

10 Error Code List

Code	Description	Actions to take
0000h	No Error	No error is pending.
0001h	Err: X4 Logic Supply Too Low	The logic supply voltage has been too low. The minimal logic supply voltage level is defined through parameter 100Eh. Recommended actions: check your 24V logic power supply.
0002h	Err: X4 Logic Supply Too High	The logic supply voltage has been too high. The maximal logic supply voltage level is defined through parameter 1010h. Recommended actions: check your 24V logic power supply.
0003h	Err: X1 Pwr Voltage Too Low	The motor power supply voltage has been too low. The minimal motor supply voltage level is defined through parameter 101Ah. Recommended actions: check your motor power supply, check the wiring, check the sizing of the power supply, add a capacitor too enforce your DC link.
0004h	Err: X1 Pwr Voltage Too High	The motor power supply voltage has been too high. The maximal motor supply voltage level is defined through parameter 101Bh. Back EMF effects may boost the DC link voltage. Recommended actions: check your motor power supply, check the wiring, check the sizing of the power supply, use a regeneration resistor for power dissipation, add a capacitor too enforce your DC link.
0005h	Err: X1 RR Not Connected	A regeneration resistor is configured (see parameter 101Dh) but not connected. Recommended actions: connect the regeneration resistor to X1.
0006h	Err: PTC 1 Sensor Too Hot	The PTC 1 sensor on X4.10 is hot or not connected. Recommended actions: check the temperature, check the wiring
0007h	Err: Min Pos Undershot	The motor position has been below the minimal position (see parameter 146Eh). Recommended actions: check the configuration, check the PLC program
0008h	Err: Max Pos Overshot	The motor position has been above the maximal position (see parameter 146Fh). Recommended actions: check the configuration, check the PLC program
0009h	Err: Ext-Int Sensor Diff Err	The position difference between sensor feedback on X3 and sensor feedback on X12 has been too big. Recommended actions: check sensor wiring, check sensor configuration (count direction, etc.), check parameter 1266h
000Ah	Fatal Err: X12 Signals Missing	The external sensor is not connected to X12 or the wiring is not ok. Recommended actions: check the wiring

000Bh	Err: Pos Lag Always Too Big	The motor was not able to follow the demand position. The maximal allowed position difference is defined through parameter 1473h. Recommended actions: check the motor load, check the motor stroke range for possible collisions, check the position controller setup, check the setpoint generation (unreachable speed/acceleration values?), check the motor sizing.
000Ch	Err: Pos Lag Standing Too Big (Not on B1100)	The motor was not able to reach the target position or was not able to stay at the target position. The maximal allowed position difference is defined through parameter 1475h. Recommended actions: check the motor load, check the motor stroke range for possible collisions, check the position controller setup, check the motor sizing
000Dh	Fatal Err: X1 Pwr Over Current	Over current on X1 detected. Recommended actions: check motor wiring, check motor configuration, for P01-48 type motors: set parameter 11F4h to value 0001h
000Eh	Err: Supply Dig Out Missing	Controller board defective. Recommended actions: contact support for repair
000Fh	Err: PTC 2 Sensor Too Hot	The PTC 2 sensor on X4.11 is hot or not connected. Recommended actions: check the temperature, check the wiring
0010h	Err: Controller Ph1+ Too Hot	Servo controller power bridge phase 1+ too hot. Recommended actions: check motor wiring
0011h	Err: Controller Ph1- Too Hot	Servo controller power bridge phase 1- too hot. Recommended actions: check motor wiring
0012h	Err: Controller Ph2+ Too Hot	Servo controller power bridge phase 2+ too hot. Recommended actions: check motor wiring
0013h	Err: Controller Ph2- Too Hot	Servo controller power bridge phase 2- too hot. Recommended actions: check motor wiring
0014h	Err: Controller Pwr Too Hot	DC link temp sensor has detected over temperature. Recommended actions: check wiring
0015h	Err: Controller RR Hot Calc	Regeneration resistor switch hot: Recommended actions: check RR configuration (Turn On level, Resistance, etc.), check RR sizing
0016h	Err: Controller X3 Too Hot	Temp sensor on X3 has detected over temperature. Recommended actions: check motor wiring
0017h	Err: Controller Core Too Hot	Temp sensor on controller's PCB board reports core being hot.
0018h	Err: Power Bridge Ph1+ Defective	Servo controller power bridge phase 1+ may be defective. Recommended actions: contact support
0019h	Err: Power Bridge Ph1- Defective	Servo controller power bridge phase 1- may be defective. Recommended actions: contact support
001Ah	Err: Power Bridge Ph2+ Defective	Servo controller power bridge phase 2+ may be defective. Recommended actions: contact support

