UL 2161

STANDARD FOR SAFETY

Neon Transformers and Power Supplies

UL Standard for Safety for Neon Transformers and Power Supplies, UL 2161

Second Edition, Dated April 6, 2016

Summary of Topics

The second edition of UL 2161 is being issued to address the editorial maintenance of UL Standards for Safety and to remove the reference of the withdrawal date for UL 873. Any changes that were made are considered to be non-substantive and not subject to UL's STP process.

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Standard for Neon Transformers and Power Supplies

First Edition – September, 1996

Second Edition

April 6, 2016

This UL Standard for Safety consists of the Second edition.

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

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PART 1 – ALL NEON SUPPLIES

INTRODUCTION

1 Scope

1.1 This standard applies to transformers and power supplies, including those intended to be connected to a Class 2 source of supply, that provide the voltage and ballasting for neon and cold-cathode tubing (electric-discharge tubing) consisting of electrodes and gas such as neon, mercury, helium, argon, and similar gases, enclosed in glass. Neon transformers and power supplies for use in signs and outline lighting are intended to be used in accordance with Article 600 of the National Electrical Code, NFPA 70. Cold-cathode supplies identified for use only in cold-cathode lighting systems are intended to be used in accordance with Article 410 of the National Electrical Code.

1.2 Neon transformers and power supplies covered by this standard are designated by their construction and intended use as specified in Table 1.1.

1.3 The following neon supplies are only covered as components for use in an end product that is determined to comply with the Standard for Electric Signs, UL 48:

a) Type 1 neon supplies;

b) Types 5 and 6 neon supplies when complying with Exception No. 3 to 23.1;

c) Types 6, 7, and 8 neon supplies when complying with the Exception to 14.4.1 or the Exception to 14.4.3;

d) All types of neon supplies having an isolated output when complying with Exception No. 2 to 23.1; and

e) Cold-cathode supplies when complying with Exception No. 5 to 23.1.

1.4 These requirements do not cover transformers or power supplies intended to supply other forms of electric-discharge lighting sources such as fluorescent and high-intensity-discharge lighting. Requirements for fluorescent supply sources are covered in the Standard for Fluorescent-Lamp Ballasts, UL 935, and the requirements for high-intensity-discharge lighting supply sources are covered in the Standard for High-Intensity-Discharge Lamp Ballasts, UL 1029.

1.5 These requirements do not cover transformers or power supplies that are intended for use with oil burners. The requirements for oil ignition transformers are covered in the Standard for Low Voltage Transformers – Part 1: General Requirements, UL 5085-1 and the Standard for Low Voltage Transformers – Part 2: General Purpose Transformers, UL 5085-2, and for oil ignition power supplies are covered in the Standard for Power Units Other Than Class 2, UL 1012.