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

GB/T 30104.220-2025

**Digital addressable lighting interface - Part 220: Particular
requirements for control gear - Centrally supplied emergency
operation (device type 19)**

(English Translation)

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Table of Contents

Preface
Introduction
1 Scope
2 Normative references
3 Terms and Definitions
4 General Requirements
5 Electrical Specifications
6 Interface Power
7 Transmission Protocol Framework Structure
8 Timing
9 Operation Method
10 Variable Declaration
11 Instruction Definition
Appendix A (Informative) Recommendations and Notes on Emergency Lighting Fixtures and Emergency Lighting Systems
Reference

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is part 220 of GB/T 30104 Digital Addressable Lighting Interface. GB/T 30104 has been published in the following parts.

- Part 101: General requirements for system components;
- Part 102: General requirements for control devices;
- Part 103: General requirements for control equipment;
- Part 104: General requirements for wireless and other wired system components;
- Part.201.Particular requirements for control gear for fluorescent lamps (equipment type 0);
- Part 202: Particular requirements for control devices Self-contained emergency lighting

(equipment type 1);

--- Part 203: Particular requirements for control gear for discharge lamps (other than fluorescent lamps) (equipment type 2);

--- Part 204: Particular requirements for control gear for low-pressure tungsten halogen lamps (equipment type 3);

--- Part 205: Particular requirements for control gear for incandescent lamp supply voltage controllers (equipment type 4);

--- Part 206: Particular requirements for control devices converting digital signals into DC voltage (equipment type 5);

--- Part 207: Particular requirements for control gear LED modules (equipment type 6);

--- Part 208: Particular requirements for control devices switching functions (equipment type 7);

--- Part 209: Particular requirements for control devices Color control (equipment type 8);

--- Part 220: Particular requirements for control devices - Central power supply emergency operation (device type 19);

--- Part 222: Particular requirements for control gear heat lamp protection (equipment type 21);

--- Part 301: Special requirements for input device buttons;

--- Part 302: Special requirements for input devices, absolute input devices;

--- Part 303: Special requirements for input device occupancy sensors;

--- Part 304: Special requirements for input devices light sensors.

This document is equivalent to IEC 62386-220:2019 "Digital addressable lighting interface Part 220: Particular requirements for control gear" Central Power Supply Emergency Operation (Equipment Type 19)".

Introduction

GB/T 30104 (all parts) specifies a bus system for controlling electronic lighting equipment through digital signals, which is intended to consist of the following Partial composition.

Part 103 specifies the general requirements for control devices. Part 104 specifies the general requirements for control equipment.

General requirements for wireless and alternative wired system components. Part 105 specifies general requirements for firmware upgrades. Part 150 the requirements for auxiliary power supplies are given. Auxiliary power supplies can be independent or built into

the control device or control equipment.

Particular requirements for controlgear for certain types of luminaires.

Special requirements for each type of input device.

The first edition of GB/T 30104.220 is intended to be compatible with GB/T 30104.101-2021, GB/T 30104.102-2021 and GB/T 30104 is published as a series of standards divided into several parts, with specific provisions for each type of equipment, in order to facilitate the standardization of Use and maintenance.

The structure of the series of standards is shown in Figure 1 below.

Figure 1 Overview of GB/T 30104

The scope of application of this clause. Other sections also include additional requirements when necessary.

except.

The standardization of control interface of control device aims to achieve compatibility between electronic control device and lighting control equipment.

This document describes a method for implementing a control device in a building management system.

Unless otherwise specified, all numbers used in this document are decimal. Hexadecimal numbers are given in the format 0xVV.

The "x" in the number means "any value".

Use the following typographical expressions.

Variable. "variable name" or "variable name[3.0]" only gives the 3rd to 0th digits of the variable name.

The range of values is. [minimum, maximum].

Command. "command name".

Digital Addressable Lighting Interface Part 220: Control Special requirements for devices for central power supply emergency operation (Device Type 19)

1 Scope

This document specifies the electrical specifications, interface power supply, transmission protocol framework structure of the bus system controlled by digital signals of electronic lighting equipment.

The bus system complies with the requirements of IEC 61347 (all parts) and has a DC power supply.

Electric power supply.

This document applies to control devices for emergency operation supporting central power supply as described in EN 50171.

This document does not apply to self-contained emergency lighting controlgear. These types of controlgear are specified in IEC 62386-202.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

IEC 62386-101:2014 Digital addressable lighting interface Part 101: General requirements System components (Digital IEC 62386-101:2014/AMD1.2018 Note. GB/T 30104.101-2025 Digital addressable lighting interface Part 101: General requirements system components (IEC 62386-101:2022, IDT) IEC 62386-102:2014 Digital addressable lighting interface Part 102: General requirements for control gear IEC 62386-102:2014/AMD1.2018 Note. GB/T 30104.102-2025 Digital addressable lighting interface Part 102: General requirements system components (IEC 62386-102:2022, IDT)

3 Terms and Definitions

For the purposes of this document, the terms and definitions defined in IEC 62386-101 and IEC 62386-102 and the following apply.

For standardized use, ISO and IEC maintain terminology databases at the following addresses.

Emergency power level emergency level Configurable emergency operating arc power level 3.2 emergency condition the power type or bus power status changes, causing emergency operation of the control device

NOTE 1 This is purely concerned with the control gear interface. It is not to be confused with the emergency signalling of an emergency to the central emergency power system.

NOTE 2 State changes are typically controlled by a central power supply system.