



# Drive Messages

## *Application Note AN102*

Triamec drives generates errors, warnings and messages, which are propagated to the user. This application note describes all messages and suggests solutions.

The list contains a class of *ErrorReactions*. These are described in the last chapter.

This list is generated for firmware release 4.22.

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# 1 Triamec Drive Messages

The messages in this chapter are related to an axis or its servo drive. In TwinCAT, the sourceId 3702 is used and the parameter %1 is always the *logical axis ID* number.

4161	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>PENDING: raw code message: %s update not done %d</b></p> <p>The firmware update of this component was not done</p> <p>Repeat the firmware update</p> <p>Class:Warning; Firmware:FW4.20.0-</p>
4500	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Enable rejected (Axis %1)</b></p> <p>An Enable request was rejected in axis-state</p> <p>Make sure the device and the encoder is ready for enabling</p> <p>Class:Warning; Firmware:FW4.12.14-</p>
4510	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Homing command rejected because of pending error (Axis %1)</b></p> <p>The homing command was rejected because of a pending error</p> <p>Clear the error and try again</p> <p>Class:Warning; Firmware:FW4.16.0-</p>
4520	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Pathplanner command rejected because of pending error (Axis %1)</b></p> <p>The pathplanner received a command. But this command is not allowed when an error is pending</p> <p>Reset the error</p> <p>Class:Warning; Firmware:FW4.16.0-</p>
4521	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Pathplanner command rejected because parameter zero acceleration (Axis %1)</b></p> <p>The pathplanner received a command which was rejected because the pathplanner AccelerationMaximum was zero</p> <p>Set Parameters.PathPlanner.AccelerationMaximum to the correct value</p> <p>Class:Warning; Firmware:FW4.16.0-</p>
4522	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Pathplanner command rejected because parameter zero deceleration (Axis %1)</b></p> <p>The pathplanner received a command which was rejected because the pathplanner DecelerationMaximum was zero</p> <p>Set Parameters.PathPlanner.DecelerationMaximum to the correct value</p> <p>Class:Warning; Firmware:FW4.16.0-</p>
4523	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Pathplanner command rejected because parameter zero velocity (Axis %1)</b></p> <p>The pathplanner received a command which was rejected because the pathplanner VelocityMaximum was zero</p> <p>Set Parameters.PathPlanner.VelocityMaximum to the correct value</p> <p>Class:Warning; Firmware:FW4.16.0-</p>
4524	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Target Position out of Range (Axis %1)</b></p> <p>The target position of a move was out of the software limits</p> <p>Check Axes[].Parameters.PathPlanner.PositionMaximum/Minimum</p> <p>Class:Warning; Firmware:FW4.20.0-</p>



4525	Message Description Solution Details	<b>LimitSwitch reached (Axis %1)</b> A limit switch is covered Move out of the switch and check Axes[].Parameters.Motor.LimitSwitch/ Class:Warning; Firmware:FW4.20.0-
4526	Message Description Solution Details	<b>PositionError0 tight (Axis %1)</b> The encoder0 positionError exceeded Parameters.PositionController.Con- troller0.PositionErrorWarning * Parameters.PositionController.Controller0.PositionErrorLimit Consider Parameters.PositionController.Controller0.PositionErrorWarning Class:Warning; Firmware:FW4.22.0-
4527	Message Description Solution Details	<b>PositionError1 tight (Axis %1)</b> The encoder1 positionError exceeded Parameters.PositionController.Con- troller1.PositionErrorWarning * Parameters.PositionController.Controller1.PositionErrorLimit Consider Parameters.PositionController.Controller1.PositionErrorWarning Class:Warning; Firmware:FW4.22.0-
4528	Message Description Solution Details	<b>Motor I2t tight (Axis %1)</b> Signals.CurrentController.ContinuousCurrentDiagnostics.MotorU/V/W ex- ceeded Parameters.Motor.NominalCurrentWarning Consider the accumulated maximum Signals.CurrentController.Continuous- CurrentDiagnostics.MotorMax after clearing with General.Commands.Reset- Diagnostics Class:Warning; Firmware:FW4.22.0-
4529	Message Description Solution Details	<b>Motor peak current tight (Axis %1)</b> Signals.CurrentController.ActualCurrentQ exceeded Parameters.Motor.- PeakCurrentWarning * Parameters.Motor.PeakCurrent Consider Parameters.Motor.PeakCurrentWarning Class:Warning; Firmware:FW4.22.0-
4737	Message Description Solution Details	<b>AnalogEncoder Opt amplitude error &lt;25% (Axis %1)</b> Analog encoder amplitude smaller than 25% detected (Option Module en- coder). Adjust the alignment of the encoder head to the scale according to the in- structions of the manufacturer. Clean the scale. Class:Warning; Firmware:FW4.13.13-4.18
4738	Message Description Solution Details	<b>AnalogEncoder amplitude warn &lt;50% (Axis %1)</b> Analog encoder amplitude smaller than 50% detected with the error mask 0x3 enabled in Axes[].Parameters.PositionController.Encoders[].DataFormat. Adjust the alignment of the encoder head to the scale according to the in- structions of the manufacturer. Clean the scale. More information on the DataFormat register can be found in AN107. Class:Warning; Firmware:FW4.13.13-

4739	Message Description  Solution  Details	<p><b>AnalogEncoder Opt amplitude warn &lt;50% (Axis %1)</b></p> <p>Analog encoder amplitude smaller than 50% detected with the error mask 0x3 enabled in Axes[].Parameters.PositionController.Encoders[].DataFormat (Option Module encoder).</p> <p>Adjust the alignment of the encoder head to the scale according to the instructions of the manufacturer. Clean the scale. More information on the DataFormat register can be found in AN107.</p> <p>Class:Warning; Firmware:FW4.13.13-4.18</p>
4740	Message Description Solution  Details	<p><b>AbsoluteEncoder flag1 (Axis %1)</b></p> <p>Absolute encoder flag1 is enabled and triggered an error.</p> <p>Determine and solve the cause of the encoder error. Consider disabling flag1 using Axes[].Parameters.PositionController.Encoders[].DataFormat. More information on the DataFormat register can be found in AN107.</p> <p>Class:Warning; Firmware:FW4.13.13-</p>
4741	Message Description  Solution  Details	<p><b>AbsoluteEncoder Opt flag1 (Axis %1)</b></p> <p>Absolute encoder flag1 is enabled and triggered an error (Option Module encoder).</p> <p>Determine and solve the cause of the encoder error. Consider disabling flag1 using Axes[].Parameters.PositionController.Encoders[].DataFormat. More information on the DataFormat register can be found in AN107.</p> <p>Class:Warning; Firmware:FW4.13.13-4.18</p>
4742	Message Description Solution  Details	<p><b>AbsoluteEncoder flag2 (Axis %1)</b></p> <p>Absolute encoder flag2 is enabled and triggered an error.</p> <p>Determine and solve the cause of the encoder error. Consider disabling flag2 using Axes[].Parameters.PositionController.Encoders[].DataFormat. More information on the DataFormat register can be found in AN107.</p> <p>Class:Warning; Firmware:FW4.13.13-</p>
4743	Message Description  Solution  Details	<p><b>AbsoluteEncoder Opt flag2 (Axis %1)</b></p> <p>Absolute encoder flag2 is enabled and triggered an error (Option Module encoder).</p> <p>Determine and solve the cause of the encoder error. Consider disabling flag2 using Axes[].Parameters.PositionController.Encoders[].DataFormat. More information on the DataFormat register can be found in AN107.</p> <p>Class:Warning; Firmware:FW4.13.13-4.18</p>
4744	Message Description Solution Details	<p><b>AbsoluteEncoder crc (Axis %1)</b></p> <p>Absolute encoder CRC communication error.</p> <p>Check cable conditions and shielding.</p> <p>Class:Warning; Firmware:FW4.13.13-</p>
4745	Message Description Solution Details	<p><b>AbsoluteEncoder Opt crc (Axis %1)</b></p> <p>Absolute encoder CRC communication error (Option Module encoder).</p> <p>Check cable conditions and shielding.</p> <p>Class:Warning; Firmware:FW4.13.13-4.18</p>



