ETSO-C178
Date: 12.07.2013

European Aviation Safety Agency

European Technical Standard Order (ETSO)

Subject: SINGLE PHASE 115 VAC, 400 HZ ARC FAULT CIRCUIT BREAKERS

1 - Applicability

This ETSO gives the requirements which Single Phase 115 VAC, 400 Hz Arc Fault Circuit Breakers that are manufactured on or after the date of this ETSO must meet in order to be identified with the applicable ETSO marking.

2 - Procedures

2.1 - General

Applicable procedures are detailed in CS-ETSO, Subpart A.

2.2 — Specific

None.

3 - Technical conditions

3.1 — Basic

3.1.1 — Minimum performance standard

Standards set forth in the SAE AS 5692, Arc Fault Circuit Breaker (AFCB), Aircraft, Trip-Free Single Phase 115 Vac, 400 Hz — Constant Frequency, dated October 2004. AFCBs may have separate indication of thermal and arcing faults to assist in fault isolation and performing proper repairs.

3.1.2 — Environmental standard

See CS-ETSO, Subpart A, paragraph 2.1.

3.1.3 —Software

See CS-ETSO, Subpart A, paragraph 2.2.

3.1.4 — Airborne electronic hardware

See CS-ETSO, Subpart A, paragraph 2.3.

3.2 — Specific

3.2.1 Failure condition classification

See CS-ETSO, Subpart A, paragraph 2.4.

Failure of the function defined in paragraph 3.1.1 of this ETSO has been determined to be a major failure condition.

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4 — Marking

4.1 - General

Marking is detailed in CS-ETSO, Subpart A, paragraph 1.2.

4.2 - Specific

None.

5 — Availability of referenced document See CS-ETSO, Subpart A, paragraph 3.