

[illegible]

no.	Long form			Error code	Remedy	State	Warning	Error	Quick stop fault reaction (v1.1, v1.4 and v1.5)	Quick stop fault reaction (v1.7 and v1.8)	Quick stop fault reaction (v1.7 and v1.8)	Firmware version in which this error code exists									
	From object In203f	A readable description of the error code	What the error code means and the conditions that lead to it being triggered									v1.2	v1.4	v1.5	v1.1	v1.2	v1.3	v1.4	v1.5	v1.6	v1.7
SMM warnings and faults	SmefrC005	Input 1 pulses missing	Safe digital input 1 reports missing test pulses.	Duff05	Check connections and configuration on the safe digital input 1. If the error persists exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC006	Input 2 pulses missing	Safe digital input 2 reports missing test pulses.	Duff06	Check connections and configuration on the safe digital input 2. If the error persists exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC007	Input 3 pulses missing	Safe digital input 3 reports missing test pulses.	Duff07	Check connections and configuration on the safe digital input 3. If the error persists exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC008	Input 4 pulses missing	Safe digital input 4 reports missing test pulses.	Duff08	Check connections and configuration on the safe digital input 4. If the error persists exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrH09	Output 1 discrepancy	Safe digital output 1 reports in discrepancy error between the two channels.	Duff09	Both channels have to be in the same state. If no this fault is reported. Check connections. If the error persists after the power cycle will be reported. Both channels have to be in the same state. If no this fault is reported. Check connections. If the error persists after the power cycle will be reported.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrH10	Output 2 discrepancy	Safe digital output 2 reports in discrepancy error between the two channels.	Duff10	Both channels have to be in the same state. If no this fault is reported. Check connections. If the error persists after the power cycle will be reported. Both channels have to be in the same state. If no this fault is reported. Check connections. If the error persists after the power cycle will be reported.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrH11	Output 1 stuck at	Safe digital output 1 reports an error.	Duff08	Check connections. If the error persists after the power cycle and error remains after deactivating the brake, exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrH12	Output 2 stuck at	Safe digital output 2 reports an error.	Duff09	Check connections. If the error persists after the power cycle and error remains after deactivating the brake, exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrH13	STO output discrepancy	The STO output reports an error between the two channels.	Duff10	Check connections. If the error persists after the power cycle and error remains after deactivating the brake, exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrH14	STO output fault	Error on STO output detected.	Duff10	Check connections. If the error persists after the power cycle and error remains after deactivating the brake, exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrH15	Brake output discrepancy	The brake output reports a discrepancy error between the two channels.	Duff10	Check connections. If the error persists after the power cycle and error remains after deactivating the brake, exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrH16	Brake output fault	The brake output reports an error.	Duff10	Check connections. If the error persists after the power cycle and error remains after deactivating the brake, exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrH17	Safety function discrepancy	SMM reports internal error	Duff11	Check connections. If the error persists after the power cycle and error remains after deactivating the brake, exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrH19	Power supply external SV analog fault	voltage monitoring for external SV supply for analog input reports a voltage out of the limits Attention: SV analog supply is affected by external decoupling supply	Duff13	Check analog input connection and measure voltage on pin 1 on IO port. Check connection of other external SV supplies as well as external SV are supplied by the same power source. If fault remains when nothing is connected to encoder and IO ports there is an internal HV fault and exchange the drive			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC020	Analog input stuck at fault	Safe analog input reports an error of getting stuck.	Duff14	Internal analog input check failed. If the error persists after power cycle exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC021	Analog input sampler fault	Safe analog input reports an error on sampler inputs.	Duff15	Internal analog input check failed. If the error persists after power cycle exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC022	Power supply external SV encoder fault	voltage monitoring for external SV supply for encoder reports a voltage out of the limits Attention: SV encoder supply is affected by external decoupling supply	Duff16	Check analog input connection and measure voltage on pin 1 on encoder port. Check connection of other external SV supplies as well as external SV are supplied by the same power source. If fault remains when nothing is connected to encoder and IO ports there is an internal HV fault and exchange the drive			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC023	Encoder fault	Encoder monitoring showed an error in SMM FW version > 1.3 Extended diagnostic test internal	Duff17	Either no encoder data is available or there is a mismatch between encoder data of primary and verification encoders. Try to reset the fault by acknowledging. Power cycle the drive. If the fault is still there: - check encoder data on non safe side (see values of encoder 1 and 2). - check if configuration between of non safe encoder settings and safety parameters are matching. - If the fault appears only after moving the drive: - check the brake state and encoder resolution. - check "reference position discrepancy" parameter and compare with reported new position discrepancy (checked if needed).			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC024	Power supply fault	Underdrive situation lead to a reset of the SMM.	Duff18	If the error persists after the power cycle, exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC025	Black-channel config fault	A parameter downloaded via safe feedback is being placed but valid parameters are available.	Duff19	Check and correct parameter on the SMM to enable FSC parameterization. This fault is raised if fault remains after the power cycle. If parameterization by SMCAC is activated in the drive. If parameterization by FSC master is used (provide with parameters), this must have to be set as well in the SMM.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC026	Black-channel fault	The safe feedback check detected a failure (e.g. checksum mismatch, Watchdog).	Duff1A	The safe feedback check reports an error. If the error persists after the power cycle, exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrH27	Core fault	SMM reports internal errors.	Duff1B	If the error persists after the power cycle, exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC028	Verification encoder direction error	One of the encoders might be moving in different direction then suggested by the parameters.	Duff1C	Check and correct gain ratio parameter of encoder monitoring. If primary and verification encoders are in opposite direction verification setting numerator has to be negative.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC029	24V Power Supply fault	voltage monitoring for 24V power supply reports a voltage out of the limits	Duff1D	Check connection on safe digital output or in short or too high power consumption. If fault remains when safe digital output are not connected there is an error HV fault and exchange the drive			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC031	Safety parameters invalid	No valid parameters are available.	Duff1F	Download a valid parameter set.