

**Description**

If monitoring functions of the drive detect an error, the drive generates an error message. Each error message is identified by an error code.

The following information is available for each error message:

- Error code
- Error class
- Description of error
- Possible causes
- Possible remedies

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**Range of Error Messages**

The table below summarizes the error codes classified by range.

Error code	Range
E 1xxx	General
E 2xxx	Overcurrent
E 3xxx	Voltage
E 4xxx	Temperature
E 5xxx	Hardware
E 6xxx	Software
E 7xxx	Interface, wiring
E 8xxx	Fieldbus
E Axxx	Motor movement
E Bxxx	Communication

**Error Class of Error Messages**

The error messages are classified according to the following error classes:

Error class	State transition <sup>1)</sup>	Error response	Resetting the error message
0	-	No interruption of the movement	Function "Fault Reset"
1	T11	Stop movement with "Quick Stop"	Function "Fault Reset"
2	T13, T14	Stop movement with "Quick Stop" and disable the power stage when the motor has come to a standstill	Function "Fault Reset"
3	T13, T14	Disable the power stage immediately without stopping the movement first	Function "Fault Reset"
4	T13, T14	Disable the power stage immediately without stopping the movement first	Power cycle
<b>(1)</b> See chapter Operating State ( <i>see page 228</i> )			

## Table of Error Messages

### List of the Error Messages Sorted by Error Code

Error code	Error class	Description	Cause	Correctives
E 1100	0	Parameter out of permissible value range	The value entered was outside of the permissible value range for this parameter.	The entered value must be within the permissible value range.
E 1101	0	Parameter does not exist	Error detected by parameter management: Parameter (index) does not exist.	Select a different parameter (index).
E 1102	0	Parameter does not exist	Error detected by parameter management: Parameter (subindex) does not exist.	Select a different parameter (subindex).
E 1103	0	Parameter write not permissible (READ only)	Write access to read only parameter.	Write only to parameters that are not read-only.
E 1104	0	Write access denied (no access authorization)	Parameter only accessible at expert level.	The write access level expert is required.
E 1105	0	Block Upload/Download not initialized		
E 1106	0	Command not permissible while power stage is active	Command not permissible while the power stage is enabled (operating state Operation Enabled or Quick Stop Active).	Disable the power stage and repeat the command.
E 1107	0	Access via other interface blocked	Access occupied by another channel (for example: Commissioning software is active and fieldbus access was tried at the same time).	Verify the channel that blocks access.
E 1108	0	File cannot be uploaded: Incorrect file ID		
E 1109	1	Data stored after a power outage is invalid		
E 110A	0	System error detected: No bootloader available		
E 110B	3	Configuration error detected (additional info=Modbus register address) Parameter <code>_SigLatched</code> Bit 30	Error detected during parameter check (for example, reference velocity value for operating mode Profile Position is greater than maximum permissible velocity of drive).	Value in additional error information shows the Modbus register address of the parameter where the initialization error was detected.
E 110D	1	Basic configuration of drive required after factory setting	The "First Setup" (FSU) was not run at all or not completed.	Perform a First Setup.
E 110E	0	Parameter changed that requires a restart of the drive	Only displayed by the commissioning software. A parameter modification requires the drive to be powered off and on.	Restart the drive to activate the parameter functionality. See the chapter Parameters for the parameter that requires a restart of the drive.
E 110F	0	Function not available in this type of device	The specific type of device does not support this function or this parameter value.	Verify that you have the correct device type, in particular type of motor, type of encoder, holding brake.
E 1110	0	Incorrect file ID for upload or download	The specific type of device does not support this kind of file.	Verify that you have the correct device type or the correct configuration file.

Error code	Error class	Description	Cause	Correctives
E 1111	0	File transfer not correctly initialized	A previous file transfer has been aborted.	
E 1112	0	Locking of configuration denied	An external tool has tried to lock the configuration of the drive for upload or download. This may not work because another tool had already locked the configuration of the drive or the drive is in an operating state that does not allow locking.	
E 1113	0	System not locked for configuration transfer	An external tool has tried to transfer the configuration without locking the drive.	
E 1114	4	Configuration download aborted Parameter <code>_SigLatched</code> Bit 5	During a configuration download, a communication error or an error in the external tool was detected. The configuration was only partially transferred to the drive and might be inconsistent now.	Power the drive off/on and retry to download the configuration or restore the factory settings.
E 1115	0	Incorrect configuration file format Parameter <code>_WarnLatched</code> Bit 5	An external tool has downloaded a configuration which has an incorrect format.	
E 1116	0	Request is processed asynchronously		
E 1117	0	Asynchronous request blocked	Request to a module is blocked because the module is currently processing another request.	
E 1118	0	Configuration data incompatible with device	The configuration data contains data from a different device.	Verify device type including type of power stage.
E 1119	0	Incorrect data length, too many bytes		
E 111A	0	Incorrect data length, insufficient number of bytes		
E 111B	4	Configuration download error detected (additional info=Modbus register address)	During a configuration download, one or more configuration values were not accepted by the drive.	Verify that the configuration file is valid and matches the type and version of the drive. The value in the additional error info shows the Modbus register address of the parameter where the initialization error was detected.
E 111C	1	Not possible to initialize recalculation for scaling	A parameter could not be initialized.	The address of the parameter that caused the detected error can be read via the parameter <code>_PAR_ScalingError</code> .
E 111D	3	Original state of a parameter cannot be restored after an error was detected during recalculation of parameters with user-defined units.	The drive contained an invalid configuration before the recalculation was started. An error was detected during the recalculation.	Power the drive off and on again. This may help you to identify the affected parameter(s). Change the parameters as required. Verify that the parameter configuration is valid before starting the recalculation procedure.

Error code	Error class	Description	Cause	Correctives
E 111F	1	Recalculation not possible.	Invalid scaling factor.	Verify that you really want the selected scaling factor. Try a different scaling factor. Before triggering scaling, reset the parameters with user-defined units.
E 1120	1	Recalculation for scaling not possible	A parameter could not be recalculated.	The address of the parameter that caused this condition can be read via the parameter <code>_PAR_ScalingError</code> .
E 1121	0	Incorrect sequence of steps for scaling (fieldbus)	The recalculation has been started prior to the initialization.	The recalculation must be started after the initialization.
E 1122	0	Recalculation for scaling not possible	Recalculation for scaling is already running.	Wait for the running recalculation for scaling to finish.
E 1123	0	Parameter cannot be changed	Recalculation for scaling is running.	Wait for the running recalculation for scaling to finish.
E 1124	1	Timeout during recalculation for scaling	The time between the initialization of the recalculation and the start of the recalculation has been exceeded (30 seconds).	Recalculation must be started within 30 seconds after initialization.
E 1125	1	Scaling not possible	The scaling factors for position, velocity or acceleration/deceleration are beyond internal calculation limits.	Retry with different scaling factors.
E 1126	0	Configuration is blocked by another access channel		Close other access channel (for example, other instance of commissioning software).
E 1127	0	Invalid key received		
E 1128	0	Special login is required for Manufacturing Test Firmware		
E 1129	0	Test step not yet started		
E 112D	0	Configuration of edges is not supported	The selected capture input does not support rising and falling edge at the same time.	Set the edge to either "rising" or "falling".
E 112F	0	Time filter settings cannot be changed	Position capture is already active with a time filter. The filter settings cannot be changed.	Deactivate position capture.
E 1300	3	Safety function STO activated (STO_A, STO_B) Parameter <code>_SigLatched</code> Bit 10	The safety function STO was activated in the operating state Operation Enabled.	Verify correct wiring of the inputs of the safety function STO and perform a Fault Reset.
E 1301	4	STO_A and STO_B different level Parameter <code>_SigLatched</code> Bit 11	The levels of the inputs STO_A and STO_B were different for more than 1 second.	Verify correct wiring of the inputs of the safety function STO.
E 1302	0	Safety function STO activated (STO_A, STO_B) Parameter <code>_WarnLatched</code> Bit 10	Safety function STO was activated while the power stage was disabled.	Verify correct wiring of the inputs of the safety function STO.
E 1311	0	The selected signal input function or signal output function cannot be configured	The selected signal input function or signal output function cannot be used in the selected operating mode.	Select another function or change the operating mode.

