



AX Portal Error Code / Message List

Original instructions

© Seiko Epson Corporation 2026

Rev.1
ENM265S8325M

Table of Contents

1. FOREWORD 3

1.1 FOREWORD 4

1.2 TRADEMARKS 4

1.3 TRADEMARK NOTATION IN THIS MANUAL 4

1.4 NOTICE 4

1.5 Manufacturer 4

1.6 CONTACT INFORMATION 4

2. Error Code List 5

2.1 Error Code / Message List 6

1. FOREWORD

1.1 FOREWORD

Thank you for purchasing our robot products.

This manual provides the information necessary for correctly using the robot system.

Before using the system, please read this manual and related manuals to ensure correct use.

After reading this manual, store it in an easily accessible location for future reference.

Epson conducts rigorous testing and inspection to ensure that the performance of our robot systems meets our standards. Please note that if the Epson robot system is used outside the operating conditions described in the manual, the product will not perform up to its basic performance.

This manual describes possible dangers and consequences that we can foresee. Be sure to comply with safety precautions on this manual to use our robot system safely and correctly.

1.2 TRADEMARKS

Microsoft, Windows, Windows logo, Visual Basic, and Visual C++ are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Other brand and product names are trademarks or registered trademarks of the respective holders.

1.3 TRADEMARK NOTATION IN THIS MANUAL

Microsoft® Windows® 10 operating system

Microsoft® Windows® 11 operating system

Throughout this manual, Windows 10 and Windows 11 refer to above respective operating systems. In some cases, Windows refers generically to Windows 10 and Windows 11.

1.4 NOTICE

No part of this manual may be copied or reproduced without authorization.

The contents of this manual are subject to change without notice.

Please notify us if you should find any errors in this manual or if you have any comments regarding its contents.

1.5 Manufacturer

SEIKO EPSON CORPORATION

1.6 CONTACT INFORMATION

For detailed contact information, see "Contact Information" of the manual below.

"AX6 / RC-A101 Safety Manual"

2. Error Code List

2.1 Error Code / Message List

KEY POINTS

In the error messages described in this manual, the portions enclosed in {{ }} represent variable fields. When an error occurs, these fields are automatically replaced with actual values, such as user names, file names, numeric values, or function names.

Example:

An account with name '{{ username }}' already exists.

In this example, the {{ username }} field is replaced with the name of the account that already exists.

Error Code	Message	Remedy
ADMIN_DB_001	Connection to database failed: {{ error }}	-
ADMIN_DB_002	Database initialization failed: {{ error }}	-
ADMIN_DB_003	Database connection handler was closed.	-
ADMIN_DB_004	Setting does not exist and cannot be written.	-
ADMIN_DB_005	Setting does not exist and cannot be written.	-
ADMIN_DB_006	Password must be properly hashed before saving.	Ensure that the password is processed through the designated hashing function before saving.
ADMIN_DB_007	It must be specified which account to read from.	Select the appropriate account.
ADMIN_DB_008	Cannot read from account, as it does not exist.	Select the appropriate account.
ADMIN_DB_009	There must always be exactly one service account.	-
ADMIN_DB_010	An account with name '{{ username }}' already exists. Account names must be unique.	Enter a different account name that is not currently used.
ADMIN_DB_011	An account with name '{{ username }}' already exists. Account names must be unique.	Enter a different account name that is not currently used.
ADMIN_DB_012	The attributes to modify need to be specified.	Specify the attribute or attributes you want to modify.
ADMIN_DB_013	The attributes '{{ attributes }}' of this '{{ user_level }}' account cannot be modified.	<ul style="list-style-type: none"> Adjust only the attributes that are permitted for the account type. Switch to an account with a different user level that has the required permissions to make changes.

Error Code	Message	Remedy
ADMIN_DB_014	The attributes '{{ attributes }}' of this '{{ user_level }}' account cannot be modified.	<ul style="list-style-type: none"> Adjust only the attributes that are permitted for the account type. Switch to an account with a different user level that has the required permissions to make changes.
ADMIN_DB_015	An account with name '{{ username }}' already exists. Account names must be unique.	Enter a different account name that is not currently used.
ADMIN_DB_016	The service account cannot be deleted.	-
AUTH_001	The login token is already used.	-
AUTH_002	The login token has expired.	-
AUTH_003	User level not sufficient to execute function '{{ function }}'.	<ul style="list-style-type: none"> Confirm the user level assigned to your account. Log in with an account that has the necessary privileges.
AUTH_004	No authentication data available.	-
AUTH_005	The function '{{ function }}' is not available on robots of type '{{ robot_type }}'.	Use an alternative function that is available for the installed robot model.
AUTH_006	The login token is not usable.	-
AUTH_007	No active tokens for this session.	-
AUTH_008	The login token is not usable.	-
AUTH_009	The login token is not usable.	-
AUTH_010	Invalid username or password.	<ul style="list-style-type: none"> Reenter the correct username and password. Contact your system administrator if you cannot log in after multiple attempts.
AUTH_011	Invalid username or password.	<ul style="list-style-type: none"> Reenter the correct username and password. Contact your system administrator if you cannot log in after multiple attempts.
AUTH_012	The user '{{ username }}' was deleted.	<ul style="list-style-type: none"> Log in using another existing account. If necessary, create a new user account with the required permissions.
AUTH_013	The service user could not be created.	-

Error Code	Message	Remedy
AUTH_014	The initial administrator already exists.	-
COMMAND_001	{{ error }}	-
COMMAND_002	{{ error }}	-
EXPORT_001	Cannot export, finalize update first.	<ul style="list-style-type: none"> ■ Complete the update before attempting to export. ■ Retry the export operation after the update is finalized.
EXPORT_002	Error while exporting logs and database.	Retry the export operation.
IMAGE_001	Unsupported type, please use images of one of the following types: {{ allowed_types }}	Select an image whose file type is indicated in the message.
IMAGE_002	The uploaded image is too small, please provide an image of at least {{ min_size }}x{{ min_size }} pixels.	Prepare an image with a resolution as indicated in the message.
IMAGE_003	The uploaded image is too big, please provide an image of at most {{ max_size }}x{{ max_size }} pixels.	Prepare an image with a resolution as indicated in the message.
IMAGE_004	Could not determine the image type.	<ul style="list-style-type: none"> ■ Verify that the file is a valid and uncorrupted image. ■ Confirm that the image has a proper file extension that matches its internal format.
REQUEST_001	The executor {{ name }} is still running.	-
REQUEST_002	{{ error }}	-
REQUEST_003	The request '{{ request }}' is unknown.	Retry the operation after correcting any invalid settings.
REQUEST_004	The request '{{ request }}' is unknown.	Retry the operation after correcting any invalid settings.
REQUEST_005	Invalid format of incoming message, not a JSON string.	Verify that the message is properly formatted as a JSON string.
REQUEST_006	{{ error }}	-
REQUEST_007	System functions not available.	-
REQUEST_008	Received a corrupted response.	-
REQUEST_009	Unsuccessful request response: {{ response }}	-
REQUEST_010	User '{{ username }}' could not be created.	Retry the operation after correcting any invalid settings.
REQUEST_011	User with ID {{ user_id }} could not be modified.	Retry the operation after correcting any invalid settings.

Error Code	Message	Remedy
REQUEST_012	The password could not be set for user with ID {{ user_id }}.	Retry the operation after correcting any invalid settings.
REQUEST_013	The password is invalid. Try again.	Retry the operation after correcting any invalid settings.
REQUEST_014	The password could not be set for user with ID {{ user_id }}.	Retry the operation after correcting any invalid settings.
REQUEST_015	User with ID {{ user_id }} could not be deleted.	Retry the operation after correcting any invalid settings.
REQUEST_016	The username is too short, must be at least {{ num }} characters long.	Correct all invalid settings as specified in the message.
REQUEST_017	An account with name '{{ username }}' already exists. Account names must be unique.	Enter a different account name that is not currently used.
REQUEST_018	The full name is too short, must be at least {{ num }} characters long.	Correct all invalid settings as specified in the message.
REQUEST_019	The password is too short, must be at least {{ num }} characters long.	Correct all invalid settings as specified in the message.
REQUEST_020	The argument '{{ argument }}' is missing for the '{{ action }}' action.	Specify the argument required for the action.
REQUEST_021	The usbhook command '{{ command }}' failed.	-
REQUEST_022	Failed to read update list from USB stick.	<ul style="list-style-type: none"> Confirm that the USB stick is properly inserted and recognized by the system. Verify that the required update list file exists on the USB stick and is stored in the correct directory.
REQUEST_023	Unknown exit code {{ exit_code }}.	-
REQUEST_024	This feature is not available due to an internal version mismatch. Choose another way to update the software.	<ul style="list-style-type: none"> Verify that all relevant software components are updated to compatible versions. Use an alternative method to perform the software update.
REQUEST_025	Please confirm the update, or power-cycle before re-executing an update.	Turn the power off and then on again before re-executing an update.
REQUEST_026	Power-cycle robot first before re-executing an update.	Turn the power off and then on again before re-executing an update.
REQUEST_027	An update is already running, cannot execute another one currently.	<ul style="list-style-type: none"> Wait for the current update process to complete. Retry the operation once the update has finished.

Error Code	Message	Remedy
REQUEST_028	Failed to remove file '{{ file_name }}' during clean-up.	-
REQUEST_029	{{ error }}	-
REQUEST_030	{{ error }}	-
REQUEST_031	{{ error }}	-
REQUEST_032	Invalid request group	-
SYSTEM_001	Failed to calculate checksum.	-
SYSTEM_002	Failed to read from file '{{ file_name }}'.	-
SYSTEM_003	Failed to read from file '{{ file_name }}'.	-
SYSTEM_004	Failed to write to file '{{ file_name }}'.	-
SYSTEM_005	Failed to write to file '{{ file_name }}'.	-
SYSTEM_006	Only dates after {{ min_date }} and before {{ max_date }} are supported.	Enter a date as indicated in the message.
SYSTEM_007	The uploaded certificate files cannot be validated, make sure to upload a matching pair of files.	Ensure that the uploaded certificate and key files form a valid matching pair.
SYSTEM_008	Timezone information in the SSL certificate cannot be read. The extracted time may be wrong.	Check whether the certificate includes complete and standard-compliant time and timezone data.
UPDATE_001	Robot type not defined, cannot update anything.	Specify the correct robot type before starting the update.
UPDATE_002	Failed to mount USB update stick.	Ensure that the USB stick is properly inserted into the USB port.
UPDATE_003	The update file was not found, skipping the update.	Verify that the update file exists in the correct location.
UPDATE_004	Bad update file format found.	Verify that the update file is correct.
UPDATE_005	USB device detected. Unplug it before running an update.	Remove all connected USB devices except the one containing the update data.
UPDATE_006	The update data folder was not found.	Verify that the update data folder exists on the storage device.
UPDATE_007	Multiple USB devices detected. Before running an update, unplug USB devices that do not contain the update.	Remove all connected USB devices except the one containing the update data.
UPDATE_008	The update failed unexpectedly. Check the logs for details.	Review the system logs to identify the specific cause of the failure.
UPDATE_009	Could not find the USB mount point.	Ensure that the USB stick is properly inserted into the USB port.

Error Code	Message	Remedy
UPDATE_010	An undefined usbhook service was called.	Verify that the usbhook service name is correct and supported by the system.
UPDATE_011	The update failed unexpectedly. Check the logs for details.	Review the system logs to identify the specific cause of the failure.
UPDATE_012	The RAUC update is not available.	-
UPDATE_013	The update flashing failed.	-
UPDATE_014	The keyring folder is missing.	Verify that the keyring folder exists in the expected directory.
UPDATE_015	Keys are missing in the keyring folder.	Verify that all required key files are present in the keyring folder.
UPDATE_016	The update file was not found, skipping the update.	Verify that the update file exists in the correct location.
UPDATE_017	Failed to extract the update signature.	Ensure that the update file includes a valid digital signature.
UPDATE_018	Failed to verify the update signature.	Retry the operation after correcting any invalid settings.
UPDATE_019	The update file is corrupted, skipping the update.	Verify that the update file is complete and has not been corrupted.
UPDATE_020	Loading the runner image failed, cannot start the update.	Verify that the runner image file exists in the correct location.
UPDATE_021	The update runner image is missing, cannot start the update.	Retry the operation after correcting any invalid settings.
UPDATE_022	Failed to install firmware.	-
UPDATE_023	Because the update failed, confirmation is blocked. Please power cycle and restart the update.	Retry the operation after correcting any invalid settings.
UPDATE_024	Other usbhook command is running.	Wait for the active usbhook command to complete.
ADDONS_001	The robot serial number is not defined. All licensed add-ons are disabled.	-
ADDONS_002	Could not initialize the license manager. All licensed add-ons are disabled.	-
BLOCK_001	Cannot add programming block.	-
BLOCK_002	Cannot modify programming block.	-
BLOCK_003	Cannot remove programming block.	-
BLOCK_004	Cannot retrieve data from programming block.	-
BLOCK_005	Cannot move programming block.	-
BLOCK_006	Cannot duplicate programming block.	-

Error Code	Message	Remedy
BLOCK_007	Invalid block structure found, cannot load it.	-
BLOCK_008	Block programming is disabled and needs to be manually unlocked first.	Disable the lock to allow block programming operations.
BLOCK_009	Coding is disabled and needs to be manually unlocked first.	Disable the lock to allow coding operations.
BRIDGE_001	The following error interrupted normal functionality. {{ error_type }}: {{ error }}	-
BRIDGE_002	The specified bridge '{{ bridge }}' does not exist. (Called action: '{{ action }}')	-
BRIDGE_003	The sent action '{{ action }}' does not exist for bridge '{{ bridge }}'.	-
BRIDGE_004	Call to function '{{ function }}' failed. It seems that you are not properly logged in. Please navigate back to the Admin Interface to log in.	Access the Admin Interface and log in using a valid account with sufficient privileges.
BRIDGE_005	A user of type '{{ user_level }}' is not authorized to execute the function '{{ function }}'. Make sure that you are properly logged in.	Access the Admin Interface and log in using a valid account with sufficient privileges.
BRIDGE_006	The argument '{{ name }}' is missing for the '{{ target_function }}' action.	Specify the argument required for the action.
BRIDGE_007	{{ response }}. Please log in again.	Access the Admin Interface and log in using a valid account with sufficient privileges.
BRIDGE_008	{{ response }}	-
BRIDGE_009	The action '{{ action }}' can only be called if the robot is powered down.	<ul style="list-style-type: none"> ■ Verify that robot power is off. ■ Retry the action after the robot is powered down.
BRIDGE_010	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.

