

ICS 91.140.60  
CCS Q 81

**CJ**

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

**CJ/T 352-2010**

Replacing JG/T 3009-1993

---

**Variable-frequency governed speed water supply equipment  
with microcomputer control  
(English Translation)**

**Issued on: October 21, 2010**

**Implemented on: May 1, 2011**

---

**Issued by: Ministry of Housing and Urban-Rural Development of the  
People's Republic of China**

## Table of Contents

|                                                               |
|---------------------------------------------------------------|
| Preface                                                       |
| 1 Scope                                                       |
| 2 Normative references                                        |
| 3 Terms and definitions                                       |
| 4 Categories and models                                       |
| 5 Working conditions                                          |
| 6 Requirements                                                |
| 7 Test Methods                                                |
| 8 Inspection rules                                            |
| 9 Logo, packaging, transportation and storage                 |
| Appendix A (Normative) Frequency Converter Requirements       |
| Appendix B (informative) wire marking, light and button color |
| Appendix C (informative) test instrument used                 |
| Appendix D (informative) equipment test equipment             |

## Foreword

This standard is JG/T 3009-1993 "computer-controlled variable frequency speed control water supply equipment" amendment.

This standard and JG/T 3009-1993 compared to the main technical changes are as follows.

--- In the scope of the provisions of the revised theme, an increase of the pressure applied to the boundaries of work and water temperature, pointed out that does not apply limit;

--- Increased computer-controlled variable frequency speed control water supply equipment, rated water flow, equipment head, pressure control error, overpressure protection term and defines and modifies the expression of the terms, points out the composition of microcomputer-controlled frequency conversion speed regulating water supply equipment;

--- In the classification of the provisions of the deleted by the control mode, structure, control the number of pumps the classification, an increase of medium temperature plan Points, and added the model's markings and examples;

--- The "working conditions" as an external separate column, and increased the vertical installation of tilt, power supply voltage, power frequency, power supply Power requirements

--- Increased the structure and layout, appearance quality, water pump, equipment configuration, the basic material requirements, modify the health performance requirements (See 6.1);

--- Increased water supply capacity, low-flow operation, manual, automatic and remote control, overpressure protection, automatic pump switch Function, standby pump since the cast function, noise and vibration performance requirements, modify the water level control, pressure control, automatic insurance Protection function, compressive strength, anti-interference, anti-harmonic pollution requirements, an increase of remote monitoring,, functions, man-machine Optional features for the port function, end water level communication interface functions, deletion of low temperature storage test, high temperature storage test, transport Test requirements (see 6.2);

--- In the control cabinet requirements, the control cabinet shell modified level and the control cabinet wire, light and button color to be Seeking, increase the requirements of lightning protection, drop test (see 6.3 and Appendix B);

--- Increased the selection of pump units, as well as the suction pipe, the configuration of the outlet pipe, the tube flow rate requirements (see 6.4);

--- Increased the use of pipes, fittings, valves, gauges, pressure tank requirements, and increased processing, welding requirements (see 6.5 and 6.6);

--- Increased the provisions of the test instruments used, modified equipment test equipment, modify or increase the requirements of the corresponding test methods (see Chapter 7 and Appendix C, Appendix D);

--- Modify the logo, packaging, transport requirements (see 9.1, 9.2 and 9.3);

--- Increasing the requirements of the inverter (see Appendix A).

This standard proposed by the Ministry of Housing and Urban Standard and Design Institute.

This standard by the Ministry of Housing and Urban Water Supply and Drainage Products Standardization Technical Committee.

This standard was drafted. Qingdao Sanli Group Co., Ltd., China Institute of Architectural Design.

## 1 Scope

This standard specifies the terms and definitions computer controlled variable frequency water supply equipment, classification and model, working conditions, requirements, test methods, Inspection rules, marking, packaging, transportation and storage.

This standard applies to the working pressure is not greater than 2.5MPa, the water

temperature is not greater than 80 °C of life, the production of water supply system with computer-controlled variable frequency Speed water supply equipment.

This standard does not apply to the use of variable frequency motor or pump integrated inverter and fire water supply equipment.

## 2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB 150 steel pressure vessel GB/T 156 standard voltage GB/T 191 Packaging - Pictorial signs GB 755 Rotating motor quotas and performance (IEC 60034-1.:2004, IDT) GB/T 985.1 gas welding, arc welding, gas shielded welding and high-beam welding recommended groove GB/T 2423.1-2008 Environmental testing for electric and electronic products Part 2. Test methods Test A. Low temperature (IEC 60068-2-1.:2007, IDT) GB/T 2423.2-2008 Environmental testing for electric and electronic products Part 2. Test methods Test B. High temperature (IEC 60068-2-2.:2007, IDT) GB/T 2423.3-2006 Environmental testing for electric and electronic products Part 2. Test methods Test Cab. constant hot and humid test (IEC 60068-2-78.:2001, IDT) GB/T 2816 wells with submersible pumps GB/T 3047.1 height of 20mm panel, frame and cabinet basic dimensions GB/T 3091 low pressure fluid delivery welded steel pipe Electrical control equipment GB/T 3797-2005 GB 4208 Enclosure Rating (IP Code) (IEC 60529.:2001, IDT) GB/T 5657 centrifugal pump technical conditions (Class III) GB/T 8163 seamless steel pipe for conveying fluid GB/T 9119 flat, convex plate flat welded steel pipe flange GB/T 9123.1 flat, convex steel pipe flange cover GB/T 9969 Industrial Products Manual General GB/T 12238 flange and the clamp connection flexible sealing butterfly valve GB/T 12459 butt welded steel seamless fittings GB/T 12668.2 speed control electrical transmission system Part 2. General Requirements Low-voltage AC variable frequency electrical drive system rating Regulations (IEC 61800-2.:1998, IDT) GB/T 12771 stainless steel welded steel pipe for fluid transport GB/T 13384 mechanical and electrical product packaging General technical conditions