Error code	Error class	Description	Cause	Correctives
E 1312	0	Limit switch or reference switch signal not defined for signal input function	Reference movements require limit switches. These limit switches are not assigned to inputs.	Assign the signal input functions Positive Limit Switch, Negative Limit Switch and Reference Switch.
E 1313	0	Configured debounce time not possible for this signal input function	The signal input function does not support the selected debounce time.	Set the debounce time to a valid value.
E 1314	4	At least two inputs have the same signal input function.	The same signal input function has been assigned to at least two inputs.	Reconfigure the inputs.
E 1316	1	Position capture via signal input currently not possible Parameter <code>_SigLatched</code> Bit 28	Position capture is already being used.	
E 1501	4	System error detected: DriveCom state machine indeterminable state		
E 1502	4	System error detected: HWL low-level state machine indeterminable state		
E 1503	1	Quick Stop triggered via fieldbus	A Quick Stop has been triggered via the fieldbus. The Quick Stop option code has been set to -1 or -2 which causes the drive to transition to the operating state 9 Fault instead of the operating state 7 Quick Stop Active.	
E 1600	0	Oscilloscope: No additional data available		
E 1601	0	Oscilloscope: Parameterization incomplete		
E 1602	0	Oscilloscope: Trigger variable not defined		
E 1606	0	Logging still active		
E 1607	0	Logging: No trigger defined		
E 1608	0	Logging: Invalid trigger option		
E 1609	0	Logging: No channel selected		
E 160A	0	Logging: No data available		
E 160B	0	Parameter cannot be logged		
E 160C	1	Autotuning: Moment of inertia outside permissible range	The load inertia is too high.	Verify that the system can easily be moved. Verify the load. Use a differently rated drive.
E 160E	1	Autotuning: Test movement could not be started		
E 160F	1	Autotuning: Power stage cannot be enabled	Autotuning was not started in the operating state Ready To Switch On.	Start Autotuning when the drive is in the operating state Ready To Switch On.
E 1610	1	Autotuning: Processing stopped	Autotuning stopped by user command or by detected error (see additional error message in error memory, for example, DC bus undervoltage, limit switches triggered)	Remove the cause of the stop and restart Autotuning.
E 1611	1	System error detected: Parameter could not be written during Autotuning (additional info=Modbus register address)		

Error code	Error class	Description	Cause	Correctives
E 1612	1	System error detected: Parameter could not be read during Autotuning		
E 1613	1	Autotuning: Maximum permissible movement range exceeded Parameter <code>_SigLatched</code> Bit 2	The movement exceeded the adjusted movement range during Autotuning.	Increase the movement range value or disable movement range monitoring by setting <code>AT_DIS = 0</code> .
E 1614	0	Autotuning: Already active	Autotuning has been started twice simultaneously or an Autotuning parameter is modified during Autotuning (parameter <code>AT_dis</code> and <code>AT_dir</code> ).	Wait for Autotuning to finish before restarting Autotuning.
E 1615	0	Autotuning: This parameter cannot be changed while Autotuning is active	Parameter <code>AT_gain</code> or <code>AT_J</code> are written during Autotuning.	Wait for Autotuning to finish before changing the parameter.
E 1617	1	Autotuning: Friction torque or load torque too great	The current limit has been reached (parameter <code>CTRL_I_max</code> ).	Verify that the system can easily be moved. Verify the load. Use a differently rated drive.
E 1618	1	Autotuning: Optimization aborted	The internal Autotuning sequence has not been finished, there may have been a following error.	See the additional information provided in the error memory.
E 1619	0	Autotuning: Velocity jump in parameter <code>AT_n_ref</code> is not sufficient	Parameter <code>AT_n_ref &lt; 2 * AT_n_tolerance</code> . The drive only checks this for the first velocity jump.	Modify the parameter <code>AT_n_ref</code> or <code>AT_n_tolerance</code> to meet the required condition.
E 1620	1	Autotuning: Load torque too high	Product rating is not suitable for the machine load. Detected machine inertia is too high compared to the inertia of the motor.	Reduce load, verify rating.
E 1621	1	System error detected: Calculation error		
E 1622	0	Autotuning: Not possible to perform Autotuning	Autotuning can only be performed if no operating mode is active.	Terminate the active operating mode or disable the power stage.
E 1623	1	Autotuning: HALT request has stopped the autotuning process	Autotuning can only be performed if no operating mode is active.	Terminate the active operating mode or disable the power stage.
E 1A00	0	System error detected: FIFO memory overflow		
E 1A01	3	Motor has been changed (different type of motor) Parameter <code>_SigLatched</code> Bit 16	Detected motor type is different from previously detected motor.	Confirm the change.
E 1A03	4	System error detected: Hardware and firmware do not match		
E 1B00	3	System error detected: Incorrect parameters for motor and power stage Parameter <code>_SigLatched</code> Bit 30	Incorrect manufacturer parameter value (data) non-volatile memory of device.	Replace device.
E 1B02	3	Target value too high. Parameter <code>_SigLatched</code> Bit 30		
E 1B05	2	Error detected during parameter switching Parameter <code>_SigLatched</code> Bit 30		
E 1B0C	3	Motor velocity too high.		

Error code	Error class	Description	Cause	Correctives
E 1B0D	3	Velocity value determined by velocity observer is incorrect	Incorrect system inertia for velocity observer calculations. Incorrect velocity observer dynamics. System inertia changes during operation. In this case, operation with velocity observer is not possible and the velocity observer must be deactivated.	Change the velocity observer dynamics via the parameter CTRL_SpdObsDyn. Change the system inertia used for velocity observer calculations via the parameter CTRL_SpdObsInert. If the detected error persists, deactivate the velocity observer.
E 1B0F	3	Velocity deviation too high		
E 2300	3	Power stage overcurrent Parameter _SigLatched Bit 27	Motor short circuit and disabling of the power stage. Motor phases are inverted.	Verify the motor power connection.
E 2301	3	Braking resistor overcurrent Parameter _SigLatched Bit 27	Braking resistor short circuit.	If you use the internal braking resistor, contact Technical Support. If you use an external braking resistor, verify correct wiring and rating of the braking resistor.
E 3100	par.	Missing mains supply, undervoltage mains supply or overvoltage mains supply Parameter _SigLatched Bit 15	Missing phase(s) for more than 50 ms. Mains voltage is out of range. Mains frequency is out of range.	Verify that the values of the mains power supply network comply with the technical data.
E 3200	3	DC bus overvoltage Parameter _SigLatched Bit 14	Excessive regeneration during deceleration.	Verify correct deceleration ramp, rating of drive and braking resistor.
E 3201	3	DC bus undervoltage (shutdown threshold) Parameter _SigLatched Bit 13	Power supply outage, insufficient power supply.	Verify mains supply.
E 3202	2	DC bus undervoltage (Quick Stop threshold) Parameter _SigLatched Bit 13	Power supply outage, insufficient power supply.	Verify mains supply.
E 3206	0	Undervoltage DC bus, missing mains supply, undervoltage mains supply or overvoltage mains supply Parameter _WarnLatched Bit 13	Missing phase(s) for more than 50 ms. Mains voltage is out of range. Mains frequency is out of range. Mains voltage and setting of parameter MON_MainsVolt do not match (for example, mains voltage is 230 V and MON_MainsVolt is set to 115 V).	Verify that the values of the mains power supply network comply with the technical data. Verify the settings of the parameter for reduced mains voltage.
E 3300	0	The winding voltage of the motor is lower than the nominal supply voltage of the drive	If the winding voltage of the motor is lower than the nominal supply voltage of the drive, this may result in motor overtemperature due to high current ripple.	Verify the motor temperature. In the case of overtemperature, use a motor with a higher winding voltage or use a drive with a lower nominal supply voltage.
E 4100	3	Power stage overtemperature Parameter _SigLatched Bit 18	Transistors overtemperature: Ambient temperature is too high, fan is inoperative, dust.	Verify the fan, improve the heat dissipation in the cabinet.
E 4101	0	Power stage overtemperature Parameter _WarnLatched Bit 18	Transistors overtemperature: Ambient temperature is too high, fan is inoperative, dust.	Verify the fan, improve the heat dissipation in the cabinet.
E 4102	0	Power stage overload (I2t) Parameter _WarnLatched Bit 30	The current has exceeded the nominal value for an extended period of time.	Verify rating, reduce cycle time.