Error Code	Message	Remedy
BRIDGE_011	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
BRIDGE_013	The action '{{ action }}' can only be called if the robot is powered down.	<ul style="list-style-type: none"> ■ Verify that robot power is off. ■ Retry the action after the robot is powered down.
BRIDGE_014	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
BRIDGE_015	A parallel/background application cannot be saved as a panel application.	Verify the application type in the project settings.
BRIDGE_016	The application can not be saved. Only one background application is allowed in a project.	<ul style="list-style-type: none"> ■ Confirm whether a background application already exists. If a background application is required, delete the existing background application before creating a new one. ■ Alternatively, change the application type to a non-background type if appropriate.
BRIDGE_017	The application you're trying to delete does not exist.	Confirm that the application has not been deleted or renamed by another user or process.

Error Code	Message	Remedy
BRIDGE_018	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
BRIDGE_019	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
BRIDGE_020	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
BRIDGE_021	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
BRIDGE_022	This path is not properly defined yet, please modify it such that it becomes valid.	Retry the operation after correcting any invalid settings as indicated in the message.

Error Code	Message	Remedy
BRIDGE_023	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
BRIDGE_024	Please specify a grid name before continuing to the next window.	Specify a grid name before continuing to the next window.
BRIDGE_025	This grid is not properly defined yet, please continue with the wizard before saving, or abort the wizard.	<ul style="list-style-type: none"> ■ Complete the wizard to finalize the grid configuration. ■ If the grid is not needed, abort the wizard to exit without saving.
BRIDGE_026	The action '{{ action }}' can only be called if the robot is powered down.	<ul style="list-style-type: none"> ■ Verify that robot power is off. ■ Retry the action after the robot is powered down.
BRIDGE_027	A new database can only be uploaded if the robot is powered down.	<ul style="list-style-type: none"> ■ Verify that robot power is off. ■ Upload the new database once power is off.
BRIDGE_028	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
BRIDGE_029	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.

Error Code	Message	Remedy
BRIDGE_030	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
BRIDGE_031	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
BRIDGE_032	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
BRIDGE_033	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.

Error Code	Message	Remedy
BRIDGE_034	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
BRIDGE_035	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
BRIDGE_036	Could not execute the action '{{ action }}'. The interface needs to have active control.	-
BRIDGE_037	Could not execute the action '{{ action }}'. The robot needs to be powered.	-
BRIDGE_038	Could not execute the action '{{ action }}'. The robot is in error state.	-
BRIDGE_039	Invalid format for multiturn axis data. Each entry must be a list containing a unique axis name and a numeric target position.	-
BRIDGE_040	Invalid format for position offset data. Must be a list of 6 floats and each must be within $-5.0 \leq x \leq 5.0$.	-
BRIDGE_041	Could not execute the action '{{ action }}'. The robot must not be powered.	-
COGNEX_001	The camera did not answer in time to a command.	<ul style="list-style-type: none"> ■ Verify that the camera is powered on and operating normally. ■ Check all communication cables and connectors for loose connections or damage. ■ Restart the camera and retry the operation.

Error Code	Message	Remedy
COGNEX_002	The connection to the camera has been lost.	<ul style="list-style-type: none"> ■ Verify that the camera is powered on and operating normally. ■ Check all communication cables and connectors for loose connections or damage. ■ Restart the camera and retry the operation.
COGNEX_003	Invalid user/password combination. Note that the default login uses the user 'admin' without password.	<ul style="list-style-type: none"> ■ Verify that the correct user name and password have been entered. ■ If using the default account, enter admin as the user name and leave the password field empty.
COGNEX_004	The camera has been disconnected.	<ul style="list-style-type: none"> ■ Verify that the camera is powered on and operating normally. ■ Check all communication cables and connectors for loose connections or damage. ■ Restart the camera and retry the operation.
COGNEX_005	Connecting to the camera took too long.	<ul style="list-style-type: none"> ■ Verify that the camera is powered on and operating normally. ■ Check all communication cables and connectors for loose connections or damage. ■ Restart the camera and retry the operation.
COGNEX_006	Timeout while establishing the connection to the camera.	<ul style="list-style-type: none"> ■ Verify that the camera is powered on and operating normally. ■ Check all communication cables and connectors for loose connections or damage. ■ Restart the camera and retry the operation.
COGNEX_007	Connecting to the camera took too long.	<ul style="list-style-type: none"> ■ Verify that the camera is powered on and operating normally. ■ Check all communication cables and connectors for loose connections or damage. ■ Restart the camera and retry the operation.

Error Code	Message	Remedy
COGNEX_008	Timeout while establishing the connection to the camera.	<ul style="list-style-type: none"> ■ Verify that the camera is powered on and operating normally. ■ Check all communication cables and connectors for loose connections or damage. ■ Restart the camera and retry the operation.
COGNEX_009	No camera found at the specified address.	<ul style="list-style-type: none"> ■ Verify that the camera is powered on and operating normally. ■ Check all communication cables and connectors for loose connections or damage. ■ Check that the specified address matches the camera's configured address. ■ Restart the camera and retry the operation.
COGNEX_010	Could not set offline.	-
COGNEX_011	Could not change job.	-
COGNEX_012	Could not set online.	-
COGNEX_013	No camera found at the specified address.	<ul style="list-style-type: none"> ■ Verify that the camera is powered on and operating normally. ■ Check all communication cables and connectors for loose connections or damage. ■ Check that the specified address matches the camera's configured address. ■ Restart the camera and retry the operation.
COGNEX_014	No FString could be found in this cell. Make sure that this function is only called for cells with Cognex FormatStrings.	Check the cell configuration and confirm that a FString has been defined.

Error Code	Message	Remedy
COGNEX_015	No camera found at the specified address.	<ul style="list-style-type: none"> ■ Verify that the camera is powered on and operating normally. ■ Check all communication cables and connectors for loose connections or damage. ■ Check that the specified address matches the camera's configured address. ■ Restart the camera and retry the operation.
COGNEX_016	No camera found at the specified address.	<ul style="list-style-type: none"> ■ Verify that the camera is powered on and operating normally. ■ Check all communication cables and connectors for loose connections or damage. ■ Check that the specified address matches the camera's configured address. ■ Restart the camera and retry the operation.
COGNEX_017	No camera found at the specified address.	<ul style="list-style-type: none"> ■ Verify that the camera is powered on and operating normally. ■ Check all communication cables and connectors for loose connections or damage. ■ Check that the specified address matches the camera's configured address. ■ Restart the camera and retry the operation.
COGNEX_018	The camera did not send a keyword string in time.	-
CONFIG_001	There is no config value for the key '{{ key }}'.	Verify that the key is spelled correctly in the program or configuration file.
CONFIG_002	There is no config value for the key '{{ key }}'. Maybe you meant one of the following keys? {{ alternatives }}	<ul style="list-style-type: none"> ■ Verify that the key is spelled correctly in the program or configuration file. ■ Review the suggested keys listed in the message and identify the correct one.
CONFIG_003	The parameter '{{ name }}' must be in range {{ range }} and cannot be set to value {{ value }}.	Correct all invalid settings as specified in the message.

Error Code	Message	Remedy
CONFIG_004	The motion parameter '{{ name }}' cannot be set to zero. It would prevent the robot from moving by default.	Check the value being assigned and ensure it is greater than zero.
CONFIG_005	The digital outputs for the picking behavior of this tool are not properly configured.	Verify that all required digital outputs for the picking behavior are assigned to valid output channels.
CONFIG_006	The outputs for the selected signal output mode must be unique. Resetting output signals for this tool.	Verify the output assignments for the selected signal output mode.
CONNECTION_001	Too many commands are being processed. The action '{{ action }}' could not be executed.	<ul style="list-style-type: none"> ■ Reduce the command rate in the application if necessary. ■ Retry the action after the command load has decreased.
CONNECTION_002	Only users with higher access levels than {{ user_level }} can be registered.	Adjust the intended user's access level as indicated in the message if appropriate.
CONNECTION_003	A user is already registered.	-
CONNECTION_004	No user is currently registered.	Register a new user with the required access level.
CONNECTION_005	This connection only accepts JSON strings as messages.	Verify that the message is properly formatted as a JSON string.
CONNECTION_006	This connection only accepts JSON strings as messages.	Verify that the message is properly formatted as a JSON string.
CONNECTION_007	The incoming JSON message needs to contain a dictionary.	Correct the message format so that it includes a valid dictionary.
CONNECTION_008	The incoming JSON message needs to contain an 'action' key.	Correct the message format so that it includes a valid 'action' key.
CONNECTION_009	The incoming JSON message needs to contain an 'action' key.	Correct the message format so that it includes a valid 'action' key.
CONNECTION_010	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.
CONNECTION_011	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.
CONNECTION_012	The 'sequence' key of the incoming JSON message needs to be a positive integer.	Check that the value assigned to sequence is a positive integer.
CONNECTION_013	The 'arguments' key of the incoming JSON message needs to contain a dictionary.	Check that the value assigned to arguments is a dictionary.
CONNECTION_014	The sent message has to be JSON-serializable.	Verify that the message consists only of JSON-serializable data types.

Error Code	Message	Remedy
CONNECTION_015	The transmission queue is full. This is most likely due to high processing load.	Wait until the current transmission queue has been processed and the load on the system has decreased.
CONTROLLER_002	Connection to the MCM could not be established. The MCM may not be running, or it may have crashed.	<ul style="list-style-type: none"> ■ Verify that the MCM is started. ■ If the MCM is not running, start or restart the MCM.
CONTROLLER_003	The MCM discovery loop initialization timed out.	<ul style="list-style-type: none"> ■ Verify that the MCM is started. ■ If the MCM is not running, start or restart the MCM.
CONTROLLER_004	The MCM discovery loop initialization failed: {{ answer }}	-
CONTROLLER_005	This function can only be called if the MCM is not yet connected.	<ul style="list-style-type: none"> ■ Verify the current MCM connection status. ■ Retry the function once the MCM is not connected.
CONTROLLER_006	This function can only be called if the MCM is not yet connected.	<ul style="list-style-type: none"> ■ Verify the current MCM connection status. ■ Retry the function once the MCM is not connected.
CONTROLLER_007	Could not request data from the MCM: {{ error }}	-
CONTROLLER_008	This function can only be called if the MCM is not yet connected.	<ul style="list-style-type: none"> ■ Verify the current MCM connection status. ■ Retry the function once the MCM is not connected.
CONTROLLER_009	Could not request data from the MCM: {{ error }}	-
CONTROLLER_010	This function can only be called if the MCM is not yet connected.	<ul style="list-style-type: none"> ■ Verify the current MCM connection status. ■ Retry the function once the MCM is not connected.
CONTROLLER_011	Could not request data from the MCM: {{ error }}	-
CONTROLLER_012	This function can only be called if the MCM is not yet connected.	<ul style="list-style-type: none"> ■ Verify the current MCM connection status. ■ Retry the function once the MCM is not connected.
CONTROLLER_013	The arguments '{{ parameter_name }}' and 'actuator_ids' need to have the same length.	Correct all invalid settings as specified in the message.
CONTROLLER_014	The property '{{ parameter_name }}' of joint {{ joint }} must be within range {{ range }}, but is {{ value }}.	Correct all invalid settings as specified in the message.

