4.5 System error messages

4.5.1 General error messages

Note!

If you use GDC or a fieldbus module to retrieve the fault (C0168/x), the error message will be represented by an error number.

Display	Error number x = 0: TRIP x = 1: Message x = 2: Warning	Error	Cause	Remedy
---	---	No fault	–	–
CCr	x071	System fault	Processor is overloaded or there is a fault in the program processing	Reduce processor load. Remove function blocks that are not needed from the processing table
			Strong interference on control cables	Shield control cables
			Ground or earth loops in the wiring	Check wiring
CE0	x061	Communication error	Fault during transmission of control commands via automation interface X1	Plug in automation module firmly, bolt down, if necessary
CE1	x062	Communication error at the process data input object CAN-IN1	CAN-IN1 object receives faulty data, or communication is interrupted	• Check cable at X4 • Check sender • Increase monitoring time under C0357/1 if necessary
CE2	x063	Communication error at the process data input object CAN-IN2	CAN-IN2 object receives faulty data, or communication is interrupted	• Check cable at X4 • Check sender • Increase monitoring time under C0357/2 if necessary
CE3	x064	Communication error at the process data input object CAN-IN3	CAN-IN3 object receives faulty data, or communication is interrupted	• Check cable at X4 • Check sender • Increase monitoring time under C0357/3 if necessary
CE4	x065	BUS-OFF state	Controller has received too many incorrect telegrams via system bus X4, and has disconnected from the bus	• Check wiring • Check bus termination (if any) • Check shield contact of the cables • Check PE connection • Check bus load • Reduce baud rate (observe cable length)
EEr	x091	External fault (TRIP-Set)	A digital input assigned with TRIP-set function has been activated (in the most basic configurations the input X5/E4 is LOW-active and linked with the TRIP-set function)	• Check external encoder • Check signal at the digital input X5/E4: – Either connect HIGH level or – Change polarity in C0114 to HIGH-active. CAUTION! When changing to HIGH level, the wire-break protection gets lost.
			The two terminal strips at X5 are reversed	Check the position of the terminal strips: • If you look at the connection unit in reading direction, the left terminal strip X5 must be connected with the input signals and the right terminal strip X5 must be connected with the output signals.
H05	x105	Internal fault		Contact Lenze
H07	x107	Wrong power stage	During initialisation of the controller, a wrong power stage was detected	Contact Lenze

Display	Error number x = 0: TRIP x = 1: Message x = 2: Warning	Error	Cause	Remedy
H10	x110	Sensor fault - heatsink temperature	Sensor of the heatsink temperature detection indicates undefined values	Contact Lenze • Fault message can only be reset by mains switching
H11	x111	Sensor fault - temperature inside the device	Sensor of the internal temperature detection indicates undefined values	Contact Lenze • Fault message can only be reset by mains switching
ID1	x140	Error during motor data identification	• No motor connected • Stator resistance too high • Controller inhibited externally	• Check motor connection • Check motor data entry • Enable controller and repeat motor data identification. The controller enable must be pending continuously until the end of the identification process.
ID2	x141	Error during motor data identification	Motor too small	• Check entered motor data – When setting parameters with Global Drive Control, use the input assistant for motor data • The measurements for the inverter error characteristic and the stator resistance are correct (save measured values in C0003). In the operating mode U/f characteristic control, the motor data identification can be completed.
			Controller inhibited externally	Enable controller and repeat motor data identification. The controller enable must be pending continuously until the end of the identification process.
LP1	x032	Motor phase failure	A current-carrying motor phase has failed	• Check motor • Check supply cables
			The current limit is set too high	Set a lower current limit value under C0599
			This monitoring is not suitable for field frequencies >480 Hz and synchronous servo motors	Deactivate monitoring with C0597= 3
LU	x030	Undervoltage	DC bus voltage is smaller than the value set under C0173	• Check mains voltage • Check supply module
NMAX	x200	Maximum system speed exceeded (C0596)	Active load too high	Check drive dimensioning
			Drive is not speed-controlled, torque excessively limited	If required, increase torque limit
			Current speed is detected incorrectly	Check parameter setting of the incremental encoder (C0025)
OC1	x011	Overcurrent (motor current > 2.25-fold rated controller current, hardware monitoring)	Short circuit/earth fault	• Remove cause of short circuit/earth fault • Check motor and cable • If required, measure the insulation resistance
			Capacitive charging current of the motor cable too high (especially with lower powers)	Use shorter or low-capacitance motor cable
			Acceleration/deceleration times too short in proportion to the load (C0012, C0013, C0105)	• Increase the gain (P component) of the current controller (C0075) • Reduce integral-action time (integral action component) of the Imax controller (C0076)

