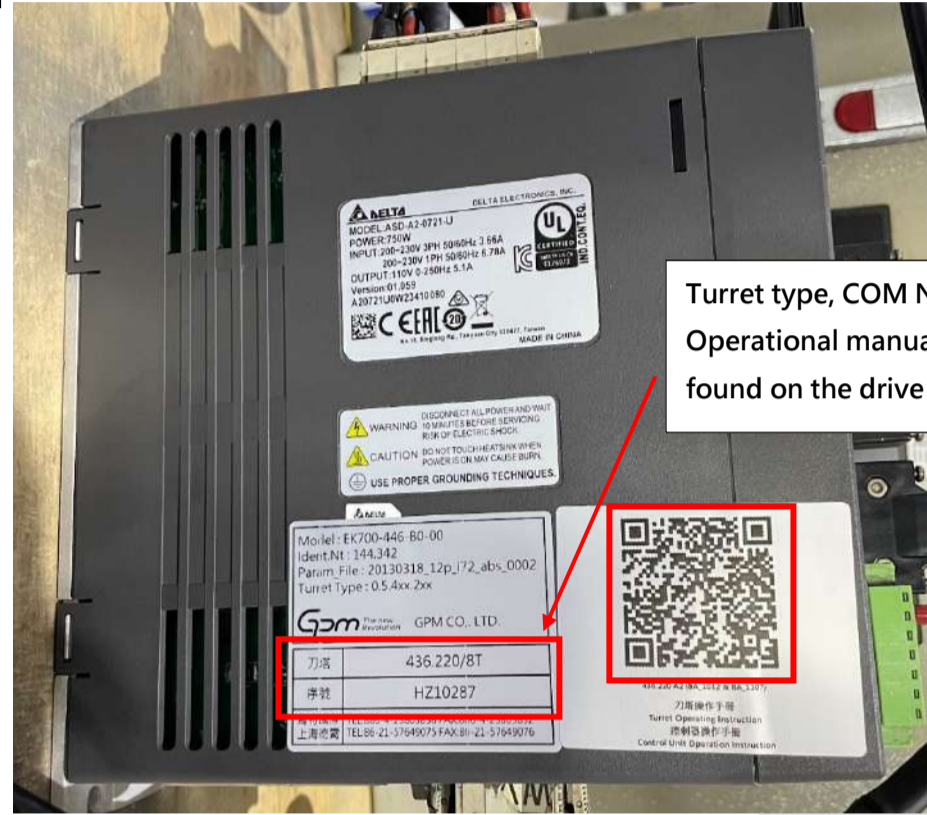


Delta A2 drive error code



No.	Abnormal alarm code	Abnormal alarm message	Possible causes	Troubleshooting
1	AL001	Over current	<ol style="list-style-type: none"> 1. Is water entering the military-spec connector? 2. Is the line short circuited? 3. Remove UVW connectors and reconnect; If AL001 remains, then drive unit was burn down. 	<ol style="list-style-type: none"> 1. Clean military-spec connectors, blow dry and reinstall 2. Change cable line 3. Replace with a new drive unit.
2	AL002	Over voltage	<ol style="list-style-type: none"> 1. Check whether the voltage exceeds 240V 2. Check whether the voltage is stable 3. Check whether there is a voltage surge 	<ol style="list-style-type: none"> 1. Change voltage source 2. Install voltage regulator 3. Install reactance coil
3	AL003	Low voltage	<ol style="list-style-type: none"> 1. Check whether the voltage is lower than 180V 2. Check whether PDC regenerative resistor is not installed 3. Check whether MC circuit breaker specification is too small 	<ol style="list-style-type: none"> 1. Replace the voltage source 2. Install PDC regenerative resistor 3. Change to larger MC circuit breaker
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 style="list-style-type: none"> 1. Check whether current is normal ? 2. Check whether tool holders are mounted evenly ? 3. Check whether PDC regenerative resistor is installed ? 	<ol style="list-style-type: none"> 1. Install the ground line 2. Install tool holders evenly 3. Install PDC regenerative resistor
6	AL006	Overload	<ol style="list-style-type: none"> 1. Check whether the cable resistance is normal ? 2. Check whether turret rotates smoothly 	<ol style="list-style-type: none"> 1. Change the cable line 2. Install pressure accumulator 3. Replace motor



