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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 39673.52-2020

Home and building electronic systems (HBES) and building automation and control systems (BACS) - Part 52: EMC requirements for HBES/BACS used in residential, commercial and light-industrial environments

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Foreword

GB/T 39673 "Home and Building Electronic System (HBES) and Building Automation and Control System (BACS)" intends to publish the following parts:

- Part 1: General requirements;
- Part 2: Environmental conditions;
- Part 3: Electrical safety requirements;
- Part 4: Functional safety;
- Part 5: EMC requirements;
- Part 51: EMC requirements, conditions and test arrangements;
- Part 52: EMC requirements for HBES and BACS used in residential, commercial and light industrial environments;
- Part 53: EMC requirements for HBES and BACS used in industrial environments;
- Part 6: Planning and installation of HBES:

This part is part 52 of GB/T 39673:

This section was drafted in accordance with the rules given in GB/T 1:1-2009:

This part uses the redrafting law to amend and adopt IEC 63044-5-2:2017 "Housing and Building Electronic System (HBES) and Building Automation

And Control System (BACS) Part 5-2: EMC requirements for HBES and BACS used in residential, commercial and light industrial environments":

The technical differences between this part and IEC 63044-5-2:2017 and the reasons are as follows:

---Regarding normative reference documents, this section has made adjustments with technical differences to adapt to my country's technical conditions and adjustments:

The situation is collectively reflected in Chapter 2 "Normative Reference Documents", and the specific adjustments are as follows:

- * Replace IEC 61000-4-2 with GB/T 17626:2 which is equivalent to adopting international standards;
- * Replace IEC 61000-4-3 with GB/T 17626:3 which is equivalent to adopting international standards;
- * Replace IEC 61000-4-4 with GB/T 17626:4 which is equivalent to adopting international standards;
- * Replace IEC 61000-4-5 with GB/T 17626:5 which is equivalent to adopting international standards;
- * Replace IEC 61000-4-6 with GB/T 17626:6 which is equivalent to adopting international standards;
- * Replace IEC 61000-4-8 with GB/T 17626:8 which is equivalent to adopting international standards;
- * Replace IEC 61000-4-11 with GB/T 17626:11 which is equivalent to adopting international standards;
- * Replace IEC 61000-6-3 with GB 17799:3 which is equivalent to the international standard:

This section has made the following editorial changes:

---According to the relevant regulations of GB/T 1:1-2009, in accordance with the national standard naming rules, the standard name is changed to "House and Building Electronics System (HBES) and Building Automation and Control System (BACS) Part 52: EMC requirements, conditions and test arrangements";

---According to the relevant regulations of GB/T 1:1-2009, in Chapter 1 "Scope", "This part of GB/T 39673 provides

EMC requirements of HBES and BACS under the environment";

---According to the relevant regulations of GB/T 1:1-2009, in Chapter 1 "Scope", "This part applies to residential and building electronics

System (HBES) and Building Automation and Control System (BACS)":

This part was proposed by China Electrical Equipment Industry Association:

This part is under the jurisdiction of the National Electrical Accessories Standardization Technical Committee (SAC/TC67):

Drafting organizations of this section: Guangdong South China Home Appliances Research Institute, Feidiao Electric Group Co., Ltd., Jiangsu Tongling Technology Co., Ltd., Hangzhou Hongyan

Electric Appliance Co., Ltd., Simon Electric (China) Co., Ltd., China National Electrical Equipment Research Institute Co., Ltd., Bull Group Co., Ltd.,

Zuhai Gree Electric Appliance Co., Ltd., Zhejiang Youmoo Technology Co., Ltd., Guangdong Xinruan Technology Co., Ltd., Weikai Testing Technology Co., Ltd.,

The Fifth Institute of Electronics of the Ministry of Industry and Information Technology, Xiamen Keli Electronics Co., Ltd., Dongguan Zhiheng Household Appliances Technology Co., Ltd., Xiamen

Wanming Electronics Co., Ltd., Shaanxi Yatney Electronics Co., Ltd., Xiamen Meike Security Technology Co., Ltd., Xiamen Kexin Electronics Co., Ltd.,

Urumqi Guojun Mould Factory, Xiamen Caimao Communication Technology Co., Ltd., Zhejiang Delixi International Electrical Co., Ltd:

Introduction

GB/T 39673 involves the development and testing of home and building electronic systems (HBES) and building automation and control systems (BACS):

GB/T 39673:51, GB/T 39673:52 and GB/T 39673:53 ensure that the electromagnetic compatibility requirements of HBES/BACS equipment meet

To the common level:

And Control System (BACS) Part 52:

Used in residential, commercial and light industrial environments

EMC requirements for HBES and BACS

1 Scope

This part of GB/T 39673 specifies the use of residential and building electronic systems (HBES) and building automation and control systems (BACS):

EMC requirements for HBES and BACS in residential, commercial and light industrial environments:

This section applies to residential and building electronic systems (HBES) and building automation and control systems (BACS):

Chapter 1 of GB/T 39673:51-2020 is applicable after the following modifications:

Replace paragraph 6 with the following:

According to the definition given in GB/T 17799:1, this section specifies the installation of HBES/BACS in residential, commercial and light industrial environments

EMC requirements:

2 Normative references

The following documents are indispensable for the application of this document: For dated reference documents, only the dated version applies to this article

Pieces: For undated references, the latest version (including all amendments) applies to this document:

GB/T 17626:2 Electromagnetic compatibility test and measurement technology Electrostatic discharge immunity test (GB/T 17626:2-2018,

IEC 61000-4-2:2008, IDT)

GB/T 17626:3 Electromagnetic compatibility test and measurement technology Radio frequency electromagnetic field radiation immunity test (GB/T 17626:3-

2016, IEC 61000-4-3:2010, IDT)

GB/T 17626:4 Electromagnetic compatibility test and measurement technology Electrical fast transient pulse group immunity test (GB/T 17626:4-

2018, IEC 61000-4-4:2012, IDT)

GB/T 17626:5 Electromagnetic compatibility test and measurement technology surge (impact) immunity test (GB/T 17626:5-2019,

IEC 61000-4-5:2014, IDT)

GB/T 17626:6 Electromagnetic compatibility test and measurement technology Radio frequency field induced conducted disturbance immunity (GB/T 17626:6-

2017, IEC 61000-4-6:2013, IDT)

GB/T 17626:8 Electromagnetic compatibility test and measurement technology Power frequency magnetic field immunity test (GB/T 17626:8-2006,