



---

# UL 1363

## **STANDARD FOR SAFETY**

## Relocatable Power Taps



UL Standard for Safety for Relocatable Power Taps, UL 1363

Fifth Edition, Dated June 12, 2018

### ***Summary of Topics***

***This new edition of ANSI/UL 1363 reflects the First time ANSI approval of the Standard, as well as the following changes in requirements:***

#### ***RPT Employing Tamper-Resistant Outlets***

#### ***Miscellaneous Editorial Corrections***

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated November 17, 2017 and April 20, 2018.

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

JUNE 12, 2018



ANSI/UL 1363-2018

1

**UL 1363**

**Standard for Relocatable Power Taps**

The first edition was titled Temporary Power Taps.

First Edition – June, 1991  
Second Edition – December, 1996  
Third Edition – May, 2007  
Fourth Edition – October, 2014

**Fifth Edition**

**June 12, 2018**

This ANSI/UL Standard for Safety consists of the Fifth Edition.

The most recent designation of ANSI/UL 1363 as an American National Standard (ANSI) occurred on June 12, 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>.

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 © 2018 UNDERWRITERS LABORATORIES INC.**

No Text on This Page

## CONTENTS

### INTRODUCTION

1 Scope .....	7
2 Components .....	8
3 Units of Measurement .....	9
4 Undated References .....	9
5 Use .....	9
6 Glossary .....	9

### CONSTRUCTION

7 General .....	12
8 Enclosure .....	13
8.1 General .....	13
8.2 Metallic .....	14
8.3 Nonmetallic .....	14
9 Mechanical Assembly .....	15
10 Accessibility of Live Parts .....	16
11 Temporary Mounting Means .....	18
12 Corrosion Protection .....	18
13 Insulating Materials .....	19
14 Power-Supply Cord .....	19
14.1 General .....	19
14.2 Class 2 lead .....	21
14.3 Bushings .....	21
15 Strain Relief .....	21
16 Receptacles .....	22
17 Supplementary Protection .....	23
18 Switches .....	24
19 Live Parts .....	25
20 Internal Wiring .....	25
21 Spacings .....	26
22 Clearance and Creepage Distances – Isolated Secondary Circuits .....	27
23 Printed-Wiring Boards .....	28
24 Separation of Circuits .....	29
25 Grounding .....	29
25.1 General .....	29
25.2 Bonding .....	31
26 Storage Compartment .....	32
27 Cord Reel Feature .....	32
28 Low Voltage Charging and Isolated Secondary Output Circuits .....	32

### PERFORMANCE

29 General .....	32
30 Temperature Test .....	33
31 Dielectric Voltage-Withstand Test .....	35
32 Leakage Current Test .....	36
32.1 General .....	36
32.2 Leakage current after humidity conditioning .....	39

33	Grounding Continuity Test .....	39
34	Fault Current Test .....	40
34.1	General .....	40
34.2	Calibration of test circuits .....	40
35	Overcurrent Test .....	41
36	Mounting Hole Barrier Tests .....	42
36.1	General .....	42
36.2	Mounting hole barrier impact test .....	43
36.3	Mounting hole barrier probe test .....	44
37	Strain Relief Test .....	44
38	Impact Tests .....	45
38.1	General .....	45
38.2	Drop impact test .....	46
38.3	Steel sphere impact test .....	47
38.4	Low-temperature steel sphere impact test .....	50
39	Crushing Test .....	50
40	Adequacy of Mounting Test .....	51
41	Stability Test .....	52
41.1	General .....	52
41.2	Test method – general .....	52
41.3	Pedestal mounted RPT with multiple or articulated columns .....	52
41.4	Pedestal mounted RPT having provisions for loading .....	52
41.5	Pedestal mounted RPT over 54 in (1472 mm) in height .....	52
42	Tipover Test .....	53
43	Mold Stress-Relief Distortion Test .....	53
44	Spill Test .....	54
45	Water Leakage Test .....	54
46	Permanence of Cord Tag Test .....	55
46.1	General .....	55
46.2	Conditioning .....	55
46.3	Test Method .....	56
47	Flexing Endurance Test .....	56

