



UL 498A

STANDARD FOR SAFETY

Current Taps and Adapters

UL Standard for Safety for Current Taps and Adapters, UL 498A

Second Edition, Dated January 23, 2008

SUMMARY OF TOPICS

This revision of ANSI/UL 498A dated October 29, 2021 incorporates a change to Clothes Dryers and Ranges Power Adapter Markings; [8.6.1](#)

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 August 13, 2021 and October 1, 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

JANUARY 23, 2008
(Title Page Reprinted: October 29, 2021)



ANSI/UL 498A-2021

1

UL 498A

Current Taps and Adapters

First Edition – December, 1999

Second Edition

January 23, 2008

This ANSI/UL Standard for Safety consists of the Second Edition including revisions through October 29, 2021.

The most recent designation of ANSI/UL 498A as an American National Standard (ANSI) occurred on October 27, 2021. 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>.

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.

No Text on This Page

CONTENTS

1	Scope	7
2	References	7
3	Glossary	9
4	Components	10
5	Units of Measurement	10
6	Ratings	10
7	Markings	12
	7.1 Company name, catalog designation, electrical rating	12
	7.2 Multiple factories	12
	7.3 AC only devices	12
	7.4 Circuit limitations	13
	7.5 Disconnecting use only	13
	7.6 Adapters	13
	7.7 Travel adapters	13
	7.8 Devices with two sets of line blades	14
	7.9 Devices with supplementary overcurrent protection	14
	7.10 Devices employing a decorative feature	14
	7.11 Current taps intended for outdoor use	14
	7.12 Current tap with child-appealing or toy-like features	15
	7.13 Current tap with shelf	15
8	Installation Instructions	15
	8.1 General	15
	8.2 Current taps	16
	8.3 Grounding adapters	16
	8.4 Travel adapters	16
	8.5 Current taps intended for outdoor use	17
	8.6 Adapters for dryer and range outlets	18
	8.7 Current tap with child-appealing or toy-like features	18
	8.8 Current tap with shelf	18
9	General	18
10	Insulating Materials	21
	10.1 General	21
	10.2 Flammability	22
	10.3 Electrical properties	22
	10.4 Thermal properties	23
	10.5 Vulcanized fiber	24
	10.6 Sealing compounds	24
	10.7 Fuse enclosures	24
11	Enclosure	24
	11.1 General	24
	11.2 Male face size	27
	11.3 Noninterchangeability obstructions	27
	11.4 Female face size	29
	11.5 Enclosure size	31
12	Current-Carrying Parts	31
	12.1 General	31
	12.2 Blades	31
	12.3 Contacts	31
13	Grounding and Dead Metal Parts	32
	13.1 General	32
	13.2 Blades	33
	13.3 Contacts	34
14	Spacings	34

15	Assembly.....	35
15.1	General.....	35
15.2	Outlet separation	35
15.3	Grounding and polarization.....	35
15.4	Mating and interchangeability	36
15.5	Fuseholders	37
15.6	Supplementary circuitry.....	38
15.7	Supplementary overcurrent protectors.....	38
16	Adapters.....	39
17	Travel Adapters.....	40
17A	Indoor or Outdoor or Indoor/Outdoor Current Taps that Employ Decorative Features.....	41
17B	Current Taps Employing Rotatable Outlets.....	41
17C	Current Taps Intended for Outdoor Use	41
17D	Current Tap with Child-Appealing or Toy-Like Features	41
17D.1	Accessibility	41
17D.2	Protection from electric shock.....	41
17D.3	Enclosure of a current tap with child-appealing or toy-like features	42
17D.4	Current tap with child-appealing or toy-like features – protection from personal injury	42
17E	Current Tap with Shelf	43
18	Representative Devices	43
19	Comparative Tracking Index Test.....	45
20	Glow Wire Test.....	45
21	High-Current Arc Resistance to Ignition Test.....	45
22	Mold Stress Relief Test	46
23	Moisture Absorption Resistance Test	47
24	Dielectric Withstand Test.....	47
25	Accelerated Aging Tests	48
25.1	General.....	48
25.2	Rubber, EPDM, and TEE compounds.....	48
25.3	PVC compounds and copolymers	49
26	Insulation Resistance Test	49
27	Security of Blades Test	49
28	Contact Security Test.....	50
29	Retention of Plugs Test	50
30	Overload Test.....	51
31	Temperature Test	53
31A	Accessible Temperature Test	54
32	Retention of Plugs Test (Repeated).....	55
32.1	General.....	55
32.2	Plug retention	55
32.3	Plug withdrawal	55
33	Resistance to Arcing Test.....	56
34	Fuseholder Temperature Test.....	56
35	Improper Insertion Test	57
35A	Single-Pole Insertion Test	58
36	Grounding Contact Tests.....	61
36.1	General.....	61
36.2	Conditioning	61
36.3	Continuity.....	62
36.4	Retention	63
37	Supplementary Overcurrent Protector Temperature Test	66
38	Obstruction Test	67
39	Separation Test.....	68
40	Circuit Condition Indication Test.....	69
41	Leakage Current Test	69

42 Rotational Endurance Test70

43 Resistance Test.....71

44 Fault Current.....71

45 Test Series for Current Taps Intended for Outdoor Use71

46 Loading Test72

APPENDIX A

Standards for Components75