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NATIONAL STANDARD

ANSI/CAN/UL/ULC 2166:2020

STANDARD FOR SAFETY

Halocarbon Clean Agent Extinguishing System Units

Approved American National Standard
ANSI
ANSI/UL 2166-2020

Standards Council of Canada
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UL Standard for Safety for Halocarbon Clean Agent Extinguishing System Units, ANSI/CAN/UL/ULC 2166

Third Edition, Dated May 10, 2017

Summary of Topics

This revision of ANSI/CAN/UL/ULC 2166 includes the following changes in requirements:

Minimum Temperature requirement; 7.5 and 7.6.

Error corrections; Table 35.1 and 35.3.1.2.

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 new and revised requirements are substantially in accordance with Proposal(s) on this subject dated July 5, 2019 and December 20, 2019.

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Standard for Halocarbon Clean Agent Extinguishing System Units

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May 10, 2017

This ANSI/CAN/UL/ULC Safety Standard consists of the Third Edition including revisions through May 15, 2020.

The most recent designation of ANSI/UL 2166 as an American National Standard (ANSI) occurred on May 15, 2020. ANSI approval for a standard does not include the Cover Page, Transmittal Pages and Title Page. Any other portions of this ANSI/UL standard that were not processed in accordance with ANSI/UL requirements are noted at the beginning of the impacted sections.

This standard has been designated as a National Standard of Canada (NSC) on May 15, 2020.

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Preface

This is the Third Edition of the ANSI/CAN/UL/ULC 2166, Standard for Safety for Halocarbon Clean Agent Extinguishing System Units.

UL is accredited by the American National Standards Institute (ANSI) and the Standards Council of Canada (SCC) as a Standards Development Organization (SDO).

Annexes A and B, identified as normative, form a mandatory part of this Standard.

This ANSI/CAN/UL/ULC 2166 Standard is under continuous maintenance, whereby each revision is approved in compliance with the requirements of SCC for accreditation of a Standards Development Organization. In the event that no revisions are issued for a period of four years from the date of publication, action to revise, reaffirm, or withdraw the standard shall be initiated.

In Canada, there are two official languages, English and French. All safety warnings must be in French and English. Attention is drawn to the possibility that some Canadian authorities may require additional markings and/or installation instructions to be in both official languages.

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This Edition of the Standard has been formally approved by the UL Standards Technical Panel (STP) on Extinguishing Systems, STP 300.

This list represents the STP 300 membership when the final text in this standard was balloted. Since that time, changes in the membership may have occurred.

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This Standard is intended to be used for conformity assessment.

The intended primary application of this standard is stated in its scope. It is important to note that it remains the responsibility of the user of the standard to judge its suitability for this particular application.

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INTRODUCTION

1 Scope

1.1 These requirements cover the construction and operation of halocarbon clean agent fire extinguishing system units intended to be installed, inspected, tested, and maintained in accordance with the Standard on Clean Agent Fire Extinguishing Systems, NFPA 2001 and with the National Fire Code of Canada.

1.2 These requirements also cover halocarbon clean agent automatic extinguisher units that may have a manual means of operation, and are intended to be used in accordance with the manufacturer's installation instructions. Automatic extinguisher units are not intended:

a) For use as a general substitute for pre-engineered or engineered clean agent extinguishing system units; or

b) For protection of fire risks larger than those specified in the manufacturer's instructions for a single unit by using multiple units.

2 General

2.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

2.2 Where these requirements reference "extinguishing system unit," the requirements also apply to automatic extinguisher units unless specifically noted otherwise.

3 Glossary

3.1 For the purpose of these requirements, the following definitions apply.

3.2 AGENT TIME IMBALANCE – A situation in which the start of agent discharge at a nozzle occurs after agent discharge has been completed at any other nozzle in the system.

3.3 AUTOMATIC EXTINGUISHER UNIT – A unit that discharges extinguishing agent upon thermal actuation and could have mechanical manual operation, is intended for use in normally unoccupied space, and is limited to a single protected area per 1.2.

3.4 CLEAN AGENT – Electrically nonconducting, volatile, or gaseous fire extinguishant that does not leave a residue upon evaporation. The word "agent" as used in this document shall mean "clean agent" unless otherwise indicated.

3.5 CYLINDER/VALVE ASSEMBLY – A container that incorporates a valve and which provides storage of the extinguishing agent and expellant (when applicable) until the valve is actuated. When actuated, the valve releases the agent into the distribution network of the extinguishing system.

3.6 DISCHARGE NOZZLE – A device that is used to uniformly distribute the extinguishing agent:

a) Over a specific area; or

b) Within a specific volume;

or both.

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