Error Code	Message	Remedy
CONTROLLER_015	The arguments '{{ parameter_name }}' and 'actuator_ids' need to have the same length.	Correct all invalid settings as specified in the message.
CONTROLLER_016	The property '{{ parameter_name }}' of joint {{ joint }} must be within range {{ range }}, but is {{ value }}.	Correct all invalid settings as specified in the message.
CONTROLLER_017	The calibration has failed. Please repeat the calibration process.	Retry the calibration operation.
CONTROLLER_018	The calibration has failed. Please repeat the calibration process.	Retry the calibration operation.
CONTROLLER_019	One of the actuators to move is not calibrated. Please calibrate the robot before executing movements.	Retry the operation after calibration.
CONTROLLER_021	This function can only be called if the MCM is properly connected.	<ul style="list-style-type: none"> ■ Verify the current MCM connection status. ■ Retry the function once the MCM is connected.
CONTROLLER_022	This function can only be called if the MCM is properly connected.	<ul style="list-style-type: none"> ■ Verify the current MCM connection status. ■ Retry the function once the MCM is connected.
CONTROLLER_023	Could not request data from the MCM: {{ error }}	-
CONTROLLER_024	The status '{{ status }}' is invalid. Possible options are: {{ available_status }}	-
CONTROLLER_025	The reset flag was not activating after sending a mode switch command, please power-cycle the robot.	Turn the power off and then on again before re-executing the operation.
CONTROLLER_026	Could not connect to motors. Expected motors: {{ expected_motors }}. Connected motors: {{ connected_motors }}.	Verify that all motors listed under 'Expected motors' are physically connected to the controller.
CONTROLLER_027	Parsing the MCM command failed: {{ error }}	-
CONTROLLER_028	{{ error }}	-
CONTROLLER_029	Original error message: {{ error }}	-
CONTROLLER_030	Original error message: {{ error }}	-
CONTROLLER_031	Received an MCM error with an empty error chain.	-
CONTROLLER_032	This function can only be called if the MCM is not yet connected.	-
CONTROLLER_033	Could not request data from the MCM: {{ error }}	-
CONTROLLER_034	This function can only be called if the MCM is not yet connected.	-
CONTROLLER_035	Could not request data from the MCM: {{ error }}	-

Error Code	Message	Remedy
CONTROLLER_036	This function can only be called if the MCM is not yet connected.	-
CONTROLLER_037	This function can only be called if the MCM is not yet connected.	-
CORE_002	This robot does not support the simulation mode.	Turn off the simulation mode and retry the operation.
CORE_003	The action '{{ action }}' can only be called if the robot is powered.	<ul style="list-style-type: none"> ■ Verify that robot power is off. ■ Retry the action once robot power is off.
CORE_004	An application with name '{{ name }}' does not exist.	<ul style="list-style-type: none"> ■ Check that the application name is spelled correctly, including case sensitivity. ■ Confirm that the application has not been deleted or renamed. ■ Retry the operation after ensuring the application exists.
CORE_005	No script selected. Please select the script you would like to execute.	<ul style="list-style-type: none"> ■ Select the script you intend to execute. ■ Confirm the selection and retry the execution command.
CORE_006	The function 'execute_script' does not allow to run a background application.	<ul style="list-style-type: none"> ■ Confirm that the selected application is not configured as a background application. ■ If a background application is required, start it using the designated method for background applications.
CORE_007	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
CORE_008	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.

Error Code	Message	Remedy
CORE_009	An application with name '{{ name }}' does not exist.	<ul style="list-style-type: none"> ■ Check that the application name is spelled correctly, including case sensitivity. ■ Confirm that the application has not been deleted or renamed. ■ Retry the operation after ensuring the application exists.
CORE_010	The function 'run_script' can only run main applications.	<ul style="list-style-type: none"> ■ Confirm that the selected application is configured as a main application. ■ Retry the operation with a valid main application selected.
CORE_011	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.
CORE_012	An application with name '{{ name }}' does not exist.	<ul style="list-style-type: none"> ■ Check that the application name is spelled correctly, including case sensitivity. ■ Confirm that the application has not been deleted or renamed. ■ Retry the operation after ensuring the application exists.
CORE_013	The function 'start_parallel_script' can only run parallel applications.	<ul style="list-style-type: none"> ■ Confirm that the selected application is configured as a parallel application. ■ Retry the operation with a valid parallel application selected.
CORE_014	A calibration application must calibrate all motors.	<ul style="list-style-type: none"> ■ Verify the list of motors included in the calibration application. ■ Execute the calibration again after ensuring all motors are part of the routine.
CORE_015	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.

Error Code	Message	Remedy
CORE_016	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
CORE_017	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
CORE_018	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
CORE_019	The function {{ function_name }} is only available if a tool is used.	Retry the function after confirming that a valid tool is in use.
CORE_020	The function {{ function_name }} requires an output signal to be defined for the active tool.	Retry the function after confirming the output signal is properly defined.
CORE_021	The function {{ function_name }} is only available if a tool is used.	Retry the function after confirming that a valid tool is in use.
CORE_022	The function {{ function_name }} requires an output signal to be defined for the active tool.	Retry the function after confirming the output signal is properly defined.
CORE_023	The function {{ function_name }} is only available if a P-Grip is used.	Retry the function after confirming that a valid P-Grip is in use.

Error Code	Message	Remedy
CORE_024	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
CORE_025	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
CORE_026	The action '{{ action }}' can only be called if the status is 'ready'.	<ul style="list-style-type: none"> ■ Verify that any preceding operations or initialization sequences required for 'ready' status have been completed. ■ Clear any active errors or warnings that may prevent the system from entering 'ready'. ■ Retry the action once the system status indicates 'ready'.
CORE_027	{{ error }}	-
CORE_028	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.
CORE_029	A shared variable with name '{{ name }}' is not defined.	<ul style="list-style-type: none"> ■ Check that the variable name is spelled correctly, including case sensitivity. ■ Confirm that the variable has not been removed or renamed. ■ Retry the operation after ensuring the variable exists.

Error Code	Message	Remedy
CORE_030	A shared variable with name '{{ name }}' is not defined.	<ul style="list-style-type: none"> ■ Check that the variable name is spelled correctly, including case sensitivity. ■ Confirm that the variable has not been removed or renamed. ■ Retry the operation after ensuring the variable exists.
CORE_031	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.
CORE_032	A global variable with name '{{ name }}' is not defined.	<ul style="list-style-type: none"> ■ Check that the variable name is spelled correctly, including case sensitivity. ■ Confirm that the variable has not been removed or renamed. ■ Retry the operation after ensuring the variable exists.
CORE_033	A global variable with name '{{ name }}' is not defined.	<ul style="list-style-type: none"> ■ Check that the variable name is spelled correctly, including case sensitivity. ■ Confirm that the variable has not been removed or renamed. ■ Retry the operation after ensuring the variable exists.
CORE_034	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.
CORE_035	The argument '{{ name }}' must be a valid file path. Allowed characters are: A-Z a-z 0-9 _ - /	Correct all invalid settings as specified in the message.
CORE_036	Invalid value for argument '{{ name }}'. Possible options are {{ options }}.	Retry the operation after correcting any invalid settings as indicated in the message.
CORE_039	The IP address needs to be a string.	Correct all invalid settings as specified in the message.
CORE_040	The port number needs to be an integer.	Correct all invalid settings as specified in the message.
CORE_041	The port needs to be between {{ port_min }} and {{ port_max }}.	Correct all invalid settings as specified in the message.
CORE_042	The end character needs to be a string.	Correct all invalid settings as specified in the message.
CORE_043	The port number needs to be an integer.	Correct all invalid settings as specified in the message.
CORE_044	The port needs to be between {{ port_min }} and {{ port_max }}.	Correct all invalid settings as specified in the message.

Error Code	Message	Remedy
CORE_045	The end character needs to be a string.	Correct all invalid settings as specified in the message.
CORE_046	The port number needs to be an integer.	Correct all invalid settings as specified in the message.
CORE_047	The port needs to be between {{ port_min }} and {{ port_max }}.	Correct all invalid settings as specified in the message.
CORE_048	The end character needs to be a string.	Correct all invalid settings as specified in the message.
CORE_049	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.
CORE_050	The sent message has to be JSON-serializable.	Verify that the message consists only of JSON-serializable data types.
CORE_051	Invalid 'channel' argument, it has to be an integer between 1 and {{ number_of_buttons }}.	Correct all invalid settings as specified in the message.
CORE_052	All buttons come with assigned functions, you cannot read these values.	-
CORE_053	Invalid 'channel' argument, you may only read the buttons without assigned functions, which are {{ keys }}.	-
CORE_054	Invalid value for argument '{{ name }}'. Possible options are {{ options }}.	Retry the operation after correcting any invalid settings as indicated in the message.
CORE_055	The function {{ function_name }} is only available if a P-Grip is used.	Retry the function after confirming that a valid P-Grip is in use.
CORE_056	The function {{ function_name }} is only available if a P-Grip is used.	Retry the function after confirming that a valid P-Grip is in use.
CORE_057	The admin-interface timed out on action '{{ action }}' of request '{{ request }}'.	-
CORE_058	The robot needs to be powering up or down, but the status is '{{ status }}' instead.	Retry the action once the system status indicates powering up or down.
CORE_059	Movement of Joint {{ joint }} is not allowed since the actuator is not calibrated.	Retry the operation after calibration.
CORE_060	The argument '{{ name }}' may not be an empty {{ container_type }}.	Retry the operation after correcting any invalid settings as indicated in the message.
CORE_061	Movement of Gripper is not allowed since the actuator is not calibrated.	Retry the operation after calibration.
CORE_062	Movement of Joint {{ joint }} is not allowed since the actuator is not calibrated.	Retry the operation after calibration.
CORE_063	The arguments '{{ parameter_name }}' and 'actuator_ids' need to have the same length.	Correct all invalid settings as specified in the message.

Error Code	Message	Remedy
CORE_064	The parameter '{{ parameter_name }}' needs to have the same elements as 'actuator_ids'.	Retry the operation after correcting any invalid settings as indicated in the message.
CORE_065	The type of argument '{{ argument_name }}' needs to be one of {{ argument_types }}.	Correct all invalid settings as specified in the message.
CORE_066	Every value of the {{ name }} parameter needs to be of type {{ value_type }}.	Correct all invalid settings as specified in the message.
CORE_067	The property '{{ parameter_name }}' of joint {{ joint }} must be within range {{ range }}, but is {{ value }}.	Correct all invalid settings as specified in the message.
CORE_068	Every value of the {{ name }} parameter needs to be a positive number.	Correct all invalid settings as specified in the message.
CORE_069	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.
CORE_070	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.
CORE_071	The position on the {{ axis }}-axis cannot coincide with the origin.	Adjust the position to a valid non-origin value.
CORE_072	The position on the {{ axis }}-axis cannot coincide with the origin.	Adjust the position to a valid non-origin value.
CORE_073	The x and y-axis must span an angle of 90deg, but the given positions span an angle of {{ angle }}deg instead.	Adjust the axis reference positions so that the angle between the x- and y-axis equals 90°.
CORE_074	This path contains an invalid pose. You may want to adapt the poses of this path.	Correct any invalid poses according to the robot's motion and workspace limits.
CORE_075	The configuration {{ configuration }} does not exist for this pose. Please choose one of the following configurations: {{ available_configurations }}	Select a valid configuration from the available list indicated in the message.
CORE_076	A pose with name '{{ name }}' does not exist.	<ul style="list-style-type: none"> ■ Check that the pose name is spelled correctly, including case sensitivity. ■ Confirm that the pose has not been removed or renamed. ■ Retry the operation after ensuring the pose exists.
CORE_077	The type of argument '{{ argument_name }}' needs to be one of {{ argument_types }}.	Correct all invalid settings as specified in the message.
CORE_078	The offset parameter needs to be a list with entries [x, y, z, frame], where x, y and z need to be numbers and frame is 'base' or 'tool'.	Correct all invalid settings as specified in the message.
CORE_079	The argument {{ name }} needs to be either int or float, or 'MAX'.	Correct all invalid settings as specified in the message.

Error Code	Message	Remedy
CORE_080	The argument {{ name }} needs to be either int or float, or 'MAX'.	Correct all invalid settings as specified in the message.
CORE_081	Cannot execute move command. The argument '{{ argument_name }}' must be greater than {{ value_min }}{{ unit }}, but a value of {{ value }}{{ unit }} was given.	Retry the operation after correcting any invalid settings as indicated in the message.
CORE_082	Cannot execute move command. The argument '{{ argument_name }}' must be greater than {{ value_min }}{{ unit }}, but a value of {{ value }}{{ unit }} was given.	Retry the operation after correcting any invalid settings as indicated in the message.
CORE_083	Cannot execute move command. The argument '{{ argument_name }}' must be greater than {{ value_min }}{{ unit }}, but a value of {{ value }}{{ unit }} was given.	Retry the operation after correcting any invalid settings as indicated in the message.
CORE_084	Cannot execute move command. The argument '{{ argument_name }}' must be greater than {{ value_min }}{{ unit }}, but a value of {{ value }}{{ unit }} was given.	Retry the operation after correcting any invalid settings as indicated in the message.
CORE_085	Cannot execute move command. The argument '{{ argument_name }}' must be greater than {{ value_min }}{{ unit }}, but a value of {{ value }}{{ unit }} was given.	Retry the operation after correcting any invalid settings as indicated in the message.
CORE_086	For each of the {{ joint_number }} robot joints a value for '{{ argument_name }}' must be provided.	Specify the argument as indicated in the message.
CORE_087	The argument '{{ argument_name }}' for joint {{ joint }} must be in the range {{ value_range }} {{ unit }}, but a value of {{ value }}{{ unit }} was given.	Correct all invalid settings as specified in the message.
CORE_088	The first waypoint must differ from the current robot pose.	Modify the first waypoint so that it differs from the current pose.
CORE_089	The 'poses' argument cannot contain two identical consecutive poses.	Modify or remove duplicate consecutive poses to ensure each pose is unique.
CORE_090	A path with name '{{ name }}' does not exist.	<ul style="list-style-type: none"> ■ Check that the path name is spelled correctly, including case sensitivity. ■ Confirm that the path has not been removed or renamed. ■ Retry the operation after ensuring the path exists.
CORE_091	The type of argument '{{ argument_name }}' needs to be one of {{ argument_types }}.	Correct all invalid settings as specified in the message.

Error Code	Message	Remedy
CORE_092	A grid with name '{{ name }}' does not exist.	<ul style="list-style-type: none"> Check that the grid name is spelled correctly, including case sensitivity. Confirm that the grid has not been removed or renamed. Retry the operation after ensuring the grid exists.
CORE_093	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.
CORE_094	The argument '{{ argument_name }}' must be a positive number.	Correct all invalid settings as specified in the message.
CORE_095	The argument '{{ argument_name }}' must be a positive number.	Correct all invalid settings as specified in the message.
CORE_096	An input must be assigned to the 'Reset Interrupt' function, as resetting an interrupt is only allowed by digital input.	-
CORE_097	Cannot execute the command '{{ command }}' while the robot is moving.	-
CORE_098	The hardware information could not be retrieved or written.	-
CORE_099	The environment variable {{ var }} is not set.	-
CORE_100	The hardware information could not be retrieved or written.	-
CORE_101	Failed to reset the controller hostname	-
CORE_102	The hardware information could not be retrieved or written.	-
DATABASE_001	{{ error_class }}: {{ error }}	-
DATABASE_002	Database version incompatibility detected. The latest migration file updates to version '{{ migration_version }}' instead of to the required database version '{{ required_version }}'.	-
DATABASE_003	Database version incompatibility detected. The currently loaded database version '{{ actual_version }}' does not match the required database version '{{ required_version }}'.	-
DATABASE_004	A column '{{ column }}' does not exist in table '{{ table_name }}'.	<ul style="list-style-type: none"> Check that the column name is spelled correctly, including case sensitivity. Retry the operation after ensuring the column exists.

