

POWERFOIL X3.0 ERROR CODES (DELTA E SERIES VFD)

Error Code	Description and Corrective Action
OC	<p>Over Current <i>Abnormal condition exists on the motor side of the fan system.</i></p> <p>Check motor OL point parameters. Check the motor wiring for shorts. If the condition persists with the disconnected motor, contact Customer Service.</p>
OU	<p>High AC Input Voltage <i>Incoming AC line voltage has exceeded acceptable limits or the motor is trying to stop too quickly.</i></p> <p>Check the DC bus voltage at drive idle versus drive running. Monitor DV bus voltage as the motor is stopping. Verify that incoming AC supply is acceptable configuration (center ground Wye or Delta with Wild on B phase).</p>
OH1 OH2	<p>Drive Overtemp <i>Verify the fan is installed in an acceptable environment (122°F [50°C] maximum).</i></p> <p>Check the VFD for excessive dirt buildup on the heat sink fins. Check the VFD cooling fan function.</p>
LV	<p>Under Voltage <i>Incoming AC line voltage has fallen below acceptable limits.</i></p> <p>Check the DC bus voltage at drive idle versus drive running. Monitor DV bus voltage as the motor is stopping. Verify that incoming AC supply is acceptable configuration (center ground Wye or Delta with Wild on B phase).</p>
ocA	<p>Over Current During Acceleration <i>Motor circuit insulation failure or over boosting.</i></p> <p>Check the torque boost. If the condition persists with a disconnected motor, contact Customer Service.</p>
OL OL1 OL2	<p>Excessive Drive Output Current <i>An abnormal condition exists on the motor side of the fan system.</i></p> <p>Check the motor OL point parameters. Reduce torque comp (Pr.54).</p>
ocd	<p>Over Current During Acceleration <i>Motor circuit insulation failure or over boosting.</i></p> <p>Check the torque boost. If the deceleration time is too short, check parameters.</p>
ocn	<p>Over Current During Steady Operation <i>Motor circuit insulation failure or over boosting.</i></p> <p>Check the motor wiring. This fault could indicate a mechanical failure.</p>
EF	<p>External Fault <i>ESFR input has been triggered (MI3).</i></p> <p>If the system's building is not on fire, check the relay wiring and the alarm system status. If the building is on fire, vacate the premises immediately! If the wall controller is in use, 4–20 mA loop has been compromised. Check the wall controller power supply and loop wiring. The VFD <i>will not</i> auto recover from EF.</p>
GFF	<p>Ground Fault <i>Drive output terminal shorted to ground.</i></p> <p>Depending on the severity of short, the output module can be damaged (if SCC ≥ 50% of drive rating).</p>
cEO4	<p>Communications Error <i>The drive has been issued a command while in fault status.</i></p> <p>Clear all active faults before trying to operate the drive.</p>
RErr	<p>Analog Error <i>The ACI switch is active. The drive is searching for a 4–20 mA signal, but it is not present or is out of tolerance.</i></p>
PHL	<p>Incoming Phase Loss <i>Possible loose connections or blown over current devices.</i></p> <p>Check the incoming AC line for loose connections or blow over current devices.</p>

Error Code	Description and Corrective Action
cF1.0 cF1.1 cF2.0 cF2.1	Internal Memory Error If the power cycle is not resolved, perform a parameter hard reset. If the condition persists, contact Customer Service.
cE10	Communications Error—Slave Verify proper data wiring between the drive's RS485 port and the command source.
bb	Base Block <i>Base Block input (M4) has been triggered.</i> Check the accessory wiring and accessory configuration. The drive will auto-recover to the previous operating state.
FbE	Feedback Signal Error Check the AVI/ACI wiring.
HPF1, HPF2 HPF3, HPF4 cF3.0, cF3.1 cF3.2, cF3.3 cF3.4, cF3.5 AcL codE	Various Unrecoverable Errors If the power cycle will not clear these faults, contact Customer Service.

Pr.00.04 Diagnostics running display options

Setting	Run Screen Display
00	(BAF Default) Display user-defined unit
01	Counter value; pulses on TRG terminal
02	Not valid
03	DC bus voltage ($\div 1.414$ = approx. AC line)
04	RMS equivalent feedback level (percentage)
05	PID analog feedback level (percentage)
06	Power factor angle of motor (degrees)
07	Output power in kW
08	Motor torque estimate (N·m)
09	VDC at AVI terminal (displayed in volts)
10	mA at ACI terminal (displayed in mA)
11	IGBT temperature (degrees C)
12	Not valid
13	Not valid
14	Not valid
15	Not valid