


List of alarm display and troubleshooting for PRONET series

Item	Alarm name	Possible reason	Solution
A.01	Parameter breakdown	The power supply was turned OFF while changing the parameter setting.	Set Fn001 to initialize the parameter and input parameter again.
		The number of times that parameters were written exceeded the limit. For example, the parameter was changed every scan through the host controller.	Replace the servo drive.
		The circuit of servo drive is faulty.	Replace the servo drive.
A.02	A/D breakdown	A malfunction occurred in reading section of the analog reference input.	Clear and reset the alarm and restart the operation.
		A servo drive board fault occurred	Replace the servo drive.
A.03	Overspeed	The position or speed reference input is too large.	Reduce the reference value.
		The setting of the reference input gain is incorrect.	Correct the reference input gain setting.
		The order of phase U, V and W in the servo motor wiring is incorrect.	Correct the servo motor wiring.
		A servo drive board fault occurred.	Replace the servo drive.
A.04	Overloaded	The servo motor wiring is incorrect or the connection is faulty.	Correct the servo motor wiring.
		The actual torque exceeds the rated torque or the starting torque largely exceeds the rated torque.	Reconsider the load and operation conditions, or reconsider the servo motor capacity.
		The encoder wiring is incorrect or the connection is faulty.	Correct the encoder wiring.
		The servo motor overtemperature and lead to demagnetization.	Cooling the servo motor, or replace the servo motor.
		A servo drive board fault occurred.	Replace the servo drive.
A.05	Deviation counter error	Internal pulse counter fault occurred.	Clear and reset the alarm and restart the operation.
		A servo drive fault occurred.	Replace the servo drive.
A.06	Position error pulse overflow	The servo drive gain adjustment is improper.	Increase the speed loop gain(Pn102) and the position loop gain(Pn104).
		The position reference pulse frequency is too high.	Smooth the pulse input and reduce the electronic gear ratio.
		Setting of the overflow counter(Pn504) is incorrect.	Set the parameter Pn504 to proper value.
		The servo motor specifications do not meet the load conditions such as a torque and moment of inertia.	Reconsider and correct the load and servo motor capacity.
		Wiring of the servo motor U, V and W are incorrect.	Correct the servo motor wiring.
		A servo drive board fault occurred.	Replace the servo drive.
A.07	Electronic gear overlimited	The electronic gear ratio outside the setting range.	Reduce the fraction (both numerator and denominator) until you obtain integers within the range $(0.01 \leq \text{Electronic gear ratio (B/A)} \leq 100)$.
		The input frequency is incorrect.	Check the input technical specification of reference pulse.
A.08	Current feedback (channel A) error	A servo drive board fault occurred.	Set Fn005 to automatic adjustment of the offset of current.
A.09	Current feedback (channel B) error	A servo drive board fault occurred.	Set Fn005 to automatic adjustment of the offset of current.
A.10	Encoder feedback error	The encoder wiring is incorrect or the connection is faulty.	Correct the encoder wiring.
		An encoder fault occurred.	Replace the servo motor.
		A servo drive fault occurred.	Replace the servo drive.
A.12	Overcurrent	The encoder wiring is incorrect or the connection is faulty.	Correct the encoder wiring.
		A short circuit occurred between phase U, V and W of the servo motor.	Repair or replace the servo motor power cable.
		A short circuit occurred between the grounding and UV or W of the servo motor cable.	Repair or replace the servo motor power cable.
		The dynamic brake was activated too frequently.	Replace the servo drive, and reduce the DB operation frequency.
		The ambient temperature exceeds 55°C.	Relocate the servo drive, and keep it away from other devices.
		A servo drive fan fault occurred.	Replace the servo drive.
		The overload or regenerative power exceeds the regenerative resistor capacity.	Reconsider the load and operation conditions.
A.13	overvoltage	C Phase angle of encoder was deflected.	Refer to the guidance, adjust the operation of the encoder installation.
		The AC power voltage is too high.	Correct the input voltage.
		The motor speed is high and load movement of inertia is excessive, resulting in insufficient regenerative capacity.	Check the load movement of inertia and minus load specifications, Reconsider the load and operation conditions.
		A servo drive board fault occurred	Replace the servo drive.
A.14	Undervoltage	The AC power supply voltage was lowered, and large voltage drop occurred.	Correct the input voltage.
		The fuse of the servo drive is blown out.	Replace the servo drive.
		The surge current limit resistor is disconnected, resulting in an abnormal power supply voltage or in an overload of the surge current limit resistor.	Replace the servo drive. Check the power supply voltage, and reduce the number of times that the main circuit is turned ON or OFF.
		The jumper of servo drive between  and  is removed.	Correct the wiring.
		A servo drive board fault occurred	Replace the servo drive.

