



UL 1206

STANDARD FOR SAFETY

Electric Commercial Clothes-Washing Equipment

UL Standard for Safety for Electric Commercial Clothes-Washing Equipment, UL 1206

Fourth Edition, Dated April 22, 2003

SUMMARY OF TOPICS

This revision of ANSI/UL 1206 dated June 14, 2021 was issued to add an alternative reference to the Standard for Adjustable Speed Electric Power Drive Systems, UL 61800-5-1; [20A.2.4](#)

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 revised requirements are substantially in accordance with Proposal(s) on this subject dated April 16, 2021.

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.

No Text on This Page

APRIL 22, 2003
(Title Page Reprinted: June 14, 2021)



ANSI/UL 1206-2021

1

UL 1206

Standard for Electric Commercial Clothes-Washing Equipment

Prior to the First edition, the requirements for the products covered by this standard were included in the Standard for Electric Home-Laundry Equipment, UL 560.

The First edition was titled Standard for Electric Coin-Operated and Commercial Clothes-Washing Equipment.

First Edition – February, 1974
Second Edition – August, 1979
Third Edition – January, 1994

Fourth Edition

April 22, 2003

This ANSI/UL Standard for Safety consists of the Fourth Edition including revisions through June 14, 2021.

The most recent designation of ANSI/UL 1206 as an American National Standard (ANSI) occurred on June 14, 2021. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

The Department of Defense (DoD) has adopted UL 1206 on June 14, 1989. The publication of revised pages or a new edition of this Standard will not invalidate the DoD adoption.

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>.

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 © 2021 UNDERWRITERS LABORATORIES INC.

This is a preview. Click here to purchase the full publication.

No Text on This Page

CONTENTS

INTRODUCTION

1	Scope	7
2	References	7
3	Glossary	7
4	Components	9
5	Units of Measurement	9
6	Field-Attached Accessories	9

CONSTRUCTION

7	Frame and Enclosure	10
8	Accessibility of Uninsulated Live Parts and Film-Coated Wire	14
9	Mechanical Assembly	19
10	Protection Against Corrosion	20
11	Power-Supply Connections	20
	11.1 General	20
	11.2 Permanently connected appliances	20
	11.3 For connection of grounded power-supply conductor	21
	11.4 For connection of equipment-grounding conductor	22
	11.5 Cord-connected appliances	22
12	Internal Wiring	23
13	Live Parts	24
14	Electrical Insulation	25
15	Thermal Insulation	25
16	Motors	25
17	Overload Protection	26
18	Lampholders	27
19	Receptacles	27
20	Switches	27
20A	Controls	28
	20A.1 General	28
	20A.2 Operating controls	28
	20A.3 Controls that manage safety critical functions (protective controls)	29
	20A.4 Temperature-regulating and temperature-limiting devices	30
	20A.5 Cycle selection controls	31
	20A.6 Door/lid interlock or lock protective controls	31
	20A.7 Water level detection controls	31
21	Heating Elements	32
22	Capacitors	32
23	Spacings	33
23A	Alternative Spacings – Clearances and Creepage Distances	34
24	Grounding	35
25	Overflow Pipes	36

PROTECTION AGAINST RISK OF INJURY TO PERSONS

26	Automatic Restarting of Motor	37
27	Stability	37
	27.1 Freestanding appliances	37
	27.2 Appliance stands	37
28	Sharp Edges, Projections, and Moving Parts	38
29	Centrifugal-Extraction Appliances	38

PERFORMANCE

30	General	39
31	Input.....	40
32	Starting Current.....	40
33	Insulation Resistance	40
34	Physical Properties of a Liquid Seal or Diaphragm	40
35	Dielectric Voltage Withstand.....	41
36	Temperature	42
37	Switches.....	47
38	Overload Protection.....	48
39	Flooding of Live Parts	48
	39.1 Flooding as a result of deterioration or damage of a boot or diaphragm.....	48
	39.2 Flooding as a result of malfunction or breakdown of a timer switch or a float- or pressure- operated switch	49
40	Oversudsing	49
41	Overflow of Auxiliary Reservoirs	50
42	Strain Relief	50
43	Permanence of Marking.....	50
44	Polymeric Materials	51
	44.1 General.....	51
	44.2 Long-term exposure.....	52
	44.3 Immersion	53
	44.4 Mold stress-relief distortion.....	54
	44.5 Horizontal burning; HB	54
	44.6 Flammability.....	54
	44.7 Resistance to impact.....	55
	44.8 Crushing resistance	55
	44.9 Hot-wire ignition.....	55
	44.10 Thermal aging	55
	44.11 Volume resistivity	56
	44.12 Enclosure flammability – large mass consideration.....	56
	44.13 High current arc resistance to ignition (HAI)	56

MANUFACTURING AND PRODUCTION TESTS

45	Plumbing System Leakage.....	57
46	Grounding Continuity.....	57
47	Dielectric Voltage Withstand.....	57

RATING

48	General	58
----	---------------	----

MARKING

49	General	59
50	Details.....	59
51	Installation Instructions	62

SUPPLEMENT SA – (NORMATIVE) – EVALUATION OF ELECTRONIC CIRCUITS

INTRODUCTION

SA1	Scope.....	63
-----	------------	----

SA2	General.....	63
SA3	Glossary	63

CONSTRUCTION

SA4	Components.....	64
SA4.1	Capacitors	64
SA4.2	Isolation devices	64
SA4.3	Printed wiring boards.....	64
SA4.4	Switch mode power supplies	65
SA4.5	Temperature sensing, thermistor devices	65
SA4.6	Transformers	65
SA5	Creepage Distances, Clearances, and Distances through Insulation.....	65
SA6	Identification of Safety Critical Circuit Functions	66
SA6.1	General	66
SA6.2	Protective electronic circuits (PEC).....	66
SA6.3	Operating circuits that mitigate a dangerous malfunction of the appliance.....	66
SA7	Evaluation of the Different Types of Electronic Circuits.....	66
SA7.1	All types of circuits.....	66
SA8	Circuits that provide safety critical functions	67

PERFORMANCE

SA9	General Conditions for the Tests	67
SA9.1	Details.....	67
SA9.2	Intentionally weak parts	67
SA9.3	Test results determined by overcurrent protection operation	68
SA10	Determination of Low-Power Circuits	68
SA11	Abnormal Operation and Fault Tests.....	69
SA11.1	General	69
SA11.2	Determined of fault conditions	69
SA11.3	Low-power circuit fire tests	71
SA11.4	Transformer overload test	71
SA11.5	Switch mode power supply overload test.....	71
SA12	Programmable Component Reduced Supply Voltage Test.....	72
SA13	Electromagnetic Compatibility (EMC) Requirements – Immunity.....	72

MANUFACTURING AND PRODUCTION LINE TESTING

SA14	General.....	73
------	--------------	----

APPENDIX A

Standards for Components	74
--------------------------------	----