# VFD Fault Finding Guide (Vendor Neutral)

Vendor neutral fault finding guide for field technicians

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## Before you start

- Permit, isolation and control room informed.
- Put the loop in manual or inhibit trips as authorised.
- Use certified test equipment in hazardous areas.
- Record as found readings before changing anything.

## Quick checks

- Read the fault code and its history.
- Isolate and wait for DC bus discharge before touching.
- Check motor and cable insulation disconnected from the drive.
- Review ramps and motor parameters.

## Symptoms, causes and fixes

| Symptom | Likely causes | Checks and fixes |
|---|---|---|
| Overcurrent | Too short acceleration, motor or cable short, mechanical jam | Increase ramp; megger motor and cable; check load |
| Overvoltage (DC bus) | Too short deceleration, overhauling load, high supply | Increase decel; add braking resistor; check supply |
| Undervoltage | Supply dip, loose input, failed rectifier or fuse | Check supply and input terminals |
| Overtemperature | Blocked fan or filter, high ambient, overload | Clean; improve cooling; check current |
| Earth fault | Damaged motor or cable insulation, moisture | Megger motor and cable (disconnected from drive) |
| Motor overload | Load too high, wrong motor data, low speed cooling | Check motor data and load; consider forced cooling |
| Phase loss | Blown fuse, loose connection | Check input and output phases |

## Safety

- DC bus capacitors stay charged after isolation; wait the time on the drive label and verify.
- Never megger with the drive connected.