

STN	Paralelné výkonové kondenzátory nesamoregeneračného typu pre striedavé siete s menovitým napätím do 1 000 V vrátane Časť 1: Všeobecne	STN EN IEC 60931-1 35 8203
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Shunt power capacitors of the non-self-healing type for AC systems having a rated voltage up to and including 1 000 V - Part 1: General

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/25

Obsahuje: EN IEC 60931-1:2025, IEC 60931-1:2025

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NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

Shunt power capacitors of the non-self-healing type for AC systems having a rated voltage up to and including 1 000 V -
Part 1: General
(IEC 60931-1:2025)

Condensateurs shunt de puissance non autorégénérateurs pour réseaux à courant alternatif de tension assignée inférieure ou égale à 1 000 V - Partie 1 : Généralités (IEC 60931-1:2025)

Nichtselbstheilende Leistungs-Parallelkondensatoren für Wechselstromanlagen mit einer Nennspannung bis einschließlich 1000 V - Teil 1: Allgemeines (IEC 60931-1:2025)

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Europäisches Komitee für Elektrotechnische Normung

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EN IEC 60931-1:2025 (E)**European foreword**

The text of document 33/721/FDIS, future edition 3 of IEC 60931-1, prepared by TC 33 "Power capacitors and their applications" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60931-1:2025.

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In the official version, for Bibliography, the following notes have to be added for the standard indicated:

IEC 60831 series	NOTE	Approved as EN 60831 series
IEC 60871 series	NOTE	Approved as EN 60871 series
IEC 60110 series	NOTE	Approved as EN 60110 series
IEC 60143 series	NOTE	Approved as EN IEC 60143 series
IEC 60252 series	NOTE	Approved as EN 60252 series
IEC 60358 series	NOTE	Approved as EN IEC 60358 series
IEC 61071	NOTE	Approved as EN 61071
IEC 61048	NOTE	Approved as EN 61048
IEC 61049	NOTE	Approved as EN 61049
IEC 63210	NOTE	Approved as EN IEC 63210
IEC 60831-1:2014	NOTE	Approved as EN 60831-1:2014 (not modified)

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

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.cencenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60060-1	-	High-voltage test techniques - Part 1: General terminology and test requirements	EN IEC 60060-1	-
IEC 60931-2	-	Shunt power capacitors of the non-self-healing type for AC systems having a rated voltage up to and including 1 000 V - Part 2: Ageing test and destruction test	EN IEC 60931-2	-
IEC 61000-2-2	2002	Electromagnetic compatibility (EMC) - Part 2-2: Environment - Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems	EN 61000-2-2	2002
IEC/TR 61000-4-1	-	Electromagnetic compatibility (EMC) - Part 4-1: Testing and measurement techniques - Overview of the IEC 61000-4 series	-	-



IEC 60931-1

Edition 3.0 2025-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Shunt power capacitors of the non-self-healing type for AC systems having a rated voltage up to and including 1 000 V –
Part 1: General**

**Condensateurs shunt de puissance non autorégénérateurs pour réseaux à courant alternatif de tension assignée inférieure ou égale à 1 000 V –
Partie 1 : Généralités**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Shunt power capacitors of the non-self-healing type for AC systems
having a rated voltage up to and including 1 000 V –
Part 1: General**

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IEC 60931-1 has been prepared by IEC technical committee 33: Power capacitors and their applications. It is an International Standard.

This third edition cancels and replaces second edition published in 1996 and Amendment 1:2002. This edition constitutes a technical revision.

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

- a) integration of IEC 60931-3 within IEC 60931-1;
- b) deletion of self-healing test.

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

Draft	Report on voting
33/721/FDIS	33/725/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.

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.

A list of all parts in the IEC 60931 series, published under the general title *Shunt power capacitors of the non-self-healing type for AC systems having a rated voltage up to and including 1 000 volts*, can be found on the IEC website.

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, or
- revised.

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1 Scope

This part of IEC 60931 is applicable to both non-self-healing capacitor units and non-self-healing capacitor banks intended to be used, particularly, for power-factor correction of AC power systems having a rated voltage up to and including 1 000 V and frequencies 15 Hz to 60 Hz.

This document also applies to capacitors intended for use in power filter circuits. Additional definitions, requirements, and tests for filter capacitors are given in Annex A.

The following capacitors are excluded from this part of IEC 60931:

- Shunt power capacitors of the self-healing type for AC systems having a rated voltage up to and including 1 000 V (IEC 60831 series [1]¹)
- Shunt capacitors for AC power systems having a rated voltage above 1 000 V (IEC 60871 series [2])
- Power capacitors for induction heating installations (IEC 60110 series [3])
- Series capacitors for power systems (IEC 60143 series [4])
- Capacitors for motor applications (IEC 60252 series [5])
- Coupling capacitors and capacitor dividers (IEC 60358 series [6])
- Capacitors for power electronics (IEC 61071 [7])
- Small AC capacitors to be used for fluorescent and discharge lamps (IEC 61048 [8] and IEC 61049 [9])
- Capacitors for suppression of radio interference (under consideration)
- Capacitors intended to be used in various types of electrical equipment and thus considered as components
- Capacitors intended for use with DC voltage superimposed on the AC voltage
- Shunt power capacitors of the self-healing type for AC systems having a rated voltage above 1 000 V (IEC 63210 [10])

Accessories such as insulators, switches, instrument transformers, fuses, etc., are to be in accordance with the relevant IEC standards.

The purpose of this document is:

- a) to formulate uniform rules regarding performances, testing and rating;
- b) to formulate specific safety rules;
- c) to provide a guide for installation and operation.

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

IEC 60931-2, *Shunt power capacitors of the non-self-healing type for a.c. systems having a rated voltage up to and including 1000 V – Part 2: Ageing test and destruction test*

¹ Numbers in square brackets refer to the Bibliography.

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IEC 61000-2-2:2002, *Electromagnetic compatibility (EMC) – Part 2-2: Environment – Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems*

IEC TR 61000-4-1, *Electromagnetic compatibility (EMC) – Part 4-1: Testing and measurement techniques – Overview of IEC 61000-4 series*

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