UL 416

STANDARD FOR SAFETY

Refrigerated Medical Equipment

UL Standard for Safety for Refrigerated Medical Equipment, UL 416

Fourth Edition, Dated August 30, 1993

Summary of Topics

This revision to UL 416 is being issued to remove the reference to the withdrawal date of UL 873 and to address universal upkeep of UL Standards for Safety. These revisions are considered to be non-substantive and not subject to UL's STP process.

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. Changes in requirements are marked with a vertical line in the margin and are followed by an effective date note indicating the date of publication or the date on which the changed requirement becomes effective.

The requirements in this Standard are now in effect, except for those paragraphs, sections, tables, figures, and/or other elements of the Standard having future effective dates as indicated in the note following the affected item. The prior text for requirements that have been revised and that have a future effective date are located after the Standard, and are preceded by a ″SUPERSEDED REQUIREMENTS″ notice.

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AUGUST 30, 1993
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UL 416

Standard for Refrigerated Medical Equipment

The First and Second editions were titled Standard for Oxygen Therapy Equipment, Refrigerated.

First Edition – August, 1956
Second Edition – May, 1973
Third Edition – July, 1978

Fourth Edition

August 30, 1993

This UL Standard for Safety consists of the Fourth Edition including revisions through September 27, 2013.

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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INTRODUCTION

1 Scope

1.1 These requirements cover refrigerated medical equipment such as thermia and oxygen therapy devices for use in hospitals, nursing homes, medical care centers, medical and dental offices, and similar health care facilities in accordance with the National Electric Code, NFPA 70.

1.2 Equipment covered by these requirements employ hermetic refrigerant motor-compressors and air- or water-cooled condensers, designed for use on alternating current circuits rated not more than 600 volts. These requirements take into consideration the hazards resulting from the presence of oxygen and the intended use of oxygen administering equipment but do not cover the canopy (tent), or oxygen storage and distribution systems with which the equipment may be used.

1.3 These requirements do not cover equipment for use in hazardous locations, with respect to flammable anesthetics, as defined in the National Electrical Code, NFPA 70.

1.4 The requirements of this Standard do not consider the complete spectrum of physiological or therapeutic effects, beneficial or otherwise, except where generally accepted limits for potentially hazardous conditions are defined. Devices which necessitate the utilization of conditions exceeding such accepted limits for patient treatment are intended for use by or under the supervision of licensed medical persons. Such equipment shall be provided with warnings prominently displayed on the device.

1.5 A product that contains features, characteristics, components, materials, or systems new or different from those in use when the standard was developed, and that involves a risk of fire, electric shock, or injury to persons shall be evaluated using the appropriate additional component and end-product requirements as determined necessary to maintain the level of safety for the user of the product as originally anticipated by the intent of this standard.

2 General

2.1 Components

2.1.1 Except as indicated in 2.1.2, a component of a product covered by this standard shall comply with the requirements for that component. See Appendix A for a list of standards covering components generally used in the products covered by this standard.

2.1.2 A component need not comply with a specific requirement that:

a) Involves a feature or characteristic not needed in the application of the component in the product covered by this standard, or

b) Is superseded by a requirement in this standard.

2.1.3 A component shall be used in accordance with its recognized rating established for the intended conditions of use.

2.1.4 Specific components are recognized as being incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions for which they have been recognized.