IEC 60947-5-1

Edition 5.0 2024-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Low- voltage switchgear and controlgear –
Part 5-1: Control circuit devices and switching elements – Electromechanical control circuit devices

Appareillage à basse tension –
Partie 5-1: Appareils et éléments de commutation pour circuits de commande – Appareils électromécaniques pour circuits de commande

IEC 60947-5-1:2024-03(en-fr)

IEC Secretariat
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

Part 5-1: Control circuit devices and switching elements – Electromechanical control circuit devices

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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IEC 60947-5-1 has been prepared by subcommittee 121A: Low-voltage switchgear and controlgear, of IEC technical committee 121: Switchgear and controlgear and their assemblies for low voltage. It is an International Standard.

This fifth edition cancels and replaces the fourth edition published in 2016. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) update of the scope structure and exclusions;
b) requirements for control circuits;
c) update of the normal service conditions (e.g. shock and vibration);
d) update of information and marking requirements including environmental information requirements referencing IEC TS 63058:2021;

e) update of the constructional requirements and the corresponding tests considering safety aspects (e.g. artificial optical radiation, security aspects, limited energy source, stored charge energy circuit);

f) update of the EMC requirements according to the generic documents;

g) new requirements for reed contact magnetic switches in Annex D;

h) requirements for class II circuit devices achieved by double or reinforced insulation in Annex F;

i) update of pull-out tests in Annex G;

j) information requirements for audible signalling device in Annex J;

k) insertion of new Annex O.

The text of this International Standard is based on the following documents:

Draft	Report on voting
121A/585/FDIS	121A/598/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

This International Standard should be used in conjunction with IEC 60947-1.

The provisions of the general rules, IEC 60947-1, are applicable to this document, where specifically called for. General rules, clauses and subclauses thus applicable, as well as tables, figures and annexes are identified by a reference to IEC 60947-1, for example 1.2.3, Table 4 or Annex A of IEC 60947-1:2020.

The following differing practices of a less permanent nature exist in the countries indicated below.

– 8.2.4.1: Making and breaking capacities (United States of America and Canada).

– 9.3.3.5.2: Test circuits and connections (United States of America and Canada).

A list of all the parts in the IEC 60947 series, under the general title *Low-voltage switchgear and controlgear*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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- withdrawn, or
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