EMMA

Alarm Reference

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About This Document

Purpose

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

- EMMA-A01
- EMMA-A02

Intended Audience

The document is intended for:

- Technical support engineers
- Commissioning engineers
- Maintenance engineers

Change History

Changes between document issues are cumulative. The latest document issue contains all the changes made in earlier issues.

Issue 02 (2024-01-19)

This issue is the second official release.

Updated **6 4004 Abnormal DI Instruction** and **7 4006 Charger Communication Error**.

Issue 01 (2023-09-12)

This issue is the first official release.

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1 Description of Alarm Reference Items

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: • Critical: Services are severely affected and corrective measures must be taken immediately. • Major: Service quality is affected and corrective measures must be taken as soon as possible. • Minor: Services suffer from minor impacts but to prevent more serious impacts, corrective measures should be taken at a proper time or further check is required. • Warning: Potential faults that may affect services are detected. Further check or diagnosis is required before any corrective measures.
Possible Cause	Indicates the possible cause of the alarm, including the cause ID and cause description.
Suggestion	Indicates the procedure for handling the alarm.

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2 4000 Inverter Communication Error

Alarm Attribute

Alarm ID	Alarm Name	Alarm Severity
4000	Inverter Communication Error	Major

Possible Cause

Cause ID	Possible Cause
1	The cable connection between EMMA and the inverter is abnormal.

Suggestion

1. Access the device monitoring menu on the app and locate the inverter experiencing abnormal communication based on the device status indicator.
2. Check whether the inverter is powered on. If it is powered off, the alarm will be automatically cleared after it is powered on. If it is powered on, check whether the cable connection between the inverter and the EMMA is normal.

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3 4001 App Communication Certificate Expired

Alarm Attribute

Alarm ID	Alarm Name	Alarm Severity
4001	App Communication Certificate Expired	Minor

Possible Cause

Cause ID	Possible Cause
1	• The device time is incorrectly set. • The certificate has expired.

Suggestion

1. Check whether the device time is incorrectly set. If yes, reset or synchronize the system time.
2. Contact your vendor or technical support to apply for a new certificate file and load it.

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4 4002 Management System Certificate Expired

Alarm Attribute

Alarm ID	Alarm Name	Alarm Severity
4002	Management System Certificate Expired	Minor

Possible Cause

Cause ID	Possible Cause
1	• The device time is incorrectly set. • The certificate has expired.

Suggestion

1. Check whether the device time is incorrectly set. If yes, reset or synchronize the system time.
2. Contact your vendor or technical support to apply for a new certificate file and load it.

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5 4003 Auxiliary Power Fault

Alarm Attribute

Alarm ID	Alarm Name	Alarm Severity
4003	Auxiliary Power Fault	Critical

Possible Cause

Cause ID	Possible Cause
1	The auxiliary power supply of EMMA is abnormal.

Suggestion

Contact your vendor or technical support to replace EMMA.

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6 4004 Abnormal DI Instruction

Alarm Attribute

Alarm ID	Alarm Name	Alarm Severity
4004	Abnormal DI Instruction	Major

Possible Cause

Cause ID	Possible Cause
1	The parameters of active power dispatch via DI port are incorrectly configured.
2	The DI cable connection is abnormal.
3	The inverter does not support the reporting of dispatch values on DI ports.
4	The parameters of reactive power dispatch via DI port are incorrectly configured.

Suggestion

Cause ID = 1

Check whether the settings in the DI signal configuration table for active power dispatch are complete and meet the requirements of the local power operator. If not, correct the settings.

Cause ID = 2

Check the cable connection between the Ripple Control device and the inverter. Ensure that the Ripple Control device is connected to only one inverter.

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Cause ID = 3

Check the inverter software version. If the inverter software does not support the reporting of dispatch values on DI ports, update the inverter software.

Cause ID = 4

Check whether the settings in the DI signal configuration table for reactive power dispatch are complete and meet the requirements of the local power operator. If not, correct the settings.

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7 4006 Charger Communication Error

Alarm Attribute

Alarm ID	Alarm Name	Alarm Severity
4006	Charger Communication Error	Major

Possible Cause

Cause ID	Possible Cause
1	• The cable connection between EMMA and the charger is abnormal. • The home router is faulty.
2	• The EMMA certificate is abnormal. • The charger communication certificate is abnormal.

