

**Madalpingelised lülitus- ja juhtimisaparaadid.
Osa 5: Juhtimisahelaseadmed ja
lülituselemendid. Jagu 3: Nõuded rikkeoludes
määratletud käitumisega lähedusseadmetele**

Low-voltage switchgear and controlgear - Part 5-3:
Control circuit devices and switching elements -
Section 3: Requirements for proximity devices with
defined behaviour under fault conditions (PDF)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60947-5-3:2001 sisaldab Euroopa standardi EN 60947-5-3:1999 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 19.06.2001 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 60947-5-3:2001 consists of the English text of the European standard EN 60947-5-3:1999.

This standard is ratified with the order of Estonian Centre for Standardisation dated 19.06.2001 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

ICS 29.120.99, 29.130

Standardite reprodutseerimis- ja levitamiseõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:
Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

Right to reproduce and distribute Estonian Standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Estonian Centre for Standardisation.

If you have any questions about standards copyright, please contact Estonian Centre for Standardisation:
Aru str 10 Tallinn 10317 Estonia; www.evs.ee; Phone: +372 605 5050; E-mail: info@evs.ee

English version

**Low-voltage switchgear and controlgear
Part 5-3: Control circuit devices and switching elements
Requirements for proximity devices with defined behaviour
under fault conditions (PDF)
(IEC 60947-5-3:1999)**

Appareillage à basse tension
Partie 5-3: Appareils et éléments
de commutation pour circuits de
commande
Prescriptions pour dispositifs de
détection de proximité
à comportement défini dans des
conditions de défaut (PDF)
(CEI 60947-5-3:1999)

Niederspannungsschaltgeräte
Teil 5-3: Steuergeräte und
Schaltelemente
Anforderungen für Näherungsschalter
mit definiertem Verhalten unter
Fehlerbedingungen (PDF)
(IEC 60947-5-3:1999)

This European Standard was approved by CENELEC on 1999-05-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 17B/963/FDIS, future edition 1 of IEC 60947-5-3, 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 60947-5-3 on 1999-05-01.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2000-02-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2002-05-01

This standard is to be used in conjunction with EN 60947-1 and EN 60947-5-2.

Annexes designated "normative" are part of the body of the standard.
In this standard, annexes A and ZA are normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60947-5-3:1999 was approved by CENELEC as a European Standard without any modification.

This document is a preview generated by EVS

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60050-191	1990	International Electrotechnical Vocabulary (IEV) Chapter 191: Dependability and quality of service	-	-
IEC 60068-2-1	1990	Environmental testing Part 2: Tests - Tests A: Cold	EN 60068-2-1	1993
IEC 60068-2-2	1974	Part 2: Tests - Test B: Dry heat	EN 60068-2-2 ¹⁾	1993
IEC 60204-1	1997	Safety of machinery - Electrical equipment of machines Part 1: General requirements	EN 60204-1 + corr. May	1997 1994
IEC 60249-2	series	Base materials for printed circuits Part 2: Specifications	EN 60249-2	series
IEC 60446	1989 ²⁾	Identification of conductors by colours or numerals	-	-
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 1993
IEC 60664-1 (mod)	1992	Insulation coordination for equipment within low-voltage systems Part 1: Principles, requirements and tests	HD 625.1 S1 + corr. November	1996 1996
IEC 60664-3	1992	Part 3: Use of coatings to achieve insulation coordination of printed board assemblies	HD 625.3 S1	1997
IEC 60742 (mod) 1983		Isolating transformers and safety isolating transformers - Requirements	EN 60742 ³⁾	1995

1) EN 60068-2-2 includes supplement A:1976 to IEC 60068-2-2.

2) IEC 60446:1999 is harmonized as EN 60446:1999.

3) EN 60742 includes A1:1992 to IEC 60742.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60812	1985	Analysis techniques for system reliability Procedure for failure mode and effects analysis (FMEA)	HD 485 S1	1987
IEC 60947-1 (mod)	1996	Low-voltage switchgear and controlgear Part 1: General rules	EN 60947-1 ⁴⁾	1997
IEC 60947-5-1	1997	Part 5-1: Control circuit devices and switching elements -- Section 1: Electromechanical control circuit devices	EN 60947-5-1	1997
IEC 60947-5-2 (mod)	1997	Part 5-2: Control circuit devices and switching elements - Proximity switches	EN 60947-5-2	1998
IEC 61025	1990	Fault tree analysis (FTA)	HD 617 S1	1992
IEC 61131-2	1992	Programmable controllers Part 2: Equipment requirements and tests	EN 61131-2	1994
IEC 61496-1	1997	Safety of machinery - Electro-sensitive protective equipment Part 1: General requirements and tests	EN 61496-1	1997
IEC 61508	series	Functional safety of electrical/electronic/programmable electronic safety-related systems	-	-
ISO 9000-3	1997	Quality management and quality assurance standards Part 3: Guidelines for the application of ISO 9001:1994 to the development, supply, installation and maintenance of computer software	EN ISO 9000-3	1997
ISO 9001	1994	Quality systems - Model for quality assurance in design/ development, production, installation and servicing	EN ISO 9001	1994
ISO/TR 12100-1	1992	Safety of machinery - Basic concepts, general principles for design Part 1: Basic terminology, methodology	-	-
ISO/DIS 13849-1		Safety of machinery - Safety-related parts of control systems Part 1: General principles for design	-	-
ISO/TR 14119	1998	Safety of machinery - Interlocking devices associated with guards - Principles for design and selection	-	-

4) EN 60947-1 is superseded by EN 60947-1:1999, which is based on IEC 60947-1:1999.