001Bh	Err: Power Bridge Ph2- Defective	Servo controller power bridge phase 2- may be defective. Recommended actions: contact support
001Ch	Err: Supply DigOut X6 Fuse Blown	Supply fuse for digital outputs on X6 blown. Recommended actions: check X6 wiring, contact support for repair
001Dh	Err: Supply X3.3 5V Fuse Blown	Supply X3.3 5V fuse blown. Motor or and/or wiring defective. Recommended actions: contact support for controller repair, check motor and wiring, replace motor and motor cables
001Eh	Err: Supply X3.8 AGND Fuse Blown	Supply X3.8 analog ground fuse blown. Recommended actions: contact support for controller repair, check motor and wiring, replace motor and motor cables
0020h	Err: Motor Hot Sensor	Temp sensor reports hot motor. Recommended actions: wait until motor has cooled down (until corresponding warning disappears, check load, check the motor configuration, check the setpoint generation (unreachable speed/acceleration values?), check the motor sizing
0021h	Fatal Err: X3 Hall Sig Missing	Motor hall signals not connected to X3 or motor defective: Recommended actions: Power down the controller and all power supplies, then reconnect motor, check motor and wiring, check parameter 1221h.
0022h	Fatal Err: Motor Slider Missing	Motor hall sensors cannot see magnetic field of the slider. The motor position was outside the allowed range defined through the motors ZP and Max Stroke data (see data sheet). Recommended actions: check stroke range, check slider orientation.
0023h	Err: Motor Short Time Overload	Short time motor overload detected. Recommended actions: check if motor is blocked, check motor sizing
0024h	Err: RR Hot Calculated	Regeneration resistor hot calculated. Recommended actions: check RR configuration (Turn On level, Resistance, etc.), check RR sizing
0025h	Err: Sensor Alarm	Sensor Alarm On X12 Occurred. Recommended actions: Check sensor mounting, band contamination or motion speed
0028h	Err: Ph1+ Short Circuit To GND	Short circuit between phase 1+ and ground detected. Recommended actions: check motor wiring, check motor
0029h	Err: Ph1- Short Circuit To GND	Short circuit between phase 1- and ground detected. Recommended actions: check motor wiring, check motor
002Ah	Err: Ph2+ Short Circuit To GND	Short circuit between phase 2+ and ground detected. Recommended actions: check motor wiring, check motor

002Bh	Err: Ph2- Short Circuit To GND	Short circuit between phase 2- and ground detected. Recommended actions: check motor wiring, check motor
002Ch	Err: Ph1 Short Circuit To Ph2	Short circuit between motor phase 1 and phase 2 detected. Recommended actions: check motor wiring, check motor
0030h	Err: Ph1+ Wired To Ph2+	Motor phase 1+ has contact to phase 2+. Recommended actions: check motor wiring, check motor
0031h	Err: Ph1+ Wired To Ph2-	Motor phase 1+ has contact to phase 2-. Recommended actions: check motor wiring, check motor
0032h	Err: Ph1+ Not Wired To Ph1-	Motor phase 1+ has no connection to phase 1-. Recommended actions: check motor wiring, check motor
0033h	Err: Ph2+ Wired To Ph1+	Motor phase 2+ has contact to phase 1+. Recommended actions: check motor wiring, check motor
0034h	Err: Ph2+ Wired To Ph1-	Motor phase 2+ has contact to phase 1-. Recommended actions: check motor wiring, check motor
0035h	Err: Ph2+ Not Wired To Ph2-	Motor phase 2+ has no connection to phase 2-. Recommended actions: check motor wiring, check motor
0036h	Err: Ph1 Short Circuit To Ph2+	Short circuit between motor phase 1 and phase 2+ detected. Recommended actions: check motor wiring, check motor
0037h	Err: Ph1 Short Circuit To Ph2-	Short circuit between motor phase 1 and phase 2- detected. Recommended actions: check motor wiring, check motor
0038h	Err: Ph2 Short Circuit To Ph1+	Short circuit between motor phase 2 and phase 1+ detected. Recommended actions: check motor wiring, check motor
0039h	Err: Ph2 Short Circuit To Ph1-	Short circuit between motor phase 2 and phase 1- detected. Recommended actions: check motor wiring, check motor
003Ah	Err: Phase U Broken	Motor phase U broken. Recommended actions: check motor wiring, check motor
003Bh	Err: Phase V Broken	Motor phase V broken. Recommended actions: check motor wiring, check motor
003Ch	Err: Phase W Broken	Motor phase W broken. Recommended actions: check motor wiring, check motor