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrH04	Manufacturing parameters invalid	SMM reports invalid manufacturing parameters.	Duff20	Check down the system. If the error persists, exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrH05	Temperature fault	SMM reports a temperature problem.	Duff21	Check connections. If the error persists, exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrH06	Timing fault	SMM reports cycle timing violations.	Duff24	Check connections. If the error persists, exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrH07	Internal discrepancy	A discrepancy between the two microcontrollers on the SMM was detected.	Duff25	Check connections. If the error persists, exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrH08	Internal fault	Internal failure happens. Firmware Version between SoC and SMM might not match	Duff26	Firmware version of the drive and SMM are not compatible. Make sure that the installed drive firmware is compatible with the installed SMM firmware.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC033	Internal Communication Fault	The communication between the safe and the non-safe parts fails.	Duff27	If the error persists after the power cycle, contact support. Check software versions on compatibility. If the error persists exchange the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC040	Phase current out of range	Phase current is outside the allowed range.	Duff28	Check motor phase wiring and make sure that the motor torque properly without exceeding the safe torque measurement function. The safe torque measurement can be deactivated by setting the torque constant to 0 in SMM configuration menu.			x	-	Quick stop ramp	Quick stop option code							x	x	x	x
SMM warnings and faults	SmefrC041	Zero calibration out of range	Zero calibration value is invalid.	Duff29	If the error persists after power cycle exchange the drive and contact support. The phase wiring has some current at startup or when STO is activated. Make sure that the motor phase wiring is properly connected without interference from other signals, especially during STO and Brake conditions.			x	-	Quick stop ramp	Quick stop option code							x	x	x	x
SMM warnings and faults	SmefrH42	Calibration cross-check discrepancy	Cross-check of calibration values failed.	Duff2A	If the error persists after power cycle exchange the drive and contact support. This is an internal failure. Power cycle the drive.			x	-	Quick stop ramp	Quick stop option code							x	x	x	x
SMM warnings and faults	SmefrC043	Sum of phase currents out of range	Total phase current exceeds the threshold above 0.	Duff2B	If the error persists after power cycle exchange the drive and contact support. The error must arise due to noisy controller tuning or due to noise from the outside of the system. Make sure that the motor phase wiring is properly done and also make sure that the torque controller is properly tuned.			x	-	Quick stop ramp	Quick stop option code							x	x	x	x
SMM warnings and faults	SmefrH44	Current cross-check discrepancy	Cross-check of phase currents failed.	Duff2C	This is an internal failure. Power cycle the drive.			x	-	Quick stop ramp	Quick stop option code							x	x	x	x
SMM warnings and faults	SmefrH45	Unknown device variant	Device variant is not recognized.	Duff2D	If the error persists after power cycle exchange the drive and contact support. Verify device variant configuration and firmware compatibility. Power cycle the drive.			x	-	Quick stop ramp	Quick stop option code							x	x	x	x
SMM warnings and faults	SmefrC046	Motor constant parameter mismatch	Motor constant parameter does not match expected.	Duff2E	Power cycle the drive. If the error persists exchange the drive and contact support. Check motor parameters in the drive configuration (non safe configuration) and update SMM configuration accordingly.			x	-	Quick stop ramp	Quick stop option code							x	x	x	x
SMM warnings and faults	SmefrC047	Pole pairs parameter mismatch	Number of pole pairs parameter does not match.	Duff2F	Make sure that the motor constant is the same on both ends. This can be easily performed by the "copy data from non safe side" functionality in SMM configuration. Check motor parameters in the drive configuration (non safe configuration) and update SMM configuration accordingly.			x	-	Quick stop ramp	Quick stop option code							x	x	x	x
SMM warnings and faults	SmefrC048	Commutation angle parameter mismatch	Commutation angle parameter does not match expected.	Duff30	Make sure that the motor constant is the same on both ends. This can be easily performed by the "copy data from non safe side" functionality in SMM configuration. Check motor parameters in the drive configuration (non safe configuration) and update SMM configuration accordingly.			x	-	Quick stop ramp	Quick stop option code							x	x	x	x
SMM warnings and faults	SmefrC050	General internal encoder fault	Internal encoder computation error.	Duff32	Make sure that the commutation after start detection is the same on both ends. This can be easily performed by the "copy data from non safe side" functionality in SMM configuration. Encoder configuration diagnostics failed. Safe speed computation failed when calculating speed based on previous and current position. Make sure that the encoder configuration is properly done in SMM. The functionality "copy data from non safe side" should help for configuration discrepancies.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC051	Encoder failed during start-up test	Encoder startup error.	Duff33	If the error persists after power cycle exchange the drive and contact support. Check encoder power, data and clock connections. Power cycle the drive.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC052	Diagnostic error detected by encoder	Encoder diagnostic error.	Duff34	If the error persists after power cycle exchange the drive and contact support. Make sure that the encoders do not return any error before configuring SMM encoder monitoring.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC053	Communication error with encoder	Encoder communication error.	Duff35	If the error persists after power cycle exchange the drive and contact support. Make sure that the power, clock and data lines of the encoders are properly connected. Make sure that the encoder is functioning properly without errors before configuring SMM encoder monitoring. Select the correct port for primary and verification encoder. Configure encoders in SMM along with the encoder settings. Power cycle the drive. If the encoder connection and configuration is correct and the error persists after power cycle exchange the drive and contact support.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x
SMM warnings and faults	SmefrC054	Channel 1 communication error	Channel 1 communication error.	Duff36	Make sure that the power, clock and data lines of the encoders are properly connected. Make sure that the encoder is functioning properly without errors before configuring SMM encoder monitoring. Select the correct port for primary and verification encoder. Configure encoders in SMM along with the encoder settings. Power cycle the drive. If the encoder connection and configuration is correct and the error persists after power cycle exchange the drive and contact support.			x	Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x

		Long form	Explanation	Error code	Remedy	State	Warning	Error	Quick stop fault reaction v4.1, v4.4 and v4.5 (x40)	Quick stop fault reaction v4.6 (x40)	Quick stop fault reaction v4.7 Fast stop (x40)	Firmware version in which this error code exists	v4.2	v4.4	v4.5	v4.6	v4.7	v4.8	v4.9	v5.0	v5.1	v5.2	v5.3	v5.4	v5.5	v5.6	v5.7	
		From object In233f	A readable description of the error code	What the error code means and the conditions that lead to it being triggered	From object In233f	What shall the user do?	Can the code be reported as a warning?	Can the code be reported as an error?	Specifies which type of quick stop is performed during the fault reaction. Only valid for firmwares v4.1, v4.4 and v4.5. Other firmwares always use quick stop.	Specifies which type of quick stop is performed during the fault reaction. Only valid for firmwares v4.6 and v4.7. Other firmwares always use quick stop.	Specifies which type of quick stop is performed during the fault reaction. Only valid for firmwares v4.7 and v4.8.																	
