SLOVENSKI STANDARD
SIST EN 6059-308:2015

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Aeronavtika - Električni kabli, namestitev - Zaščitne obojke - Preskusne metode - 308. del: Hitra sprememba temperature

Aerospace series - Electrical cables, installation - Protection sleeves - Test methods - Part 308: Rapid change of temperature

Luft- und Raumfahrt - Elektrische Leitungen, Installation - Schutzschläuche - Prüfverfahren - Teil 308: Schneller Temperaturwechsel

Série aérospatiale - Câbles électriques, installation - Gaines de protection - Méthodes d'essais - Partie 308: Variation rapide de température

Ta slovenski standard je istoveten z: **EN 6059-308:2014**

ICS:

49.060	Letalska in vesoljska električna oprema in sistemi	Aerospace electric equipment and systems

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English Version

Aerospace series - Electrical cables, installation - Protection sleeves - Test methods - Part 308: Rapid change of temperature

Série aérospatiale - Câbles électriques, installation - Gaines de protection - Méthodes d'essais - Partie 308: Variation rapide de température

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN 6059-308:2014) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2015, and conflicting national standards shall be withdrawn at the latest by June 2015.

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1 Scope

This European Standard specifies a method of assessing the behaviour of conductive protection sleeves or conduits after exposure to a rapid change of temperature.

It shall be used together with EN 6059-100.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 3475-301, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 301: Ohmic resistance per unit length*

EN 6059-100, *Aerospace series — Electrical cables, installation — Protection sleeves — Test methods — Part 100: General*

3 Preparation of specimens

Each sleeve or conduit specimen shall have a length of 600 mm minimum, and shall be prepared according to Figure 1.

The cable bundle shall be made of standard aerospace cables, according to Figure 1. The diameter of the bundle shall be the maximum diameter applicable to the used sleeve or conduit.

Then apply a twisting with the number of twists per metre, as specified in the product standard.

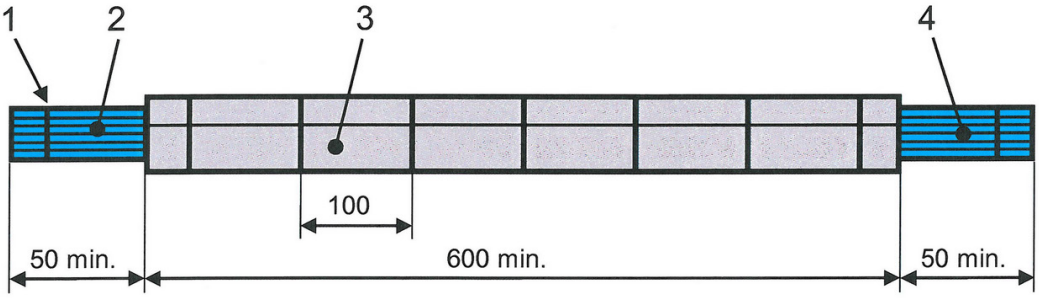
The cable bundle and the twisted sleeve shall be tied using standard aerospace tying devices compliant with the temperature range.

The tying devices on the cable bundle shall be installed with a pitch of 300 mm.

The tying devices on the sleeve shall be installed with a pitch of 100 mm.

Measure the ohmic resistance of each specimen according to EN 3475-301, tests shall be carried out at ambient temperature T_a (typically 20 °C).

Dimensions in millimetres



Key

1 Tying device
2 Cable bundle
3 Sleeve
4 Bundle at the maximum allowed diameter of the sleeve

Figure 1 — Specimen configuration

4 Apparatus

Two chambers, one for low temperature and one for high temperature, shall be provided.

The chambers shall be located that the time of transfer (t_2) of the specimen from one chamber to the other shall be less than 1 min.

The chambers shall be capable of maintaining the specified temperatures (T_A and T_B) to ± 3 % at those locations where the specimens are installed.

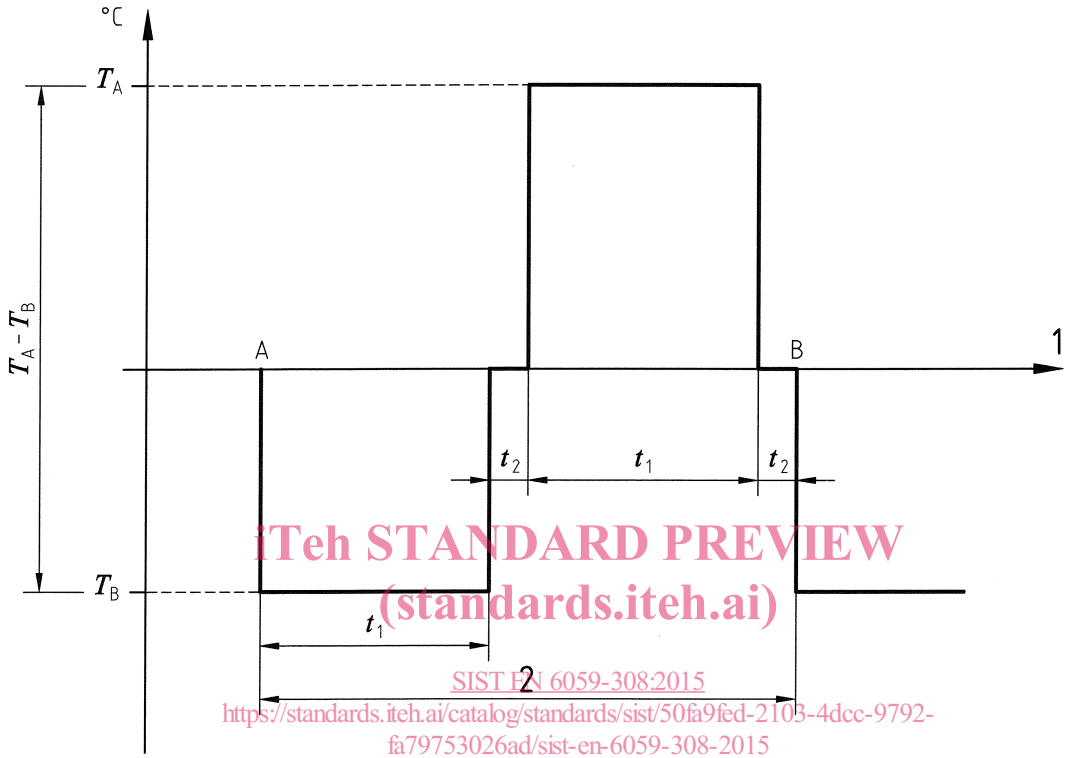
The volume of the chambers shall be such that after insertion of the specimens, the temperature shall be within the specified tolerances after a time of not more than 5 min or 10 % of the exposure time, whichever is the smallest.

Unless otherwise specified, the thermal conduction of the mounting shall be sufficiently low, so that the specimens may be considered thermally isolated.

5 Method

The specimen shall be installed in an oven and subjected to a temperature cycling defined in Figure 2.

The number of cycles shall be 10.



Keys

1 Time t min.
2 1 cycle

A: start of the first cycle
$t_1 = 30$
$t_2 < 1$ min.
B: end of first cycle

Figure 2 — Temperature cycle

6 Requirements

The pass/fail requirements shall be specified in the product standard.