

**Madalpingelised lülitus- ja juhtimisaparaadid. Osa 4-3:
Kontaktorid ja mootorikäivitid. Vahelduvvoolu
pooljuhtkontrollerid ja -käivitid mitte-mootorkoormustele**

**Low-voltage switchgear and controlgear - Part 4-3:
Contactors and motor-starters - AC semiconductor
controllers and contactors for non-motor loads**

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 60947-4-3:2014 sisaldab Euroopa standardi EN 60947-4-3:2014 inglisekeelset teksti.	This Estonian standard EVS-EN 60947-4-3:2014 consists of the English text of the European standard EN 60947-4-3:2014.
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English Version

**Low-voltage switchgear and controlgear - Part 4-3: Contactors
and motor-starters - AC semiconductor controllers and
contactors for non-motor loads
(IEC 60947-4-3:2014)**

Appareillage à basse tension - Partie 4-3: Contacteurs et
démarreurs de moteurs - Gradateurs et contacteurs à
semiconducteurs pour charges, autres que des moteurs, à
courant alternatif
(CEI 60947-4-3:2014)

Niederspannungsschaltgeräte - Teil 4-3: Schütze und
Motorstarter - Halbleiter-Steuergeräte und -Schütze für
nichtmotorische Lasten für Wechselspannung
(IEC 60947-4-3:2014)

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of document 121A/2/FDIS, future edition 2 of IEC 60947-4-3, 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 approved by CENELEC as EN 60947-4-3:2014.

The following dates are fixed:

- latest date by which the document has to be (dop) 2015-03-11
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publication of an identical national
standard or by endorsement
- latest date by which the national (dow) 2017-06-11
standards conflicting with the
document have to be withdrawn

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EU Directive 2004/108/EC.

For relationship with EU Directive(s), see informative Annex ZZ, which is an integral part of this document.

This document supersedes EN 60947-4-3:2000.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

Endorsement notice

The text of the International Standard IEC 60947-4-3:2014 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60085:2007	NOTE	Harmonized as EN 60085:2008 (modified).
IEC 60146 (series)	NOTE	Harmonized as EN 60146 (series) (not modified).
IEC 60664 (series)	NOTE	Harmonized as EN 60664 (series) (not modified).
IEC 60947-4-2:2011	NOTE	Harmonized as EN 60947-4-2:2012 (modified).
IEC 61439 (series)	NOTE	Harmonized as EN 61439 (series) (not modified).

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60269-1	2006	Low-voltage fuses -- Part 1: General requirements	EN 60269-1	2007
IEC 60410	1973	Sampling plans and procedures for inspection by attributes	-	-
IEC 60947-1	2007	Low-voltage switchgear and controlgear -- Part 1: General rules	EN 60947-1	2007
+A1	2010		+A1	2011
IEC 61000-4 (series)	-	Electromagnetic compatibility (EMC) -- Part 4-1: Testing and measurement techniques (series) - Overview of IEC 61000-4 series	EN 61000-4	-
IEC 61000-4-5	2005	Electromagnetic compatibility (EMC) -- Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	2006
CISPR 11 (mod)	2009	Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement	EN 55011	2009
CISPR 11:2009/A1	2010		EN 55011:2009/A1	2010

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Annex ZZ (informative)

Coverage of Essential Requirements of EU Directives

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and within its scope the standard covers protection requirements of Annex I Article 1 of the EU Directive 2004/108/EC.

Compliance with this standard provides presumption of conformity with the specified essential requirements of the Directives concerned.

NOTE: Other requirements and other EU Directives may be applicable to the products falling within the scope of this standard.

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INTRODUCTION

This part of IEC 60947 covers low-voltage a.c. semiconductor controllers and contactors (solid-state contactors) intended for the use with non-motor loads. As controllers, they have many capabilities beyond the simple switching on and off of non-motor loads. As contactors, they perform the same functions as mechanical contactors, but utilize one or more semiconductor switching devices in their main poles.

The devices may be single-pole or multi-pole (see 2.3.1 of IEC 60947-1:2007,). This standard refers to complete devices rated as a unit incorporating all necessary heat-sinking material and terminals. It includes devices with all necessary terminals, which are supplied with or without heat-sink in knocked-down form for combination by the users, when the manufacturer gives with the device detailed information about choosing the heat-sink and mounting the device on the heat-sink.

The generic term, "controller", is used in this standard wherever the unique features of the power semiconductor switching elements are the most significant points of interest. The generic term "contactor" is used in this standard wherever the feature of simple switching on and off is the most significant point of interest. Specific designations (for example, form 4, form HxB, etc.) are used wherever the unique features of various configurations comprise significant points of interest.

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