



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 50017:1999

ICS 29.260.20

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**ELECTRICAL APPARATUS FOR  
POTENTIALLY EXPLOSIVE ATMOSPHERES  
POWDER FILLING "Q"**

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authority of the National  
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**EN 50017**

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Supersedes EN 50017:1994

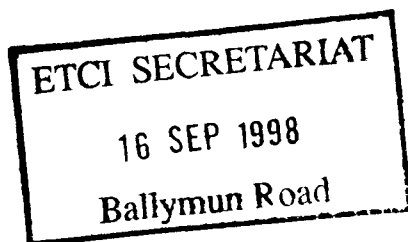
Descriptors: Electrical apparatus, potentially explosive atmosphere, explosive atmosphere, explosion proofing, specific requirement, powder filling "q"

English version

**Electrical apparatus for potentially explosive atmospheres  
Powder filling "q"**

Matériel électrique pour atmosphères  
explosibles  
Remplissage pulvérulent "q"

Elektrische Betriebsmittel für  
explosionsgefährdete Bereiche  
Sandkapselung "q"



This European Standard was approved by CENELEC on 1998-08-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**CENELEC**

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

This European Standard was prepared by Technical Committee CENELEC TC31, Electrical apparatus for explosive atmospheres - General Requirements.

It consists of the text of EN 50017:1994 and a draft amendment to this second edition which was submitted to the unique acceptance procedure and received a positive vote. The second edition and the amendment have been combined to form an "editorial" third edition which was approved by CENELEC on 1998-08-01.

This European Standard was prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and supports the essential health and safety requirements of EC Directive 94/9/EC.

This European Standard is to be read in conjunction with EN 50014:1997 Electrical Apparatus for potentially explosive atmospheres – General requirements, and with the European Standards for the specific types of protection listed in the scope of EN 50014:1997. This European Standard should not be considered in conjunction with any editions of these standards and their amendments published before 1997.

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) 1999-06-01
- latest date by which the national standards  
conflicting with the EN have to be withdrawn (dow) -

Annexes designated "normative" are part of the body of the standard.  
In this standard Annex A is normative.

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## 1 Scope

1.1 This European Standard contains the specific requirements for the construction, testing and marking of electrical apparatus, parts of electrical apparatus and Ex components in the type of protection powder filling 'q', intended for use in potentially explosive atmospheres of gas, vapour and mist.

Potentially explosive atmospheres include the presence of combustible dusts.

This European Standard covers only Category 2G and Category M2.

NOTE: Powder-filled electrical apparatus and Ex Components may contain electronic circuits, transformers, protection fuses, relays, intrinsically safe electrical apparatus, associated electrical apparatus, switches, etc.

1.2 This European Standard supplements EN 50014, insofar as it applies to powder-filled electrical apparatus.

1.3 This European Standard applies only to electrical apparatus, parts of electrical apparatus and Ex components with

- a rated supply voltage less than or equal to 1000 V;
- a rated current less than or equal to 16 A;
- a rated power less than or equal to 1000 VA.

## 2 Normative references

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

EN 50014	Electrical apparatus for potentially explosive atmospheres General requirements
EN 50019	Electrical apparatus for potentially explosive atmospheres Increased safety 'e'
EN 50020	Electrical apparatus for potentially explosive atmospheres Intrinsic safety 'i'
EN 60127	Miniature fuses (IEC 60127 series)
EN 60269	Low-voltage fuses (IEC 60269 series)
EN 60529	Degrees of protection provided by enclosures (IP Code) (IEC 60529: 1989)

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