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CABLE CLEATS FOR ELECTRICAL

INSTALLATIONS

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Cable cleats for electrical installations

Brides de câbles pour installations électriques

Kabelhalter für elektrische Installationen

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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 213, Cable management.

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50368 on 2003-09-01.

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)	2004-09-01
 latest date by which the national standards conflicting with the EN have to be withdrawn 	(dow)	2006-09-01
Annexes designated "informative" are given for information only.		

In this standard, Annexes A and B are informative.

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1 Scope

This European Standard specifies requirements and tests for cable cleats used for cable fixing, retention and support in electrical installations up to 1 000 V a.c. and/or 1 500 V d.c. and which, if declared, provide resistance to electromechanical forces. This standard does not apply to cable glands, cable ties or devices that rely on the mounting surface for cable retention or devices covered by other standards.

Certain cable cleats may be suitable for use in association with cables operating outside the abovementioned voltages; regard shall then be taken of extra requirements which may be necessary.

2 Normative references

This European Standard incorporates, by dated or undated references, 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).

Publication	Year	Title
EN 60695-2-2	1994	Fire Hazard testing - Part 2: Test methods - Section 2: Needle-flame test (IEC 60695-2-2:1991)
EN 60909-0	2001	Short-circuit currents in three-phase a.c. systems - Part 0: Calculation of currents (IEC 60909-0:2001)
EN ISO 4287	1998	Geometrical product specification (GPS) - Surface texture: Profile method - Terms, definitions and surface texture parameters (ISO 4287:1997)
EN ISO 868	1997	Plastics and ebonite - Determination of indentation hardness by means of a durometer (Shore hardness) (ISO 868:1985)
IEC 61363-1	1998	Electrical installations of ships and mobile fixed offshore units - Part 1: Procedures for calculating short-circuit currents in three phase a.c.

3 Definitions

For the purpose of this European Standard, the following definitions apply:

3.1

cable cleat

a device designed to provide in itself, or with the system component(s) it is designed to fit to, retention and support of cables and installed at intervals along the length of the cable. A cable cleat is provided with a means of attachment to a mounting surface but does not rely on the mounting surface for the retention of the cables

3.2

intermediate restraint

a cable retaining device, which is designed to be used with cable cleats, that is not attached to the support structure and that holds the cables together

3.3

metallic cable cleat

a cable cleat consisting of metal only

3.4

non-metallic cable cleat

a cable cleat consisting of non-metallic material only

3.5

composite cable cleat

a cable cleat comprising metallic and non-metallic materials

3.6

non-flame propagating cable cleat

a cable cleat which may or may not ignite as a result of an applied flame but does not propagate fire

3.7

metallic intermediate restraint

an intermediate restraint consisting of metal only

3.8

non-metallic intermediate restraint

an intermediate restraint consisting of non-metallic material only

3.9

composite intermediate restraint

an intermediate restraint comprising metallic and non-metallic materials

3.10

non-flame propagating intermediate restraint

an intermediate restraint which may or may not ignite as a result of an applied flame but does not propagate fire

3.11

electrical fault

a circuit condition in which the current flows through an abnormal or unintended path. This may result from an insulation failure or the bridging of insulation. Conventionally, the impedance between live conductors or between live conductors and extraneous conductive parts at the fault position is considered negligible

3.12

fault current

a current resulting from an electrical fault

3.13

short-circuit current

an overcurrent resulting from an electrical fault of negligible impedance between live conductors or between a live conductor and an earth, having a difference in potential under normal operating conditions

3.14

peak short-circuit current i_p

the maximum possible instantaneous value of the short-circuit current (see Annex B)

3.15

initial RMS symmetrical short-circuit current I"k

the RMS value of the a.c. symmetrical component of a short-circuit current, applicable at the instant of the short-circuit if the impedance remains at zero-time value (see Annex B)



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