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Low-voltage switchgear and controlgear -
Part 5-5: Control circuit devices and switching elements - Electrical emergency stop device with mechanical latching function

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FOREWORD

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IEC 60947-5-5 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 second edition cancels and replaces the first edition published in 1997. This edition constitutes a technical revision.

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

a) re-shaping the document with the clause numbers and names to be in line with other documents of the 60947 series;
b) review of the test method to reasonably determine that the latch mechanism meets the requirements of the document;

c) new Annex B for special requirements for illuminated push-button type emergency stop devices, including the reference to a function to distinguish between "active and inactive" by changing the colour of the push-button depending on the illumination.

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

Draft	Report on voting
121A/699/FDIS	121A/703/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 is to be used in conjunction with IEC 60947-1:2020 and with IEC 60947-5-1:2024.

The provisions of the general rules, IEC 60947-1, are applicable to this standard, 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 or Annex A of IEC 60947-1:2020.

A list of all 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

– reconfirmed,
– withdrawn, or
– revised.

INTRODUCTION

This document deals specifically with electrical emergency stop devices with mechanical latching function and gives additional electrical and mechanical requirements to those given in the following International Standards:

– ISO 13850, giving requirements for the emergency stop function of a machine, whatever be the energy used;

– IEC 60204-1, giving additional requirements for an emergency stop function realized by the electrical equipment of a machine;

– IEC 60947-5-1, specifying electrical characteristics of electromechanical control circuit devices.