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GA

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

GA/T 489-2016

Replacing GA/T 489-2004

Specifications for installation of road traffic signal controller

道路交通信号控制机安装规范

(English Translation)

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Foreword

This standard is drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces GA/T 489-2004 "Road traffic signal control machine installation specifications". Compared with GA/T 489-2004, the main technical changes are the following.

- modified scope (see Chapter 1, Chapter 1 of the 2004 edition);
- modified normative reference documents (see Chapter 2, Chapter 2 of the 2004 edition);
- modified terms and definitions (see Chapter 3, Chapter 3 of the 2004 edition);
- modified installation location requirements (see 4.1, 2004 version 4.1);
- modified the installation requirements (see 4.2, 2004 version 4.2);
- modified the installation requirements (see 4.3, 4.3 of 2004);
- modified the requirements for site conditions prior to installation (see 4.4.1), 4.4.1 of 2004);
- modified the cable requirements (see 4.4.2), 4.4.3 in 2004);
- modified the requirements for cable laying (see 4.4.3, 2004, 4.4.11);
- Removal of three-phase four-wire power cable requirements (see 4.4.4 of 2004);
- modified the requirements for cable installation identification (see 4.4.8, 2004 4.4.8);
- modified the requirements for signal ground (see 4.5, 2004, 4.5);

- modified the installation of the signal cabinet installation requirements (see 4.6, 2004 version of the 4.6.1);
- modified the requirements for signal line wiring (see 4.7.4, 4.6.4, 4.6.4, 2004);
- Increased signal power requirements (see 4.8);
- modified the requirements for signal commissioning (see 4.6, 4.6.4, 4.6.5) - modified the protection requirements after the installation of the signal (see 4.10, 2004, 4.6.3, 4.6.6);
- the inspection method was deleted (see Chapter 5 of the 2004 edition);
- modified acceptance (see Chapter 5, Chapter 6 of the 2004 edition);
- the rule of judgment was deleted (see Chapter 7 of the 2004 edition).

1 Scope

This standard specifies the installation requirements and acceptance of road traffic signal control machines.

This standard applies to the installation of traffic signal control machines used on roads. Other places to use the traffic signal control machine can be installed According to the implementation.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article Pieces. For undated references, the latest edition (including all modifications) applies to this document.

Road traffic signs - Part 2. Road traffic signs GB 5768.2 Specification for installation and installation of road traffic lights GB 14886 GB/T 31418 Road traffic signal control system terminology Code for construction and acceptance of cable lines for installation of electrical installations GB 50168 Code for construction and acceptance of grounding installations for electrical installations Code for acceptance of construction quality of concrete structure engineering GB 50204 Code for acceptance of construction quality of building electrical engineering GB 50303

3 Terms and definitions

The terms and definitions defined in GB/T 31418 apply to this document.

4.1 Installation location

Select the road traffic signal control machine (hereinafter referred to as the signal machine) installation location, the requirements are as follows.

- a) The signal machine should not be installed on a motorway or non-motor vehicle lane, the outer edge is at a horizontal distance from the motorway or non-motorway not less than 500mm, installed on the sidewalk, should not affect the pedestrian passage;
- b) the direction of the signal to open the door should take into account the safety and ease of operation, and is conducive to the operator to observe the intersection, road traffic conditions;
- c) to avoid low-lying areas and other areas of easy water, away from power transformers, high-voltage transmission lines and other strong electromagnetic interference;
- d) away from flammable, explosive, corrosive items storage;
- e) Signals with satellite timing function should avoid occlusion of satellite signals.

4.2 Installation method

4.2.1

signal installation method is divided into.

- a) ground installation;
- b) pole suspension installation.

4.2.2

Ground installation, in order to prevent water, can be taken to increase the height of the signal machine or column feet to improve the position of the signal machine.