

## საქართველოს სტანდარტი

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დაბალი ძაბვის გამანაწილებელი და მარეგულირებელი მოწყობილობა-  
ნაწილი 5-7: წრედის მართვის მოწყობილობა და ჩამრთველი  
ელემენტები- მოთხოვნები სიახლოვის მოწყობილობებისათვის  
ანალოგიური პროდუქციით (იეკ 60947-5-7:2003)

საქართველოს სტანდარტების და  
მეტროლოგიის ეროვნული სააგენტო  
თბილისი

სსტ ენ 60947-5-7:2003/2014

## საინფორმაციო მონაცემები

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EUROPEAN STANDARD

**EN 60947-5-7**

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2003

ICS 29.130.20

Supersedes EN 50319:1999

English version

**Low-voltage switchgear and controlgear**  
**Part 5-7: Control circuit devices and switching elements -**  
**Requirements for proximity devices with analogue output**  
**(IEC 60947-5-7:2003)**

Appareillage à basse tension  
Partie 5-7: Appareils et éléments  
de commutation pour circuits  
de commande -  
Prescriptions pour les détecteurs  
de proximité à sortie analogique  
(CEI 60947-5-7:2003)

Niederspannungsschaltgeräte  
Teil 5-7: Steuergeräte und Schaltelemente -  
Anforderungen an Näherungssensoren  
mit Analogausgang  
(IEC 60947-5-7:2003)

This European Standard was approved by CENELEC on 2003-09-01. 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.

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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/1277/FDIS, future edition 1 of IEC 60947-5-7, 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 60947-5-7 on 2003-09-01.

This standard should be used in conjunction with EN 60947-5-2:1998.

This European Standard supersedes EN 50319:1999.

The following dates were fixed:

- |  |       |            |
|--|-------|------------|
| <ul style="list-style-type: none"> <li>– latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement</li> </ul> | (dop) | 2004-06-01 |
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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 G is informative.  
Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 60947-5-7:2003 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 60381-1	NOTE	Harmonized as HD 452.1 S1:1984 (not modified).
IEC 60770-1	NOTE	Harmonized as EN 60770-1:1999 (not modified).

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**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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60947-5-2 (mod)	1997	Low-voltage switchgear and controlgear Part 5-2: Control circuit devices and switching elements - Proximity switches	EN 60947-5-2	1998
A1	1999		A1	1999

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NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD

CEI  
IEC

60947-5-7

Première édition  
First edition  
2003-06

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**Appareillage à basse tension –**

**Partie 5-7:  
Appareils et éléments de commutation  
pour circuits de commande –  
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de proximité à sortie analogique**

**Low-voltage switchgear and controlgear –**

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with analogue output**



Numéro de référence  
Reference number  
CEI/IEC 60947-5-7:2003

## Numérotation des publications

Depuis le 1er janvier 1997, les publications de la CEI sont numérotées à partir de 60000. Ainsi, la CEI 34-1 devient la CEI 60034-1.

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60947-5-7

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**Appareillage à basse tension –**

**Partie 5-7:  
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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
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# COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

## APPAREILLAGE À BASSE TENSION –

### Partie 5-7: Appareils et éléments de commutation pour circuits de commande – Prescriptions pour les détecteurs de proximité à sortie analogique

#### AVANT-PROPOS

- 1) La CEI (Commission Électrotechnique Internationale) est une organisation mondiale de normalisation composée de l'ensemble des comités électrotechniques nationaux (Comités nationaux de la CEI). La CEI a pour objet de favoriser la coopération internationale pour toutes les questions de normalisation dans les domaines de l'électricité et de l'électronique. A cet effet, la CEI, entre autres activités, publie des Normes internationales. Leur élaboration est confiée à des comités d'études, aux travaux desquels tout Comité national intéressé par le sujet traité peut participer. Les organisations internationales, gouvernementales et non gouvernementales, en liaison avec la CEI, participent également aux travaux. La CEI collabore étroitement avec l'Organisation Internationale de Normalisation (ISO), selon des conditions fixées par accord entre les deux organisations.
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La Norme internationale CEI 60947-5-7 a été établie par le sous-comité 17B: Appareillage à basse tension, du comité d'études 17 de la CEI: Appareillage.

Cette norme doit être utilisée conjointement avec la CEI 60947-5-2.

Le texte de cette norme est issu des documents suivants:

FDIS	Rapport de vote
17B/1277/FDIS	17B/1287/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à l'approbation de cette norme.

Cette publication a été rédigée selon les Directives ISO/CEI, Partie 2.

Le comité a décidé que le contenu de cette publication ne sera pas modifié avant 2005. A cette date, la publication sera

- reconduite;
- supprimée;
- remplacée par une édition révisée, ou
- amendée.

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

**Part 5-7: Control circuit devices and switching elements –  
Requirements for proximity devices  
with analogue output**

## FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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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International Standard IEC 60947-5-7 has been prepared by subcommittee 17B: Low-voltage switchgear and controlgear, of IEC technical committee 17: Switchgear and controlgear.

This standard should be used in conjunction with IEC 60947-5-2.

The text of this standard is based on the following documents:

FDIS	Report on voting
17B/1277/FDIS	17B/1287/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until 2005. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

## INTRODUCTION

La présente partie de la CEI 60947 modifie les prescriptions appropriées de la CEI 60947-5-2, traitant des prescriptions pour les détecteurs de proximité à éléments de commutation à semiconducteurs, afin de les rendre applicables aux détecteurs de proximité à sortie analogique.

## INTRODUCTION

This part of IEC 60947 modifies the relevant requirements of IEC 60947-5-2, dealing with the requirements for proximity switches with semiconductor switching elements, to make them applicable to proximity devices with analogue output.