Suggestion

Cause ID = 1

1. Access the device monitoring menu on the app and locate the charger experiencing abnormal communication based on the device status indicator.
2. Check whether the charger is powered off. If it is powered off, the alarm will be automatically cleared after it is powered on. If the charger is powered on, check whether the cable or Wi-Fi connection to the home router is normal.

Cause ID = 2

Contact your vendor or technical support to apply for a new certificate file and load it.

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8 4008 BackupBox Communication Error

Alarm Attribute

Alarm ID	Alarm Name	Alarm Severity
4008	BackupBox Communication Error	Major

Possible Cause

Cause ID	Possible Cause
1	The cable connection between EMMA and the BackupBox is abnormal.

Suggestion

Check the communications cable between EMMA and the BackupBox. If the cable is loose or disconnected, securely connect it.

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9 4009 Management System Certificate Invalid

Alarm Attribute

Alarm ID	Alarm Name	Alarm Severity
4009	Management System Certificate Invalid	Minor

Possible Cause

Cause ID	Possible Cause
1	• The device time is incorrectly set. • The certificate file is abnormal or incorrect.

Suggestion

1. Check whether the device time is incorrectly set. If yes, reset or synchronize the system time.
2. Contact your vendor or technical support to apply for a new certificate file and load it.

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10 4010 Management System Certificate About to Expire

Alarm Attribute

Alarm ID	Alarm Name	Alarm Severity
4010	Management System Certificate About to Expire	Warning

Possible Cause

Cause ID	Possible Cause
1	• The device time is incorrectly set. • The certificate is about to expire.

Suggestion

1. Check whether the device time is incorrectly set. If yes, reset or synchronize the system time.
2. Contact your vendor or technical support to apply for a new certificate file and load it.

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11 4011 App Communication Certificate Invalid

Alarm Attribute

Alarm ID	Alarm Name	Alarm Severity
4011	App Communication Certificate Invalid	Minor

Possible Cause

Cause ID	Possible Cause
1	• The device time is incorrectly set. • The certificate file is abnormal or incorrect.

Suggestion

1. Check whether the device time is incorrectly set. If yes, reset or synchronize the system time.
2. Contact your vendor or technical support to apply for a new certificate file and load it.

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12 4012 App Communication Certificate Will Expire

Alarm Attribute

Alarm ID	Alarm Name	Alarm Severity
4012	App Communication Certificate Will Expire	Warning

Possible Cause

Cause ID	Possible Cause
1	• The device time is incorrectly set. • The certificate is about to expire.

Suggestion

1. Check whether the device time is incorrectly set. If yes, reset or synchronize the system time.
2. Contact your vendor or technical support to apply for a new certificate file and load it.

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13 4013 BackupBox Overload

Alarm Attribute

Alarm ID	Alarm Name	Alarm Severity
4013	BackupBox Overload	Major

Possible Cause

Cause ID	Possible Cause
1	The power of appliances is too high.

Suggestion

Check whether high-power appliances are started. If yes, shut them down.

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14 4014 On-/Off-Grid Switching Signal Abnormal

Alarm Attribute

Alarm ID	Alarm Name	Alarm Severity
4014	On-/Off-Grid Switching Signal Abnormal	Major

Possible Cause

Cause ID	Possible Cause
1	The cable connection between the BackupBox and inverter is abnormal.

Suggestion

1. Check the DO cable between the BackupBox and inverter. If the cable is loose or disconnected, securely connect it.
2. If the alarm is not automatically cleared after the cable connection fault is rectified, you need to manually clear the alarm on the app.

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15 4015 Smart Switch Communication Error

Alarm Attribute

Alarm ID	Alarm Name	Alarm Severity
4015	Smart Switch Communication Error	Major

Possible Cause

Cause ID	Possible Cause
1	The cable connection to the smart switch is abnormal.

Suggestion

1. Access the monitoring menu on the app and locate the smart switch experiencing abnormal communication based on the device status indicator.
2. Check whether the FE cable or Wi-Fi connection between the smart switch and router is normal.

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