SLOVENSKI STANDARD
oSIST prEN IEC 62310-1:2026

01-junij-2026

Sistemi s statičnim prenosom (STS) - 1. del: Splošne in varnostne zahteve

Static transfer systems (STS) - Part 1: General and safety requirements

Statische Transferschalter (STS) - Teil 1: Allgemeine und Sicherheitsanforderungen

Systèmes de transfert statique (STS) - Partie 1: Exigences générales et règles de sécurité

Ta slovenski standard je istoveten z: **prEN IEC 62310-1:2026**

ICS:

29.240.99	Druga oprema v zvezi z omrežji za prenos in distribucijo električne energije	Other equipment related to power transmission and distribution networks

oSIST prEN IEC 62310-1:2026 **en,fr,de**

22H/347/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER: **IEC 62310-1 ED2**	
DATE OF CIRCULATION: **2026-03-27**	CLOSING DATE FOR VOTING: **2026-06-19**
SUPERSEDES DOCUMENTS: **22H/340/CD, 22H/341A/CC**	

IEC SC 22H : UNINTERRUPTIBLE POWER SYSTEMS (UPS)	
SECRETARIAT: France	SECRETARY: Mr Miao-Xin WANG
OF INTEREST TO THE FOLLOWING COMMITTEES:	HORIZONTAL FUNCTION(S):
ASPECTS CONCERNED: Safety	
☒ SUBMITTED FOR CENELEC PARALLEL VOTING	☐ NOT SUBMITTED FOR CENELEC PARALLEL VOTING

Attention IEC-CENELEC parallel voting

The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting.

The CENELEC members are invited to vote through the CENELEC online voting system.

This document is still under study and subject to change. It should not be used for reference purposes.

Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Recipients of this document are invited to submit, with their comments, notification of any relevant “In Some Countries” clauses to be included should this proposal proceed. Recipients are reminded that the CDV stage is the final stage for submitting ISC clauses. (SEE AC/22/2007 OR NEW GUIDANCE DOC).

TITLE:

Static transfer systems (STS) - Part 1: General and safety requirements

PROPOSED STABILITY DATE: 2030

NOTE FROM TC/SC OFFICERS:

Please find IEC 62310-1 ED2 CDV.

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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STATIC TRANSFER SYSTEMS (STS)

Part 1: General and safety requirements

FOREWORD

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IEC 62310-1 has been prepared by subcommittee 22H: Uninterruptible Power Systems, of IEC technical committee 22: Power electronic systems and equipment. It is an International Standard.

This 2.0 edition cancels and replaces the 1.0 edition published in march 2005. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) the reference document has been changed from IEC 60950-1:2005 (Information technology equipment – Safety – Part 1: General requirements) to IEC 62477-1:2022 (Safety requirements for power electronic converter systems and equipment – Part 1: General);

b) addition of Table 101, minimum overvoltage categories in 4.4.7.1.4;

c) add line-to-line voltage for components bridging insulation in 4.4.7.1.8;

d) compatibility with residual current operated protective devices (RCD) and expanded requirement for 4 poles *STS* in 4.4.8;

e) *STS with* multiple sources of supply in 4.8*;*

f) protection against environmental stresses added in 4.9;

g) *backfeed* protection, previously in IEC 62310-3:2008, 5.2.9 and Annex G is added in 4.8.101;

h) AC power isolation, previously in IEC 62310-3:2008, 5.2.1 is added in 4.101;

i) *short-time withstand current* test method added in 5.2.4.4.3.2;

j) clearance and creepage comparison from Edition 1 to Edition 2 in Annex AA;

k) neutral management, previously in IEC 62310-3:2008, Annex D is added in Annex BB.

The text of this International Standard is based on the following documents:

Draft	Report on voting
XX/XX/FDIS	XX/XX/RVD

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

The language used for the development of this International Standard is English.

The provisions of the general rules dealt within IEC 62477-1:2022 are only applicable to this document insofar as they are specifically cited. Clauses and subclauses of IEC 62477-1:2022 that are applicable in this document are identified by reference to IEC 62477-1:2022, for example, "Clause 4 of IEC 62477-1:2022 applies, except as follows".

The exceptions are then listed.

The exceptions can take the form of a deletion, a replacement or an addition of subclauses, tables, figures or annexes.

Subclauses, tables and figures that are additional to those of IEC 62477-1:2022 are, in this document, identified by a suffix in the format of X.10x, for example 4.3.101.

Annexes that are additional to those of IEC 62477-1:2022 are, in this document, lettered AA, BB, etc.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, and ISO/IEC Directives, IEC Supplement available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all the parts in the IEC 62477 series, published under the general title Safety requirements for power electronic convertor systems and equipment can be found on the IEC website.

A list of all the parts in the IEC 62310 series, published under the general title Static transfer systems (*STS*) can be found on the IEC website.

In this document, terms in *italic* are defined in Clause 3.

NOTE Due to the requirement in ISO/IEC directive part 2 the defined term is in singular. In this document also the plural is in italic.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

IEC technical sub-committee 22H: Uninterruptible Power Systems (UPS) carefully considered the relevance of each paragraph of IEC 62477-1:2022 in static transfer systems (*STS*) applications. This part of IEC 62310 utilizes IEC 62477-1:2022 as a reference document (RD). It adds, replaces or modifies requirements as relevant. This is because product-specific topics not covered by the reference document are the responsibility of the technical committee using the reference document.

IEC 62477-1:2022 relates to products that include power electronic converters, with a rated system voltage not exceeding 1 000 V AC or 1 500 V DC. It specifies requirements to reduce risks of fire, electric shock, thermal, energy and mechanical hazards, except functional safety as defined in all parts of IEC 61508 series. The objectives of this document are to establish a common terminology and basis for the safety requirements of products that contain power electronic converters across several IEC technical committees.

IEC 62477-1:2022 has been developed with the intention

- to be used as a reference document for product committees inside TC 22 in the development of product standards for power electronic converter systems and equipment,
- to replace IEC 62103 as a product family standard providing minimum requirements for safety aspects of power electronic converter systems and equipment in apparatus for which no product standard exists, and

NOTE The scope of IEC 62103 contains reliability and electromagnetic compatibility aspects, which are not covered by this document.

- to be used as a reference document for product committees outside TC 22 in the development of product standards of power electronic converter systems and equipment intended renewable energy sources. TC 82, TC 88, TC 105, TC 114 and TC 121, in particular, have been identified as relevant technical committees at the time of publication.

The reference document IEC 62477-1:2022, being a group safety standard, will not take precedence over this product-specific standard according to IEC Guide 104. IEC Guide 104 provides information about the responsibility of product committees to use group safety standards for the development of their own product standards.