

Specification for

Electrostatic hand-held spraying equipment for non-flammable material for painting and finishing

This European Standard EN 50059:1990 has the status of a
British Standard

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW



Document Sharing Hub

Cooperating organizations

The European Committee for Electrotechnical Standardization (CENELEC), under whose supervision this European Standard was prepared, comprises the National Committees of the following countries:

Austria	Italy
Belgium	Luxemburg
Denmark	Netherlands
Finland	Norway
France	Portugal
Germany	Spain
Greece	Sweden
Iceland	Switzerland
Ireland	United Kingdom

This British Standard was published under the authority of the Board of BSI and comes into effect on 28 February 1991

© BSI 01-2000

The following BSI references relate to the work on this standard:
Committee reference GEL/114
Draft for comment 83/20345 DC

ISBN 0 580 19324 1

Amendments issued since publication

Amd. No.	Date of issue	Comments

Contents

	Page
Cooperating organizations	Inside front cover
National foreword	ii
Text of EN 50059	3
National appendix NA	12
National appendix NB	Inside back cover

National foreword

This British Standard has been prepared under the direction of the General Electrotechnical Standards Policy Committee and is the English language version of EN 50059 “*Specification for electrostatic hand-held spraying equipment for non-flammable material for painting and finishing*”.

Cross-references. Where there are British Standards corresponding to IEC publications, European Standards and CENELEC Harmonization Documents quoted in this standard the relationship is given in National appendix NB.

Product certification. Users of this British Standard are advised to consider the desirability of third party certification of product conformity with this British Standard based on testing and continuing surveillance, which may be coupled with assessment of a supplier’s quality systems against the appropriate Part of BS 5750.

Enquiries as to the availability of third party certification schemes will be forwarded by BSI to the Association of Certification Bodies. If a third party certification scheme does not already exist, users should consider approaching an appropriate body from the list of Association members.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 12, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

UDC 667.661.23-83:621.319.7:620.1:614.83

Descriptors: Electrical apparatus, non-flammable spraying material, hand-held electrostatic spraying equipment, constructional requirement

English version

Specification for electrostatic hand-held spraying equipment for non-flammable material for painting and finishing

Spécifications pour les équipements manuels de projection électrostatique de produits inflammables pour peinture et finition

Bestimmungen für elektrostatische Handsprüheinrichtungen für nichtbrennbare Sprühstoffe für Beschichtungen

This European Standard was approved by CENELEC on 9 December 1986. 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 list 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, 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

© 1990 Copyright reserved to CENELEC members

IEC Publications referred to in European Standard EN 50059:

IEC 664:1980 and 664A:1981 *Insulation co-ordination within low-voltage systems including clearances and creepage distances for equipment.*

European Standards referred to in European Standard EN 50059:

- EN 50014:1977 (1st edition) *Electrical apparatus for potentially explosive atmospheres — General requirements* [including amendment 1 (July 1979), amendment 2 (June 1982), amendment 3 (December 1982), amendment 4 (December 1982) and amendment 5 (February 1986)].
- EN 50019:1977 (1st edition) *Electrical apparatus for potentially explosive atmospheres — Increased safety “e”* [including amendment 1 (July 1979), amendment 2 (September 1983) and amendment 3 (December 1985)].
- EN 50020:1977 (1st edition) *Electrical apparatus for potentially explosive atmospheres — Intrinsic safety “i”* [including amendment 1 (July 1979) and amendment 2 (December 1985)].
- EN 50050:1986 (1st edition) *Electrical apparatus for potentially explosive atmospheres — Electrostatic hand-held spraying equipment.*

CENELEC Harmonization document referred to in European Standard EN 50059:

HD 365 S3 *Classification of degrees of protection provided by enclosures* [IEC 529:1976 and amendments 1 and 2].

Contents

	Page
1 Scope	3
2 Definitions	3
3 Constructional requirements	3
4 Supply of spraying material	4
5 Type verifications and tests	5
6 Manufacturer's responsibility	7
7 Marking	7
8 Instruction manual	7
Annex A	11
Annex B	11
Figure 1	8
Figure 2	8
Figure 3	8
Figure 4	8
Figure 5	8
Figure 6	8
Figure 7	9
Figure 8	9
Figure 9	9
Figure 10 — Example of test rig for impact test	10