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Static VAR compensators (SVC) - Testing of thyristor valves

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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and corrigenda (if any)

English Version

**Static VAR compensators (SVC) - Testing of thyristor valves
(IEC 61954:2021)**Compensateurs statiques de puissance réactive (SVC) -
Essais des valves à thyristors
(IEC 61954:2021)Statische Blindleistungskompensatoren (SVC) - Prüfung
von Thyristorventilen
(IEC 61954:2021)

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EN IEC 61954:2021 (E)**European foreword**

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Annex ZA (normative)

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NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60060	series	High-voltage test techniques	EN 60060	series
IEC 60060-1	2010	High-voltage test techniques - Part 1: General definitions and test requirements	EN 60060-1	2010
IEC 60060-2	-	High-voltage test techniques - Part 2: Measuring systems	EN 60060-2	-
IEC 60071	series	Insulation co-ordination	EN IEC 60071	series
IEC 60071-1	2019	Insulation co-ordination - Part 1: Definitions, principles and rules	EN IEC 60071-1	2019
IEC 60270	-	High-voltage test techniques - Partial discharge measurements	EN 60270	-
IEC 60700-1	2015	Thyristor valves for high voltage direct current (HVDC) power transmission - Part 1: Electrical testing	EN 60700-1	2015



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NORME INTERNATIONALE

Static VAR compensators (SVC) – Testing of thyristor valves

Compensateurs statiques de puissance réactive (SVC) – Essais des valves à thyristors





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Edition 3.0 2021-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Static VAR compensators (SVC) – Testing of thyristor valves

Compensateurs statiques de puissance réactive (SVC) – Essais des valves à thyristors

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**STATIC VAR COMPENSATORS (SVC) –
TESTING OF THYRISTOR VALVES**

FOREWORD

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International Standard IEC 61954 has been prepared by subcommittee 22F: Power electronics for electrical transmission and distribution systems, of IEC technical committee 22: Power electronic systems and equipment.

This third edition cancels and replaces the second edition published in 2011, Amendment 1:2013 and Amendment 2:2017. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition: important clarifications were made in 4.4.1.2, 5.1.2.2, 5.1.3.2, 5.2.3.2, 6.1.2.2, 6.1.2.4, 6.1.3.2, 6.2.2.2, 6.2.2.4, 6.3.2.2 and 9.3.2.

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

FDIS	Report on voting
22F/642/FDIS	22F/658/RVD

Full information on the voting for the approval of this International Standard 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/standardsdev/publications.

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

STATIC VAR COMPENSATORS (SVC) – TESTING OF THYRISTOR VALVES

1 Scope

This document defines type, production and optional tests on thyristor valves used in thyristor controlled reactors (TCR), thyristor switched reactors (TSR) and thyristor switched capacitors (TSC) forming part of static VAR compensators (SVC) for power system applications. The requirements of the document apply both to single valve units (one phase) and to multiple valve units (several phases).

Clauses 4 to 7 detail the type tests, i.e. tests which are carried out to verify that the valve design meets the requirements specified. Clause 8 covers the production tests, i.e. tests which are carried out to verify proper manufacturing. Clauses 9 and 10 detail optional tests, i.e. tests additional to the type and production tests.

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 60060 (all parts), *High-voltage test techniques*

IEC 60060-1:2010, *High-voltage test techniques – Part 1: General definitions and test requirements*

IEC 60060-2, *High-voltage test techniques – Part 2: Measuring systems*

IEC 60071 (all parts), *Insulation co-ordination*

IEC 60071-1:2019, *Insulation co-ordination – Part 1: Definitions, principles and rules*

IEC 60270, *High-voltage test techniques – Partial discharge measurements*

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