the user interface and replace the corresponding RPCB. Restart the system and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.

2.2.2.9 3308 Battery RCD Protection Triggered

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3308	Battery RCD Protection Triggered	Major	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The system is powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The ground insulation resistance on the battery side decreases during device operation.	1. The external circuit may be abnormal temporarily. The device will automatically recover after the fault is rectified. 2. If the alarm occurs frequently or persists for a long time, check whether battery leakage occurs, or use an insulation resistance meter to check whether the ground impedance of BAT+ or BAT– is less than 50 kΩ. If yes, contact technical support. 3. If the alarm persists, contact technical support.

2.2.2.10 3309 RPCB Overcurrent Protection Triggered

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3309	RPCB Overcurrent Protection Triggered	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system is powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	Overload occurs during battery discharging.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, contact technical support.
2	1	Overload occurs during battery charging.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, contact technical support.

2.2.2.11 3310 RPCB Fan Alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3310	RPCB Fan Alarm	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system is not powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The fan is damaged or the cable connection is abnormal.	1. If the system does not have other faults and can run properly, ignore this alarm. 2. If the fault affects the use of the system, shut down the system and replace the RCM. After the replacement, restart the ESS on the user interface and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.

2.2.2.12 3311 SPD Faulty

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3311	SPD Faulty	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The SPD is faulty, and the surge protection function of the system may fail.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The SPD is faulty.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 3. If the alarm persists, shut down the system and replace the RCM. After the replacement, restart the ESS on the user interface and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.

2.2.2.13 3312 Battery-Side ISO Insulation Detection Alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3312	Battery-Side ISO Insulation Detection Alarm	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

A system alarm is generated.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The PE cable on the battery side is improperly insulated.	1. Shut down the ESS on the user interface. Check whether the PE cable of the device is correctly connected according to the maintenance manual. 2. Check whether the system enclosure and PE cable are damaged. If they are damaged, replace them. 3. Use an insulation resistance meter to check whether the ground impedance of BAT+ or BAT– is too low. If yes, contact technical support. 4. If the alarm persists, contact technical support.

2.2.2.14 3313 Auxiliary Power Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3313	Auxiliary Power Abnormal	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system is not powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The AC auxiliary power experiences undervoltage.	1. If the auxiliary power supply loop on the AC side is faulty, shut down the ESS on the user interface and check whether the three-phase AC auxiliary power circuit breaker is turned on. If not, turn it on, restart the ESS on the user interface, and check whether the alarm is cleared. 2. If the alarm persists, contact technical support.
2	1	The DC auxiliary power experiences undervoltage.	1. Shut down the ESS on the user interface and check whether the upstream circuit breaker of the RCM is turned on. If not, turn it on, restart the ESS on the user interface, and check whether the alarm is cleared. 2. If the alarm persists, shut down the system and replace the RCM. After the replacement, restart the ESS on the user interface and check whether the alarm is cleared. 3. If the alarm persists, contact technical support.
3	1	Cluster control box 12 V OUT output undervoltage	1. Shut down the system, restart the system on the customer interface, and check whether the fault is rectified. 2. If the fault persists, contact technical support engineers.

2.2.2.15 3314 RPCB Overcurrent Alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3314	RPCB Overcurrent Alarm	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system generates an alarm and does not shut down.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	Overload occurs during battery charging.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, contact technical support.
2	1	Overload occurs during battery discharging.	1. Shut down the ESS on the user interface. After 5 minutes, start the ESS on the user interface and check whether the alarm is cleared. 2. If the alarm persists, contact technical support.

2.3 Power System

2.3.1 PCS

2.3.1.1 3500 PCS DC Overvoltage

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3500	PCS DC Overvoltage	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The DC bus voltage of the device exceeds the upper threshold.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. If the alarm persists, contact technical support.

2.3.1.2 3501 PCS DC Bus in Reverse Polarity

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3501	PCS DC Bus in Reverse Polarity	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The DC bus is connected in reverse polarity.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. Check whether the DC bus is connected in reverse polarity. If yes, adjust the DC polarities. If not, contact technical support.

2.3.1.3 3503 PCS Grid Phase Wire Short-Circuited to PE

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3503	PCS Grid Phase Wire Short-Circuited to PE	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The phase wire is short-circuited to PE or its impedance to PE is low.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. Turn off the secondary circuit breaker of the transformer. 3. Use a megohmmeter to measure the impedance between the AC side and the ground. If the impedance is abnormal, rectify the fault. If the impedance is normal, contact technical support.

2.3.1.4 3504 PCS Grid Failed

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3504	PCS Grid Failed	Major	Environmental alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	1. The power grid experiences an outage. 2. The AC circuit is disconnected or the AC circuit breaker is off.	1. Use a multimeter to check whether the AC voltage meets the power grid standard. 2. Use a multimeter to check whether the AC circuit is disconnected or the AC circuit breaker is off.

2.3.1.5 3505 PCS Grid Undervoltage

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3505	PCS Grid Undervoltage	Major	Environmental alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The grid voltage is below the lower threshold or the low voltage duration has lasted for more than the value specified by low voltage ride-through (LVRT).	1. If the power grid is abnormal temporarily, the device automatically recovers after detecting that the power grid becomes normal. 2. Check whether the power grid voltage is within the allowed range. If not, contact the local power operator. If yes, modify the power grid undervoltage protection threshold after obtaining the consent of the local power operator. 3. Check whether the peak voltage of the power grid is too high. If the fault occurs frequently and persists, contact the local power operator. 4. If the alarm persists, contact technical support.

2.3.1.6 3506 PCS Grid Overvoltage

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3506	PCS Grid Overvoltage	Major	Environmental alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The grid voltage exceeds the upper threshold or the overvoltage duration exceeds the time that triggers high voltage ride-through (HVRT).	1. If the power grid is abnormal temporarily, the device automatically recovers after detecting that the power grid becomes normal. 2. Check whether the power grid voltage is within the allowed range. If not, contact the local power operator. If yes, modify the power grid overvoltage protection threshold after obtaining the consent of the local power operator. 3. Check whether the peak voltage of the power grid is too high. If the fault occurs frequently and persists, contact the local power operator. 4. If the alarm persists, contact technical support.

2.3.1.7 3507 PCS Grid Voltage Imbalanced

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3507	PCS Grid Voltage Imbalanced	Major	Environmental alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The difference between grid phase voltages exceeds the upper threshold.	1. If the power grid is abnormal temporarily, the device automatically recovers after detecting that the power grid becomes normal. 2. Check whether the power grid voltage is within the allowed range. If not, contact the local power operator. If yes, modify the power grid imbalance protection threshold after obtaining the consent of the local power operator. 3. Check whether the peak voltage of the power grid is too high. If the fault occurs frequently and persists, contact the local power operator. 4. If the alarm persists, contact technical support.

2.3.1.8 3508 PCS Grid Overfrequency

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3508	PCS Grid Overfrequency	Major	Environmental alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	Power grid exception: The power grid frequency is higher than the frequency required in the local standard.	1. If the power grid is abnormal temporarily, the device automatically recovers after detecting that the power grid becomes normal. 2. Check whether the power grid frequency is within the allowed range. If not, contact the local power operator. If yes, modify the power grid frequency protection threshold after obtaining the consent of the local power operator. 3. If the alarm persists, contact technical support.

2.3.1.9 3509 PCS Grid Underfrequency

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3509	PCS Grid Underfrequency	Major	Environmental alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	Power grid exception: The actual power grid frequency is lower than the standard requirement for the local power grid.	1. If the power grid is abnormal temporarily, the device automatically recovers after detecting that the power grid becomes normal. 2. Check whether the power grid frequency is within the allowed range. If not, contact the local power operator. If yes, modify the power grid frequency protection threshold after obtaining the consent of the local power operator. 3. If the alarm persists, contact technical support.