Error Code	Message	Remedy
DATABASE_005	Failed to decode the JSON string '{{ json_string }}'.	Verify that the message is properly formatted as a JSON string.
DATABASE_006	The ID '{{ element_id }}' does not exist in '{{ table_name }}'.	<ul style="list-style-type: none"> ■ Check that the ID is spelled correctly, including case sensitivity. ■ Retry the operation after ensuring the ID exists.
DATABASE_007	All columns except 'id' must be defined in order to add an element.	Add any missing values to the element definition.
DATABASE_008	A column '{{ column }}' does not exist in table '{{ table_name }}'.	<ul style="list-style-type: none"> ■ Check that the column name is spelled correctly, including case sensitivity. ■ Retry the operation after ensuring the column exists.
DATABASE_009	SQL command failed: {{ sql_command }}	-
DATABASE_010	A column '{{ column }}' does not exist in table '{{ table_name }}'.	<ul style="list-style-type: none"> ■ Check that the column name is spelled correctly, including case sensitivity. ■ Retry the operation after ensuring the column exists.
DATABASE_011	The name '{{ element_name }}' already exists in '{{ table_name }}'.	Use a unique name that does not conflict with existing entries.
DATABASE_012	The following database columns are reserved: {{ columns }}	Remove or rename any user-defined columns that conflict with reserved names.
DATABASE_013	A column '{{ column }}' does not exist in table '{{ table_name }}'.	<ul style="list-style-type: none"> ■ Check that the column name is spelled correctly, including case sensitivity. ■ Retry the operation after ensuring the column exists.
DATABASE_014	The ID '{{ element_id }}' of table '{{ table_name }}' is not part of any project.	-
DATABASE_015	The default project cannot be deleted or overwritten.	-
DATABASE_016	The ID '{{ element_id }}' does not exist in '{{ table_name }}'.	<ul style="list-style-type: none"> ■ Check that the ID is spelled correctly, including case sensitivity. ■ Retry the operation after ensuring the ID exists.

Error Code	Message	Remedy
DATABASE_017	The ID '{{ element_id }}' does not exist in '{{ table_name }}'.	<ul style="list-style-type: none"> Check that the ID is spelled correctly, including case sensitivity. Retry the operation after ensuring the ID exists.
DATABASE_018	The ID '{{ element_id }}' does not exist in '{{ table_name }}'.	<ul style="list-style-type: none"> Check that the ID is spelled correctly, including case sensitivity. Retry the operation after ensuring the ID exists.
DATABASE_019	The name '{{ element_name }}' does not exist in '{{ table_name }}'.	<ul style="list-style-type: none"> Check that the name is spelled correctly, including case sensitivity. Retry the operation after ensuring the name exists.
DATABASE_020	A column '{{ column }}' does not exist in table '{{ table_name }}'.	<ul style="list-style-type: none"> Check that the column name is spelled correctly, including case sensitivity. Retry the operation after ensuring the column exists.
DATABASE_021	The uploaded file cannot be unpacked.	Check that the file is not corrupted and retry the operation.
DATABASE_022	A {{ element_string }} called {{ element_name }} already exists in this project.	Use a unique name that is not already used in the project.
DATABASE_023	Cannot write entry to global database: {{ entry }}. Make sure this entry is JSON serializable.	Verify that the message consists only of JSON-serializable data types.
DATABASE_024	Cannot load a table of the settings database. You are probably loading a newer database version on an older (incompatible) software version.	-
DATABASE_025	Database version incompatibility detected. The latest migration file updates to version '{{ migration_version }}' instead of to the required database version '{{ required_version }}'.	-
DATABASE_026	Database version incompatibility detected. The currently loaded database version '{{ actual_version }}' does not match the required database version '{{ required_version }}'.	-
DATABASE_027	Invalid value for '{{ parameter }}' in the migration file '{{ file_name }}'.	Correct all invalid settings as specified in the message.
DATABASE_028	Invalid value for '{{ parameter }}' in the migration file '{{ file_name }}'.	Correct all invalid settings as specified in the message.
DATABASE_029	Operation '{{ operation }}' failed during database migration: {{ error }}	-

Error Code	Message	Remedy
DATABASE_030	Operation '{{ operation }}' failed during database migration: {{ error }}	-
DATABASE_031	SQL command failed: {{ sql_command }}	-
DATABASE_032	Operation '{{ operation }}' failed during database migration: {{ error }}	-
DATABASE_033	Operation '{{ operation }}' failed during database migration: {{ error }}	-
DATABASE_034	Operation '{{ operation }}' failed during database migration: {{ error }}	-
DATABASE_035	Migration '{{ file_name }}' not available.	-
DATABASE_036	SQL command failed: {{ sql_command }}	-
DATABASE_037	SQL command failed: {{ sql_command }}	-
DATABASE_038	SQL command failed: {{ sql_command }}	-
DATABASE_039	The nested structure of the specified name is too deep.	Simplify the nested structure so that it conforms to the system's maximum supported depth.
DATABASE_040	The specified name is too long. You need to choose a shorter name.	Shorten the name so that it conforms to the allowable character limit.
DATABASE_041	The specified name contains invalid characters or a reserved name.	Modify the name so that it complies with naming rules and avoids reserved identifiers.
DATABASE_042	Please specify a name before performing this action.	Retry the action after specifying the name.
DIALOG_001	The dialog '{{ dialog_id }}' does not exist anymore.	-
DIALOG_002	The dialog of type '{{ dialog_type }}' expects an answer of type {{ expected_type }}, but got {{ answer_type }} instead.	Re-send the answer to the dialog after correcting the data type as specified in the message.
DIALOG_003	The dialog of type '{{ dialog_type }}' expects an answer of type {{ expected_type }}, but got {{ answer_type }} instead.	Re-send the answer to the dialog after correcting the data type as specified in the message.
DIALOG_004	The dialog of type '{{ dialog_type }}' expects an answer of type {{ expected_type }}, but got {{ answer_type }} instead.	Re-send the answer to the dialog after correcting the data type as specified in the message.
DIALOG_005	The dialog option '{{ option }}' does not exist. Available options are {{ available_options }}.	Select a valid option from the available list indicated in the message.
DIALOG_006	The dialog option '{{ option }}' does not exist. Available options are {{ available_options }}.	Select a valid option from the available list indicated in the message.
DIALOG_007	The dialog of type '{{ dialog_type }}' expects an answer of type {{ expected_type }}, but got {{ answer_type }} instead.	Re-send the answer to the dialog after correcting the data type as specified in the message.

Error Code	Message	Remedy
DIALOG_008	The dialog of type '{{ dialog_type }}' expects an answer of type {{ expected_type }}, but got {{ answer_type }} instead.	Re-send the answer to the dialog after correcting the data type as specified in the message.
DIALOG_009	The interrupt action '{{ interrupt_action }}' does not exist. Available actions are {{ available_interrupt_actions }}.	Select a valid action from the available list indicated in the message.
DISTRIBUTOR_001	The type of argument '{{ argument_name }}' needs to be one of {{ argument_types }}.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_002	The type of argument '{{ argument_name }}' needs to be one of {{ argument_types }}.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_003	The type of argument '{{ argument_name }}' needs to be one of {{ argument_types }}.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_004	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_005	The type of argument '{{ argument_name }}' needs to be one of {{ argument_types }}.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_006	The argument '{{ name }}' cannot be the name of a built-in API functions.	Rename the argument value to a valid user-defined name that does not match any reserved names.
DISTRIBUTOR_007	The argument '{{ name }}' may not be an empty {{ container_type }}.	Add one or more valid elements to the argument.
DISTRIBUTOR_008	The types of the arguments 'identifiers' and 'values' are incompatible.	Correct one or both arguments so that their types are compatible.
DISTRIBUTOR_009	The arguments 'identifiers' and 'values' must contain the same number of entries.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_010	The argument 'values' must contain entries of type '{{ value_type }}'.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_011	The types of the arguments 'identifiers' and 'values' are incompatible.	Correct one or both arguments so that their types are compatible.
DISTRIBUTOR_012	The arguments 'identifiers' and 'values' must contain the same number of entries.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_013	The keys of argument 'values' must match the set of 'identifiers'.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_014	The argument 'values' must contain entries of type '{{ value_type }}'.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_015	The argument 'range' must be a list of two entries, one needs to be a number, None is allowed.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_016	Invalid 'range' argument, values must not exceed [0.0, 20.0].	Correct all invalid settings as specified in the message.
DISTRIBUTOR_017	Invalid 'range' argument, specify values in increasing order.	Correct all invalid settings as specified in the message.

Error Code	Message	Remedy
DISTRIBUTOR_018	The actuator IDs must be of type str, int, list, or set.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_019	An actuator with ID {{ actuator_id }} does not exist.	Retry the operation after confirming that the actuator ID is valid and available.
DISTRIBUTOR_020	If 'actuator_ids' is a list, '{{ parameter_name }}' needs to be a list.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_021	The arguments '{{ parameter_name }}' and 'actuator_ids' need to have the same length.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_022	If 'actuator_ids' is a set, '{{ parameter_name }}' needs to be a dictionary.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_023	The parameter '{{ parameter_name }}' needs to have the same elements as 'actuator_ids'.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_024	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_025	The argument {{ name }} needs to be of size {{ size }}.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_026	Every element of the {{ name }} parameter needs to be of type {{ element_type }}.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_027	The argument '{{ name }}' cannot contain more than {{ size }} elements.	<ul style="list-style-type: none"> ■ Remove any excess elements from the argument. ■ Retry the operation after adjusting the argument to meet the size limit.
DISTRIBUTOR_028	Every key of the {{ name }} dict needs to be of type {{ key_type }}.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_029	Every value of the {{ name }} parameter needs to be of type {{ value_type }}.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_030	The argument '{{ name }}' must be a percentage greater than 0 and no more than 100.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_031	Only robot arm joints can be moved using this function.	-
DISTRIBUTOR_032	The 'frame' argument must take string values 'base' or 'tool'.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_033	The argument {{ name }} needs to be either int or float, or 'MAX'.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_034	The argument '{{ name }}' may not be an empty {{ container_type }}.	Add one or more valid elements to the argument.
DISTRIBUTOR_035	The argument '{{ name }}' may not be an empty {{ container_type }}.	Add one or more valid elements to the argument.

Error Code	Message	Remedy
DISTRIBUTOR_036	Invalid value for argument '{{ name }}'. Possible options are {{ options }}.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_037	The argument '{{ name }}' may not be an empty {{ container_type }}.	Add one or more valid elements to the argument.
DISTRIBUTOR_038	The directions must be -1 or +1.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_039	Only robot arm joints can be moved using this function.	-
DISTRIBUTOR_041	The payload cannot exceed the maximum allowed {{ max_payload }}kg.	Reduce the payload value to within the allowable limit as specified in the message.
DISTRIBUTOR_042	The payload cannot be lower than the tool mass, which is {{ tool_mass }}kg.	Adjust the payload value to exceed the tool mass as specified in the message.
DISTRIBUTOR_043	The minimum number of poses needs to be at least 2.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_044	The argument '{{ name }}' has size {{ size_actual }}, but size {{ size_expected }} is expected.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_045	Every element of the {{ name }} parameter needs to be of type {{ element_type }}.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_046	Can't read from unknown signal category '{{ category }}'.	-
DISTRIBUTOR_047	Can't read from unknown signal category '{{ category }}'.	-
DISTRIBUTOR_048	Can't read from unknown signal category '{{ category }}'.	-
DISTRIBUTOR_049	Workspace boundaries must be defined as a dictionary with 'direction' and 'constant' keys.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_050	The port needs to be between {{ port_min }} and {{ port_max }}.	Correct all invalid settings as specified in the message.
DISTRIBUTOR_051	The gripper current must be a value between 0 and {{ current_limit }}.	Correct all invalid settings as specified in the message.
EDITOR_001	The editor '{{ editor_id }}' does not exist anymore.	-
EDITOR_002	This pose cannot be reached by the robot (no kinematic solution).	Correct any invalid poses according to the robot's motion and workspace limits.
EDITOR_003	Make sure all grid points are properly defined (and not too close to each other).	Adjust the positions of any invalid or overlapping grid points so that no two grid points are positioned too close together.

