I'm not robot

reCAPTCHA

Continue

I'm not robot

reCAPTCHA

Damage to feedback device. Call your Rockwell Automation sales representative to return module for repair. FLT S47...AUX ENC SELF TEST nn FLT S50...POS HW OTRAVEL Hardware Overtravel - Positive Axis moved beyond the physical travel limits in the positive direction. Dedicated overtravel input is inactive. • Check wiring.• Verify motion profile.• Verify axis configuration in software. FLT S51...NEG HW OTRAVEL Hardware Overtravel - Negative Axis moved beyond the physical travel limits in the negative direction. FLT S52...POS SW OTRAVEL(Kinetix 6200 drives only) Software Overtravel - Positive Axis position exceeded maximum software setting. • Verify motion profile.• Verify overtravel settings are appropriate. FLT S53...NEG SW OTRAVEL(Kinetix 6200 drives only) Software Overtravel - Negative FLT S54...POSN ERROR Excessive Position Error Position error limit was exceeded. Improperly sized drive or motor. • Increase the feed forward gain. • Increase following error limit or time. • Check position loop tuning.• Verify sizing of system. Mechanical system out of specifications. • Verify mechanical integrity of system within specification limits.

• Increase the feed forward gain. • Increase following error limit or time. • Check position loop tuning.• Verify sizing of system. Mechanical system out of specifications.

FLT S51...NEG HW OTRAVEL Hardware Overtravel - Negative Axis moved beyond the physical travel limits in the negative direction.
FLT S52...POS SW OTRAVEL(Kinetix 6200 drives only) Software Overtravel - Positive Axis position exceeded maximum software setting. • Verify motion profile.• Verify overtravel settings are appropriate.

• Check wiring.• Verify motion profile.• Verify axis configuration in software. FLT S51...NEG HW OTRAVEL Hardware Overtravel - Negative Axis moved beyond the physical travel limits in the negative direction. FLT S52...POS SW OTRAVEL(Kinetix 6200 drives only) Software Overtravel - Positive Axis position exceeded maximum software setting. • Verify motion profile.• Verify overtravel settings are appropriate. FLT S53...NEG SW OTRAVEL(Kinetix 6200 drives only) Software Overtravel - Negative FLT S54...POSN ERROR Excessive Position Error Position error limit was exceeded. Improperly sized drive or motor. • Increase the feed forward gain. • Increase following error limit or time. • Check position loop tuning.• Verify sizing of system. Mechanical system out of specifications. • Verify mechanical integrity of system within specification limits. • Check motor power wiring. FLT S55...VEL ERROR nn Excessive Velocity Error The velocity error has exceeded a limit for a period of time. The nn sub-code is defined as follows:00: Velocity error referenced to the velocity loop feedback. 01: Velocity error referenced to the nonvelocity feedback (in dual-feedback configurations). Improperly sized drive or motor. • Increase velocity error limit or time. • Check velocity loop tuning.• Verify sizing of system. Mechanical system out of specifications. • Verify mechanical integrity of system within specification limits. • Check motor power wiring. • Reduce acceleration. FLT S56...OVERTORQUE(Kinetix 6500 drives only) Overtorque Limit Motor torque has exceeded a user-programmable setting. • Overly aggressive motion profile • Mechanical binding • Verify motion profile.• Verify Overtorque settings are appropriate. • Verify sizing of system.• Verify torque offset Mechanical system out of specifications. • Verify mechanical integrity of system within specification limits. FLT S57...UNDERTORQUE(Kinetix 6500 drives only) Undertorque Limit Motor torque has fallen below a user-programmable setting. • Improperly configured limit • Improperly configured motion • Improperly drive/motor sizing • Verify motion profile.• Verify Overtorque settings are appropriate. • Verify sizing of system. Mechanical system out of specifications. • Verify mechanical integrity of system within specification limits. FLT S60...ILLEGAL MODE Illegal Control mode An illegal mode of operation was attempted. Axis 1 was configured for dual feedback or load feedback with Axis 2 also configured for Feedback Only operation, but with different feedback attribute values. • Use Aux Feedback for one axis only. • Verify Axis 1 and Axis 2 have identical feedback configuration for aux feedback. Table 81 - FLT Sxx Fault Codes (continued) Four-character Display Message RSLogix 5000 Fault Message Problem or Symptom Potential Cause Possible Resolution This manual is related to the following products: System Design for the Control of Electrical Noise Kinetix Rotary and Linear Motion Cable Specifications Low-profile Connector Kits Installation Low-profile Connector Kit for I/O, Safety, and Auxiliary Feedback Installation Low-profile Connector Kit for Cascading Safe Torque-off Signals Installation Integrated Motion on the EtherNet/IP Network Reference Manual For information on troubleshooting SAFE FLT fault codes, refer to the Kinetix 6200 and Kinetix 6500 Safe Speed Monitoring Safety Reference Manual, publication 2094-RM001 . Table 80 - Fault Code Summary Fault Code Type Description FLT Sxx Standard runtime anomalies. FLT Mxx INIT FLT Sxx Anomalies that prevent normal operation and occur during the initialization process. INIT FLT Mxx NODE FLTxx Anomalies that prevent normal operation of all drives on the power rail.