4746	Message Description Solution Details	<b>AbsoluteEncoder communication (Axis %1)</b> Absolute encoder communication error. Check cable conditions and shielding. Class:Warning; Firmware:FW4.13.13-
4747	Message Description Solution Details	<b>AbsoluteEncoder Opt communication (Axis %1)</b> Absolute encoder communication error (Option Module encoder). Check cable and connector conditions. Class:Warning; Firmware:FW4.13.13-4.18
4748	Message Description Solution Details	<b>AnalogEncoder RangePhaseA (Axis %1)</b> Encoder phaseA voltage out of range. Check cable and connector conditions. Class:Warning; Firmware:FW4.13.13-
4749	Message Description Solution Details	<b>AnalogEncoder Opt RangePhaseA (Axis %1)</b> Encoder phaseA voltage out of range (Option Module encoder). Check cable and connector conditions. Class:Warning; Firmware:FW4.13.13-4.18
4750	Message Description Solution Details	<b>AnalogEncoder RangePhaseB (Axis %1)</b> Encoder phaseB voltage out of range. Check cable and connector conditions. Class:Warning; Firmware:FW4.13.13-
4751	Message Description Solution Details	<b>AnalogEncoder Opt RangePhaseB (Axis %1)</b> Encoder phaseB voltage out of range (Option Module encoder). Check cable and connector conditions. Class:Warning; Firmware:FW4.13.13-4.18
4752	Message Description Solution Details	<b>Encoder busy (Axis %1)</b> Encoder is busy. Wait until the encoder is ready. Class:Warning; Firmware:FW4.18.2-
4753	Message Description Solution Details	<b>Encoder Opt busy (Axis %1)</b> Encoder is busy (Option Module encoder). Wait until the encoder is ready. Class:Warning; Firmware:FW4.18.2-4.18
4864	Message Description Solution Details	<b>DC-Bus Voltage upper Limit (Axis %1)</b> The DC-Bus voltage is above General.Parameters.DcBusVoltageUpperLimit or the LowerLimit parameter is larger than the UpperLimit parameter. Check the parameters and measure the power supply voltage. Class:Warning; Firmware:FW4.12.14-

4865	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>DC-Bus Voltage lower Limit (Axis %1)</b></p> <p>The DC-Bus voltage is below General.Parameters.DcBusVoltageLowerLimit. Switch on the power supply. If the error persists, check the parameters and measure the power supply voltage.</p> <p>Class:Warning; Firmware:FW4.12.14-</p>
4866	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>PowerSupply warning (Axis %1)</b></p> <p>Supply lines are switched off during the charging phase or during operation. Not all phases available if not in SinglePhaseOperation mode.</p> <p>Check the wiring of the supply lines and, if not in SinglePhaseOperation mode, make sure that all three phases are available.</p> <p>Class:Warning; Firmware:FW4.12.14-</p>
4867	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Fieldbus not ready (Axis %1)</b></p> <p>The fieldbus is not connected or not functional.</p> <p>Check the fieldbus master state. If working with EtherCAT, check the settings for Distributed Clock of the master adapter. If working without fieldbus, set General.Parameters.Standalone to True.</p> <p>Class:Warning; Firmware:FW4.12.14-</p>
4868	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Power supply not ready (Axis %1)</b></p> <p>Internal power supply or brake resistor not ready.</p> <p>Check wiring and connector of the AC-Line input.</p> <p>Class:Warning; Firmware:FW4.12.14-</p>
4869	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>PowerSupply BrakeResistor (Axis %1)</b></p> <p>The thermal model of the brake resistor issues an overload warning.</p> <p>Allow cooling down.</p> <p>Class:Warning; Firmware:FW4.12.14-</p>
4870	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Jitter 10kHz ! (Axis %1)</b></p> <p>The real-time engine issued a jitter warning. Limits are maintained.</p> <p>No action required.</p> <p>Class:Warning; Firmware:FW4.12.14-</p>
4172	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Persistent Register uri unknown (Axis %1)</b></p> <p>The persistency contains parameter data which is not known anymore in this firmware</p> <p>Decide, if the missing information can be ignored</p> <p>Class:Warning; Firmware:FW4.20.0-</p>
4880	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Safety STO warning (Axis %1)</b></p> <p>The STO circuit is open. Enabling is not possible.</p> <p>Close the STO circuit.</p> <p>Class:Warning; Firmware:FW4.12.14-</p>
6145	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>HTTP Write failed from (Axis %1)</b></p> <p>HTTP file upload failed.</p> <p>Retry the upload and consider AN124.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>



6146	Message Description Solution Details	<b>HTTP GET 404 file not found (Axis %1)</b> HTTP GET file not found. The browser requested an unknown file. Use the directory for a list of known files. Class:Alarm; Firmware:FW4.12.14-
6147	Message Description Solution Details	<b>HTTP 400 Internal (Axis %1)</b> HTTP GET request of the browser was inconsistent. Retry the request and consider AN124. Class:Alarm; Firmware:FW4.12.14-
6148	Message Description Solution Details	<b>HTTP POST 400 Boundary (Axis %1)</b> HTTP GET request without boundary keyword. Retry the request or use another browser Class:Alarm; Firmware:FW4.12.14-
6149	Message Description Solution Details	<b>HTTP POST 400 ContentLength (Axis %1)</b> HTTP GET request without ContentLength keyword. Retry the request or use another browser. Class:Alarm; Firmware:FW4.12.14-
6150	Message Description Solution Details	<b>HTTP POST 400 file name (Axis %1)</b> HTTP POST file name has more than 31 characters. Use a filename smaller than 31 characters. Class:Alarm; Firmware:FW4.12.14-
6151	Message Description Solution Details	<b>HTTP POST 404 file open (Axis %1)</b> HTTP POST file upload to unknown destination. Use the directory for a list of known destination. Class:Alarm; Firmware:FW4.12.14-
6152	Message Description Solution Details	<b>HTTP POST 413 Disk Space (Axis %1)</b> HTTP POST file to be uploaded is too large. Check for the maximum file size in the directory. Class:Alarm; Firmware:FW4.12.14-
6153	Message Description Solution Details	<b>HTTP POST 413 file write (Axis %1)</b> The file to be written is not writable anymore. Retry the upload and consider AN124. Class:Alarm; Firmware:FW4.12.14-
6154	Message Description Solution Details	<b>HTTP POST 400 Early End (Axis %1)</b> HTTP POST file write was finished earlier than expected. Retry the upload. Class:Alarm; Firmware:FW4.12.14-



6155	Message	<b>HTTP POST 408 Timeout (Axis %1)</b>
	Description	HTTP POST file upload did not continue in time.
	Solution	Retry the upload. Make sure, there are not too many parallel upload sessions.
	Details	Class:Alarm; Firmware:FW4.12.14-
6156	Message	<b>HTTP Error callback (Axis %1)</b>
	Description	TCP connection error.
	Solution	Open a new connection.
	Details	Class:Alarm; Firmware:FW4.12.14-
6157	Message	<b>HTTP DELETE 404 file not found (Axis %1)</b>
	Description	HTTP DELETE request for unknown file.
	Solution	Consider the directory for a list of known files as described in AN124.
	Details	Class:Alarm; Firmware:FW4.12.14-
6158	Message	<b>HTTP POST 503 file rejected due to flash wear protection. Retry later (Axis %1)</b>
	Description	The flash wear protection prevents writing to persistent memory.
	Solution	Let the time stated in the error pass before writing to persistent memory again. In the mean time consider to disable the table persistency (AN 124).
	Details	Class:Alarm; Firmware:FW4.12.14-
6159	Message	<b>HTTP Error socket format (Axis %1)</b>
	Description	Wrong format of the websocket.
	Solution	Check the format of the websocket.
	Details	Class:Alarm; Firmware:FW4.12.14-
6165	Message	<b>Parameter change prohibited in motion (Axis %1)</b>
	Description	Parameter change in path planner prohibited while in motion (move absolute, relative or coupled motion).
	Solution	Stop the motion and retry.
	Details	Class:Alarm; Firmware:FW4.12.14-
6170	Message	<b>EoT connection (Axis %1)</b>
	Description	Too many concurrent file accesses over USB or Tria-Link.
	Solution	Reduce the number of concurrent accesses.
	Details	Class:Alarm; Firmware:FW4.12.14-
6171	Message	<b>EoT Sending aborted (Axis %1)</b>
	Description	File access over USB or Tria-Link interrupted.
	Solution	Retry.
	Details	Class:Alarm; Firmware:FW4.12.14-
6172	Message	<b>EoT Receive code (Axis %1)</b>
	Description	File access over USB or Tria-Link interrupted.
	Solution	Retry.
	Details	Class:Alarm; Firmware:FW4.12.14-





6173	Message Description Solution Details	<b>EoT connection (Axis %1)</b> File access over USB or Tria-Link interrupted. Retry. Class:Alarm; Firmware:FW4.12.14-
6175	Message Description Solution Details	<b>Ethernet unknown Ip4 setting (Axis %1)</b> Illegal value in parameter General.Parameters.Ethernet.IPv4Setting Choose an IPv4 mode known by the firmware. Class:Alarm; Firmware:FW4.12.14-
6176	Message Description Solution Details	<b>TCP callback (Axis %1)</b> TCP connection aborted. Retry the TCP connection. Class:Alarm; Firmware:FW4.12.14-
6177	Message Description Solution Details	<b>TCP Output (Axis %1)</b> Internal error with a TCP send callback. Retry the TCP connection. Class:Alarm; Firmware:FW4.12.14-
6180	Message Description Solution Details	<b>EtherCAT CoE unknown (Axis %1)</b> EtherCAT tried to write or read a CoE register which is unknown Check the PLC source code to only access valid registers Class:Alarm; Firmware:FW4.12.14-
6181	Message Description Solution Details	<b>EtherCAT CoE write read-only (Axis %1)</b> EtherCAT tried to write to a read-only CoE register Check the PLC source code to only write to registers with write access. Class:Alarm; Firmware:FW4.12.14-
6182	Message Description Solution Details	<b>EtherCAT CoE write error (Axis %1)</b> Writing the CoE register failed Check the PLC source code for valid register addresses. Class:Alarm; Firmware:FW4.12.14-
6183	Message Description Solution Details	<b>EtherCAT does not allow BridgeMode (Axis %1)</b> The parameter General.Parameters.Bridge is active. Set this parameter to Disabled on EtherCAT drives. Class:Alarm; Firmware:FW4.12.14-
6185	Message Description Solution Details	<b>EtherCAT CoE read error (Axis %1)</b> Reading a CoE register failed. Check the PLC source code for valid register addresses. Class:Alarm; Firmware:FW4.12.14-
6186	Message Description Solution Details	<b>EtherCAT PDO Out Ext unknown content (Axis %1)</b> A PDO Out entry contains an unknown URI. Change the PDO entry in General.Parameters.EtherCAT or in the TwinCAT startup settings. Class:Alarm; Firmware:FW4.12.14-

