

Error code

Error code	Fault content
AL.000	Normal state
AL.100	<p>Parameter reading error</p> <p>A. Typically occurs after a firmware upgrade or when parameter reading operations are performed, the version of the stored parameters in the drive EEPROM does not match or the validation error. Need to re-import the firmware and save it.</p> <p>B. An alarm occurs when the drive does not upgrade the firmware. It is caused by an error in reading the internal parameters of the drive. Please power off the drive completely for 30s, and then restart the drive to check whether the alarm occurs.</p> <p>C. After the B-step operation, the drive still alarms, please try to restore the factory settings, then power off for 30s, and then restart the drive. If the drive still alarms, please contact the manufacturer for after-sales or replacement. If there is no alarm, please reset the parameters and continue to use it again.</p>
AL.101	<p>Parameter saving error</p> <p>A. Appears during parameter saving, generally due to abnormal communication of EEPROM chip, please completely power off the drive 30s, then restart the drive and carry out parameter save test, if there is still a warning, please contact the manufacturer after-sales or replacement.</p>
AL.103	<p>The drive program is running abnormally</p> <p>A. The drive program is running abnormally, please contact the manufacturer for after-sales service.</p>
AL.105	<p>Drive parameters do not match</p> <p>A. Drive P00.34 parameter setting is abnormal, please set this parameter correctly according to the motor model, this parameter is generally 1/ 2.</p>
AL.110 AL.111	<p>AL.110: Drive IPM module overcurrent</p> <p>AL.111: Drive ADC overcurrent</p> <p>A. Whether the motor collides or not causes a blockage</p> <p>B. Motor P06.00,P06.01, P06.02, P06.28, P06.29 improper settings caused. Try to restore the drive parameters and restart to see if the warning still exists. If a warning still appears, please contact the manufacturer for after-sales service.</p> <p>C. By setting the P05.04 parameter, try to reduce the overload multiple of the drive to test whether there is an alarm.</p>
AL.112 AL.113	<p>AL.112: Motor command overload</p> <p>AL.113: Motor overheating</p> <p>A. Check if the motor is colliding causing a blockage</p> <p>B. Check whether the encoder cable is connected correctly, e.g. the motor encoder cable</p>

	<p>does not correspond to the correct connection when multi-axis</p> <p>C. Monitor the driver d03.tF to see the running torque of the motor, and judge whether it is caused by long time overload.</p>
AL.114	<p>Drive IPM module over temperature</p> <p>A. Check the drive housing temperature and ventilation cooling conditions</p> <p>B. Check that the drive fan is spinning properly</p>
AL.115	<p>Drive internal voltage error</p> <p>A. The internal voltage failure of the drive is generally caused by the internal hardware of the drive, please contact the manufacturer for after-sales service.</p>
AL.120	<p>Drive Encoder Interference</p> <p>A. Please check whether the motor PE cable connection is reliable</p> <p>B. Check that the encoder plug is connected reliably</p> <p>C. Replace the drive to check whether the fault is caused by the motor encoder</p>
AL.121	<p>Encoder communication error</p> <p>A. The fault occurs when power-up, generally will alarm AL.170 at the same time, please check that the encoder extension cord connection is reliable.</p> <p>B. If the drive simply alarms AL.121, usually caused by a faulty encoder, replace the motor.</p>
AL.123	Encoder CRC check failure
AL.124	Encoder Z-phase signal failure
AL.125	Encoder counting failure
AL.126	<p>Encoder disconnection fault</p> <p>A. Check that the encoder cable is reliably connected</p>
AL.127	<p>Encoder failure</p> <p>A. Appears during power-on initialization, the incremental encoder reads the Hall signal incorrectly when power-on, and the communication encoder shows that the drive cannot communicate with the encoder.</p> <p>B. Please check that the encoder cable connection is reliable</p>
AL.128	<p>Encoder type setting error</p> <p>A. Check that the P00.34 parameter value is set correctly</p>
AL.129	Encoder data receiving timeout
AL.140	Position error overflow
AL.150	Braking resistance parameter setting is too small
AL.160	<p>FPGA parameter initialization error</p> <p>A. It appears when the drive is powering on and initializing, power off the drive for 30s, then restart it to see if it still alarms, if it still alarms, please replace the drive.</p>
AL.161	<p>The program detected an SPI communication error</p> <p>A. Update the drive and contact the manufacturer for after-sales service.</p>
AL.162	Read encoder EEPROM fault

