

INTERNATIONAL STANDARD

NORME INTERNATIONALE



Cable cleats for electrical installations

Brides de câbles pour installations électriques



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CONTENTS

FOREWORD	4
1 Scope	6
2 Normative references	6
3 Terms, definitions and abbreviations	6
4 General requirements	8
5 General notes on tests	8
6 Classification	9
6.1 According to material	9
6.1.1 Metallic	9
6.1.2 Non-metallic	9
6.1.3 Composite	9
6.2 According to maximum and minimum temperature	9
6.3 According to resistance to impact	10
6.3.1 Very light	10
6.3.2 Light	10
6.3.3 Medium	10
6.3.4 Heavy	10
6.3.5 Very heavy	10
6.4 According to type of retention or resistance to electromechanical forces or both	10
6.4.1 General	10
6.4.2 With lateral retention	10
6.4.3 With axial retention	10
6.4.4 Resistant to electromechanical forces, withstanding one short circuit	10
6.4.5 Resistant to electromechanical forces, withstanding more than one short circuit	10
6.5 According to environmental influences	10
6.5.1 Resistant to ultraviolet light for non-metallic and composite components	10
6.5.2 Resistant to corrosion for metallic and composite components	10
7 Marking and documentation	10
7.1 Marking	10
7.2 Durability and legibility	11
7.3 Documentation	11
8 Construction	11
9 Mechanical properties	11
9.1 Requirements	11
9.2 Impact test	12
9.3 Lateral load test	14
9.4 Axial load test	15
9.5 Test for resistance to electromechanical force	17
9.5.1 General	17
9.5.2 For cable cleats and intermediate restraints classified in 6.4.4	19
9.5.3 For cable cleats and intermediate restraints classified in 6.4.5	19
10 Fire hazards	19
10.1 Flame propagation	19

10.2	Smoke emission.....	20
10.3	Smoke toxicity	20
11	Environmental influences.....	21
11.1	Resistance to ultraviolet light	21
11.2	Resistance to corrosion	21
11.2.1	General	21
11.2.2	Salt spray test	22
12	Electromagnetic compatibility	22
12.1	Electromagnetic emission	22
12.2	Inductive heating	22
Annex A (informative)	Examples of cable cleats.....	23
Annex B (informative)	Calculation of forces caused by short-circuit currents	24
B.1	Characteristics	24
B.2	Specification of the test current.....	25
B.3	Calculation of the mechanical forces between conductors.....	25
Bibliography		28
Figure 1–	Typical arrangement for impact test	13
Figure 2 –	Typical arrangements for lateral load test.....	15
Figure 3 –	Typical arrangement for axial load test.....	16
Figure 4 –	Typical assemblies for test for resistance to electromechanical force	17
Figure 5 –	Typical arrangement of three cables in trefoil formation	18
Figure 6 –	Typical arrangement of cables in flat formation	18
Figure 7 –	Typical arrangement of the needle-flame test.....	20
Figure B.1 –	Short-circuit current of a far-from-generator short circuit with constant a.c. component.....	24
Figure B.2 –	Short-circuit current of a near-to-generator short circuit with decaying a.c. component.....	25
Figure B.3 –	Two parallel conductors	26
Table 1 –	Maximum temperature for permanent application	9
Table 2 –	Minimum temperature for permanent application	9
Table 3 –	Impact test values	14
Table 4 –	Resistance to corrosion.....	22

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CABLE CLEATS FOR ELECTRICAL INSTALLATIONS**FOREWORD**

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International Standard IEC 61914 has been prepared by subcommittee 23A: Cable management systems, of IEC technical committee 23: Electrical accessories.

This second edition cancels and replaces the first edition published in 2009. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) Additional declaration and test for lateral load retention depending on cleat mounting orientation with associated new figures;
- b) Additional declaration of the distance between the cable centres in any short-circuit test and associated new figures;
- c) Specification of the cable to be used in short-circuit testing and relaxation of the ambient temperature limits for the test;
- d) Additional requirement to photograph the short-circuit test arrangement before and after the test and to record more complete details of the cable used;

e) Revised parameters for the test of resistance to UV light.

This edition also includes the following editorial changes with respect to the previous edition:

- f) Revised and updated normative references and bibliography;
- g) Editorial clarification of definitions;
- h) Editorial clarification of procedures for selection of test samples and the testing of cleats designed for more than one cable;
- i) Relaxation of some mandrel material requirements;
- j) Clarification of the inspection requirements following a short-circuit test and adding the option of either a.c. or d.c. voltage testing following a second short-circuit;
- k) Clarification that the resistance to corrosion test applies to all types of fixing;
- l) New cleat example illustration;
- m) Limitations of use of the formulae in Annex B added.

The text of this standard is based on the following documents:

FDIS	Report on voting
23A/786/FDIS	23A/795/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

In this standard, the following print types are used:

- requirements proper: in roman type;
- *test specifications: in italic type;*
- notes: in smaller roman type.

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CABLE CLEATS FOR ELECTRICAL INSTALLATIONS

1 Scope

This International Standard specifies requirements and tests for cable cleats and intermediate restraints used for securing cable in electrical installations. Cable cleats provide resistance to electromechanical forces where declared. This standard includes cable cleats that rely on a mounting surface specified by the manufacturer for axial and/or lateral retention of cables.

This standard does not apply to:

- cable glands;
- cable ties.

2 Normative references

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

IEC 60060-1:2010, *High-voltage test techniques – Part 1: General definitions and test requirements*

IEC 60695-11-5:2004, *Fire hazard testing – Part 11-5: Test flames – Needle-flame test method – Apparatus, confirmatory test arrangement and guidance*

ISO 4287:1997, *Geometrical product specifications (GPS) – Surface texture: Profile method – Terms, definitions and surface texture parameters*

ISO 4892-2:2006, *Plastics – Methods of exposure to laboratory light sources – Part 2: Xenon-arc lamps*

ISO 9227:2012, *Corrosion tests in artificial atmospheres – Salt spray tests*

3 Terms, definitions and abbreviations

For the purposes of this document, the following terms, definitions and abbreviations apply.

3.1

cable cleat

device designed to provide securing of cables when installed at intervals along the length of cables

Note 1 to entry: A cable cleat is provided with a means of attachment to a mounting surface but does not rely on an unspecified mounting surface for the retention of the cables. Examples of mounting surfaces that may be specified are ladder, tray, strut (see Figure A.8) or rail. Where declared, cable cleats provide resistance to electromechanical forces.

Note 2 to entry: See Figure A.1 to Figure A.9 for some examples of cable cleats. These examples do not limit the use of other cable cleat designs that conform to the requirements of this standard.