USA Ground Operations CIL Sheet

Critical Item: Transformer
NASA Part No: None
Mfg/Part No: General Electric / Type: QL-WP Model: 9T23B3875
System: 60 Hz Low Voltage Power Distribution System

Criticality Category: 1S
Total Quantity: 1

Find No.	Qty	Area	PMN	Baseline	Drawing / Sheet
T-30, RSS Switchboard	1	Pad-A	K61-4318	353.20	39K6150018 /

Function:

Provides stepped-down voltage, 480-208/120, for Panel P-42.

Failure Mode No. Failure Mode	Failure Cause Failure Effect	Detection Method Time to Effect	Crit Cat
09ELA2-001.002 Fails Open	Breakdown of windings insulation due to aging/heat or other internal piece part structural failure Loss of power to Panel P-42 and Hypergol Vapor Detection System (HVDS) equipment racks. Could allow loss of life during hazardous conditions.	LPS console operator will receive alarm indicating HVDS sensor failures. Immediate	1S
09ELA2-001.003 Fails shorted	Breakdown of windings insulation due to aging/heat or other internal piece part structural failure Loss of power to Panel P-42 and Hypergol Vapor Detection System (HVDS) equipment racks. Could allow loss of life during hazardous conditions.	LPS console operator will receive alarm indicating HVDS sensor failures. Immediate	1S

ACCEPTANCE RATIONALE

Design:

	Rated	Estimated Operating Load
Delta-Wye 112.5KA	480-208/120V (312A @ 208V)	100A

- This component is a standard commercial item used throughout industry.

Test:

- Operating characteristics are checked annually and require insulation resistance and voltage testing (ref. OMI I2001, Electrical Hardware Testing).

Inspection:

- OMRSD File VI requires visual inspection of transformer for signs of excessive heat and available output voltage annually.

Failure History:

- Current data on test failures, unexplained anomalies, and other failures experienced during ground processing activities can be found in the PRACA database. The PRACA database was researched and no data was found on this component in the critical failure mode.

Operational Use:

Corrective Action	Timeframe
There is no action which can be taken to mitigate the failure effect.	Since no corrective action is available, timeframe does not apply.