BRITISH STANDARD

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IEC 60034-7:1992
Incorporating Amendment No. 1

Rotating electrical machines —

Part 7: Classification of types of construction, mounting arrangements and terminal box position (IM Code)

The European Standard EN 60034-7:1993 with the incorporation of amendment A1:2001 has the status of a British Standard

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This British Standard, having been prepared under the direction of the Power Electrical Engineering Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 15 October 1993

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Amendments issued since publication

Amd. No.	Date	Comments
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The following BSI references relate to the work on this standard:
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National foreword

This British Standard has been prepared under the direction of the Power Electrical Engineering Standards Policy Committee and is the English language version of EN 60034-7:1993 *Rotating electrical machines — Part 7: Classification of types of construction mounting arrangements, and terminal box position (IM Code)* including amendment A1:2001 published by the European Committee for Electrotechnical Standardization (CENELEC). It was derived by CENELEC from IEC 60034-7:1992 including amendment 1:2000 published by the International Electrotechnical Commission (IEC).

This British Standard supersedes BS 4999-107:1987 which is withdrawn.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 25 and a back cover.

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Descriptors: Rotating electrical machine, classification, designation, types of construction, mounting arrangements, IM code

English version

Rotating electrical machines — Part 7: Classification of types of construction, mounting arrangements and terminal box position (IM Code)

(includes amendment A1:2001)
(IEC 60034-7:1992 + A1:2000)

Machines électriques tournantes —
Partie 7: Classification des modes de construction, des dispositions de montage et position de la boîte à bornes (Code IM)
(inclut l'amendement A1:2001)
(CEI 60034-7:1992 + A1:2000)

Drehende elektrische Maschinen —
Teil 7: Klassifizierung der Bauarten, der Aufstellungsarten und der Klemmkasten-Lage (IM-Code)
(enthält Änderung A1:2001)
(IEC 60034-7:1992 + A1:2000)

This European Standard was approved by CENELEC on 1992-03-24. Amendment A1 was approved by CENELEC on 2000-11-01. 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.

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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.

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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 2H(CO)29, as prepared by subcommittee 2H: Degrees of protection, methods of cooling and mounting arrangements, of IEC technical committee 2: Rotating machinery, was submitted to the IEC-CENELEC parallel vote in July 1991.

The reference document was approved by CENELEC as EN 60034-7 on 24 March 1992.

The following dates were fixed:

— latest date of publication of an identical national standard (dop) 1993-12-01

— latest date of withdrawal of conflicting national standards (dow) 1993-12-01

Foreword to amendment A1

The text of document 2/1095/FDIS, future amendment 1 to IEC 60034-7:1992, prepared by IEC TC 2, Rotating machinery, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A1 to EN 60034-7:1993 on 2000-11-01.

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) 2001-08-01

— latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2003-11-01

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Section 1. Scope and definitions

1.1 Scope

This part of IEC 34 specifies the IM code, a classification of types of construction and mounting arrangements of rotating electrical machines.

Two systems of classification are provided as follows:

— Code I (see section 2): An alpha-numeric designation applicable to machines with endshield bearing(s) and only one shaft extension.

— Code II (see section 3): An all-numeric designation applicable to a wider range of types of machines including types covered by Code I.

The type of machine not covered by Code II should be fully described in words.

The relationship between Code I and Code II is given in Annex A.

1.2 Definitions

For the purposes of this part of IEC 34, the following definitions apply:

1.2.1
type of construction
the arrangement of machine components with regard to fixings, bearing arrangement and shaft extension (IEV 411-13-34)[1)]

1.2.2
mounting arrangement
the orientation on site of the machine as the whole with regard to shaft alignment and position of fixings (IEV 411-13-35)

1.2.3
shaft extension
a portion of a shaft extending beyond an extreme bearing (IEV 411-13-07)

NOTE The bearing may be on the machine itself or be part of an assembly comprising a machine and (an) additional bearing(s).

1.2.4
drive-end of a machine (D-end)
that end of the machine which accommodates the shaft end (IEV 411-13-36)

NOTE This is normally the driving end of a motor or the driven end of a generator.

Where for some machines the above definition is inadequate, the D-end is defined as follows:

a) machine with two shaft extensions of different diameter: the end with the larger shaft diameter;

b) machine with a cylindrical shaft extension and a conical shaft extension of the same diameter: the end with cylindrical shaft extension;

c) machine with other arrangements: according to IEC 34-8 if applicable; otherwise by agreement.

NOTE The outer diameter of a forged-on flange is taken to be the diameter of the shaft extension.

1.2.5
non-drive end of the machine (N-end)
that end of the machine opposite to the drive end (IEV 411-13-37)

[1)] IEC 50 (411):1973, International Electrotechnical Vocabulary (IEV), Chapter 411: Rotating machines.

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Section 2. Code I (Alpha-numeric designation)

2.1 Designation of machines with horizontal shafts

In Code I, a machine with a horizontal shaft is designated by the Code letters IM (International Mounting), followed by a space, the letter B and one or two numerals, as shown in Table 1.

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