

**USA Ground Operations CIL Sheet**

**Critical Item:** Circuit Breaker

**Criticality Category:** 1S

**NASA Part No:** None

**Total Quantity:** 2

**Mfg/Part No:** General Electric / Type: TB4 Cat: TB43150AF14

**System:** 60 Hz Low Voltage Power Distribution System

Find No.	Qty	Area	PMN	Baseline	Drawing / Sheet
CB-4C, FSS Emergency SWBD	1	Pad-A	K61-4318	353.20	39K6150018 /
CB-4D, FSS Emergency SWBD	1	Pad-A	K61-4318	353.20	39K6150018 /

**Function:**

**CB-4C:** Provides circuit overload protection for Panel P-3 (bottom-section). Panel P-3 provides power for FSS passenger elevator #2 drive motor.

**CB-4D:** Provides circuit overload protection for Panel P-3 (top-section). Panel P-3 provides power for FSS passenger elevator #1 drive motor.

Failure Mode No. Failure Mode	Failure Cause Failure Effect	Detection Method Time to Effect	Crit Cat
09ELA2-001.008  Premature trip	Internal piece part structural failure  CB-4D: Loss of power to Panel P-3 (top-section). Loss of power to FSS passenger elevator #1. Loss of egress/ingress route for rescue personnel/crew. Could allow loss of life during hazardous condition. CB-4C: Loss of power to Panel P-3 (bottom). Loss of power to FSS passenger elevator #2. Loss of egress/ingress route for rescue personnel/crew. Could allow loss of life during hazardous condition.	Visual  Immediate	1S

**ACCEPTANCE RATIONALE**

**Design:**

	Rated	Estimated Operating Load	Operating Voltage
CB-4C:	225/150A	85A	480V
CB-4D:	225/150A	80A	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.