SMM warnings and faults	SmefV05	Channel 1 signal failure	Channel 1 signal failure	Duff37	Make sure that the power, clock and data lines of the encoders are properly connected. Make sure that the encoder is functioning properly without errors before configuring SMM encoder monitoring. Select the correct port for primary and verification encoder. Configure encoders in SMM along with the encoder settings. Power cycle the drive. If the encoder connection and configuration is correct and the error persists after power cycle exchange the drive and contact support.		x		Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x	x	x	x	x	x	x	
SMM warnings and faults	SmefV06	Channel 2 communication error	Channel 2 communication error	Duff38	Make sure that the power, clock and data lines of the encoders are properly connected. Make sure that the encoder is functioning properly without errors before configuring SMM encoder monitoring. Select the correct port for primary and verification encoder. Configure encoders in SMM along with the encoder settings. Power cycle the drive. If the encoder connection and configuration is correct and the error persists after power cycle exchange the drive and contact support.		x		Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x	x	x	x	x	x	x	
SMM warnings and faults	SmefV07	Channel 2 signal failure	Channel 2 signal failure	Duff39	Make sure that the power, clock and data lines of the encoders are properly connected. Make sure that the encoder is functioning properly without errors before configuring SMM encoder monitoring. Select the correct port for primary and verification encoder. Configure encoders in SMM along with the encoder settings. Power cycle the drive. If the encoder connection and configuration is correct and the error persists after power cycle exchange the drive and contact support.		x		Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x	x	x	x	x	x	x	
SMM warnings and faults	SmefV08	No encoder data available	No encoder data available	Duff3A	Make sure that the power, clock and data lines of the encoders are properly connected. Make sure that the encoder is functioning properly without errors before configuring SMM encoder monitoring. Select the correct port for primary and verification encoder. Configure encoders in SMM along with the encoder settings. Power cycle the drive. If the encoder connection and configuration is correct and the error persists after power cycle exchange the drive and contact support.		x		Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x	x	x	x	x	x	x	
SMM warnings and faults	SmefV09	ABI diagnostic error	ABI diagnostic error	Duff3C	Make sure that the power, clock and data lines of the encoders are properly connected. Make sure that the encoder is functioning properly without errors before configuring SMM encoder monitoring. Select the correct port for primary and verification encoder. Configure encoders in SMM along with the encoder settings. Power cycle the drive. If the encoder connection and configuration is correct and the error persists after power cycle exchange the drive and contact support.		x		Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x	x	x	x	x	x	x	
SMM warnings and faults	SmefV0E	Position time drift error	Position time drift error	Duff3D	Make sure that the power, clock and data lines of the encoders are properly connected. Make sure that the encoder is functioning properly without errors before configuring SMM encoder monitoring. Select the correct port for primary and verification encoder. Configure encoders in SMM along with the encoder settings. Power cycle the drive. If the encoder connection and configuration is correct and the error persists after power cycle exchange the drive and contact support.		x		Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x	x	x	x	x	x	x	
SMM warnings and faults	SmefV0E2	Position drift error	Position drift error	Duff3E	Check for mechanical slippage, mounting, noise. Make sure that the power, clock and data lines of the encoders are properly connected. Make sure that the encoder is functioning properly without errors before configuring SMM encoder monitoring. Select the correct port for primary and verification encoder. Configure encoders in SMM along with the encoder settings. Power cycle the drive. If the encoder connection and configuration is correct and the error persists after power cycle exchange the drive and contact support.		x		Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x	x	x	x	x	x	x	
SMM warnings and faults	SmefV0E3	No position available	No valid position from the encoder is available	Duff41	Make sure that the power, clock and data lines of the encoders are properly connected. Make sure that the encoder is functioning properly without errors before configuring SMM encoder monitoring. Select the correct port for primary and verification encoder. Configure encoders in SMM along with the encoder settings. Power cycle the drive. If the encoder connection and configuration is correct and the error persists after power cycle exchange the drive and contact support.		x		Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x	x	x	x	x	x	x	
SMM warnings and faults	SmefV0E6	Fiber buffer not filled	The fiber buffer is not yet filled	Duff42	Safe state is achieved until the buffer is filled		x		Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x	x	x	x	x	x		
SMM warnings and faults	SmefV0F7	Acceleration buffer not filled	The acceleration buffer is not yet filled	Duff43	Safe state is achieved until the buffer is filled		x		Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x	x	x	x	x	x		
SMM warnings and faults	SmefV0E8	Absolute position not available or invalid	Absolute position not available or invalid	Duff44	Power cycle the drive. If the encoder connection and configuration is correct and the error persists after power cycle exchange the drive and contact support.		x		Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x	x	x	x	x	x		
SMM warnings and faults	SmefV0E9	Multiturn Diagnostic	Multiturn Diagnostic failed	Duff45	Power cycle the drive. If the encoder connection and configuration is correct and the error persists after power cycle exchange the drive and contact support.		x		Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x	x	x	x	x	x		
SMM warnings and faults	SmefV0F0	Multiturn counter	The multiturn counter has detected a problem with the data	Duff46	Power cycle the drive. If the encoder connection and configuration is correct and the error persists after power cycle exchange the drive and contact support.		x		Quick stop ramp	Quick stop ramp	Quick stop option code				x	x	x	x	x	x	x	x	x	x	x	x		
SMM warnings and faults	SmefV0F0d	Invalid Firmware	The version of the SMM firmware does not match the expected version	DuffF0	Contact support to install a valid SMM firmware		x	-	Quick stop ramp	Quick stop option code														x	x	x		
BSS Sensor Faults	BsdBt	BSS Error Bit active	One of the bits in the BSS frame is used to signal an error. This bit is set by the encoder and read by the drive according to user-defined parameter (Status bits active value).	h7333, h7334	Please check the 2 causes often seen: 1. Misconfiguration of Status bits active value. The status bits (error bit and warning bit) are only defined once as active or not. As the error bit being 1 indicates the error being active. Please check the documentation of the encoder and correctly configure the setting. 2. The encoder is indeed raising an error/warning. Please check the BSS data.		x		Quick stop ramp	Active short circuit	Active short circuit	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
BSS Sensor Faults	BsdBtB	BSS Warning Bit active	This fault indicates that the drive receives the error bit being active. One of the bits in the BSS frame is used to signal warning. This bit is set by the encoder and read by the drive according to user-defined parameter (Status bits active value).	h7333, h7334	1. Misconfiguration of Status bits active value. The status bits (error bit and warning bit) are only defined once as active or not. As the error bit being 1 indicates the error being active. Please check the documentation of the encoder and correctly configure the setting. 2. The encoder is indeed raising an error/warning. Please check the BSS data.		x	-	-	-	-	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
BSS Sensor Faults	BsdAckB	BSS Acknowledge Bit not received	The BSS data is not acknowledging the request to communicate sent by the drive. This usually happens when there is some issue with the power or communication link, e.g. one of the wires is broken or not well connected.	h7333, h7334	Please verify make sure that the encoder is connected to the port which is being configured.		x		Quick stop ramp	Active short circuit	Active short circuit	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
BSS Sensor Faults	BsdStB	BSS Start Bit not received	The BSS data acknowledges the request to communicate, but it doesn't see the start bit to start the communication. This usually happens when there is some issue with the power or communication link, e.g. one of the wires is broken or not well connected.	h7333, h7334	This check the wiring according to the hardware wiring instructions to make sure that, finally the signals are transferred to the correct pins, accordingly the signal transfer is stable. Assurance of measurement tools such as multimeter and oscilloscope is necessary.		x		Quick stop ramp	Active short circuit	Active short circuit	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
