SVENSK STANDARD SS-EN 62310-3

Fastställd	Utgåva	Sida	Ansvarig kommitté
2009-02-23	1	1 (1+49)	SEK TK 22

Statiska nätomkopplingsutrustningar (STS) – Del 3: Provning och angivande av egenskaper

Static transfer system (STS) –
Part 3: Method for specifying performance and test requirements

Som svensk standard gäller europastandarden EN 62310-3:2008. Den svenska standarden innehåller den officiella engelska språkversionen av EN 62310-3:2008.

Nationellt förord

Europastandarden EN 62310-3:2008

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 62310-3, First edition, 2008 - Static transfer system (STS) - Part 3: Method for specifying performance and test requirements**

utarbetad inom International Electrotechnical Commission, IEC.

ICS 29.200; 29.240.30

Denna standard är fastställd av SEK Svensk Elstandard,
som också kan lämna upplysningar om **sakinnehållet** i standarden.
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Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62310-3

September 2008

ICS 29.200; 29.240.30

English version

Static transfer systems (STS) - Part 3: Method for specifying performance and test requirements

(IEC 62310-3:2008)

Systèmes de transfert statique (STS) - Partie 3: Méthode de spécification des performances et exigences d'essai (CEI 62310-3:2008)

Statische Transfersysteme - Teil 3: Verfahren für die Festlegung des Betriebsverhaltens und Prüfanforderungen (IEC 62310-3:2008)

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 62310-3:2008 E

SEK Svensk Elstandard

Foreword

The text of document 22H/105/FDIS, future edition 1 of IEC 62310-3, prepared by SC 22H, Uninterruptible power systems (UPS), of IEC TC 22, Power electronic systems and equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62310-3 on 2008-07-01.

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)	2009-04-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2011-07-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62310-3:2008 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 60664-3	NOTE Harmonized as HD 625.3 S1:1997 (not modified). HD 625.3 S1 is superseded by EN 60664-3:2003 which is based on IEC 60664-3:2003.
IEC 60947-1	NOTE Harmonized as EN 60947-1:2007 (not modified).
IEC 60990	NOTE IEC 60990:1990 is superseded by IEC 60990:1999, which is harmonized as EN 60990:1999 (not modified).
IEC 61140	NOTE Harmonized as EN 61140:2002 (not modified).
IEC 61400-1	NOTE Harmonized as EN 61400-1:2005 (not modified).
IEC 62040-2	NOTE Harmonized as EN 62040-2:2006 (not modified).
IEC 62040-1-1	NOTE Harmonized as EN 62040-1-1:2003 (not modified).
IEC 62040-1-2	NOTE Harmonized as EN 62040-1-2:2003 (not modified).

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 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 60068	Series	Environmental testing	EN 60068	Series
IEC 60146-1-1	-[1)]	Semiconductor convertors - General requirements and line commutated convertors Part 1-1: Specification of basic requirements	EN 60146-1-1	1993[2)]
IEC 60439-1	-[1)]	Low-voltage switchgear and controlgear assemblies - Part 1: Type-tested and partially type-tested assemblies	EN 60439-1	1999[2)]
IEC 60529	-[1)]	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991[2)] 1993
IEC 60947-6-1	-[1)]	Low-voltage switchgear and controlgear - Part 6-1: Multiple function equipment - Transfer switching equipment	EN 60947-6-1	2005[2)]
IEC 60950-1 (mod)	-[1)]	Information technology equipment - Safety - Part 1: General requirements	EN 60950-1	2006[2)]
IEC 61000-2-2	-[1)]	Electromagnetic compatibility (EMC) - Part 2-2: Environment - Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems	EN 61000-2-2	2002[2)]
IEC 62040-3 (mod)	-[1)]	Uninterruptible power systems (UPS) - Part 3: Method of specifying the performance and test requirements	EN 62040-3	2001[2)]
IEC 62310-1	-[1)]	Static transfer systems (STS) - Part 1: General and safety requirements	EN 62310-1	2005[2)]
IEC 62310-2 (mod)	-[1)]	Static transfer systems (STS) - Part 2: Electromagnetic compatibility (EMC) requirements	EN 62310-2	2007[2)]
ISO 7779	-[1)]	Acoustics - Measurement of airborne noise emitted by information technology and telecommunications equipment	EN ISO 7779	2001[2)]

[1)] Undated reference.

[2)] Valid edition at date of issue.

CONTENTS

STATIC TRANSFER SYSTEMS (STS) –

Part 3: Method for specifying performance and test requirements

1 Scope

The IEC 62310 series of three standards applies to stand-alone operating a.c. static transfer systems (STS) intended to ensure the continuity of load supply through controlled transfer, with or without interruption of power, from two or more independent a.c. sources.

This series of standards includes information for the overall integration of the STS and its accessories into the a.c. power network and includes requirements for the switching elements, their control and protective elements, where applicable.

Part 1 of the series concerns general and safety requirements.

Part 2 of the series concerns electromagnetic compatibility (EMC) requirements.

This Part 3 of the series concerns methods for specifying performance and test requirements including applicable safety tests referenced in standard IEC 62310-1 for general and safety requirements.

This standard applies for single-phase, phase-phase and three-phase static transfers in a. c. systems up to 1 000 V. It takes precedence over all aspects of generic performance standards, and no additional performance testing is necessary.

The requirements have been selected so as to be consistent with compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems (see IEC 61000-2-2) as well as to ensure an adequate level of performance when the STS is applied in diverse critical load situations. The requirements take into account the differing test conditions necessary to encompass the range of physical sizes and power ratings of STS. This standard applies to STS as a stand-alone product, whether presented as a unit or an assembly of units. This standard does not apply to:

– devices for d.c. source switching;
– single source systems;
– transfer systems using only electromechanical switching devices with interruption of the supply to the load during transfer and intended to be used in emergency power systems or covered by IEC 60947-6-1;
– automatic switching devices integrated into UPS covered by the IEC 62040 series of UPS product standards.

NOTE Additional or different requirements may apply to STS intended for use on board of vehicles including ships and aircrafts, in emergency power systems subject to a particular regulation e.g. health care facilities, fire fighting or emergency rescue, in tropical countries or where elevations are greater than 1 000 m.

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 60068 (all parts), *Environmental testing*