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I.S. EN 50491-2:2010&A1:2015

General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 2: Environmental conditions

I.S. EN 50491-2:2010&A1:2015

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EUROPEAN STANDARD

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April 2015

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English Version

**General requirements for Home and Building Electronic Systems
(HBES) and Building Automation and Control Systems (BACS) -
Part 2: Environmental conditions**

Exigences générales pour systèmes électroniques pour les
foyers domestiques et les bâtiments (HBES) et pour
systèmes de gestion technique du bâtiment (SGTB) - Partie
2: Exigences d'environnement

Allgemeine Anforderungen an die Elektrische
Systemtechnik für Heim und Gebäude (ESHG) und an
Systeme der Gebäudeautomation (GA) - Teil 2:
Umgebungsbedingungen

This amendment A1 modifies the European Standard EN 50491-2:2010; it was approved by CENELEC on 2015-02-23. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

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This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

This document (EN 50491-2:2010/A1:2015) has been prepared by CLC/TC 205 "Home and Building Electronic Systems (HBES)".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2016-02-23
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2016-02-23

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 50491-2

March 2010

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Elektrische Systemtechnik für Heim
und Gebäude (ESHG) und an Systeme
der Gebäudeautomation (GA) -
Teil 2: Umgebungsbedingungen

This European Standard was approved by CENELEC on 2010-03-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Foreword

This European Standard was prepared by a joint working group of CLC/TC 205, Home and Building Electronic Systems (HBES) and CEN/TC 247, Building Automation, Controls and Building Management (BACS).

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50491-2 on 2010-03-01.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

- | | | |
|--|-------|------------|
| – latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2011-03-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2013-03-01 |

As a result of the discussions at the CLC/TC 205 meeting on 2004-10-5/6 concerning the structuring of their standards in general parts and open system parts (see CLC/TC 205/Sec0413/INF) the following new parts of EN 50491 under the generic title “*General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS)*” under the task of the JWG CEN/TC 247-CLC/TC 205 are proposed:

- | | |
|------------------------|--|
| Part 2 | Environmental conditions; |
| Part 3 | Electrical safety requirements; |
| Part 4-1 ¹⁾ | Functional safety requirements (for non safety related systems); |
| Part 4-2 ¹⁾ | Functional safety requirements (for safety related systems); |
| Part 5-1 ²⁾ | EMC requirements, conditions and test set-up; |
| Part 5-2 ²⁾ | EMC requirements for HBES/BACS used in residential, commercial and light industry environment; |
| Part 5-3 ²⁾ | EMC requirements for HBES/BACS used in industry environment. |

¹⁾ Under consideration.

²⁾ To be ratified.

Contents

Introduction	4
1 Scope	4
2 Normative references	4
3 Terms and definitions	5
4 General explanation for all tests	6
5 Environmental conditions	6
5.1 General test conditions	6
5.2 General performance criteria	6
6 Environmental requirements	8
6.1 Climatic	8
6.2 Chemical	9
6.3 Mechanical	10
6.4 Biological	11
Annex A (informative) Sets of environmental class combinations	12
A.1 Description of the classes	12
Bibliography	15
Tables	
Table 1 - Details of climatic tests	8
Table 2 - Details of chemical tests	9
Table 3 - Details of mechanical tests	10
Table 4 - Details of biological tests	11
Table A.1 - Summary of classes	12

Introduction

The EN 50491 series deals with developing and testing Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS).

The expression HBES/BACS covers any combination of HBES and/or BACS devices including their separate connected/detachable devices linked together via one or more networks.

Part 2 of this series applies to HBES/BACS devices and defines the environmental conditions for these devices.

1 Scope

This European Standard provides the environmental conditions for all devices connected to HBES/BACS.

This European Standard 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,
- dedicated devices for engineering and commissioning tools for HBES/BACS.

The standard defines the general requirements for devices operating in weather protected and non-weather protected locations, ship environments, portable use and also for storage and transport.

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.

EN 60068-2-1	Environmental testing - Part 2-1: Tests - Test A: Cold (IEC 60068-2-1)
EN 60068-2-6	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal) (IEC 60068-2-6:1995 + corrigendum March 1995)
EN 60068-2-10	Environmental testing - Part 2-10: Tests - Test J and guidance: Mould growth (IEC 60068-2-10)
EN 60068-2-11	Environmental testing - Part 2: Tests - Test Ka: Salt mist (IEC 60068-2-11)
EN 60068-2-14:1999	Environmental testing - Part 2: Tests - Test N: Change of temperature (IEC 60068-2-14:1984 + A1:1986)
EN 60068-2-27	Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock (IEC 60068-2-27)
EN 60068-2-30	Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle) (IEC 60068-2-30)
EN 60068-2-32	Basic environmental testing procedures - Part 2: Tests - Test Ed: Free fall (IEC 60068-2-32)

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