BSS Sensor Faults	BsdSLC	BSS data (SLC) is permanently Low	The SLC line should be set to high by the BSS drive when it is ready to establish communication. This error usually happens when there is some issue with the power or communication link, e.g. one of the wires is broken or not well connected.	h7333, h7334	Please check the sensor configuration according to the documentation of the encoder manufacturer. The most relevant aspects to check: 1. Installation, unit and location. 2. Multiturn resolution, unit and number of steps. 3. Number of filling bits, unit and number of bits.		x		Quick stop ramp	Active short circuit	Active short circuit	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
BSS Sensor Faults	BsdFrmB	BSS Frame configuration error	The sensor configuration causes an issue related to the BSS frame. This error is currently raised only if the BSS frame size is higher than 64 bits.	h7333, h7334	Regarding a CRC error, there are several causes often seen: 1. Misconfiguration of the sensor setting leading to the bits being read wrong in the case the fault cannot be reset. Please check the sensor configuration according to the documentation of the encoder manufacturer. Common parameters are wrongly configured are the resolution, resolution and multiturn resolution. 2. Misconfiguration of the signed CRC polynomial (h2110115 or h2112115). This CRC is calculated using, in this case the fault cannot be reset. Please check the polynomial in the encoder documentation. The value by default 0F represents $x^8 + x^4 + x^3 + x^2 + 1$, which usually doesn't need to be modified. 3. Inconsistency in signal transfer. In this case the fault can sometimes be reset, but would occur under certain circumstances. Please check the signals received by the drive with an oscilloscope under operation for better investigation. The cause can be that the signal transfer is influenced by external field, or that the signal transfer is unstable for example due to soldering quality or cable aging. Improve the situation by replacing the cables, better arranging the cables, adding shielding, etc., ensuring that the signals can be stably transferred with acceptable noise. 4. Try to recognize the encoder manufacturer's pin-to-pin. In this case, there are two possibilities: - Set its function to Disabled and then back to the function I had. - Remove the encoder from the sensor port (h2C100) and add it again.		x		Quick stop ramp	Active short circuit	Active short circuit	Active short circuit	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
BSS Sensor Faults	BsdCrc	BSS CRC error	The BSS frame contains a CRC or some of the data that is being sent. This error is raised when the CRC sent by the BSS drive is different than the CRC computed by the drive. This usually means that the drive can't read the frame properly.	h7333, h7334	Regarding a CRC error, there are several causes often seen: 1. Misconfiguration of the sensor setting leading to the bits being read wrong in the case the fault cannot be reset. Please check the sensor configuration according to the documentation of the encoder manufacturer. Common parameters are wrongly configured are the resolution, resolution and multiturn resolution. 2. Misconfiguration of the signed CRC polynomial (h2110115 or h2112115). This CRC is calculated using, in this case the fault cannot be reset. Please check the polynomial in the encoder documentation. The value by default 0F represents $x^8 + x^4 + x^3 + x^2 + 1$, which usually doesn't need to be modified. 3. Inconsistency in signal transfer. In this case the fault can sometimes be reset, but would occur under certain circumstances. Please check the signals received by the drive with an oscilloscope under operation for better investigation. The cause can be that the signal transfer is influenced by external field, or that the signal transfer is unstable for example due to soldering quality or cable aging. Improve the situation by replacing the cables, better arranging the cables, adding shielding, etc., ensuring that the signals can be stably transferred with acceptable noise. 4. Try to recognize the encoder manufacturer's pin-to-pin. In this case, there are two possibilities: - Set its function to Disabled and then back to the function I had. - Remove the encoder from the sensor port (h2C100) and add it again.		x		Quick stop ramp	Active short circuit	Active short circuit	Active short circuit	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
BSS Sensor Faults	BsdRegC	BSS register communication error	Some BSS encoders require the firmware to initialize some of the registers to be initialized properly. This error is triggered when any of these BSS register transaction fail.	h7333, h7334	Set its function to Disabled and then back to the function I had. - Remove the encoder from the sensor port (h2C100) and add it again.		x		Quick stop ramp	Active short circuit	Active short circuit	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
SSI Sensor Faults	SsfFrmB	SSI Frame configuration error	The sensor configuration causes an issue related to the SSI frame. This error is currently raised only if the SSI frame size is higher than 256 bits.	h7333, h7334	Please check the sensor configuration, especially the object frame size according to the documentation of the encoder manufacturer.		x		Quick stop ramp	Active short circuit	Active short circuit	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
SSI Sensor Faults	SsfDataL	SSI Data is permanently Low	The data line should be set to high by the SSI drive when it is ready to establish communication. This error usually happens when there is some issue with the power or communication link, e.g. one of the wires is broken or not well connected.	h7333, h7334	Please verify make sure that the encoder is connected to the port which is being configured. This check the wiring according to the hardware wiring instructions to make sure that, finally the signals are transferred to the correct pins, accordingly the signal transfer is stable. Assurance of measurement tools such as multimeter and oscilloscope is necessary.		x		Quick stop ramp	Active short circuit	Active short circuit	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
SSI Sensor Faults	SsfDataH	SSI Data is permanently High	The data line should be set to low by the SSI drive during the readout time, which happens right after clocking the complete SSI frame. This error usually happens when there is some issue with the power or communication link, e.g. one of the wires is broken or not well connected.	h7333, h7334	Please verify make sure that the encoder is connected to the port which is being configured. This check the wiring according to the hardware wiring instructions to make sure that, finally the signals are transferred to the correct pins, accordingly the signal transfer is stable. Assurance of measurement tools such as multimeter and oscilloscope is necessary.		x		Quick stop ramp	Active short circuit	Active short circuit	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
SSI Sensor Faults	SsfCheckB	SSI Checksum error	Some SSI drives include a checksum of the data in the SSI frame. Currently our drives can be configured to read a parity bit from compatible SSI encoders. This error means the parity bit computed by the firmware is different than the one sent by the SSI drive.	h7333, h7334	Regarding a checksum error, there are several causes often seen: 1. Misconfiguration of the sensor setting leading to the bits being read wrong in the case the fault cannot be reset. Please check the sensor configuration according to the documentation of the encoder manufacturer. 2. Inconsistency in signal transfer. In this case the fault can sometimes be reset, but would occur under certain circumstances. Please check the signals received by the drive with an oscilloscope under operation for better investigation. The cause can be that the signal transfer is influenced by external field, or that the signal transfer is unstable for example due to soldering quality or cable aging. Improve the situation by replacing the cables, better arranging the cables, adding shielding, etc., ensuring that the signals can be stably transferred with acceptable noise.		x		Quick stop ramp	Active short circuit	Active short circuit	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
RES10M1 Sensor Faults	R10MAGF	RES10M1 Weak Magnetic Field	Weak magnetic field. Mounting may need to be improved.	h7333, h7334			x		Quick stop ramp	-	-	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
RES10M1 Sensor Faults	R10Cout	RES10M1 Multiturn Counter error	Multiturn counter error	h7333, h7334			x		Quick stop ramp	-	-	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		

msg	Long form	Explanation	Error code	Remedy	State	Warning	Error	Quick stop fault reaction v5.1, v5.2 and v5.3	Quick stop fault reaction (v5.4)	Quick stop fault reaction (v5.7 Feed forward)	Hardware version in which this error code exists	v5.2	v5.4	v5.5	v5.1	v5.2	v5.3	v5.4	v5.5	v5.6	v5.7
From object In203f	A readable description of the error code	What the error code means and the conditions that lead to it being triggered	From object In203f	What shall the user do?	Just a note.	Can the code be reported as a warning?	Can the code be reported as an error?	Specifies which type of quick stop is performed using the feed forward. Only valid for firmware v5.1, v5.2 and v5.3. Other firmware always use quick stop.	Specifies which type of quick stop is performed using the feed forward. Only valid for firmware v5.1, v5.2 and v5.3. Other firmware always use quick stop.	Specifies which type of quick stop is performed using the feed forward. Only valid for firmware v5.1, v5.2 and v5.3. Other firmware always use quick stop.											
