

ETSO-C43d

ED Decision 2020/011/R (applicable from 25.7.2020)

TEMPERATURE INSTRUMENTS**1 Applicability**

This ETSO provides the requirements which new models of temperature instruments that are designed and 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

The 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

The applicable standards are those provided in SAE International's Aerospace Standard AS8005 'Minimum Performance Standard for Temperature Instruments' Revision A, September 1996, as amended by Appendix 1.

Exceptions:

- (i) In the friction error test SAE AS8005A, paragraph 4.8, the vibration (to minimise friction) provisions of paragraph 4.3 do not apply.
- (ii) For clarification, the vibration test of SAE AS8005A, paragraph 5.8, shall be conducted in accordance with the test procedure required by paragraph 3.1.2 below.

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.

4 Marking

4.1 General

See CS-ETSO, [Subpart A](#), paragraph 1.2.

4.2 Specific

None.

5 Availability of Referenced Documents

See CS-ETSO, [Subpart A](#), paragraph 3.

[Amdt ETSO/16]

Appendix 1 to ETSO-C43d – Modifications to SAE AS8005A

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- Change Section 4.1 of SAE AS8005A to read:
'Unless otherwise specified herein, all the tests required shall be made at the atmospheric conditions specified in Section 3.5 of the document required by Section 3.1.2 of ETSO-C43d.'
- Remove Section 4.3 of SAE AS8005A, as vibration as a means to reduce friction is no longer acceptable.
- In Section 5 of SAE AS8005A, remove the sentence 'The order of tests shall be in accordance with paragraph 3.2, page 5, DO-138.'
- In Section 5 of SAE AS8005A, the text 'RTCA Document Number DO-138 entitled "Environmental Conditions and Test Proc. for Airborne Electronic/Electrical Equipment and Instruments", dated 27 June 1968' shall be replaced with the document required by Section 3.1.2 of ETSO-C43d.'
- In Section 5 of SAE AS8005A, any reference to 'DO-138' shall be replaced by a reference to the document required by Section 3.1.2 of ETSO-C43d'.

[Amdt ETSO/16]