6187	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>EtherCAT PDO In Ext unknown content (Axis %1)</b></p> <p>A PDO In entry contains an unknown URI.</p> <p>Change the PDO entry in General.Parameters.EtherCAT or in the TwinCAT startup settings.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6188	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>EtherCAT PDO Invalid SM IN Config (Axis %1)</b></p> <p>The number of bits cyclically exchanged by TwinCAT does not correspond to the number of bits defined by the PDO settings.</p> <p>Load the correct ESI file.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6189	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>EtherCAT PDO Invalid SM OUT Config (Axis %1)</b></p> <p>The number of bits cyclically exchanged by TwinCAT does not correspond to the number of bits defined by the PDO settings.</p> <p>Load the correct ESI file.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6190	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>EtherCAT state machine error0x%x states 0x%x -&gt; 0x%x (Axis %1)</b></p> <p>The EtherCAT state machine got an error.</p> <p>Check the EtherCAT master message.</p> <p>Class:Alarm; Firmware:FW4.16.5-</p>
6209	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Hardware fault EMMC (Axis %1)</b></p> <p>The file system memory is not functional.</p> <p>Contact Triamec Motion AG.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6210	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>File open failed (Axis %1)</b></p> <p>Failed to open a file.</p> <p>Ensure that the file is listed in the directory.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6211	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>File read failed (Axis %1)</b></p> <p>Failed to read from a file.</p> <p>Verify that no write access is pending.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6214	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>File not ready (Axis %1)</b></p> <p>An internal persistence task prevents opening the file.</p> <p>Retry.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6215	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>File checksum mismatch (Axis %1)</b></p> <p>File checksum mismatch.</p> <p>If this happens after transferring a file to the drive, ensure that the checksum is correct. If this happens during boot, a persistent file might contain a wrong checksum. Re-transfer and save the original file.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>

6216	Message Description Solution Details	<b>File no write access (Axis %1)</b> File is read-only. Choose a file with write access. Class:Alarm; Firmware:FW4.12.14-
6217	Message Description Solution Details	<b>File too large (Axis %1)</b> File is too large. Reduce the file size. Class:Alarm; Firmware:FW4.12.14-
6236	Message Description Solution Details	<b>Firmware update failed (Axis %1)</b> The update of a firmware component failed. Restart the update and if the error persists, copy the message and send it to Triamec and include details (The old and new release and the product) Class:Alarm; Firmware:FW4.20.0-
6242	Message Description Solution Details	<b>Persistent flash write file rejected due to flash wear protection. Retry later. (Axis %1)</b> The flash wear protection prevents writing to persistent memory. Let the time stated in the error pass before writing to persistent memory again. In the mean time consider to disable the table persistency (AN 124). Class:Alarm; Firmware:FW4.12.14-
6273	Message Description Solution Details	<b>Motor temperature limit (Axis %1)</b> The motor temperature is above limit. Check the sensor cables. Check the motor temperature. Class:Alarm; Firmware:FW4.12.14-
6274	Message Description Solution Details	<b>Motor BrakeHoldTime out of limit (Axis %1)</b> The parameter Axes[].Parameters.Motor.BrakeHoldTime is too large. Reduce this parameter. Class:Alarm; Firmware:FW4.12.14-
6275	Message Description Solution Details	<b>Motor phase short (Axis %1)</b> Detected a motor short current. Remove the motor connector and check if the error disappears. If not, contact Triamec Motion AG. Class:Alarm; Firmware:FW4.12.14-
6276	Message Description Solution Details	<b>Enabling but motor type not defined (Axis %1)</b> The parameter Axes[].Parameters.Motor.Type is not set. Set the parameter to the correct motor type. Class:Alarm; Firmware:FW4.12.14-
6277	Message Description Solution Details	<b>Motor type changed when enabled (Axis %1)</b> The parameter Axes[].Parameters.Motor.Type has changed in enabled state. Do not change the motor type when enabled. Class:Alarm; Firmware:FW4.12.14-FW4.16

6278	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Power bridge I2t limit (Axis %1)</b></p> <p>The continuous current limit of the drive is reached.</p> <p>Reduce the currents or the accelerations or the duty cycle.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6280	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Power bridge peak current limit (Axis %1)</b></p> <p>The peak current limit of the drive is reached.</p> <p>Reduce the currents or the accelerations.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6281	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Motor I2t (Axis %1)</b></p> <p>The continuous current limit <code>Axes[].Parameters.Motor.NominalCurrent</code> is reached.</p> <p>Ensure the parameter <code>Axes[].Parameters.Motor.CurrentSquareTime</code> is correct. If so, reduce the currents or the accelerations or the duty cycle.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6282	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Motor peak current limit (Axis %1)</b></p> <p>The peak current limit <code>Axes[].Parameters.Motor.PeakCurrent</code> is reached.</p> <p>Reduce the currents or the accelerations.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6283	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Axis must be disabled (Axis %1)</b></p> <p>The axis must be disabled for this action.</p> <p>Disable the axis for this action.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6285	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Axis enable not possible (Axis %1)</b></p> <p>Enabling the axis was ignored because an error is pending or the motor type is None or unsupported.</p> <p>Reset the error before enabling the axis. Check the motor configuration.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6286	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>EncoderConfigurationError Enc0Enc1 (Axis %1)</b></p> <p>There is a conflicting encoder configuration in EncoderTopology Standard. Either <code>Ax0Enc0</code> and <code>Ax1Enc1</code> are both set or <code>Ax0Enc1</code> and <code>Ax1Enc0</code> are both set.</p> <p>Change the parametrization.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6287	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Override state leaving but EtherCAT commands enable (Axis %1)</b></p> <p>An EtherCAT enable command is pending at the very transition from override (attach-mode) to standard mode.</p> <p>Make sure TwinCAT does not try to enable an axis when the Explorer axis is detached.</p> <p>Class:Alarm; Firmware:FW4.13.13-</p>



6288	Message Description Solution Details	<b>Commit error (Axis %1)</b> This is an internal error. Contact Triamec Motion AG. Class:Alarm; Firmware:FW4.16.0-
6290	Message Description Solution Details	<b>Pathplanner parameter modulo min&gt;max (Axis %1)</b> The Pathplanner modulo minimum is larger than the maximum. Change Axes[].Parameters.PathPlanner.ModuloPositionMinimum or ModuloPositionMaximum. Class:Alarm; Firmware:FW4.12.14-
6291	Message Description Solution Details	<b>Pathplanner unknown Mode (Axis %1)</b> Illegal Axes[].Parameters.PathPlanner.Mode setting. Check if this firmware release supports the selected mode. Class:Alarm; Firmware:FW4.12.14-
6292	Message Description Solution Details	<b>Pathplanner unknown StreamLossAction (Axis %1)</b> Illegal Axes[].Parameters.PathPlanner.StreamLossAction setting. Check if this firmware release supports the selected StreamLossAction. Class:Alarm; Firmware:FW4.12.14-
6293	Message Description Solution Details	<b>Pathplanner unknown StreamInterpolationMode (Axis %1)</b> Illegal Axes[].Parameters.PathPlanner.StreamInterpolationMode setting. Check, if this firmware release supports the selected StreamInterpolationMode. Class:Alarm; Firmware:FW4.12.14-
6294	Message Description Solution Details	<b>Pathplanner InterpolatorDelay not within +-50us (Axis %1)</b> Axes[].Parameters.PathPlanner.InterpolatorDelay is out of range. Modify this parameter. Class:Alarm; Firmware:FW4.12.14-
6295	Message Description Solution Details	<b>Pathplanner couple act= (Axis %1)</b> Coupling to the external position stream failed because the positions deviate from the actual position by more than the PositionErrorLimit. Ensure that external positions are equal to the actual position during coupling. Class:Alarm; Firmware:FW4.12.14-
6296	Message Description Solution Details	<b>Pathplanner synchronization lost (Axis %1)</b> The stream of external positions ceased while the pathplanner was coupled to the stream. Re-enter the coupled motion mode. The ErrorReaction depends on the setting in Parameters.PathPlanner.StreamLossAction. Class:Alarm; ErrorReaction:[ErrorStop, ErrorStopDisable]; Firmware:FW4.12.14-

