SLOVENSKI STANDARD
SIST EN 60947-3:2000/A2:2006

01-januar-2006

Nizkonapetostne stikalne naprave - 3. del: Stikala, loļ ilniki, loļ ilna stikala in stikalni aparati z varovalkami (IEC 60947-3:1999/A2:2005)

Low-voltage switchgear and controlgear -- Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units

Niederspannungsschaltgeräte -- Teil 3: Lastschalter, Trennschalter, Lasttrennschalter und Schalter-Sicherungs-Einheiten

Appareillage à basse tension -- Partie 3: Interrupteurs, sectionneurs, interrupteurs-sectionneurs et combinés-fusibles

Ta slovenski standard je istoveten z: **EN 60947-3:1999/A2:2005**

ICS:

29.130.20	Nizkonapetostne stikalne in krmilne naprave	Low voltage switchgear and controlgear

SIST EN 60947-3:2000/A2:2006 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60947-3/A2

August 2005

ICS 29.120.40; 29.130.20

English version

Low-voltage switchgear and controlgear
Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units
(IEC 60947-3:1999/A2:2005)

Appareillage à basse tension
Partie 3: Interrupteurs, sectionneurs, interrupteurs-sectionneurs et combinés-fusibles
(CEI 60947-3:1999/A2:2005)

Niederspannungsschaltgeräte
Teil 3: Lastschalter, Trennschalter, Lasttrennschalter und Schalter-Sicherungs-Einheiten
(IEC 60947-3:1999/A2:2005)

This amendment A2 modifies the European Standard EN 60947-3:1999; it was approved by CENELEC on 2005-06-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, 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

Ref. No. EN 60947-3:1999/A2:2005 E

Foreword

The text of document 17B/1402/FDIS, future amendment 2 to IEC 60947-3:1999, 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 A2 to EN 60947-3:1999 on 2005-06-01.

The following dates were fixed:

– latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2006-03-01

– latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2008-06-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of amendment 2:2005 to the International Standard IEC 60947-3:1999 was approved by CENELEC as an amendment to the European Standard without any modification.

Replace annex ZA by:

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

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

Publication	Year	Title	EN/HD	Year
IEC 60050-441	1984	International Electrotechnical Vocabulary (IEV) Chapter 441: Switchgear, controlgear and fuses	-	-
A1	2000		-	-
IEC 60269	Series	Low-voltage fuses	EN 60269	Series
IEC 60410	1973	Sampling plans and procedures for inspection by attributes	-	-
IEC 60417	database	Graphical symbols for use on equipment	-	-
IEC 60447	2004	Basic and safety principles for man-machine interface, marking and identification - Actuating principles	EN 60447	2004
IEC 60617	database	Graphical symbols for diagrams	-	-
IEC 60947-1	2004	Low-voltage switchgear and controlgear Part 1: General rules	EN 60947-1 + corr. November	2004 2004
IEC 60947-2	2003	Part 2: Circuit-breakers	EN 60947-2	2003
IEC 60947-4-1	2000	Part 4-1: Contactors and motor-starters - Electromechanical contactors and motor-starters	EN 60947-4-1	2001
A1	2002		A1	2002
IEC 60947-5-1	2003	Part 5-1: Control circuit devices and switching elements - Electromechanical control circuit devices	EN 60947-5-1 + corr. July	2004 2005
IEC 61000-4-2	1995	Electromagnetic compatibility (EMC) Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	1995
A1 A2	1998 2000		A1 A2	1998 2001

Publication	Year	Title	EN/HD	Year
IEC 61000-4-3	2002	Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3	2002
A1	2002		A1	2002
IEC 61000-4-4	2004	Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	2004
IEC 61000-4-5	1995	Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	1995
A1	2000		A1	2001
IEC 61000-4-6	2003	Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	-	-
CISPR 11	2003	Industrial scientific and medical (ISM) radio-frequency equipment - Electromagnetic disturbance characteristics - Limits and methods of measurement	-	-
CISPR 22	2003	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement	-	-

NORME INTERNATIONALE

INTERNATIONAL STANDARD

CEI
IEC
60947-3

1999

AMENDEMENT 2
AMENDMENT 2
2005-04

Amendement 2

Appareillage à basse tension –

Partie 3:
Interrupteurs, sectionneurs, interrupteurs-sectionneurs et combinés-fusibles

Amendment 2

Low-voltage switchgear and controlgear –

Part 3:
Switches, disconnectors, switch-disconnectors and fuse-combination units

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE N

Pour prix, voir catalogue en vigueur
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FOREWORD

This amendment has been prepared by subcommittee 17B: Low-voltage switchgear and controlgear, of IEC technical committee 17: Switchgear and controlgear.

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

FDIS	Report on voting
17B/1402/FDIS	17B/1410/RVD

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

Page 3

CONTENTS

Add the following:

Annex C (normative) Single pole operated three pole switches .....

