Irish Standard
I.S. EN 50340:2010

Hydraulic cable cutting devices - Devices to be used on electrical installations with nominal voltage up to AC 30 kV

I.S. EN 50340:2010

Incorporating amendments/corrigenda issued since publication:

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Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD

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Supersedes EN 50340:2001 + corr. Feb.2002

English version

Hydraulic cable cutting devices - Devices to be used on electrical installations with nominal voltage up to AC 30 kV

Dispositifs coupe câbles hydrauliques - Dispositifs à utiliser sur des installations électriques de tension nominale jusqu'à 30 kV en courant alternatif

Hydraulische Kabelschneidgeräte - Geräte zur Verwendung an elektrischen Anlagen mit Nennwechselspannungen bis 30 kV

This European Standard was approved by CENELEC on 2010-04-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard 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.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

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Foreword

This European Standard EN 50340 was prepared by the Technical Committee CENELEC TC 78, Equipment and tools for live working. It was submitted to the formal vote as an amendment and was approved by CENELEC as a new edition of EN 50340 on 2010-04-01.

This EN 50340:2010 supersedes EN 50340:2001.

The principal changes compared to EN 50340:2001 are as follows (minor changes are not listed):

- In the scope were defined limits for the pressure inside the cable cutting devices, to ensure that the products are outside the Pressure Equipment Directive.

- The definitions were corrected and defined more clearly.

- According to the operating method and the local regulation, two possible insulating hose assemblies can be applicable:

  - Method A: The insulating hose assembly has a length of 10 m. Detailed references to EN 62237 with some amendments have been added for checking the insulation hose line. In Annex A is recommended a distance of minimum 10 m as safety zone.

  - Method B: The insulating hose assembly consists of 3 m non insulating hose plus 320 mm hose according to EN 62237 which gives a sufficient insulation for the worker.

- A note was inserted in 5.6 and 5.12 to consider the kind of working of the safety valve.

- The parameters of the metal wire were inserted in 5.7.

- Subclause 5.10 was renamed into “Stability” and the conditions of the test were amended.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

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)	2011-04-01
– latest date by which the national standards conflicting with the amendment have to be withdrawn	(dow)	2013-04-01

The cable cutting devices specified here are designed to protect the user while he is verifying whether the cable is dead.

In some countries, it is necessary where the cable to be cut is live that the first action of the cutting device is to make, on a multi-phases cable, only a single-phase fault to earth so that the protective devices of the network can operate on a single-phase fault.

This European Standard specifies requirements and tests for these cable cutting devices.

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1 Scope

This European Standard is applicable to cable cutting devices to be used to verify that a cable is dead in accordance with the rules given in EN 50110-1.

The following limits apply to the cable cutting devices:

- pressure less than 1 000 bar or pressure (bar) x volume (l) less than 10 000;
- fluid outside the categories listed in Article 9 Group 1 (explosive, extremely flammable, highly flammable, flammable (where the maximum allowable temperature is above flashpoint), very toxic, toxic, oxidizing) of the Pressure Equipment Directive.

Cable cutting devices specified in this standard are for use on systems with nominal voltage up to 30 kV AC and nominal frequencies up to 60 Hz and shall only be suitable for operation by foot or by hand. This European Standard does not deal with motorised cable cutting devices.

For devices to be used on systems with nominal voltages above 30 kV AC this standard should be used as a guide but additional requirements and tests shall be agreed between manufacturer and customer to provide for an equivalent level of safety.

These devices are not designed to be used on cables with special armour, or with steel wires or steel tapes more than 1 mm in diameter or thickness.

2 Normative references

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

EN 10016-2:1994, *Non-alloy steel rod for drawing and/or cold rolling – Part 2: Specific requirements for general purposes rod*

EN 12164:1998 + A1:2000, *Copper and copper alloys – Rod for free machining purposes*

EN 50110-1:2004, *Operation of electrical installations*

EN 60156:1995, *Insulating liquids – Determination of the breakdown voltage at power frequency – Test method* (IEC 60156:1995)

EN 61111:2009, *Live working – Electrical insulating matting* (IEC 61111:2009)

EN 61230:1995 [1)], *Live working – Portable equipment for earthing or earthing and short-circuiting* (IEC 61230:1993, mod.)

EN 61318:2008, *Live working – Conformity assessment applicable to tools, devices and equipment* (IEC 61318:2007)

EN 62237:2005, *Live working – Insulating hoses with fittings for use with hydraulic tools and equipment* (IEC 62237:2003, mod.)

[1)] Superseded by EN 61230:2008, *Live working – Portable equipment for earthing or earthing and short-circuiting* (IEC 61230:2008).