0040h	Err: X4.3 Brake Driver Error	X4.3 brake driver reports error. Recommended actions: check for short circuit on X4.3
0041h	Err: Dig Out X4.4..X4.11 Status	X4.3..X4.11 output driver reports error. Recommended actions: check for short circuit on outputs X4.4..X4.11 or output configurations.
0042h	Err: Dig Out X6 Status	X6 output driver reports error. Recommended actions: check for short circuit on outputs X6.
0044h	Err: X4 Dig Out Defective	Digital outputs on X4 defective. Recommended actions: check X4 wiring, contact support for repair
0045h	Fatal Err: Motor Comm Lost	Motor communication lost. Recommended actions: Power down and check motor wiring and motor, replace cable and/or motor.
0046h	Err: PTC 1 Broken	PTC 1 on X4.10 broken or not connected. Recommended actions: Power down and check PTC 1 wiring and resistance.
0047h	Err: PTC 1 Short To 24V	PTC 1 on X4.10 short to 24V. Recommended actions: Power down and check PTC 1 wiring and resistance.
0050h	Setup Err: HW Not Supported	Setup error, hardware is not supported by the software. Recommended actions: download correct firmware, contact support
0051h	Setup Err: SW Key Missing	Software key and access code for special functionality is missing. Recommended actions: Order the SW key with your support together with the serial number of your HW.
0058h	Runtime Err: ROM write error	Runtime error, MC SW was not able to change parameter value in ROM. Recommended actions: verify PLC is not configuring during this action, contact support
0060h	Cfg Err: RR Voltage Set Too Low	Configuration error: regeneration resistor turn on/off voltage parameter value is too low. Recommended actions: check parameters 101Eh and 101Fh
0061h	Cfg Err: RR Hysteresis < 0.5V	Configuration error: regeneration resistor turn on/off voltage parameter values too close to each other. Recommended actions: check parameters 101Eh and 101Fh
0062h	Cfg Err: Curve Not Defined	Configuration error. Software tried to start a curve that is not defined yet. Action to take: define the curve using the curves service, check if curves were downloaded to controller, check the curve IDs, check the configuration, check the PLC program
0063h	Cfg Err: Pos Ctrl Max Curr High	Configuration error: Invalid max current setting in control parameters. Recommended actions: check parameters 13A6h and 13BAh, check PLC program
0064h	Cfg Err (Fatal): No Motor Defined	Configuration error: No motor has been configured yet. Recommended actions: use the motor wizard to configure the motor

0065h	Cfg Err (Fatal): No Trigger Mode Defined	Configuration error: Digital input X4.6 is configured for trigger input function, but the trigger mode is not defined yet. Recommended actions: configure parameter 170Ch
0067h	Cfg Err (Fatal): Wrong Stator Type	Configuration error: The configured motor type does not match with the connected motor. Recommended actions: configure correct motor type by using the motor wizard, connect an appropriate motor
0068h	Cfg Err (Fatal): No Motor Communication	Configuration error: The controller was not able to establish the communication to the microcontroller on the motor. Older P01 motors don't support motor communication. Recommended actions: check motor wiring, check motor, check the motor configuration, disable communication by using parameter 11FBh if you have an old P01 motor.
0069h	Cfg Err: Wrong Slider	Configuration error: A wrong slider has been configured or slider home position has an invalid value. Recommended actions: reconfigure the motor by using the motor wizard
0080h	User Err: Lin: Not Homed	User error: The PLC program tried to start an action that requires the motor to be already homed, but the motor was not homed. Recommended actions: check the PLC program, do a homing of the motor first
0081h	User Err: Unknown Motion Cmd	User error: The PLC program sent an unknown motion command ID. Recommended actions: check PLC program, check firmware version
0082h	User Err: PVT Buffer Overflow	User error: The PLC program has sent the stream position commands too fast, the buffer had an overflow. Streaming has to be strictly cyclic! Recommended actions: check PLC program, check the fieldbus by using bus monitor tools
0083h	User Err: PVT Buffer Underflow	User error: The PLC program has sent the stream position commands too slowly, the buffer had an underflow. Streaming has to be strictly cyclic! Recommended actions: check PLC program, check the fieldbus by using bus monitor tools
0084h	User Err: PVT Master Too Fast	User error: The PLC program has begun to send PVT streaming command. The commands were too close to each other. The servo controller expects new streaming commands every 2ms to 5ms. Recommended actions: check PLC program, check the fieldbus by using bus monitor tools
0085h	User Err: PVT Master Too Slow	User error: The PLC program has begun to send PVT streaming command. The cycle time between the streaming commands has been too long. The servo controller expects new streaming commands every 2ms to 5ms. Recommended actions: check PLC program, check the fieldbus by using bus monitor tools