Internal Encoder Faults	EncdErr	Encoder multim turn general error	The battery-based multim turn encoder is in a general error state at the startup. A single error source can't be determined.	nv203i, nv204	The multim turn encoder has to be re-configured. Following procedure for the reconfiguration has to be done. Please contact support if the issue persists.		x	Quick stop ramp	Active short circuit	Active short circuit	x	x					x	x	x	x	
Internal Encoder Faults	EncdErr	Integrated encoder checksum error	There is an issue with the integrated encoder. Please contact support.	nv203i, nv204	The integrated encoder detected absolute position inconsistency. The encoder system may report incorrect up to 1 magnetic ring gap past absolute position at the next startup. The correct position may be recovered. If this encoder is used for communication and safety, the communication error may occur. The regular updates are updated calibration values due to mechanical changes, encoder ring damage.		x	Quick stop ramp	Active short circuit	Active short circuit					x	x	x	x	x	x	
Internal Encoder Faults	EncdErr	Integrated Encoder Position Error	The encoder is currently not providing position data, so it's not possible to enter Operation enabled.	nv203i, nv204	If the encoder was used for communication (bus or control), the Communication Error Detection procedure should be done first. Next, the encoder configuration and calibration procedures should be done. If the regular updates are updated calibration values look abnormal, check installation tolerances or replace the encoder ring.		x	Quick stop ramp	Active short circuit	Active short circuit											
Internal Encoder Faults	EncdErr	Integrated encoder wrong 32000 p/turn	Encoder is busy	nv203i, nv204	If using the Integri integrated encoder, make sure that the encoder is not in a busy state.		x	Quick stop ramp	Active short circuit	Active short circuit					x	x	x	x	x	x	
Internal Encoder Faults	EncdErr	Circuits integrated encoder EEPROM error	The EEPROM is corrupted and the integrated encoder configuration has been lost.	nv203i, nv204	Configure the integrated encoder using the button CONFIGURE encoder (v5.4.2). Check the EEPROM data (v5.1) and the EEPROM data (v5.2).	x		-	-	-											
Internal Encoder Faults	EncdErr	Circuits integrated encoder configuration for the error	There was a problem when trying to restore the integrated encoder configuration from the backup file (the backup file is not found).	nv203i, nv204	Save the OELAC problem report and contact customer support.		x	Quick stop ramp	Quick stop ramp	Quick stop option code											
Generic Sensor Faults	SensAng1	Sensor Angle error	1. The selected angle was not completing a whole revolution during offset detection. 2. The calculated commutation angle is out of bounds. A singulation related configuration parameter (resolution, equivalent with a wrong value) wrongly causes the error. 3. The motor is not moving during the QDI index detection.	nv203i, nv203f, nv204	Please first check whether the motor rotates during offset detection. If it doesn't please check the configuration, wiring, and mechanical mounting. Please check the encoder configuration, and make sure that while setting the motor for one full turn, the encoder value is correctly responding to the mechanical position. You can manually rotate the motor for investigation. An alternative way is with OELAC opening another page and playing the position feedback of the encoder used for communication while moving offset detection.		x	Quick stop ramp	Active short circuit	Active short circuit	x	x	x	x	x	x	x	x	x	x	
Generic Sensor Faults	SensCfg	Sensor Configuration error	1. Some encoder parameter was set with an invalid value in the Object dictionary. 2. An action that assigned a parameter encoder function (position, velocity or commutation) value triggered, but there is no action assigned to the function. 3. There was an issue when trying to initialize or configure an encoder.	nv203i, nv203f, nv204	Please check the configuration of the sensors, especially the parameters changed during the last update.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
Generic Sensor Faults	InfResErr	Hardware Resource Error	The software configuration is invalid for the hardware. For example, a sensor configured is with a sensor type not supported by that port.	nv203i, nv204	Please check the sensor configurations and the digital IO settings, making sure that the setting is supported by your hardware according to the documentation.		x	Quick stop ramp	Active short circuit	Active short circuit	x	x	x	x	x	x	x	x	x	x	
Generic Sensor Faults	InfResErr	Invalid Gpio configuration.	The GPIO related configuration chosen is not available. This includes voltage level, direction of the GPIO, or GPIO mode. The error appears when a GPIO pin is configured as Input probe 1 input in GPIO pin configuration (nv203i), but no encoder is selected in Encoder source (nv203i).	nv203i, nv203f, nv204, nv203i	Please check the configuration of the GPIO according to the documentation. If the probe pin is used, select an encoder in Encoder source (nv203i).		x	Quick stop ramp	Active short circuit	Active short circuit	x	x	x	x	x	x	x	x	x	x	
Generic Sensor Faults	SensBat1	Sensor battery error	This error is raised when an encoder battery was expected, but couldn't be detected. This error is raised only by multim turn encoders that need a battery. The circuit's integrated encoder 1 when configured as a multim turn encoder. The error is also raised when the multim turn of such an encoder configured for multim turn.	nv203i, nv204	Please check the documentation to make sure the battery is connected properly and power given. In case there is a battery, check if the battery is not selected, "Y" or "N" to "Y".		x	Quick stop ramp	-	-			x	x							
Generic Sensor Faults	SensCyc1	Sensor encoder service is skipping cycle	The error SnsCyc1 (nv203i or nv203f) is raised when a serial encoder service (RPM18, BSS, SS1, A, Fernal, MAX32) is running. The error SnsCyc1 (nv203i or nv203f) is raised when a serial encoder service (RPM18, BSS, SS1, A, Fernal, MAX32) is running. The error SnsCyc1 (nv203i or nv203f) is raised when a serial encoder service (RPM18, BSS, SS1, A, Fernal, MAX32) is running. The error SnsCyc1 (nv203i or nv203f) is raised when a serial encoder service (RPM18, BSS, SS1, A, Fernal, MAX32) is running.	nv203i, nv204	Monitor the time that is required for reading the encoder. In a BSS encoder, the clock frequency should be increased, and then the encoder should be initialized (determine the minimum value from the encoder data sheet). For an SS1 encoder, only the clock frequency can be increased because the input is fixed. For other encoders, the speed is fixed. Please contact support if this issue occurs.		x	Quick stop ramp	-	-				x	x						
Generic Sensor Faults	EncdErr1	Encoder sampling period is too long	This error is raised whenever the Sampling frequency selected in Encoder configuration 1 or Encoder configuration 2 can't be reached.	nv203i, nv204	Monitor the time that is required for reading the encoder. In a BSS encoder, the clock frequency should be increased, and then the encoder should be initialized (determine the minimum value from the encoder data sheet). For an SS1 encoder, only the clock frequency can be increased because the input is fixed. For other encoders, the speed is fixed. Please contact support if this issue occurs.		x	Quick stop ramp	Active short circuit	Active short circuit			x	x	x	x	x	x	x	x	
Touch probe faults	TpInCng	Touch probe function configuration not supported	Some values in object Out008 Touch probe function are not supported.	nv203i	Check the ESI documentation of object Out008 to understand which bits are not supported. Once the bits are set to supported values, the error can be reset.		x	-	Quick stop ramp	Quick stop option code											
Brake Faults	BnkMtr1	Brake release failed	Brake release procedure for pin brake failed. i.e. the configured displacement threshold (nv204-8 Minimum displacement	nv203i	Please first check whether the motor functions correct, for example by manually releasing the brake and turning off the motor. If the brake release check is configuration, wiring, and mechanical mounting. While the motor functions correct, please further tune the brake configuration parameters, by increasing the torque or decreasing the minimum displacement, until the brakes can be released easily.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
Brake Faults	BnkPul1	Pull brake voltage too high	Pull brake voltage (nv204-1 Pull voltage) higher than measured DC bus voltage (nv203f: DC link output voltage)	nv203i	Please make sure the main power supply is not connected to the drive, and in case it is, check the main power supply voltage.		x	-	-	-			x	x	x	x	x	x	x	x	