2.3.1.10 3510 PCS Grid Frequency Unstable

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3510	PCS Grid Frequency Unstable	Major	Environmental alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	Power grid exception: The actual grid frequency change rate does not comply with the local power grid standard.	1. If the power grid is abnormal temporarily, the device automatically recovers after detecting that the power grid becomes normal. 2. Check whether the power grid frequency is within the allowed range. If not, contact the local power operator. 3. If the alarm persists, contact technical support.

2.3.1.11 3511 PCS AC Overcurrent

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3511	PCS AC Overcurrent	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The grid experiences a dramatic voltage drop or is short-circuited. As a result, the transient AC current of the device exceeds the upper threshold and triggers protection.	1. The device detects its external working conditions in real time. After the alarm is cleared, the device automatically recovers. 2. If the alarm persists and affects the operation of the plant, contact technical support.

2.3.1.12 3512 PCS DC Component Overhigh

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3512	PCS DC Component Overhigh	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The DC component in the AC current exceeds the upper threshold.	1. The device detects its external working conditions in real time. After the alarm is cleared, the device automatically recovers. 2. If the alarm persists and affects the operation of the plant, contact technical support.
2	1	The DC component in the AC voltage exceeds the upper threshold.	1. The device detects its external working conditions in real time. After the alarm is cleared, the device automatically recovers. 2. If the alarm persists and affects the operation of the plant, contact technical support.

2.3.1.13 3513 Reverse Phase Sequence on PCS AC Side

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3513	Reverse Phase Sequence on PCS AC Side	Major	Environmental alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The phase sequence of lines A, B, and C on the AC side is reversed.	Check whether lines A, B, and C on the AC side are properly connected by referring to the user manual.

2.3.1.14 3514 PCS Residual Current Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3514	PCS Residual Current Abnormal	Major	Environmental alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The ground insulation resistance decreases during device operation.	1. The external circuit may be abnormal temporarily. The device will automatically recover after the fault is rectified. 2. If the alarm persists, use a megohmmeter to check whether the DC-side resistance values of the positive and negative poles to the ground are less than the grid standard values. If yes, rectify the fault. If not, contact technical support.

2.3.1.15 3515 PCS Grounding Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3515	PCS Grounding Abnormal	Major	Environmental alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	1. The neutral wire or PE cable is not connected. 2. The output mode set on the user interface is inconsistent with the actual cable connection mode.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. Check whether the PE cable is properly connected. 3. If the PCS is connected to the TN power grid, check whether the neutral wire is properly connected. 4. Turn on the AC circuit breaker of the RCM and the AC circuit breaker of the power distribution cabinet, and check whether the output mode set on the user interface is consistent with the actual cable connection mode. If they are inconsistent, change the output mode on the user interface to the actual cable connection mode. If they are consistent but the alarm persists and affects the operation of the plant, contact technical support.

2.3.1.16 3516 Low PCS Insulation Resistance

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3516	Low PCS Insulation Resistance	Major	Environmental alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	1. The DC side is short-circuited to the ground. 2. The device is in a humid environment and the insulation between the circuit and ground is poor.	1. Set the insulation resistance protection threshold on the user interface to the minimum value by referring to the power grid standard. 2. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. Check that the PE cable of the device is correctly connected. 4. Use a megohmmeter to check the common-mode impedance between the system and PE cable. If a short circuit occurs, rectify the fault. If no short circuit occurs but the alarm persists and affects the operation of the plant, contact technical support.

2.3.1.17 3517 PCS Temperature High

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3517	PCS Temperature High	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	1. The ambient temperature is too high. 2. The device is faulty.	1. Check whether an alarm is generated for the LTMS. 2. If yes, rectify the LTMS fault. 3. If not, contact technical support.

2.3.1.18 3518 PCS Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3518	PCS Abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	A major fault has occurred on a circuit inside the device.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
2	1	A major fault has occurred on a circuit inside the device.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. If the alarm persists, contact technical support.
3	1	A major fault has occurred on a circuit inside the device.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. If the alarm persists, contact technical support.
4	1	A major fault has occurred on a circuit inside the device.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. If the alarm persists, contact technical support.
5	1	A major fault has occurred on a circuit inside the device.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. If the alarm persists, contact technical support.
6	1	A major fault has occurred on a circuit inside the device.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
7	1	A major fault has occurred on a circuit inside the device.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. If the alarm persists, contact technical support.
8	1	A major fault has occurred on a circuit inside the device.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. If the alarm persists, contact technical support.
9	1	A major fault has occurred on a circuit inside the device.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. If the alarm persists, contact technical support.
10	1	A major fault has occurred on a circuit inside the device.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. If the alarm persists, contact technical support.
11	1	A major fault has occurred on a circuit inside the device.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
12	1	The precharge circuit is abnormal, or the common DC bus is short-circuited.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. Use a multimeter to check whether the common DC bus is short-circuited. 3. If not, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet, and start the ESS on the user interface. 4. If the alarm persists and affects the operation of the plant, contact technical support.
13	1	The current of the balanced bridge exceeds the maximum operating current.	1. The device detects its external working conditions in real time. After the alarm is cleared, the device automatically recovers. 2. If the alarm persists and affects the operation of the plant, contact technical support.
14	1	A major fault has occurred on a circuit inside the device.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. If the alarm persists, contact technical support.

2.3.1.19 3519 PCS Update Failed or Versions Mismatched

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3519	PCS Update Failed or Versions Mismatched	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The update fails.	1. Perform the update again. 2. If the update fails for three consecutive times, contact technical support.
2	1	The update fails.	1. Perform the update again. 2. If the update fails for three consecutive times, contact technical support.
3	1	The communications protocol version is incorrect.	1. Perform the update again. 2. If the update fails for three consecutive times, contact technical support.

2.3.1.20 3520 PCS Internal Fan Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3520	PCS Internal Fan Abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The internal fan is short-circuited, the power supply is insufficient, or the fan is damaged.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. If the alarm persists, contact technical support.
2	1	The internal fan is short-circuited, the power supply is insufficient, or the fan is damaged.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. If the alarm persists, contact technical support.
3	1	The internal fan is short-circuited, the power supply is insufficient, or the fan is damaged.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. If the alarm persists, contact technical support.

2.3.1.21 3521 PCS AC Terminal Temperature Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3521	PCS AC Terminal Temperature Abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	1. The AC power cable is not of the recommended specifications or is oxidized. 2. The OT/OD terminal of the AC power cable is not crimped as required. 3. The fastening torque of the AC terminal does not meet the requirement.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. Check whether the cables meet the specifications by referring to the user manual. 3. Check whether the OT/OD terminal is crimped as required by referring to the user manual. 4. Check whether the fastening torque of wiring terminals meets the requirement by referring to the user manual. 5. Turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. If the alarm persists, contact technical support.

2.3.1.22 3522 PCS DC Terminal Temperature Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3522	PCS DC Terminal Temperature Abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	1. The DC power cable is not of the recommended specifications or is oxidized. 2. The DC connector is not properly inserted. 3. The OT/OD terminals of the DC cable are not crimped as required, or the tightening torque of the wiring terminals on the DC side does not meet the requirement.	1. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. 2. Check whether the cables meet the specifications by referring to the user manual. 3. Check whether the DC connector is not properly inserted by referring to the user manual. 4. Check whether the OT/OD terminals are crimped as required, or the tightening torque of the wiring terminals meets the requirement by referring to the user manual. 5. Turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. If the alarm persists, contact technical support.

2.3.1.23 3523 PCS Black Start Failed

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3523	PCS Black Start Failed	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	1. The grid codes configured on PCSs are inconsistent. 2. The external load is abnormal or the power cable is not properly connected.	1. Shut down the ESS on the user interface. 2. Check whether the grid codes configured on all PCSs are consistent on the user interface. 3. If the grid codes are different, correctly set the grid code to an identical value on all PCSs and perform black start again. 4. If the grid codes are the same, perform the following steps: (1) Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. (2) Check whether the external load power is lower than the current system output power. It is recommended that black start be performed without loads. (3) Check whether the power cable is correctly connected by referring to the user manual. (4) After the check is complete, perform black start again. (5) If the alarm persists, contact technical support.

