

E01-SAA01FT06-010
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SAA09FT06-010

OCT 10 1990

SFP Item: Circuit Breaker

Find Number: CB-10, Panel TB

Criticality Category: 1S, 2

S04C244
ATTACHMENT
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SAA No:	09FT06-010, Rev. A	System/Area:	EPS, Payload Canister Transporter
NASA Part No:	None	PMN/ Name:	H70-0833/ Transporter EPS
Mfg. Part No:	Westinghouse Corp. QBHW3060H	Drawing/ Sheet No:	79K15394/ 16

Function: Provides overload protection of IACS.

Critical Failure Mode: Premature Trip (FHM 09FT06-010.007)

Cause: Internal part failure

Failure Effect: Loss of 60Hz power to the IACS. Eventual loss of capability to detect smoke, fire, hypergols, and to vent/smother a payload hypergol leak which could result in loss of life or payload. Also, loss of conditioned canister interior environment which could result in payload damage due to exceeding environmental limits (e.g. temperature, humidity, and contaminants).

Acceptance Rationale

Design:

- 0 Component Specifications:

	Rated	Actual
AC Voltage	240	208
- 0 Breaker set to trip at 60A and loaded at 13A.
- 0 Breaker trip is detectable by IACS. Fifteen (15) minute backup battery power.
- 0 Breaker is a standard commercial item.
- 0 This component is qualified through regular usage in this application over a four year period and by analysis of loads and voltages.

Test:

- 0 Qualification and acceptance testing and manufacturers/assembly (source) inspection is in accordance with the requirements of NASA Payload Canister Mechanical and Electrical Installation Specification 79K14847, Section 16190 which requires the "Conduct of all tests and checkout as specified" in the procurement documentation.
- 0 File VI OMRS requirements which will be implemented by revision of OMI E6408 include:
 - Annual CB operation, insulation test and performance test
 - Time-current test with first use/component replacement
 - File VI OMRS requirements test/inspection) are presently accomplished by TPS H70-0833-DI-0003

Inspection:

- 0 File VI OMRS requirements, which will be implemented by revision of OMI E6408, includes an annual terminal inspection

Failure History:

- 0 No NDAC-KSC failure history in the critical failure mode since turnover in October 1983.

Operational Use: N/A