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Standards

Irish Standard  
I.S. EN 60831-2:2014

Shunt power capacitors of the self-healing type for a.c. systems having a rated voltage up to and including 1 000 V - Part 2: Ageing test, self-healing test and destruction test

## I.S. EN 60831-2:2014

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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EUROPEAN STANDARD

**EN 60831-2**

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2014

ICS 29.120.99; 31.060.70

Supersedes EN 60831-2:1996

English Version

**Shunt power capacitors of the self-healing type for a.c. systems  
having a rated voltage up to and including 1 000 V - Part 2:  
Ageing test, self-healing test and destruction test  
(IEC 60831-2:2014)**

Condensateurs shunt de puissance autorégénérateurs pour  
réseaux à courant alternatif de tension assignée inférieure  
ou égale à 1 000 V - Partie 2: Essais de vieillissement,  
d'autorégénération et de destruction  
(CEI 60831-2:2014)

Selbstheilende Leistungs-Parallelkondensatoren für  
Wechselstromanlagen mit einer Bemessungsspannung bis  
1 000 V - Teil 2: Alterungsprüfung, Selbstheilungsprüfung  
und Zerstörungsprüfung  
(IEC 60831-2:2014)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

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European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## **Foreword**

The text of document 33/544/FDIS, future edition 3 of IEC 60831-2, prepared by IEC/TC 33, "Power capacitors and their applications" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60831-2:2014.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2014-12-19
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-03-19

This document supersedes EN 60831-2:1996.

EN 60831-2:2014 includes the following significant technical changes with respect to EN 60831-2:1996:

- a) Updating of the normative references;
- b) Discharge cycles before ageing test carried out at ambient temperature;
- c) Alternative Self-healing test at d.c. voltage;
- d) Modified acceptance conditions after Self-healing test;
- e) Modifications to Destruction test.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

## **Endorsement notice**

The text of the International Standard IEC 60831-2:2014 was approved by CENELEC as a European Standard without any modification.

## **Annex ZA** (normative)

### **Normative references to international publications with their corresponding European publications**

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When 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](http://www.cenelec.eu)

| <u>Publication</u> | <u>Year</u> | <u>Title</u>   | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|--|--------------|-------------|
| IEC 60831-1        | 2014        | Shunt power capacitors of the self-healing type for a.c. systems having a rated voltage up to and including 1000 V -<br>Part 1: General - Performance, testing and rating - Safety requirements - Guide for installation and operation | EN 60831-1   | 2014        |

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**IEC 60831-2**

Edition 3.0 2014-02

# **INTERNATIONAL STANDARD**

## **NORME INTERNATIONALE**

**Shunt power capacitors of the self-healing type for a.c. systems having a rated voltage up to and including 1 000 V –**

**Part 2: Ageing test, self-healing test and destruction test**

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

**Partie 2: Essais de vieillissement, d'autorégénération et de destruction**



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**IEC 60831-2**

Edition 3.0 2014-02

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Shunt power capacitors of the self-healing type for a.c. systems having a rated voltage up to and including 1 000 V –**

**Part 2: Ageing test, self-healing test and destruction test**

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

**Partie 2: Essais de vieillissement, d'autorégénération et de destruction**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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### **SHUNT POWER CAPACITORS OF THE SELF-HEALING TYPE FOR A.C. SYSTEMS HAVING A RATED VOLTAGE UP TO AND INCLUDING 1 000 V –**

#### **Part 2: Ageing test, self-healing test and destruction test**

#### FOREWORD

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International Standard IEC 60831-2 has been prepared by IEC technical committee 33: Power capacitors and their applications.

This third edition cancels and replaces the second edition published in 1995. This edition constitutes a technical revision.

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

- a) Updating of the normative references;
- b) Discharge cycles before ageing test carried out at ambient temperature;
- c) Alternative Self-healing test at d.c. voltage;
- d) Modified acceptance conditions after Self-healing test;
- e) Modifications to Destruction test.

The text of this standard is based on the following documents:

| FDIS        | Report on voting |
|-------------|------------------|
| 33/544/FDIS | 33/551/RVD       |

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts in the IEC 60831 series, published under the general title *Shunt power capacitors of the self-healing type for a.c. systems having a rated voltage up to and including 1 000 V*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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

# **SHUNT POWER CAPACITORS OF THE SELF-HEALING TYPE FOR A.C. SYSTEMS HAVING A RATED VOLTAGE UP TO AND INCLUDING 1 000 V –**

## **Part 2: Ageing test, self-healing test and destruction test**

### **1 Scope**

This part of IEC 60831 applies to capacitors according to IEC 60831-1 and gives the requirements for the ageing test, self-healing test and destruction test for these capacitors.

NOTE The numbering of the clauses and subclauses in this standard corresponds to that of IEC 60831-1.

### **2 Normative references**

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60831-1:2014, *Shunt power capacitors of the self-healing type for a.c. systems having a rated voltage up to and including 1 000 V – Part 1: General – Performance, testing and rating – Safety requirements – Guide for installation and operation*

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