2.3.1.24 3524 Incorrect Black Start Instruction Sequence of PCS

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3524	Incorrect Black Start Instruction Sequence of PCS	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The black start instructions are incorrect.	1. Shut down the ESS on the user interface. 2. Turn off the AC circuit breaker of the power distribution cabinet and then the AC circuit breaker of the RCM. After 5 minutes, turn on the AC circuit breaker of the RCM and then the AC circuit breaker of the power distribution cabinet. 3. If the alarm persists, contact technical support.

2.3.1.25 3525 PCS Fuse Broken

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3525	PCS Fuse Broken	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The internal circuit of the device is faulty.	Contact technical support.

2.3.1.26 3526 PCS Fuse Self-Check Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3526	PCS Fuse Self-Check Abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The internal circuit of the device is faulty.	1. The device detects its external working conditions in real time. After the alarm is cleared, the device automatically recovers. 2. If the alarm persists and affects the operation of the plant, contact technical support.

2.3.1.27 3527 PCS FAST I/O Self-Test Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3527	PCS FAST I/O Self-Test Abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The PCS cannot be powered on.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The rapid shutdown cable between the PCS and the ESS is not properly connected.	1. Shut down the ESS on the user interface. 2. After 5 minutes, start the ESS on the user interface. 3. If the alarm persists, contact technical support.

2.3.1.28 3528 PCS DC Bus Short-Circuited

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3528	PCS DC Bus Short-Circuited	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The PCS cannot be powered on.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The PCS DC bus is short-circuited.	1. Shut down the ESS on the user interface and check whether a PCS DC short circuit occurs. 2. If the circuit is normal, contact technical support. 3. If a short circuit occurs, rectify the fault. After the fault is rectified, power on the system again.

2.3.1.29 3529 PCS Relay Overtemperature

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3529	PCS Relay Overtemperature	Major	Communications alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

/

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The oxidized relay contact causes conduction impedance increase, which consequently leads to overtemperature.	1. Check whether no grid scheduling instruction is received in grid connection scenarios or whether the PCS supply power is greater than the load power in off-grid scenarios. If yes, shut down and start the PCS by referring to step 2. If not, no further action is required. 2. Shut down the ESS on the user interface. After 5 minutes, start the ESS.

2.4 Temperature Control System

2.4.1 3600 Power loss alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3600	Power loss alarm	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The LTMS shuts down.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The power supply to the LTMS is abnormal.	1. Use a voltmeter to check whether the power supply to the LTMS is normal. 2. If the power supply is abnormal, locate the cause and resume the power supply. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.2 3601 Power voltage abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3601	Power voltage abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The LTMS shuts down.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The power supply voltage exceeds the upper threshold.	1. Use a voltmeter to check whether the power supply to the LTMS is normal. 2. If the power supply is abnormal, locate the cause and resume the power supply. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The corresponding power detection device is faulty.	1. Replace the component by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
2	1	The power supply voltage is below the lower threshold.	1. Use a voltmeter to check whether the power supply to the LTMS is normal. 2. If the power supply is abnormal, locate the cause and resume the power supply. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The corresponding power detection device is faulty.	1. Replace the component by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.3 3602 Power frequency abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3602	Power frequency abnormal	Warning	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system reliability may be affected.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The power supply frequency is below the lower threshold.	1. Check whether the power supply frequency of the LTMS is normal on the user interface. 2. If the power supply is abnormal, locate the cause and resume the power supply. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The corresponding power detection device is faulty.	1. Replace the component by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
2	1	The power supply frequency exceeds the upper threshold.	1. Check whether the power supply frequency of the LTMS is normal on the user interface. 2. If the power supply is abnormal, locate the cause and resume the power supply. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
	2	The corresponding power detection device is faulty.	1. Replace the component by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.4 3603 Outdoor temperature sensor fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3603	Outdoor temperature sensor fault	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The outdoor temperature cannot be properly monitored, and the power heat dissipation requirements may not be responded in a timely manner.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The cable to the temperature sensor is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
	2	The temperature sensor is faulty.	1. Replace the temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.5 3604 Outdoor low temperature alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3604	Outdoor low temperature alarm	Minor	Environmental alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The LTMS may not work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The outdoor temperature is too low.	Use the device within the nominal temperature range.

2.4.6 3605 LTMS communication abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3605	LTMS communication abnormal	Major	Communications alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The LTMS may not work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The power supply to the LTMS is abnormal.	1. Use a voltmeter to check whether the power supply to the LTMS is normal. 2. If the power supply is abnormal, locate the cause and resume the power supply. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The cable to the LTMS is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the LTMS is disconnected or broken. If the cable is disconnected or broken, reconnect the cable. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.7 3606 LTMS expiration alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3606	LTMS expiration alarm	Warning	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The LTMS may not work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The system time is incorrectly set.	1. Check whether the time of the battery cabinet is the same as the local time on the user interface. If they are inconsistent, set the time on the user interface to the local time. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The service time of the LTMS exceeds the threshold.	1. Replace the LTMS by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.8 3608 Certificate about to expire

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3608	Certificate about to expire	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

Certificate-related functions are restricted.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The northbound communication certificate is about to expire or the system time is incorrectly set.	1. Check whether the time of the ESS is consistent with the local time on the user interface. If they are inconsistent, set the time on the user interface to the local time. 2. Otherwise, apply for a new certificate from the CA and update the certificate. 3. If the fault persists, contact technical support.

2.4.9 3609 Certificate has expired

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3609	Certificate has expired	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

Certificate-related functions are restricted.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The northbound communication certificate has expired or the system time is incorrectly set.	1. Check whether the time of the ESS is consistent with the local time on the user interface. If they are inconsistent, set the time on the user interface to the local time. 2. Otherwise, apply for a new certificate from the CA and update the certificate. 3. If the fault persists, contact technical support.

