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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 34940.3-2017

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

(English Translation)

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Foreword

GB/T 34940 "Static Switching System (STS)" is divided into the following sections.

--- Part 1. General and safety requirements;

--- Part 2. Electromagnetic compatibility (EMC) requirements;

--- Part 3. Determination of performance methods and test requirements.

This section GB/T 34940 Part 3.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses the redrafted law to amend the use of IEC 62310-3:2008 "Static Switching System (STS) Part 3. Determination of performance Method and test requirements. " this part made the following structural adjustment.

--- According to the referenced IEC terminology standard version and chapter number changes, adjust the entry number of the referenced terms (see 3.1.25, 3.2.4, 3.2.5);

--- According to the order mentioned, adjust the number of some appendix Appendix C is adjusted to Appendix D, Appendix D adjusted to Appendix F, Appendix E adjusted to Appendix C, Appendix F adjusted to Appendix E (see Appendix C ~ Appendix F);

--- Unnumbered overhang number, followed by the same level of reg number followed by adjustment (see 4.1.2.1 ~ 4.1.2.10, 5.2.6.1 ~ 5.2.6.3 and 5.2.10.2.1 ~ 5.2.10.2.3);

This section there are technical differences compared with IEC 62310-3:2008, the provisions of these differences have been passed in the outer margin of its margin the position of the vertical single line (-) is marked.

This part of IEC 62310-3:2008 technical differences and the reasons are as follows.

--- On normative references, this section made a technical difference with the adjustment to meet the technical conditions in China, the specific adjustment as follows.

- Replacing IEC 60146-1-1 with revision GB/T 3859.1 using international standards - Use IEC 60529 instead of GB/T 4208 equivalent to international standards - Replace IEC 60950-1 with GB 4943.1 modified to use international standards - Replaces IEC 62040-3 with International Standard GB/T 7260.3 modified - Replacing IEC 60947-6-1 with revision GB/T 14048.11 adopting international standards - Replace IEC 61000-2-2 with GB/T 18039.3 equivalent to international standards - Replace ISO 7779 with GB/T 18313 equivalent to international standard - Equivalent with the international standard GB/T 34940.1-2017 static switching system (STS) Part 1. General and safety all requirements of IEC 62310-1 - Equivalent with the international standard GB/T 34940.2-2017 static switching system (STS) Part 2. Electromagnetic compatibility Sexual (EMC) requirements replace IEC 62310-2

--- The term "synchronous switching" uses the definition 3.1.19 of GB/T 34940.1-2017, so that different parts of the same standard consistent (See 3.1.15);

--- Increasing the switching limit of 5ms, corresponding to the switching interrupt category T = 3. The original switch interrupt category T = 3,4,5 adjusted accordingly cut Interrupt category T = 4,5,6 (see 4.1.1);

--- Reference standard GB/T 7251.1-2013 in Table A.1 rated current "12A" to "13A", Appendix H in Table H.1 Change accordingly (see Appendix H);

According to the provisions of GB/T 1.1, delete the E.5.1 article number and title.

This section made the following editorial changes.

--- Clause 5.2.1.2 quoted is corrected to "5.2.5.2" "4.1.2b" is corrected to "4.1.2.3" (see 4.3.1 and 5.2.6.2);

--- Added explanation of the meaning of the variables in equations (6) and (7) (see 5.2.8).

This part is proposed by China Electrical Equipment Industry Association.

This part of the National Power Electronic Systems and Equipment Standardization Technical Committee (SAC/TC60) centralized.

This section is drafted. Schneider Electric Information Technology (China) Co., Ltd., Xi'an Institute of Power Electronics, Guangdong Zhicheng Champion Group Co., Ltd., Huazhong University of Science and Technology, Qingdao Chuangtong Technology Development Co., Ltd., Zhejiang Kezheng Electronic Information Products Inspection Co., Ltd., Xiamen Kehua Hengsheng Co., Ltd., Zhuhai Titan Technology Co., Ltd., Xi'an love Paike Power Electronics Co., Ltd., China Power Industry Association Will, Renault (Changzhou) Electronics Co., Ltd., China Power Institute, Emerson Network Power Co., Ltd.

1 Scope

GB/T 34940 is suitable for stand-alone operation, scheduled to ensure continuous power supply load AC Static Switching System (STS). The system is two or multiple independent AC source for interrupted or uninterrupted controlled switchover.

GB/T 34940 includes the STS and its accessories into the AC power grid integrated information, but also includes the switching element and its control and the requirements for protection components (if applicable).

Part 1 of GB/T 34940 covers general and safety requirements.

Part 2 of GB/T 34940 is Electromagnetic Compatibility (EMC).

GB/T 34940 provisions of this section determine the performance of the methods and test requirements, including GB/T 34940.1 requirements, applicable safety Full test.

This section applies to AC voltage not exceeding 1000V single-phase, two-phase and three-phase static switching system. This section takes precedence over versatility can be standard in all aspects, and without additional performance testing.

These requirements are chosen to be consistent with the compatibility of low-frequency conducted disturbances and signal transmission in public low-voltage power supply systems GB/T 18039.3), and to ensure that STS has adequate performance levels for