AS 62310.2—2006
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AS 62310.2—2006

Australian Standard®

Static transfer systems (STS)

Part 2: Electromagnetic compatibility (EMC) requirements

This Australian Standard® was prepared by Committee EL-027, Power Electronics. It was approved on behalf of the Council of Standards Australia on 10 November 2006.
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The following are represented on Committee EL-027:

- Australian Communications and Media Authority
- Australian Electrical and Electronic Manufacturers Association
- Bureau of Steel Manufacturers of Australia
- Department of Defence (Australia)
- Energy Networks Association
- Monash University

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PREFACE

This Standard was prepared by the Standards Australia Committee EL-027, Power Electronics.

The objective of this Standard is to provide electromagnetic compatibility (EMC) requirements for free standing a.c. static transfer systems (STS) intended to ensure the continuity of power to load by automatically or manually controlled transfer, with or without interruption, from two or several a.c. independent sources.

This Standard is Part 2 of a three part Standard which, when complete, will consist of the following:

AS	
62310	Static transfer systems (STS)
62310.1	Part 1: General and safety requirements
62310.2	Part 2: Electromagnetic compatibility (EMC) requirements (this Standard)
62310.3	Part 3: Method of specifying the performance and test requirements

This Standard is identical with, and has been reproduced from IEC 62310-2, Ed. 1.0 (2006), *Static transfer systems (STS) – Part 2: Electromagnetic compatibility (EMC) requirements*.

As this Standard is reproduced from an International Standard, the following applies:

(a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.

(b) In the source text ‘IEC 62310-2’ should read ‘AS 62310.2’.

(c) A full point should be substituted for a comma when referring to a decimal marker.

The terms ‘normative’ and ‘informative’ are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

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STANDARDS AUSTRALIA

Australian Standard

Static transfer systems (STS)
Part 2: Electromagnetic compatibility (EMC) requirements

1 Scope

The IEC 62310 series applies to free standing operation 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.

The IEC 62310 series includes requirements for the switching elements, their control and protective elements, where applicable. The IEC 62310 series also includes information for the overall integration of the STS and its accessories into the a.c. power network.

This standard applies to systems up to 1 000 V a.c. which are intended to be used in single-phase, phase-phase or three-phase applications

This part of IEC 62310 takes precedence over all aspects of the generic standards, and no additional testing is necessary.

The requirements have been selected so as to ensure an adequate level of Electromagnetic Compatibility (EMC) for STS at public and industrial locations. These levels cannot, however, cover extreme cases which may occur in any location, but with extremely low probability of occurrence.

It takes into account the differing test conditions necessary to encompass the range of physical sizes and power ratings of STS.

A STS, whether presented as a unit or an assembly of units shall meet the relevant requirements of this part of IEC 62310 as a stand-alone product. EMC phenomena produced by any supply or load connected to the input or output of the STS equipment shall not be taken into account.

This standard does not apply to:

– devices for d.c. source switching;
– single source systems;
– transfer systems using only electromechanical switching devices intended to be used in emergency power systems with interruption of the supply to the load during transfer;
  NOTE 1 Such equipment is covered by IEC 60947-6-1.
– automatic switching devices integrated into Uninterruptible Power Systems (UPS) covered by the IEC 62040 series.

NOTE 2 For STS intended to be used in vehicles, on board ships or aircraft, in tropical countries, for Emergency Power Systems (such as those used for health care facilities, fire fighting, emergency rescue, etc.), or at altitudes greater than 1 000 m, different requirements may be necessary.

This part of IEC 62310 concerns Electromagnetic Compatibility (EMC). See IEC 62310-1 for general and safety requirements.

Special installation environments are not covered, nor are fault conditions of STS taken into account.

