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.
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.