

English version

**Luminaires -  
Part 1: General requirements and tests**

Luminaires -  
Partie 1: Exigences générales  
et essais

Leuchten -  
Teil 1: Allgemeine Anforderungen  
und Prüfungen

This amendment A11 modifies the European Standard EN 60598-1:2008; it was approved by CENELEC on 2009-05-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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.

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**CENELEC**

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

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## Foreword

This amendment was prepared by the Technical Committee CENELEC TC 34Z, Luminaires and associated equipment.

The text of the draft was submitted to the formal vote and was approved by CENELEC as amendment A11 to EN 60598-1:2008 on 2009-05-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 2009-11-01
  - latest date by which the national standards conflicting  
with the amendment have to be withdrawn (dow) 2009-11-01
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**Replace** the existing definition 1.2.76 with the following:

**1.2.76**

**impulse withstand category (former term “overvoltage categories”)**

numeral defining a transient overvoltage condition

NOTE 1 Impulse withstand categories I, II, III and IV are used.

NOTE 2 The following explanation is taken from IEC 60364-4-44:2007:

Subclause 443.2.1 a) Purpose of classification of impulse withstand voltages.

NOTE 2.1 Overvoltage categories are defined within electrical installations for the purpose of insulation co-ordination and a related classification of equipment with impulse withstand voltages is provided, see Table 1.1.

NOTE 2.2 The rated impulse withstand voltage is an impulse withstand voltage assigned by the manufacturer to the equipment or to a part of it, characterizing the specified withstand capability of its insulation against overvoltages (in accordance with 3.9.2 of IEC 60664-1).

b) The impulse withstand voltage is used to classify equipment energized directly from the mains.

Impulse withstand voltages for equipment selected according to the nominal voltage are provided to distinguish different levels of availability of equipment with regard to continuity of service and an acceptable risk of failure. By selection of equipment with a classified impulse withstand voltage, insulation co-ordination can be achieved in the whole installation, reducing the risk of failure to an acceptable level.

NOTE 2.3 Transient overvoltages transmitted by the supply distribution system are not significantly attenuated downstream in most installations.

**Table 1.1 – Required rated impulse withstand voltage of equipment**

Nominal voltage of the installation <sup>a</sup> V		Impulse withstand voltage for equipment kV <sup>b</sup>			
Three-phase systems	Single-phase systems with middle point	Equipment at the origin of the installation (overvoltage category IV)	Equipment of distribution and final circuits (overvoltage category III)	Appliances and current-using equipment (overvoltage category II)	Specially protected equipment (overvoltage category I)
–	120-240	4	2,5	1,5	0,8
230/400 277/480	–	6	4	2,5	1,5
400/690	–	8	6	4	2,5
1 000	–	12	8	6	4
<sup>a</sup> According to IEC 60038. <sup>b</sup> This impulse withstand voltage is applied between live conductors and PE.					