Error code	Error class	Description	Cause	Correctives
E 4200	3	Device overtemperature Parameter _SigLatched Bit 18	Excessively high ambient temperature due to, for example, dust.	Improve heat dissipation in the control cabinet. If a fan is installed, verify correct operation of the fan. Install a fan in the control cabinet. Improve heat transfer from the rear wall of the device to the control cabinet.
E 4300	2	Motor overtemperature Parameter _SigLatched Bit 17	Ambient temperature is too high. Duty cycle is too high. Motor not properly mounted (thermal isolation). Motor overload.	Verify motor installation: The heat must be dissipated via the mounting surface. Reduce ambient temperature. Provide ventilation.
E 4301	0	Motor overtemperature Parameter _WarnLatched Bit 17	Ambient temperature is too high. Duty cycle is too high. Motor not properly mounted (thermal isolation). Motor overload.	Verify motor installation: The heat must be dissipated via the mounting surface. Reduce ambient temperature. Provide ventilation.
E 4302	0	Motor overload (I2t) Parameter _WarnLatched Bit 31	The current has exceeded the nominal value for an extended period of time.	Verify that the system can easily be moved. Verify the load. Use a differently sized motor, if necessary.
E 4303	0	No motor temperature monitoring	The temperature parameters (in electronic nameplate of motor, non-volatile memory of encoder) are unavailable or invalid; parameter A12 is equal to 0.	Contact Technical Support. Replace motor.
E 4304	0	The encoder does not support motor temperature monitoring.		
E 4402	0	Braking resistor overload (I2t > 75%) Parameter _WarnLatched Bit 29	Regeneration energy too high. External loads too high. Motor velocity too high. Deceleration too fast. Insufficient braking resistor.	Reduce load, velocity, deceleration. Verify correct braking resistor rating.
E 4403	par.	Braking resistor overload (I2t > 100%)	Regeneration energy too high. External loads too high. Motor velocity too high. Deceleration too fast. Insufficient braking resistor.	Reduce load, velocity, deceleration. Verify correct braking resistor rating.
E 4404	0	Overload of transistor for braking resistor Parameter _WarnLatched Bit 28	Regeneration energy too high. External loads too high. Deceleration too fast.	Reduce load and/or deceleration.
E 5101	0	Modbus power supply missing		
E 5102	4	Motor encoder supply voltage Parameter _SigLatched Bit 16	Encoder power supply is not within permissible range of 8 V to 12 V.	Replace the device. Contact Technical Support.
E 5200	4	Error detected at connection to motor encoder Parameter _SigLatched Bit 16	Incorrect encoder cable or cable not connected, EMC.	Verify the cable connection and the cable shield.
E 5201	4	Error detected in motor encoder communication Parameter _SigLatched Bit 16		Verify the cable connection and the cable shield.
E 5202	4	Motor encoder is not supported Parameter _SigLatched Bit 16	Incompatible encoder connected.	Verify that a correct encoder is used.

Error code	Error class	Description	Cause	Correctives
E 5203	4	Error detected in connection motor encoder Parameter <code>_SigLatched</code> Bit 16		
E 5204	3	Connection to motor encoder lost Parameter <code>_SigLatched</code> Bit 16	Encoder cable (communication has been interrupted).	Verify the cable connection.
E 5206	0	Communication error detected in encoder Parameter <code>_WarnLatched</code> Bit 16	Communication disturbed, EMC.	Verify cable specifications, cable shield connection and EMC.
E 5207	1	Function is not supported	The hardware revision does not support the function.	
E 5302	4	The motor requires a PWM frequency (16kHz) which the power stage does not support.	The connected motor only works with a PWM frequency of 16 kHz (motor nameplate entry). However, the power stage does not support this PWM frequency.	Use a motor that works with a PWM frequency of 8 kHz.
E 5430	4	System error detected: EEPROM read error Parameter <code>_SigLatched</code> Bit 29		
E 5431	3	System error: EEPROM write error Parameter <code>_SigLatched</code> Bit 29		
E 5432	3	System error: EEPROM state machine Parameter <code>_SigLatched</code> Bit 29		
E 5433	3	System error: EEPROM address error Parameter <code>_SigLatched</code> Bit 29		
E 5434	3	System error: EEPROM incorrect data length Parameter <code>_SigLatched</code> Bit 29		
E 5435	4	System error: EEPROM not formatted Parameter <code>_SigLatched</code> Bit 29		
E 5436	4	System error: EEPROM incompatible structure Parameter <code>_SigLatched</code> Bit 29		
E 5437	4	System error detected: EEPROM checksum error (manufacturer data) Parameter <code>_SigLatched</code> Bit 29		
E 5438	3	System error detected: EEPROM checksum error (user parameters) Parameter <code>_SigLatched</code> Bit 29		
E 5439	3	System error detected: EEPROM checksum error (fieldbus parameters) Parameter <code>_SigLatched</code> Bit 29		
E 543B	4	System error detected: No valid manufacturer data Parameter <code>_SigLatched</code> Bit 29		
E 543E	3	System error detected: EEPROM checksum error (NoInit parameter) Parameter <code>_SigLatched</code> Bit 29		
E 543F	3	System error detected: EEPROM checksum error (motor parameters) Parameter <code>_SigLatched</code> Bit 29		