2.4.10 3620 Compressor discharge high pressure alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3620	Compressor discharge high pressure alarm	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The compressor cannot run properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The air filter or outdoor heat exchanger is dirty or blocked.	1. Check whether the air filter is dirty or blocked. If yes, clean it up or replace it. 2. Check whether the outdoor heat exchanger is dirty or blocked. If yes, clean it up. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The outdoor fan is abnormal.	1. Check whether a fan alarm is generated on the user interface. 2. If a fan alarm is generated, rectify the fault by referring to the suggestions related to the fan first. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	3	The data reported from the pressure sensor is abnormal.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the pressure sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, replace the pressure sensor by referring to the corresponding replacement guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
1	4	The temperature of water supplied to the condenser is too high or the water supply is insufficient.	1. Check whether a water pump alarm is generated on the user interface. 2. If a water pump alarm is generated, rectify the fault by referring to the suggestions related to the water pump first. 3. If the fault persists, check whether a multi-way valve alarm is generated on the user interface. 4. If a multi-way valve alarm is generated, rectify the fault by referring to the suggestions related to the multi-way valve first. 5. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
1	5	The refrigerant is overfilled.	1. Withdraw an appropriate amount of the refrigerant in the system by referring to the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.11 3621 Compressor suction low pressure alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3621	Compressor suction low pressure alarm	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The compressor cannot run properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The data reported from the pressure sensor is abnormal.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the pressure sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, replace the pressure sensor by referring to the corresponding replacement guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The refrigerant leaks.	1. Use a halogen detector to check whether a leakage occurs in a refrigerant pipe of the LTMS. 2. If a leakage occurs, replace the corresponding component by referring to the maintenance manual. 3. Charge refrigerant by referring to the refrigerant charging guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	3	The EEV is faulty.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the electronic expansion valve (EEV) is disconnected or broken. If the cable is disconnected or broken, reconnect the EEV connector. 3. If the fault persists, replace the EEV by referring to the corresponding replacement guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
2	1	The data reported from the pressure sensor is abnormal.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the pressure sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, replace the pressure sensor by referring to the corresponding replacement guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The refrigerant leaks.	1. Use a halogen detector to check whether a leakage occurs in a refrigerant pipe of the LTMS. 2. If a leakage occurs, replace the corresponding component by referring to the maintenance manual. 3. Charge refrigerant by referring to the refrigerant charging guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	3	The EEV is faulty.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the electronic expansion valve (EEV) is disconnected or broken. If the cable is disconnected or broken, reconnect the EEV connector. 3. If the fault persists, replace the EEV by referring to the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.12 3622 Compressor low superheat degree alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3622	Compressor low superheat degree alarm	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The compressor cannot run properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The data reported from the pressure and temperature sensor is abnormal.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the pressure and temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the connector of the pressure and temperature sensor. 3. If the fault persists, replace the pressure and temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
	4	The EEV is faulty.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the electronic expansion valve (EEV) is disconnected or broken. If the cable is disconnected or broken, reconnect the EEV connector. 3. If the fault persists, replace the EEV by referring to the corresponding replacement guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.13 3623 Compressor discharge pressure sensor fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3623	Compressor discharge pressure sensor fault	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The discharge pressure cannot be properly monitored, and the compressor may not run properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The cable to the pressure sensor is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the pressure sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The pressure sensor is faulty.	1. Replace the pressure sensor by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.14 3624 Condenser outlet pressure sensor fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3624	Condenser outlet pressure sensor fault	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The condenser outlet pressure cannot be properly monitored.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The cable to the pressure sensor is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the pressure sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The pressure sensor is faulty.	1. Replace the pressure sensor by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.15 3625 Condenser outlet temperature sensor fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3625	Condenser outlet temperature sensor fault	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The condenser outlet temperature cannot be properly monitored.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The cable to the temperature sensor is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The temperature sensor is faulty.	1. Replace the temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.16 3626 Compressor suction pressure sensor fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3626	Compressor suction pressure sensor fault	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The suction pressure cannot be properly monitored, and the compressor may not run properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The cable to the pressure sensor is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the pressure sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The pressure sensor is faulty.	1. Replace the pressure sensor by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.17 3627 Compressor suction temperature sensor fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3627	Compressor suction temperature sensor fault	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The suction temperature cannot be properly monitored, and the compressor may not run properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The cable to the temperature sensor is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, check for other causes. 4. If all possible causes have been ruled out, contact technical support.
	2	The temperature sensor is faulty.	1. Replace the temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.18 3628 Dehumidifying temperature sensor fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3628	Dehumidifying temperature sensor fault	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The outlet temperature of the evaporator cannot be properly monitored, and dehumidification may fail.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The cable to the temperature sensor is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The temperature sensor is faulty.	1. Replace the temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.19 3640 Compressor drive alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3640	Compressor drive alarm	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The compressor cannot run properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	2	The compressor drive is faulty.	1. Replace the drive by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	3	The compressor is faulty.	1. Replace the compressor by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.20 3641 Compressor drive output abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3641	Compressor drive output abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The compressor cannot run properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The cable to the compressor drive is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the drive is disconnected or broken. If the cable is disconnected or broken, reconnect the cable. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The compressor drive is faulty.	1. Replace the drive by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	3	The compressor is faulty.	1. Replace the compressor by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.21 3642 Compressor overcurrent alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3642	Compressor overcurrent alarm	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The compressor cannot run properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The air filter or outdoor heat exchanger is dirty or blocked.	1. Check whether the air filter is dirty or blocked. If yes, clean it up or replace it. 2. Check whether the outdoor heat exchanger is dirty or blocked. If yes, clean it up. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The outdoor fan is abnormal.	1. Check whether a fan alarm is generated on the user interface. 2. If a fan alarm is generated, rectify the fault by referring to the suggestions related to the fan first. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	3	The refrigerant is overfilled.	1. Withdraw an appropriate amount of the refrigerant in the system by referring to the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	4	The compressor is faulty.	1. Replace the compressor by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.22 3643 Compressor drive communication abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3643	Compressor drive communication abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The compressor cannot run properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The compressor drive is absent.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the drive is in position. If not, reconnect the drive. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	3	The cable to the compressor drive is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the drive is disconnected or broken. If the cable is disconnected or broken, reconnect the cable. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	4	The compressor drive is faulty.	1. Replace the drive by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.23 3644 High discharge temperature alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3644	High discharge temperature alarm	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The compressor cannot run properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The air filter or outdoor heat exchanger is dirty or blocked.	1. Check whether the air filter is dirty or blocked. If yes, clean it up or replace it. 2. Check whether the outdoor heat exchanger is dirty or blocked. If yes, clean it up. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The outdoor temperature is too high.	Use the device within the nominal temperature range.
	3	The outdoor fan is abnormal.	1. Check whether a fan alarm is generated on the user interface. 2. If a fan alarm is generated, rectify the fault by referring to the suggestions related to the fan first. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
	4	The data reported from the discharge temperature sensor is abnormal.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, replace the temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	5	The temperature of water supplied to the condenser is too high or the water supply is insufficient.	1. Check whether a water pump alarm is generated on the user interface. 2. If a water pump alarm is generated, rectify the fault by referring to the suggestions related to the water pump first. 3. If the fault persists, check whether a multi-way valve alarm is generated on the user interface. 4. If a multi-way valve alarm is generated, rectify the fault by referring to the suggestions related to the multi-way valve first. 5. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	6	The refrigerant leaks.	1. Use a halogen detector to check whether a leakage occurs in a refrigerant pipe of the LTMS. 2. If a leakage occurs, replace the corresponding component by referring to the maintenance manual. 3. Charge refrigerant by referring to the refrigerant charging guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.24 3645 Compressor discharge temperature sensor fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3645	Compressor discharge temperature sensor fault	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The discharge temperature cannot be properly monitored, and the compressor may not run properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The cable to the temperature sensor is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, check for other causes. 4. If all possible causes have been ruled out, contact technical support.
	2	The temperature sensor is faulty.	1. Replace the temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.25 3650 Insufficient cooling capacity alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3650	Insufficient cooling capacity alarm	Warning	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

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Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	Multi-way valve seal failure	1. Replace the multi-way valve by referring to the maintenance manual. 2. If the fault persists, locate other causes. If all causes are found, contact technical support for assistance.
	2	Refrigerant leakage	1. Use a halogen detector to check whether the refrigerant pipe of the liquid cooling unit leaks. 2. If leakage occurs, replace the corresponding components by referring to the maintenance manual. 3. Fill the refrigerant by referring to the maintenance manual. 4. If the fault persists, locate other causes. If all causes are found, contact technical support for assistance.

2.4.26 3655 Auxiliary power abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3655	Auxiliary power abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The LTMS shuts down.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The auxiliary power cable is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the auxiliary power supply is disconnected or broken. If the cable is disconnected or broken, reconnect the connector of the auxiliary power supply. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The auxiliary power supply is faulty.	1. Replace the auxiliary power supply by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.27 3660 Outdoor cooling module blocked

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3660	Outdoor cooling module blocked	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The air volume may be insufficient.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The air filter or outdoor heat exchanger is dirty or blocked.	1. Check whether the air filter is dirty or blocked. If yes, clean it up or replace it. 2. Check whether the outdoor heat exchanger is dirty or blocked. If yes, clean it up. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.28 3661 Outdoor heat exchanger temperature sensor fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3661	Outdoor heat exchanger temperature sensor fault	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The outdoor heat exchanger temperature cannot be properly monitored.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The cable to the temperature sensor is loose or damaged.	1. Disconnect the power supply to the liquid cooling unit by referring to the maintenance manual. 2. Check whether the cable to the temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, check for other causes. 4. If all possible causes have been ruled out, contact technical support.
	2	The temperature sensor is faulty.	1. Replace the temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. 3. If all possible causes have been ruled out, contact technical support.