Item	Alarm name	Possible reason	Solution
A.15	Regenerative resistor breakdown	Check for incorrect wiring or a disconnected wire in the regenerative resistor.	Correct the wiring for the external regenerative resistor.
		The jumper of servo drive between B2 and B3 is removed.	Correct the wiring.
		A servo drive fault occurred,such as regenerative transistor or internal regenerative resistor was breakdown.	Replace the servo drive.
A.16	Regeneration error detected	The generating state continued.	Select a proper regenerative resistance capacity,or reconsider the load and operation conditions.
		The regenerative energy is excessive.	Select a proper regenerative resistance capacity,or reconsider the load and operation conditions.
		The power supply is overvoltage.	Correct the input voltage.
		A servo drive board fault occurred	Replace the servo drive.
A.17	Resolver error	Resolver feedback fault occurred	Replace the servo motor.
		A servo drive board fault occurred	Replace the servo drive.
A.20	Power lines open phase	The three-phase power supply wiring is incorrect.	Correct the power supply wiring.
		The three-phase power supply is unbalanced.	Balance the power supply by changing phases.
		A servo drive fault occurred.	Replace the servo drive,check the power supply voltage.
A.21	Voltage fluctuation detected	The three-phase power supply wiring is incorrect.	Correct the power supply wiring.
		One cycle of input voltage waveform lost.	Correct the input voltage,recommend to utilize voltage stabilizer.
		A servo drive fault occurred.	Replace the servo drive,check the power supply voltage.
A.42	Motor model unmatched	The encoder wiring is incorrect or the connection is faulty.	Correct the encoder wiring.
		The parameter setting for servo motor are incorrect.	Correct the setting of Pn005.3 .
A.43	Drive model unmatched	A servo drive fault occurred.	Set Fn001 to initialize the parameter.
		The parameter setting for servo drive are incorrect.	Correct the setting of Pn840.2 .
A.45	* Absolute encoder Multiturn information error	Multiturn information of encoder is faulty.	Set Fn010 to clear error .
		An absolute encoder fault occurred.	If the alarm cannot be reset by setting Fn011, replace the encoder.
A.46	* Encoder Multiturn information overflow	Multiturn information of encoder is overflow	Set Fn010 to clear error .
		An absolute encoder fault occurred.	If the alarm cannot be reset by setting Fn011, replace the encoder.
A.47	* Absolute encoder battery error	Multiturn information of encoder is lost.	Set Fn010 to clear error.
		The battery voltage is lower than the specified value 2.5V	Replace the battery, and then turn ON the power to the encoder.
A.48	Absolute encoder battery error	The battery voltage is lower than the specified value 3.1V	Replace the battery, and then turn ON the power to the encoder.
		The encoder cable does not have a battery inside.	Set Pn002.2 to 1,and change the absolute encoder into incremental mode.
A.50	Encoder communicating timeout occurred	The parameter setting for encoder are incorrect.	Correct the setting of Pn840.0 .
		The encoder wiring is incorrect or the connection is faulty.	Correct the encoder wiring.
		An encoder fault occurred.	Replace the servo motor.
		Noise interference occurred on the signal line from encoder.	Take the measure against noise for the encoder wiring.
A.51	* Encoder overspeed	The servo motor runs at 100RPM without power supply.	Set Fn010 to clear error.
		An encoder fault occurred.	Replace the servo motor.
A.52	Encoder data error	Absolute state of encoder is faulty.	Set Fn011 to clear error.
		An encoder fault occurred.	Replace the servo motor.
A.53	Encoder data error	Calculation result of encoder is faulty.	Set Fn011 to clear error.
		An encoder fault occurred.	Replace the servo motor.
A.54	Encoder data error	The parity bit and cut-off bit of controlfield are faulty.	Clear and reset the alarm and restart the operation.
		An encoder fault occurred.	Replace the servo motor.
A.55	Encoder checksum error	A servo drive fault occurred.	Replace the servo drive.
		An encoder fault occurred.	Replace the servo motor.
A.56	Encoder data error	The cut-off bit of controlfield is faulty.	Clear and reset the alarm and restart the operation.
		An encoder fault occurred.	Replace the servo motor.
A.58	Encoder data error	Datum of EEPROM is empty.	Clear and reset the alarm and restart the operation.
		An encoder fault occurred.	Replace the servo motor.
A.59	Encoder data error	Data format of EEPROM is faulty.	Clear and reset the alarm,please refer to the guidance for encoder phase angle adjustment.
		An encoder fault occurred.	Replace the servo motor.
A.60	Communicate module undetected	The communicate module is incorrect.	Clear and reset the alarm and restart the operation.
		The contact between the module and the servo drive is faulty.	Insert securely the connector.
		An module fault occurred.	Replace the communication module.
A.61	Handshaking fault occurred	CPU of communication module is faulty.	Replace the communication module.
		An servo drive fault occurred.	Replace the servo drive.
A.62	Communicate fault occurred	Servo drive can not receive cyclist data from communication module.	Check and fix the connection between servo drive and module.
		A servo drive board fault occurred	Replace the servo drive.
A.63	Module fault occurred	Communication module can not receive response package from servo drive.	Replace the communication module.
		A servo drive board fault occurred	Replace the servo drive.
A.64	Connection dropping detected	The BUS connection is incorrect.	Correct the BUS wiring.
		An module fault occurred.	Replace the communication module.
A.66	CAN communicate faulty occurred	Noise interference occurred on the signal line from encoder.	Take the measure against noise for the encoder wiring.
		An module fault occurred.	Replace the communication module.
A.00	Not an error	Normal status.	

* If A.45,A.46,A.47,A.51 alarm occurred, please refer to the assistance function.(Fn010,Fn011)