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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 European Standard was prepared by the Technical Committee CENELEC TC 46X, Communication cables.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50289-4-14 on 2003-05-01.

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)	2004-05-01
- latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2006-05-01

This European Standard has been prepared under the European Mandate M/212 given to CENELEC by the European Commission and the European Free Trade Association.

Contents

1 Scope

This Part 4-14 of EN 50289 details the method of test to determine the ability of a cable used in analogue and digital communication systems to withstand a surge caused by a lightning strike.

It is to be read in conjunction with Part 3-1 of EN 50289, which contains essential provisions for its application.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 50174-2		Information technology - Cabling installation - Part 2: Installation planning and practices inside buildings
EN 50174-3		Information technology - Cabling installation - Part 3: Installation planning and practices outside buildings
EN 50289-3-1	2001	Communication cables - Specifications for test methods - Part 3-1: Mechanical test methods - General requirements
EN 50290-1-2 [1)]		Communication cables - Part 1-2: Definitions
EN 60794-1-2		Optical fibre cables - Part 1-2: Generic specification - Basic optical cable test procedures (IEC 60794-1-2)
EN 61663-1		Lightning protection - Telecommunication lines - Part 1: Fibre optic installations (IEC 61663-1)
EN 61663-2		Lightning protection - Telecommunication lines - Part 2: Lines using metallic conductors (IEC 61663-2)
EN 187200		Sectional Specification: Optical cables to be used along electrical power lines (OCEPL)
ITU-T K20		Resistibility of telecommunication equipment installed in a telecommunications centre to overvoltages and overcurrents

3 Definitions

For the purposes of this European Standard the definitions of EN 50290-1-2 apply.

[1)] At draft stage.

4 General

A direct lightning strike can cause an enormous amount of physical damage. However, the indirect effects from a nearby strike can also cause damage by inducing voltage surges onto cables.

A guide for the selection of protective measures is given in IEC 61663-1 and in IEC 61663-2.

However, in some cases, compliance with ITU-T K 20 may be requested.

The end user should be aware that the conditions of installation can influence the actual behaviour under lightning exposure of the installed cables. EN 50174-2 and EN 50174-3 give further information about installation practices.

5 Test method

Although a general test is under consideration, OPGW and OPPW cables shall be tested according to IEC 60794-1-2 (EN 187200).

6 Requirements

Under consideration.

7 Test report

Under consideration.