2.4.29 3665 Fan fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3665	Fan fault	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The air volume cannot be controlled.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The cable to the fan is not connected properly.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the fan is disconnected or broken. If the cable is disconnected or broken, reconnect the fan connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The fan is faulty.	1. Replace the fan by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
2	1	The power supply to the fan is abnormal.	1. Use a voltmeter to check whether the fan power supply is normal. 2. If the power supply is abnormal, locate the cause and resume the power supply. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The cable to the fan is not connected properly.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the fan is disconnected or broken. If the cable is disconnected or broken, reconnect the fan connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	3	The fan is faulty.	1. Replace the fan by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.30 3666 Fan fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3666	Fan fault	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The air volume cannot be controlled.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The cable to the fan is not connected properly.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the fan is disconnected or broken. If the cable is disconnected or broken, reconnect the fan connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The fan is faulty.	1. Replace the fan by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
2	1	The power supply to the fan is abnormal.	1. Use a voltmeter to check whether the fan power supply is normal. 2. If the power supply is abnormal, locate the cause and resume the power supply. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
	2	The cable to the fan is not connected properly.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the fan is disconnected or broken. If the cable is disconnected or broken, reconnect the fan connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	3	The fan is faulty.	1. Replace the fan by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.31 3675 Electric heater fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3675	Electric heater fault	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The electric heater does not run properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The cable to the electric heater is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the electric heater is disconnected or broken. If the cable is disconnected or broken, reconnect the electric heater connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The coolant is insufficient.	1. Check whether a leakage occurs in the LTMS or a pipe. 2. If a leakage occurs, replace the corresponding component or pipe by referring to the maintenance manual. 3. Fill coolant in the coolant tank until it is higher than the MIN line. For details, see the coolant refilling guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	4	The electric heater is faulty.	1. Replace the electric heater by referring to the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.32 3676 Electric heater power overvoltage alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3676	Electric heater power overvoltage alarm	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The electric heater does not run properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The power supply voltage exceeds the upper threshold.	1. Use a voltmeter to check whether the power supply to the LTMS is normal. 2. If the power supply is abnormal, locate the cause and resume the power supply. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The corresponding power detection device is faulty.	1. Replace the component by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.33 3680 Power-side supply water temperature sensor fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3680	Power-side supply water temperature sensor fault	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The supply water temperature on the power side cannot be monitored, and the cooling capacity may be insufficient.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	The cable to the temperature sensor is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The temperature sensor is faulty.	1. Replace the temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.34 3681 Power-side return water temperature sensor fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3681	Power-side return water temperature sensor fault	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The return water temperature on the power side cannot be monitored.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	The cable to the temperature sensor is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The temperature sensor is faulty.	1. Replace the temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.35 3682 Power-side supply/return water temperature sensor abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3682	Power-side supply/return water temperature sensor abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The supply/return water temperature on the power side cannot be monitored, and the cooling capacity may be insufficient.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	The data reported from the power-side supply water temperature sensor is abnormal.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, replace the temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The data reported from the power-side return water temperature sensor is abnormal.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, replace the temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.36 3683 Battery-side supply water temperature sensor fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3683	Battery-side supply water temperature sensor fault	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The supply water temperature on the battery side cannot be monitored, and the supply water temperature may be low.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	The cable to the temperature sensor is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The temperature sensor is faulty.	1. Replace the temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.37 3684 Battery-side return water temperature sensor fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3684	Battery-side return water temperature sensor fault	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The return water temperature on the battery side cannot be monitored.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	The cable to the temperature sensor is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The temperature sensor is faulty.	1. Replace the temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.38 3685 Battery-side supply/return water temperature sensor abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3685	Battery-side supply/return water temperature sensor abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The supply/return water temperature on the battery side cannot be monitored. The supply water temperature may be high or low.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	The data reported from the battery-side supply water temperature sensor is abnormal.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, replace the temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The data reported from the battery-side return water temperature sensor is abnormal.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, replace the temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.39 3686 Battery-side supply water high temperature alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3686	Battery-side supply water high temperature alarm	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The LTMS shuts down.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	The air filter or outdoor heat exchanger is dirty or blocked.	1. Check whether the air filter or outdoor heat exchanger is dirty or blocked. 2. If the air filter is dirty or blocked, clean it up or replace it. 3. If the outdoor heat exchanger is dirty or blocked, clean it up. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The data reported from the battery-side supply water temperature sensor is abnormal.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, replace the temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	3	The multi-way valve is faulty.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the multi-way valve is disconnected or broken. If the cable is disconnected or broken, reconnect the cable. 3. If the fault persists, replace the multi-way valve by referring to the corresponding replacement guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

Reason ID	Cause ID	Possible Causes	Suggestion
	4	The water pump is faulty.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the water pump is disconnected or broken. If the cable is disconnected or broken, reconnect the cable. 3. If the fault persists, replace the water pump by referring to the corresponding replacement guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.40 3687 Battery-side supply water low temperature alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3687	Battery-side supply water low temperature alarm	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

Condensation may occur on the pipe surface.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	The diagnostic mode runtime exceeds the upper limit.	1. On the user interface, check whether the cooling function in the diagnosis mode is enabled for a long time. If yes, exit the diagnosis mode on the user interface and wait for the water temperature to rise. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The data reported from the battery-side supply water temperature sensor is abnormal.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the temperature sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, replace the temperature sensor by referring to the corresponding replacement guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.41 3688 Coolant expiration alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3688	Coolant expiration alarm	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system reliability may be affected.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	The coolant usage duration exceeds the upper limit.	1. Drain coolant according to the coolant drainage process in the maintenance manual. 2. Inject coolant according to the coolant injection process in the maintenance manual. 3. Tap on the user interface to complete the coolant replacement process. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
2	1	The coolant usage duration exceeds the upper limit.	1. Drain coolant according to the coolant drainage process in the maintenance manual. 2. Inject coolant according to the coolant injection process in the maintenance manual. 3. Tap on the user interface to complete the coolant replacement process. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.42 3689 Shutdown due to coolant expiration

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3689	Shutdown due to coolant expiration	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The LTMS shuts down.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	The coolant usage duration exceeds the upper limit.	1. Drain coolant according to the coolant drainage process in the maintenance manual. 2. Inject coolant according to the coolant injection process in the maintenance manual. 3. Tap on the user interface to complete the coolant replacement process. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.43 3690 Coolant replacement not completed

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3690	Coolant replacement not completed	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The LTMS cannot start.

