

# MALAYSIAN STANDARD

MS IEC 62305-1:2007

PROTECTION AGAINST LIGHTNING-PART 1: GENERAL PRINCIPLES (FIRST REVISION) (IEC 62305-1:2006, IDT)

ICS: 91.120.40, 29.020

Descriptors: lightning protection, installations and contents

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# **Committee representation**

The Electrotechnical Industry Standards Committee (ISC E) 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 Producer Association 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 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 Working Group on Lightning Protection which recommends adoption of the IEC Standard consists of representatives from the following organisations:

Association of Consulting Engineers Malaysia
Institute of Engineer Malaysia
Jabatan Kerja Raya Malaysia (Cawangan Kejuruteraan Elektrik)
Lightning Research Sdn Bhd
Markas Angkatan Tentera Malaysia
Mega Jati Consult Sdn Bhd
Pertubuhan Akitek Malaysia
SIRIM Berhad
SIRIM Berhad
SIRIM QAS International Sdn Bhd
Tenaga Nasional Berhad
The Electrical and Electronics Association of Malaysia
TM Research and Development
TNB Research Sdn Bhd
Universiti Teknologi Malaysia

#### NATIONAL FOREWORD

The adoption of the IEC Standard as a Malaysian Standard was recommended by the Technical Committee on Electromagnetic Compatibility (EMC) under the authority of the Electrotechnical Industry Standards Committee (ISC E).

This Malaysian Standard is identical with IEC 62305-1:2006, *Protection Against Lightning – Part 1: General principles*, 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";
   and
- b) the comma which is used as a decimal sign (if any), to read as a point.

MS IEC 62305 consist of the following parts, under the general title *Protection against lightning:* 

- Protection against lightning-Part 1: General principles
- Protection against lightning-Part 2: Risk management
- Protection against lightning-Part 3: Physical damage to structures and life hazard
- Protection against lightning-Part 4: Electrical and electronic systems within structures

This standard cancels and replaces

- a) MS IEC 61024-1:2001, Protection of structures against lightning Part 1: General principles
- b) MS IEC 61024-1-1:2001, Protection of structures against lightning Part 1: General principles Section 1: Guide A Selection of protection levels of lightning protection systems
- c) MS IEC 61024-1-2: 2001, Protection of structures against lightning Part 1-2: General principles, Guide B Design, installation, maintenance and inspection of lightning protection 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

## PROTECTION AGAINST LIGHTNING -

Part 1: General principles

#### **FOREWORD**

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62305-1 has been prepared by IEC technical committee 81: Lightning protection.

The IEC 62305 series (Parts 1 to 5), is produced in accordance with the New Publications Plan, approved by National Committees (81/171/RQ (2001-06-29)), which restructures and upd ates in a more simple and rational form the publications of the IEC 61024 series, the IEC 61312 series and the IEC 61663 series.

The text of this first edition of IEC 62305-1 is compiled from and replaces

- IEC 61024-1-1, first edition (1993).

The text of this standard is based on the following documents:

FDIS	Report on voting
81/262/FDIS	81/267/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

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

IEC 62305 consists of the following parts, under the general title *Protection against lightning*:

Part 1: General principles

Part 2: Risk management

Part 3: Physical damage to structures and life hazard

Part 4: Electrical and electronic systems within structures

Part 5: Services<sup>1</sup>

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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.

<sup>&</sup>lt;sup>1</sup> To be published