
International Standard



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**Aircraft — Hermetically sealed monostable electrical
relays, 2A and 3A —
Part 1 : Operating characteristics and test conditions**

Aéronefs — Relais électriques hermétiques monostables 2A et 3A — Partie 1 : Caractéristiques de fonctionnement et conditions d'essai

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Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 5066/1 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

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Aircraft — Hermetically sealed monostable electrical relays, 2A and 3A — Part 1 : Operating characteristics and test conditions

0 Introduction

ISO 5066 deals with hermetically sealed monostable electrical relays, 2A and 3A, and it is divided into two closely united parts :

Part 1 : Operating characteristics and test conditions.

Part 2 : Type approval tests.

For a series of hermetically sealed relays to be declared as conforming to ISO 5066, it shall have passed the type approval tests in accordance with table 8 given in the annex to this part and with the test methods laid down in ISO 5066/2.

A detail specification shall be sent with the relay series which is to be subjected to the type approval tests and shall include

- drawings dimensioned for checking in accordance with ISO 2315;
- a summary of the number of variations, in accordance with ISO 2315;
- the mass of each relay;
- the coil resistance;
- the degree of severity of the test specifications;
- a complete table of samples, tests and frequency of these tests, in order to ensure maintenance of quality and inspection levels in all aspects of manufacture and production;
- a report of performance and limitations in use.

1 Scope and field of application

This part of ISO 5066 specifies the operating characteristics for hermetically sealed monostable electrical relays, 2A and 3A, for aircraft.

It does not specify a particular model of relay as regards dimensions, but proposes limits for the number of variants which may be included in each individual range.

This part of ISO 5066 gives a general view of the basic specifications relating to mechanical and electrical construction of hermetically sealed electrical relays, and of the basic service environment conditions.

2 References

ISO 1540, *Aerospace — Characteristics of aircraft electrical systems.*

ISO 2315, *Aircraft — Two- and four-pole sealed electromagnetic relays, 2A and 3A — Clearance and fixing dimensions.*

ISO 5066/2, *Aircraft — Hermetically sealed monostable electrical relays, 2A and 3A — Part 2 : Type approval tests.*

ISO 7137, *Aircraft — Environmental conditions and test procedures for airborne equipment.*¹⁾

3 Definitions

For the purposes of ISO 5066, the following definitions shall apply.

3.1 electrical relay : A device designed to produce sudden, predetermined changes in one or more electrical output circuits, when certain conditions are fulfilled in the electrical input circuits controlling the device.

NOTES

1) The term "relay" shall be restricted to a relay unit having a single relaying function between its input circuits and its output circuits.

1) Endorsement, in part, of the publication EUROCAE ED-14A/RTCA DO-160A (a document published jointly by the European Organisation for Civil Aviation Electronics and the Radio Technical Commission for Aeronautics).