



NEGARA BRUNEI DARUSSALAM

**BRUNEI DARUSSALAM STANDARD
PIAWAI BRUNEI DARUSSALAM**

**PBD IEC 60364-7-712:2002
IEC 60364-7-712:2002**

Edition 1.0

**ELECTRICAL INSTALLATIONS OF BUILDINGS -
PART 7-712: REQUIREMENTS FOR SPECIAL INSTALLATIONS
OR LOCATIONS - SOLAR PHOTOVOLTAIC (PV) POWER SUPPLY
SYSTEMS.**

**ENERGY DIVISION, PRIME MINISTER'S OFFICE
IN COLLABORATION WITH MINISTRY OF DEVELOPMENT
NEGARA BRUNEI DARUSSALAM**

FOREWORD

This Brunei Darussalam Electrical Standard was prepared by the Technical Committee on Electrical Standards (TECO), Energy Division at Prime Minister's Office in collaboration with the Authority for Building and Construction Industry (ABCI), Ministry of Development, Brunei Darussalam with the objective of developing the National Electrical Standards for electrical products, systems, equipments and facilities for the local industry and consumers with reference to international standards, guidelines and procedures. In developing the national electrical standards, the aim is to promote quality, technical integrity, health, safety and environmental standards for the local industries and consumers.

This Brunei Darussalam Electrical Standard is an adoption of the International Electro Technical Commission IEC 60364-7-712: 2002 (Edition 1.0) standard and implements it as the Brunei Darussalam National Standard.

Attention is drawn to the fact that this Brunei Darussalam Electrical Standard does not confer any immunity from legal obligations in any contract for compliance to the Standard.

The National Electrical Standards are subject to periodical review according to the current needs of the local industries and consumers to keep abreast of progress in the industries and consumers concerned. Suggestions of amendments will be recorded and in due course brought to the notice of the committees concerned.

COMMITTEE MEMBERS

The Technical Committee on Electrical Standards (TECO) was tasked by the Energy Division at the Prime Minister's Office in collaboration with the Authority for Building and Construction Industry (ABCI), Ministry of Development, Brunei Darussalam for the preparation of this Brunei Darussalam Electrical Standard. The members of the Technical Committee are as follows:

- | | |
|---|---|
| 1. Awg Haji Abd Shawal Yaman
(Chairman) | Department of Electrical Services, PMO |
| 2. Awg Liaw Wai Khiong
(Co-Chairman) | Brunei Shell Petroleum Co. Sdn Bhd /
Institution of Engineering and Technology,
Brunei Darussalam |
| 3. Pg Shaharuddin Pg Haji Yusoff
(Secretary) | ABCI, Ministry of Development |
| 4. Awg William Voon
(Assistant Secretary 1) | Berakas Power Management Company, |
| 5. Awg Simon K A Leong
(Assistant Secretary 2) | KR Kamarulzaman & Associates |
| 6. Awg Haji Md Azrul Azrin Hj Md Zain | Department of Electrical Services, PMO |
| 7. Awg Md Amir Sharifuddin Haji Ali | Department of Electrical Services, PMO |
| 8. Awg Khairul Ezam Hj Mohd Zain | ABCI, Ministry of Development |
| 9. Awg Dennis Wong Tet Yin | Department of Mechanical & Electrical
Services, PWD |
| 10. Awg Nohi Irwan Surkarki Haji Pawi | Department of Fire & Rescue Services |
| 11. Awg Haji Morsidi Haji Kassim | Institut Teknologi Brunei |
| 12. Awg Haji Ismit Haji Mohamad | Institut Teknologi Brunei |
| 13. Awg Matyassin Haji Masri | Maktab Kejuruteraan Jefri Bolkiah |
| 14. Awg Sylvester Kong | Brunei Shell Petroleum Co. Sdn Bhd |
| 15. Dyg Seri Malati OKIP Hj Zolkeflee | Brunei Shell Petroleum Co. Sdn Bhd |
| 16. Awang Aristoteles Momin | Brunei LNG Sdn Bhd |
| 17. Awg Rick Liaw | Hamzah Hassan Consultant |

SUB-COMMITTEE NO. 5 MEMBERS

The Sub-Committee No. 5 (SC5) is the working groups for the Electrical Wiring Code of Practice who assisted in the preparation for the adoption of the Brunei Darussalam Electrical Standard. The members of the Sub-Committee No. 5 are :