Possible Cause and Solution

Reason ID	Cause ID	Possible Causes	Suggestion
1	1	Coolant replacement is not completed.	1. Check the coolant replacement status on the user interface. 2. Fill coolant into the LTMS or drain coolant from the LTMS based on the coolant replacement status by following the coolant injection/drainage process in the maintenance manual. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.44 3705 Water pump power supply abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3705	Water pump power supply abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The LTMS may not work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The power supply to the water pump is abnormal.	1. Use a voltmeter to check whether the power supply to the water pump is normal. 2. If the power supply is abnormal, locate the cause and resume the power supply. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
	2	The cable to the water pump is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the water pump is disconnected or broken. If the cable is disconnected or broken, reconnect the water pump connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.45 3706 Water pump function abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3706	Water pump function abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The LTMS may not work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The auxiliary power supply module is absent.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the auxiliary power module is in position. If not, reconnect the auxiliary power module. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
	2	The cable to the water pump is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the water pump is disconnected or broken. If the cable is disconnected or broken, reconnect the cable. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	3	The water pump is sealed by gas.	1. Manually clear the alarm on the user interface and refill coolant by referring to the coolant injection process in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	4	The water pump is faulty.	1. Replace the water pump by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.46 3707 Water pump fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3707	Water pump fault	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The LTMS may not work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The water pump is faulty.	1. Replace the water pump by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
2	1	The water pump is faulty.	1. Replace the water pump by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
3	1	The water pump is faulty.	1. Replace the water pump by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The ambient temperature of the water pump is too high.	1. Check whether there are abnormal heat sources around the water pump. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.47 3715 Multi-way valve communication abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3715	Multi-way valve communication abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The LTMS may not work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The cable to the multi-way valve is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the multi-way valve is disconnected or broken. If the cable is disconnected or broken, reconnect the multi-way valve connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The multi-way valve is faulty.	1. Replace the multi-way valve by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.48 3716 Multi-way valve power supply abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3716	Multi-way valve power supply abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The LTMS may not work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The power supply to the multi-way valve is abnormal.	1. Use a voltmeter to check whether the power supply to the multi-way valve is normal. 2. If the power supply is abnormal, locate the cause and resume the power supply. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The cable to the multi-way valve is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the multi-way valve is disconnected or broken. If the cable is disconnected or broken, reconnect the multi-way valve connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.49 3717 Multi-way valve fault

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3717	Multi-way valve fault	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The LTMS may not work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The multi-way valve is faulty.	1. Replace the multi-way valve by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
2	1	The cable to the multi-way valve is loose or damaged.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the multi-way valve is disconnected or broken. If the cable is disconnected or broken, reconnect the multi-way valve connector. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	The multi-way valve is faulty.	1. Replace the multi-way valve by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
3	1	The multi-way valve is faulty.	1. Replace the multi-way valve by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
4	1	The multi-way valve is faulty.	1. Replace the multi-way valve by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
5	1	The multi-way valve is faulty.	1. Replace the multi-way valve by referring to the corresponding replacement guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.4.50 3725 Water tank low liquid level alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3725	Water tank low liquid level alarm	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The coolant may be insufficient.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The liquid level sensor is faulty.	1. Disconnect the power supply to the LTMS by referring to the maintenance manual. 2. Check whether the cable to the liquid level sensor is disconnected or broken. If the cable is disconnected or broken, reconnect the sensor connector. 3. If the fault persists, replace the liquid level sensor by referring to the corresponding replacement guide in the maintenance manual. 4. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.
	2	Liquid leakage occurs in the system.	1. Check whether a leakage occurs in the LTMS or a pipe. 2. If a leakage occurs, replace the corresponding component or pipe by referring to the maintenance manual. 3. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
	3	The coolant is insufficient.	1. Fill coolant in the coolant tank until it is higher than the MIN line. For details, see the coolant refilling guide in the maintenance manual. 2. If the fault persists, check for other causes. If all possible causes have been ruled out, contact technical support.

2.5 ESU

2.5.1 3880 AC SPD Faulty

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3880	AC SPD Faulty	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS works properly and but devices in the cabinet may not be protected against lightning strikes.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The detection cable is disconnected or the SPD of the RCM is faulty.	1. Check whether the AC SPD signal cable of the RCM is loose and whether the cable connector is exposed. 2. Check whether the AC SPD indicator of the RCM changes its color or is burnt. 3. If the color has changed, replace the AC SPD.

2.5.2 3881 Door Status Alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3881	Door Status Alarm	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system works properly although the door status sensor generates an alarm.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The ESS doors are open, or the door status sensor is disconnected, faulty, incorrectly installed, or displaced.	1. Check whether the ESS doors are completely closed. If not, close the doors. 2. Check whether the cable to the door status sensor or travel switch is disconnected. If yes, connect the cable properly. 3. Check whether the door status sensor or travel switch is displaced. If yes, move it back to the original position. 4. If not, replace the door status sensor or travel switch.

2.5.3 3882 ESS Door Open

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3882	ESS Door Open	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS is powered off, and the fans in the RCM are shut down (for C&I scenarios).

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The ESS door is open.	1. Check whether the door is completely closed. If not, close the door completely. 2. Check whether the cable is disconnected from the door status sensor. If yes, connect the cable correctly. 3. Check whether the door status sensor is displaced. If yes, move it back to the original position. 4. If not, replace the door status sensor.

2.5.4 3883 Water Alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3883	Water Alarm	Major	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The ESS is powered off, and the LTMS stops running.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	Water accumulates in the ESS cabinet or the sensor is faulty.	1. Check whether there is water inside the ESS cabinet. If yes, drain the water. 2. If not, replace the water sensor. 3. After the replacement, manually clear the alarm. 4. If the alarm persists, contact technical support.

2.5.5 3884 Smoke Detector Alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3884	Smoke Detector Alarm	Minor	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

If only a smoke detector triggers an alarm, the system works properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The humidity inside the cabin is too high, the sensor is dusty, or the cabin is on fire.	1. Remotely monitor the system for 30 minutes to check whether other exceptions (such as abnormal battery voltage, abnormal battery temperature, and abnormal combustible gas concentration) occur. If yes, remotely power off the system. During remote monitoring, do not approach the ESS or open the ESS cabin doors. 2. If no exception is found during remote monitoring, assign trained personnel to the site and observe the system for 30 minutes from a safe distance. If there is smoke or fire, remotely power off the system, evacuate onsite personnel as soon as possible, and call the fire emergency service. 3. If no exception is found during remote monitoring and onsite observation, open the ESS cabin doors and check and replace the smoke detector.

2.5.6 3885 High Concentration of Combustible Gas

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3885	High Concentration of Combustible Gas	Major	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The ESS is powered off and starts exhausting gas.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The gas concentration is high.	1. Remotely monitor the system for 30 minutes to check whether the air exhaust fan starts properly and whether other exceptions (such as abnormal battery voltage and temperature) occur. If yes, check whether the system is powered off. If the system is not powered off, remotely power off the system. During remote monitoring, do not approach the ESS or open the ESS cabin doors. 2. If no other exception is found during remote monitoring, arrange trained personnel to go to the site and open the ESS doors to detect the gas source while ensuring safety. If there is smoke or fire, remotely power off the system, evacuate onsite personnel as soon as possible, and call the fire emergency service.
	2	The detector is faulty.	If no exception is found during remote monitoring and onsite observation, open the ESS cabin doors and check and replace the combustible gas detector.
2	1	The gas concentration is too high.	1. Remotely monitor the system for 30 minutes to check whether the air exhaust fan starts properly and whether other exceptions (such as abnormal battery voltage and temperature) occur. If yes, check whether the system is powered off. If the system is not powered off, remotely power off the system. During remote monitoring, do not approach the ESS or open the ESS cabin doors. 2. If no other exception is found during remote monitoring, arrange trained personnel who have taken explosion prevention measures to the site. The personnel observe the site from a safe distance for 30 minutes and perform explosion relief while ensuring safety. If there is smoke or fire, remotely power off the system, evacuate onsite personnel as soon as possible, and call the fire emergency service.

Reason ID	No.	Possible Cause	Suggestion
	2	The detector is faulty.	If no exception is found during remote monitoring and onsite observation, open the ESS cabin doors and check and replace the combustible gas detector.

2.5.7 3886 Combustible Gas Detector Communication Failed

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3886	Combustible Gas Detector Communication Failed	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The CO or H2 gas concentration cannot be detected. When CO or H2 gas accumulates in the cabinet and cannot be exhausted in a timely manner, the system may explode.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The communications cable is disconnected.	1. Check whether the harness connector of the combustible gas detector module and the harness connectors of the COM1/12V and COM2/12V ports on the ESS controller are properly connected. If not, remove and then insert the connectors. 2. Use a multimeter to check whether the communications cable of the device is broken or exposed.

