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**Kopplingsapparater för spänning över 1 kV –
Del 209: Kabelanslutningar för gasisolerade metallkapslade ställverk med
lägst 52 kV märkspänning –
Vätskefyllda kablar och kablar med extruderad isolering –
Vätskefyllda och torra kabelavslutningar**

High-voltage switchgear and controlgear –

Part 209: Cable connections for gas-insulated metal-enclosed switchgear for rated voltages above 52 kV –

Fluid-filled and extruded insulation cables –

Fluid-filled and dry type cable-terminations

Som svensk standard gäller europastandarden EN 62271-209:2007. Den svenska standarden innehåller den officiella engelska språkversionen av EN 62271-209:2007.

Nationellt förord

Europastandarden EN 62271-209:2007

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 62271-209, First edition, 2007 - High-voltage switchgear and controlgear - Part 209: Cable connections for gas-insulated metal-enclosed switchgear for rated voltages above 52 kV - Fluid-filled and extruded insulation cables - Fluid-filled and dry type cable-terminations**

utarbetad inom International Electrotechnical Commission, IEC.

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English version

**High-voltage switchgear and controlgear -
Part 209: Cable connections for gas-insulated metal-enclosed switchgear
for rated voltages above 52 kV -
Fluid-filled and extruded insulation cables -
Fluid-filled and dry-type cable-terminations
(IEC 62271-209:2007)**

Appareillage à haute tension -
Partie 209: Raccordement de câbles
pour appareillage sous enveloppe
métallique à isolation gazeuse de tension
assignée supérieure à 52 kV -
Câbles remplis d'un fluide
ou à isolation extrudée -
Extrémité de câble sèche
ou remplie d'un fluide
(CEI 62271-209:2007)

Hochspannungs-Schaltgeräte
und -Schaltanlagen -
Teil 209: Kabelanschlüsse für gasisolierte
metallgekapselte Schaltanlagen
für Bemessungsspannungen über 52 kV -
Kabel mit fluidgefüllter
und extrudierter Isolierung -
Fluidgefüllte und feststoffisolierte
Kabelendverschlüsse
(IEC 62271-209:2007)

This European Standard was approved by CENELEC on 2007-10-01. 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, Bulgaria, 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 17C/405/FDIS, future edition 1 of IEC 62271-209, prepared by SC 17C, High-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 62271-209 on 2007-10-01.

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) 2008-07-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2010-10-01

Annexes ZA and ZB have been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62271-209:2007 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