Brake Faults	BnkPul1	Push brake voltage too high	Push brake voltage (nv204-2 Push voltage) higher than measured DC bus voltage (nv203f: DC link output voltage)	nv203i	Please make sure the main power supply is not connected to the drive, and in case it is, check the main power supply voltage.		x	-	-	-			x	x	x	x	x	x	x	x	
Brake Faults	BnkPul1	Pin brake pull voltage timeout	This warning is triggered when the pin brake release algorithm takes longer than set up time.	nv203i	Please check the pin brake release algorithm parameters (nv204-4 Release time).		x	-	-	-			x	x	x	x	x	x	x	x	
Parameter Faults	InfResErr	Invalid offset	The commutation offset in Out201 Commutation angle offset is not valid. This error comes directly from reading object Out201 Commutation offset. Data.	nv203i	Please run offset detection before operations. Please pay attention that, the change in some fundamental configuration parameters (sensor configuration, motor configuration) can make the existing offset detection invalid. Please make offset detection in a test mode.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
Parameter Faults	InfResErr	Invalid operation mode	Requested operate mode is not supported. Set a valid value in Out005 Modes of operation.	nv203i	Please check our documentation for the available operation modes. Please check our documentation for the available operation modes. Please check our documentation for the available operation modes.		x	-	-	-			x	x	x	x	x	x	x	x	
Parameter Faults	InfResErr	Max. current is zero or negative	User-defined limit on motor max current (nv203f: Max current) is 0.	nv203i	Please configure the nv203f. Max current is a valid value larger than 0, according to your motor data sheet or your application need.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
Parameter Faults	InfResErr	Max. torque is zero or negative	User-defined limit on motor max torque (nv203f: Max torque) is 0.	nv203i	Please configure the nv203f. Max torque is a valid value larger than 0, according to your motor data sheet or your application need.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
Parameter Faults	InfResErr	Max. motor speed is zero or negative	The value of Out005 Max motor speed is 0, no no motor is allowed.	nv203i	Please configure the nv203f. Max motor speed is a valid value larger than 0, according to your motor data sheet or your application need.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
Parameter Faults	InfResErr	Max. power is zero or negative	User-defined limit on Max. power (nv203f: Max power) is 0.	nv203i	Please configure the nv203f. Max power is a valid value larger than 0, according to your motor data sheet or your application need.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
Parameter Faults	InfResErr	Invalid parameter	The value of a parameter is invalid.	nv203i	Please check the values changed lately according to the documentation.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
Parameter Faults	InfResErr	Software Limit Out	Out007 Software position limit is outside of encoder range limit.	nv203i	Please check object Out007. Software position limit and make sure that it is inside of Out007 Position range limit.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA00F	User-defined acceleration overflow	There is an acceleration parameter that is outside the bounds of how user scaling is configured.	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the acceleration parameter is set too high or too low. E.g. Out003 Quick stop deceleration might be set impossibly high.	Only available in v5.4.5-v2 and v5.4.5-v3.	x	Quick stop ramp	-	-			x								
User scaling errors	UscA00F	User-defined velocity overflow	There is a velocity parameter that is outside the bounds of how user scaling is configured.	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the velocity parameter is set too high or too low. E.g. Out002 Feed velocity might be set impossibly high.	Only available in v5.4.5-v2 and v5.4.5-v3.	x	Quick stop ramp	-	-			x								
User scaling errors	UscA00F	User-defined position overflow	There is a position parameter that is outside the bounds of how user scaling is configured.	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the position parameter is set too high or too low. E.g. Out002 Feed position limit might be set impossibly high.	Only available in v5.4.5-v2 and v5.4.5-v3.	x	Quick stop ramp	-	-			x								
User scaling errors	UscA001	User-defined velocity overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA002	User-defined velocity overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA003	User-defined velocity overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA004	User-defined velocity overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA005	User-defined velocity overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA006	User-defined velocity overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA007	User-defined velocity overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA008	User-defined velocity overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA009	User-defined velocity overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA010	User-defined velocity overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA011	User-defined velocity overflow	Overflow when converting velocity from internal units (RPM Q15) to user units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA012	User-defined velocity overflow	Overflow when converting velocity from internal units (RPM Q15) to user units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA013	User-defined velocity overflow	Overflow when converting velocity from internal units (RPM Q15) to user units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA014	User-defined velocity overflow	Overflow when converting velocity from internal units (RPM Q15) to user units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA015	User-defined velocity overflow	Overflow when converting velocity from internal units (RPM Q15) to user units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA016	User-defined velocity overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA017	User-defined velocity overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA018	User-defined velocity overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA019	User-defined acceleration overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA020	User-defined acceleration overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA021	User-defined acceleration overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA022	User-defined acceleration overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA023	User-defined acceleration overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA024	User-defined acceleration overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA025	User-defined position overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA026	User-defined position overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA027	User-defined position overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA028	User-defined position overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA029	User-defined position overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	
User scaling errors	UscA030	User-defined position overflow	Overflow when converting Out003 SI unit velocity to internal units (RPM Q15).	nv203i	Based on the units you've defined in Out003 SI unit velocity and Out002 Feed constant, the value for the parameter would be out of bounds after scaling it.		x	Quick stop ramp	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x	x	x	x	

msg	Long form	Explanation	Error code	Remedy	State	Warning	Error	Quick stop fault reaction (v1.1, v1.4 and v1.5)	Quick stop fault reaction (v1.6)	Quick stop fault reaction (v1.7 and newer)	Firmware version in which this error code exists	v1.2	v1.4	v1.5	v1.1	v1.2	v1.3	v1.4	v1.5	v1.6	v1.7
	From object In203f	A readable description of the error code		From object In203f	What shall the user do?	Just a note.	Can the code be reported as a warning?	Can the code be reported as an error?	Specifies which type of quick stop is performed using the fault reaction. Only valid for firmwares v1.1, v1.4 and v1.5. Other firmwares always use Quick Stop ramp.	Specifies which type of quick stop is performed using the fault reaction. Only valid for firmwares v1.1, v1.4 and v1.5. Other firmwares always use Quick Stop ramp.	Specifies which type of quick stop is performed using the fault reaction. Only valid for firmwares v1.1, v1.4 and v1.5. Other firmwares always use Quick Stop ramp.										
