

List of alarm display and troubleshooting for EDC series

Item	Alarm name	Possible reason	Method
A.01	Parameter breakdown	checksum results of parameters saved in external storage has errors	1.turn on the power supply again to see if it still happen 2.If it still happens,external storage of servo drive has been damaged.Pls change a chip.
A.02	Current detection error	internal detection circuit problem	1.check the reference power supply of servo A/D circuit if it is damaged. 2.check the connection between the main board and control board is good. 3.check if the channel of A/D sampling is damaged.
A.03	Overspeed	rotation speed of the motor has exceed 1.1 times of max. speed 1.input reference pulse frequency is too high 2.time constant of acceleration and deceleration is too small which makes the speed overshoot is too large. 3.the electronic gear ratio is too large 4.Pn015 is too small.	Pls take the following measures when the motor is overspeed 1.reduce setting speed(reference value) 2.increase the value of Pn024 and Pn015 3.check the electronic gear ratio which should be seeting under the coverage of the following range: input pulse frequency*electronic gear ratio 500KHZ
A.04	Overloaded	the motor was runing for several seconds under the torque largely exceeding ratings. 1.The time for acceleration or deceleration is too short 2.The capacity of servo drive and servo motor is too small 3.overload 4.start stop frequently	1.increase the time for acceleration or deceleration 2.change large capacity servo sysstem 3.check the load capacity 4.cut down the frequency of start-stop.
A.05	Position error counter overflow	internal position error counter has exceeded the value 1.the motor is locked by the mechanics 2.input reference pulse is abnormal	1.check if the motor rotated according to the reference pulse 2.check the load mechanics 3.check the reference pulse 4.check the connection of motor encoder.
A.06	Position error pulse overflow	internal position error pulse has exceeded the value setted in the parameter Pn-031 1.the motor is locked by the mechanics 2.input reference pulse is abnormal	1.check the load mechanics 2.check the connection of motor encoder. 3.increase the value of Pn015,Pn031 and Pn017 4.check the reference pulse 5.reduce the overload capacity and speed.
A.09	Pulse loss of encoder C	PC is disconnected or have interference 1.cable's problem,disconnected or misconnected 2.power cable shield is not good 3.encoder damaged 4.screen wire ground disconnect 5.interface circuit of encoder fault.	1.Pls check the power cable connection.power cable and encoder signal wire shouldn't be tied together. 2.Pls check the interface circuit of encoder.
A.10	Encoder disconnected	At least one of PA,PB, PC,PU,PV, or PW is disconnected	1.Pls check the connection between encoder and the mortor 2.Pls check the encoder signal 3.if the above mentioned is correct,may be the fault of servo drive internal components.
A.11	Encoder U,V or W code violation	Encoder U,V or W code violation(Pls note that the U,V,W signal of encoder is different from the strong current signal U,V,W which the servo drive connected with the motor) 1.the connection of encoder is wrong 2.encoder is damaged	pls make sure the power supply voltage or encoder is 5V±5% especially the wire is long.power cable and encoder signal wire shouldn't be tied together. 1.pls check the wiring of encoder. 2.change the servo motor

A.12	Power module error	the current passed on power module is too large or control voltage of VCC4 is too low	<p>1.disconnect the U,V,W and electricity,if this status still happen under s-off,it means power module damaged.</p> <p>2.check if the wirring of U,V,W is correct.Check the resistor between U,V,W and ground.If it is small,it means the insulating property of the motor is lower.Change the motor.</p> <p>3.check if the capacity of motor is match with the servo drive's.</p> <p>4.check if the control power of power module VCC4 is normal(It will alarm when it is lower)</p> <p>5.increase the time of acceleration and deceleration</p> <p>6.check if the relay of DB is damaged</p>
A.13	overheat	<p>power module overheat</p> <p>1.bad air flow of radiator or temperature around the servo drive is too high</p> <p>2.start and stop frequently</p> <p>3.servo drive operate under over load capacity for a long time</p>	<p>1.change the servo drive match with the load capacity</p> <p>2.improve environment condition to enhance the ability of convection and ventilation</p>
A.14	Voltage error	<p>overvoltage or undervoltage of main circuit</p> <p>1.power off for a moment,the voltage of main power supply is too low.</p> <p>2.the energy of the load is too large which leads to main volatge is too large when stop deceleration.</p> <p>3.frequency of start-stop is too high.</p>	<p>1.check the input voltage if it is in the cover of rated range.</p> <p>2.increase the time of deceleration</p> <p>3.low down the frequency of start-stop.</p>
A.15	Frequency error of input pulse	<p>Reference pulse frequency is higher than 500kpps.</p> <p>1.pulse input frequency is too high</p> <p>2.noise mixed in the reference pulse</p> <p>3.the value of Pn022,Pn023 is not correct</p>	<p>1.pls set reasonable reference pulse frequency</p> <p>2.take measures to deal with the noise</p> <p>3.adjust the value of Pn022,Pn023.reference pulse frequency=pulse input frequency*(Pn022/Pn023)</p>
A.16	Parameter error	parameter saved in external storage has errors	<p>1.check carefully if the parameter setting is correct</p> <p>2.set default value and check if the data is correct,replace chip U12</p>
A.17	I/O data error	I/O data error,such as ALM,BRK,COIN,Relay,LED lamps ect error	chip U7 fault ot chip U15 fault
A.21	Power loss error	a power interruption exceeding one cycle occurred in AC power supply.	check if the voltage of servo drive inlet wire is normal
A.25	Watchdog reset	system reeste by watchdog	<p>1.current detect abnormal</p> <p>2.serial perpheral abnormal</p>
A.99	Not an error	normal status	