Reason ID	No.	Possible Cause	Suggestion
	2	The communications cable is disconnected, the power supply is abnormal, or the sensor is faulty.	1. Check whether the harness connector of the combustible gas detector module and the harness connectors of the COM1/12V and COM2/12V ports on the ESS controller are properly connected. If not, remove and then insert the connectors. 2. Use a multimeter to check whether the power supply voltage of the sensor is normal and whether the power cable is broken. 3. If not, contact technical support.
	3	The sensor is faulty.	1. Replace the sensor. 2. If the alarm persists, contact technical support.

2.5.8 3887 Combustible Gas Detector Faulty

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3887	Combustible Gas Detector Faulty	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The CO or H2 gas concentration cannot be detected. When CO or H2 gas accumulates in the cabinet and cannot be exhausted in a timely manner, the system may explode.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The sensor is faulty.	1. Replace the CO or H2 detector and check whether the fault is rectified. 2. If not, contact technical support.

2.5.9 3888 Temperature and Humidity Sensor Communication Failed

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3888	Temperature and Humidity Sensor Communication Failed	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

If the communication with more than two temperature and humidity sensors fails, the system temperature and humidity cannot be detected or controlled.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The communications cable is disconnected, the power supply is abnormal, or the sensor is faulty.	1. Check whether the harness connector of the temperature and humidity sensor and the harness connectors of the COM1/12V and COM2/12V ports on the BCU are properly connected. If not, remove and then insert the connectors. 2. Use a multimeter to check whether the power supply voltage of the sensor is normal and whether the power cable is broken. 3. If the alarm persists, replace the sensor.

2.5.10 3889 Temperature and Humidity Sensor Faulty

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3889	Temperature and Humidity Sensor Faulty	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

If more than two temperature and humidity sensors are faulty, the system temperature and humidity cannot be detected or controlled.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The sensor is faulty.	1. Replace the temperature and humidity sensor and check whether the fault is rectified. 2. If not, contact technical support.

2.5.11 3890 Heat Detector Alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3890	Heat Detector Alarm	Minor	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

Only the heat detector generates an alarm, but the system works properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The cabinet is on fire or the sensor is faulty.	1. Remotely monitor the system for 30 minutes to check whether other exceptions (such as abnormal battery voltage, abnormal battery temperature, and abnormal combustible gas concentration) occur. If yes, remotely power off the system. During remote monitoring, do not approach the ESS or open the ESS cabin doors. 2. If no exception is found during remote monitoring, assign trained personnel to the site and observe the system for 30 minutes from a safe distance. If there is smoke or fire, remotely power off the system, evacuate onsite personnel as soon as possible, and call the fire emergency service. 3. If no exception is found during remote monitoring and onsite observation, open the ESS cabin doors and check and replace the heat detector.

2.5.12 3891 High Ambient Temperature Inside ESS Cabin

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3891	High Ambient Temperature Inside ESS Cabin	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The system automatically derates. If the temperature is too high for a long time, the system may be powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The LTMS does not work properly or the weather is hot.	1. Check whether the LTMS works properly and whether an alarm is generated. 2. Check whether the ESS cabin doors are completely closed.

2.5.13 3892 EPO Alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3892	EPO Alarm	Major	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The ESS, including the LTMS, shuts down.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The EPO button is pressed.	1. Rectify the system fault first. 2. After the fault is rectified, rotate the EPO button out. 3. Start the ESS on the user interface.
	2	The feedback cable to the EPO button is disconnected.	1. Check whether the cable to the EPO button is disconnected or whether the cable connector is exposed. 2. If not, use a multimeter to check whether the cable to the EPO button is broken. 3. If the alarm persists, replace the EPO button.

2.5.14 3893 Fire Alarm

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3893	Fire Alarm	Major	Equipment alarm	ADMC	LUNA2000B V200R024C00

Impact on the System

The ESS cabinet and LTMS shut down, and the system cannot run properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The electrical circuit or battery is on fire.	1. Do not open the cabin doors, evacuate onsite personnel, and call the fire emergency service. 2. For details, see the "Emergency Handling" section in the maintenance manual. 3. Contact technical support.

2.5.15 3894 Exhaust Fan Faulty

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3894	Exhaust Fan Faulty	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

When CO or H2 gas accumulates in the cabinet, the gas cannot be exhausted in a timely manner. As a result, the system may explode.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The fan power input or feedback cable is abnormal.	1. Check whether cable to the exhaust fan is disconnected or whether the cable connector is exposed. 2. If yes, reconnect the cable. 3. If not, use a multimeter to check whether the cable is broken.
	2	The fan is faulty.	1. Check whether the fan is damaged or burnt. If yes, replace the fan. 2. If the alarm persists after the fan is replaced, contact technical support.

2.5.16 3895 Devices Connected and System Configuration Inconsistent

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3895	Devices Connected and System Configuration Inconsistent	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS cannot be powered on.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The number of battery packs is incorrectly set.	1. Check whether the number of battery packs configured on the user interface is consistent with the number of battery packs installed onsite.
	2	The BMU communication is abnormal or the BMU is faulty.	1. Check whether the communication is abnormal due to abnormal cable connection on the BMU. 2. Replace the faulty BMU.
2	1	The CAN communication of the balancing module is abnormal or the balancing module is faulty.	1. Check whether the communication is abnormal due to abnormal cable connection of the balancing module in the battery pack. 2. Replace the faulty balancing module.
3	1	The CAN communication of the RPCB is abnormal or the RPCB is faulty.	1. Check whether the communication error is caused by abnormal cable connection between the RPCB and the BCU. 2. Replace the faulty RPCB.
4	1	The CAN communication of the DCDC is abnormal or the DCDC is faulty.	1. Check whether the communication error is caused by abnormal cable connection between the DCDC and the BCU. 2. Replace the faulty DCDC.
5	1	The CAN communication of the PCS is abnormal or the PCS is faulty.	1. Check whether the communication error is caused by abnormal cable connection between the PCS and the BCU. 2. Replace the faulty PCS.
6	1	The Ethernet communication of the liquid cooling controller is abnormal or the liquid cooling controller is faulty.	1. Check whether the communication error is caused by abnormal cable connection between the liquid cooling controller and the ESS controller. 2. Replace the faulty liquid cooling controller.

Reason ID	No.	Possible Cause	Suggestion
7	1	The RS485 communication of the display module is abnormal or the display module is faulty.	1. Check whether the communication error is caused by abnormal cable connection between the display module and the ESS controller. 2. Replace the faulty display module.
8	1	The RS485 communication of the TRSD is abnormal or the TRSD is faulty.	1. Check whether the communication error is caused by abnormal cable connection between the TRSD and the ESS controller. 2. Replace the faulty TRSD.
9	1	The RS485 communication of the temperature and humidity sensor is abnormal or the temperature and humidity sensor is faulty.	1. Check whether the communication error is caused by abnormal cable connection between the temperature and humidity sensor and the ESS controller. 2. Replace the faulty temperature and humidity sensor.
10	1	The combustible gas detector is faulty or the communication is abnormal.	1. Check whether the communication error is caused by abnormal cable connection between the combustible gas detector and the ESS controller. 2. Replace the faulty combustible gas detector.
11	1	The meter communication is abnormal or the meter is faulty.	1. Check whether the communication error is caused by abnormal cable connection between the meter and the ESS controller. 2. Replace the faulty meter.