Table 12 – Temperature-rise limits for terminals and accessible parts .....

Page 11

1.1 Scope and object

Insert, after the third paragraph, the following new paragraph:

The requirements for single pole operated three pole switches are included in Annex C.

Page 13 and, in amendment 1, page 3

1.2 Normative references

Replace the text of the first paragraph by the following:

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.

Add, after IEC 60050(441):1984, the following reference:

Amendment 1 (2000)

Insert, after IEC 60050(441), the following new reference:

IEC 60269 (all parts), *Low-voltage fuses*

Replace the reference to IEC 60417-2:1998 by the following:

IEC 60417-DB:2002[1], *Graphical symbols for use on equipment*

Replace the reference to IEC 60447:1993 by the following:

IEC 60447:2004, *Basic and safety principles for man-machine interface, marking and identification – Actuating principles*

Replace the reference to IEC 60617-7:1996 by the following:

IEC 60617-DB:2001[1], *Graphical symbols for diagrams*

Replace the reference to IEC 60947-1:1999 by the following:

IEC 60947-1:2004, *Low-voltage switchgear and controlgear – Part 1: General rules*

Replace the reference to IEC 60947-2:1995 by the following:

IEC 60947-2:2003, *Low-voltage switchgear and controlgear – Part 2: Circuit-breakers*

Replace the reference to IEC 60947-4-1:1990 by the following:

IEC 60947-4-1:2000, *Low-voltage switchgear and controlgear – Part 4-1: Contactors and motor-starters – Electromechanical contactors and motor-starters*
Amendment 1 (2002)

Replace the reference to IEC 60947-5-1:1997 by the following:

IEC 60947-5-1:2003, *Low-voltage switchgear and controlgear – Part 5-1: Control circuit devices and switching elements – Electromechanical control circuit devices*

Add, after IEC 61000-4-2:1995, the following references:

Amendment 1 (1998)
Amendment 2 (2000)

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[1] "DB" refers to the IEC on-line database.

Replace the reference to IEC 61000-4-3:1995 by the following:

IEC 61000-4-3:2002, *Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement techniques – Radiated radio-frequency electromagnetic field immunity test*
Amendment 1 (2002)

Replace the reference to IEC 61000-4-4:1995 by the following:

IEC 61000-4-4:2004, *Electromagnetic compatibility (EMC) – Part 4-4: Testing and measurement techniques – Electrical fast transient/burst immunity test*

Add, after IEC 61000-4-5:1995, the following reference:

Amendment 1 (2000)

Replace the reference to IEC 61000-4-6:1996 by the following:

IEC 61000-4-6:2003, *Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields*

Replace the reference to CISPR 11:1997 by the following:

CISPR 11:2003, *Industrial, scientific and medical (ISM) radio-frequency equipment – Electromagnetic disturbance characteristics – Limits and methods of measurement*

Replace the reference to CISPR 22:1997 by the following:

CISPR 22:2003, *Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement*

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2 Definitions

Insert, after the first paragraph, the following alphabetical index of definitions:

Reference

D

Dependent manual operation (of a mechanical switching device) 2.13
Disconnector 2.2
Disconnector-fuse 2.7

F

Fuse-combination unit 2.4
Fuse-disconnector 2.8
Fuse-switch 2.6
Fuse-switch-disconnector 2.10

I

Independent manual operation (of a mechanical switching device) 2.14

M

Multiple tip contact system 2.12

S

Semi-independent manual operation 2.15
Single pole operated three pole switch 2.11
Stored energy operation (of a mechanical switching device) 2.16
Switch (mechanical) 2.1
Switch-disconnector 2.3
Switch-disconnector-fuse 2.9
Switch-fuse 2.5

Renumber, on page 17, definitions 2.11, 2.12, 2.13 and 2.14 as 2.13, 2.14, 2.15 and 2.16 respectively.

Insert, on page 17, after definition 2.10, the following new definitions:

2.11
single pole operated three pole switch
device consisting of three individually operable single pole switch disconnecting devices according to this standard, rated as a complete unit for use in a three-phase system

NOTE These devices are intended for power distribution systems where switching and/or isolation of an individual phase may be necessary and they should not be used for the switching of the primary circuit of three-phase equipment.

2.12
multiple tip contact system
a multiple tip contact system consists of more than one contact gap per pole, which can be switched, in series and/or in parallel

Page 19

3.2 According to the method of operation of manually operated equipment

Replace “(see 2.11)”, “(see 2.12)” *and* “(see 2.13)” *by* “(see 2.13)”, “(see 2.14)” *and* “(see 2.15)” *respectively.*

Amendment 1, page 7

7.1.4 Actuator

Replace the existing text of this subclause by the following:

Subclause 7.1.4 of IEC 60947-1 applies.

7.1.4.2 Direction of movement

Delete this subclause.