0086h	User Err: Motion Cmd In Wrong St	User error: The PLC program has sent a motion command while the controller was not in an appropriate operational state. Most of the motion commands are accepted only in operational state 8 (Operation Enabled). Recommended actions: check the PLC program
0087h	User Err: Limit Switch In High	User error: The motor moved into the Limit Switch In while it was still in the stroke range. Recommended actions: check the PLC program or check homing
0088h	User Err: Limit Switch Out High	User error: The motor moved into the Limit Switch Out while it was still in the stroke range. Recommended actions: check the PLC program or check homing
0089h	User Err: Curve Amp Scale Error	User error: The automatic calculated amplitude scale is out of range -2000percent to 2000percent. Recommended actions: check the PLC program or use other curve
008Ah	User Err: Cmd Tab Entry Not Def	Called command Table entry is not defined. Recommended actions: check the PLC program or define Command Table Entry.

Error Codes

			Description
ERROR	WARN	EN	
OFF	Warning	Operation Enabled	Normal Operation. Warnings and Operation Enabled are displayed
On	● ~ 2Hz 0..15 x Error Code High Nibble	● ~ 2Hz 0..15 x Error Code Low Nibble	Error: The Error Code is shown by a blink code with "WARN" and "EN". The Error Byte is divided into Low and High Nibble. "WARN" and "EN" are blinking together. The error can be acknowledged. (ex.: WARN blinks 3x, EN blinks 2x; Error Code = 32h)
● ~ 2Hz	● ~ 2Hz 0..15 x Error Code High Nibble	● ~ 2Hz 0..15 x Error Code Low Nibble	Fatal Error: The Error Code is shown by a blink code with "WARN" and "EN". The Error Byte is divided into Low and High Nibble. "WARN" and "EN" are blinking together. Fatal Errors can only be acknowledged by a reset or power cycle (ex.: WARN blinks 3x, EN blinks 2x; Error Code = 32h)
● ~ 4Hz	● ~ 2Hz 0..15 x Error Code High Nibble	● ~ 2Hz 0..15 x Error Code Low Nibble	System Error. Please reinstall firmware or contact support.
● ~ 0.5Hz	● ~ 0.5Hz	On	Signal Supply 24V too low: The error and warn LEDs blink alternating if the signal supply +24V (X4.2) is less than 18VDC.

The meaning of the Error Codes can be found in the Usermanual_MotionCtrl_Software_E1100 and the user manual of the loaded interface software. These documents are provided together with LinMot-Talk configuration software and can be downloaded from www.linmot.com.

Physical Dimension

E1100 Single axes controller		
Width	mm (in)	40 (1.6)
Height	mm (in)	250 (9.9)
Height without fixings	mm (in)	218 (8.6)
Depth	mm (in)	180 (7.1)
Weight	Kg (lb)	1.5 (3.3)
Case	IP	20
Storage Temperature	°C	-25...40
Transport Temperature	°C	-25...70
Operating Temperature	°C	0...40 at rated data (UL) 40...50 with power derating
Relative humidity		95% (non-condensing)
Max. Case Temperature	°C	65
Max. Power Dissipation	W	30
Distance between Controllers	mm (in)	20 (0.8) left/right 50 (2) top/bottom

() dimensions in inch

