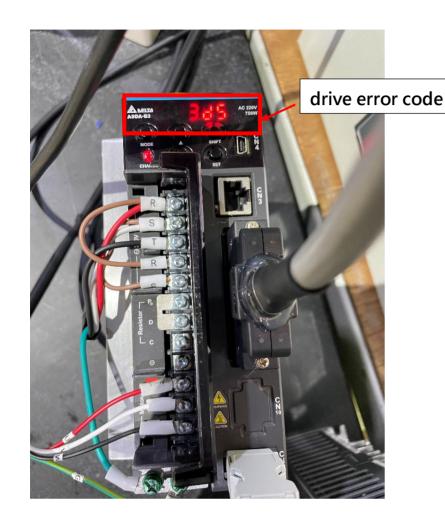


## Delta B3&E3 drive error code





No.	Abnormal alarm code	Abnormal alarm message	Possible causes	Troubleshooting
1	AL001	Over current	<ol> <li>Is water entering the connector?</li> <li>Is the line short circuited?</li> <li>Remove UVW connectors and reconnect;</li> <li>If AL001 remains, then drive unit was burn down.</li> </ol>	<ol> <li>Clean connectors, blow dry and reinstall</li> <li>Change cable line</li> <li>Replace with a new drive unit.</li> </ol>
2	AL002	Over voltage	<ol> <li>Check whether the voltage exceeds 240V</li> <li>Check whether the voltage is stable</li> <li>Check whether there is a voltage surge</li> </ol>	<ol> <li>Change voltage source</li> <li>Install voltage regulator</li> <li>Install reactance coil</li> </ol>
3	AL003	Low voltage	<ol> <li>Check whether the voltage is lower than 180V</li> <li>Check whether PDC regenerative resistor is not installed</li> <li>Check whether MC circuit breaker specification is too small</li> </ol>	<ol> <li>Replace the voltage source</li> <li>Install PDC regenerative resistor</li> <li>Change to larger MC circuit breaker</li> </ol>
4	AL004	Abnormal position of motor magnetic field	Whether the motor and drive are connected incorrectly	Correct motor and drive connections
5	AL005	Regenerative resistor error	<ol> <li>Check whether current is normal?</li> <li>Check whether tool holders are mounted evenly?</li> <li>Check whether PDC regenerative resistor is installed?</li> </ol>	<ul><li>1.Install the ground line</li><li>2. Install tool holders evenly</li><li>3. Install PDC regenerative resistor</li></ul>
6	AL006	Overload	1. Check whether the cable resistance is normal?	Change the cable line     Install pressure accumulator

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			<ul><li>2. Check whether turret rotates smoothly</li><li>3. Check if the motor can be rotated</li></ul>	3. Replace motor	
			manually ?		
			Check whether drive unit is damaged	1. Replace drive unit	
			2. Check whether motor is off position?	2. Replace motor	
7	AL06A	Origin not set	3. Check whether cable line quality is poor	3. Replace cable line	
			or enect whether easie line quality is poor	o. Replace capie line	
			Check hydraulic pressure	1. Adjust the pressure to 50kg	
		Position control error is too large	2. Check whether hydraulic pressure is	2. Install the pressure accumulator.	
			stable	3. Replace cable line	
			3. Check whether cable line is normal	4. If other abnormal alarm codes	
8			4. Check whether there are other abnormal	appear, please refer to the	
0	AL009		alarm codes?	corresponding troubleshooting.	
			5. Check motor UVW cables	5. Check whether motor UVW is	
			6. For driven turret, please check whether	connected incorrectly or lack phase.	
			the origin is deviated or there is tool holder	6. Make proper adjustment on power	
			interference.	shaft and tool disc.	
			1. Check whether connector is water-	1. Clean and reinstall connector	
	A I O 4 4		intruded or loose.	2. Re-wiring	
9	AL011	Location detector abnormal	2. Check whether cable line is broken	3. Replace motor	
			3. Check whether motor is damaged		
			Check if drive unit is brand new?	1. If the drive unit is brand new, reconfirm whether correct parameters	
				are installed?	
10	AL014	Reverse limit abnormal		2. If the drive unit is not brand new:	
				→Parameter setting error, please set	
				correct parameters	
				→The drive is damaged, replace the	
				drive unit.	
11	AL018	Detector output abnormal	Check CN2 encoder cable	Replace Cn2 cable	
12	AL022	Main circuit power supply abnormal	Check whether three-phase RST current is normal	Provide stable power	
13	AL024	Encoder initial magnetic field error	Check whether voltage is stable	Install voltage regulator	
			Chooley whether the comment the size		
14	AL025	Encoder internal error	Check whether the ground line is properly installed	Connect the motor ground line	
15	AL026	Encoder error	Check whether Cn2 cable isolation network is installed correctly	Connect the isolation nets at both ends	
16	AL029	Gray code error	Any crash happened ?	Replace motor	
	AL033		1. Check whether the encoder 5V power		
		Encoder internal communication abnormal	supply is lower than 4.3V	1. Check the Cn2 cable line, unplug it	
17			2. Check whether there is any high voltage	and reinsert it	
			passing through the Cn2 line causing interference	2. Replace the motor or line	
18	AL034	Encoder internal communication	Check whether Cn2 cable is connected	Replace Cn2 cable line	
	2001	abnormal	correctly ?		
	AL036	Encoder alarm status error	1. The power line and Cn2 line must be grounded	1. Check the Cn2 cable line, unplug it	
19				and reinsert it	
				2. Replace the motor or line	

