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BSI Standards Publication

Incompatibility of connectors for DC-application in photovoltaic systems

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National foreword

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A list of organizations represented on this committee can be obtained on request to its secretary.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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IEC TR 63225, which is a Technical Report, has been prepared by IEC technical committee 82: Solar photovoltaic energy systems.

The text of this Technical Report is based on the following documents:

Draft TR	Report on voting
82/1499/DTR	82/1552A/RVDTR

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

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

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

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- withdrawn,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

A bilingual version of this publication may be issued at a later date.

INCOMPATIBILITY OF CONNECTORS FOR DC-APPLICATION IN PHOTOVOLTAIC SYSTEMS

1 Scope

This document highlights the problem of incompatibility of connectors for DC-application in photovoltaic systems (DC connectors) produced by different manufacturers. It addresses four particular issues in that context:

- background information on incompatibility of DC connectors from different manufacturers;
- observations and challenges concerning the handling of DC connectors from different manufacturers;
- stakeholders concerned by the incompatibility of DC connectors;
- recommendations for long-term standardization and interim measures to address incompatibility of DC connectors.

2 Normative references

IEC 62852, *Connectors for DC-application in photovoltaic systems – Safety requirements and tests*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62852 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1
DC connector
connector designed for use in DC circuits of photovoltaic systems, as defined in IEC 62852.

Note 1 to entry: This document generally refers to connectors of type MC4 or similar, and particularly products that are often referred to as “MC4-compatible”.

3.2
compatible DC connectors
interoperable DC connectors
intermateable DC connectors
<connector pair> components which terminate conductors for the purpose of providing connection to and disconnection from a suitable mating component under supervision of one quality management system

4 Background

In the early years of terrestrial photovoltaics, a range of different DC connectors were available on the market. They were of distinctly different designs and could not be connected between