UL 935

STANDARD FOR SAFETY

Fluorescent-Lamp Ballasts

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UL Standard for Safety for Fluorescent-Lamp Ballasts, UL 935

Tenth Edition, Dated May 21, 2001

Summary of Topics

This revision to ANSI/UL 935 dated February 23, 2024 includes the following changes:

– Updating the references to UL and non-UL standards: 10.3.1, 20.12, 23.10, Table 25.1, 44.2, SB1.2, SB2.3, SB2.4, SB3.4, SB9.1, and SB9.2

– Editorial corrections: 2.3, Table 19.1, 34.4, Figure 34.2, Table 43.1, and SD2.1.4

Text that has been changed in any manner or impacted by ULSE's electronic publishing system is marked with a vertical line in the margin.

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated September 29, 2023 and December 15, 2023.

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The most recent designation of ANSI/UL 935 as an American National Standard (ANSI) occurred on February 23, 2024. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

The Department of Defense (DoD) has adopted UL 935 on February 17, 1983. The publication of revised pages or a new edition of this Standard will not invalidate the DoD adoption.

Comments or proposals for revisions on any part of the Standard may be submitted to ULSE at any time. Proposals should be submitted via a Proposal Request in the Collaborative Standards Development System (CSDS) at https://csds.ul.com.

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PART 1 – ALL PRODUCTS

INTRODUCTION

1 Scope

1.1 These requirements cover ballasts of the resistance, reactance, and electronic (high frequency) types for use with fluorescent lamps involving a potential of 2500 volts or less in accordance with the National Electrical Code, ANSI/NFPA 70.

1.2 A fluorescent-lamp ballast may be determined by investigation to be acceptable for use, in a fixture or other device, with electric-discharge lamps of other than the fluorescent type.

1.3 Fluorescent self ballasted lamps and ballast adaptors are evaluated using the Standard for Self-Ballasted Lamps and Lamp Adapters, UL 1993. The component ballast is evaluated to requirements in this Standard.

1.4 A product that contains features, characteristics, components, materials, or systems new or different from those covered by the requirements in this standard, and that involves a risk of fire or of electric shock or injury to persons shall be evaluated using appropriate additional component and end-product requirements to maintain the level of safety as originally anticipated by the intent of this standard. A product whose features, characteristics, components, materials, or systems conflict with specific requirements or provisions of this standard does not comply with this standard. Revision of requirements shall be proposed and adopted in conformance with the methods employed for development, revision, and implementation of this standard.

2 Glossary

2.1 For the purpose of this standard the following definitions apply.

2.2 BALLAST – A device that by means of reactance or resistance, singly or in combination, limits the current of a lamp to the required value for proper operation and, where necessary, provides adequate starting voltage; and in the case of rapid start circuits, provides for low-voltage lamp filament heating.

2.3 CHEESECLOTH – Used in abnormal condition tests as an indicator of a fire hazard. Bleached cheesecloth is to be running 14 – 15 square yards per pound (26 – 28 m^2/kg), and have what is known to the trade as a count of 32 X 28; that is, for any square inch, 32 threads in one direction and 28 threads in the other direction (for any square centimeter, 13 threads in one direction and 11 threads in the other direction).

2.4 CLASS P PROTECTED BALLAST – A ballast that is integrally protected from overheating, where the ballast and protection combination comply with the requirements in this standard.

2.5 COMPACT FLUORESCENT LAMP – A fluorescent lamp of a small compact shape (such as a folded construction) with all contacts terminating in a single base that performs the entire mechanical support function.

2.6 CONDITIONED LAMP – A new lamp that has been operated for a minimum of 100 hours.

2.7 CONVENTIONAL MAGNETIC BALLAST – A ballast that consists of a coil of wire wound on a core and operates at the supply line frequency. A conventional magnetic ballast is either a transformer type or simple reactance type. A power capacitor is able to be provided with the magnetic ballast.

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