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

GB/T 3369.2-2008

Replacing GB/T 3370-1989

**Analogue signals for process control systems -- Part 2: Direct
voltage signals**

过程控制系统用模拟信号 第2部分：直流电压信号

(English Translation)

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Foreword

GB/T 3369 "process control system with analog signals" is divided into the following two parts.

--- Part 1. DC current signal;

--- Part 2. DC voltage signal.

This section GB/T 3369 Part 2.

This section identical with IEC 60381-2. 1978 "Analog signal processing control system Part 2. DC voltage signal" (English Version).

According to GB/T 1.1-2000 "Standardization Guide Part 1. Standard Structure and Writing Rules", IEC 60381-2.

1978 made the following editorial changes.

- a) This Standard has been changed to this part;
- b) Remove the foreword to IEC 60381-2. 1978;
- c) Where "IEC 60381" is replaced by "GB/T 3369";
- d) Use the decimal "." instead of the comma "," for the decimal point.

This Part replaces GB/T 3370-1989 "industrial automation instrumentation with analog DC voltage signal." this section compared with GB/T 3370-1989, the main changes are as follows.

--- The standard name from "industrial automation instrumentation with analog DC voltage signal" to "process control system with analog signal Part 2 Points. DC voltage signal";

--- "This Standard" changed to "this section";

--- Scope. GB/T 3370-1989 is the reference to the use of IEC 60381-2. 1979, the scope of application of industrial automation instruments;

The standard is equivalent to using IEC 60381-2. 1979, the scope of application for industrial process measurement and control system (GB/T 3370-1989

1 Chapter, of this section; Chapter 1)

--- The scope of the "industrial automation instrumentation" to "components" (GB/T 3370-1989 Chapter 1; Chapter 1 of this section);

--- Terminology and the definition of part of the deletion of the "output ripple content" and "output AC components", adding "analog DC voltage measurement Value measuredvalueofanaloguedirectvoltagesignal "," load impedance "," ripple Volume ripplecontent "," signal common line signalcommon "," signalisolation "(GB/T 3370-1.6, 1.7 of 1989; 2.3, 2.7, 2.8, 2.9, 2.10 of this section);

--- "Table 1 DC voltage range" adds "0 ~ +10" and "-10 ~ +10" range (GB/T 3370-1989 Table 1; Table 1 of this section).

This part is proposed by China Machinery Industry Federation.

This part of the National Industrial Process Measurement and Control Standardization Technical Committee second sub-technical committee.

This section is responsible for the drafting unit. Southwest University, China Sihe Instrumentation Group.

Participated in the drafting of this section. Machinery Industry Instrumentation Comprehensive Technology and Economy Institute, Beijing Institute of Machinery Industry Automation.

2 Terms and definitions

The following terms and definitions apply to this section.

Functional units for the conversion, transmission or processing of measured values, control variables, control variables and reference variables and their integrated combination.

A DC voltage signal for transmitting or processing information varying in a continuous manner according to one or more physical quantities.

Average over the stated duration.

The signal voltage corresponding to the minimum value of the DC voltage signal.

The signal voltage corresponding to the maximum value of the DC voltage signal.

The range determined by the lower and upper limit of the signal voltage.

The sum of the impedance of all connected receivers.

The ratio of the peak-to-peak value of the AC component to the upper limit of the DC voltage signal.

Multiple signal circuits can have a common electrical connection, which can be grounded or ungrounded.

GB/T 3369.2-2008/IEC 60381-2. 1978