

© Copyright SEK. Reproduction in any form without permission is prohibited.

Handhållna och transportabla elverktyg samt trädgårdsmaskiner – Säkerhet – Del 3-6: Särskilda fordringar på transportabla diamanthörmaskiner med vattenanslutning

*Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery –
Safety –
Part 3-6: Particular requirements for transportable diamond drills with liquid system*

Som svensk standard gäller europastandarden EN 62841-3-6:2014. Den svenska standarden innehåller den officiella engelska språkversionen av EN 62841-3-6:2014.

Nationellt förord

Europastandarden EN 62841-3-6:2014

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 62841-3-6, First edition, 2014^{*)} - Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3-6: Particular requirements for transportable diamond drills with liquid system**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med SS-EN 62841-1, utgåva 1, 2015.

Tidigare fastställd svensk standard SS-EN 61029-2-6, utgåva 1, 2010, gäller ej fr o m 2019-08-21.

^{*)}Corrigendum, May 2015 till IEC 62841-3-6:2014 är inarbetat i standarden.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

Genom att utforma sådana standarder blir säkerhetsfordringar tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

SEK Svensk Elstandard

Box 1284
164 29 Kista
Tel 08-444 14 00
www.elstandard.se

English Version

**Electric motor-operated hand-held tools, transportable tools and
lawn and garden machinery - Safety - Part 3-6: Particular
requirements for transportable diamond drills with liquid system
(IEC 62841-3-6:2014)**

Outils électroportatifs à moteur, outils portables et machines
pour jardins et pelouses - Sécurité - Partie 3-6: Exigences
particulières pour les forets diamantés transportables avec
système liquide
(CEI 62841-3-6:2014)

Elektrische motorbetriebene handgeführte Werkzeuge,
transportable Werkzeuge und Rasen- und
Gartenmaschinen - Sicherheit - Teil 3-6: Besondere
Anforderungen für transportable Diamantbohrmaschinen
mit Flüssigkeitssystem
(IEC 62841-3-6:2014)

This European Standard was approved by CENELEC on 2014-05-02. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of document 116/165/FDIS, future edition 1 of IEC 62841-3-6, prepared by IEC/TC 116 "Safety of motor-operated electric tools" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62841-3-6:2014.

A draft amendment, which covers common modifications to IEC 62841-3-6:2014, was prepared by CLC/TC 116 "Safety of motor-operated electric tools" and approved by CENELEC.

The following dates are fixed:

- latest date by which this document has (dop) 2015-05-02
to be implemented at national level
by publication of an identical
national standard or by endorsement
- latest date by which the national (dow) 2019-08-21
standards conflicting with this document
have to be withdrawn

ANM – (sv anm) Uppgifter om andra, felaktiga datum har tidigare cirkulerat i CENELEC.

EN 62841-3-6:2014 supersedes EN 61029-2-6:2010.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 62841-3-6 are prefixed "Z".

This European Standard is divided into four parts:

- Part 1: General requirements which are common to most electric motor operated tools (for the purpose of this standard referred to simply as tools) which could come within the scope of this standard;
- Part 2, 3 or 4: Requirements for particular types of tools which either supplement or modify the requirements given in Part 1 to account for the particular hazards and characteristics of these specific tools.

This Part 3-6 is to be used in conjunction with EN 62841-1:2015. When this standard states "addition", "modification" or "replacement", the relevant text in Part 1 is to be adapted accordingly.

Subclauses, tables and figures which are additional to those in Part 1 are numbered starting from 101.

Compliance with the clauses of Part 1 together with this Part 3-6 provides one means of conforming with the essential health and safety requirements of the Directive concerned.

Warning: Other requirements and other EU Directives can be applicable to the products falling within the scope of this standard.

This European Standard follows the overall requirements of EN ISO 12100.

NOTE In this standard the following print types are used:

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

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

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

CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references	5
3 Terms and definitions	5
4 General requirements	5
5 General conditions for the tests	6
6 Radiation, toxicity and similar hazards.....	6
7 Classification.....	6
8 Marking and instructions.....	6
9 Protection against access to live parts.....	7
10 Starting	7
11 Input and current	7
12 Heating.....	8
13 Resistance to heat and fire.....	8
14 Moisture resistance	8
15 Resistance to rusting.....	8
16 Overload protection of transformers and associated circuits	8
17 Endurance.....	8
18 Abnormal operation	9
19 Mechanical hazards.....	9
20 Mechanical strength	10
21 Construction	10
22 Internal wiring.....	11
23 Components	11
24 Supply connection and external flexible cords	11
25 Terminals for external conductors.....	11
26 Provision for earthing	11
27 Screws and connections	11
28 Creepage distances, clearances and distances through insulation.....	11
Annexes	14
Annex I (informative) Measurement of noise and vibration emissions.....	14
Annex K (normative) Battery tools and battery packs	16
Bibliography.....	17
Figure 101 – Example of a diamond drill with liquid system.....	12
Figure 102 – Test arrangement to check efficiency of the liquid collection device	13
Table 4 – Required performance levels.....	9
Table I.101 – Test conditions for noise and vibration	14
Table I.102 – Concrete formulation (per cubic metre).....	15
Table I.103 – Depth of holes for the test	15

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS, TRANSPORTABLE
TOOLS AND LAWN AND GARDEN MACHINERY –
SAFETY –****Part 3-6: Particular requirements for transportable
diamond drills with liquid system**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

This part of International Standard IEC 62841 has been prepared by technical committee 116: Safety of motor-operated electric tools.

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

FDIS	Report on voting
116/165/FDIS	116/179/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.

This Part 3-6 is to be used in conjunction with IEC 62841-1:2014.

This Part 3-6 supplements or modifies the corresponding clauses in IEC 62841-1, so as to convert it into the IEC Standard: *Particular requirements for transportable diamond drills with liquid system*.

Where a particular subclause of Part 1 is not mentioned in this Part 3-6, that subclause applies as far as is reasonable. Where this standard states "addition", "modification" or "replacement", the relevant text in Part 1 is to be adapted accordingly.

The following print types are used:

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

The terms defined in Clause 3 are printed in **bold typeface**.

Subclauses, notes and figures which are additional to those in Part 1 are numbered starting from 101.

A list of all parts of the IEC 62841 series, under the general title: *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

NOTE The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 36 months from the date of publication.

The contents of the corrigendum of May 2015 have been included in this copy.

ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS, TRANSPORTABLE TOOLS AND LAWN AND GARDEN MACHINERY – SAFETY –

Part 3-6: Particular requirements for transportable diamond drills with liquid system

1 Scope

This clause of Part 1 is applicable except as follows:

Addition:

This part of IEC 62841 applies to transportable **diamond drills**, intended to be connected to a liquid system. Liquid system may include liquid from a pipe or container.

2 Normative references

This clause of Part 1 is applicable.