Error code	Error class	Description	Cause	Correctives
E 5441	4	System error detected: EEPROM checksum error (global control loop parameter set) Parameter _SigLatched Bit 29		
E 5442	4	System error detected: EEPROM checksum error (control loop parameter set 1) Parameter _SigLatched Bit 29		
E 5443	4	System error detected: EEPROM checksum error (control loop parameter set 2) Parameter _SigLatched Bit 29		
E 5444	4	System error detected: EEPROM checksum error (NoReset parameter) Parameter _SigLatched Bit 29		
E 5445	4	System error detected: EEPROM checksum error (hardware information) Parameter _SigLatched Bit 29		
E 5446	4	System error detected: EEPROM checksum error (for power outage data) Parameter _SigLatched Bit 29	Internal EEPROM not operative.	Restart the drive. If the detected error persists, contact Technical Support.
E 5448	2	System error detected: Communication with memory card Parameter _SigLatched Bit 20		
E 5449	2	System error detected: Memory card bus is busy Parameter _SigLatched Bit 20		
E 544A	4	System error detected: EEPROM checksum error (administration data) Parameter _SigLatched Bit 29		
E 544C	4	System error detected: EEPROM is write-protected Parameter _SigLatched Bit 29		
E 544D	2	System error detected: Memory card Parameter _SigLatched Bit 20	The last saving procedure may not have been successful; the memory card may be inoperative.	Retry saving the data. Replace the memory card.
E 544E	2	System error detected: Memory card Parameter _SigLatched Bit 20	The last saving procedure may not have been successful; the memory card may be inoperative.	Retry saving the data. Replace the memory card.
E 544F	2	System error detected: Memory card Parameter _SigLatched Bit 20	The last saving procedure may not have been successful; the memory card may be inoperative.	Retry saving the data. Replace the memory card.
E 5451	0	System error detected: No memory card available Parameter _WarnLatched Bit 20		
E 5452	2	System error detected: Data on memory card and device do not match Parameter _SigLatched Bit 20	Different type of device. Different type of power stage. Data on memory card does not match firmware version of device.	
E 5453	2	System error detected: Incompatible data on the memory card Parameter _SigLatched Bit 20		

Error code	Error class	Description	Cause	Correctives
E 5454	2	System error detected: Capacity of detected memory card insufficient Parameter <code>_SigLatched</code> Bit 20		
E 5455	2	System error detected: Memory card not formatted Parameter <code>_SigLatched</code> Bit 20		Update memory card via HMI command "dtoc" (drive-to-card).
E 5456	1	System error detected: Memory card is write-protected Parameter <code>_SigLatched</code> Bit 20	The memory card has been write-protected.	Remove memory card or disable write protection via HMI.
E 5457	2	System error detected: Incompatible memory card Parameter <code>_SigLatched</code> Bit 20	Memory card capacity is insufficient.	Replace memory card
E 5462	0	Memory card implicitly written by the device Parameter <code>_WarnLatched</code> Bit 20	The content of the memory card and the content of the EEPROM are not identical.	
E 546C	0	EEPROM file not available		
E 5600	3	Motor connection phase error detected Parameter <code>_SigLatched</code> Bit 26	Missing motor phase.	Verify connection of motor phases.
E 5603	3	Commutation error detected Parameter <code>_SigLatched</code> Bit 26	Incorrect wiring of motor cable. Encoder signals are lost or subject to interference. The load torque is greater than the motor torque. The encoder EEPROM contains incorrect data (encoder phase offset is incorrect). Motor is not adjusted.	Verify motor phases, verify encoder wiring. Improve EMC, verify grounding and shield connection. Use a differently sized motor that can withstand the load torque. Verify the motor data. Contact Technical Support.
E 6102	4	System error detected: Internal software error Parameter <code>_SigLatched</code> Bit 30		
E 6103	4	System error detected: System stack overflow Parameter <code>_SigLatched</code> Bit 31		
E 6104	0	System error detected: Division by zero (internal)		
E 6105	0	System error detected: Overflow during 32 bit calculation (internal)		
E 6106	4	System error detected: Size of data interface does not match Parameter <code>_SigLatched</code> Bit 30		
E 6107	0	Parameter outside of value range (calculation error detected)		
E 6108	0	Function not available		
E 6109	0	System error detected: Internal range exceeded		
E 610A	2	System error detected: Calculated value cannot be represented as a 32 bit value		
E 610D	0	Error detected in selection parameter	Incorrect parameter value selected.	Verify the value to be written.
E 610E	4	System error detected: 24 VDC below undervoltage threshold for shutdown		
E 610F	4	System error detected: Internal timer basis missing (Timer0) Parameter <code>_SigLatched</code> Bit 30		

Error code	Error class	Description	Cause	Correctives
E 6111	2	System error detected: Memory area locked Parameter _SigLatched Bit 30		
E 6112	2	System error detected: Out of memory Parameter _SigLatched Bit 30		
E 6113	1	System error detected: Calculated value cannot be represented as a 16 bit value		
E 6114	4	System error detected: Impermissible function call from interrupt service routine	Incorrect programming	
E 6117	0	Holding brake cannot be released manually.	The holding brake cannot be released manually because it is still applied manually.	First, switch from applying the holding brake manually to Automatic, then to releasing the holding brake manually.
E 7100	4	System error detected: Invalid power stage data Parameter _SigLatched Bit 30	Error detected in power stage data stored in device (incorrect CRC), error detected in internal memory data.	Contact Technical Support or replace the device.
E 7110	2	System error detected: Internal braking resistor	Internal braking resistor is inoperative or not connected.	Contact Technical Support.
E 7111	0	Parameter cannot be changed because the external braking resistor is active.	An attempt is made to change one of the parameters RESExt_ton, RESExt_P or RESExt_R even though the external braking resistor is active.	Verify that the external braking resistor is not active if one of the parameters RESExt_ton, RESExt_P or RESExt_R has to be changed.
E 7112	2	No external braking resistor connected	External braking resistor activated (Parameter RESint_ext), but no external resistor is detected.	Verify wiring of the external braking resistor. Verify correct resistance.
E 7120	4	Invalid motor data Parameter _SigLatched Bit 16	Motor data is incorrect (incorrect CRC).	Contact Technical Support or replace the motor.
E 7121	2	System error detected: Error in motor encoder communication Parameter _SigLatched Bit 16	EMC, detailed information can be found in the error memory that contains the error code of the encoder.	Contact Technical Support.
E 7122	4	Invalid motor data Parameter _SigLatched Bit 30	Error detected in motor data stored in motor encoder, error detected in internal memory data.	Contact Technical Support or replace the motor.
E 7124	4	System error detected: Motor encoder inoperative Parameter _SigLatched Bit 16		Contact Technical Support or replace the motor.
E 7125	4	System error detected: Length specification for user data too great Parameter _SigLatched Bit 16		
E 7129	0	System error detected: Motor encoder Parameter _WarnLatched Bit 16		
E 712C	0	System error detected: Communication with encoder not possible Parameter _WarnLatched Bit 16		

Error code	Error class	Description	Cause	Correctives
E 712D	4	Electronic motor nameplate not found Parameter _SigLatched Bit 16	Incorrect motor data (incorrect CRC). Motor without electronic motor nameplate (for example, SER motor)	Contact Technical Support or replace the motor.
E 712F	0	No data segment of the electronic motor nameplate		
E 7132	0	System error detected: Motor configuration cannot be written		
E 7134	4	Incomplete motor configuration Parameter _SigLatched Bit 16		
E 7135	4	Format is not supported Parameter _SigLatched Bit 16		
E 7136	4	Incorrect encoder type selected with parameter MotEnctype Parameter _SigLatched Bit 16		
E 7137	4	Error detected during the internal conversion of the motor configuration Parameter _SigLatched Bit 16		
E 7138	4	Parameter of the motor configuration out of permissible range Parameter _SigLatched Bit 16		
E 7139	0	Encoder offset: Data segment in encoder is incorrect.		
E 713A	3	Adjustment value of the encoder of the third party motor has not yet been determined. Parameter _SigLatched Bit 16		
E 7200	4	System error detected: Calibration analog/digital converter during manufacturing / incorrect BLE file Parameter _SigLatched Bit 30		
E 7320	4	System error detected: Invalid encoder parameter Parameter _SigLatched Bit 16	Communication channel (Hiperface) to encoder is subject to interference, motor encoder has not been factory-parameterized.	Contact Technical Support.
E 7321	3	Timeout reading the absolute position from the encoder Parameter _SigLatched Bit 16	Communication channel (Hiperface) to encoder is subject to interference or motor encoder is inoperative.	Verify wiring and shield connection of encoder cable or replace motor.
E 7327	0	Error bit set in Hiperface answer Parameter _WarnLatched Bit 16	Insufficient EMC.	Verify wiring (shield).
E 7328	4	Motor encoder: Position evaluation error detected Parameter _SigLatched Bit 16	Encoder has detected incorrect position evaluation.	Contact Technical Support or replace the motor.
E 7329	0	Motor encoder Warn signal Parameter _WarnLatched Bit 16	EMC.	Contact Technical Support or replace the motor.
E 7330	4	System error detected: Motor encoder (Hiperface) Parameter _SigLatched Bit 16		Verify wiring and shield connection of encoder cable. Contact Technical Support.
E 7331	4	System error detected: Motor encoder initialization Parameter _SigLatched Bit 30		Verify wiring and shield connection of encoder cable. Contact Technical Support.