6297	Message Description Solution Details	<b>Pathplanner Parameter SoftwareLimits min&gt;max (Axis %1)</b> The pathplanner Axes[].Parameters.PathPlanner.PositionMin is larger than PositionMax. Correct the parameters. Class:Alarm; Firmware:FW4.16.0-
6298	Message Description Solution Details	<b>Target Position out of Range (Axis %1)</b> The pathplanner targets a position outside the software limits Axes[].Parameters.PathPlanner.PositionMinimum or PositionMaximum. Check the limit parameters. Keep inside the legal motion range. If actual position is out of range, move back to a valid position. Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.16.0-
6299	Message Description Solution Details	<b>LimitSwitch reached (Axis %1)</b> The axis ran into a limit switch Axes[].Parameters.Motor.LimitSwitch. Move back to the valid range or consider changing the LimitSwitch parameters. Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.16.0-
6300	Message Description Solution Details	<b>PositionController PositionUnit unspecified (Axis %1)</b> Axes[].Parameters.PositionController.PositionUnit is unspecified. Set a unit. Class:Alarm; Firmware:FW4.12.14-
6301	Message Description Solution Details	<b>Illegal PositionController MasterPositionSource (Axis %1)</b> Illegal Axes[].Parameters.PositionController.MasterPositionSource setting. Make sure this firmware release supports the selected source. Class:Alarm; Firmware:FW4.12.14-
6302	Message Description Solution Details	<b>PositionController PositionErrorLimit0 I= (Axis %1)</b> The position error of Controller0 exceeded the limit setting at Axes.Parameters.PositionController.PositionErrorLimit Ensure that the entire travel path of the axis is clear. Consider relaxing the limit or optimizing the controller. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6303	Message Description Solution Details	<b>PositionController PositionErrorLimit1 I= (Axis %1)</b> The positionError of controller1 exceeded the limit Axes.Parameters.PositionController.PositionErrorLimit Check, if an obstacle caused the deviation or if the limit should be relaxed or if the controller should be optimized. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6320	Message Description Solution Details	<b>Sensorless only for AC motors (Axis %1)</b> Sensorless mode is only available for synchronous AC motors. Turn off Sensorless mode in Axes[].Parameters.PositionController.Encoders[].Type, if Axes[].Parameters.Motor.Type is not Synchronous. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-

6321	Message Description Solution  Details	<p><b>Motor phase current: Significant deviation between PowerBridges (Axis %1)</b>          Significant current deviation between power bridges.          Navigate to <code>Axes[.].Signals.CurrentController.actualCurrentDetail</code>. Use the scope to compare aU with bU etc when the error happens and Contact Triamec Motion AG if the error is frequently observed.          Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6330	Message Description Solution Details	<p><b>Commutation unknown EnablingMethod (Axis %1)</b>  <code>Axes[.].Commutation.EnablingMethod</code> is unknown.          Make sure the firmware release supports this method.          Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6331	Message Description  Solution Details	<p><b>Enable command no valid commutation (Axis %1)</b>          A synchronous motor requires a valid commutation <code>Axes[.].Parameters.Commutation.PhasingMethod</code>.          Set the parameters <code>Axes[.].Parameters.Commutation</code>.          Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6332	Message Description Solution Details	<p><b>Commutation Unknown Command (Axis %1)</b>          Unknown <code>Axes[.].Commands.Commutation.Command</code>          Make sure the firmware release supports this command.          Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.12.14-</p>
6333	Message Description  Solution  Details	<p><b>Commutation restart bad state (Axis %1)</b>  <code>Axes[.].Commands.Commutation.Command</code> tried to re-start phasing, but the axis is not in a proper state.          The axis must be ready for operation but not Enabled for <code>StartPhasingAndZeroEncoder</code> and it must not be in motion for other commands.          Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.12.14-</p>
6334	Message Description  Solution  Details	<p><b>Commutation command (Axis %1)</b>          Incompatible motor configuration for command issued in <code>Axes[.].Commands.Commutation.Command</code>.          Use this command with an AC motor configuration only. Check <code>Axes[.].Parameters.Motor.Type</code>          Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.12.14-</p>
6335	Message Description  Solution  Details	<p><b>Commutation command (Axis %1)</b>          Incompatible encoder configuration for command issued in <code>Axes[.].Commands.Commutation.Command</code>.          Use this command with an absolute encoder only. Check <code>Axes[.].Parameters.PositionController.Encoders[.].Type</code>          Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.12.14-</p>
6336	Message Description Solution Details	<p><b>Commutation integrator limit (Axis %1)</b>          The phasing controller did not settle.          Ensure that the axis is freely movable during phasing.          Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>



6337	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Commutation 600HzLimit vel= (Axis %1)</b></p> <p>Maximum commutation velocity of 600Hz reached.</p> <p>Reduce the velocity or replace the product by a high-speed variant.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6338	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Commutation invalidated (Axis %1)</b></p> <p>An external command invalidated the commutation while enabled.</p> <p>Find and fix the cause of the invalidation command.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6339	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>AbsoluteEncoder command (Axis %1)</b></p> <p>The absolute encoder returned an error while processing the command issued in Axes[].Commands.Commutation.Command.</p> <p>Check the Log for encoder errors for more information.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6340	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Commutation encoder is disabled (Axis %1)</b></p> <p>An encoder which is used for the commutation is disabled.</p> <p>Set the correct encoder type for all encoders referenced by Parameters.Commutation.Source.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.18.2-</p>
6341	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Sine excitation longer than commutation duration (Axis %1)</b></p> <p>In Axes[].Parameters.Commutation, 3/SineFrequency must be smaller than RampRiseTime + 0.8*RampConstTime.</p> <p>Increase the SineFrequency or the RampConstTime.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.19.0-</p>
6350	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Homing Start commanded, but not ready for movement Err= (Axis %1)</b></p> <p>The axis was not ready to move when issuing a homing start command.</p> <p>The axis must be enabled before homing.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
6351	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Homing FirstSearch early trigger at (Axis %1)</b></p> <p>Trigger detected within the first 5ms of the homing FirstSearchMove.</p> <p>Check for EMC noise on the source defined in Axes[].Parameters.Homing.FirstSearchMove.EventInput.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
6352	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Homing FirstSearch motion error (Axis %1)</b></p> <p>Detected a motion error during homing FirstSearchMove.</p> <p>Check for obstacles in the axis pathway.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
6353	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Homing Relocation move motion error (Axis %1)</b></p> <p>Detected a motion error during homing RelocateMove.</p> <p>Check for obstacles in the axis pathway.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>





6354	Message	<b>Homing SecondSearch early trigger at (Axis %1)</b>
	Description	Trigger detected within the first 5ms of the homing SecondSearchMove.
	Solution	Check for EMC noise on the source defined in Axes[].Parameters.Homing.SecondSearchMove.EventInput.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
6355	Message	<b>Homing SecondSearch trigger not found at (Axis %1)</b>
	Description	The homing SecondSearchMove reached the SignedMaxDistance without finding the trigger.
	Solution	Check the source defined in Axes[].Parameters.Homing.SecondSearchMove.EventInput. Consider increasing the SignedMaxDistance value.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
6356	Message	<b>Homing SecondSearch motion error (Axis %1)</b>
	Description	Detected a motion error during the homing SecondSearchMove.
	Solution	Check for an obstacle in the axis pathway.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
6357	Message	<b>Homing MoveHome motion error (Axis %1)</b>
	Description	Detected a motion error during the MoveToHomePosition move.
	Solution	Check for an obstacle in the axis pathway.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
6358	Message	<b>Homing FirstSearch trigger not found at (Axis %1)</b>
	Description	The homing FirstSearchMove reached the SignedMaxDistance without finding the trigger.
	Solution	Check the source defined in Axes[].Parameters.Homing.FirstSearchMove.EventInput. Consider increasing the SignedMaxDistance value.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
6359	Message	<b>Homing FirstSearch unknown par (Axis %1)</b>
	Description	The parameter Axes[].Parameters.Homing.FirstSearchMove.EventInput is either unknown, or already defined in a search move of an other axis on the same drive.
	Solution	Ensure the combinations of EventInput and EventAxis in multiple axes are unique across one drive.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
6360	Message	<b>Homing SecondSearch unknown par (Axis %1)</b>
	Description	The parameter Axes[].Parameters.Homing.SecondSearchMove.EventInput is either unknown, or already defined in a search move of an other axis on the same drive. Skip is not allowed for this parameter!
	Solution	Ensure the combinations of EventInput and EventAxis in multiple axes are unique across one drive.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-