			3. Check if the motor can be rotated manually ?	
7	AL06A	Origin not set	1. Check whether drive unit is damaged 2. Check whether motor is off position ? 3. Check whether battery is flat? 4. Check whether cable line quality is poor	1. Replace drive unit 2. Replace motor 3. Replace battery 4. Replace cable line
8	AL009	Position control error is too large	1. Check hydraulic pressure 2. Check whether hydraulic pressure is stable 3. Check whether cable line is normal 4. Check whether there are other abnormal alarm codes? 5. Check motor UVW cables 6. For driven turret, please check whether the origin is deviated or there is tool holder interference.	1. Adjust the pressure to 50kg 2. Install the pressure accumulator. 3. Replace cable line 4. If other abnormal alarm codes appear, please refer to the corresponding troubleshooting. 5. Check whether motor UVW is connected incorrectly or lack phase. 6. Make proper adjustment on power shaft and tool disc.
9	AL011	Location detector abnormal	1. Check whether military connector is water-intruded or loose. 2. Check whether cable line is broken 3. Check whether motor is damaged	1. Clean and reinstall military connector 2. Re-wiring 3. Replace motor
10	AL014	Reverse limit abnormal	Check if drive unit is brand new?	1. If the drive unit is brand new, reconfirm whether correct parameters are installed ? 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
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	AL028	Encoder high voltage error or encoder internal error	1. Check whether the battery voltage exceeds 3.8V 2. Check whether the Cn2 isolation network is properly connected	1. Replace the battery box 2. Connect the ground wire
17	AL029	Gray code error	Any crash happened ?	Replace motor
18	AL033	Encoder internal communication abnormal	1. Check whether the encoder 5V power supply is lower than 4.3V 2. Check whether there is any high voltage passing through the Cn2 line causing interference	1. Check the Cn2 cable line, unplug it and reinsert it 2. Replace the motor or line
19	AL034	Encoder internal communication abnormal	Check whether Cn2 cable is connected correctly ?	Replace Cn2 cable line

20	AL036	Encoder alarm status error	1. The power line and Cn2 line must be grounded 2. Check whether there is any high voltage passing through the Cn2 line causing interference	1. Check the Cn2 cable line, unplug it and reinsert it 2. Replace the motor or line
21	AL060	absolute position missing	1. Check whether origin is not set ? 2. Check whether military connector is fastened properly ?	Reset origin
22	AL061	Encoder low voltage error	Check if battery is flat?	Replace battery
23	AL062	Absolute position circle overflow	Check whether the battery is normal	Replace battery
24	AL083	Abnormal current detection range	1. Check whether current is normal 2. Check whether tool holders are mounted evenly 3. Check whether PDC is installed	1. Replace motor 2. Tool holders must be mounted evenly on the tool disc. 3. Install PDC regenerative resistor
25	AL084	Drive unit error	Check whether drive unit is abnormal	Replace drive
26	AL085	Regenerative resistor error	Check mounting of tool holders	1. Tool holders must be mounted evenly. 2. Check whether PDC regenerative resistor is installed 3. Reduce motor acceleration, deceleration and speed 4. Replace drive unit
27	AL086	Regenerative resistor error	1. Check whether current is normal 2. Check whether tool holders are mounted evenly 3. Check whether PDC is installed	1. Adjust parameters and control acceleration and deceleration 2. Tool holders must be mounted evenly. 3. Install PDC regenerative resistor
28	AL099	DSP firmware upgrade	Check whether need to reinstall firmware	Reboot
29	AL201	CANopen data initial error	Check whether need to reinstall software	Failed to install software, reinstall
30	AL289	Position counter overflow	1. Check whether there is a crash 2. Check whether the origin is not set 3. Check whether the battery is normal	1. Rotate T1 to the marked line 2. Reset the origin 3. Replace the battery
31	AL350	absolute position missing	1. Check whether it is installed for the first time 2. Check whether the origin is not set	1. AL350 will appear during first time installation. 2. Set origin
32	AL400	Indexing coordinate error	Check driver firmware/software version	Replace drive unit
33	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

