

Low-voltage switchgear and controlgear

Part 5-5. Control circuit devices and switching elements — Electrical emergency stop devices with mechanical latching function

The European Standard EN 60947-5-5 : 1997, with the incorporation of amendment A1:2005, has the status of a British Standard

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National foreword

This British Standard was published by BSI. It is the UK implementation of EN 60947-5-5 : 1997, incorporating amendment A1:2005. It is identical with IEC 60947-5-5 : 1997, including amendment 1:2005.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by **A1** **A1**.

The UK participation in its preparation was entrusted by Technical Committee PEL/17, High-voltage switchgear and controlgear, to Subcommittee PEL/17/2, Low-voltage switchgear and controlgear.

A list of organizations represented on PEL/17/2 can be obtained on request to its secretary.

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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
(IEC 60947-5-5:1997)

Appareillage à basse tension
Partie 5-5: Appareils et éléments
de commutation pour circuits de
commande - Appareil d'arrêt d'urgence
électrique à accrochage mécanique
(CEI 60947-5-5:1997)

Niederspannungsschaltgeräte
Teil 5-5: Steuergeräte und
Schaltelemente
Elektrisches NOT-AUS-Gerät mit
mechanischer Verrastfunktion
(IEC 60947-5-5:1997)

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

The text of document 17B/837/FDIS, future edition 1 of IEC 60947-5-5, prepared by SC 17B, Low-voltage switchgear and controlgear, of IEC TC 17, Switchgear and controlgear, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60947-5-5 on 1997-10-01.

The following dates were fixed:

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This standard is to be used in conjunction with EN 60947-1 : 1997 and EN 60947-5-1 : 1997.

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annex ZA is normative and annex A is informative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of International Standard IEC 60947-5-5:1997 was approved by CENELEC as a European Standard without any modification.

Foreword to amendment A1

The text of document 17B/1389/FDIS, future amendment 1 to IEC 60947-5-5:1997, prepared by SC 17B, Low-voltage switchgear and controlgear, of IEC TC 17, Switchgear and controlgear, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A1 to EN 60947-5-5:1997 on 2005-03-01.

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Annex ZA has been added by CENELEC.

Endorsement notice

The text of amendment 1:2005 to the International Standard IEC 60947-5-5:1997 was approved by CENELEC as an amendment to the European Standard without any modification.

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INTRODUCTION

The present IEC 60947-5-5 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.

LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

Part 5-5: Control circuit devices and switching elements – Electrical emergency stop device with mechanical latching function

1 Scope

This section of IEC 60947-5 provides detailed specifications relating to the electrical and mechanical construction of emergency stop devices with mechanical latching function and to their testing.

[A1] This standard is applicable to electrical control circuit devices and switching elements which are used to initiate an emergency stop signal. Such devices may be either provided with their own enclosure, or installed according to the manufacturer's instructions. **[A1]**

This standard does not apply to:

- emergency stop devices for non-electrical control circuit, for example hydraulic, pneumatic;
- emergency stop devices without mechanical latching function.

An emergency stop device may also be used to provide an emergency switching off function (see annex A).

2 Normative references

[A1] 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. **[A1]**

IEC 60050(441):1984, *International Electrotechnical Vocabulary (IEV) – Chapter 441: Switchgear, controlgear, fuses*

[A1] Amendment 1 (2000) **[A1]**

IEC 60068-2-1:1990, *Environmental testing – Part 2: Tests – Test A: Cold*

[A1] Amendment 1 (1993)

Amendment 2 (1994) **[A1]**

IEC 60068-2-2:1974, *Environmental testing – Part 2: Tests – Test B: Dry heat*

[A1] Amendment 1 (1993)

Amendment 2 (1994) **[A1]**

IEC 60068-2-6:1995, *Environmental testing – Part 2: Tests – Test Fc: Vibration (sinusoidal)*

IEC 60068-2-11:1981, *Environmental testing – Part 2: Tests – Test Ka: Salt mist*