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Solar thermal electric plants -
Part 4-2: Heliostat field control system of solar tower plants

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Solar thermal electric plants - Part 4-2: Heliostat field control system of solar tower plants

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

Draft	Report on voting
117/XX/CD	117/186/CC

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.

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, 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.

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– reconfirmed,
– withdrawn or,
– revised.

1 Scope

This document specifies the technical requirements and test methods for the heliostat field control system of solar power tower plants.

This document provides the technical requirements of function, performance, and safety constraints of the heliostat field control system, and is applicable to the heliostat field control system of solar power tower plants.

This document includes procedures for testing the functionality and performance requirements of the heliostat field control system. It describes the test methods, steps, conditions, and required instruments.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60050-601, *International Electrotechnical Vocabulary (IEV) - Part 601: Generation, transmission and distribution of electricity - General*

IEC 60068-2-1, *Environmental testing - Part 2-1: Tests - Test A: Cold*

IEC 60068-2-2, *Environmental testing - Part 2-2: Tests - Test B: Dry heat*

IEC 60068-2-6, *Environmental testing - Part 2-6: Tests - Test Fc: Vibration(sinusoidal)*

IEC 60068-2-11, *Envrionmental testing for electric and electronic products - Part 2: Test method - Test Ka: Salt mist*

IEC 60068-2-13, *Basic environmental testing procedures - Part 2-13: Tests - Test M: Low air pressure*

IEC 60068-2-14, *Basic environmental testing procedures - Part 2-14: Tests - Test N: Change of temperature*

IEC 60068-2-78, *Environmental Testing - Part 2-78: Tests - Test Cab: Damp heat, steady state*

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

IEC 61000-4-2, *Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test*

IEC 61000-4-3, *Electromagnetic compatibility (EMC) - Part 4-3 : Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test*

IEC 61000-4-4, *Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test*

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

IEC 61000-4-8, *Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test*

IEC 61000-4-11, *Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current up to 16 A per phase*

IEC 61010-1, *Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements*

IEC 61557-5, *Electrical safety in low voltage distribution systems up to 1000 V a.c. and 1500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 5: Resistance to earth*

IEC 62443-2-4, *Security for industrial automation and control systems - Part 2-4: Security program requirements for IACS service providers*

IEC TS 62862-1-1, *Solar thermal electric plants - Part 1-1: Terminology*

IEC 62862-4-1, *Solar thermal electric plants - Part 4-1: General requirements for the design of solar tower plants*

Bibliography

There are no bibliographic references in this document.

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