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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 2900.92-2015

Electrotechnical terminology -- Mathematics -- Functions

电工术语 数学 函数

(English Translation)

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Foreword

GB/T 2900 "Electrotechnical term" multi-part.

The first part is divided into Part 92 GB/T 2900's.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses the translation method identical with IEC 60050-103:2009 "International Electrotechnical Vocabulary - Part 103. Mathematical Functions." the term item number in this section and IEC 60050-103:2009 consistent.

This section based on the original increase of informative elements 8 Translator's Note.

This part of the National Electrotechnical Terminology Standardization Technical Committee (SAC/TC232) and focal points.

This section is drafted. the machine Productivity Promotion Center, Academy of Mathematics and Systems Science Research Institute.

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1 Scope

This section GB/T 2900 provisions of the basic concepts of mathematical functions electrical, electronics and telecommunications sectors.

This section applies to the technical field of electrical, electronics and telecommunications.

2.1 General Concepts

103-01-01

Function

Relationship f, such that for any object a, determining the existence of an object b, b and a are interconnected by the relationship between f and [102-01-10. Modify].

Note 1: If the function f by making a correlation with b, then.

- f for a definition;

- a variable from a function f;

- b is a value of the function f, usually denoted by f (a).

Argument of a function with the same function value, can be a basic object, such as a number, or an ordered set of basic objects.

Note 2: The term "function" according to the value of their property to refer to, for example, real function, complex function, vector function, or in accordance with (independent variables and values) relationship Call, for example, algebraic, trigonometric, hyperbolic function.

Note 3: 1 Translator's Note. In keeping with the IEC 60050-102, translators reviewed the document section of IEC 60050-102, wherever it appears the word "entity" at its Chinese nothing more than "objects, entities, objects, unknown quantity" four kinds, according to which the context, the "object" for the majority. In the IEC 60050-103 it will also take the same approach, namely, depending on the context, one of the most appropriate choice in this four kinds.

103-01-02

Functional Argument is a function, the value is a function of the number.

Note: The function f (t) is an example of a functional is integral t1 t2 f (t) dt.

103-01-03

Distribution Generalized Functions generalizedfunction Continuous linear functional, it bounded interval or real variable or complex variable region of the outer boundary of any zero infinitely differentiable function specifies a Real number or a complex number.

Note 1: a function D (x) can be considered a distribution D, which the function f (x) to a specified value D (f) = integral-infinity D (x) f (x) dx If this integral exists.

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Note 2: The derivative of a distribution D is another distribution D ', for any function f (x), which consists of D '(f) = -D (df/dx) definition.

Note 3: The Translator's Note 2. According to the "Translator's Note 1" in the same principles, and we try to keep in line with IEC 60050-102 in terms. in

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