

E01-SAA01FT06-010
SHEET 12 OF 16

SAA09FT06-010
OCT 10 1990

SFP Item: Circuit Breaker

Find Number: CB-4, Panel TA

Criticality Category: IS, 2

S040244
ATTACHMENT -
Page 38 of 68

SAA No: 09FT06-010, Rev. A	System/Area: EPS, Payload Canister Transporter
NASA Part No: None	PMN/ Name: H70-0833/ Transporter EPS
Mfg. Gould Inc.. Part No: HE38040	Drawing/ Sheet No: 79K15394/ 16

Function: Provides overload protection for Transformer T1.

Critical Failure Mode: Premature Trip (FMN 09FT06-010.003)

Cause: Internal part failure

Failure Effect: Loss of 60Hz power to Panel TB and the I&CS. 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 vehicle. 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	600	480
- Material: molded case, non-interchangeable trip.
- 0 Breaker set to trip at 40A and loaded at 10A.
- 0 Breaker trip is detectable by I&CS. 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 79K14547, 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 H70-0833-01-0003

Inspection:

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

Failure History:

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

Operational Use: N/A