UL 887

STANDARD FOR SAFETY

Delayed-Action Timelocks

UL Standard for Safety for Delayed-Action Timelocks, UL 887

Eighth Edition, Dated October 5, 1999

Summary of Topics

This revision of ANSI/UL 887 is being issued to update the title page to reflect the reaffirmation of ANSI approval. No changes in requirements 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. 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 are substantially in accordance with Proposal(s) on this subject dated April 13, 2018.

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UL 887

Standard for Delayed-Action Timelocks

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Second Edition – January, 1945
Third Edition – July, 1972
Fourth Edition – December, 1977
Fifth Edition – October, 1983
Sixth Edition – December, 1988
Seventh Edition – May, 1994

Eighth Edition

October 5, 1999

This ANSI/UL Standard for Safety consists of the Eighth Edition including revisions through June 26, 2018.

The most recent designation of ANSI/UL 887 as a Reaffirmed American National Standard (ANS) occurred on June 26, 2018. 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 delayed-action timelocks intended for attachment on the doors of safes, chests, vaults, and the like, to provide a means for locking the door for a predetermined length of time as protection against burglary or robbery or both.

1.2 The timelocks covered by these requirements may be automatic, manual, or both, in operation depending upon their design. Automatic devices can be factory set to a fixed minimum time delay of 5 minutes. Manual devices are generally set by the user with a key or similar device to provide delays of 120 hours or more. Some designs may include both the automatic delay feature for interior robbery protection and the manual delay feature for burglary protection.

1.3 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 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.

2.1.2 A component is not required to comply with a specific requirement that:

a) Involves a feature or characteristic not required 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 rating established for the intended conditions of use.

2.1.4 Specific components are 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.

2.2 Units of measurement

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

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3 General

3.1 Mechanical parts, such as clockwork, gears, springs, pivots, and the like, shall be enclosed to protect against dust, moisture, and mechanical damage.

3.2 The timer shall be provided with a simple and convenient means of setting, or winding, or both, for frequent use.

3.3 Automatic devices shall not be provided with levers or other attachments by which the user can interrupt, reduce, or nullify the time-delay period after the unit is installed in the secure condition.

3.4 The mechanism shall be constructed to reduce the risk of premature stoppage and shall provide reserve power for release of the lock at the expiration of its time limit.

3.5 The operation of the device shall not permit it to be set to a time delay of less than 5-minute duration.

3.6 The device shall not be capable of having the running period (see 3.5) interrupted or reduced after it has begun.

3.7 The complete assembly shall not produce a visual signal, nor an audible signal above 50 decibels, upon expiration of the timelocked period.

3.8 The sound level measurement shall be made using a sound level meter using a weighting network and fast response characteristics. The microphone shall be located 1 foot (0.3 m) in front of the timelock. The ambient sound level shall be 44 decibels or less.

4 Corrosion Protection

4.1 All working parts of the lock mechanisms shall be constructed of brass, bronze, stainless steel, or other corrosion-resistant materials.

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5 Endurance Test

5.1 The timelock opening shall not vary by more than 1 minute for a 5-minute setting or 3 minutes for a 15-minute setting before and after being operated for 120 cycles on the minimum delay opening. For the purpose of this requirement, a cycle is to be defined as a locking and unlocking of the timelock device.

6 Variable Ambient Temperature Test

6.1 The accuracy of the timelock shall not vary by more than 1 minute for a 5-minute setting or 3 minutes for a 15-minute setting after being subjected to:

a) An ambient temperature of 49°C (120°F) for 4 hours, and

b) An ambient temperature of 0°C (32°F) for 4 hours.

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