6361	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Homing timeout (Axis %1)</b></p> <p>The axis was in motion when issuing SetPosition in Axes[].Commands.Homing.Command.</p> <p>Issuing SetPosition is allowed exclusively when the axis is in Standstill, Disabled or in DirectCoupled but not moving.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
6362	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Homing start for absolute encoder, which is not ready (Axis %1)</b></p> <p>An absolute encoder command Axes[].Commands.Homing.Command was received, but the encoder is not ready.</p> <p>Make sure the absolute encoder Axes[].Parameters.PositionController.Encoders[] is setup and working properly.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
6363	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Homing command (Axis %1)</b></p> <p>The current method in Axes[].Parameters.Homing.Method does not allow saving a position to the absolute encoder.</p> <p>Set Axes[].Parameters.Homing.Method to a setting with suffix OffsetEncoder before using the command SaveEncoder in Axes[].Commands.Homing.Command.</p> <p>Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.12.14-</p>
6364	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Homing command (Axis %1)</b></p> <p>The commands SaveEncoder or InvalidateEncoder in Axes[].Commands.Homing.Command are illegal while the axis is enabled.</p> <p>Disable the axis before issuing these commands.</p> <p>Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.12.14-</p>
6365	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Homing command incompatible with method (Axis %1)</b></p> <p>Illegal command Start in Axes[].Commands.Homing.Command for the setting in Axes[].Parameters.Homing.Method.</p> <p>Check the setting in Axes[].Parameters.Homing.Mode.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
6366	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Homing unknown Method (Axis %1)</b></p> <p>Unknown setting in Axes[].Parameters.Homing.Mode.</p> <p>Ensure that the installed firmware supports this homing mode.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6371	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Gantry error (Axis %1)</b></p> <p>The other axis of the gantry threw an error.</p> <p>Refer to the error of the other axis.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
6372	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Gantry not allowed with encoder (Axis %1)</b></p> <p>Gantry is not supported with the current encoder type configuration.</p> <p>Use encoders of type Incremental or Analog.</p> <p>Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-</p>

6373	Message	<b>Gantry not allowed for modulo axes (Axis %1)</b>
	Description	Gantry is not allowed for modulo axes.
	Solution	Set the modulo parameters at Axes[].Parameters.Pathplanner to 0.
	Details	Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-
6374	Message	<b>Gantry enable rejected because axis is not active (Axis %1)</b>
	Description	Gantry enable is not allowed if an axis is not active.
	Solution	Set Axes[].Comamnds.PositionController.Active to True.
	Details	Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.16.0-
6376	Message	<b>Option Parameter Range (Axis %1)</b>
	Description	Unknown value in Axes[].Parameters.OptionModule.AN_Range or AO_Range.
	Solution	Check if this firmware supports the specified range.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
6377	Message	<b>Option Function (Axis %1)</b>
	Description	The Option Module does not function properly.
	Solution	Contact Triamec Motion AG, if the error persists.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
6378	Message	<b>OptionModule encoder missing (Axis %1)</b>
	Description	An Option Module is configured but not available.
	Solution	Check Axes[].Parameter.PositionController.Encoders[].Type and General.Parameters.EncoderTopology
	Details	Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.12.14-
6379	Message	<b>SPI (Axis %1)</b>
	Description	The Option Module SPI connection error.
	Solution	Call Triamec Motion AG if the error persists
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
6390	Message	<b>Pathplanner command %s rejected because parameter jerk or drf zero (Axis %1)</b>
	Description	The Pathplanner Jerk or DynamicReductionFactor is zero. This is mandatory for correct behavior of emergency stop.
	Solution	Check Axes[].Parameter.PathPlanner.Jerk and Axes[].Parameter.PathPlanner.DynamicReductionfactor.
	Details	Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.16.0-
6391	Message	<b>Pathplanner command %s rejected because parameter deceleration zero (Axis %1)</b>
	Description	The Pathplanner Deceleration parameter or command is zero. This is mandatory for correct behavior of emergency stop.
	Solution	Check Axes[].Parameter.PathPlanner.Deceleration
	Details	Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.16.0-
6392	Message	<b>Pathplanner command %s rejected in axis state %s (Axis %1)</b>
	Description	This pathplanner command is not allowed in the current axis state.
	Solution	Make sure the axis is in a valid state for this command.
	Details	Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.16.0-

6393	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Pathplanner emergency stop (Axis %1)</b></p> <p>The Pathplanner received an emergency stop command.</p> <p>Reset the error.</p> <p>Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.20.0-</p>
6400	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Axis Compensation bad table header parameter file (Axis %1)</b></p> <p>The axis compensation function points to a table with inconsistent parameters.</p> <p>Make sure the referenced table (Parameters.Compensations.Axis.Table) is valid and check its header parameters for size and type.</p> <p>Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.18.2-</p>
6401	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Axis Compensation unknown uri (Axis %1)</b></p> <p>The axis compensation function uses an illegal uri in Parameters.Commpensations.Axis.DimNSource.</p> <p>Make sure this uri exists.</p> <p>Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.18.2-</p>
6410	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Cogging Table unknown parameter file (Axis %1)</b></p> <p>The Parameters.Compensation.Cogging function uses an illegal parameter.</p> <p>If the source is MotorTurn, make sure, StatorDecoupling mode is not used.</p> <p>Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.18.2-</p>
6411	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Cogging Table bad header in file (Axis %1)</b></p> <p>The cogging table specified by Parameters.Compensations.Cogging.Table is not available or its header is not valid.</p> <p>Make sure, Dim1.Distance!=0 and Dim1.Size!=0 and Dim2.Size=1 and Dim3.Size=1.</p> <p>Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.18.2-</p>
6420	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>PositionError analysis inconsistent parameter (Axis %1)</b></p> <p>The Time parameter is smaller than 0.1ms for modes StandardDeviation, ISE and ITSE or the Mode is not known.</p> <p>Set a valid time parameter and check the Mode setting.</p> <p>Class:Alarm; ErrorReaction:ErrorStop; Firmware:FW4.18.2-</p>
6791	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Encoder option module not found (Axis %1)</b></p> <p>An Option Module encoder is used but there is no option module in this axis.</p> <p>Change the encoder configuration.</p> <p>Class:Alarm; Firmware:FW4.16.0-4.18</p>
6792	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Encoder (Axis %1)</b></p> <p>The encoder type is unknown.</p> <p>Choose a valid encoder type.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6793	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Encoder (Axis %1)</b></p> <p>The encoder type is unknown (Option Module encoder).</p> <p>Choose a valid encoder type.</p> <p>Class:Alarm; Firmware:FW4.16.0-4.18</p>

6794	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Sensorless encoder is not commutation encoder (Axis %1)</b></p> <p>Illegal configuration of Encoder[1].Type = Sensorless.</p> <p>Only Encoder[0] is allowed for Sensorless motion. Change the encoder configuration.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6796	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>AbsoluteEncoder no encoder persistency (Axis %1)</b></p> <p>The encoder nameplate contains no encoder persistency data.</p> <p>Consider the application note AN107.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6797	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>AbsoluteEncoder Opt no encoder persistency (Axis %1)</b></p> <p>The encoder nameplate contains no encoder persistency data (Option Module encoder).</p> <p>Consider the application note AN107.</p> <p>Class:Alarm; Firmware:FW4.16.0-4.18</p>
6800	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Save encoder timeout cmd= (Axis %1)</b></p> <p>Timeout while saving persistency data to the encoder.</p> <p>Check encoder cabling.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6801	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Save Opt encoder timeout cmd= (Axis %1)</b></p> <p>Timeout while saving persistency data to the option module encoder.</p> <p>Check encoder cabling.</p> <p>Class:Alarm; Firmware:FW4.16.0-4.18</p>
6816	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>AbsoluteEncoder SubResolutionError (Axis %1)</b></p> <p>Lost alignment of the absolute encoder position with its analog sub resolution.</p> <p>Check if the analog encoder signals A/B wiring is correct. See also AN107.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
6817	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>AbsoluteEncoder Opt SubResolutionError (Axis %1)</b></p> <p>Lost alignment of the absolute encoder position with its analog sub resolution (Option Module encoder).</p> <p>Check if analog phase A/B wiring is correct.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-4.18</p>
6818	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Encoder short or overload (Axis %1)</b></p> <p>The encoder supply is shorted or overloaded.</p> <p>Check for correct wiring. Check cable conditions on previously running machines. Check current consumption of the encoder.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6819	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>EncoderShort Opt (Axis %1)</b></p> <p>The Option Module encoder supply is shorted.</p> <p>Check for correct wiring. Check cable conditions on previously running machines.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-4.18</p>

6820	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>AbsoluteEncoder Dataformat (Axis %1)</b></p> <p>Illegal string in Axes[].Parameters.PositionController.Encoders[].DataFormat.</p> <p>Check the string at the character position indicated in the error message.</p> <p>Check for allowed DataFormat tags in AN107.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
6821	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>AbsoluteEncoder Opt Dataformat at (Axis %1)</b></p> <p>Illegal string in Axes[].Parameters.PositionController.Encoders[].DataFormat for an Option Module encoder.</p> <p>Check the string at the character position indicated in the error message.</p> <p>Check for allowed DataFormat tags in AN107.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-4.18</p>
6822	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>AbsoluteEncoder incPerUnit is zero (Axis %1)</b></p> <p>The Endat hardware incPerUnit is zero.</p> <p>Check if this encoder is compatible.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
6823	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>AbsoluteEncoder Opt incPerUnit is zero (Axis %1)</b></p> <p>The Endat hardware incPerUnit is zero.</p> <p>Check if this encoder is compatible.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-4.18</p>
6824	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>AbsoluteEncoder signalPeriod is zero (Axis %1)</b></p> <p>The Endat hardware signalPeriod is zero which is not compatible with encoder type AnalogEndat.</p> <p>Check if this encoder is compatible.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
6825	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>AbsoluteEncoder Opt signalPeriod is zero (Axis %1)</b></p> <p>The Endat hardware signalPeriod is zero which is not compatible with encoder type AnalogEndat.</p> <p>Check if this encoder is compatible.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-4.18</p>
6826	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>AbsoluteEncoder unknown command (Axis %1)</b></p> <p>The encoder does not support the requested command.</p> <p>Check which commands are possible for this encoder in AN107.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
6827	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>AbsoluteEncoder Opt unknown command (Axis %1)</b></p> <p>The encoder does not support the requested command.</p> <p>Check which commands are possible for this encoder in AN107.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-4.18</p>
6828	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>AbsoluteEncoder unknown type (Axis %1)</b></p> <p>Unknown value in Axes[].Parameters.PositionController.Encoders[].Type.</p> <p>Check if the firmware supports this encoder type.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>