- | | |
|---------------------------------------|---|
| 1. Awg William Voon
(Chairman) | Berakas Power Management Company, |
| 2. Awg Liaw Wai Khiong
(Secretary) | Brunei Shell Petroleum Co. Sdn Bhd
Institution of Engineering and Technology,
Brunei Darussalam |
| 3. Pg Shaharuddin Pg Haji Yusoff | ABCi, Ministry of Development |
| 4. Awg Khairul Ezam Hj Mohd Zain | ABCi, Ministry of Development |
| 5. Awg Simon K A Leong | KR Kamarulzaman & Associates |
| 6. Awg Dennis Wong Tet Yin | Department of Mechanical & Electrical
Services, PWD |
| 7. Dr Rohaniyati Salleh | Department of Mechanical & Electrical
Services, PWD |
| 8. Dyg Hajah Norhayati binti Ahmad | Department of Electrical Services, PMO |
| 9. Awg Abdul Azia bin Abdullah | Department of Electrical Services, PMO |
| 10. Awg Matyassin Haji Masri | Institut Teknologi Brunei |
| 11. Awg Haji Morsidi Haji Kassim | Maktab Kejuruteraan Jefri Bolkiah |
| 12. Awg Tony Ng | PKS Sdn Bhd |
| 13. Awg N. Sivakumar | LKH (B) Sdn Bhd |
| 14. Awg Tan Tau Minn | SEC Mashibah Sdn Bhd |

INTERNATIONAL
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Electrical installations of buildings –

**Part 7-712:
Requirements for special installations
or locations –
Solar photovoltaic (PV) power supply systems**



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This IEC International Standard has been adopted by CPRU, Ministry of Development,
Negara Brunei Darussalam as a national standard under the IEC Affiliate Country Programme**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRICAL INSTALLATIONS OF BUILDINGS –

**Part 7-712: Requirements for special installations or locations –
Solar photovoltaic (PV) power supply systems**

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.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 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 60364-7-712 has been prepared by IEC technical committee 64: Electrical installations and protection against electric shock.

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

FDIS	Report on voting
64/1229/FDIS	64/1244/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 in accordance with the ISO/IEC Directives, Part 3.

The committee has decided that the contents of this publication will remain unchanged until 2006. At this date, the publication will be

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

INTRODUCTION

The requirements of this part of IEC 60364 supplement, modify or replace certain of the general requirements contained in parts 1 to 6 of IEC 60364.

The clause numbering appearing after 712 refers to the corresponding parts or clauses of IEC 60364, parts 1 to 6. Numbering of clauses does not, therefore, necessarily follow sequentially. Numbering of figures and tables takes the number of this part followed by a sequential number.

The absence of reference to a part or a clause means that the general requirements contained in parts 1 to 6 of IEC 60364 are applicable.

ELECTRICAL INSTALLATIONS OF BUILDINGS –

Part 7-712: Requirements for special installations or locations – Solar photovoltaic (PV) power supply systems

712 Solar photovoltaic (PV) power supply systems

NOTE The abbreviation "PV" is used for "solar photovoltaic".

712.1 Scope

The particular requirements of this part of IEC 60364 apply to the electrical installations of PV power supply systems including systems with AC modules.

NOTE 1 Standards for PV equipment are being prepared by TC 82.

NOTE 2 Requirements for PV power supply systems which are intended for stand-alone operation are under consideration.

712.2 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 60050(826):1982, *International Electrotechnical Vocabulary (IEV) – Chapter 826: Electrical installations of buildings*

IEC 60439-1, *Low-voltage switchgear and controlgear assemblies – Part 1: Type-tested and partially type-tested assemblies*

IEC/TR 60755, *General requirements for residual current operated protective devices*
Amendment 2 (1992)

IEC 60904-3, *Photovoltaic devices – Part 3: Measurement principles for terrestrial photovoltaic (PV) solar devices with reference spectral irradiance data*

IEC 61215, *Crystalline silicon terrestrial photovoltaic (PV) modules – Design qualification and type approval*

712.3 Definitions

(See also figures 712.1 and 712.2).

For the purpose of this part of IEC 60364, the definitions of IEC 60050(826) as well as the following definitions apply.

712.3.1

PV cell

basic PV device which can generate electricity when exposed to light such as solar radiation