

Protection of persons and equipment by enclosures — Probes for verification

The European Standard EN 61032:1998 has the status of a
British Standard

ICS 19.080

National foreword

This British Standard is the English language version of EN 61032:1998. It is identical with IEC 61032:1997, including Corrigendum January 2003. It supersedes BS 3042:1992 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GEL/70, Protective enclosures of electrical apparatus, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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Summary of pages

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Descriptors: Electrical equipment, enclosure for electrical equipment, degree of protection, accident prevention, equipment protection, verification, range

English version

Protection of persons and equipment by enclosures — Probes for verification

(IEC 61032:1997)

Protection des personnes et des matériels par les
enveloppes —
Calibres d'essai pour la vérification
(CEI 61032:1997)

Schutz von Personen und Ausrüstung durch
Gehäuse —
Prüfsonden zum Nachweis
(IEC 61032:1997)

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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

The text of document 70/82/FDIS, future edition 2 of IEC 61032, prepared by IEC TC 70, Degrees of protection by enclosures, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61032 on 1998-01-01.

This European Standard supersedes HD 601 S1:1991.

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) 1998-10-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1998-10-01

Annexes designated “normative” are part of the body of the standard.

Annexes designated “informative” are given for information only.

In this standard, Annex ZA is normative and Annex A and Annex B are informative. Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61032:1997 was approved by CENELEC as a European Standard without any modification.

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1. General

1.1 Scope and object

This International Standard specifies details and dimensions of test probes intended to verify the protection provided by enclosures with regard to:

- protection of persons against access to hazardous parts inside the enclosure;
- protection of the equipment inside the enclosure against ingress of solid foreign objects.

The object of this International Standard is:

- to bring together in one publication object probes and access probes currently specified in other standards, together with any necessary new probes;
- to guide technical committees in the selection of test probes;
- to encourage those concerned to specify test probes in accordance with those already specified in this International Standard rather than modify details and dimensions;
- to limit the further proliferation of types of test probe.

1.2 General recommendations

When selecting probes, priority should be given to IP code probes.

The use of other probes, particularly probes which are not specified in this International Standard, should be limited to cases where the use of an IP code probe is for some reason impractical.

NOTE 1 The selection of a test probe for a particular purpose is the responsibility of the relevant technical committees.

NOTE 2 Technical committees wishing to develop new probes or to modify existing probes should submit proposals to technical committee 70 for amendment of this standard.

Application of the probes, test conditions, acceptance conditions and the procedure in case of conflicting test results are the responsibility of the relevant product committee.

Certificates based on test probes conforming to the first edition of IEC 61032 should remain valid.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60050 (826):1982, *International Electrotechnical Vocabulary (IEV) — Chapter 826: Electrical installations of buildings*.

IEC 60529:1989, *Degrees of protection provided by enclosures (IP Code)*.

IEC 60536:1976, *Classification of electrical and electronic equipment with regard to protection against electric shock*.

ISO 4287-1:1984, *Surface roughness — Terminology — Part 1: Surface and its parameters*.

3 Definitions

For the purpose of this International Standard the following definitions apply:

3.1

enclosure

a part providing protection of equipment against certain external influences and, in any direction, protection against direct contact
[IEV 826-03-12]

NOTE This definition taken from the International Electrotechnical Vocabulary (IEV) needs the following additional explanations:

- a) Enclosures provide protection of persons or livestock against access to hazardous parts.
- b) Barriers, shapes of openings or any other means — whether attached to the enclosure or formed by the enclosed equipment — suitable to prevent or limit the penetration of the specified test probes are considered as a part of the enclosure, except when they can be removed without the use of a key or tool.

(see 3.1 of IEC 60529)