

Application Note: PowerFlex 400 Fault Codes
Version 001
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PowerFlex 400 Fault Codes

If a FAULT has occurred, and you are at the TELEMETRY USER INTERFACE:

1. Note the FAULT CODE in the TELEMETRY USER INTEFACE
2. Address the condition that caused the FAULT.
See Table Below For List of Fault Codes and Descriptions.
The cause must be corrected before the fault can be cleared.
Corrective action may require a troubleshooting/repair visit to the VFD site.
3. After corrective action has been take, clear the fault by:
Modify Station Setpoints with a CHECKMARK in the setting “RESET VFD ONESHOT”.

If a FAULT has occurred, and you are at the KEYPAD:

1. See Table Below For List of Fault Codes and Descriptions.
2. Press ESC on the KEYPAD to acknowledge the FAULT.
The fault information will be removed so that you can resume using the keypad.
3. Address the condition that caused the FAULT.
The cause must be corrected before the fault can be cleared.
4. After corrective action has been take, clear the fault by:
Press STOP at the KEYPAD
..or..
Cycle VFD Power (VFD shutdown may take up to 1 minute to discharge capacitor energy).

No. Fault Description

- 2 Auxiliary Input⁽¹⁾. Check remote wiring.
- 3 Power Loss. Monitor the incoming AC line for low voltage or line power interruption.
- 4 UnderVoltage⁽¹⁾. Monitor the incoming AC line for low voltage or line power interruption.
- 5 OverVoltage⁽¹⁾. Monitor the AC line for high line voltage or transient conditions. Bus overvoltage can also be caused by motor regeneration. Extend the decel time or install a dynamic brake chopper.
- 6 Motor Stalled⁽¹⁾. Increase [Accel Time x] or reduce load so drive output current does not exceed the current set by parameter A089 [Current Limit].
- 7 Motor Overload⁽¹⁾. An excessive motor load exists. Reduce load so drive output current does not exceed the current set by parameter P033 [Motor OL Current].

No. Fault Description

- 8 Heatsink OvrTmp⁽¹⁾. Check for blocked or dirty heat sink fins. Verify that ambient temperature has not exceeded 40°C (104°F) for IP 30/NEMA 1/UL Type 1 installations or 50°C (122°F) for Open type installations. Check fan.
- 12 HW OverCurrent. Check programming. Check for excess load, improper DC boost setting, DC brake volts set too high or other causes of excess current.
- 13 Ground Fault. Check the motor and external wiring to the drive output terminals for a grounded condition.
- 15 Load Loss. Check for load loss (i.e., a broken belt).
- 29 Analog Input Loss⁽¹⁾. An analog input is configured to fault on signal loss. A signal loss has occurred.
- 33 Auto Rstrt Tries. Correct the cause of the fault and manually clear.
- 38 Phase U to GND. Check the wiring between the drive and motor. Check motor for grounded phase. Replace F39 Phase V to GND drive if fault cannot be cleared.
- 40 Phase W to GND.
- 41 Phase UV Short. Check the motor and drive output terminal wiring for a shorted condition.
- 42 Phase UW Short. Replace drive if fault cannot be cleared.
- 43 Phase VW Short.
- 48 Params Defaulted. The drive was commanded to write default values to EEPROM. Clear the fault or cycle power to the drive. Program the drive parameters as needed.
- 63 SW OverCurrent⁽¹⁾. Check load requirements and A098 [SW Current Trip] setting.
- 64 Drive Overload. Reduce load or extend Accel Time.
- 70 Power Unit. Cycle power. Replace drive if fault cannot be cleared.
- 71 Net Loss. The communication network has faulted.
- 81 Comm Loss. If adapter was not intentionally disconnected, check wiring to the port. Replace wiring, port expander, adapters or complete drive as required. Check connection. An adapter was intentionally disconnected. Turn off using C105 [Comm Loss Action].
- 94 Function Loss. Close input to terminal O1 and re-start the drive.
- 100 Parameter Checksum. Restore factory defaults.
- 122 I/O Board Fail. Cycle power. Replace drive if fault cannot be cleared.

⁽¹⁾ Auto-Reset/Run type fault. Configure with parameters A092 and A093.