

Nanjing DUNEN Electric Controller Alarm Code List

V1.7

Controller Alarm Code List

Alarm Code	Fault Name	Protection Action	Troubleshooting
1 (1 short)	Software overcurrent	Shutdown	1. Current threshold set too low 2. Encoder harness problem 3. Sudden change in load or speed 4. Restart with the key
2 (2 short)	Motor overspeed	Shutdown	1. Motor speed exceeds the set threshold 2. Check whether the encoder wiring is broken
3 (3 short)	Battery overvoltage	Shutdown	1. Battery power-off 2. Regenerative current too large 3. Improper parameter setting
4 (4 short)	KEY power supply abnormal	Shutdown	1. Key circuit open or poor contact 2. Key sampling circuit fault
5 (5 short)	12V power supply abnormal	Shutdown	1. Auxiliary power supply fault 2. Short circuit at the external power supply port
6 (6 short)	5V power supply abnormal	Shutdown	1. 5V power supply fault 2. Short circuit in the external 5V supply line
7 (7 short)	Angle sensor open circuit	Shutdown	1. Motor angle sensor open circuit or short-circuited to other components 2. Poor connector contact
8 (8 short)	Hardware overcurrent	Shutdown	1. Motor insulation failure 2. Motor short circuit 3. MOSFET damaged
9 (9 short)	Current closed-loop failure	Shutdown	1. Motor phase line open circuit or controller damaged
10 (1 long)	Battery undervoltage	Derating	1. Battery voltage below the set threshold 2. BMS protection, battery power-off 3. Poor contact of positive/negative busbar
11 (1 long 1 short)	Controller over-temperature	Derating	1. Controller temperature exceeds the set threshold 2. Stop the motor and cool down
12 (1 long 2)	Motor over-	Derating	1. Motor temperature exceeds the set threshold 2. PTC-type motor temperature

short)	temperature		sensor line open circuit
13 (1 long 3 short)	Current sensor abnormal	Shutdown	1. Current sensor signal interfered
14 (1 long 4 short)	Angle signal interference	Shutdown	1. Angle sensor signal interfered
15 (1 long 5 short)	Throttle signal out of range	Shutdown	1. Throttle signal input exceeds the limit 2. Throttle wiring open circuit
16 (1 long 6 short)	Throttle not at zero	Shutdown	1. Throttle not at zero position at power-on
17 (1 long 7 short)	Motor stall	Derating	1. Motor stall exceeds the predetermined protection time
18 (1 long 8 short)	BMS fault	Shutdown	1. Internal battery abnormality
19 (1 long 9 short)	Communication loss	Shutdown	1. BMS communication not connected
21 (2 long 1 short)	Brake fault	Shutdown	1. External short circuit of the brake signal line
23 (2 long 3 short)	User parameter abnormal	Shutdown	1. User parameters incomplete
24 (2 long 4 short)	Factory parameter abnormal	Shutdown	1. Factory parameters incomplete
33 (3 long 3 short)	Angle learning failure	Shutdown	Motor phase sequence wiring is wrong, adjust the motor wiring. Motor angle signal abnormal, check the angle wiring or replace the angle detection disc.
34 (3 long 4 short)	Phase terminal over-temperature	Shutdown	1. Phase wire screw contact abnormal, loose connection
35 (3 long 5 short)	Torque closed-loop failure	Shutdown	1. Encoder disc zero position abnormal
36 (3 long 6 short)	Motor phase line short-circuited to power supply	Shutdown	U/V/W phase output voltage abnormal at power-on detection; check the motor wiring. Internal power MOSFET of the controller short-circuited; replace the controller.
37 (3 long 7 short)	Wheelie angle over-limit protection	Shutdown	Wheelie angle exceeds the set range. Controller mounting orientation abnormal.
97 (9 long 7 short)	Phase current		1. FCT phase current calibration parameter abnormal.

short)	calibration factor deviation too large		
98 (9 long 8 short)	Program verification failed	Shutdown	1. Program data incomplete
99 (9 long 9 short)	Model verification failed	Shutdown	1. Product software model error