6829	Message Description  Solution Details	<p><b>AbsoluteEncoder Opt unknown type (Axis %1)</b> Unknown value in Axes[].Parameters.PositionController.Encoders[].Type for an Option Module encoder.</p> <p>Check if the firmware supports this encoder type.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-4.18</p>
6830	Message Description Solution Details	<p><b>AbsoluteEncoder internal error (Axis %1)</b> Encoder setup failed due to an internal error.</p> <p>Contact Triamec Motion AG if the error persists.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
6831	Message Description Solution Details	<p><b>AbsoluteEncoder Opt internal error (Axis %1)</b> Option Module encoder setup failed due to an internal error.</p> <p>Contact Triamec Motion AG if the error persists.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-4.18</p>
6832	Message Description Solution Details	<p><b>AbsoluteEncoder databus error (Axis %1)</b> Communication with the encoder hardware failed.</p> <p>Check encoder databus wiring.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
6833	Message Description Solution Details	<p><b>AbsoluteEncoder Opt databus error (Axis %1)</b> Communication with the Option Module encoder hardware failed.</p> <p>Check encoder databus wiring.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-4.18</p>
6834	Message Description Solution Details	<p><b>AbsoluteEncoder cable length calibration (Axis %1)</b> The Endat cable length calibration failed.</p> <p>Reduce the cable length or consider turning off the calibration with the setting Encoders[].DataFormat = M2.</p> <p>Class:Alarm; Firmware:FW4.12.14-</p>
6835	Message Description Solution Details	<p><b>AbsoluteEncoder Opt cable length calibration (Axis %1)</b> The Endat cable length calibration failed (Option Module encoder).</p> <p>Reduce the cable length or consider turning off the calibration with the setting Encoders[].DataFormat = M2.</p> <p>Class:Alarm; Firmware:FW4.12.14-4.18</p>
6836	Message Description  Solution Details	<p><b>AbsoluteEncoder nameplate access (Axis %1)</b> Failed to access the digital nameplate of the absolute encoder holding homing and commutation information.</p> <p>Check if the encoder supports saving customer data.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
6837	Message Description  Solution Details	<p><b>AbsoluteEncoder Opt nameplate access (Axis %1)</b> Failed to access the digital nameplate of the absolute encoder holding homing and commutation information (Option Module encoder).</p> <p>Check if the encoder supports saving customer data.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-4.18</p>





6838	Message Description Solution Details	<b>AbsoluteEncoder set zero (Axis %1)</b> Encoder set zero failed. Check if the encoder supports zeroing. Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
6839	Message Description Solution Details	<b>AbsoluteEncoder Opt set zero (Axis %1)</b> Option module encoder set zero failed. Check if the encoder supports zeroing. Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-4.18
6848	Message Description Solution Details	<b>AnalogEncoder amplitude error &lt;25% (Axis %1)</b> Analog encoder amplitude is smaller than 25% detected. Adjust the alignment of the encoder head to the scale according to the instructions of the manufacturer. Clean the scale. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6849	Message Description Solution Details	<b>AnalogEncoder opt amplitude error &lt;25% (Axis %1)</b> Analog encoder amplitude smaller than 25% detected (Option Module encoder). Adjust the alignment of the encoder head to the scale according to the instructions of the manufacturer. Clean the scale. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-4.18
6850	Message Description Solution Details	<b>AnalogEncoder amplitude warn &lt;50% (Axis %1)</b> Analog encoder amplitude smaller than 50% detected with the error mask 0x3 enabled in Axes[].Parameters.PositionController.Encoders[].DataFormat. Adjust the alignment of the encoder head to the scale according to the instructions of the manufacturer. Clean the scale. More information on the DataFormat register can be found in AN107. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.13.13-
6851	Message Description Solution Details	<b>AnalogEncoder Opt amplitude warn &lt;50% (Axis %1)</b> Analog encoder amplitude smaller than 50% detected with the error mask 0x3 enabled in Axes[].Parameters.PositionController.Encoders[].DataFormat (Option Module encoder). Adjust the alignment of the encoder head to the scale according to the instructions of the manufacturer. Clean the scale. More information on the DataFormat register can be found in AN107. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.13.13-4.18
6852	Message Description Solution Details	<b>AbsoluteEncoder flag1 (Axis %1)</b> Absolute encoder flag1 is enabled and triggered an error. Determine and solve the cause of the encoder error. Consider disabling flag1 using Axes[].Parameters.PositionController.Encoders[].DataFormat. More information on the DataFormat register can be found in AN107. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.13.13-



6853	Message Description  Solution  Details	<p><b>AbsoluteEncoder Opt flag1 (Axis %1)</b> Absolute encoder flag1 is enabled and triggered an error (Option Module encoder).</p> <p>Determine and solve the cause of the encoder error. Consider disabling flag1 using Axes[].Parameters.PositionController.Encoders[].DataFormat. More information on the DataFormat register can be found in AN107.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.13.13-4.18</p>
6854	Message Description Solution  Details	<p><b>AbsoluteEncoder flag2 (Axis %1)</b> Absolute encoder flag2 is enabled and triggered an error.</p> <p>Determine and solve the cause of the encoder error. Consider disabling flag2 using Axes[].Parameters.PositionController.Encoders[].DataFormat. More information on the DataFormat register can be found in AN107.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.13.13-</p>
6855	Message Description  Solution  Details	<p><b>AbsoluteEncoder Opt flag2 (Axis %1)</b> Absolute encoder flag2 is enabled and triggered an error (Option Module encoder).</p> <p>Determine and solve the cause of the encoder error. Consider disabling flag2 using Axes[].Parameters.PositionController.Encoders[].DataFormat. More information on the DataFormat register can be found in AN107.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.13.13-4.18</p>
6856	Message Description Solution Details	<p><b>AbsoluteEncoder crc (Axis %1)</b> Absolute encoder CRC communication error.</p> <p>Check cable conditions and shielding.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.13.13-</p>
6857	Message Description Solution Details	<p><b>AbsoluteEncoder Opt crc (Axis %1)</b> Absolute encoder CRC communication error (Option Module encoder).</p> <p>Check cable conditions and shielding.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.13.13-4.18</p>
6858	Message Description Solution Details	<p><b>AbsoluteEncoder communication (Axis %1)</b> Absolute encoder communication error.</p> <p>Check cable conditions and shielding.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.13.13-</p>
6859	Message Description Solution Details	<p><b>AbsoluteEncoder Opt communication (Axis %1)</b> Absolute encoder communication error (Option Module encoder).</p> <p>Check cable conditions and shielding.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.13.13-4.18</p>
6860	Message Description Solution Details	<p><b>AnalogEncoder RangePhaseA (Axis %1)</b> Encoder phaseA voltage out of range.</p> <p>Check cable and connector conditions.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.13.13-</p>

6861	Message Description Solution Details	<b>AnalogEncoder Opt RangePhaseA (Axis %1)</b> Encoder phaseA voltage out of range (Option Module encoder). Check cable and connector conditions. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.13.13-4.18
6862	Message Description Solution Details	<b>AnalogEncoder RangePhaseB(Axis %1)</b> Encoder phaseB voltage out of range. Check cable and connector conditions. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.13.13-
6863	Message Description Solution Details	<b>AnalogEncoder Opt RangePhaseB (Axis %1)</b> Option encoder phaseB voltage out of range (Option Module encoder). Check cable and connector conditions. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.13.13-4.18
6913	Message Description Solution Details	<b>Fieldbus not ready (Axis %1)</b> The fieldbus is not ready. Check the fieldbus condition and cabling. If working with EtherCAT, check the settings for Distributed Clock of the master adapter. Class:Alarm; Firmware:FW4.12.14-
6914	Message Description Solution Details	<b>ComputingTime Order (Axis %1)</b> Internal error of the real-time scheduler. Contact Triamec Motion AG with the information, under which conditions the error appeared. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6916	Message Description Solution Details	<b>ComputingTime Tamalso entry (Axis %1)</b> The computing time of the isochronous Tama task was too long. Change the Tama code Task.IsochronousMain to reduce the computing time. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6917	Message Description Solution Details	<b>ComputingTime Iso (Axis %1)</b> The computing time of the 10kHz task was too long. Change the Tama code Task.IsochronousMain to reduce the computing time. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6918	Message Description Solution Details	<b>ComputingTime TamaAsy entry (Axis %1)</b> The computing time of the Tama program asynchronous task was too long. Change the Tama code Task.AsynchronousMain to reduce the computing time. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6920	Message Description Solution Details	<b>DC-Bus Hardware-Limit (Axis %1)</b> The DC-Bus voltage reached the absolute maximum limit. Check the power supply and the condition of the brake resistor. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-

