IECQ
COMPONENT SPECIFICATION

IEC Quality Assessment System for Electronic Components (IECQ System)

Wi-Fi Module 0021800073C – K182-WD-HR-Intelligent balcony Series-0001
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FOREWORD

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The object of the System is to facilitate international trade via business-to-business supply chain management tools and the harmonization of the specifications and quality assessment procedures for electronic components, assemblies and related materials and processes, and by the grant of an international recognized Certification of Conformity and the optional use of an IECQ Mark of Conformity. The components produced or services provided under the System are therefore accepted in all member countries without further testing.

This Component Specification is based upon the requirements of IECQ 03 Series of Rules of Procedure by:

Qingdao Haier Washing Machine Co., Ltd.
Haier Zone Hi-tech Zone,
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and published under the authority of:

DEKRA Testing and Certification (Shanghai) Ltd. Guangzhou Branch
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AMENDMENT RECORD

No previous editions.

REQUIREMENTS

The following data sheet satisfies the requirements of IECQ Component Specifications as detailed in IECQ 03 Series of Rules of Procedure.

It should be note that IECQ is not responsible for manufactures declaration made in data sheets that fall outside the limits of Certificates of Conformity.
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- **Publicly available Specifications**
  - IECQ Certification Body under whose authority the Component Specification (CS) is published
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  - Other: ...

## Component Specification number:

**IECQ-CS 033000-CN0003**

for use within the IECQ Approved Component Scheme for *IoT smart home device*

**Edition 1, 2021-03**

## Product description:

Wi-Fi Module 0021800073C – K182-WD-HR-Intelligent balcony Series-0001

## Electronic Components of Assessed Quality Component Specification in according with:

- DEKRA K182
- ETSI ES 202 396-1
- GB/T 39384
- IEC 61000-4-x Series, Parts 4, 5, 6 and 11
- IEC TS 63134
- IEC 60730-1
- TR-398

## Applicant:

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## Outline drawing and install information:

The Wi-Fi module 0021800073C is designed to be embedded in intelligent balcony appliance, combined washing machine, dryer with a size of 48mm*28mm*11mm (L*W*H) and 4 pin interface connected to their control boards.

Refer to Section 1.1.1 for further details
Section one – General information

1.1 Approved Scope

This specification is applicable to Wi-Fi Module 0021800073C – K182-WD-HR-Intelligent balcony series-0001.

This specification defines the functional performance requirements for initial qualification and for any component product changes and to establish the ongoing quality conformance inspection procedure / controls for production lot by lot inspection and release of the IECQ Approved Component Wi-Fi Module 0021800073C, used in intelligent balcony appliance, combined washing machine, dryer.

The Wi-Fi module is responsible to connect intelligent balcony appliance, combined washing machine, dryer to the mobile App, and transfer the protocol sent from server to the control command recognized by Main Control Unit (MCU), with Wi-Fi SoC IC and interface connection to the appliance control board. The Wi-Fi module is a PCBA installed in the intelligent balcony appliance, combined washing machine, dryer. The overview of the architecture for the smart home system is shown in Figure 1.

1.1.1 Appearance, Modules and Dimensions

The Wi-Fi module 0021800073C supports Wi-Fi 2.4 GHz with IEEE 802.11 b/g/n with module dimensions 48mm*28mm*11mm (L*W*H).

Figure 1 – overview of the architecture for the smart home system

Figure 2 – Appearance Wi-Fi Module
1.2 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.

DEKRA K182, *IoT smart home device*

ETSI ES 202 396-1, *Speech and multimedia Transmission Quality (STQ); Speech quality performance in the presence of background noise; Part 1: Background noise simulation technique and background noise database*

GB/T 39384, *Intelligentization technology for intelligent household appliances—Particular requirements for washing machine*

IEC 60730-1, *Automatic electrical controls - Part 1: General requirements*

IEC 61000-4-4, *Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test*

IEC 61000-4-5, *Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test*

IEC 61000-4-6, *Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields*

IEC 61000-4-11, *Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current up to 16 A per phase*

IEC TS 63134, *Active assisted living (AAL) use cases*

TR-398, *Wi-Fi In-Premises Performance Testing*

1.3 Terms and definitions
The following terms and definitions apply to this specification, other terms and definitions apply to related normative references.

1.3.1 Intelligent balcony
A type of intelligent scene in the smart home concept that includes the interoperation between the washing machine, clothes dryer, clothes rack, balcony cabinet and other smart home appliances. In addition, it can realize intelligent watering and automatic pet feeding function.

1.3.2 Combined washing machine, dryer
A type of dryer that has the networking function, which can realize the remote control through the App on the mobile terminal. It can provide automatic or different modes of drying program, as well as steam washing program by App.

1.3.3 Application (APP)
Software specific to the application installed in Android or IOS system, that is implemented by the designer of the electrical control system, generally containing logic sequences, limits and expressions that control the appropriate input, output, calculations, and decisions necessary to meet the electrical control system functional requirements.

1.3.4 Packet loss
The loss of data packets during transmission over a network. [SOURCE: IEC 62676-1-2:2013]
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Proprietary Specification Summary - contact DEKRA as detailed on Pages 4 & 5