

OCT 28 1998

USA Ground Operations CIL Sheet

Critical Item: Circuit Breaker
NASA Part No: None
Mfg/Part No: General Electric / TJJ436400
System: 60 Hz Low Voltage Power Distribution System

Criticality Category: 1S
Total Quantity: 1

Find No.	Qty	Area	PMN	Baseline	Drawing / Sheet
CB-40, RSS Switchboard	1	Pad-A	K61-4318	353.20	39K6150018 /

Function:

Provides circuit overload protection of transformer T-30 in RSS Switchboard. T-30 provides power for Panel P-42 and the Hypergol Vapor Detection System equipment racks.

Failure Mode No. Failure Mode	Failure Cause Failure Effect	Detection Method Time to Effect	Crit Cat
09ELA2-001.021 Premature trip	Internal piece part structural failure Loss of power to T-30, Panel P-42, and the HVDS racks (4). Loss of hypergol detection capabilities. 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	Operating Voltage
225/175A	100A	480V

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

Test:

- OMRSD File VI requires time/current trip test, megger test, and instantaneous trip test prior to installation and after a fault (ref. OMI I2001, Electrical Hardware Testing).

Inspection:

- OMRSD File VI requires annual inspection and maintenance per OMI I2001.
- Operational check and visual inspection of circuit breaker for excessive heat performed 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:

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