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Kopplingskondensatorer och kondensatorer för spänningsdelare – Del 2: Enfas kopplingskondensatorer för AC eller DC för anslutning mellan fas och jord för bärfrekvenstillämpningar (PLC)

*Coupling capacitors and capacitor dividers –
Part 2: AC or DC single-phase coupling capacitor connected between line and
ground for power line carrier-frequency (PLC) application*

Som svensk standard gäller europastandarden EN 60358-2:2013. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60358-2:2013.

Nationellt förord

Europastandarden EN 60358-2:2013

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60358-2, First edition, 2013 - Coupling capacitors and capacitor dividers - Part 2: AC or DC single-phase coupling capacitor connected between line and ground for power line carrier-frequency (PLC) application**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med SS-EN 60358-1, utgåva 1, 2013.

Standarden ersätter delvis tidigare fastställd svensk standard SS-IEC 358, utgåva 2, 1992, som ej gäller fr o m 2016-09-16.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

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Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

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Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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**Coupling capacitors 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 60358-2:2013)**

Condensateurs de couplage et diviseurs
capacitifs -
Partie 2: Condensateur de couplage
monophasé à courant alternatif ou à courant
continu connecté entre la ligne et la terre
pour application aux liaisons à courant
porteur sur lignes d'énergie (CPL)
(CEI 60358-2:2013)

Kopplungskondensatoren und kapazitive
Teiler -
Teil 2: Einphasen-Kopplungskondensatoren
für Wechsel- oder Gleichstrom, die für
Trägerfrequenzübertragungen auf
Hochspannungsleitungen (TFH-
Übertragung) zwischen Außenleiter und
Erde geschaltet sind
(IEC 60358-2:2013)

This European Standard was approved by CENELEC on 2013-09-16. 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

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

Foreword

The text of document 33/531/FDIS, future edition 1 of IEC 60358-2, prepared by IEC/TC 33, "Power capacitors and their applications" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60358-2:2013.

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) 2014-06-16
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2016-09-16

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

This European Standard is to be used in conjunction with the latest edition of EN 60358-1 and its amendments. It was established on the basis of the first edition (2012) of that standard.

This Part 2 supplements or modifies the corresponding clauses in EN 60358-1.

When a particular subclause of Part 1 is not mentioned in this Part 2, that subclause applies as far as is reasonable. Where this Part 2 states "addition" or "replacement", the relevant text in Part 1 is to be adapted accordingly.

For additional clauses, subclauses, figures, tables or annexes, the following numbering system is used:

- subclauses, tables and figures which are additional to those in Part 1 are numbered starting from 200;
- additional annexes are lettered AA, BB etc.
- as the notes are integrated into the clauses, their numbering starts from 1 as usual.

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.

Endorsement notice

The text of the International Standard IEC 60358-2:2013 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 60085	NOTE	Harmonized as EN 60085.
IEC 60721 Series	NOTE	Harmonized in EN 60721 series.
IEC 61462	NOTE	Harmonized as EN 61462.
CISPR 16-1-1	NOTE	Harmonized as EN 55016-1-1.

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.

<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 definitions and test requirements	EN 60060-1	
IEC 60060-2		High-voltage test techniques - Part 2: Measuring systems	EN 60060-2	
IEC 60358-1 + corr. July	2012 2013	Coupling capacitors and capacitor dividers - Part 1: General rules	EN 60358-1 + AC:2013	2012 2013
IEC 60481		Coupling devices for power line carrier systems	-	-
IEC 61869-5		Instrument transformers - Part 5: Additional requirements for capacitor voltage transformers		

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INTRODUCTION

This series consists of the following parts:

- IEC 60358-1, *Coupling capacitors and capacitor dividers – Part 1: General rules*
- IEC 60358-2, *Coupling capacitors 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 60358-3¹, *Coupling capacitors and capacitor dividers – Part 3: AC or DC single-phase coupling capacitor connected between line and ground for harmonic-filters applications*
- IEC 60358-4², *Coupling capacitors 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 series)*

¹ Under consideration.

² Under consideration.

COUPLING CAPACITORS AND CAPACITOR DIVIDERS –

Part 2: AC or DC single-phase coupling capacitor connected between line and ground for power line carrier-frequency (PLC) application

1 Scope

Clause 1 of IEC 60358-1:2012 is applicable with the following additions:

This part of the IEC 60358 series applies to AC or DC single-phase coupling capacitors, with rated voltage > 1 000 V, connected between line and ground with a low voltage terminal either permanently earthed or connected to a device for power line carrier-frequency (PLC) applications at frequencies from 30 kHz to 500 kHz or similar applications (DC or AC) at power frequencies from 15 Hz to 60 Hz.

The transmission requirements for coupling devices for power line carrier (PLC) systems are defined in IEC 60481.

NOTE Diagrams of coupling capacitors to which this standard applies are given in Figure A.1.

2 Normative references

Clause 2 of IEC 60358-1:2012 is replaced by the following:

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

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

IEC 60358-1:2012, *Coupling capacitors and capacitor dividers. – Part 1: General rules*

IEC 60481, *Coupling devices for power line carrier systems*

IEC 61869-5, *Instrument transformers – Part 5: Additional requirements for capacitor voltage transformers*