

INTERNATIONAL STANDARD

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Home and building electronic systems (HBES) and building automation and control systems (BACS) –

Part 5-1: EMC requirements, conditions and test set-up

Systèmes électroniques pour les foyers domestiques et les bâtiments (HBES) et systèmes de gestion technique du bâtiment (SGTB) –

Partie 5-1: CEM Exigences générales, condition et montage d'essais



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IEC 63044-5-1

Edition 1.1 2022-06
CONSOLIDATED VERSION

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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 29.120.01; 29.120.99

ISBN 978-2-8322-3932-2

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REDLINE VERSION

VERSION REDLINE



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CONTENTS

FOREWORD	4
INTRODUCTION	6
1 Scope	7
2 Normative references	7
3 Terms, definitions and abbreviated terms	8
3.1 Terms and definitions	8
3.2 Abbreviated terms	10
4 General requirements	10
5 Performance criteria	11
5.1 General performance criteria	11
5.2 Specific performance criteria	11
5.2.1 Performance criterion A	11
5.2.2 Performance criterion B	11
5.2.3 Performance criterion C	11
6 Standard test conditions	12
6.1 General	12
6.2 Immunity	13
6.2.1 Electrostatic discharge (ESD)	13
6.2.2 RF fields	13
6.2.3 Fast transients (bursts)	13
6.2.4 Surge	13
6.2.5 RF voltage	14
6.2.6 Power frequency magnetic fields	14
6.2.7 Voltage dips and interruptions	14
6.3 Emission	14
6.3.1 General	14
6.3.2 Conducted emission	14
6.3.3 Radiated emission	14
6.3.4 Low frequency emission	14
Annex A (informative) Additional information for fast transients (burst) test set-up	16
Annex B (informative) Test set-ups	17
B.1 General	17
B.2 Test set-up for conducted immunity tests	17
B.3 Test set-up for ESD	18
B.4 Test set-up for conducted emission tests	18
B.5 Test set-up for radiated (immunity and emission) tests	18
Annex C (informative) Examples of product standards	18
Bibliography	21
Figure 1 – EUT ports	9
Figure B.1 – Test set-up for conducted immunity tests	18
Figure B.2 – Set-up for radiated tests	19

~~Table C.1—Examples of product standards with an EMC part~~
~~Table C.2—Examples of stand-alone EMC product standards~~

INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOME AND BUILDING ELECTRONIC SYSTEMS (HBES) AND BUILDING AUTOMATION AND CONTROL SYSTEMS (BACS) –

Part 5-1: EMC requirements, conditions and test set-up

FOREWORD

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IEC 63044-5-1 edition 1.1 contains the first edition (2017-01) [documents 23/736/CDV and 23/748/RVC] and its amendment 1 (2022-06) [documents 23/1001/FDIS and 23/1007/RVD].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

International Standard IEC 63044-5-1 has been prepared by IEC technical committee 23: Electrical accessories.

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

A list of all parts in the IEC 63044 series, published under the general title *Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS)*, can be found on the IEC website.

The committee has decided that the contents of the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site under webstore.iec.ch in the data related to the specific publication. At this date, the publication will be

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INTRODUCTION

The IEC 63044 series deals with developing and testing Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS).

The IEC 63044-5 series ensures a common level of EMC requirements for HBES/BACS devices.

HOME AND BUILDING ELECTRONIC SYSTEMS (HBES) AND BUILDING AUTOMATION AND CONTROL SYSTEMS (BACS) –

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1 Scope

~~This part of IEC 63044 is a product family standard that sets the minimum level of EMC performance for the HBES/BACS network in addition to the product EMC standards for HBES/BACS devices.~~

~~It also applies to devices used within an HBES/BACS network for which no specific HBES/BACS product EMC standard exists.~~

This product family standard specifies the EMC requirements for HBES/BACS devices.

In addition, it defines EMC requirements for the interface of equipment intended to be connected to an HBES/BACS network. It does not apply to interfaces to other networks.

NOTE An example of other networks is a dedicated ICT network covered by ~~CISPR 22 and 23~~ CISPR 32.

This document provides general performance requirements, standard test conditions and test set-ups.

~~This document is applicable (but not limited) to~~

- ~~— operator stations and other human-system interface devices,~~
- ~~— devices for management functions,~~
- ~~— control devices, automation stations and application-specific controllers,~~
- ~~— field devices and their interfaces,~~
- ~~— cabling and interconnection of devices,~~

~~used within a dedicated HBES/BACS network.~~

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 61000-3-2, *Electromagnetic compatibility (EMC) – Part 3-2: Limits – Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)*

IEC 61000-3-3, *Electromagnetic compatibility (EMC) – Part 3-3: Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection*

IEC 61000-4-2, *Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test*