BS EN 60358-1:2012

Incorporating corrigendum July 2013

BSI Standards Publication

Coupling capacitors and capacitor dividers

Part 1: General rules

National foreword

This British Standard is the UK implementation of EN 60358-1:2012. It is identical to IEC 60358-1:2012, incorporating corrigendum July 2013. Together with BS EN 60358-2:2013, BS EN 60358-3 and BS EN 60358-4 it supersedes BS 7578:1992 (dual numbered as IEC 60358:1990), which will be withdrawn on publication of all parts of the BS EN 60358 series.

The start and finish of text introduced or altered by corrigendum is indicated in the text by tags. Text altered by IEC corrigendum July 2013 is indicated in the text by [AC1⟩ ⟨AC1].

The UK participation in its preparation was entrusted to Technical Committee PEL/33, Power capacitors.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Published by BSI Standards Limited 2014

ISBN 978 0 580 83914 6

ICS 29.120.99; 29.240.99; 31.060.70

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 January 2013.

Amendments/corrigenda issued since publication

Date	Text affected
31 March 2014	Implementation of IEC corrigendum July 2013

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60358-1

August 2012

ICS 29.120.99; 29.240.99; 31.060.70

English version

Coupling capacitors and capacitor dividers - Part 1: General rules

(IEC 60358-1:2012)

Condensateurs de couplage et diviseurs capacitifs -
Partie 1: Règles générales
(CEI 60358-1:2012)

Kopplungskondensatoren und kapazitive Teiler -
Teil 1: Allgemeine Bestimmungen
(IEC 60358-1:2012)

This European Standard was approved by CENELEC on 2012-07-17. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 60358-1:2012 E

Foreword

The text of document 33/499/FDIS, future edition 1 of IEC 60358-1, prepared by IEC/TC 33, "Power capacitors" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60358-1:2012.

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)	2013-04-17
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2015-07-17

This document supersedes HD 597 S1:1992 (partially).

EN 60358-1:2012 includes the following significant technical changes with respect to HD 597 S1:1992:

– The standard has been split into different parts; Part 1 is the general rules and Parts 2, 3, 4 will be specific to the PLC, filters and dividers applications.

– The routine and type test have been reviewed and are presented in Figure 2.

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 60358-1:2012 was approved by CENELEC as a European Standard without any modification.

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

IEC 60060-2	NOTE	Harmonized as EN 60060-2.
IEC 60085	NOTE	Harmonized as EN 60085.
IEC 60358-2	NOTE	Harmonized as EN 60358-2[1)].
IEC 60422	NOTE	Harmonized as EN 60422.
IEC 61869-5	NOTE	Harmonized as EN 61869-5.
IEC 62155	NOTE	Harmonized as EN 62155.
CISPR 16-1-1	NOTE	Harmonized as EN 55016-1-1.

[1)] To be published.

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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60038 (mod)	-	IEC standard voltages	EN 60038	-
IEC 60050-321	1986	International Electrotechnical vocabulary - Chapter 321: Instrument transformers	-	-
IEC 60050-436	1990	International Electrotechnical Vocabulary (IEV) - Chapter 436: Power capacitors	-	-
IEC 60050-601	1985	International Electrotechnical Vocabulary (IEV) - Chapter 601: Generation, transmission and distribution of electricity - General	-	-
IEC 60050-604	1987	International Electrotechnical Vocabulary (IEV) - Chapter 604: Generation, transmission and distribution of electricity - Operation	-	-
IEC 60060-1	-	High-voltage test techniques - Part 1: General definitions and test requirements	EN 60060-1	-
IEC 60068-2-17	-	Environmental testing - Part 2: Tests - Test Q: Sealing	EN 60068-2-17	-
IEC 60071-1	-	Insulation co-ordination - Part 1: Definitions, principles and rules	EN 60071-1	-
IEC 60270	-	High-voltage test techniques - Partial discharge measurements	EN 60270	-
IEC 60721	Series	Classification of environmental conditions	EN 60721	Series
IEC 61462	-	Composite hollow insulators - Pressurized and unpressurized insulators for use in electrical equipment with rated voltage greater than 1 000 V - Definitions, test methods, acceptance criteria and design recommendations	EN 61462	-
CISPR/TR 18-2	-	Radio interference characteristics of overhead power lines and high-voltage equipment - Part 2: Methods of measurement and procedure for determining limits	-	-

CONTENTS

INTRODUCTION

For the new re-structured IEC 60358 series, the following parts are envisaged:

IEC 60358-1[1], Coupling capacitors and capacitor dividers – Part 1: General rules

IEC 60358-2[2], Coupling capacitor and capacitor dividers – Part 2: AC or DC single-phase coupling capacitor connected between line and ground for power line carrier-frequency (PLC) application

IEC 60358-3[3], Coupling capacitors and capacitor dividers – Part 3: AC or DC single-phase coupling capacitor for harmonic-filters applications

IEC 60358-4[4], Coupling capacitor and capacitor dividers – Part 4: AC or DC single-phase capacitor-divider and RC-divider connected between line and ground (except for CVT's which belong to IEC 61869-5)

---

1 To be published.

2 To be published.

3 Under consideration.

4 Under consideration.

COUPLING CAPACITORS AND CAPACITOR DIVIDERS –

Part 1: General rules

1 Scope

This part of IEC 60358 applies to:

- Capacitors, with rated voltage $>$ 1 000 V, connected line to ground with the low voltage terminal either permanently earthed or connected to devices, for applications listed hereunder and other similar uses.

This standard serves as basic standard for the coupling capacitor, the different parts of this standard will present the supplementary specifications and tests, for example IEC 60358-2, IEC 60358-3 or IEC 60358-4.

NOTE Diagrams of coupling capacitor to which this standard applies are given in Figures A.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 60038, *IEC standard voltages*

IEC 60050-321:1986, *International Electrotechnical Vocabulary – Chapter 321: Instrument transformers*

IEC 60050-436:1990, *International Electrotechnical Vocabulary – Chapter 436: Power capacitors*

IEC 60050-601:1985, *International Electrotechnical Vocabulary – Chapter 601: Generation, transmission and distribution of electricity – General*

IEC 60050-604:1987, *International Electrotechnical Vocabulary – Chapter 604: Generation, transmission and distribution of electricity – Operation*

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

IEC 60068-2-17, *Basic environmental testing procedures – Part 2-17: Tests – Test Q: Sealing*

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

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

IEC 60721 (all parts), *Classification of environmental conditions*

IEC 61462*, Composite hollow insulators – Pressurized and unpressurized insulators for use in electrical equipment with rated voltage greater than 1 000 V – Definitions, test methods, acceptance criteria and design recommendations*