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TECHNICAL REPORT

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Radio frequency identification (RFID) of stationary lead acid cells and monoblocs – Tentative requirements

IEC/TR 62540:2009(E)

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CONTENTS

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

RADIO FREQUENCY IDENTIFICATION (RFID) OF STATIONARY LEAD ACID CELLS AND MONOBLOCS – TENTATIVE REQUIREMENTS

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IEC/TR 62540, which is a technical report, has been prepared by IEC technical committee 21: Secondary cells and batteries. It is an informative document destined to lay the groundwork for a possible future IEC/ISO standard. Such a standard would be established by a joint ISO/IEC working group with IEC TC 21 and ISO/IEC JTC1/SC31 acting as the leading technical committees.

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The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
21/685/DTR	21/703/RVC

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

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

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- withdrawn,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

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

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RADIO FREQUENCY IDENTIFICATION (RFID) OF STATIONARY LEAD ACID CELLS AND MONOBLOCS – TENTATIVE REQUIREMENTS

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1 Scope

IEC/TR 62540, which is a technical report, applies to all stationary lead-acid cells and monobloc batteries for float charge applications (i.e. permanently connected to a load and to a d.c. power supply), in a static location (i.e. not generally intended to be moved from place to place) and incorporated into stationary equipment or installed in battery rooms for use in telecom, uninterruptible power supply (UPS), utility switching, emergency power or similar applications. These batteries are covered by IEC 60896-11, IEC 60896-21 and IEC 60896-22.

The objective of this technical report is to assist the supplier and user of radio frequency identification devices (RFID) in the understanding of the requirements for performance, durability, data content and structure, the write/read capability of such devices, and to provide guidance so that the RFID tag on the battery will result in meeting the needs of a particular industry application and operational condition.

This technical report does not directly apply to lead-acid cells and batteries used for vehicle engine starting applications (IEC 60095 series), solar photovoltaic applications (IEC 61427), or general purpose applications (IEC 61056 series) but nevertheless can also be the base of standardization activities for these types of lead acid batteries.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1
ambient temperature
temperature of the medium in the immediate vicinity of a cell or battery

[IEC 60050-826:2004, 826-10-03, modified]

2.2
ampere-hour
quantity of electricity or a capacity of a battery obtained by integrating the discharge current in ampere with respect to time in hours

NOTE One ampere-hour equals 3 600 coulombs.

2.3
secondary battery
two or more secondary cells connected together and used as a source of electrical energy

[IEC 60050-811:1991, 811-20-02, modified]

2.4
monobloc battery
secondary battery in which the plate packs are fitted in a multi-compartment container