6921	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>DC-Bus Upper-limit (Axis %1)</b></p> <p>The DC-Bus voltage exceeded the setting in General.Parameters.DcBusVoltageUpperLimit.</p> <p>Check the setting considering the power supply specifications and the brake resistor capability.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6922	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>DC-Bus Lower-Limit (Axis %1)</b></p> <p>The DC-Bus voltage dropped below General.Parameters.DcBusVoltageLowerLimit.</p> <p>Check the setting considering the power supply specifications. Check the main supply for power failure events.</p> <p>Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-</p>
6923	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>DC-Bus OverCurrent Limit (Axis %1)</b></p> <p>The DC-Bus current exceeded limits.</p> <p>Check for shorts in the motor cable.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6930	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>TemperatureLimit Tc R81= (Axis %1)</b></p> <p>Internal temperature limit reached.</p> <p>Check if the fan is working properly and ensure the cooling openings are free. Control your overall cabinet temperature.</p> <p>Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-</p>
6931	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>TemperatureLimit Bridge R81= (Axis %1)</b></p> <p>Internal temperature limit reached.</p> <p>Check if the fan is working properly and ensure the cooling openings are free. Control your overall cabinet temperature.</p> <p>Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-</p>
6932	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>TemperatureLimit SafeA R81= (Axis %1)</b></p> <p>Internal temperature limit reached.</p> <p>Check if the fan is working properly and ensure the cooling openings are free. Control your overall cabinet temperature.</p> <p>Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-</p>
6933	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>TemperatureLimit SafeB R81= (Axis %1)</b></p> <p>Internal temperature limit reached.</p> <p>Check if the fan is working properly and ensure the cooling openings are free. Control your overall cabinet temperature.</p> <p>Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-</p>
6934	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>TemperatureLimit Motor R81= (Axis %1)</b></p> <p>Internal temperature limit reached.</p> <p>Check if the fan is working properly and ensure the cooling openings are free. Control your overall cabinet temperature.</p> <p>Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-</p>

6935	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>TemperatureLimit OptionA R81= (Axis %1)</b></p> <p>Internal temperature limit reached.</p> <p>Check if the fan is working properly and ensure the cooling openings are free.</p> <p>Control your overall cabinet temperature.</p> <p>Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-</p>
6936	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>TemperatureLimit OptionB R81= (Axis %1)</b></p> <p>Internal temperature limit reached.</p> <p>Check if the fan is working properly and ensure the cooling openings are free.</p> <p>Control your overall cabinet temperature.</p> <p>Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-</p>
6937	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>TemperatureLimit TempA53 (Axis %1)</b></p> <p>Internal temperature limit of the CPU reached.</p> <p>Check if the fan is working properly and ensure the cooling openings are free.</p> <p>Control your overall cabinet temperature.</p> <p>Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-</p>
6938	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>TemperatureLimit BridgeB R81= (Axis %1)</b></p> <p>Internal temperature limit reached.</p> <p>Check if the fan is working properly and ensure the cooling openings are free.</p> <p>Control your overall cabinet temperature.</p> <p>Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-</p>
6940	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Internal Voltage OutOfRange Tc R81= (Axis %1)</b></p> <p>Internal voltage failure.</p> <p>Contact Triamec Motion AG.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6941	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Internal Voltage OutOfRange Bridge R81= (Axis %1)</b></p> <p>Internal voltage failure.</p> <p>Contact Triamec Motion AG.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6942	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Internal Voltage OutOfRange SafeA R81= (Axis %1)</b></p> <p>Internal voltage failure.</p> <p>Contact Triamec Motion AG.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6943	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Internal Voltage OutOfRange SafeB R81= (Axis %1)</b></p> <p>Internal voltage failure.</p> <p>Contact Triamec Motion AG.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6944	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Internal Voltage OutOfRange MotorTemp R81= (Axis %1)</b></p> <p>Internal voltage failure.</p> <p>Contact Triamec Motion AG.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>



6945	Message Description Solution Details	<b>Internal Voltage OutOfRange OptionA R81= (Axis %1)</b> Internal voltage failure. Contact Triamec Motion AG. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6946	Message Description Solution Details	<b>Internal Voltage OutOfRange OptionB R81= (Axis %1)</b> Internal voltage failure. Contact Triamec Motion AG. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6947	Message Description Solution Details	<b>Internal Voltage OutOfRange PowerBridgeSupply (PBS) R88= (Axis %1)</b> Internal voltage failure. Contact Triamec Motion AG. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6948	Message Description Solution Details	<b>Internal Voltage OutOfRange UVLO DcDc Drv Fpga= (Axis %1)</b> Internal voltage failure. Contact Triamec Motion AG. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6949	Message Description Solution Details	<b>Internal Voltage OutOfRange BridgeB R81= (Axis %1)</b> Internal voltage failure. Contact Triamec Motion AG. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6950	Message Description Solution Details	<b>ExternalError (Axis %1)</b> General.Commands.ExternalError is set to True to simulate an error. Set the register value back to False. Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-
6951	Message Description Solution Details	<b>InvalidPersistentParameters (Axis %1)</b> Invalid checksum in persistent data. Reload the configuration file (*.TAMcfg) and retry to save the parameters persistently. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6952	Message Description Solution Details	<b>Persistency erase failed (Axis %1)</b> Failed erasing persistent data due to an internal error. Contact Triamec Motion AG. Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-
6953	Message Description Solution Details	<b>Persistency write failed (Axis %1)</b> Failed to save data persistently due to an internal error. Contact Triamec Motion AG. Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-



6960	Message Description Solution Details	<b>Gantry version (Axis %1)</b> The firmware does not support the setting in General.Parameters.Controller-Topology. Check if the firmware supports the mode and if any chosen Gantry mode requires a license. Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-
6961	Message Description Solution Details	<b>Gantry axis units not equal (Axis %1)</b> Unequal Axes[].Parameters.PositionController.PositionUnit setting for Axes[0] and Axes[1]. In Gantry setups both Axes must use the same units. Make sure the parameters are equal. Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-
6962	Message Description Solution Details	<b>Gantry motor types not equal (Axis %1)</b> Unequal Axes[].Parameters.Motor.Type setting for Axes[0] and Axes[1]. In Gantry setups both Axes must use the same motor. Make sure the parameters are equal. Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-
6963	Message Description Solution Details	<b>Gantry commutation phasingMethod not equal (Axis %1)</b> Unequal Axes[].Parameters.Commutation.PhasingMethod setting for Axes[0] and Axes[1]. In Gantry setups both Axes must use the same phasing method. Make sure the parameters are equal. Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-
6970	Message Description Solution Details	<b>Tama code not valid VMID (Axis %1)</b> The Tama assembly does not match to the Virtual Machine ID (Vmid) of the device. Ensure using the correct Vmid and recompile the Tama program code. Find the Vmid of the target drive in the Device node information. Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
6971	Message Description Solution Details	<b>Tama code incompatible to this drive (Axis %1)</b> The Tama assembly does not match to the Register Layout ID (Rlid) of the device. Ensure using the correct Rlid and recompile the Tama program code. Find the Rlid of the target drive in the Device node information. Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
6972	Message Description Solution Details	<b>Tama code wrong checksum (Axis %1)</b> The Tama assembly is not valid. Recompile the Tama program code. Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-

6973	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Tama code unknown register (Axis %1)</b></p> <p>Illegal register access by the Tama program - triggered by accessing an unknown address or writing to a read-only register.</p> <p>Ensure that all registers (URIs) used in the Tama program are compatible with the firmware version used. Find the point of failure with the row number (row%x) and the register address (reg0x%x) in the assembly file (.asm). Consult the SWTAMA_CompilerUserGuide document for more information.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
6975	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Tama code out of memory (Axis %1)</b></p> <p>The Tama code heap run out of memory.</p> <p>Reduce the amount of heap allocations with new.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6976	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Tama division by zero (Axis %1)</b></p> <p>The Tama code aborted due to a division by zero.</p> <p>Prevent division by zero in the program code.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6977	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Tama null reference (Axis %1)</b></p> <p>Tama null reference exception.</p> <p>Ensure that objects are correctly instantiated in the program code. Consider null checks when referencing objects.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6978	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Tama index out of range (Axis %1)</b></p> <p>Tama array index out of bounds.</p> <p>Limit the array index to the array size.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6979	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Tama corrupted state (Axis %1)</b></p> <p>Tama execution reached a corrupted state.</p> <p>Contact Triamec Motion AG.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6990	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Monitor is not running Tc (Axis %1)</b></p> <p>Internal communication error.</p> <p>Ignore and acknowledge if triggered during a firmware upgrade. Contact Triamec Motion AG if the error persists.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
6991	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Monitor is not running Bridge (Axis %1)</b></p> <p>Internal communication error.</p> <p>Ignore and acknowledge if triggered during a firmware upgrade. Contact Triamec Motion AG if the error persists.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>





