

ABB AC Drives Operator Troubleshooting During Warranty Period

1. Verify Line Power is present and acceptable. This is performed at phases A to B, B to C and A to C. Once this has been verified, each phase to ground should also be verified.
2. What is being shown on the VFD display? What is the fault number and name? Have the steps in the manual under "Diagnostics" been applied? If so what were the results? This will tend to rule out external issues in many cases.
3. If the display is blank (Refer to Step #1)
4. If no fault is present and VFD does not run in "AUTO"
 - Is there an "Auto" reference for speed? (Upper right hand corner)
 - Is the Start/Stop means from EMS being satisfied? (This can typically be verified using Operating Data Group 1 (Parameter 118 and 119) or Actual Signals Group 3)
 - Is the Safety means being satisfied? (This can typically be verified using Operating Data Group 1 (Parameter 118 and 119) The drive typically will not run in "HAND" mode either
5. Unit runs erratically (Not at design speed reference)
 - See Step #4 bullet point 1
 - Does unit run stable in "HAND" operating mode? (This can typically verify unstable speed reference to the VFD)
 - Using a "Clamp On" style amp meter verify that each phase has even current draw on the output and each incoming phase has current draw (This may typically not be even on the Input should the VFD not be at base (Full) speed
6. If any of the input fuses are open or (Blown) there may be an unforeseen underlying issue. It would be well advised to contact Mech-Line for support prior to fuse replacement. It would be well advised to contact Mech-Line for issues not included in this document.