Display	Error number x = 0: TRIP x = 1: Message x = 2: Warning	Error	Cause	Remedy
			The drive is connected to the coasting machine. The coasting is caused by a short-time pulse inhibit, e.g. at ● OU (overvoltage in the DC bus) ● external or internal controller inhibit	● Activate flying restart circuit ● Operate with speed feedback in the vector control operating mode
			● Encoder error ● Tracks for encoder feedback of the motor speed are reversed	● Check wiring of the encoder ● In case of drive problems with activated feedback, the feedback can be analysed. Here, the signal of the feedback is not used for control. For this test the function block DFIN must be entered into the processing table. In the Lenze setting, DFIN is entered at position 1 of the processing table (C0465/1 = 200). – Deactivate feedback with C0025 = 1 – Connect feedback at the digital frequency input DFIN (X9) – Set DFIN constant (C0425) to the number of increments of the encoder – In C0426, the speed detected by the encoder is indicated
			DC-injection braking at high speeds	● See 📖 31
OC2	x012	Earth fault	One of the motor phases has earth contact	● Check motor ● Check supply cables
			Excessive capacitive charging current of the motor cable	Use motor cable which is shorter or of lower capacitance
OC3	x013	Overload during acceleration	Acceleration/deceleration times too short in proportion to the load (C0012, C0013, C0105)	● Increase the gain (P component) of the current controller (C0075) ● Reduce integral-action time (integral action component) of the I_{max} controller (C0076) ● Increase ramp times ● 📖 32, ”controller in clamp operation (fault OC3)”
OC5	x015	I × t overload	The utilisation of the controller exceeds 100 % (C0064 > 100 %)	Check drive dimensioning ● The utilisation of the controller is calculated from the mean value of the motor current over a time of 180 s. When operating with rated power (150 % overload capacity), the controller can be operated at a utilisation of up to 100 %. ● When C0064 = 95 %, the warning is cancelled.
			The utilisation of the controller exceeds 110 % (C0064 > 110 %) ● The maximum current is reduced	Check drive dimensioning ● When C0064 = 95 %, the reduction of the maximum current is cancelled. The warning is cancelled. ● NOTE: Operation at increased rated power (120 % overload capacity) is not possible.
			Reversed motor phases when operating with feedback or reversed encoder tracks so that the direction of rotation has changed	● Check the motor cable connection for correct phase relation ● If possible, operate the motor with deactivated feedback (C0025 = 1) and check the direction of rotation of the motor. ● See also 📖 31

Display	Error number x = 0: TRIP x = 1: Message x = 2: Warning	Error	Cause	Remedy
OH	x050	Heatsink temperature is higher than the value set in the controller	Ambient temperature T_u > 40 °C or 50 °C	• Allow controller to cool and ensure better ventilation • Check ambient temperature in the control cabinet
			Heatsink very dirty	Clean heatsink
			Wrong mounting position	Change mounting position
OH3	x053	Motor temperature is higher than the value set in the controller	Motor too hot because of excessive current or frequent and too long acceleration	Check drive dimensioning
			No KTY is connected to X8	Connect KTY or switch off monitoring (C0583 = 3)
OH4	x054	Heatsink temperature is higher than the value set in C0122	Ambient temperature T_u > 40 °C or 50 °C.	• Allow controller to cool and ensure better ventilation • Check ambient temperature in the control cabinet
			Heatsink very dirty	Clean heatsink
			Wrong mounting position	Change mounting position
			The value entered in C0122 is too low	Enter higher value
OH7	x057	Motor temperature is higher than the value set in C0121	Motor too hot because of excessive current or frequent and too long acceleration	Check drive dimensioning
			No KTY is connected to X8	Connect KTY or switch off monitoring (C0584 = 3)
			The value entered in C0121 is too low	Enter higher value
OH8	x058	PTC at terminals T1, T2 indicates motor overheating	Motor too hot because of excessive current or frequent and too long acceleration	Check drive dimensioning
			Terminals T1, T2 are not assigned	Connect PTC or thermal contact or switch off monitoring (C0585=3)
OU	x020	Overvoltage in the DC bus	Only for variants V210, V240, V270, V300: • Wrong values in C0173 • Wrong values in C0174	• Set correct values in C0173 • Set correct values in C0174
PEr	x074	Program fault	An error has been detected in the program flow. The parameter set 1 is loaded automatically. Parameter data which has been changed and not has been saved, will get lost.	Contact Lenze
PI	x079	Initialisation error	• A fault was detected during transfer of parameter sets between the controllers • Parameter set does not match the controller	Correct parameter set
PR0	x075	Parameter set error	Error while loading a parameter set. The parameters saved do not match the software version of the controller. **CAUTION! The Lenze setting is loaded automatically.**	• Correct parameter set • Save all parameter sets with C0003 and reset the fault message by mains switching
PR1 PR2 PR3 PR4	x072 x073 x077 x078	Parameter set error	• Fault while loading a parameter set • The transmission of parameter sets with keypad XT has been interrupted (e.g. by an early disconnection of the keypad XT) **CAUTION! The Lenze setting is loaded automatically.**	Set the required parameters and save them with C0003
Sd3	x083	Encoder error at X9	Cable interrupted	Check cable for wire breakage

Display	Error number x = 0: TRIP x = 1: Message x = 2: Warning	Error	Cause	Remedy
			Pin X9/8 is not assigned	Assign pin X9/8 with 5 V or switch off monitoring (C0587 = 3)
Sd5	x085	Encoder at X6/1, X6/2 is defective	Current at X6/1, X6/2 < 2 mA	• Check cable for wire breakage • Check encoder
Sd6	x086	Sensor error at X8	KTY at X8 indicates undefined values	• Check supply cable for firm connection • Switch off monitoring with C0594 = 3 if necessary