Error Code	Message	Remedy
EDITOR_004	The grid size must be at least 2 in each dimension.	Correct all invalid settings as specified in the message.
EDITOR_005	Missing application code file: {{ file_name }}	-
EDITOR_006	Missing application code file: {{ file_name }}	-
EDITOR_007	The state variable container ID '{{ container_id }}' does not exist.	Retry the operation after confirming that the state variable is valid and available.
EDITOR_008	Invalid state variable index: {{ index }}	Correct the index so that it refers to an existing and defined state variable.
EDITOR_009	Invalid state variable container index: {{ index }}	Correct the index so that it refers to an existing and defined state variable container.
EDITOR_010	The state variable type '{{ variable_type }}' does not exist.	Retry the operation after confirming that the state variable type is valid and available.
EDITOR_011	Invalid state variable index: {{ index }}	Retry the operation after confirming that the state variable is valid and available.
EDITOR_012	Invalid state variable container index: {{ index }}	Correct the index so that it refers to an existing and defined state variable.
EDITOR_013	State variable containers do not support nested structure.	Redesign the state variable container to use a flat structure only.
EDITOR_014	Invalid state variable index: {{ index }}	Retry the operation after confirming that the state variable is valid and available.
EDITOR_015	Invalid state variable container index: {{ index }}	Correct the index so that it refers to an existing and defined state variable.
EDITOR_016	Invalid state variable index: {{ index }}	Retry the operation after confirming that the state variable is valid and available.
EDITOR_017	Invalid state variable index: {{ index }}	Retry the operation after confirming that the state variable is valid and available.
EDITOR_018	Invalid state variable container index: {{ index }}	Correct the index so that it refers to an existing and defined state variable.
EDITOR_019	Invalid state variable container index: {{ index }}	Correct the index so that it refers to an existing and defined state variable.
EDITOR_020	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.

Error Code	Message	Remedy
EDITOR_021	A state variable with name '{{ name }}' is not defined.	<ul style="list-style-type: none"> ■ Check that the variable name is spelled correctly, including case sensitivity. ■ Confirm that the variable has not been removed or renamed. ■ Retry the operation after ensuring the variable exists.
EDITOR_022	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.
EDITOR_023	A state variable with name '{{ name }}' is not defined.	<ul style="list-style-type: none"> ■ Check that the variable name is spelled correctly, including case sensitivity. ■ Confirm that the variable has not been removed or renamed. ■ Retry the operation after ensuring the variable exists.
EDITOR_024	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.
EDITOR_025	A state variable with name '{{ name }}' is not defined.	<ul style="list-style-type: none"> ■ Check that the variable name is spelled correctly, including case sensitivity. ■ Confirm that the variable has not been removed or renamed. ■ Retry the operation after ensuring the variable exists.
EDITOR_026	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.
EDITOR_027	A state variable with name '{{ name }}' is not defined.	<ul style="list-style-type: none"> ■ Check that the variable name is spelled correctly, including case sensitivity. ■ Confirm that the variable has not been removed or renamed. ■ Retry the operation after ensuring the variable exists.
EDITOR_028	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.

Error Code	Message	Remedy
EDITOR_029	A state variable with name '{{ name }}' is not defined.	<ul style="list-style-type: none"> Check that the variable name is spelled correctly, including case sensitivity. Confirm that the variable has not been removed or renamed. Retry the operation after ensuring the variable exists.
EDITOR_030	The values of all variables of this container need to be written.	Provide valid values for all variables in the container.
EDITOR_031	The configuration {{ configuration }} does not exist for this pose. Please choose one of the following configurations: {{ available_configurations }}	Select a valid configuration from the available list indicated in the message.
EDITOR_032	The 'button_up' command does not properly follow a 'button_down' command.	Verify the command sequence in the program or script.
EDITOR_033	This pose cannot be reached by the robot (no kinematic solution).	Correct any invalid poses according to the robot's motion and workspace limits.
EVENT_001	The function signature of the delegate to add to this event is {{ actual_signature }}, but it is expected to be {{ expected_signature }}.	-
EVENT_002	The function signature of the delegate to add to this event is {{ actual_signature }}, but it is expected to be {{ expected_signature }}.	-
EVENT_003	Too many threads are being executed by this event. This is most likely due to high processing load.	-
KINEMATICS_001	The argument '{{ name }}' has size {{ size_actual }}, but size {{ size_expected }} is expected.	-
KINEMATICS_002	Every value of the {{ name }} parameter needs to be a number.	Correct all invalid settings as specified in the message.
KINEMATICS_003	Every value of the {{ name }} parameter needs to be a number.	Correct all invalid settings as specified in the message.
KINEMATICS_004	The dictionary {{ name }} needs to contain the keys {{ keys }}.	Correct all invalid settings as specified in the message.
KINEMATICS_005	The type of argument '{{ argument_name }}' needs to be one of {{ argument_types }}.	Correct all invalid settings as specified in the message.
KINEMATICS_006	The coordinates contain an invalid orientation {{ orientation }}. The limits for roll, pitch and yaw are $\pm 180^\circ$, $\pm 90^\circ$ and $\pm 180^\circ$ respectively.	Correct all invalid settings as specified in the message.
KINEMATICS_007	Coordinate frames can only be multiplied with other coordinate frames.	Correct all invalid settings as specified in the message.

Error Code	Message	Remedy
KINEMATICS_008	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.
KINEMATICS_009	The configuration {{ configuration }} does not exist for this pose. Please choose one of the following configurations: {{ available_configurations }}	Select a valid configuration from the available list indicated in the message.
KINEMATICS_010	The configuration index {{ index }} does not exist for this pose. Please choose one of the following indices: {{ available_indices }}	Select a valid configuration from the available list indicated in the message.
KINEMATICS_011	The argument '{{ argument_name }}' must be a positive number.	Correct all invalid settings as specified in the message.
KINEMATICS_012	The argument '{{ argument_name }}' must be a positive number.	Correct all invalid settings as specified in the message.
KINEMATICS_013	The argument '{{ argument_name }}' must be a positive number.	Correct all invalid settings as specified in the message.
KINEMATICS_014	{{ error }}	-
MODBUS_001	The address for user registers must be between 0x10 and 0xFF.	Correct all invalid settings as specified in the message.
MODBUS_002	The address for user registers must be between 0x10 and 0xFF.	Correct all invalid settings as specified in the message.
MODBUS_003	The action '{{ action }}' requires the argument '{{ argument }}' to be given in the input register.	Correct all invalid settings as specified in the message.
MODBUS_004	The action '{{ action }}' requires the argument '{{ argument }}' to be given in the input register.	Correct all invalid settings as specified in the message.
MODBUS_005	The action '{{ action }}' requires the argument '{{ argument }}' to be given in the input register.	Correct all invalid settings as specified in the message.
MODBUS_006	The action '{{ action }}' requires the argument '{{ argument }}' to be given in the input register.	Correct all invalid settings as specified in the message.
REST_001	The argument '{{ argument_name }}' needs to be one of {{ options }}.	Correct all invalid settings as specified in the message.
REST_002	The argument '{{ argument_name }}' needs to be one of {{ options }}.	Correct all invalid settings as specified in the message.
ROS_001	Executing the action took too long.	-
ROS_002	There is no ROS connection requests with sequence {{ sequence }}.	-
ROS_003	There is no ROS connection requests with sequence {{ sequence }}.	-
ROS_007	Cyclone DDS config file not found at '{{ file_path }}'.	Verify that the Cyclone DDS config file exists.
ROS_008	Error parsing XML file '{{ file_path }}': {{ error }}	-

Error Code	Message	Remedy
ROS_009	<Domain> element not found in Cyclone DDS config.	Verify that the configuration file includes a <Domain> element.
ROS_010	<General> element not found under <Domain>.	Verify that the <Domain> includes a <General> element.
ROS_011	<Discovery> element not found under <Domain>.	Verify that the <Domain> includes a <Discovery> element.
ROS_012	The provided list contained only invalid or empty IP addresses.	<ul style="list-style-type: none"> Remove any invalid or blank entries from the list. Add at least one valid IP address to the list.
ROS_013	Backup Cyclone DDS config file not found at '{{ file_path }}'.	Check that the backup Cyclone DDS config file exists at the specified location.
ROS_014	An unexpected error occurred while copying backup config: {{ error }}	-
ROS_015	The type of argument '{{ argument_name }}' needs to be one of {{ argument_types }}.	Correct all invalid settings as specified in the message.
ROS_016	The type of argument '{{ argument_name }}' needs to be one of {{ argument_types }}.	Correct all invalid settings as specified in the message.
ROS_017	The type of argument '{{ argument_name }}' needs to be one of {{ argument_types }}.	Correct all invalid settings as specified in the message.
ROS_018	No wireless network interface found on the system.	-
ROS_019	No wireless network interface found on the system.	-
SAFETY_001	The safety parameter '{{ parameter_name }}' cannot be read.	-
SAFETY_002	The safety parameter '{{ parameter_name }}' cannot be written.	-
SAFETY_003	SafetySettingsError: {{ error }}	-
SAFETY_004	SafetySettingsError: {{ error }}	-
SAFETY_005	The default safety PMT file was not found. The safety editor cannot be used.	Verify that the default safety PMT file exists.
SAFETY_006	Initializing the dbus interface failed: {{ error }}	-
SAFETY_007	Invalid safety settings file. Cannot import values.	Verify that the selected safety settings file is the correct and not corrupted.
SAFETY_008	The safety configuration has not been verified. Your safety officer needs to resolve this by verifying changes in the safety settings.	Have a designated safety officer verify and approve the changes in the safety settings.

Error Code	Message	Remedy
SAFETY_009	The safety device must be locked. Your safety officer needs to resolve this by verifying changes in the safety settings.	Have a designated safety officer verify and approve the changes in the safety settings.
SAFETY_010	There is a mismatch in the safety configuration. Your safety officer needs to resolve this by verifying changes in the safety settings. The device TOC is {{ device_checksum }} instead of {{ local_checksum }}.	Have a designated safety officer verify and approve the changes in the safety settings.
SAFETY_011	Fatal code {{ code }} raised on safety device. The safety officer needs to check the device and resolve the error.	-
SAFETY_012	Alarm code {{ code }} raised on safety device. The safety officer needs to check the device and resolve the error.	-
SAFETY_013	The safety device is in state '{{ state }}'. The safety officer needs to check the device and resolve the error.	-
SAFETY_014	An interrupt is only allowed to be reset using digital input functions. It's configured as such in the safety settings.	-
SAFETY_015	Operators are not allowed to switch the operation mode.	-
SAFETY_016	The safety officer is currently blocking the safety device. Please wait until the safety officer finished editing or verifying the settings.	-
SAFETY_017	The loaded safety parameters do not match the ones on the safety device. Your safety officer needs to edit and apply the safety parameters.	-
SCRIPT_001	Recursive import in file '{{ file_name }}' detected. Please resolve before executing the file.	Follow the instructions provided in the message to resolve the issue.
SCRIPT_002	Could not import '{{ node_name }}' from file '{{ file_name }}': {{ error }}	-
SCRIPT_003	Could not import '{{ node_name }}' from file '{{ file_name }}': {{ error }}	-
SCRIPT_004	Cannot import '{{ function_names }}' from application '{{ file_name }}'. Please make sure these entities exist.	Follow the instructions provided in the message to resolve the issue.
SCRIPT_005	While trying to import the class {{ node_name }}, the base class could not be found. Please import all the classes which {{ node_name }} inherits from. Base classes have to be imported first.	Follow the instructions provided in the message to resolve the issue.
SCRIPT_006	The import of the Python module '{{ module_name }}' is prohibited for user applications. Triggered by application '{{ application }}'.	-

Error Code	Message	Remedy
SCRIPT_007	The statement 'from module import *' is not allowed for standard Python modules. Please use the generic import of the module ('import module') instead.	Follow the instructions provided in the message to resolve the issue.
SCRIPT_008	Relative imports are not allowed in user applications. Triggered by application '{{ application }}' on line {{ line }}.	-
SCRIPT_009	Could not find application '{{ application }}' to import from.	Verify that the application to import exists.
SCRIPT_010	The import of the Python module '{{ module_name }}' is prohibited for user applications. Triggered by application '{{ application }}'.	-
SCRIPT_011	The name '{{ node_name }}' is prohibited for user applications. Triggered by application '{{ application }}' on line {{ line }}.	-
SCRIPT_012	The function name '{{ node_name }}' is prohibited for user applications. Triggered by application '{{ application }}' on line {{ line }}.	-
SCRIPT_013	The imported function '{{ function_name }}' is not allowed in application '{{ application }}' of type '{{ application_type }}'.	-
SCRIPT_014	The imported function '{{ function_name }}' is not allowed in application '{{ application }}' of type '{{ application_type }}'.	-
SCRIPT_015	The class name '{{ node_name }}' is prohibited for user applications. Triggered by application '{{ application }}' on line {{ line }}.	-
SCRIPT_016	The class attribute '{{ node_name }}' is prohibited for user applications. Triggered by application '{{ application }}' on line {{ line }}.	-
SCRIPT_017	The class name '{{ node_name }}' is prohibited for user applications. Triggered by application '{{ application }}' on line {{ line }}.	-
SCRIPT_018	The function name '{{ node_name }}' is prohibited for user applications. Triggered by application '{{ application }}' on line {{ line }}.	-
SCRIPT_019	The string argument '{{ string }}' is prohibited for user applications. Triggered by application '{{ application }}' on line {{ line }}.	-
SCRIPT_020	The generic except statement (try: ... except: ...) is not allowed as it could lead to harmful behavior of the robot.	-

Error Code	Message	Remedy
SCRIPT_021	Catching generic exceptions (Exception, BaseException) is not allowed as it could lead to harmful behavior of the robot.	-
SCRIPT_022	Catching generic exceptions (Exception, BaseException) is not allowed as it could lead to harmful behavior of the robot.	-
SCRIPT_023	Overwriting an attribute of the imported module {{ target }} is prohibited. Triggered by application '{{ application }}' on line {{ line }}.	-
SCRIPT_024	Overwriting an attribute of the internal function register {{ target }} is prohibited. Triggered by application '{{ application }}' on line {{ line }}.	-
SCRIPT_025	Overwriting the internal class {{ target }} is prohibited. Triggered by application '{{ application }}' on line {{ line }}.	-
SCRIPT_026	Overwriting the predefined function {{ target }} is prohibited. Triggered by application '{{ application }}' on line {{ line }}.	-
SCRIPT_027	Overwriting the imported entity {{ target }} is prohibited. Triggered by application '{{ application }}' on line {{ line }}.	-
SCRIPT_028	The application '{{ application }}' has been marked as not yet executable, it may be still under ongoing development.	-
SCRIPT_030	{{ error_class }} in imported application: {{ error }}	-
SCRIPT_031	{{ error_class }} in application '{{ application }}' on line {{ line }}: {{ error }}	-
SCRIPT_032	{{ error_class }} in imported object from application '{{ application }}' on line {{ line }}: {{ error }}	-
SCRIPT_033	{{ error_class }} in application '{{ application }}' on line {{ line }}: {{ error }}	-
SCRIPT_034	The type of argument '{{ argument_name }}' needs to be one of {{ argument_types }}.	Correct all invalid settings as specified in the message.
SCRIPT_035	The type of argument '{{ argument_name }}' needs to be '{{ argument_type }}'.	Correct all invalid settings as specified in the message.
SCRIPT_036	The address to be sent needs to be a tuple (ip_address, port).	Correct all invalid settings as specified in the message.
SCRIPT_037	The IP address needs to be a string.	Correct all invalid settings as specified in the message.
SCRIPT_038	The port number needs to be an integer.	Correct all invalid settings as specified in the message.