			2. Check whether there is any high voltage passing through the Cn2 line causing interference		
20	AL060	absolute position missing	<ul><li>1. Check whether origin is not set?</li><li>2. Check whether connector is fastened properly?</li></ul>	Reset origin	
21	AL083	Abnormal current detection range	<ol> <li>Check whether current is normal</li> <li>Check whether tool holders are mounted evenly</li> <li>Check whether PDC is installed</li> </ol>	<ol> <li>Replace motor</li> <li>Tool holders must be mounted.</li> <li>evenly on the tool disc.</li> <li>Install PDC regenerative resistor</li> </ol>	
GPM 22	CO., LTD AL084	Drive unit error	Check whether drive unit is abnormal	www.GPMcnc.com Replace drive	
23	AL085	Regenerative resistor error	Check mounting of tool holders	<ol> <li>Tool holders must be mounted evenly.</li> <li>Check whether PDC regenerative resistor is installed</li> <li>Reduce motor acceleration, deceleration and speed</li> <li>Replace drive unit</li> </ol>	
24	AL086	Regenerative resistor error	<ol> <li>Check whether current is normal</li> <li>Check whether tool holders are mounted evenly</li> <li>Check whether PDC is installed</li> </ol>	<ol> <li>Adjust parameters and control acceleration and deceleration</li> <li>Tool holders must be mounted evenly.</li> <li>Install PDC regenerative resistor</li> </ol>	
25	AL099	DSP firmware upgrade	Check whether need to reinstall firmware	Reboot	
26	AL201	CANopen data initial error	Check whether need to reinstall software	Failed to install software, reinstall	
27	AL289	Position counter overflow	<ol> <li>Check whether there is a crash</li> <li>Check whether the origin is not set</li> </ol>	Rotate T1 to the marked line     Reset the origin	
28	AL350	absolute position missing	<ol> <li>Check whether it is installed for the first time</li> <li>Check whether the origin is not set</li> </ol>	AL350 will appear during first time installation.      Set origin	
29	AL400	Indexing coordinate error	Check driver firmware/software version	Replace drive unit	
30	AL 3C3	Emergency stop is pressed or CN1/CN2 line abnormal	Check whether the emergency stop switch is pressed down	Release the emergency stop switch	
31	AL0A6	The absolute position of the drive unit and the motor does not match		Reset origin	
32	ALF021	PLC origin setting timing error	In origin mode, servo on will appear if switched in a short time.	Check the PLC origin timing     DI10 abnormal alarm cleared	
33	AL3B7	Enter non-existent revert mode	Origin parameter setting error	Confirm P5.004 parameter setting	
34	AL3B8	Abnormal numbers of tool numbers	Abnormal tool numbers parameter setting	Confirm P5.096 Parameter setting	
35	AL3B9	Triggered tool number is beyond setting	Abnormal triggered tool number	Confirm whether triggered tool number is within P5.096 parameter	

36	AL3B1	The home position has not been set. Functions other than JOG or forward/reverse inching are disabled.	Origin not set	Reset origin	
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