User scaling errors	UnchF07	User-defined position overflow	In203D	Based on the units you've defined in In203D Feed constant, the value for this parameter would be out of bounds after scaling.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
User scaling errors	UnchF08	User-defined position overflow	In203D	Overflow when converting In203D.0 from user units to internal units (ticks).			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
User scaling errors	UnchF09	User-defined position overflow	In203D	Overflow when converting position from internal units (ticks) to user units (object In203D.1).			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
User scaling errors	UnchF10	User-defined position overflow	In203D	Overflow when converting position from internal units (ticks) to user units (object In203D.2).			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Parameter Faults	StnVn0	Invalid velocity scaling factor	In203D	The velocity scaling factor defined by In203D.0 is unit velocity is outside of the supported range.			x	-	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x				
Parameter Faults	StnVn1	Invalid St velocity time factor	In203D	The velocity scaling factor defined by In203D.0 is unit velocity is outside of the supported range.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Parameter Faults	StnVn2	Invalid Feed constant	In203D	One of the Feed parameters In203D.0 (Feed or Demand torque) is set to 0.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Motion Control Faults	MtHwLnt	Maximum power limit	In203D	Maximum power limit is active. Torque set point is limited.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Motion Control Faults	MtHwLnt	Maximum power limit	In203D	Maximum power limit is active. Torque set point is limited.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Motion Control Faults	FtHwLnt	Following error	In203D	Position actual value is out of the following error window. The quick stop reaction can be changed by using the object In203D.11 (Position following error option code).			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Motion Control Faults	FtHwLnt	Following error	In203D	Velocity actual value is out of the following error window. The quick stop reaction can be changed by using the object In203D.12 (Velocity following error option code).			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Motion Control Faults	MtHwLnt	Maximum torque limit	In203D	Maximum torque limit is active. Target or demand torque is limited.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Motion Control Faults	MtHwLnt	Maximum motor speed limit	In203D	Max. motor speed limit is active. Target or demand velocity is limited. Also, it is active when Profile velocity is Profile position.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Motion Control Faults	MtHwLnt	Software position limit	In203D	Software position limit is active. Actual position is limited to order to prevent runaway of a motor.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Motion Control Faults	MtHwLnt	Software position limit	In203D	Software position limit is active. Target position is limited.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Motion Control Faults	MtHwLnt	Encoder range limit	In203D	Encoder range limit is active. Target position is limited and cart wrap around range limits.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Motion Control Faults	MtHwLnt	Integral limit active	In203D	Integral limit is active. Integral part of position or velocity PID controller is limited.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Motion Control Faults	InpHwLnt	Impedance limit active	In203D	Impedance control stiffness or damping was limited and clamped to its object dictionary limits.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Motion Control Faults	MtHwLnt	Max joint torque capped	In203D	The configured maximum joint torque exceeds the In203D range and was capped to the maximum valid value.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Motion Control Faults	PosLntA01	Positive Limit Switch Active	In203D	Motor is at the configured limit switch and can't move further.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Motion Control Faults	PosLntA02	Positive Limit Switch Active	In203D	Motor is at the position limit switch and can't move further.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Motion Control Faults	NegLntA01	Negative Limit Switch Active	In203D	Motor is at the negative limit switch and can't move further.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Motion Control Faults	NegLntA02	Negative Limit Switch Active	In203D	Motor is at the negative limit switch and can't move further.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Motion Control Faults	OverLntA01	Over-speed limit	In203D	Actual motor velocity exceeds over-speed protection limit while a controller is enabled.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Communication Faults	Cy01n0	Cyclic heartbeat	In203D	A communication keep alive heartbeat was dropped. Check that the PSD messages are being sent by the master correctly, and within 100 ms of each other.			x	-	Quick stop ramp	Quick stop option code	x	x	x	x	x	x	x				
Communication Faults	Cy02n0	OS command collision	In203D	A new OS command was sent, but the OS command response of a previous OS command was not read after it completed.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
DI Protection Errors	DIH01	DI protection is active	In203D	DI protection is active, which limits your maximum torque to the nominal rated values of the motor. See In203D.0, DI and Stall protection for configuration parameters.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Stall Protection Errors	StH01	Stall protection is active	In203D	Stall protection is active, which limits your maximum torque to the nominal rated values of the motor or the motor's deceleration on the selected protection mode. See In203D.0, DI and Stall protection for configuration options.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
DI protection errors	Inver01	Inverter overload	In203D	The inverter has entered an error state to protect itself due to an overload condition.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
DI protection errors	MtH01	Motor phase windings overload	In203D	DI protection is active, motor's phase windings are in overload state and the drive goes into error state to protect the motor.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
DI protection errors	MtH02	Motor phase windings overload	In203D	When DI protection is active, it indicates that the motor's phase windings are in an overload state. Depending on user settings, the drive will either limit the motor current to half of the nominal current or take no action.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
DI protection errors	MtH03	Motor phase windings overload	In203D	Motor phase windings overload.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Homing errors	HmHw01	Invalid homing method	In203D	The value of In203D.0 Homing method is invalid or not supported.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Homing errors	HmHw02	Invalid Switch State during homing	In203D	The state of the homing switch at the end of the homing routine was unexpected. This can happen if the homing switch deactivates before the axis moves back into the valid range of motion.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Internal Errors	IntH01	Internal Error Code: Phase contact support	In203D	Phase code does not support the information regarding the occurrence of the error and needs Symptom technical support for further investigation.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Internal Errors	IntH02	Internal Error Code: Phase contact support	In203D	Phase code does not support the information regarding the occurrence of the error and needs Symptom technical support for further investigation.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Internal Errors	IntH03	Internal Error Code: Drive service is skipping cycles and there is no downstream communication.	In203D	Phase code does not support the information regarding the occurrence of the error and needs Symptom technical support for further investigation.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Internal Errors	IntH04	Internal Error Code: Drive service is skipping cycles and there is no downstream communication.	In203D	Phase code does not support the information regarding the occurrence of the error and needs Symptom technical support for further investigation.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Internal Errors	IntH05	Internal Error Code: Modbus service is skipping cycles and there is no downstream communication.	In203D	Phase code does not support the information regarding the occurrence of the error and needs Symptom technical support for further investigation.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Filter cutoff frequency bounds	VnF0L0	Velocity filter cut-off frequency too low	In203D	Velocity feedback filter Cutoff frequency is lower than the minimum limit.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Filter cutoff frequency bounds	VnF0H0	Velocity filter cut-off frequency too high	In203D	Velocity feedback filter Cutoff frequency is higher than the maximum limit.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Filter cutoff frequency bounds	PnF0L0	Position filter cut-off frequency too low	In203D	Position feedback filter Cutoff frequency is lower than the minimum limit.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Filter cutoff frequency bounds	PnF0H0	Position filter cut-off frequency too high	In203D	Position feedback filter Cutoff frequency is higher than the maximum limit.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Filter cutoff frequency bounds	VnF0L1	Velocity feed forward filter cut-off frequency too low	In203D	Velocity feed forward filter Cutoff frequency is lower than the minimum limit.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Filter cutoff frequency bounds	VnF0H1	Velocity feed forward filter cut-off frequency too high	In203D	Velocity feed forward filter Cutoff frequency is higher than the maximum limit.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Filter cutoff frequency bounds	NvF0L0	Notch filter center frequency too low	In203D	Notch filter Center frequency is higher than the maximum limit.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Filter cutoff frequency bounds	NvF0H0	Notch filter center frequency too high	In203D	Notch filter Center frequency is higher than the maximum limit.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
