

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 Electroniques 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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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	10
5.1 General performance criteria.....	10
5.2 Performance criterion A	10
5.3 Performance criterion B	11
5.4 Performance criterion C	11
6 Standard test conditions	11
6.1 General.....	11
6.2 Immunity.....	12
6.2.1 Electrostatic discharge (ESD)	12
6.2.2 RF fields.....	12
6.2.3 Fast transients (bursts).....	13
6.2.4 Surge	13
6.2.5 RF voltage.....	13
6.2.6 Power frequency magnetic fields	13
6.2.7 Voltage dips and interruptions	13
6.3 Emission.....	13
6.3.1 General	13
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	15
Annex B (informative) Test set-ups	16
B.1 General.....	16
B.2 Test set-up for conducted immunity tests	16
B.3 Test set-up for ESD	17
B.4 Test set-up for conducted emission tests	17
B.5 Test set-up for radiated (immunity and emission) tests.....	17
Annex C (informative)	19
Bibliography.....	20
Figure 1 – EUT ports.....	9
Figure B.1 – Test set-up for conducted immunity tests	17
Figure B.2 – Set-up for radiated tests	18

Table C.1 – Examples of product standards with an EMC part 19
Table C.2 – Examples of stand alone EMC product standards 19

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

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

CDV	Report on voting
23/736/CDV	23/748/RVC

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 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 this publication will remain unchanged until the stability date indicated on the IEC website under "<http://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) –

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

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.

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.

This document provides general performance requirements 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*

IEC 61000-4-3, *Electromagnetic compatibility (EMC) – Part 4-3 : Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test*