Error code	Error class	Description	Cause	Correctives
E 7335	0	Communication with motor encoder active Parameter _WarnLatched Bit 16	Command is being processed or communication may be disturbed (EMC).	Verify wiring and shield connection of encoder cable. Contact Technical Support.
E 733F	4	Amplitude of encoder analog signals too low Parameter _SigLatched Bit 16	Incorrect encoder wiring. Encoder not connected. Encoder signals subject to EMC interference (shield connection, cabling, etc.).	
E 7340	3	Reading of absolute position aborted Parameter _SigLatched Bit 16	Communication channel (Hiperface) to encoder is subject to interference. Encoder (in motor) is inoperative.	Verify wiring and shield connection of encoder cable, replace motor.
E 7341	0	Encoder overtemperature Parameter _WarnLatched Bit 16	The maximum permissible duty cycle is exceeded. The motor was not mounted properly, for example, it is thermally isolated. The motor is blocked so that more current is used than under normal conditions. The ambient temperature is too high.	Reduce the duty cycle, for example, reduce acceleration. Supply additional cooling, for example, use a fan. Mount the motor in such a way as to increase thermal conductivity. Use a differently rated drive or motor. Replace the motor.
E 7342	2	Encoder overtemperature Parameter _SigLatched Bit 16	The maximum permissible duty cycle is exceeded. The motor was not mounted properly, for example, it is thermally isolated. The motor is blocked so that more current is used than under normal conditions. The ambient temperature is too high.	Reduce the duty cycle, for example, reduce acceleration. Supply additional cooling, for example, use a fan. Mount the motor in such a way as to increase thermal conductivity. Use a differently rated drive or motor. Replace the motor.
E 7343	0	Absolute position is different from incremental position Parameter _WarnLatched Bit 16	- Encoder is subject to EMC interference. - Motor encoder is inoperative.	Verify wiring and shield connection of encoder cable, replace motor.
E 7344	3	Absolute position is different from incremental position Parameter _SigLatched Bit 16	- Encoder is subject to EMC interference. - Motor encoder is inoperative.	Verify wiring and shield connection of encoder cable, replace motor.
E 7345	0	Amplitude of analog signals too high, limit of AD conversion exceeded	Encoder signals subject to EMC interference (shield connection, wiring, etc.). Encoder inoperative.	Verify wiring and shield connection. Replace encoder.
E 7346	4	System error detected: Encoder not ready Parameter _SigLatched Bit 16		Verify wiring and shield connection of encoder cable. Contact Technical Support.
E 7347	0	System error detected: Position initialization not possible	Analog and digital encoder signals subject to massive interference.	Reduce encoder signal interference, verify shield connection. Contact Technical Support.
E 7348	3	Timeout reading encoder temperature Parameter _SigLatched Bit 16	Encoder without temperature sensor, incorrect encoder connection.	Verify wiring and shield connection of encoder cable. Contact Technical Support.

Error code	Error class	Description	Cause	Correctives
E 7349	0	Discrepancy between absolute and analog encoder phases	Analog encoder signals are subject to interference. Encoder inoperative.	Verify wiring and shield connection of encoder cable. Replace motor. Contact Technical Support.
E 734A	3	Amplitude of analog signals from encoder too high, signals are clipped Parameter <code>_SigLatched</code> Bit 16	Incorrect encoder wiring. Encoder hardware interface inoperative.	
E 734B	0	Signal position evaluation of analog encoder inoperative Parameter <code>_WarnLatched</code> Bit 16	Incorrect encoder wiring. Encoder hardware interface inoperative.	
E 734C	par.	Error detected with quasi absolute position Parameter <code>_SigLatched</code> Bit 16	The motor shaft may have been moved while the drive was powered down. A quasi absolute position has been detected that is not within the permissible motor shaft deviation range.	If the quasi absolute function is active, only power down the drive if the motor is at a standstill and do not move the motor shaft when the drive is off.
E 734D	0	Index pulse is not available for the encoder Parameter <code>_WarnLatched</code> Bit 16		
E 734E	4	Error in analog signals from encoder detected Parameter <code>_SigLatched</code> Bit 16	Encoder cable not properly connected. Encoder signals subject to EMC interference (shield connection, wiring, etc.). Mechanical issue.	Verify wiring and shield connection of encoder cable. Contact Technical Support.
E 7500	0	RS485/Modbus: Overrun error detected Parameter <code>_WarnLatched</code> Bit 5	EMC; incorrect cabling.	Verify cables.
E 7501	0	RS485/Modbus: Framing error detected Parameter <code>_WarnLatched</code> Bit 5	EMC; incorrect cabling.	Verify cables.
E 7502	0	RS485/Modbus: Parity error detected Parameter <code>_WarnLatched</code> Bit 5	EMC; incorrect cabling.	Verify cables.
E 7503	0	RS485/Modbus: Receive error detected Parameter <code>_WarnLatched</code> Bit 5	EMC; incorrect cabling.	Verify cables.
E 7623	0	Absolute encoder signal is not available Parameter <code>_WarnLatched</code> Bit 22	There is no encoder available at the input specified via the parameter <code>ENC_abs_source</code> .	Verify wiring, verify encoder. Change the value of the parameter <code>ENC_abs_source</code> .
E 7625	0	Not possible to set the absolute position for encoder 1. Parameter <code>_WarnLatched</code> Bit 22	There is no encoder connected to the input for encoder 1.	Connect an encoder to the input for encoder 1 before trying to set the absolute position directly via <code>ENC1_abs_pos</code> .
E 7701	4	System error detected: Timeout during connection to power stage Parameter <code>_SigLatched</code> Bit 31		Contact Technical Support.
E 7702	4	System error detected: Invalid data received from power stage Parameter <code>_SigLatched</code> Bit 31		Contact Technical Support.
E 7703	4	System error detected: Data exchange with power stage lost Parameter <code>_SigLatched</code> Bit 31		Contact Technical Support.