FLT S52…POS SW OTRAVEL(Kinetix 6200 drives only) Software Overtravel - Positive Axis position exceeded maximum software setting. • Verify motion profile.• Verify overtravel settings are appropriate. FLT S53…NEG SW OTRAVEL(Kinetix 6200 drives only) Software Overtravel - Negative FLT S54…POSN ERROR Excessive Position Error Position error limit was exceeded. Improperly sized drive or motor.

• Increase following error limit or time. • Check position loop tuning.• Verify sizing of system. Mechanical system out of specifications.
• Verify mechanical integrity of system within specification limits. • Check motor power wiring. FLT S55…VEL ERROR nn Excessive Velocity Error The velocity error has exceeded a limit for a period of time. The nn sub-code is defined as follows:00: Velocity error referenced to the velocity loop feedback.
01: Velocity error referenced to the nonvelocity feedback (in dual-feedback configurations). Improperly sized drive or motor. • Increase velocity error limit or time. • Check velocity loop tuning.• Verify sizing of system. Mechanical system out of specifications. • Verify mechanical integrity of system within specification limits. • Check motor power wiring.• Reduce acceleration. FLT S56…OVERTORQUE(Kinetix 6500 drives only) Overtorque Limit Motor torque has exceeded a user-programmable setting. • Overly aggressive motion profile • Mechanical binding • Verify motion profile.• Verify Overtorque settings are appropriate. • Verify sizing of system.• Verify torque offset Mechanical system out of specifications. • Verify mechanical integrity of system within specification limits. FLT S57…UNDERTORQUE(Kinetix 6500 drives only) Undertorque Limit Motor torque has fallen below a user-programmable setting. • Improperly configured limit • Improperly configured motion • Improperly drive/motor sizing • Verify motion profile.• Verify Overtorque settings are appropriate. • Verify sizing of system.
Mechanical system out of specifications. • Verify mechanical integrity of system within specification limits. FLT S60…ILLEGAL MODE Illegal Control mode An illegal mode of operation was attempted. Axis 1 was configured for dual feedback or load feedback with Axis 2 also configured for Feedback Only operation, but with different feedback attribute values. • Use Aux Feedback for one axis only. • Verify Axis 1 and Axis 2 have identical feedback configuration for aux feedback. Table 81 - FLT Sxx Fault Codes (continued) Four-character Display Message RSLogix 5000 Fault Message Problem or Symptom Potential Cause Possible Resolution This manual is related to the following products: System Design for the Control of Electrical Noise Kinetix Rotary and Linear Motion Cable Specifications Low-profile Connector Kits Installation Low-profile Connector Kit for I/O, Safety, and Auxiliary Feedback Installation Low-profile Connector Kit for Cascading Safe Torque-off Signals Installation Integrated Motion on the EtherNet/IP Network Reference Manual For information on troubleshooting SAFE FLT fault codes, refer to the Kinetix 6200 and Kinetix 6500 Safe Speed Monitoring Safety Reference Manual, publication 2094-RM001 . Table 80 - Fault Code Summary Fault Code Type Description FLT Sxx Standard runtime anomalies. FLT Mxx INIT FLT Sxx Anomalies that prevent normal operation and occur during the initialization process. INIT FLT Mxx NODE FLTxx Anomalies that prevent normal operation of all drives on the power rail. NODE ALARM xx Anomalies that prevent normal operation of all drives on the power rail, but do not result in any action other than reporting the alarm to the controller. ALARM SxxALARM Mxx Warnings of conditions that may affect normal operation, but do not result in any action other than reporting the alarm to the controller. TIP Fault codes triggered by conditions that fall outside factory set limits are identified by FL at the end of the display message. For example, FLT S03…MTR OVERSPEED FL. Fault codes triggered by conditions that fall outside user set limits are identified by UL at the end of the display message. For example, FLT S04…MTR OVERSPEED UL. Table 81 - FLT Sxx Fault Codes Four-character Display Message RSLogix 5000 Fault Message Problem or Symptom Potential Cause Possible Resolution FLT S02…MTR COMMUTATION Illegal Hall State State of Hall feedback inputs is incorrect.
Improper connections. • Check Hall wiring at motor feedback (MF) connector. • Check 5V power supply to the encoder. FLT S03…MTR OVERSPEED FL Motor Overspeed Motor speed has exceeded 125% of maximum rated speed. • Check cables for noise.• Check tuning.
FLT S04…MTR OVERSPEED UL(Kinetix 6500 drives only) Motor Overspeed Motor speed has exceeded user velocity limits. FLT S05…MTR OVERTEMP FL nn Motor Overtemperature The motor thermostat, motor thermistor, or encoder temperature sensor indicates that the motor factory temperature limit has been exceeded. The nn sub-code is defined as follows: High motor ambient temperature and/or Excessive Current. • Operate within (not above) the continuous torque rating for the ambient temperature.
• Lower ambient temperature or increase motor cooling. 01: Motor Thermostat or Thermistor. Motor wiring error. Check motor wiring at motor feedback (MF) connector. 02: Encoder Temperature Sensor. Incorrect motor selection. Verify the proper motor has been selected. This manual is related to the following products: