

USA Ground Operations CIL Sheet

Critical Item: Circuit Breaker
NASA Part No: None
Mfg/Part No: Westinghouse, CA-3225X / 56828D19G48
System: 60 Hertz Low Voltage Power System

Criticality Category: 1S
Total Quantity: 1

Find No.	Qty	Area	PMN	Baseline	Drawing / Sheet
Panel P-42 Upper / CB-Main	1	Pad-B	K61-1663	353.25	39K6150023 / 20

Function:

Provides circuit overload protection for panel P-42. Panel P-42 provides 120V 60 HZ operating power to Hypergol Vapor Detection System (HVDS) equipment racks 6280 thru 6283.

Failure Mode No. Failure Mode	Failure Cause Failure Effect	Detection Method Time to Effect	Crit Cat
09ELB2-001.020 Premature Trip	Internal piece part structural failure Loss of power to panel P-42 and all HVDS equipment racks. Loss of hypergol vapor detection capabilities. Failure could allow loss of life and vehicle during hazardous conditions.	LPS console operator will receive alarm indicating HVDS sensor failures Immediate	1S

ACCEPTANCE RATIONALE**Design:**

- Rated: 600V/225A Operating load: 45 Amps Trip Set: 225 Amps
- Environment is normal for application.
- Molded-case circuit breaker used throughout industry.

Test:

- OMRSD File VI requires Time/Current trip tests and insulation resistance test performed prior to installation and after a fault per NETA-MTS.

Inspection:

- OMRSD File VI requires inspection and maintenance prior to installation and after a fault per NETA-MTS.

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.