Error code	Error class	Description	Cause	Correctives
E 7704	4	System error detected: Exchange of identification data from power stage not successful Parameter _SigLatched Bit 31		Contact Technical Support.
E 7705	4	System error detected: Checksum identification data from power stage incorrect Parameter _SigLatched Bit 31		Contact Technical Support.
E 7706	4	System error detected: No identification frame received from power stage Parameter _SigLatched Bit 31		Contact Technical Support.
E 7707	4	System error detected: Type of power stage and manufacture data do not match		Contact Technical Support.
E 7708	4	PIC voltage supply too low Parameter _SigLatched Bit 31		Contact Technical Support.
E 7709	4	System error detected: Invalid numbers of data received Parameter _SigLatched Bit 31		Contact Technical Support.
E 770A	2	PIC received data with incorrect parity Parameter _SigLatched Bit 31		Contact Technical Support.
E 8110	0	CANopen: Overflow internal receive queue (message lost) Parameter _WarnLatched Bit 21	Two short CAN messages have been sent too fast (at 1 Mbits only).	
E 8120	0	CANopen: CAN Controller in state Error Passive Parameter _WarnLatched Bit 21	Too many error frames have been detected.	Verify CAN bus installation.
E 8130	2	CANopen: Detected Heartbeat or Life Guard error Parameter _SigLatched Bit 21	The bus cycle time of the CANopen master is longer than the programmed heartbeat or node guarding time.	Verify the CANopen configuration, increase the heartbeat or node guarding time.
E 8131	0	CANopen: Detected Heartbeat or Life Guard error Parameter _WarnLatched Bit 21		
E 8140	0	CANopen: CAN controller was in state 'bus-off', communication is possible again Parameter _WarnLatched Bit 21		
E 8141	2	CANopen: CAN controller is in state 'bus-off' Parameter _SigLatched Bit 21	Too many error frames have been detected, CAN devices with different baud rates.	Verify CAN bus installation.
E 8142	0	CANopen: CAN controller is in state 'bus-off' Parameter _WarnLatched Bit 21	Too many error frames have been detected, CAN devices with different baud rates.	Verify CAN bus installation.
E 8281	0	CANopen: RxPDO1 could not be processed Parameter _WarnLatched Bit 21	Error detected while processing Receive PDO1: PDO1 contains invalid value.	Verify RxPDO1 content (application).
E 8282	0	CANopen: RxPDO2 could not be processed Parameter _WarnLatched Bit 21	Error detected while processing Receive PDO2: PDO2 contains invalid value.	Verify RxPDO2 content (application).
E 8283	0	CANopen: RxPDO3 could not be processed Parameter _WarnLatched Bit 21	Error detected while processing Receive PDO3: PDO3 contains invalid value.	Verify RxPDO3 content (application).
E 8284	0	CANopen: RxPDO4 could not be processed Parameter _WarnLatched Bit 21	Error detected while processing Receive PDO4: PDO4 contains invalid value.	Verify RxPDO4 content (application)

Error code	Error class	Description	Cause	Correctives
E 8291	0	CANopen: TxPdo could not be processed Parameter <code>_WarnLatched</code> Bit 21		
E 8292	0	CANopen: TxPdo could not be processed Parameter <code>_WarnLatched</code> Bit 21		
E 8293	0	CANopen: TxPdo could not be processed Parameter <code>_WarnLatched</code> Bit 21		
E 8294	0	CANopen: TxPdo could not be processed Parameter <code>_WarnLatched</code> Bit 21		
E 82A0	0	CANopen: Initialization CANopen stack Parameter <code>_WarnLatched</code> Bit 21		
E 82A1	0	CANopen: Overflow internal transmit queue (message lost) Parameter <code>_WarnLatched</code> Bit 21		
E 82B1	0	CANopen: The data tunneling protocol is not Modbus RTU Parameter <code>_WarnLatched</code> Bit 21		
E 82B2	0	CANopen: Data frame is still being processed Parameter <code>_WarnLatched</code> Bit 21	A new data frame was written but the previous data frame is still being processed.	Write the data frame again later on.
E A065	0	Parameters cannot be written Parameter <code>_WarnLatched</code> Bit 4	A data set is still active.	Wait until the currently active data set has been terminated.
E A300	0	Deceleration after HALT request still running	HALT was removed too soon. New command was sent before motor standstill was reached after a HALT request.	Wait for complete stop before removing HALT signal. Wait until motor has come to a complete standstill.
E A301	0	Drive in operating state Quick Stop Active	Error with error class 1 detected. Drive stopped with Quick Stop.	
E A302	1	Stop by positive limit switch Parameter <code>_SigLatched</code> Bit 1	The positive limit switch was activated because movement range was exceeded, incorrect operation of limit switch or signal disturbance.	Verify application. Verify limit switch function and connection.
E A303	1	Stop by negative limit switch Parameter <code>_SigLatched</code> Bit 1	The negative limit switch was activated because movement range was exceeded, incorrect operation of limit switch or signal disturbance.	Verify application. Verify limit switch function and connection.
E A304	1	Stop by reference switch Parameter <code>_SigLatched</code> Bit 1		
E A305	0	Power stage cannot be enabled in the operating state Not Ready To Switch On	Fieldbus: An attempt was made to enable the power stage in the operating state Not Ready To Switch On.	Refer to the state diagram.
E A306	1	Stop by user-initiated software stop Parameter <code>_SigLatched</code> Bit 3	Drive is in operating state Quick Stop Active due to a software stop request. The activation of a new operating mode is not possible, the error code is sent as the response to the activation command.	Clear break condition with command Fault Reset.

Error code	Error class	Description	Cause	Correctives
E A307	0	Interruption by internal software stop	In the operating modes Homing and Jog, the movement is internally interrupted by an internal software stop. The activation of a new operating mode is not possible, the error code is sent as the response to the activation command.	Perform a Fault Reset.
E A308	0	Drive is in operating state Fault or Fault Reaction Active	Error with error class 2 or higher detected.	Verify the error code (HMI or commissioning software), remove the cause and perform a Fault Reset.
E A309	0	Drive not in operating state Operation Enabled	A command was sent that requires the drive to be in the operating state Operation Enabled (for example, a command to change the operating mode).	Set drive to operating state Operation Enabled and repeat the command.
E A310	0	Power stage not enabled	Command cannot be used because the power stage is not enabled (operating state Operation Enabled or Quick Stop Active).	Set drive to an operating state in which the power stage is enabled, see state diagram.
E A311	0	Operating mode change active	A start request for an operating mode has been received while a change of the operating mode was active.	Wait until the operating mode change has terminated before triggering a start request for another operating mode.
E A312	0	Profile generation interrupted		
E A313	0	Position overflow, zero point is therefore no longer valid (ref_ok=0)	The movement range limits were exceeded and the zero point is no longer valid. An absolute movement requires a valid zero point.	Define a valid zero point by means of the operating mode Homing.
E A314	0	No valid zero point	Command needs a valid zero point (ref_ok=1).	Define a valid zero point by means of the operating mode Homing.
E A315	0	Homing active	Command cannot be used while the operating mode Homing is active.	Wait until reference movement is finished.
E A316	0	Overflow during calculation of acceleration		
E A317	0	Motor is not at a standstill	Command sent which is not permissible when the motor is not at a standstill. For example: - Change of software limit switches - Change of handling of monitoring signals - Setting of reference point - Teach in of data set	Wait until the motor has come to a standstill (x_end = 1).
E A318	0	Operating mode active (x_end=0)	Activation of a new operating mode is not possible while another operating mode is still active.	Wait until the command in the operating mode has finished (x_end=1) or terminate active operating mode with HALT command.
E A319	1	Manual tuning/Autotuning: Movement out of range Parameter_SigLatched Bit 2	The movement exceeds the parameterized maximum movement range.	Verify permissible movement range value and time interval.

Error code	Error class	Description	Cause	Correctives
E A31A	0	Manual tuning/Autotuning: Amplitude/offset too high	Amplitude plus offset for tuning exceed internal velocity or current limitation.	Choose lower amplitude and offset values.
E A31B	0	Halt requested	Command not permissible while Halt is requested.	Clear Halt request and repeat command.
E A31C	0	Invalid position setting with software limit switch	Value for negative (positive) software limit switch is greater (less) than value for positive (negative) software limit switch.	Set correct position values.
E A31D	0	Velocity range exceeded (parameter CTRL_v_max, M_n_max)	The velocity was set to a value greater than the maximum permissible velocity in parameter CTRL_v_max or M_n_max, whichever is lower.	If the value of parameter M_n_max is greater than the value of parameter CTRL_v_max, increase the value of parameter CTRL_v_max or reduce the velocity value.
E A31E	1	Stop by positive software limit switch Parameter _SigLatched Bit 2	Not possible to execute command because positive software limit switch was triggered.	Return to the permissible movement range.
E A31F	1	Stop by negative software limit switch Parameter _SigLatched Bit 2	Not possible to execute command because negative software limit switch was triggered.	Return to the permissible movement range.
E A320	par.	Permissible position deviation exceeded Parameter _SigLatched Bit 8	External load or acceleration are too high.	Reduce external load or acceleration. Use a differently rated drive, if necessary. Error response can be adjusted via parameter ErrorResp_p_dif.
E A321	0	Invalid setting for RS422 position interface		
E A322	0	Error detected in ramp calculation		
E A323	3	System error detected: Processing error detected during generation of profile		
E A324	1	Error detected during homing (additional info = detailed error code) Parameter _SigLatched Bit 4	Homing movement was stopped in response to a detected error, the detailed reason is indicated by the additional info in the error memory.	Possible sub-error codes: E A325, E A326, E A327, E A328 or E A329.
E A325	1	Limit switch to be approached not enabled Parameter _SigLatched Bit 4	Homing to positive limit switch or negative limit switch is disabled.	Enable limit switch via 'IOsigLimP' or 'IOsigLimN'.
E A326	1	Reference switch not found between positive limit switch and negative limit switch Parameter _SigLatched Bit 4	Reference switch inoperative or not correctly connected.	Verify the function and wiring of the reference switch.
E A329	1	More than one signal positive limit switch/negative limit switch/reference switch active Parameter _SigLatched Bit 4	Reference switch or limit switch not connected correctly or supply voltage for switches too low.	Verify the wiring and 24 VDC supply voltage.
E A32A	1	Positive limit switch triggered with negative direction of movement Parameter _SigLatched Bit 4	Start reference movement with negative direction (for example, reference movement to negative limit switch) and activate the positive limit switch (switch in opposite direction of movement).	Verify correct connection and function of limit switch. Activate a jog movement with negative direction of movement (target limit switch must be connected to the negative limit switch).

Error code	Error class	Description	Cause	Correctives
E A32B	1	Negative limit switch triggered with positive direction of movement Parameter <code>_SigLatched</code> Bit 4	Start reference movement with positive direction (for example, reference movement to positive limit switch) and activate the negative limit switch (switch in opposite direction of movement).	Verify correct connection and function of limit switch. Activate a jog movement with positive direction of movement (target limit switch must be connected to the positive limit switch).
E A32C	1	Reference switch error detected (switch signal briefly enabled or switch overtraveled) Parameter <code>_SigLatched</code> Bit 4	Switch signal disturbance. Motor subjected to vibration or shock when stopped after activation of the switch signal.	Verify supply voltage, cabling and function of switch. Verify motor response after stopping and optimize control loop settings.
E A32D	1	Positive limit switch error detected (switch signal briefly enabled or switch overtraveled) Parameter <code>_SigLatched</code> Bit 4	Switch signal disturbance. Motor subjected to vibration or shock when stopped after activation of the switch signal.	Verify supply voltage, cabling and function of switch. Verify motor response after stopping and optimize control loop settings.
E A32E	1	Negative limit switch error detected (switch signal briefly enabled or switch overtraveled) Parameter <code>_SigLatched</code> Bit 4	Switch signal disturbance. Motor subjected to vibration or shock when stopped after activation of the switch signal.	Verify supply voltage, cabling and function of switch. Verify motor response after stopping and optimize control loop settings.
E A32F	1	Index pulse not found Parameter <code>_SigLatched</code> Bit 4	Index pulse signal not connected or not working properly.	Verify index pulse signal and connection.
E A330	0	Reference movement to index pulse cannot be reproduced. Index pulse is too close to the switch Parameter <code>_WarnLatched</code> Bit 4	The position difference between the index pulse and the switching point is insufficient.	Increase the distance between the index pulse and the switching point. If possible, the distance between the index pulse and the switching point should be a half motor revolution.
E A332	1	Jog error detected (additional info = detailed error code) Parameter <code>_SigLatched</code> Bit 4	Jog movement was stopped in response to a detected error.	For additional info, verify the detailed error code in the error memory.
E A333	3	System error detected: Invalid internal selection		
E A334	2	Timeout Standstill Window monitoring	Position deviation after movement greater than standstill window. This may have been caused by an external load.	Verify load. Verify settings for standstill window (parameter <code>MON_p_win</code> , <code>MON_p_winTime</code> and <code>MON_p_winTout</code> ). Optimize control loop settings.
E A336	1	System error detected: Jerk limitation with position offset after end of movement (additional info = offset in Inc.)		
E A337	0	Operating mode cannot be continued Parameter <code>_WarnLatched</code> Bit 4	Continuation of interrupted movement in operating mode Profile Position is not possible because another operating mode had been active in the meantime. In the operating mode Motion Sequence, continuation is not possible if a motion blend was interrupted.	Restart the operating mode.

Error code	Error class	Description	Cause	Correctives
E A338	0	Operating mode unavailable Parameter <code>_WarnLatched</code> Bit 4	The selected operating mode is not available.	
E A339	0	No processing of motor encoder selected or position capture of motor index pulse active Parameter <code>_WarnLatched</code> Bit 4		
E A33A	0	No valid zero point (ref_ok=0) Parameter <code>_WarnLatched</code> Bit 4	No zero point defined by means of operating mode Homing. Zero point no longer valid due to movement beyond permissible movement range. Motor does not have an absolute encoder.	Use operating mode Homing to define a valid zero point. Use a motor with an absolute encoder.
E A33C	0	Function not available in this operating mode Parameter <code>_WarnLatched</code> Bit 4	Activation of a function which is not available in the active operating mode. Example: Start of backlash compensation while autotuning/manual tuning is active.	
E A33D	0	Motion blend is already active Parameter <code>_WarnLatched</code> Bit 4	Change of motion blend during the ongoing motion blend (end position of motion blend not yet reached)	Wait for the motion blend to complete before setting the next position.
E A33E	0	No movement activated Parameter <code>_WarnLatched</code> Bit 4	Activation of a motion blend without movement.	Start a movement before the motion blend is activated.
E A33F	0	Position of motion blend movement not in the range of the ongoing movement Parameter <code>_WarnLatched</code> Bit 4	The position of the motion blend is outside of the movement range.	Verify the position of the motion blend and the movement range.
E A341	0	Position of motion blend has already been passed Parameter <code>_WarnLatched</code> Bit 4	The movement has passed beyond the position of the motion blend.	
E A342	1	Target velocity was not reached at motion blend position. Parameter <code>_SigLatched</code> Bit 4	The position of the motion blend was overtraveled, the target velocity was not reached.	Reduce the ramp velocity so that the target velocity is reached at the position of the motion blend.
E A343	0	Processing only possible with linear ramp Parameter <code>_WarnLatched</code> Bit 4	Motion blend position was set with a non-linear ramp.	Set a linear ramp.
E A347	0	Permissible position deviation exceeded Parameter <code>_WarnLatched</code> Bit 8	External load or acceleration are too high.	Reduce external load or acceleration. Threshold value can be adjusted via the parameter <code>MON_p_dif_warn</code> .
E A349	0	Position setting exceeds system limits	Position scaling of <code>POSscaleDenom</code> and <code>POSscaleNum</code> results in a scaling factor that is too small.	Change <code>POSscaleDenom</code> and <code>POSscaleNum</code> in such a way as to increase the resulting scaling factor.
E A34A	0	Velocity setting exceeds system limits	The velocity scaling of <code>VELscaleDenom</code> and <code>VELscaleNum</code> results in a scaling factor that is too small. The velocity has been set to a value greater than the maximum possible velocity (the maximum velocity is 13200 rpm).	Change <code>VELscaleDenom</code> and <code>VELscaleNum</code> in such a way as to increase the resulting scaling factor.

Error code	Error class	Description	Cause	Correctives
E A34B	0	Ramp setting exceeds system limits	The ramp scaling of 'RAMPscaleDenom' and 'RAMPscaleNum' results in a scaling factor that is too small.	Change of 'RAMPscaleDenom' and 'RAMPscaleNum' in such a way as to increase the resulting scaling factor.
E A34C	0	Resolution of scaling too high (range exceeded)		
E A34D	0	Function not available when Modulo is active	The function cannot be executed when Modulo is active.	Deactivate Modulo to use the function.
E A34E	0	Target value for absolute movement not possible with defined modulo range and modulo handling.	If parameter 'MOD_Absolute' is set to: Shortest Distance: Target value is not in defined modulo range. Positive Direction: Target value is less than parameter 'MOD_Min'. Negative Direction: Target value is greater than parameter 'MOD_Max'.	Set a correct target value for absolute movement.
E A34F	0	Target position outside of modulo range. Corresponding movement within range performed instead.	The setting of parameter 'MOD_AbsMultiRng' only allows for a movement within the modulo range.	Change the parameter 'MOD_AbsMultiRng' to allow for movements beyond the modulo range.
E A351	1	Function cannot be executed with this position scaling factor Parameter _SigLatched Bit 4	The positions scaling factor is set to a value less than 1rev/131072usr_p, which is less than the internal resolution. In the operating mode Cyclic Synchronous Position, the resolution is not set to 1rev/131072usr_p.	Use a different position scaling factor or deactivate the selected function.
E A352	0	Position list active		
E A353	0	Position list not sorted		
E A354	0	Position list does not match the configuration of the Modulo range		
E A355	1	Error detected during relative movement after capture (additional info = detailed error code) Parameter _SigLatched Bit 4	Movement was stopped by error.	Verify the error memory.
E A356	0	Function Relative Movement After Capture not assigned to a digital input		Assign the function Relative Movement After Capture to a digital input.
E A357	0	Deceleration still running	Command is not permissible during deceleration.	Wait until motor has come to a complete standstill.
E A358	1	Target position overtraveled with function Relative Movement After Capture Parameter _SigLatched Bit 4	Stopping distance too small or velocity too high at the point in time of the capture event.	Reduce the velocity.
E A359	0	Request cannot be processed since the relative movement after capture is still active		
E A35B	0	Modulo cannot be activated Parameter _WarnLatched Bit 4	The set operating mode does not support Modulo.	
E A35D	par.	Permissible velocity deviation exceeded Parameter _SigLatched Bit 8	Load or acceleration too high.	Reduce load or acceleration.
E B100	0	RS485/Modbus: Indeterminable service Parameter _WarnLatched Bit 5	Unsupported Modbus service was received.	Verify application on the Modbus master.

Error code	Error class	Description	Cause	Correctives
E B120	2	Cyclic communication: Incorrect cycle time Parameter <code>_SigLatched</code> Bit 21	The drive does not support the configured cycle time or the difference between the measured cycle time and the configured cycle time is too great.	Change the cycle time in the master controller to a cycle time supported by the drive or verify synchronization requirements.
E B121	2	Cyclic communication: Synchronization signal missing Parameter <code>_SigLatched</code> Bit 21	Two cycles have passed without a synchronization signal having been received.	Analyze the communication.
E B122	2	Cyclic communication: Incorrect synchronization Parameter <code>_SigLatched</code> Bit 21	One signal was missing and the expected second signal was received at an incorrect point in time. The master controller may be unable to provide the required synchronization signals at the set cycle time, for example, due to insufficient computing power.	Analyze the communication or increase the cycle time.
E B123	2	Cyclic communication: The selected cycle time tolerance is too high Parameter <code>_SigLatched</code> Bit 21	The cycle time tolerance may not exceed one quarter of the set cycle time.	Enter a correct value.
E B124	0	Cyclic Communication: Drive is not synchronous with master cycle Parameter <code>_WarnLatched</code> Bit 21	Operating mode has been activated but drive is not synchronized to external synchronization signal.	After having started the synchronization mechanism, wait for 120 cycles before activating the operating mode.
E B200	0	RS485/Modbus: Protocol error detected Parameter <code>_WarnLatched</code> Bit 5	Logical protocol error detected: Incorrect length or unsupported subfunction.	Verify application on the Modbus master.
E B201	2	RS485/Modbus: Interruption of the connection Parameter <code>_SigLatched</code> Bit 5	Connection monitoring has detected an interruption of the connection.	Verify all connections and cables used for data exchange. Verify that the device is on.
E B202	0	RS485/Modbus: Interruption of the connection Parameter <code>_WarnLatched</code> Bit 5	Connection monitoring has detected an interruption of the connection.	Verify all connections and cables used for data exchange. Verify that the device is on.
E B203	0	RS485/Modbus: Incorrect number of monitor objects Parameter <code>_WarnLatched</code> Bit 5		
E B400	2	CANopen: NMT reset with power stage enabled Parameter <code>_SigLatched</code> Bit 21	NMT Reset command is received while drive is in operating state Operation Enabled.	Disable the power stage before sending a NMT reset command.
E B401	2	CANopen: NMT stop with power stage enabled Parameter <code>_SigLatched</code> Bit 21	NMT Stop command is received while drive is in operating state Operation Enabled.	Disable the power stage before sending a NMT Stop command.
E B402	0	CAN PLL active Parameter <code>_WarnLatched</code> Bit 21	An attempt has been made to start the synchronization mechanism, but the synchronization mechanism was already active.	Deactivate the synchronization mechanism.
E B403	2	Excessive Sync period deviation Parameter <code>_SigLatched</code> Bit 21	The period time of the SYNC signals is not stable. The deviation is more than 100 usec.	The SYNC signals of the motion controller must be more accurate.
E B404	2	Sync signal error detected Parameter <code>_SigLatched</code> Bit 21	SYNC signal missed more than twice.	Verify CAN connection, verify motion controller.

Error code	Error class	Description	Cause	Correctives
E B405	2	Drive could not be adapted to master cycle Parameter <code>_SigLatched</code> Bit 21	The jitter of the SYNC object is too great or the motion bus requirements are not taken into account.	Verify the timing requirements regarding interpolation time period and number of devices.
E B406	0	Baud rate is not supported Parameter <code>_WarnLatched</code> Bit 21	The configured baud rate is not supported.	Choose one of the following baud rates: 250 kB, 500 kB, 1000 kB.
E B407	0	Drive is not synchronous with master cycle Parameter <code>_WarnLatched</code> Bit 21	The operating mode 'Cyclic Synchronous Mode' cannot be activated as long as the drive is not synchronized.	Verify motion controller. To be synchronized, the motion controller must cyclically send SYNC signals.
E B700	0	Drive Profile Lexium: On activation of the profile, no dmControl, refA or refB has been mapped.	dmControl, refA or refB have not been mapped.	Map dmControl, refA or refB.
E B702	1	Insufficient velocity resolution due to velocity scaling	Due to the configured velocity scaling, the velocity resolution in REFA16 is insufficient.	Change the velocity scaling.