2.5.17 3898 TRSD Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3898	TRSD Abnormal	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The TRSD cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The gas cylinder pressure is low due to leakage.	1. Replace the gas cylinder onsite. 2. If the alarm persists, contact technical support.
2	1	The flash memory is faulty or the power supply is abnormal.	1. Use a multimeter to check whether the main power supply cable is broken or exposed. If yes, rectify the fault. 2. If not, contact technical support.
3	1	The power-on loop of the lead-acid battery is abnormal.	1. Check whether the TRSD backup power supply is switched on the user interface. If not, switch on the backup power supply. 2. If the alarm persists, use a multimeter to check whether the lead-acid battery loop has breakpoints or exposed points. If yes, rectify the fault. 3. If not, replace the lead-acid battery.
4	1	The cable to the valve is damaged or improperly connected.	1. Use a multimeter to check whether the valve cable is broken or exposed. 2. If yes, rectify the fault. 3. If not, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
5	1	Undervoltage occurs on the lead-acid battery.	1. Check whether the main power supply is normal and charge the lead-acid battery first. 2. If the alarm persists after the battery is charged for 2 hours, replace the lead-acid battery.
14	1	The cable to the master valve of the gas cylinder is improperly connected, or the internal control board communication is abnormal.	1. Use a multimeter to check whether the cable to the master valve of the gas cylinder is broken or exposed. 2. If yes, rectify the fault. 3. If not, rectify the fault by referring to the troubleshooting section in the fire suppression system user manual.

2.5.18 3899 TRSD Valve Open

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3899	TRSD Valve Open	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The association PACK-level fire alarm is triggered.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The gas cylinder releases extinguishant.	1. Check whether a smoke or fire alarm is generated, and whether the gas cylinder releases extinguishant. 2. If yes, replace the gas cylinder, valve, and pipe components. 3. If not, contact technical support.

2.5.19 3900 High Relative Humidity Inside ESS Cabin

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3900	High Relative Humidity Inside ESS Cabin	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS works properly but condensation may occur.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	Dehumidification fails.	1. Ensure that the temperature control mode is set to automatic. 2. Check whether the LTMS is normal and whether the cabin doors are completely closed.

2.5.20 3901 Offering Software Update Package Not Backed Up

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3901	Offering Software Update Package Not Backed Up	Warning	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

After parts replacement, users cannot select a software update package for update.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The software update package is not backed up or the backup package is lost.	Download the latest software update package and perform an update.

2.5.21 3903 E-label Board Data Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3903	E-label Board Data Abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS is powered off.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The differentiated data backed up on the ESS controller is inconsistent with that on the e-label board of the system, or some data is damaged.	1. If the ESS controller has been replaced, replace it on the "Device Replacement" page of the SmartLogger WebUI. 2. If only the e-label is replaced or no spare part is replaced, check the ESS SN on the label and connect to the FusionSolar app beside the ESS. 3. On the alarm screen of the app, tap "Proceed" to go to the SN confirming screen and select the SN displayed on the device label. If the SN is not the one displayed on the device label, data errors may occur and safety risks may occur during system running. 4. After the SN is confirmed, the device automatically synchronizes data and restarts. 5. If the alarm persists, contact technical support.
2	1	The differentiated data backed up on the ESS controller and that on the e-label board of the system is damaged.	1. If both the ESS controller and e-label board are replaced, replace them on the "Device Replacement" page of the SmartLogger WebUI. 2. If the alarm persists, contact technical support.
3	1	The cable connection to the e-label board is abnormal, or the e-label board is faulty.	1. Reconnect the cable to the e-label board. 2. If the alarm persists, replace the e-label board.

2.5.22 3904 Certificate About to Expire

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3904	Certificate About to Expire	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

Replace the certificate before expiration. Otherwise, the following consequences may occur:

Failure to connect to the upper-layer controller, leading to system power-off

Failure to connect to the local mobile app

Failure to communicate with the LTMS

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The northbound communication certificate is about to expire or the system time is incorrect.	1. Check whether the time of the ESS is consistent with the local time on the user interface. If not, set the time on the user interface to the local time. If yes, go to the next step. 2. Apply for a new certificate from the CA and update the certificate on the local app. If the alarm persists, contact technical support.
2	1	The certificate used for app communication is about to expire or the system time is incorrect.	1. Check whether the time of the ESS is consistent with the local time on the user interface. If not, set the time on the user interface to the local time. If yes, go to the next step. 2. Apply for a new certificate from the CA and update the certificate on the local app. If the alarm persists, contact technical support.

Reason ID	No.	Possible Cause	Suggestion
3	1	The southbound communication certificate is about to expire or the system time is incorrect.	1. Check whether the time of the ESS is consistent with the local time on the user interface. If not, set the time on the user interface to the local time. If yes, go to the next step. 2. Apply for a new certificate from the CA and update the certificate on the local app. If the alarm persists, contact technical support.

2.5.23 3905 Certificate Expired

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3905	Certificate Expired	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The upper-layer controller may not be connected, leading to system power-off.

The local mobile app may not be connected.

The communication with the LTMS may fail.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The northbound communication certificate has expired or the system time is incorrect.	1. Check whether the time of the ESS is consistent with the local time on the user interface. If not, set the time on the user interface to the local time. If yes, go to the next step. 2. Apply for a new certificate from the CA and update the certificate on the local app. If the alarm persists, contact technical support.
2	1	The certificate used for app communication has expired or the system time is incorrect.	1. Check whether the time of the ESS is consistent with the local time on the user interface. If not, set the time on the user interface to the local time. If yes, go to the next step. 2. Apply for a new certificate from the CA and update the certificate on the local app. If the alarm persists, contact technical support.
3	1	The southbound communication certificate has expired or the system time is incorrect.	1. Check whether the time of the ESS is consistent with the local time on the user interface. If not, set the time on the user interface to the local time. If yes, go to the next step. 2. Apply for a new certificate from the CA and update the certificate on the local app. If the alarm persists, contact technical support.

2.5.24 3906 Communication with Upper-layer Controller Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3906	Communication with Upper-layer Controller Abnormal	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS shuts down because it does not receive scheduling instructions from the upper-layer controller.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The communications cable is improperly connected, the network is disconnected, or the upper-layer controller is abnormal or not detected.	1. Check whether you can log in to the user interface of the upper-layer controller to check whether the upper-layer controller works properly. If it is not running properly, contact technical support. If the upper-layer controller works properly, go to the next step. 2. Check whether the communications cable between the ESS and the upper-layer controller is loose, disconnected, or incorrectly connected. If yes, reconnect the cable. If not, go to the next step. 3. Check whether the IP addresses of the ESS controller and the upper-layer controller are in the same network segment. If not, set them to be in the same network segment. If yes, contact technical support.

2.5.25 3909 TRSD Communication Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3909	TRSD Communication Abnormal	Minor	Communications alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The TRSD cannot work properly.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The communications cable is improperly connected or the module is faulty.	1. Check whether the TRSD is powered on. If not, rectify the power supply fault. If yes, go to the next step. 2. Check whether the communications cable between the TRSD and the ESS controller is loose, disconnected, or incorrectly connected. If yes, reconnect the cable. If not, contact technical support.

2.5.26 3910 Auxiliary Power Meter Communication Abnormal

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3910	Auxiliary Power Meter Communication Abnormal	Minor	Communications alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS works properly, but the auxiliary power meter data cannot be obtained.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The communications cable is improperly connected or the meter is faulty.	1. Check whether the communications cable is loose, disconnected, or incorrectly connected. If yes, reconnect the cable. 2. Check whether the meter is powered on. If not, rectify the power supply fault. 3. If the alarm persists, contact technical support.

2.5.27 3912 Startup Authorization Not Obtained

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3912	Startup Authorization Not Obtained	Major	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The ESS is not started.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	Startup authorization is not obtained for the ESS.	Contact technical support to perform startup authorization.

2.5.28 3913 Fire Extinguishing Agents in TRSD Sprayed

Attribute

Alarm ID	Alarm Name	Alarm Severity	Alarm Type	Clearance Category	Introduced Since
3913	Fire Extinguishing Agents in TRSD Sprayed	Minor	Equipment alarm	ADAC	LUNA2000B V200R024C00

Impact on the System

The association PACK-level fire alarm is triggered.

Possible Cause and Solution

Reason ID	No.	Possible Cause	Suggestion
1	1	The gas cylinder releases extinguishant.	1. Check whether a smoke or fire alarm is generated, and whether the gas cylinder releases extinguishant. 2. If yes, replace the gas cylinder, valve, and pipe components. 3. If not, contact technical support.