

FINAL VERSION

VERSION FINALE

**Rotating electrical machines –
Part 8: Terminal markings and direction of rotation**

**Machines électriques tournantes –
Partie 8: Marques d'extrémité et sens de rotation**



CONTENTS

FOREWORD.....	5
INTRODUCTION.....	7
1 Scope.....	8
2 Normative references	8
3 Terms and definitions	8
4 Symbols	10
4.1 General.....	10
4.2 DC and single-phase commutator machines	10
4.3 AC machines without commutators.....	10
4.4 Auxiliary devices	11
5 Direction of rotation	11
6 Rules for terminal markings	11
6.1 General	11
6.2 Suffixes.....	12
6.3 Prefixes.....	13
6.4 Winding identification for categories of machines	13
6.5 Synchronous machines	14
6.6 DC machines.....	14
6.7 Relation between terminal markings and direction of rotation	14
6.8 Terminal marking figures	15
7 Auxiliary terminal marking rules.....	20
7.1 General.....	20
7.2 Marking.....	20
 Annex A (normative) Connection diagrams for common applications.....	 23
 Figure 1 – Single three-phase winding, three elements, open connection, six terminals	 15
Figure 2 – Single three-phase winding, delta connection, three terminals	16
Figure 3 – Single three-phase winding, internal star connection with neutral conductor, four terminals.....	16
Figure 4 – Single three-phase winding, two elements per phase, open connection, twelve terminals.....	16
Figure 5 – Single three-phase winding, four elements per phase, open connection, twenty-four terminals	16
Figure 6 – Single three-phase winding, two elements per phase with four tapping points per element, open connection, thirty-six terminals	17
Figure 7 – Two separate three-phase windings with two independent functions, two elements per phase, open connection, twenty-four terminals	17
Figure 8 – Two elements, internal connection, three terminals	17
Figure 9 – Single three-phase winding, star connection, duplicate terminals for alternate connection, six terminals	17
Figure 10 – Single three-phase winding, star connection, parallel terminals for shared current, six terminals	18

Figure 11 – Three-phase wound-rotor, star connections with neutral conductors, eight terminals.....	18
Figure 12 – Main and auxiliary winding, two elements.....	18
Figure 13 – Single-phase auxiliary winding, integrally connected capacitor, one element	18
Figure 14 – Single-phase main winding, integrally connected thermal protector, one element	18
Figure 15 – Six-phase winding, open connection, six elements	18
Figure 16 – Armature winding, one element	19
Figure 17 – Commutating winding, one and two elements	19
Figure 18 – Compensating winding, one and two elements	19
Figure 19 – Series winding, one element, two tappings.....	19
Figure 20 – Shunt excitation winding, one element	19
Figure 21 – Separately excited excitation winding, one and two elements.....	19
Figure 22 – Direct-axis auxiliary winding, one element.....	19
Figure 23 – Quadrature-axis auxiliary winding, one element	19
Figure 24 – Armature winding with commutating and compensating windings, one element	19
Figure 25 – Single-phase, single voltage	20
Figure 26 – Single-phase, dual voltage	20
Figure 27 – Three-phase, single voltage	21
Figure 28 – Three-phase, dual voltage.....	21
Figure 29 – Two-lead devices (except type R)	21
Figure 30 – Two-lead devices of type R	21
Figure 31 – Three-lead devices of type R.....	22
Figure 32 – Four-lead devices of type R	22
Figure 33 – Switch connections	22
Figure A.1 – Delta connection.....	23
Figure A.2 – Star connection – with or without neutral	23
Figure A.3 – Dual voltage, six terminals (1: $\sqrt{3}$).....	23
Figure A.4 – Star-connected, dual voltage, nine terminals (1:2)	24
Figure A.5 – Delta-connected, dual voltage, nine terminals (1:2).....	24
Figure A.6 – Star-delta, single voltage, six terminals.....	24
Figure A.7 – Star-delta, dual voltage, twelve terminals (1:2)	25
Figure A.8 – Part-winding, single voltage, six terminals	25
Figure A.9 – Part-winding, dual voltage, nine terminals (1:2).....	26
Figure A.10 – Variable-torque, six terminals	26
Figure A.11 – Variable-torque, dual-voltage (1: $\sqrt{3}$), nine terminals	27
Figure A.12 – Constant-torque, six terminals	28
Figure A.13 – Constant power, six terminals	28
Figure A.14 – Variable-torque, six terminals	29
Figure A.15 – Constant-torque, seven terminals.....	29
Figure A.16 – Constant-power, seven terminals	29

Figure A.17 – Example of three-speed, constant torque motor using two separate windings, ten terminals 30

Figure A.18 – Example of three-speed motor using three separate windings, ten terminals..... 30

Figure A.19 – Example of four-speed, variable-torque motor using two separate windings, twelve terminals 31

Figure A.20 – Split-phase or capacitor-start reversible motor 31

Figure A.21 – Reversible capacitor-start motor with four terminals with externally connected capacitor 32

Figure A.22 – Shunt motor or generator, four terminals..... 32

Figure A.23 – Compound-motor or generator with compensating and commutating windings, six terminals 32

Figure A.24 – Series-wound motor, two terminals 33

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ROTATING ELECTRICAL MACHINES –

Part 8: Terminal markings and direction of rotation

FOREWORD

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This Consolidated version of IEC 60034-8 bears the edition number 3.1. It consists of the third edition (2007-06) [documents 2/1434/FDIS and 2/1451/RVD] and its amendment 1 (2014-03) [documents 2/1732/FDIS and 2/1743/RVD]. The technical content is identical to the base edition and its amendment.

Cette version Finale ne montre pas les modifications apportées au contenu technique par l'amendement 1. Une version Redline montrant toutes les modifications est disponible dans cette publication.

This publication has been prepared for user convenience.

International Standard IEC 60034-8 has been prepared by IEC technical committee 2: Rotating machinery.

The main change with respect to the previous edition is listed below:

- changed terminal markings for d.c. machines in Clause A.4.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts of the IEC 60034 series, under the general title *Rotating electrical machines*, can be found on the IEC website.

The committee has decided that the contents of the base publication and its amendment 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.

INTRODUCTION

The revision of this part of IEC 60034 provides worldwide uniformity in the electrical connections for rotating electrical machines and applies the recommendations of the basic safety publication IEC 60445 in specifying marking requirements.

These standardized connections will then permit the safe interchange of electric machines with their control and protective devices using standardized terminal markings.

ROTATING ELECTRICAL MACHINES –

Part 8: Terminal markings and direction of rotation

1 Scope

This part of IEC 60034 applies to a.c. and d.c. machines and specifies

- a) rules for the identification of winding connection points;
- b) marking of winding terminals;
- c) direction of rotation;
- d) relationship between terminal markings and direction of rotation;
- e) terminal marking of auxiliary devices;
- f) connection diagrams of machines for common applications.

Turbine-type synchronous machines are excluded from this standard.

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.

IEC 60034-1, *Rotating electrical machines – Part 1: Rating and performance*

IEC 60417-1, *Graphical symbols for use on equipment – Part 1: Overview and application*

IEC 60445, *Basic and safety principles for man-machine interface, marking and identification – Identification of equipment terminals and conductor terminations*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60034-1 and the following apply.

3.1

terminal marking

permanent identification of the external termination of winding leads or auxiliary leads at the disposal of the user for connection of the machine to the supply or apparatus that indicates the function of the termination

3.2

connecting points

all current transfer points that are used to permanently interconnect winding or winding element ends internally