Error Code	Message	Remedy
SCRIPT_039	The import of the Python module '{{ module_name }}' is prohibited for user applications. Triggered by application '{{ application }}'.	-
SCRIPT_040	The function name '{{ function_name }}' is prohibited for applications of type '{{ application_type }}'. Triggered by application '{{ application }}'.	-
SCRIPT_041	The name '{{ name }}' is prohibited for applications of type '{{ application_type }}'. Triggered by application '{{ application }}'.	-
SETTINGS_001	The interrupt behavior '{{ interrupt_behavior }}' is invalid. Possible options are: {{ available_interrupt_behaviors }}	Select a behavior from the available list indicated in the message.
SIGNAL_001	The digital outputs for the picking behavior of this tool are not properly configured.	-
SIGNAL_002	The digital outputs for the picking behavior of this tool are not unique.	-
SIGNAL_003	This category does not contain any I/Os to read from.	-
SIGNAL_004	Invalid index ({{ index_or_name }}), the index must be between 1 and {{ length }}.	Correct all invalid settings as specified in the message.
SIGNAL_005	Invalid name, '{{ index_or_name }}' is not a valid I/O name.	-
SIGNAL_006	Custom I/O names must be unique.	Enter a different I/O name that is not currently used.
SIGNAL_007	This robot does not come with signals of the category '{{ category }}'. This function therefore cannot be used.	-
SIGNAL_008	Only the value of outputs can be written, inputs are read-only.	<ul style="list-style-type: none"> ■ Use the input signal only for reading its current state. ■ If a writable signal is required, select or configure an appropriate output signal instead.
SIGNAL_009	Invalid value, only bools or 0/1 value can be written to digital outputs.	Correct all invalid settings as specified in the message.
SIGNAL_010	Invalid value, only numeric values can be written to analog outputs.	Correct all invalid settings as specified in the message.
SIGNAL_011	Invalid analog output value, must be in the range [{{ value_min }}, {{ value_max }}].	Correct all invalid settings as specified in the message.
SIGNAL_012	Custom I/O names must be unique.	Enter a different I/O name that is not currently used.
SIGNAL_013	Unknown setting '{{ name }}'.	-

Error Code	Message	Remedy
SIGNAL_014	Invalid start address: {{ value }}. Must be a positive number.	Correct all invalid settings as specified in the message.
SIGNAL_015	Data unpacking failed: {{ error }}. You probably try to access invalid Modbus addresses.	Check that all specified Modbus register addresses are valid.
SIGNAL_016	{{ error_class }}: {{ error }}	-
SIGNAL_017	Could not connect to Modbus device at IP address {{ ip }}	-
SIGNAL_018	Modbus not connected, cannot read or write data.	<ul style="list-style-type: none"> Check the physical connection between the controller and the Modbus device. Confirm that the Modbus communication settings are correctly configured.
SIGNAL_019	Modbus already connected, cannot change its settings.	Stop any tasks that are using Modbus communication to change the settings.
SIGNAL_020	Modbus function call failed (Exception Code: {{ exception_code }}	-
SOCKET_001	The connection closed while trying to receive a message.	-
SOCKET_002	The address '{{ address }}' of the server is already in use.	<ul style="list-style-type: none"> Check whether another application or service is currently using this address. Change the server configuration to use a different, unused address.
SOCKET_003	The address '{{ address }}' is incompatible with the network setup.	-
SOCKET_004	Connection refused. The server cannot handle more than {{ max_connections }} connections.	Retry the connection after the number of active connections has decreased.
SOCKET_005	The client was closed while it was waiting for a connection.	-
SOCKET_006	Could not establish a connection with {{ address }}.	-
SOCKET_007	A message could not be decoded with the '{{ encoding_standard }}' decoding standard.	-
SOCKET_008	The address '{{ address }}' is incompatible with the network setup.	-
STATUS_001	Waiting for the running process to terminate took too long. If the status does not automatically change to 'ready', please restart the robot.	Follow the instructions provided in the message to resolve the issue.
STATUS_002	The status '{{ status }}' is invalid. Possible options are: {{ available_status }}	Correct all invalid settings as specified in the message.

Error Code	Message	Remedy
STATUS_003	The status kind '{{ status_kind }}' cannot be reserved. Reservable states are: {{ reservable_status }}	Correct all invalid settings as specified in the message.
STATUS_004	The status kind '{{ status_kind }}' requires the control status of the low level controller to be '{{ expected_controller_status }}' but it is '{{ actual_controller_status }}'.	Correct all invalid settings as specified in the message.
STATUS_005	Another running thread owns the status. The reserved status is '{{ reserved_status }}'.	<ul style="list-style-type: none"> ■ If possible, wait until the running thread completes and releases the status. ■ Alternatively, stop or terminate the conflicting thread according to the standard procedure. ■ Retry the operation after the status is no longer reserved.
STATUS_006	The status '{{ status }}' is invalid. Possible options are: {{ available_status }}	Correct all invalid settings as specified in the message.
STATUS_007	Undefined reaction to the interrupt behavior '{{ interrupt_behavior }}'.	Replace the reaction to the interrupt behavior with a valid and supported behavior.
TCP_001	Missing argument in function call: '{{ action }} <{{ argument }}>'	Correct all invalid settings as specified in the message.
TCP_002	Missing argument in function call: '{{ action }} <{{ argument }}>'	Correct all invalid settings as specified in the message.
TCP_003	Missing argument in function call: '{{ action }} <{{ argument }}>'	Correct all invalid settings as specified in the message.
TCP_004	Missing argument in function call: '{{ action }} <{{ argument_1 }}> <{{ argument_2 }}>'	Correct all invalid settings as specified in the message.
TCP_005	Missing argument in function call: '{{ action }} <{{ argument }}>'	Correct all invalid settings as specified in the message.
TCP_006	Missing argument in function call: '{{ action }} <{{ argument }}>'	Correct all invalid settings as specified in the message.
TCP_007	The argument '{{ argument }}' must be JSON decodable.	<ul style="list-style-type: none"> ■ Check for JSON syntax errors. ■ Remove any unsupported data types or non-JSON content.
THREAD_001	The following error interrupted normal functionality. {{ error_type }}: {{ error }}	-
THREAD_002	The following error interrupted normal functionality. {{ error_type }}: {{ error }}	-
AX_1001	Slave with ID '{{ 0 }}', name '{{ 1 }}': Recovery timed out.	-

Error Code	Message	Remedy
AX_1002	Hardware parameter setup: Slave with ID '{{ 0 }}' has unknown name: '{{ 1 }}'	Correct the slave name to a valid slave name.
AX_1003	EtherCAT slave setup is incorrect. Expected exactly one slave with name '{{ 0 }}', but found: {{ 1 }}	Correct all invalid settings as specified in the message.
AX_101	Could not recover AX robot.	-
AX_102	Could not recover robot from a SS1 violation.	-
AX_103	Could not recover robot from a SS2 violation.	-
AX_104	Could not recover robot due to active protective stop.	-
AX_2001	Could not verify validity of the safety PLC PDO reading	-
AX_2011	Unsupported safety PLC protocol version '{{ 0 }}' (expected one of: {{ 1 }}). Please make sure the correct configuration is uploaded to the safety PLC.	Follow the instructions provided in the message to resolve the issue.
AX_251	Temperature check failed on axis {{ 0 }}. Temperature was {{ 1 }} degC, which is higher than the threshold {{ 2 }} degC. Please let the robot cool down.	Follow the instructions provided in the message to resolve the issue.
AX_2901	Motor Error Codes: {{ 0 }}	-
AX_2902	A violation on the safety signal of the HGC button was detected. Please power cycle the robot to recover.	-
AX_2903	Position discrepancy limit was violated on axis '{{ 0 }}'. Please power cycle the robot to recover.	-
AX_2904	Current discrepancy limit was violated on axis '{{ 0 }}'. Please power cycle the robot to recover.	-
AX_2905	I2T protection of axis '{{ 0 }}' is active. Please let the robot cool down.	-
AX_2906	Measured temperature of axis '{{ 0 }}' is too high. Please let the robot cool down.	-
AX_3001	Could not verify validity of the motor controller PDO reading	-
AX_3002	Could not verify validity of the output encoder PDO reading. Please move robot slightly and try to power up again.	Follow the instructions provided in the message to resolve the issue.
AX_3801	Could not verify validity of the IMU PDO reading.	-

Error Code	Message	Remedy
AX_3802	Could not power up robot: The provided gravity vector {{ 0 }} [base frame] / {{ 1 }} [IMU frame] differs from the gravity measured by the IMU: {{ 2 }} [IMU frame]. The difference of {{ 3 }} is higher than the tolerance of {{ 4 }}.	Follow the instructions provided in the message to resolve the issue.
AX_3901	Axis {{ 0 }}: Magnitude of position offset must be <= 5 degrees (actual: {{ 1 }}). Please adjust robot and config accordingly.	Follow the instructions provided in the message to resolve the issue.
AX_59001	Operation not supported in simulation mode: {{ 0 }}	Retry the operation after exiting simulation mode.
AX_59002	Simulated error: '{{ 0 }}'	-
AX_59003	EtherCAT state mismatch in AX simulator.	-
CFG_101	Failed to set up axis '{{ 0 }}'.	-
CFG_102	Failed to set up joint '{{ 0 }}'.	-
CFG_103	Failed to set up link '{{ 0 }}'.	-
CFG_104	Failed to set up custom capsule.	-
CFG_105	Definition for '{{ 0 }}' must be x, y, z.	Correct all invalid settings as specified in the message.
CFG_106	Value of '{{ 1 }}' ({{ 0 }}) is invalid.	Correct all invalid settings as specified in the message.
CFG_11	Missing value '{{ 0 }}' in section '{{ 1 }}'; robot voltage: {{ 2 }}, hardware version: {{ 3 }}.	Correct all invalid settings as specified in the message.
CFG_12	Could not find gripper link with name '{{ 0 }}'. Please check your agrip.config or pgrip2.config file.	Follow the instructions provided in the message to resolve the issue.
CFG_1301	Definition for '{{ 0 }}' must be x1, y1, z1, x2, y2, z2, radius.	Correct all invalid settings as specified in the message.
CFG_1311	Attempt to define check_intersect with self.	-
CFG_1312	Attempt to define check_intersect with unknown link '{{ 0 }}'.	-
CFG_1313	Links referenced in check_intersect must be previously defined, but link '{{ 0 }}' comes later in config.	Follow the instructions provided in the message to resolve the issue.
CFG_1511	Calibrated translation {{ 0 }} is too far from nominal value {{ 1 }}; allowed tolerance (norm): {{ 2 }}.	Correct all invalid settings as specified in the message.
CFG_1512	Calibrated rotation {{ 0 }} is too far from nominal value {{ 1 }}; allowed tolerance (angular distance): {{ 2 }}.	Correct all invalid settings as specified in the message.
CFG_201	Position safety margin is too high (value: {{ 0 }}).	Correct all invalid settings as specified in the message.

Error Code	Message	Remedy
CFG_51	Wrong robot arm type '{{ 0 }}'.	-
CFG_52	Unknown joint kind '{{ 0 }}'.	-
CFG_53	Unknown axis name '{{ 0 }}'.	-
CFG_54	Unknown link name '{{ 0 }}'.	-
CFG_55	Invalid joint kind for this operation: '{{ 0 }}'.	-
CKM_1001	The unit rotation axis must contain three elements.	Correct all invalid settings as specified in the message.
CKM_1002	Only the restraint kind 'Free' is valid without additional arguments.	-
CKM_101	Target out of range.	-
CKM_102	Target out of range: Could not determine {{ 0 }} angle, target pose: {{ 1 }}	-
CKM_103	Target out of range: Joint 1/2/3 angles are: {{ 0 }} {{ 1 }} {{ 2 }} ; pose at J7: {{ 3 }}	-
CKM_104	Target out of range: All {{ 0 }} solution(s) are violating joint limits.	-
CKM_11	Could not build kinematic chain: No links defined.	Add the missing link definitions as required.
CKM_12	Could not build kinematic chain: Some joints have no link.	Add the missing link definitions as required.
CKM_13	Not enough link configs: {{ 0 }} joint config(s), {{ 1 }} link config(s)	-
CKM_1501	Unknown Restraint kind '{{ 0 }}' for numerical inverse kinematics.	-
CKM_1502	A non-zero rotation axis is required for the free rotation axis restraint.	Correct all invalid settings as specified in the message.
CKM_1503	Maximum random previous angles must be smaller than: {{ 0 }}	Correct all invalid settings as specified in the message.
CKM_1504	No numerical solution found. Increase either tolerance or maximum iterations.	Correct all invalid settings as specified in the message.
CKM_1505	No numerical solution found. Either the target pose is not reachable or the algorithm did not converge.	-
CKM_2511	Could not add rotor inertia for: '{{ 0 }}', parent: '{{ 1 }}'	-
CKM_2512	Unsupported joint type: {{ 0 }} on axis {{ 1 }}	-
CKM_3001	Analytical kinematics: Calibrated robot geometry is required.	Retry the operation after calibration.

