SLOVENSKI STANDARD
SIST EN 2349-318:2009

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Aeronavtika - Zahteve in preskusni postopki za releje in kontaktorje - 318. del: Napetost pri vklopu pri visoki temperaturi in napetost ob izpadu pri nizki temperaturi

Aerospace series - Requirements and test procedures for relays and contactors - Part 318: Pick-up voltage at high temperature and drop-out voltage at low temperature

Luft- und Raumfahrt - Anforderungen und Prüfverfahren für Relais und Schaltschütze - Teil 318: Ansprechspannung bei hoher Temperatur und Rückfallspannung bei niedriger Temperatur

Série aérospatiale - Exigences et méthodes d'essais des relais et contacteurs - Partie 318 : Tension de collage à haute température et de décollage à basse température

Ta slovenski standard je istoveten z: **EN 2349-318:2006**

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This European Standard was approved by CEN on 19 May 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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Foreword

This document (EN 2349-318:2006) 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of an identical text or by endorsement, at the latest by April 2007, and conflicting national standards shall be withdrawn at the latest by April 2007.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This standard specifies a method for testing the pick-up voltage at high temperature and release voltage at low temperature of relays and contactors. It shall be used together with EN 2349-100.

2 Normative references

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

EN 2349-100, *Aerospace series — Requirements and test procedures for relays and contactors — Part 100: General requirements* [1)]

EN 2349-201, *Aerospace series — Requirements and test procedures for relays and contactors — Part 201: Visual inspection*

EN 2349-301, *Aerospace series — Requirements and test procedures for relays and contactors — Part 301: Pick-up and drop-out voltage*

EN 2349-303, *Aerospace series — Requirements and test procedures for relays and contactors — Part 303: Dielectric strength*

EN 2349-412, *Aerospace series — Requirements and test procedures for relays and contactors — Part 412: Seal*

3 Pick-up voltage at high temperature

3.1 Mounting method

The relay or contactor shall be wired in accordance with EN 2349-100 and placed in a heating cabinet. The coil of the relay or contactor shall be connected through a switch to the power source.

3.2 Test procedure

The temperature of the heating cabinet shall be brought to the level specified in the product standard.

After the temperature in the heating cabinet has been stabilized, the relay or contactor shall be stored at the specified temperature for a period of 1 h.

The pick-up voltage shall be measured with the relay or contactor in all three perpendicularly opposed planes.

The switching position of the contacts shall not change when the voltage is increased from the measured actuating voltage to the maximum level.

3.3 Pick-up voltage for previously de-energized coil

The relay or contactor shall be stored for 1 h with the coil de-energized and the contacts unloaded.

The pick-up voltage shall be measured.

The test samples shall be stored for a minimum of 1 h at (23 ± 3) °C before further tests are performed.

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1) In preparation at the date of publication of this standard.

3.4 Pick-up voltage for previously energized coil

The relay or contactor shall be stored for 1 h at the rated voltage with the coil energized and the contacts unloaded.

The pick-up voltage shall be measured.

The test samples shall be stored for a minimum of 1 h at (23 ± 3) °C before further tests are performed.

3.5 Test criteria

The pick-up voltage shall lie within the values specified in the product standard.

3.6 Verification tests

Test in accordance with EN 2349-201, EN 2349-301, EN 2349-303, EN 2349-307 and EN 2349-412.

4 Drop-out voltage at low temperature

4.1 Mounting method

The relay or contactor shall be wired as described in EN 2349-100 and placed in a cooling cabinet. The coil of the relay or contactor shall be connected through a switch to the power source.

4.2 Test procedure

The temperature of the cooling cabinet shall be brought to the level specified in the product standard.

The coil of the relay or contactor shall be de-energized and the contacts unloaded.

After the temperature in the cooling cabinet has been stabilized, the relay or contactor shall be stored at the specified temperature for a period of 48 h.

At the end of the 48 h storage period and maintaining the specified temperature, the release voltage and voltage drop on the contacts shall be measured in all three perpendicularly opposed planes.

To limit temperature increase during the tests as far as possible, the coil of the relay or contactor shall be energized for no longer than 30 s.

The contacts shall not change their switching position when the voltage is reduced from the measured release voltage to zero.

4.3 Test criteria

The release voltage shall lie within the values specified in the product standard.

4.4 Verification tests

Test in accordance with EN 2349-201, EN 2349-301, EN 2349-303, EN 2349-307, EN 2349-412.