



MALAYSIAN STANDARD

MS IEC 60038:2006

**IEC STANDARD VOLTAGES
(IEC 60038:2002, IDT)**

ICS: 29.020

Descriptors: voltages, frequency, alternating current transmission and distribution systems

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Preview Only

Committee representation

The Electrotechnical-1 Industry Standards Committee (ISC E-1) under whose authority this Malaysian Standard was adopted, comprises representatives from the following organisations:

Association of Consulting Engineers Malaysia
Department of Standards Malaysia
Federation of Malaysian Manufacturers
Independent Power Producers
Jabatan Kerja Raya Malaysia
Malaysian Cable Manufacturers Association
Malaysian Electrical Appliances and Distributors Association
Ministry of Domestic Trade and Consumer Affairs
Ministry of International Trade and Industry
Persatuan Pengguna-Pengguna Standard Malaysia
Pusat Tenaga Malaysia
SIRIM QAS International Sdn Bhd (Electrotechnical Testing Section)
SIRIM QAS International Sdn Bhd (Product Certification Inspection Section)
Suruhanjaya Komunikasi dan Multimedia Malaysia
Suruhanjaya Tenaga
Tenaga Nasional Berhad
The Electrical and Electronics Association of Malaysia
The Institution of Engineers, Malaysia
Universiti Teknologi Malaysia

The Technical Committee on Generation, Conversion, Transformation and Storage of Electrical Energy which supervised the adoption of the IEC Standard consists of representatives from the following organisations:

Jabatan Kerja Raya Malaysia
SIRIM Berhad (Secretariat)
SIRIM QAS International Sdn Bhd (Electrotechnical Testing Section)
SIRIM QAS International Sdn Bhd (Product Certification Inspection Section)
Suruhanjaya Tenaga
Tenaga Nasional Berhad
The Electrical and Electronics Association of Malaysia
The Institution of Engineers, Malaysia
TNB Remaco Sdn Bhd
Universiti Malaya
Universiti Teknologi Malaysia

The Working Group on Voltage and Frequency which recommends adoption of the IEC Standard consists of representatives from the following organisations:

Association of Consulting Engineers Malaysia
Jabatan Kerja Raya Malaysia
Malaysian Electrical Appliances Distributors Association
PETRONAS Carigali Sdn Bhd
SIRIM Berhad (Secretariat)
SIRIM QAS International Sdn Bhd (Electrotechnical Testing Section)
Suruhanjaya Tenaga
Tenaga Nasional Berhad
The Electrical and Electronics Association of Malaysia
The Institution of Engineers, Malaysia
Universiti Malaya
Universiti Teknologi Malaysia
Universiti Tenaga Nasional

NATIONAL FOREWORD

The adoption of the IEC Standard as a Malaysian Standard was recommended by the Working Group on Voltage and Frequency under the authority of the Electrotechnical-1 Industry Standards Committee.

This Malaysian Standard is identical with IEC 60038:2002, *IEC standard voltages*, published by the International Electrotechnical Commission (IEC). However, for the purposes of this Malaysian Standard, the following apply:

- a) in the source text, “this International Standard” should read “this Malaysian Standard”;
- b) the comma which is used as a decimal sign (if any), to read as a point; and
- c) the basis IEC 60038:2002 is printed in English and French languages. However, only the English version is applied for this Malaysian Standard.

This Malaysian Standard cancels and replaces MS 406:1996, *Specification for voltages and frequency for alternating current transmission and distribution systems*.

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

NOTE. IDT on the front cover indicates an identical standard i.e. a standard where the technical content, structure, and wording (or is an identical translation) of a Malaysian Standard is exactly the same as in an International Standard or is identical in technical content and structure although it may contain the minimal editorial changes specified in clause 4.2 of ISO/IEC Guide 21-1.

INTERNATIONAL ELECTROTECHNICAL COMMISSION

IEC STANDARD VOLTAGES

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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 the 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 National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
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- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60038 has been prepared by IEC technical committee 8: Standard Voltages, Current Ratings and Frequencies.

This sixth edition supersedes the fifth edition of IEC 60038 (1975), and now includes standard voltages below 120 V a.c. and 750 V d.c.

This consolidated version of IEC 60038 is based on the sixth edition (1983) [documents 8(CO)1132 and 8(CO)1133], its amendment 1 (1994) [documents 8(CO)1137+1137A and 8(CO)1138] and its amendment 2 (1997) [documents 8/1165/FDIS and 8/1166/RVD].

It bears the edition number 6.2.

A vertical line in the margin shows where the base publication has been modified by amendments 1 and 2.

The committee has decided that the contents of the base publication and its amendments 1 and 2 will remain unchanged until 2003. At this date, the publication will be

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