Error Code	Message	Remedy
CKM_3501	Chosen kinematic configuration {{ 0 }} is invalid (valid range is {{{ 1 }}, {{ 2 }}}).	-
CKM_501	No closest angles found.	-
CKM_502	No valid iterated angles found. Increase step size.	Correct all invalid settings as specified in the message.
CMD_101	Parse error.	-
CMD_102	Failed to parse axis.	-
CMD_103	Failed to parse json command '{{ 0 }}'.	-
CMD_104	Failed to parse LED mode '{{ 0 }}'.	-
CMD_105	Parameter '{{ 0 }}': Must be an array.	Modify the value so that it is provided as an array.
CMD_11	Could not enter mode: '{{ 0 }}'	-
CMD_11001	Invalid 'points' element at index {{ 0 }}.	-
CMD_111	Number of '{{ 0 }}' must be equal to number of '{{ 1 }}' (actual: {{ 2 }}, {{ 3 }})	Correct all invalid settings as specified in the message.
CMD_11101	Could not switch from Manual Mode to Automatic Mode.	-
CMD_112	Parameter '{{ 0 }}': Must not be empty.	Correct all invalid settings as specified in the message.
CMD_121	Unknown command: '{{ 0 }}'	-
CMD_122	Unknown command type for move_axes: '{{ 0 }}'	-
CMD_151	Usage: {{ 0 }}	-
CMD_201	Expected a 'status' result, but got: '{{ 0 }}'	-
CMD_202	Expected an OK status, but got an error. Operating mode: '{{ 0 }}', message: {{ 1 }}	-
CMD_203	Initialization failed. Message: {{ 0 }}	-
CMD_5011	Value must be 'all' or between 1 and {{ 0 }} (actual: {{ 1 }}).	Correct all invalid settings as specified in the message.
CMD_59001	Simulation mode not supported with robot arm type '{{ 0 }}'.	-
CTL_1001	CurrentReferenceGenerator::add_plane() failed at index {{ 0 }}.	-
CTL_10011	Robot is not calibrated.	Retry the calibration operation.
CTL_111	Please switch to manual mode. Actual position violates limit.	-
CTL_112	Target position violates limit.	-

Error Code	Message	Remedy
CTL_201	{{ 1 }} is violating workspace boundary {{ 0 }}.	Follow the instructions provided in the message to resolve the issue.
CTL_203	Robot is close to a self collision between {{ 0 }} and {{ 1 }}.	Follow the instructions provided in the message to resolve the issue.
CTL_204	Axis {{ 0 }}: Position {{ 1 }} about to hit limit {{ 2 }} with velocity {{ 3 }}, deceleration {{ 4 }}.	-
CTL_205	Safety controller: Position limits [{{ 0 }}, {{ 1 }}] are too narrow on axis {{ 2 }}.	Expand the position limits to a valid range that allows safe and sufficient motion for the axis.
CTL_206	Safety controller: Position {{ 0 }} on axis {{ 1 }} is too close to limits (expected: inside [{{ 2 }}, {{ 3 }}]).	Adjust the position to a valid range that allows safe and sufficient motion for the axis.
CTL_2111	Axis {{ 0 }}: Position control error; actual: {{ 1 }}, commanded: {{ 2 }}	-
CTL_2112	Could not proceed motion. Axis {{ 0 }}: Position difference {{ 1 }} degrees exceeds limit.	-
CTL_2113	Could not proceed motion. Axis {{ 0 }}: Velocity {{ 1 }} degrees per second exceeds limit.	-
CTL_311	Safety controller: Joint angle limit change would cause sudden jump on axis {{ 0 }}.	-
CTL_312	Workspace limits or boundaries changed while intersecting with robot. A change would cause a sudden jump.	-
CTL_313	Workspace limit or boundary change would cause {{ 0 }} intersection(s) and a sudden jump, not changing.	-
CTL_314	Cannot activate intersection controller while self or workspace boundary intersections are present.	-
CTL_501	Desired velocity must not be zero (actual: {{ 0 }})	Correct all invalid settings as specified in the message.
CTL_601	Trapezoid algorithm: Could not calculate path due to negative time value: {{ 0 }}	Correct the value so that it is zero or a positive number.
CTL_602	Trapezoid algorithm: Acceleration or deceleration is too small to reach target velocity.	Correct all invalid settings as specified in the message.
CTL_603	The minimum calculated position of {{ 0 }} is smaller than the lower position limit of {{ 1 }}. This can be avoided by choosing poses further away from the joint limits.	Correct any invalid poses according to the robot's motion and workspace limits.
CTL_604	The maximum calculated position of {{ 0 }} is larger than the upper position limit of {{ 1 }}. This can be avoided by choosing poses further away from the joint limits.	Correct any invalid poses according to the robot's motion and workspace limits.

Error Code	Message	Remedy
CTL_605	Trapezoid algorithm: Could not calculate path due to negative discriminant: {{ 0 }}	Correct the value so that it is zero or a positive number.
CTL_606	Trapezoid algorithm: The required distance cannot be covered with the given parameters.	-
CTL_701	Position reference generator ran out of points.	-
CTL_801	Cannot set filter interval in position limiter while robot is still moving.	-
CTL_802	Filter interval needs to be in range (0.000, {{ 0 }})s, but is {{ 1 }}s.	-
ECAT_1001	SOEM library error code: {{ 0 }}	-
ECAT_101	Could not reset safety PLC after {{ 0 }} attempts.	-
ECAT_1011	Could not create EtherCAT interface.	-
ECAT_1012	EtherCAT bus is already in use.	-
ECAT_1013	Could not initialize SOEM interface with device name '{{ 0 }}'. Make sure to execute with root rights.	-
ECAT_1014	Could not initialize EtherCAT connection.	-
ECAT_1015	Could not configure distributed clock.	-
ECAT_1016	I/O map size {{ 0 }} is too large (expected: <= {{ 1 }}).	-
ECAT_11	Failed to initialize EtherCAT slave with ID '{{ 0 }}', name '{{ 1 }}'	-
ECAT_1101	Function '{{ 0 }}' failed.	-
ECAT_1111	SOEM interface could not read file '{{ 0 }}'.	-
ECAT_1112	SOEM interface could not write file '{{ 0 }}'.	-
ECAT_12	Expected exactly 1 EtherCAT slave '{{ 0 }}', but found {{ 1 }}. A total of {{ 2 }} slaves were found in the network.	-
ECAT_1211	Failed to read {{ 0 }} SDO byte(s) from slave {{ 1 }}; index/subindex: {{ 2 }}/{{ 3 }}.	-
ECAT_1212	Failed to write SDO value '{{ 0 }}' to slave {{ 1 }}; index/subindex: {{ 2 }}/{{ 3 }}.	-
ECAT_13	Could not find any slaves on the network.	-
ECAT_14	Could not configure slaves. Make sure that the motors are connected to the EPC.	-
ECAT_15	Error during robot update: Slave with ID '{{ 0 }}' is not enabled. Statusword was: {{ 1 }}	-

Error Code	Message	Remedy
ECAT_1501	EtherCAT connection could not set state to {{ 0 }} during attempt #{{ 1 }}.	-
ECAT_1502	EtherCAT connection could not set state to {{ 0 }} after {{ 1 }} attempt(s).	-
ECAT_16	Waiting for slave state change to '{{ 0 }}' timed out. Slaves in unexpected state: {{ 1 }}	-
ECAT_1601	Mismatch of '{{ 0 }}' on joint {{ 1 }}: Drive value: {{ 2 }}; expected or configured value: {{ 3 }}	-
ECAT_1602	Invalid motor config parameter '{{ 0 }}' on joint {{ 1 }}: Drive value: {{ 2 }}.	-
ECAT_1603	Invalid motor config. Functional safety over ethercat (FSOE) is not enabled on joint {{ 0 }}.	-
ECAT_17	Not all slaves are in expected state '{{ 0 }}'. Slaves in unexpected state: {{ 1 }}	-
ECAT_1701	EtherCAT device {{ 0 }} with slave ID {{ 1 }}: Unsupported firmware version: {{ 2 }} (expected: one of {{ 3 }})	-
ECAT_1702	Motor controller with slave ID {{ 0 }}: Firmware version {{ 1 }} is inconsistent with first motor controller which has {{ 2 }}.	-
ECAT_1703	Forced firmware update was triggered.	-
ECAT_1704	Forced firmware update was not triggered or failed.	-
ECAT_18	Could not recover slave with ID {{ 0 }}: Unknown status word: {{ 1 }}	-
ECAT_19	Failed to parse slave configuration data: {{ 0 }}	-
ECAT_201	MCM detected an error with its internal multiturn count. Multiturn count of joint {{ 0 }} is {{ 1 }}, output encoder position is {{ 2 }} degrees.	-
ECAT_2011	EtherCAT connection could not transmit process data.	-
ECAT_202	MCM detected an alignment error with the encoders of joint {{ 0 }}. Output encoder position is {{ 1 }}, while drive encoder position is {{ 2 }}.	-
ECAT_203	AX servicer detected invalid encoder source on slave '{{ 0 }}' (expected: motor side encoder).	-
ECAT_204	AX servicer detected invalid encoder sensor on slave '{{ 0 }}' (expected: motor side encoder).	-
ECAT_205	Could not verify validity of the SDO output encoder reading. Please move the robot slightly and try to power up again.	-

Error Code	Message	Remedy
LIC_101	Failed to verify license.	-
LIC_102	License file version '{{ 0 }}' is not supported (expected: '{{ 1 }}').	-
LIC_103	Bad license.	-
MATH_1011	Flat vector to matrix conversion: Expected {{ 0 }} * {{ 1 }} elements (actual: {{ 2 }}).	Correct all invalid settings as specified in the message.
MATH_1012	Expected symmetric matrix for {{ 0 }}.	Correct all invalid settings as specified in the message.
MATH_1101	Rotation matrix is not orthogonal. Frobenius deviation of $R^T R$ from identity: {{ 0 }}, matrix: {{ 1 }}	-
MATH_1102	Rotation matrix must have determinant 1 (actual: {{ 0 }}).	Correct all invalid settings as specified in the message.
MATH_111	{{ 0 }}: Must not contain NaN values.	Correct all invalid settings as specified in the message.
MATH_112	Attempt to compute {{ 0 }} of empty vector.	-
MATH_201	Could not parse '{{ 0 }}' into an integer.	-
MCM_1001	Unhandled error in server loop; reinitializing.	-
MCM_101	Please specify --robot or set environment variable ARM_TYPE.	Follow the instructions provided in the message to resolve the issue.
MCM_102	Invalid action '{{ 0 }}'. Please check the '--action' command line flag.	Follow the instructions provided in the message to resolve the issue.
MCM_103	Invalid format '{{ 0 }}'. Please check the '--format' command line flag.	Follow the instructions provided in the message to resolve the issue.
MCM_104	Invalid CPU affinity '{{ 0 }}'. Please use an integer ≥ -1 for '--cpu'.	-
MCM_201	Output loop terminating.	-
MISC_201	Safety PLC Error Bits: {{ 0 }}.	-
MISC_202	STO as a result of an SS1.	-
MISC_203	STO due to violation of an SOS.	-
MISC_204	Please release the normal stop button. SS1 due to normal stop.	Follow the instructions provided in the message to resolve the issue.
MISC_205	Please release the emergency stop button. SS1 due to emergency stop button.	Follow the instructions provided in the message to resolve the issue.
MISC_206	Please release the teach pendant emergency stop button. SS1 due to teach pendant emergency stop button.	Follow the instructions provided in the message to resolve the issue.

