VFD ERROR CODES

Some VFD issues can be resolved before requesting service. Review the below warning and fault messages before contacting Customer Service for support.

Status and warning messages

Error Code	Description and Corrective Action
cE	**EPM Contains Earlier Firmware Version** *This error occurs when you try to change a VFD parameter and the EPM firmware is older than the VFD firmware.* **To correct this condition**, press the STOP button, and then press the Memory/Enter button. Use the UP/DOWN button to scroll to **P199**. Press the Memory/Enter button. Use the UP/DOWN button to scroll to a setting of **5**. Press the Memory/Enter button to save the change. The VFD is now able to read/write the EPM properly.
CL	**Current Limit** Verify proper motor wiring and HP. Check for short circuits. Increase acceleration time.
dEC	**Decel Override** *The fan is stopping too fast, causing a DC Bus overvoltage. The drive is backing off the deceleration rate to prevent HP (Over-voltage) fault.*
Err	**Error** *Invalid data or invalid command entered*
FCL	**Fast Current Limit** *Overload* Check for short circuits throughout the load. Increase acceleration time.
FSt	**Flying Restart Attempt after Fault**
GE	**Program Attempt Made in OEM Settings Mode** *(P199=1)* Parameter changes are not permitted.
GF	**Reset EPM to OEM Defaults Failure** *The EPM's OEM dataset is missing or corrupt.*
LC	**Fault Lockout** *Auto restart failure after five unsuccessful restart attempts*
SP	**Start Pending** *The drive has tripped and is waiting to restart.*
StoP	**Fan Stopped** *Output frequency is 0 Hz*

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Fault messages

Error Code	Description and Corrective Action
	**High Temperature Fault** Check for excessive load or a dirty heatsink. Improve the drive cooling ability.
	**Assertion Level Fault** Check the assertion level switch relative to P120.
	**Personality Fault** *Drive hardware error* Cycle power, and then reprogram EPM. If the fault will not clear, replace the drive and EPM.
	**Control Fault** *Drive hardware error* Cycle power, and then reprogram EPM. If the fault will not clear, replace the drive and EPM.
	**Incompatible EPM Fault** *Drive hardware error* Cycle power, and then reprogram EPM. If the fault will not clear, replace the drive and EPM.
	**External Fault** *Digital input programmed for this feature has been energized/de-energized depending on programming. P121–P124*
	**EPM Fault** *EPM is missing or defective* Replace the EPM.
 to 	**Hardware Failure** Replace the drive.
	**4–20 mA Signal Loss** Check signal source and wiring, i.e., SmartSense wiring error.
	**OEM Defaults Data Fault** *The OEM parameters in the EPM module do not match the anticipated defaults according to the VFD. This fault may appear immediately upon VFD power-up.* **To correct this condition**, press the STOP button, and then press the Memory/Enter button. Use the UP/DOWN button to scroll to **P199**. Press the Memory/Enter button. Use the UP/DOWN button to scroll to a setting of **0**. Press the Memory/Enter button to save the change. The VFD is now able to read/write the EPM properly.
	**High Voltage Fault** Check AC incoming power or increase fan deceleration time.
	**Low Voltage Fault** Check AC incoming power.

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Error Code	Description and Corrective Action
	**Output Transistor Fault** *Short circuit, excessive load, excessive cable charging current* Verify correct load (motor HP, motor wiring, cable length, cable type).
	**Motor Short to Ground**
	**Motor Thermal OL** Check actual motor current against FLA (P108).
	**Flying Restart Fault** *Failed motor speed sync attempt*
	**Single Phase Fault** *Incoming AC line phase loss* Check supply power.
	**Start Fault** *Start command was present on power-up* Cycle start command.

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Error Code	Description and Corrective Action
	**Fault History** *(n.xxx)* N = 1–8 xxx = Fault code
	**Software Version**
	**Drive ID**
	**Internal Code (x.yz)**
	**DC Bus Voltage** *(divided by 1.414 = approximate line input voltage)*
	**RMS Equivalent Motor Voltage at Drive Output Terminals**
	**Motor Load** *(% of drive output rating)*

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Error Code	Description and Corrective Action
P508	**Actual Motor Current in Amperes**
P509	**Torque as a Percentage of Motor Rated Torque** *(vector mode only)*
P510	**Drive Output Power in kW**
P511	**Total kWH for Drive Lifetime**
P512	**Heatsink Temperature Degrees Celsius**
P520	**0–10 VDC Input Voltage (VDC)**
P521	**4–20 mA Input Current (mA)**
P525	**Analog Output Level (VDC)**
P527	**Actual Drive Output Frequency (Hz)**
P528	**Network Speed Command (Hz)**
P540	**Total Runtime (hours)**
P541	**Total Powered-On Time (hours)**
P55n	**Fault History** *(n.xxx)* N = 1–8 xxx = Fault code

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