



---

UL 826

**STANDARD FOR SAFETY**

Household Electric Clocks

[ULNORM.COM](http://ULNORM.COM) : Click to view the full PDF of UL 826 2016

[ULNORM.COM](http://ULNORM.COM) : Click to view the full PDF of UL 826 2016

UL Standard for Safety for Household Electric Clocks, UL 826

Eleventh Edition, Dated November 29, 2007

### **Summary of Topics**

***This revision of UL 826 was issued to incorporate editorial updates. No changes in requirements are involved.***

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.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form by any means, electronic, mechanical photocopying, recording, or otherwise without prior permission of UL.

UL provides this Standard "as is" without warranty of any kind, either expressed or implied, including but not limited to, the implied warranties of merchantability or fitness for any purpose.

In no event will UL be liable for any special, incidental, consequential, indirect or similar damages, including loss of profits, lost savings, loss of data, or any other damages arising out of the use of or the inability to use this Standard, even if UL or an authorized UL representative has been advised of the possibility of such damage. In no event shall UL's liability for any damage ever exceed the price paid for this Standard, regardless of the form of the claim.

Users of the electronic versions of UL's Standards for Safety agree to defend, indemnify, and hold UL harmless from and against any loss, expense, liability, damage, claim, or judgment (including reasonable attorney's fees) resulting from any error or deviation introduced while purchaser is storing an electronic Standard on the purchaser's computer system.

ULNORM.COM : Click to view the full PDF of UL 826 2016

No Text on This Page

[ULNORM.COM](http://ULNORM.COM) : Click to view the full PDF of UL 826 2016

**NOVEMBER 29, 2007**  
(Title Page Reprinted: August 9, 2016)

1

**UL 826**

**Standard for Household Electric Clocks**

First Edition – October, 1966  
Second Edition – October, 1968  
Third Edition – January, 1974  
Fourth Edition – July, 1974  
Fifth Edition – October, 1979  
Sixth Edition – January, 1981  
Seventh Edition – November, 1985  
Eighth Edition – July, 1990  
Ninth Edition – June, 1995  
Tenth Edition – August, 2000

**Eleventh Edition**

**November 29, 2007**

This UL Standard for Safety consists of the 11th Edition including revisions through August 9, 2016.

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>.

UL's Standards for Safety are copyrighted by UL. Neither a printed nor electronic copy of a Standard should be altered in any way. All of UL's Standards and all copyrights, ownerships, and rights regarding those Standards shall remain the sole and exclusive property of UL.

**COPYRIGHT © 2016 UNDERWRITERS LABORATORIES INC.**

No Text on This Page

[ULNORM.COM](http://ULNORM.COM) : Click to view the full PDF of UL 826 2016

## CONTENTS

### INTRODUCTION

1 Scope .....	5
2 General .....	5
2.1 Components .....	5
2.2 Units of measurement .....	6
2.3 Undated references .....	6
3 Glossary .....	6

### CONSTRUCTION

4 Frame and Enclosure .....	6
4.1 General .....	6
4.2 Accessibility of live parts .....	9
4.3 Mounting means .....	12
4.4 Servicing .....	12
5 Corrosion Resistance .....	13
6 Mechanical Assembly .....	13
7 Supply Connections – Cord-Connected Clocks .....	13
7.1 Cords and plugs .....	13
7.2 Grounding .....	16
7.3 Strain relief .....	16
7.4 Bushings .....	17
8 Supply Connections – Permanently Connected Clocks .....	17
8.1 General .....	17
8.2 Grounding .....	18
8.3 Terminals .....	18
8.4 Leads .....	19
9 Live Parts .....	20
10 Insulating Material .....	20
11 Internal Wiring .....	20
12 Coil Windings .....	21
13 Spacings .....	22
14 Secondary Circuits .....	24
14.1 General .....	24
14.2 Connections to frame .....	25
14.3 Separation of circuits .....	25

### PERFORMANCE

15 Leakage Current Test .....	25
16 Leakage Current Test Following Humidity Conditioning .....	28
17 Current Input Test .....	28
18 Temperature Test .....	28
19 Dielectric Voltage-Withstand Test .....	32
19.1 General .....	32
19.2 Primary circuits .....	32
19.3 Secondary circuits .....	32
20 Transformer Abnormal Operation Test .....	33
20.1 General .....	33

20.2 15-day abnormal operation .....33  
21 Secondary Circuit Component Failure, Abnormal Operation Test .....35  
22 Stability Test of Floor-Standing Clocks .....36  
23 Enclosure Abuse (Drop) Test .....36  
24 Mounting Means Test .....36  
25 Strain Relief Test .....37  
26 Impact Test .....37

**MANUFACTURING AND PRODUCTION TESTS**

27 Production-Line Dielectric Voltage-Withstand Test .....40  
28 Grounding Continuity Test .....41  
28.1 Continuity of grounding connection .....41  
28.2 Electrical indicating device .....42

**RATINGS**

29 General .....42

**MARKINGS**

30 General .....42

**APPENDIX A**

Standards for Components..... A1

ULNORM.COM : Click to view the full PDF of UL 826 2016

## INTRODUCTION

### 1 Scope

1.1 These requirements cover electrically operated household clocks having an input rating of not more than 30 watts and 250 volts to be used in ordinary indoor locations in accordance with the National Electrical Code, NFPA 70.

1.2 These requirements do not cover clocks intended primarily for industrial or commercial installations, clocks that form part of a master clock system, outdoor clocks, time stamps, job card recorders, timers, and similar time-indicating and -recording appliances, nor do they cover illuminated clocks intended for use as portable electric lamps or for other illuminating purposes.

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. See Appendix A for a list of standards covering components used in the products covered by this standard.

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.

2.2.2 Unless otherwise indicated, all voltage and current values mentioned in this standard are root-mean-square (rms).

## 2.3 Undated references

2.3.1 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.

## 3 Glossary

3.1 For the purpose of this standard the following definitions apply.

3.2 FIELD WIRING TERMINAL – Any terminal to which a supply or other wire may be connected by an installer in the field, unless the wire is provided as part of the unit and a connector, soldering lug, soldered loop, crimped eyelet, pressure terminal, or other means for making the connection is factory assembled to the wire.

3.3 PRINTED WIRING ASSEMBLY – A printed wiring board on which mechanical and electrical parts are mounted.

3.4 PRINTED WIRING BOARD – The finished combination of a pattern of conductive paths on, in, or both on and in (multilayer) a sheet of insulating material.

3.5 SAFETY CIRCUIT – Any primary or secondary circuit that is relied upon to reduce the risk of damage or injury to persons (for example, an interlock circuit).

3.6 SECONDARY CIRCUIT – A circuit supplied from a secondary winding of an isolating transformer.

## CONSTRUCTION

### 4 Frame and Enclosure

#### 4.1 General

4.1.1 A clock shall be formed and assembled so that it will have the strength and rigidity to resist the abuses to which it is likely to be subjected, without increasing the risk of fire, electric shock, or injury to persons because of total or partial collapse with resulting reduction of spacings, loosening or displacement of parts, or other serious defects.

4.1.2 An edge, projection, or corner of an enclosure, opening, frame, guard, handle, knob, or the like shall be smooth and well-rounded and shall not be made in such a way that it causes any type of injury during intended use or user maintenance.