Error Code	Message	Remedy
MISC_207	Please release the protective stop button.	Follow the instructions provided in the message to resolve the issue.
MISC_208	Please press the enable button to move the robot. SS2 as a result of manual mode.	Follow the instructions provided in the message to resolve the issue.
MISC_209	SS1 due to violation of {{ 0 }} linear speed.	-
MISC_210	SS1 due to violation of {{ 0 }} angular speed.	-
MISC_211	Please switch to manual mode. SS2 due to violation of {{ 0 }} workspace boundaries.	Follow the instructions provided in the message to resolve the issue.
MISC_212	Please switch to manual mode. SS2 due to violation of {{ 0 }} joint position limits.	Follow the instructions provided in the message to resolve the issue.
MISC_213	SS2 after collision due to violation of {{ 0 }} force limits.	-
MISC_214	Reset required after operating mode switch. Make sure the enabled button is released. SS2 as a result of mode switch reset.	Follow the instructions provided in the message to resolve the issue.
MISC_215	Please release the protective stop button. SS1 due to protective stop button.	-
MISC_216	Please release the protective stop button. SS2 due to protective stop button.	-
MOV_101	Error on axis {{ 0 }}.	-
OS_101	Operating System error code (errno): {{ 0 }}, message: {{ 1 }}	-
OS_11001	Program '{{ 0 }}' already running with process ID {{ 1 }}, lock file name: {{ 2 }}	If the program is running and operation is not required, stop the running instance.
OS_11011	Failed to handle signal '{{ 0 }}'. Something already handles this signal.	Retry the operation after resolving the signal handling conflict.
OS_11012	Failed to handle signal '{{ 0 }}'.	-
OS_1301	Couldn't set CPU affinity for {{ 0 }}. Make sure process has root privileges.	Follow the instructions provided in the message to resolve the issue.
OS_1302	Couldn't set scheduling priority for {{ 0 }}. Make sure process has root privileges.	Follow the instructions provided in the message to resolve the issue.
OS_1401	Couldn't lock process memory. Make sure process has root privileges.	Follow the instructions provided in the message to resolve the issue.
OS_1402	Couldn't increase process priority. Make sure process has root privileges.	Follow the instructions provided in the message to resolve the issue.
OS_201	Could not create socket object.	-
OS_2011	Failed to open file '{{ 0 }}' for reading.	-
OS_2012	Failed to remove file '{{ 0 }}'.	-

Error Code	Message	Remedy
OS_202	Could not set socket for immediate reuse.	-
OS_203	Could not bind socket to address: {{ 0 }}	-
OS_2301	Call to fcntl(): Could not get flags.	-
OS_2302	Call to fcntl(): Could not set flags.	-
OS_251	Call to setsockopt(): Could not set socket option '{{ 0 }}'.	-
OS_252	Could not get socket options.	-
OS_301	Could not set receive timeout for socket.	-
OS_411	Could not connect to server.	-
OS_412	Could not establish connection to server.	-
OS_413	Could not connect to server due to timeout.	-
OS_451	Could not set socket to listen.	-
OS_452	Could not accept incoming connection.	-
OS_501	Call to select() failed.	-
OS_502	Connecting by select() not in progress.	-
OS_503	Error in select() during connection attempt.	-
OS_504	Timeout in select() during connection attempt.	-
OS_601	Could not send message.	-
OS_602	Could not send all characters.	-
OS_651	Could not receive message.	-
OS_701	Invalid port number: {{ 0 }} (must be between 0 and 65535)	Correct all invalid settings as specified in the message.
OS_702	Invalid IPv4 address: '{{ 0 }}'	-
OS_711	Call to getnameinfo() failed.	-
OS_801	Data size of {{ 0 }} is too large (expected: < {{ 1 }}).	-
OS_802	Data size is {{ 0 }} (expected: >= 0).	-
PPM_101	No segment was specified.	-
PPM_102	CKM error.	-
PPM_103	Configuration change.	-
PPM_104	Detected mid path configuration change (joint {{ 0 }} velocity: {{ 1 }}, tool velocity: {{ 2 }}).	-
PPM_105	The blend radius of the first segment needs to be 0 but is {{ 0 }}.	-

Error Code	Message	Remedy
PPM_106	Pose {{ 0 }} cannot be outside of blending sphere with center {{ 1 }} and radius {{ 2 }}.	-
PPM_107	Invalid segment blending: Segment of type '{{ 0 }}' (ID {{ 1 }}) has blend radii of {{ 2 }} and {{ 3 }} but the total length is only {{ 4 }}. This would result in a length of {{ 5 }} which is smaller than the minimum required length of {{ 6 }}.	-
PPM_108	The configuration {{ 0 }} of the target pose of the PoseSegment is not valid.	-
PPM_11	Could not generate path.	-
PPM_12	Middle pose position must be different from start and end pose.	-
PPM_13	Start pose must be different from the pose.	-
PPM_14	Failed to create segment of type '{{ 0 }}'	-
PPM_151	Segment of type '{{ 0 }}' requires a change in position.	-
PPM_152	Segment of type '{{ 0 }}' requires a change in orientation.	-
PPM_1701	Segment type '{{ 0 }}' does not support direction calculation.	-
PYAPI_1011	List must have 4 or 9 elements.	Correct all invalid settings as specified in the message.
PYAPI_111	Conversion of Python list to vector failed.	-
PYAPI_112	Conversion of Python list to quaternion failed.	-
PYAPI_1211	Failed to parse definition of robot joint '{{ 0 }}'.	-
PYAPI_1212	Failed to parse definition of robot link '{{ 0 }}'.	-
PYAPI_1213	Failed to parse geometric capsule.	-
SIG_1011	Signal at index {{ 0 }}: Does not exist.	-
SIG_1012	Signal at index {{ 0 }}: Not configurable.	-
SIG_1013	Signal at index {{ 0 }}: Only digital inputs may be in pull up mode.	<ul style="list-style-type: none"> ■ If the signal is not a digital input, disable pull-up mode for this signal. ■ If pull-up mode is required, reassign the configuration to a valid digital input signal.

Error Code	Message	Remedy
SIG_1014	Signal at index {{ 0 }}: Digital inputs may not be in current mode.	<ul style="list-style-type: none"> ■ If the signal is a digital signal, configure it to operate using boolean values only. ■ If current mode is required, reconfigure the signal as an analog signal that supports current mode.
SIG_1015	Signal at index {{ 0 }}: Digital I/Os may not switch between input and output.	<ul style="list-style-type: none"> ■ If you use digital I/O, configure the signal as input only or output only. ■ If switching between input and output is required, reconfigure the signal as an analog signal that supports this behavior.
SIG_1101	Signal at index {{ 0 }}: Is not an output, value not set.	<ul style="list-style-type: none"> ■ If the signal is an input, remove or correct any write operation targeting this signal. ■ If a writable signal is required, reconfigure the signal as an output, or select a different output signal.
SIG_1102	Signal at index {{ 0 }}: Desired value {{ 1 }} is negative, not set.	Correct the value so that it is zero or a positive number.
SYS_1	Internal error: {{ 0 }}	-
SYS_2	System exception of type {{ 0 }}, message: {{ 1 }}	-
SYS_3	Error handling: Duplicate module tag: {{ 0 }}	Correct all invalid settings as specified in the message.
TLC_101	Command {{ 0 }} not supported in mode {{ 1 }}.	Check the commands supported in the current mode and correct the command accordingly.
TLC_102	Command {{ 0 }} with {{ 1 }} not supported in mode {{ 2 }}.	Check the commands supported in the current mode and correct the command accordingly.
TLC_103	Ignored control gripper request.	-
TLC_104	Ignored release or hold request while robot is handling a collision.	-
TLC_11	Aborting due to setup or unexpected error.	-
TLC_12	Error during disconnect stop routine.	-
TLC_201	{{ 0 }} error during controller safety check.	-
TLC_51	Command handler could not secure robot.	-
TLC_52	Error during robot update.	-

Error Code	Message	Remedy
TLC_53	Error during robot checks.	-
TLC_56	Entering high damping mode after collision of axis {{ 0 }}.	-
TLC_701	Robot update step discovered timestamp inaccuracy. Time: {{ 0 }}, messages skipped: {{ 1 }}	-
TLC_702	Robot state is not up to date: Time delta: {{ 0 }} ms (expected: < {{ 1 }} ms).	-
TLC_703	Update until target reached function timed out after {{ 0 }} seconds.	-
TLC_801	Robot has no mounted or configured gripper.	<ul style="list-style-type: none"> ■ Verify that a gripper is physically mounted on the robot. ■ Check whether a gripper is defined and configured.
UTIL_1	Function not implemented, location: {{ 0 }}:{{ 1 }}	Verify that the function indicated in the message is implemented correctly, and then retry the operation.
UTIL_101	Condition check failed: {{ 0 }}	Verify that the condition indicated in the message is implemented correctly, and then retry the operation.
UTIL_1011	Element '{{ 0 }}' doesn't exist	<ul style="list-style-type: none"> ■ Check that the name is spelled correctly, including case sensitivity. ■ Retry the operation after ensuring the name exists.
UTIL_1012	Numeric conversion to {{ 0 }} {{ 1 }} type with {{ 2 }} digits failed, source value: {{ 3 }}	-
UTIL_1013	Attempt to construct null NonNullPtr<> to type {{ 0 }}	-
UTIL_1014	Error with untranslated message: {{ 0 }}	-
UTIL_102	List must have {{ 0 }} elements (actual: {{ 1 }})	Correct all invalid settings as specified in the message.
UTIL_103	{{ 0 }}: List must have {{ 1 }} elements (actual: {{ 2 }})	Correct all invalid settings as specified in the message.
UTIL_11	Assertion failure: {{ 0 }}, location: {{ 1 }}:{{ 2 }}	-
UTIL_1101	{{ 0 }}: Duplicate {{ 1 }}: {{ 2 }}	-
UTIL_12	Assertion failure: {{ 0 }} ({{ 2 }}) == {{ 1 }} ({{ 3 }}), location: {{ 4 }}:{{ 5 }}	-
UTIL_121	Value of '{{ 0 }}': Must be > 0 (actual: {{ 1 }}).	Correct all invalid settings as specified in the message.

Error Code	Message	Remedy
UTIL_122	Value of '{{ 0 }}': Must be >= 0 (actual: {{ 1 }}).	Correct all invalid settings as specified in the message.
UTIL_123	All values of '{{ 0 }}': Must be > 0.	Correct all invalid settings as specified in the message.
UTIL_124	All values of '{{ 0 }}': Must be >= 0.	Correct all invalid settings as specified in the message.
UTIL_125	Value of '{{ 0 }}': Must be <= {{ 2 }} (actual: {{ 1 }})	Correct all invalid settings as specified in the message.
UTIL_126	Value of '{{ 0 }}': Absolute value must be <= {{ 2 }} (actual: {{ 1 }})	Correct all invalid settings as specified in the message.
UTIL_127	Value of '{{ 0 }}': Must be >= {{ 2 }} (actual: {{ 1 }})	Correct all invalid settings as specified in the message.
UTIL_128	Value of '{{ 0 }}': Absolute value must be == {{ 2 }} (actual: {{ 1 }})	Correct all invalid settings as specified in the message.
UTIL_129	Value of '{{ 0 }}': '{{ 1 }}' is not allowed.	Modify the value to a valid and supported value.
UTIL_13	Assertion failure: {{ 0 }} ({{ 2 }}) <= {{ 1 }} ({{ 3 }}), location: {{ 4 }}:{{ 5 }}	-
UTIL_130	Value of '{{ 0 }}' must be <= value of '{{ 1 }}' (actual: {{ 2 }}, {{ 3 }}).	Correct all invalid settings as specified in the message.
UTIL_131	Value of '{{ 0 }}' must be >= value of '{{ 1 }}' (actual: {{ 2 }}, {{ 3 }}).	Correct all invalid settings as specified in the message.
UTIL_132	Value of '{{ 0 }}': Must be equal to {{ 2 }} (actual: {{ 1 }})	Correct all invalid settings as specified in the message.
UTIL_133	Value of '{{ 0 }}': Must be < {{ 2 }} (actual: {{ 1 }})	Correct all invalid settings as specified in the message.
UTIL_134	Value of '{{ 0 }}': Must be > {{ 2 }} (actual: {{ 1 }})	Correct all invalid settings as specified in the message.
UTIL_14	Assertion failure: {{ 0 }} ({{ 2 }}) < {{ 1 }} ({{ 3 }}), location: {{ 4 }}:{{ 5 }}	-
UTIL_141	{{ 0 }}: {{ 1 }} must be within range {{ 2 }} but is {{ 3 }}.	Correct all invalid settings as specified in the message.
UTIL_1501	Invalid hexadecimal character (int): {{ 0 }}	<ul style="list-style-type: none"> ■ Check that the value contains only valid characters. ■ Re-enter the corrected value.
UTIL_1502	Invalid binary character in string '{{ 0 }}' (all must be 0 or 1).	<ul style="list-style-type: none"> ■ Check that the value contains only valid characters. ■ Re-enter the corrected value.
UTIL_161	Argument {{ 0 }} is not valid for command {{ 1 }}. Valid arguments are: {{ 2 }}	Correct all invalid settings as specified in the message.

Error Code	Message	Remedy
UTIL_162	Required argument {{ 0 }} for command {{ 1 }} was not provided.	Provide a valid value for the argument.
UTIL_163	Expected an array object.	Follow the instructions provided in the message to resolve the issue.
UTIL_164	Failed to parse interval [lower_bound, upper_bound].	Verify that the interval is specified in the correct format.
UTIL_2	Internal error, location: {{ 0 }}:{{ 1 }}	-
UTIL_201	Cannot create a time interval with negative value {{ 0 }}	Correct the value so that it is zero or a positive number.
UTIL_3	Null pointer, location: {{ 0 }}:{{ 1 }}	-
UTIL_301	{{ 0 }}: value {{ 1 }} violates lower bound {{ 2 }} (tolerance {{ 3 }})	Correct all invalid settings as specified in the message.
UTIL_302	{{ 0 }}: value {{ 1 }} violates upper bound {{ 2 }} (tolerance {{ 3 }})	Correct all invalid settings as specified in the message.
UTIL_4	Undefined value for '{{ 0 }}'.	-
UTIL_51	Could not open log file, path: {{ 0 }}	-
UTIL_511	Command line parser: Argument '{{ 0 }}' was not specified by add_option() or add_parameter()	Add a corresponding add_option() or add_parameter() definition for the argument.
UTIL_512	Command line parser: Argument '{{ 0 }}' was passed twice.	Correct all invalid settings as specified in the message.
UTIL_513	Command line parser: No argument was passed for '{{ 0 }}'.	Correct all invalid settings as specified in the message.
UTIL_514	Command line parser: Missing option '{{ 0 }}'.	Correct all invalid settings as specified in the message.
UTIL_515	Command line parser: Input '{{ 0 }}' does not exist.	<ul style="list-style-type: none"> Check that the name is spelled correctly, including case sensitivity. Retry the operation after ensuring the name exists.
UTIL_516	Command line parser: An input called '{{ 0 }}' already exists as '{{ 1 }}'.	Use a unique name that does not conflict with existing entries.
UTIL_52	Duplicate install attempt of log {{ 0 }}, can only be installed once.	-
UTIL_53	Log {{ 0 }} must be installed before being used.	Follow the instructions provided in the message to resolve the issue.
UTIL_59901	Test error, argument: {{ 0 }}	-