USA Ground Operations CIL Sheet

Critical Item: Circuit Breaker
NASA Part No: None
Mfg/Part No: General Electric / 179A4535-294-MA
System: 60 Hertz Low Voltage Power System

Criticality Category: 1S
Total Quantity: 1

Find No.	Qty	Area	PMN	Baseline	Drawing / Sheet
SS1029/ CB-3C	1	Pad-B	K61-1663	353.25	39K6150023 / 101

Function:

Provides circuit overload protection for ATS-88 and Panel PC.

Failure Mode No. Failure Mode	Failure Cause Failure Effect	Detection Method Time to Effect	Crit Cat
09ELB2-001.001 Premature trip	Internal piece part structural failure or failure of relay control logic. Loss of power to ATS-88, Panel PC, PC-1, PC-2 and remote-air-intake pressurization fans. Loss of temperature and humidity control in the PCR. Loss of cooling air to critical electronic equipment. Loss of hazardous purge for PCR, PTCR and MLP. Failure could allow loss of life and vehicle during hazardous conditions.	CCS monitors breaker status. Variable w/ ambient temp/ humidity	1S

ACCEPTANCE RATIONALE

Design:

- Rated: 600V/600A   Estimated Load: 302 Amps Trip Set: 600A
- Environment is normal for application.
- Circuit breaker is used throughout industry.
- Draw-out Type AK-2A-25-1

Test:

- OMRSD File VI requires Time/Current trip tests and insulation resistance test 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.