AL.163	Save the encoder EEPROM fault
AL.164	Encoder data is incorrect A. It appears during power-on initialization, because the encoder has not been calibrated, please contact the manufacturer for after-sales service.
AL.165	Encoder data is incorrect A. When the initialization of power-on, the check and error of the encoder is caused, please power off and restart after 30s, if it still alarms, please contact the manufacturer for after-sales or replace the motor.
AL.166	Write encoder EEPROM failure
AL.167	Write encoder EEPROM failure (read back for verification).
AL.168	Read encoder EEPROM failure
AL.169	Read encoder EEPROM failure
AL.170	Read encoder EEPROM failure A. When power-on initialization occurs, generally due to the encoder extension cable, please check that the extension cable is connected correctly.
AL.171	FPGA initialization error A. It appears during power-on initialization and is caused by abnormal communication between DSP and FPGA.
AL.200	Control mode setting error A. Please check the P01.00 parameter setting value, whether it meets the requirements of the manual, or contact the manufacturer.
AL.201	Position command source setting error A. Please check whether the P03.00 parameter setting value meets the requirements of the manual, or contact the manufacturer.
AL.202	Speed command source setting error A. Please check the P04.00 parameter setting value, whether it meets the requirements of the manual, or contact the manufacturer.
AL.203	Torque command source setting error A. Please check whether the parameter setting values of P05.00, P05.01 and P05.02 meet the requirements of the manual or contact the manufacturer.
AL.210	Drive bus voltage is high A. Please plug in the brake resistance or check the quality of the brake resistance and whether the resistance value is appropriate. B. Please check whether the AC input power is too high and the drive input power requirement is below 260VAC.
AL.211	Drive bus voltage is low A. Please check whether the AC input power is indeed too low and the drive input power requirement is below 170VAC. B. Replace with a new drive to check if the drive is damaged.

AL.212	<p>Driver bus voltage is high</p> <p>A. It occurs when the bus voltage of the driver is momentarily higher than the alarm threshold.</p> <p>B. Please plug in the brake resistance or check the quality of the brake resistance and whether the resistance value is appropriate.</p> <p>C. Please check whether the AC input power is too high and the drive input power requirement is below 260VAC.</p>
AL.213	<p>Torque-limited alarm output</p>
AL.220	<p>Encoder Battery Warning</p> <p>A. When power-on initialization occurs, the battery voltage is less than 3.3V caused, please replace the battery in time.</p> <p>B. Use the AF.CEN function to clear the alarm</p>
AL.221	<p>Encoder battery failure</p> <p>A. The current encoder battery voltage is lower than 2.8V, please replace the battery</p> <p>B. The encoder battery is disconnected from the encoder.</p> <p>C. Use the AF.CEE function to clear the alarm</p> <p>D. When this alarm occurs, the multi-turn encoder data of the drive is already incorrect, and the zero point needs to be reset</p>
AL.222	<p>Encoder multi-turn data alarm</p> <p>A. It occurs during power-on initialization, usually due to the previous disconnection of the encoder battery and the encoder.</p> <p>B. The battery voltage is too low or the battery cable is abnormal</p> <p>C. Use the AF.CEN function to clear the alarm</p> <p>D. When this alarm occurs, the multi-turn encoder data of the drive is already incorrect, and the zero point needs to be reset</p>
AL.230	<p>Overspeed alarm</p>
AL.231	<p>The speed regulator output is saturated</p> <p>A. Check if the crash is caused</p> <p>B. Check that the P06.00, P06.01 parameters are set correctly</p> <p>C. Check that the power cable and the encoder extension cable are properly connected</p>
AL.240	<p>Location is out of tolerance</p> <p>A. Check that the power cable is properly connected</p> <p>B. Check that the electronic gear ratio parameters are set correctly</p> <p>C. Check that the frequency of the pulse input exceeds the maximum speed of the motor</p>
AL.250	<p>No braking feedback</p> <p>A. The brake feedback circuit of the drive is abnormal, replace the drive or contact the after-sales.</p>
AL.251	<p>Brake timeout</p> <p>A. Please connect the braking resistor or check whether the resistance of the braking resistor is normal</p> <p>B. Check that the input AC voltage is within the operating voltage range of the driver calibration</p>

AL.252	Limit input abnormal A. Because the positive and negative limits take effect at the same time, please check the limit sensor and its input port polarity settings
AL.253	braking voltage setting value is too large A. Please check whether the parameter setting value of P01.27 meets the requirements of the manual
AL.260	Analog input channel 1 zero drift setting is abnormal
AL.261	Analog input channel 2 zero drift setting is abnormal