

Kopplingsutrustningar för högst 1000 V växelspänning eller 1500 V likspänning – Del 5: Särskilda fordringar på kabelskåp och lågspänningsfördelningar i nätstationer

*Low-voltage switchgear and controlgear assemblies –
Part 5: Particular requirements for assemblies for power distribution in public networks*

Som svensk standard gäller europastandarden EN 60439-5:2006. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60439-5:2005.

Nationellt förord

Europastandarden EN 60439-5:2006

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60439-5, Second edition, 2006 - Low-voltage switchgear and controlgear assemblies - Part 5: Particular requirements for assemblies for power distribution in public networks**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden skall användas tillsammans med SS-EN 60439-1, utgåva 3, 2000 eller SS-EN 60439-1, utgåva 4, 2004.

Tidigare fastställd svensk standard SS-EN 60439-5, utgåva 1, 1996, SS-EN 60439-5/A1, utgåva 1, 1998 och SS-EN 50300, utgåva 1, 2004, gäller ej fr o m 2009-09-01.

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.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

Svenska Elektriska Kommissionen, SEK, svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

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).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

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.

SEK

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EUROPEAN STANDARD

EN 60439-5

NORME EUROPÉENNE

EUROPÄISCHE NORM

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ICS 29.130.20; 29.240.99

Supersedes EN 60439 5:1996 + A1:1998 and EN 50300:2004

English version

Low-voltage switchgear and controlgear assemblies
Part 5: Particular requirements for assemblies
for power distribution in public networks
(IEC 60439-5:2006)

Ensembles d'appareillage
à basse tension
Partie 5: Règles particulières
pour les ensembles pour réseaux
de distribution publics
(CEI 60439-5:2006)

Niederspannungs-
Schaltgerätekombinationen
Teil 5: Besondere Anforderungen
für Schaltgerätekombinationen
in Energieverteilungsnetzen
(IEC 60439-5:2006)

This European Standard was approved by CENELEC on 2006-09-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 17D/334/FDIS, future edition 2 of IEC 60439-5, prepared by SC 17D, Low-voltage switchgear and controlgear assemblies, of IEC TC 17, Switchgear and controlgear, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60439-5 on 2006-09-01.

This European Standard supersedes EN 60439-5:1996 + A1:1998 and EN 50300:2004.

The main change with respect to EN 60439-5:1996 is the inclusion of substation cable distribution boards (SCDBs). The title has therefore been amended.

In view of the fact that this publication should be read in conjunction with EN 60439-1:1999, the numbering of its clauses and subclauses correspond with the latter. The clauses of this standard supplement, modify or replace clauses in EN 60439-1.

Where there is no corresponding clause or subclause in this standard, the clause or subclause of the main document applies without modification.

Clauses, subclauses, figures and tables which are additional to those in Part 1 are numbered starting from 101.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2007-06-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2009-09-01

Annexes ZA and ZB have been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60439-5:2006 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 referenced documents are indispensable for the application 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 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 60068-2-11	1981	Environmental testing Part 2: Tests - Test Ka: Salt mist	EN 60068-2-11	1999
IEC 60068-2-30	2005	Environmental testing Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)	EN 60068-2-30	2005
IEC 60238	2004	Edison screw lampholders	EN 60238 + corr. January	2004 2005
IEC 60269-1	1998	Low-voltage fuses Part 1: General requirements	EN 60269-1	1998
IEC 60439-1 A1	1999 2004	Low-voltage switchgear and controlgear assemblies Part 1: Type-tested and partially type-tested assemblies	EN 60439-1 A1	1999 2004
IEC 60446	1999	Basic and safety principles for man-machine interface, marking and identification - Identification of conductors by colours or numerals	EN 60446	1999
IEC 60529 A1	1989 1999	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May A1	1991 1993 2000
IEC 60695-11-10	1999	Fire hazard testing Part 11-10: Test flames - 50 W horizontal and vertical flame test methods	EN 60695-11-10	1999
ISO 3231	1993	Paints and varnishes - Determination of resistance to humid atmospheres containing sulphur dioxide	EN ISO 3231	1997
ISO 4628-3	2003	Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance Part 3: Assessment of degree of rusting	EN ISO 4628-3	2003
ISO 4892-2	1994	Plastics - Methods of exposure to laboratory light sources Part 2: Xenon arc sources	EN ISO 4892-2	1999
ISO 6506-1	2005	Metallic materials - Brinell hardness test Part 1: Test method	EN ISO 6506-1	2005

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 9223	1992	Corrosion of metals and alloys - Corrosivity of - atmosphere - Classification		-

Annex ZB
(informative)

A-deviations

[Redacted]

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LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR ASSEMBLIES –

Part 5: Particular requirements for assemblies for power distribution in public networks

1 General

1.1 Scope and object

Replacement:

Substation cable distribution boards (SCDBs) and cable distribution cabinets (CDCs) for power distribution in networks shall comply with all the requirements of IEC 60439-1 (1999) if not otherwise indicated hereinafter and shall also comply with the particular requirements contained in this publication.

This standard gives supplementary requirements for substation cable distribution boards (SCDBs) and cable distribution cabinets (CDCs), which are stationary, type-tested assemblies (TTA). They are used for the distribution of electrical energy in three-phase systems. Open-type ASSEMBLY are not covered by this standard.

Individual components, such as fuses and switching devices that comply with other standards, shall also comply with the supplementary requirements of this standard.

The object of this standard is to state the definitions and to specify the service conditions, construction requirements, technical characteristics and tests for SCDBs and CDCs. Higher performance and test levels may be required for particular networks, for example, those with meshed connections.

NOTE 1 If a CDC is equipped with additional equipment (for example meters), in such a way that the main function is changed considerably, then other standards may also apply as agreed between user and manufacturer (see 7.6).

NOTE 2 Where local regulations and practices permit, an SCDB or CDC according to this standard may be used in other than public networks.

SCDBs are suitable for installation in places where only skilled persons have access for their use; however, outdoor types may be installed in situations which may be accessible to the public.

SCDBs are connected to the low voltage terminals of distribution transformers by means of connecting bars, rods or cables.

CDCs are for outdoor installation in places which are accessible to the public, and where only skilled persons have access for their use.

1.2 Normative references

This subclause of Part 1 applies with the following additions:

IEC 60068-2-11:1981, *Environmental testing – Part 2: Tests – Test Ka: Salt mist*