

Electrical Connections/Contacts		
Symptom or Observation	Root Cause	Action Required
Overheating	Loose Connection	Clean residue and contamination reinstall connection with recommended torque
	Contamination	Foreign material or copper oxide must be filed and cleaned from the connection. Follow proper safety procedures for specific areas.
	Too High of Current	Reduce the load through the lead or replace with a larger contactor or wire.
	Improper operation or closing of contacts	Replace the contacts, contactor or make appropriate adjustments.
	Ambient Temperature too High	Provide better ventilation for cooling by relocating contactor, A/C or ventilate electrical panel, reduce load to decrease heat generation or increase size.
	Too Small of wires and cables	Verify design to NEC standards
Low Life for a contactor	Contactors is bouncing when operated.	Correct voltage and/or repair mechanical defects or replace contactors
	Contamination	Clean and assure contactors are in sealed environment away for contaminants
	Too High of Load	Reduce load or redesign contactor
	Poor Contact Force	Make adjustments, replace the contactor and/or failed components (spring), Follow proper set up procedures to obtain correct operation (force).

This is an example of developing quick reference for troubleshooting and developing Job Plans. Overtime this type of information can be used to develop good job libraries to improve Maintenance planning effectiveness.