General errors	InConf	Invalid Configuration	In203D	The operation to save the config on the did not properly complete, and the config save may be corrupt. The config save file is not to be saved.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
General errors	IntH01	Internal Error Code: Phase contact support	In203D	Phase code does not support the information regarding the occurrence of the error and needs Symptom technical support for further investigation.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
General errors	IntH02	Internal Error Code: Phase contact support	In203D	Phase code does not support the information regarding the occurrence of the error and needs Symptom technical support for further investigation.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
General errors	IntH03	Internal Error Code: Drive service is skipping cycles and there is no downstream communication.	In203D	Phase code does not support the information regarding the occurrence of the error and needs Symptom technical support for further investigation.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
General errors	IntH04	Internal Error Code: Drive service is skipping cycles and there is no downstream communication.	In203D	Phase code does not support the information regarding the occurrence of the error and needs Symptom technical support for further investigation.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
General errors	IntH05	Internal Error Code: Modbus service is skipping cycles and there is no downstream communication.	In203D	Phase code does not support the information regarding the occurrence of the error and needs Symptom technical support for further investigation.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Temperature Sensor Faults	Ph01Cov	Protection Hardware Core Over-temperature	In203D	This fault is triggered when the temperature of the core becomes too high and crosses the error threshold (107 °C for Ingeco and 105 °C for the rest of the drives). This happens usually because of sustained load on the processor, high operating frequency and/or even ambient temperature. High core temperature can lead to equipment damage. It can also mean it might be a cooling issue.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
Temperature Sensor Faults	Ph01Cov	Protection Hardware Core Over-temperature	In203D	This fault is triggered when the temperature of the drive becomes too high and crosses the error threshold (145 °C for Ingeco, 140 °C for Natch rev. C, and 140 °C for the rest of the drives). This happens usually because of sustained load on the processor, current leakage from the on-board components, high operating frequency and even ambient temperature. High drive temperature can lead to equipment damage. A warning is triggered at 5% less temperature than the error threshold.			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				
External Sensor Faults	ExH01n0	External Isolated Analog Sensor Output exceeded one of the threshold values	In203D	This fault is triggered when the scaled external analog sensor output exceeds the upper level threshold or becomes lower than the lower level threshold. In203D.11 External isolated measurement Upper error threshold In203D.12 External isolated measurement Lower error threshold			x	-	Quick stop ramp	Quick stop option code				x	x	x	x				

err	From object In203f	Long form	Explanation	Error code	Remedy	State	Warning	Error	Quick stop fault reaction (v1.1, v1.4 and v1.5)	Quick stop fault reaction (v1.7 and v1.8)	Quick stop fault reaction (v1.7 and v1.8)	Firmware version in which this error code exists									
		A readable description of the error code	What the error code means and the conditions that lead to it being triggered	From object In203f	What shall the user do?	Just a note	Can the code be reported as a warning?	Can the code be reported as an error?	Specifies which type of quick stop is performed during the fault reaction. Only valid for firmwares v1.1, v1.4 and v1.5. Other firmwares always use quick stop ramp.	Specifies which type of quick stop is performed during the fault reaction. Only valid for firmwares v1.7 and v1.8.	Specifies which type of quick stop is performed during the fault reaction. Only valid for firmwares v1.7 and v1.8.	v1.2	v1.4	v1.5	v1.1	v1.2	v1.3	v1.4	v1.5	v1.6	v1.7
Diagnostic Errors																					
Diagnostic Errors	DiagErr	Diagnostics error	Error triggered by OS command 16	In2030																	
Diagnostic Errors	VBrcAct	Virtual Braking Chopper Active	The warning or error report says that the virtual braking chopper is actively using the motor to turn energy - User not configured Virtual braking chopper - User has configured In2031 IT (virtual braking chopper notification level) to report warning or report error.	In2030	Check if virtual braking chopper voltage limit is higher than the operating voltage limit - Check if the motor is going to regeneration mode										x	x	x	x	x	x	x
Distributed Clock	SyncDR6	Sync difference too high	Sync time variance of the EtherCAT distributed clock is too high (value will be ignored). This may happen if the distributed clock is poorly configured or the signal isn't consistent.	In2030	Please check the distributed clock (DC) setting of your EtherCAT master		x		-	-	-	x	x								
Open Terminal Faults	OpenTermA	Open Terminal A	Drive terminal A is openned. This error can happen if motor cable is not connected to terminal A of the Drive. It can also happen if the Drive is damaged internally.	In2031	Please check the motor wiring, making sure that the motor phase cable is connected to the terminal A/B/C of the Drive			x	-	-	-	x	x								
Open Terminal Faults	OpenTermB	Open Terminal B	Drive terminal B is openned. This error can happen if motor cable is not connected to terminal B of the Drive. It can also happen if the Drive is damaged internally.	In2032				x	-	-	-	x	x								
Open Terminal Faults	OpenTermC	Open Terminal C	Drive terminal C is openned. This error can happen if motor cable is not connected to terminal C of the Drive. It can also happen if the Drive is damaged internally.	In2033				x	-	-	-	x	x								
Open FET Faults	OpenFetH1	Open high FET at phase A	One of the power electronic switches of Drive is damaged (not conducting). The damaged FET is located in leg A of the inverter, and it's the high-side FET of the leg.	In2031	Please note down the information regarding the occurrence of the error and reach Symington technical support for further investigation.			x	-	-	-	x	x								
Open FET Faults	OpenFetH1	Open high FET at phase B	One of the power electronic switches of Drive is damaged (not conducting). The damaged FET is located in leg B of the inverter, and it's the high-side FET of the leg.	In2032				x	-	-	-	x	x								
Open FET Faults	OpenFetH1	Open high FET at phase C	One of the power electronic switches of Drive is damaged (not conducting). The damaged FET is located in leg C of the inverter, and it's the high-side FET of the leg.	In2033				x	-	-	-	x	x								
Open FET Faults	OpenFetL1	Open low FET at phase A	One of the power electronic switches of Drive is damaged (not conducting). The damaged FET is located in leg A of the inverter, and it's the low-side FET of this leg.	In2031				x	-	-	-	x	x								
Open FET Faults	OpenFetL1	Open low FET at phase B	One of the power electronic switches of Drive is damaged (not conducting). The damaged FET is located in leg B of the inverter, and it's the low-side FET of this leg.	In2032				x	-	-	-	x	x								
Open FET Faults	OpenFetL1	Open low FET at phase C	One of the power electronic switches of Drive is damaged (not conducting). The damaged FET is located in leg C of the inverter, and it's the low-side FET of this leg.	In2033				x	-	-	-	x	x								
Torque sensor error																					
Torque sensor error	TqSDmgT	Torque sensor sampling is too long	This error is raised whenever the Sampling frequency torque sensor can't be reached.	In2030	Please note down the information regarding the occurrence of the error and reach Symington technical support for further investigation.			x		Quick stop ramp	Quick stop ramp							x	x	x	