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Kopplingsapparater för högst 1000 V – Del 6-1: Flerfunktionsapparater – Nätomkopplare

*Low-voltage switchgear and controlgear –
Part 6-1: Multiple function equipment –
Transfer switching equipment*

Som svensk standard gäller europastandarden EN 60947-6-1:2005. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60947-6-1:2005.

Nationellt förord

Europastandarden EN 60947-6-1:2005^{*)}

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60947-6-1, Second edition, 2005 - Low-voltage switchgear and controlgear - Part 6-1: Multiple function equipment - Transfer switching equipment**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med SS-EN 60947-1, utgåva 4, 2004.

Tidigare fastställd svensk standard SS-EN 60947-6-1, utgåva 1, 1995, SS-EN 60947-6-1/A1, utgåva 1, 1995 och SS-EN 60947-6-1/A2, utgåva 1, 1998, gäller ej fr o m 2008-10-01.

^{*)} EN 60947-6-1:2005 ikraftsattes 2005-12-19 som SS-EN 60947-6-1 genom offentliggörande, d v s utan utgivning av något svenskt dokument.

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EUROPEAN STANDARD

EN 60947-6-1

NORME EUROPÉENNE

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English version

**Low-voltage switchgear and controlgear
Part 6-1: Multiple function equipment –
Transfer switching equipment
(IEC 60947-6-1:2005)**

Appareillage à basse tension
Partie 6-1: Matériels à fonctions multiples -
Matériels de connexion de transfert
(CEI 60947-6-1:2005)

Niederspannungsschaltgeräte
Teil 6-1: Mehrfunktionsschaltgeräte -
Netzumschalter
(IEC 60947-6-1:2005)

This European Standard was approved by CENELEC on 2005-10-01. 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, 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

Foreword

The text of document 17B/1418/FDIS, future edition 2 of IEC 60947-6-1, 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 60947-6-1 on 2005-10-01.

This European Standard supersedes EN 60947-6-1:1991 + A1:1994 + A2:1997.

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) 2006-07-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2008-10-01

This part of EN 60947 shall be used in conjunction with EN 60947-1:2004 (IEC 60947-1:2004), General rules.

The provisions of the general rules dealt with in IEC 60947-1 are applicable to this part of EN 60947, where specifically called for. Clauses and subclauses, tables, figures and annexes of the general rules thus applicable are identified by reference to IEC 60947-1 (e.g. 1.2.3 of IEC 60947-1, Table 4 of IEC 60947-1 or Annex A of IEC 60947-1, etc.).

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 EC Directive 89/336/EEC. See Annex ZZ.

Annexes ZA and ZZ have been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60947-6-1:2005 was approved by CENELEC as a European Standard without any modification.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60695-11-10	1999	Fire hazard testing Part 11-10: Test flames - 50 W horizontal and vertical flame test methods	EN 60695-11-10	1999
A1	2003		A1	2003
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 60947-3	1999	Part 3: Switches, disconnectors, switch- disconnectors and fuse-combination units	EN 60947-3	1999
A1	2001		A1	2001
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 60947-4-2	1999	Part 4-2: Contactors and motor-starters - AC semiconductor motor controllers and starters	EN 60947-4-2	2000
A1	2001		A1	2002
IEC 60947-4-3	1999	Part 4-3: Contactors and motor-starters - AC semiconductor controllers and contactors for non-motor loads	EN 60947-4-3	2000
IEC 60947-6-2	2002	Part 6-2: Multiple function equipment - Control and protective switching devices (or equipment) (CPS)	EN 60947-6-2	2003
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	1998		A1	1998
A2	2000		A2	2001
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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-4-4	1995	Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	1995
A1	2000		A1	2001
A2	2001		A2	2001
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	-	-
A1	2004		-	-
CISPR 11	2003	Industrial scientific and medical (ISM) radio-frequency equipment - Electromagnetic disturbance characteristics - Limits and methods of measurement	-	-
A1	2004		-	-

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LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

Part 6-1: Multiple function equipment – Transfer switching equipment

1 Scope and object

This part of IEC 60947 applies to transfer switching equipment (TSE) to be used in power systems with interruption of the supply to the load during transfer, the rated voltage of which does not exceed 1 000 V a.c. or 1 500 V d.c.

It covers:

- manually operated transfer switching equipment (MTSE);
- remote operated transfer switching equipment (RTSE);
- automatic transfer switching equipment (ATSE).

It covers TSE provided with or without an enclosure.

Devices necessary for the control (e.g. control switches, etc.) and the protection (e.g. circuit-breakers, etc.) of a TSE are covered by the relevant IEC standards.

NOTE TSE used only for emergency lighting may be subject to specific rules and/or legal requirements and are not, therefore, covered by this standard.

The object of this part of IEC 60947 is to state:

- 1) The characteristics of the equipment:
 - a) specific equipment;
 - b) equipment the main part of which being devices covered by other IEC 60947 product standards.
- 2) The conditions of the equipment with respect to:
 - a) operation for which the equipment is intended;
 - b) operation and behaviour in case of specified abnormal conditions, for example, short-circuit;
 - c) dielectric properties.
- 3) The tests intended to confirm that these conditions have been met and the methods for performing these tests.
- 4) The data to be marked on the equipment and provided by the manufacturer.

2 Normative references

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.

IEC 60695-11-10:1999, *Fire hazard testing – Part 11-10: Test flames – 50 W horizontal and vertical flame test methods*
Amendment 1 (2003)

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

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

IEC 60947-3:1999, *Low-voltage switchgear and controlgear – Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units*
Amendment 1 (2001)

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)

IEC 60947-4-2:1999, *Low-voltage switchgear and controlgear – Part 4-2: Contactors and motor-starters – AC semiconductor motor controllers and starters*
Amendment 1 (2001)

IEC 60947-4-3:1999, *Low-voltage switchgear and controlgear – Part 4-3: Contactors and motor-starters – AC semiconductor controllers and contactors for non-motor loads*

IEC 60947-6-2:2002, *Low-voltage switchgear and controlgear – Part 6-2: Multiple function equipment – Control and protective switching devices (or equipment) (CPS)*

IEC 61000-4-2:1995, *Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test*
Amendment 1 (1998)
Amendment 2 (2000)

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)

IEC 61000-4-4:1995, *Electromagnetic compatibility (EMC) – Part 4-4: Testing and measurement techniques – Electrical fast transient/burst immunity test*
Amendment 1 (2000)
Amendment 2 (2001)

IEC 61000-4-5:1995, *Electromagnetic compatibility (EMC) – Part 4-5: Testing and measurement techniques – Surge immunity test*
Amendment 1 (2000)

IEC 61000-4-6:2003, *Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields*
Amendment 1 (2004)

CISPR 11:2003, *Industrial, scientific and medical (ISM) radio-frequency equipment – Electromagnetic disturbance characteristics – Limits and methods of measurement*
Amendment 1 (2004)