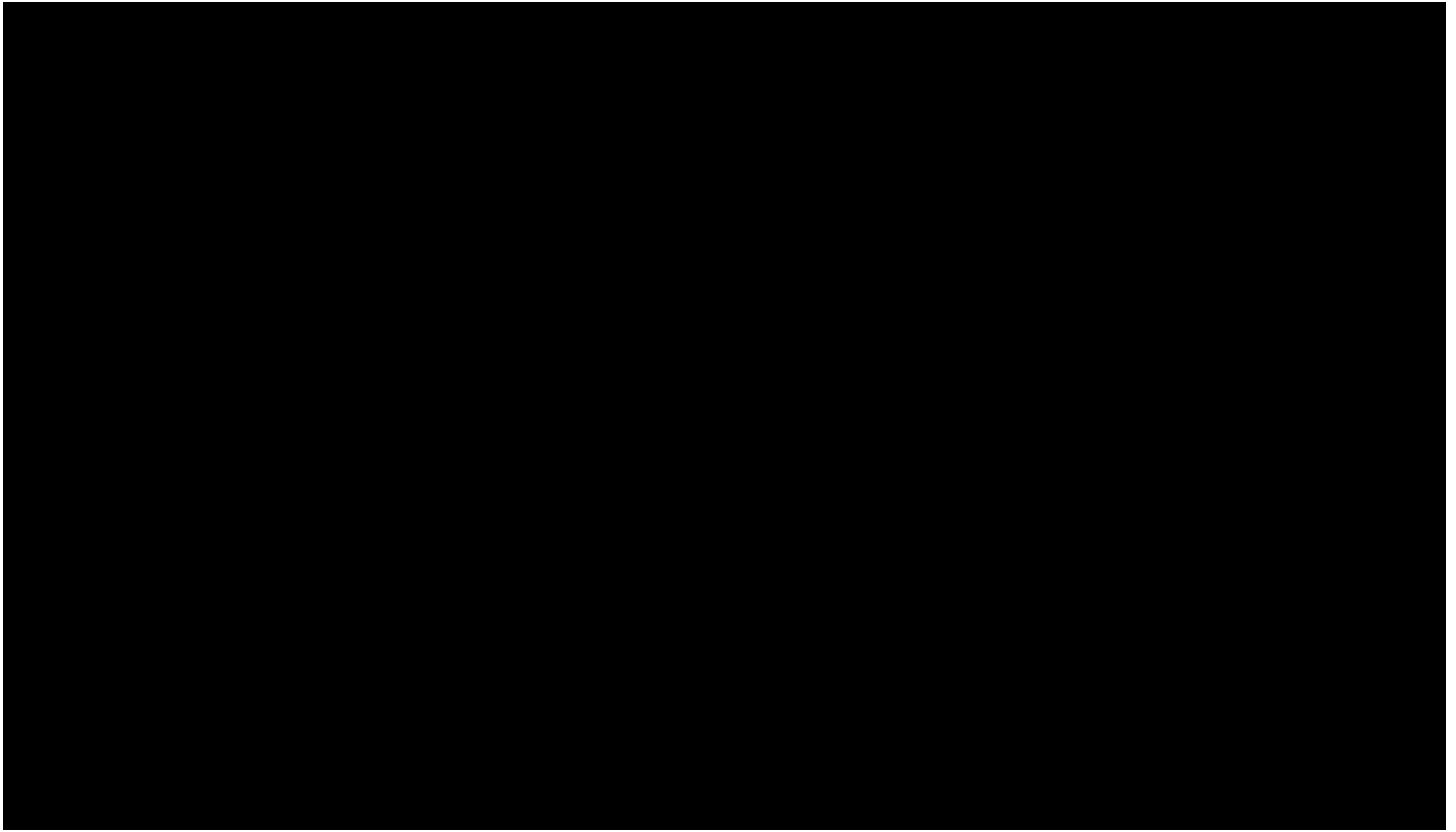
The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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 60038 (mod) A1 A2	1983 1994 1997	IEC standard voltages ¹⁾	HD 472 S1 + corr. February	1989 2002
IEC 60141	Series	Tests on oil-filled and gas-pressure cables and their accessories	–	–
IEC 60141-1	1993	Tests on oil-filled and gas-pressure cables and their accessories - Part 1: Oil-filled, paper- insulated, metal-sheathed cables and accessories for alternating voltages up to and including 400 kV	–	–
IEC 60141-2	1963	Tests on oil-filled and gas-pressure cables and their accessories - Part 2: Internal gas-pressure cables and accessories for alternating voltages up to 275 kV	–	–
IEC 60694	1996	Common specifications for high-voltage switchgear and controlgear standards	EN 60694 + corr. May	1996 1999
IEC 60840	2004	Power cables with extruded insulation and their accessories for rated voltages above 30 kV ($U_m = 36$ kV) up to 150 kV ($U_m = 170$ kV) - Test methods and requirements	–	–
IEC 62067 A1	2001 2006	Power cables with extruded insulation and their accessories for rated voltages above 150 kV ($U_m = 170$ kV) up to 500 kV ($U_m = 550$ kV) - Test methods and requirements	–	–
IEC 62271-203	2003	High-voltage switchgear and controlgear - Part 203: Gas-insulated metal-enclosed switchgear for rated voltages above 52 kV	EN 62271-203	2004
CIGRE WG 23-10 Report, ELECTRA 151	1993	Earthing of GIS - An Application Guide	–	–

¹⁾ The title of HD 472 S1 is: Nominal voltages for low voltage public electricity supply systems.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
CIGRE Brochure 89, WG 21.06	1995	Accessories for HV Extruded Cables - Chapter 2.1.5: Directly Immersed Metal Enclosed GIS Termination	-	-



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HIGH-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

Part 209: Cable connections for gas-insulated metal-enclosed switchgear for rated voltages above 52 kV – Fluid-filled and extruded insulation cables – Fluid-filled and dry-type cable-terminations

1 Scope

This standard covers the connection assembly of fluid-filled and extruded cables to gas-insulated metal enclosed switchgear (GIS), in single- or three-phase arrangements where the cable-terminations are fluid-filled or dry type and there is a separating insulating barrier between the cable insulation and the gas insulation of the switchgear.

The purpose of this standard is to establish electrical and mechanical interchangeability between cable-terminations and the gas-insulated metal-enclosed switchgear and to determine the limits of supply. It complements and amends, if necessary, the relevant IEC standards. For the purpose of this standard the term "switchgear" is used for "gas-insulated metal enclosed switchgear".

It does not cover directly immersed cable terminations, as described in CIGRE brochure 89.

2 Normative references

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.

IEC 60038:1983, *IEC standard voltages*¹
Amendment 1 (1994)
Amendment 2 (1997)

IEC 60141 (all parts), *Tests on oil-filled and gas-pressure cables and their accessories*

IEC 60141-1:1993, *Tests on oil-filled and gas-pressure cables and their accessories – Part 1: Oil-filled, paper-insulated, metal-sheathed cables and accessories for alternating voltages up to and including 400 kV*

IEC 60141-2:1963, *Tests on oil-filled and gas-pressure cables and their accessories – Part 2: Internal gas-pressure cables and accessories for alternating voltages up to 275 kV*

IEC 60694:1996, *Common specifications for high-voltage switchgear and controlgear standards*

IEC 60840:2004, *Power cables with extruded insulation and their accessories for rated voltages above 30 kV ($U_m = 36$ kV) up to 150 kV ($U_m = 170$ kV) – Test methods and requirements*

¹ There exists a consolidated version (2002) including Amendment 1 and 2.