



UL 452

STANDARD FOR SAFETY

Antenna – Discharge Units

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UL Standard for Safety for Antenna – Discharge Units, UL 452

Seventh Edition, Dated November 2, 2006

Summary of Topics

This revision of ANSI/UL 452 dated August 6, 2021 is being issued to update the title page to reflect the most recent designation as a Reaffirmed American National Standard (ANS). No technical changes have been made.

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

The requirements are substantially in accordance with Proposal(s) on this subject dated April 9, 2021.

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UL 452

Standard for Antenna – Discharge Units

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Third Edition – April, 1972
Fourth Edition – October, 1977
Fifth Edition – November, 1987
Sixth Edition – August, 1993

Seventh Edition

November 2, 2006

This ANSI/UL Standard for Safety consists of the Seventh Edition including revisions through August 6, 2021.

The most recent designation of ANSI/UL 452 as a Reaffirmed American National Standard (ANS) occurred on August 6, 2021. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

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 <https://csds.ul.com>.

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INTRODUCTION

1 Scope

1.1 These requirements cover antenna-discharge units for radio and television receiving equipment and amateur radio-transmitting and -receiving equipment, to be employed in accordance with the National Electrical Code, NFPA 70.

1.2 An antenna-discharge unit – hereinafter referred to as a discharge unit – as covered by these requirements consists of a gap, a fixed resistance or other discharge element, or a combination of such features, connected between each antenna lead-in terminal and a grounding terminal.

2 References

2.1 Any undated reference to a code or standard appearing in the requirements of this standard shall be interpreted as referring to the latest edition of that code or standard.

CONSTRUCTION

3 General

3.1 A gap-type discharge unit shall have a fixed gap that is constructed so that it cannot be readily altered or adjusted in the field.

3.2 A discharge unit of other than the gap type shall be constructed so that the resistance between the antenna and ground terminals cannot be readily altered or adjusted in the field.

4 Enclosure

4.1 The discharge chamber of a discharge unit shall be dust tight and, if the discharge unit is intended for outdoor use, the discharge chamber shall be watertight.

4.2 A discharge unit shall have means for mounting.

5 Protection Against Corrosion

5.1 Iron and steel parts shall be protected against corrosion by enameling, galvanizing, plating, or an equivalent means.

6 Insulating Material

6.1 A base or body for the mounting or enclosing of uninsulated live parts shall be of moisture-resistant insulating material.

6.2 Material for the mounting of uninsulated live parts shall be porcelain, phenolic composition, or other material acceptable for the application. Fiber and rubber are not acceptable. A material other than the above shall be appropriately investigated.

7 Current-Carrying Parts

7.1 A current-carrying part shall be brass, phosphor-bronze, carbon, or other corrosion-resistant material.