

**ISOLATSIOONI KOORDINATSIOON. OSA 1:  
MÄÄRATLUSED, PÕHIMÖTTED JA REEGLID**

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

**EESTI STANDARDI EESSÕNA****NATIONAL FOREWORD**

<p>See Eesti standard EVS-EN 60071-1:2006+A1:2010 sisaldb Euroopa standardi EN 60071-1:2006 ja selle muudatuse A1:2010 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kätesaadavaks 12.05.2006, muudatuse A1 26.02.2010.</p> <p>Standard on kätesaadav Eesti Standardikeskusest.</p>	<p>This Estonian standard EVS-EN 60071-1:2006+A1:2010 consists of the English text of the European standard EN 60071-1:2006 and its amendment A1:2010.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.</p> <p>Date of Availability of the European standard is 12.05.2006, for amendment A1 26.02.2010.</p> <p>The standard is available from the Estonian Centre for Standardisation.</p>
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English version

**Insulation co-ordination**  
**Part 1: Definitions, principles and rules**  
(IEC 60071-1:2006)

Coordination de l'isolement  
Partie 1: Définitions, principes et règles  
(CEI 60071-1:2006)

Isolationskoordination  
Teil 1: Begriffe, Grundsätze  
und Anforderungen  
(IEC 60071-1:2006)

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**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 28/176/FDIS, future edition 8 of IEC 60071-1, prepared by IEC TC 28, Insulation co-ordination, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60071-1 on 2006-03-01.

This European Standard supersedes EN 60071-1:1995.

The main changes from EN 60071-1:1995 are as follows:

- in the definitions (3.26, 3.28 and 3.29) and in the environmental conditions (5.9) taken into account clarification of the atmospheric and altitude corrections involved in the insulation co-ordination process;
- in the list of standard rated short-duration power frequency withstand voltages reported in 5.6 addition of 115 kV;
- in the list of standard rated impulse withstand voltages reported in 5.7, addition of 200 kV and 380 kV;
- in the standard insulation levels for range I ( $1 \text{ kV} < U_m \leq 245 \text{ kV}$ ) (Table 2) addition of the highest voltage for equipment  $U_m = 100 \text{ kV}$ ;
- in the standard insulation levels for range II ( $U_m > 245 \text{ kV}$ ) (Table 3) replacement of 525 kV by 550 kV and of 765 kV by 800 kV;
- in order to remove that part in the next revision of EN 60071-2, addition of Annex A dealing with clearances in air to assure a specified impulse withstand voltage in installation;
- in Annex B, limitation at two  $U_m$  values for the values of rated insulation levels for  $1 \text{ kV} < U_m \leq 245 \text{ kV}$  for highest voltages for equipment  $U_m$  not standardized by IEC/CENELEC based on current practice in some countries.

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) 2006-12-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2009-03-01

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 60071-1:2006 was approved by CENELEC as a European Standard without any modification.

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## 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)	1983	IEC standard voltages <sup>1)</sup>	HD 472 S1	1989
+ A1	1994		+ corr. February	2002
+ A2	1997			
IEC 60060-1	1989		HD 588.1 S1	1991
+ corr. March	1990			
IEC 60071-2	- <sup>2)</sup>	Insulation co-ordination Part 2: Application guide	EN 60071-2	1997 <sup>3)</sup>
IEC 60099-4 (mod)	- <sup>2)</sup>	Surge arresters Part 4: Metal-oxide surge arresters without gaps for a.c. systems	EN 60099-4	2004 <sup>3)</sup>
IEC 60507	- <sup>2)</sup>	Artificial pollution tests on high-voltage insulators to be used on a.c. systems	EN 60507	1993 <sup>3)</sup>
IEC 60633	- <sup>2)</sup>	Terminology for high-voltage direct current (HVDC) transmission	EN 60633	1999 <sup>3)</sup>

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

<sup>2)</sup> Undated reference.

<sup>3)</sup> Valid edition at date of issue.

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