



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 2349-412:2007

ICS 49.060

**AEROSPACE SERIES - REQUIREMENTS AND
TEST PROCEDURES FOR RELAYS AND
CONTACTORS - PART 412: SEAL**

National Standards
Authority of Ireland
Glasnevin, Dublin 9
Ireland

Tel: +353 1 807 3800
Fax: +353 1 807 3838
<http://www.nsai.ie>

Sales

<http://www.standards.ie>

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Série aérospatiale - Exigences et méthodes d'essais des
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Luft- und Raumfahrt - Anforderungen und Prüfverfahren für
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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

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Foreword

This document (EN 2349-412:2007) has been prepared by the AeroSpace and Defense 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of an identical text or by endorsement, at the latest by October 2007, and conflicting national standards shall be withdrawn at the latest by October 2007.

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EN 2349-412:2007 (E)

1 Scope

This standard specifies a method for checking the leakage rate 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*

IEC 60068-2-17, *Basic environmental testing procedures — Part 2: Tests — Test Q: Sealing*

3 Method

3.1 Mounting

For relays or contactors with plug-socket holders, only the switching device shall be tested.

3.2 Procedure

The relay or contactor shall be subjected to a seal test in accordance with IEC 60068-2-17.

4 Requirements

4.1 Gas-tightness

Relays or contactors with a sealed volume of more than 30 cm³ shall show a leakage rate, at a pressure differential of 100 kPa (1 bar), of at most 1×10^{-6} cm³ / s per 15 cm³ hermetically sealed volume.

Relays or contactors with a sealed volume of less than 30 cm³ shall show a leakage rate of at most 1×10^{-8} cm³ / s in accordance with Test Q of IEC 60068-2-17.

4.2 Liquid-tightness

10 s after immersion no visible bubbles shall escape, in accordance with Test Q of IEC 60068-2-17.

4.3 Inspection

Test in accordance with EN 2349-201. No signs of leakage or bubbles.

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

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