6992	Message Description Solution Details	<b>Monitor is not running SafeA (Axis %1)</b> Internal communication error. Ignore and acknowledge if triggered during a firmware upgrade. Contact Triamec Motion AG if the error persists. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6993	Message Description Solution Details	<b>Monitor is not running SafeB (Axis %1)</b> Internal communication error. Ignore and acknowledge if triggered during a firmware upgrade. Contact Triamec Motion AG if the error persists. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6994	Message Description Solution Details	<b>Monitor is not running Motor (Axis %1)</b> Internal communication error. Ignore and acknowledge if triggered during a firmware upgrade. Contact Triamec Motion AG if the error persists. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6995	Message Description Solution Details	<b>Monitor is not running OptionA (Axis %1)</b> Internal communication error. Ignore and acknowledge if triggered during a firmware upgrade. Contact Triamec Motion AG if the error persists. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6996	Message Description Solution Details	<b>Monitor is not running OptionB (Axis %1)</b> Internal communication error. Ignore and acknowledge if triggered during a firmware upgrade. Contact Triamec Motion AG if the error persists. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6997	Message Description Solution Details	<b>Monitor is not running Communication State= (Axis %1)</b> Internal communication error. Ignore and acknowledge if triggered during a firmware upgrade. Contact Triamec Motion AG if the error persists. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6998	Message Description Solution Details	<b>Monitor state machine (Axis %1)</b> Internal communication error. Contact Triamec Motion AG if the error persists. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-
6999	Message Description Solution Details	<b>Monitor is not running BridgeB (Axis %1)</b> Internal communication error. Ignore and acknowledge if triggered during a firmware upgrade. Contact Triamec Motion AG if the error persists. Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.13.13-



7000	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>ThreeLevel MiddleVoltage (Axis %1)</b></p> <p>Internal voltage is out of hardware limit.</p> <p>Contact Triamec-Motion AG.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
7001	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Power supply or brake resistor error (Axis %1)</b></p> <p>Internal power supply or brake resistor error.</p> <p>Check wiring and connector of the AC-Line input. Check wiring and connector of the brake resistor. Check the main supply for power failure events.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
7002	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Reboot not allowed if enabled (Axis %1)</b></p> <p>Rejected a reboot command because an axis is enabled.</p> <p>Ensure all axes are disabled before commanding a reboot.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
7003	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Localbus timeout (Axis %1)</b></p> <p>Internal communication error.</p> <p>Contact Triamec Motion AG if the error persists.</p> <p>Class:Alarm; ErrorReaction:ErrorStopDisable; Firmware:FW4.12.14-</p>
7004	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Signal Processor unknown address (Axis %1)</b></p> <p>The register General.Commands.SignalProcessors[.].Uri contains an unknown URI Address.</p> <p>Check the value to be a valid URI address.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
7005	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Signal Processor unknown mode or too many high speed acquisitions (Axis %1)</b></p> <p>The value in register General.Commands.SignalProcessors[.].Mode is unknown or there are too many high speed acquisitions.</p> <p>Reduce the number of other acquisitions running, such as a 50kHz/100kHz scope or check if the firmware supports the selected mode.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
7007	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Localbus (Axis %1)</b></p> <p>The value pair in registers General.Parameters.Localbus.Device and Address is invalid.</p> <p>Contact Triamec Motion AG.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
7008	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Internal Hardware Coding faulty or unknown. (Monitor) (Axis %1)</b></p> <p>The coding of the Monitor Hardware Type or Hardware Identification is incorrect or unknown.</p> <p>Contact Triamec Motion AG.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.19.0-</p>

7010	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>STO-Active from enabled state(Axis %1)</b></p> <p>STO activation detected in enabled state.</p> <p>Disable all axes before activating STO.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
7011	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>STO-Inconsistent (Axis %1)</b></p> <p>The logic levels of the STO channels are not equal.</p> <p>Ensure equal logic levels for both STO inputs for normal operation. Check the STO circuit if this reoccurs.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
7013	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>STO-StartupTestFail (Axis %1)</b></p> <p>The safety module test running during startup failed.</p> <p>Contact Triamec Motion AG.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
7014	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>STO-SafeMode (Axis %1)</b></p> <p>The safety module entered safe mode.</p> <p>Consult the safety documentation.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
7015	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>STO-TemperatureLimit (Axis %1)</b></p> <p>The safety module detected a temperature error.</p> <p>Reduce the environment temperature.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
7016	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>No functional safety option (Axis %1)</b></p> <p>The safety module is in functional safety state, but the FS option is disabled.</p> <p>Request the FS option from Triamec Motion AG.</p> <p>Class:Alarm; ErrorReaction:ErrorDisable; Firmware:FW4.12.14-</p>
7110	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Tria-Link-Publisher illegal URI (Axis %1)</b></p> <p>Illegal URI Address in this Publisher.</p> <p>Ensure that the address stated in the error message is a valid register.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
7111	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Tria-Link-Publisher Channel too large or already in use (Axis %1)</b></p> <p>The Tria-Link-Channel is already in use or illegal.</p> <p>One Tria-Link-Channel must be used by only one Publisher. Check for multiple assignments.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>
7112	<p>Message</p> <p>Description</p> <p>Solution</p> <p>Details</p>	<p><b>Tria-Link-Subscriber illegal URI (Axis %1)</b></p> <p>Illegal URI Address in this Subscriber.</p> <p>Ensure that the address stated in the error message is a valid register.</p> <p>Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-</p>



7113	Message	<b>Tria-Link-Subscriber Channel too large or already in use (Axis %1)</b>
	Description	The Tria-Link Channel is already subscribed or illegal.
	Solution	Ensure that one Channel is subscribed only once per drive. Check for multiple assignments.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
7114	Message	<b>Tria-Link-Subscriber timeout (Axis %1)</b>
	Description	The data feed for the Subscriber discontinued.
	Solution	Ensure that the corresponding Publisher is running.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
7115	Message	<b>Tria-Link-Subscriber multiple source (Axis %1)</b>
	Description	The Subscriber receives data from multiple Publishers on the same Channel.
	Solution	Use the two source addresses stated in the error message to find Publishers that use the same Channel. One Tria-Link-Channel must be used by only one Publisher.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
8961	Message	<b>BootError factory firmware: Install a new firmware (Axis %1)</b>
	Description	Drive fell back into factory firmware, most probably due to a failed firmware update.
	Solution	Install a new firmware using the update firmware procedure.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
8962	Message	<b>BootError hardware test failed (Axis %1)</b>
	Description	A critical hardware error occurred.
	Solution	Contact triamec Motion AG.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
8963	Message	<b>BootError unknown product ID (Axis %1)</b>
	Description	The firmware does not support the product.
	Solution	Install an up to date firmware.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
8964	Message	<b>BootError unknown product revision (Axis %1)</b>
	Description	The firmware does not support this hardware revision.
	Solution	Install an up to date firmware.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
8965	Message	<b>BootError option module missing (Axis %1)</b>
	Description	The product requires an option module which is not found.
	Solution	Contact Triamec-Motion AG.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-
8966	Message	<b>BootError firmware is incompatible with the fieldbus of the product (Axis %1)</b>
	Description	The firmware does not support the fieldbus.
	Solution	Install an up to date firmware.
	Details	Class:Alarm; ErrorReaction:None; Firmware:FW4.12.14-



## 2 ErrorReactions

If an error has an impact on the axis, the message description contains a tag that identifies the errorReaction taking place. These reactions are described in the following:

### 2.1 ErrorStop

If the axis is in motion, it will first enter the state "ErrorStopping" and stop using the emergency stop ramp. The axis will stay enabled (Standstill) if it was enabled before the error. The user must reset the error before the axis can receive new motion commands.

### 2.2 ErrorStopDisable

If the axis is in motion, it will first enter the state "ErrorStopping" and stop using the emergency stop ramp. Then it will activate the brakes if available (`Axes[].Parameters.Motor.BrakeReleaseAction`) and enter the state "Disabling". Then, it will wait until the time `Axes[].Parameters.Motor.BrakeHoldTime` is passed. Finally the axis will be disabled. The user must reset the error before the axis can be enabled again.

### 2.3 ErrorDisable

The brakes are activated if available (`Axes[].Parameters.Motor.BrakeReleaseAction`) but the `BrakeHoldTime` is not considered. The axis will therefore immediately disable. The user must reset the error before the axis can be enabled again.

## Revision History

Version	Date	Editor	Comment
002	2022-03-22	chm	Initial fork from AN103
003	2022-06-08	sm	First release with FW 4.15
004	2022-08-16	sm	Update to FW release 4.16
005	2023-02-17	sm	Update to FW release 4.18
006	2023-10-23	mxv	Update to FW release 4.19
007	2024-0403	mxv, ab	Update to FW release 4.22

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