## MANUFACTURING AND PRODUCTION-LINE TESTS

48	Dielectric Voltage-Withstand Test .....	57
49	Grounding Continuity Test .....	59

## RATINGS

50	Details .....	59
----	---------------	----

## MARKINGS

51	Details .....	59
----	---------------	----

## INSTRUCTIONS

52	Details .....	62
----	---------------	----



**SUPPLEMENT SA - EXTENDABLE RELOCATABLE POWER TAPS****INTRODUCTION**

SA1 Scope .....	SA1
SA2 Glossary .....	SA1

**CONSTRUCTION**

SA3 General .....	SA2
SA4 Electrical Contact Devices .....	SA2
SA4.1 General .....	SA2
SA4.2 Mating connectors .....	SA2
SA4.3 Flammability .....	SA3
SA4.4 Electrical properties .....	SA3
SA4.5 Thermal properties .....	SA4
SA4.6 Mating connector physical requirements .....	SA4
SA5 Enclosures .....	SA4
SA6 Performance .....	SA5
SA6.1 General .....	SA5
SA6.2 Locking and latching tests .....	SA5
SA6.3 Mating connector tests .....	SA6
SA7 Markings .....	SA7
SA8 Instruction Manual .....	SA8

**SUPPLEMENT SB - RELOCATABLE POWER TAPS INCORPORATING BATTERIES****INTRODUCTION**

SB1 Scope .....	SB1
SB2 Glossary .....	SB1
SB3 General .....	SB2
SB4 Battery Chargers and Circuits .....	SB2

**CONSTRUCTION**

SB5 Batteries .....	SB2
SB5.1 General .....	SB2
SB5.2 Non-replaceable batteries .....	SB3
SB5.3 Technician replaceable batteries .....	SB3
SB5.4 User replaceable batteries .....	SB3
SB5.5 Battery packs .....	SB3
SB5.6 Lithium-ion battery cells or packs .....	SB3
SB6 Battery Compartments .....	SB4
SB7 Battery Circuits .....	SB5
SB8 Battery Charging .....	SB5

**PERFORMANCE**

SB9 Temperature Test .....	SB5
SB9.1 General .....	SB5
SB9.2 Temperature test method I .....	SB6
SB9.3 Temperature test method II .....	SB6
SB9.4 Temperature test method III .....	SB6
SB10 Discharge Test .....	SB6
SB11 Lithium-ion Batteries .....	SB7
SB11.1 Lithium-ion battery abnormal tests .....	SB7
SB11.2 Impact tests .....	SB8
SB12 Markings .....	SB9
SB13 Installation and Operation Instructions .....	SB9

**SUPPLEMENT SC - RELOCATABLE POWER TAPS EMPLOYING AN INTEGRAL THERMAL INTERRUPTION MECHANISM****INTRODUCTION**

SC1 Scope .....	SC1
SC2 Glossary .....	SC1

**CONSTRUCTION**

SC3 General .....	SC1
-------------------	-----

**PERFORMANCE**

SC4 General .....	SC2
SC5 Abnormal Slow Heat Rise Test .....	SC2
SC6 Abnormal Fast Heat Rise Test .....	SC4
SC7 Abnormal Switch Test .....	SC4

**MARKINGS**

SC8 Details .....	SC5
-------------------	-----

**INSTRUCTIONS**

SC9 Details .....	SC5
-------------------	-----

**APPENDIX A**

Standards for Components .....	A1
--------------------------------	----

## INTRODUCTION

### 1 Scope

1.1 These requirements cover indoor use cord and plug connected, relocatable power taps (RPT) rated 250 V AC or less and 20 Amperes or less. A RPT may include an integral Class 2 power supply with an integral lead and/or connector(s) output. In accordance with the National Electric Code, NFPA 70, RPT are for use as a movable power supply connection for cord and plug connected electrical utilization equipment and shall not serve as fixed wiring of a structure or of fixed furnishings, such as but not limited to applications in permanent countertops of kitchens and bathrooms.

1.2 A cord-and-plug-connected product as described in 1.1 with less than three receptacle outlets and provided with a Luminaire is covered under the Standard for Portable Electric Luminaires, UL 153.

1.3 A cord-and-plug-connected product as described in 1.1 with less than three receptacle outlets that employs an electromagnetic interference filter is covered under the Standard for Electromagnetic Interference Filters, UL 1283.

1.4 A cord-and-plug-connected product as described in 1.1 with less than three receptacle outlets that employs a surge protective device (SPD) is covered under the Standard for Surge Protective Devices, UL 1449, for SPD Type 3.

1.5 These requirements cover RPT with more than two receptacle outlets that employ a surge protective device (SPD) shall also comply with the applicable requirements for cord-connected, Type 3 Surge Protective Device (SPD) in the Standard for Surge Protective Devices, UL 1449.

1.6 A cord-and-plug-connected product as described in 1.1 that employs ground-fault protection is covered under the requirements for portable GFCIs in the Standard for Ground-Fault Circuit Interrupters, UL 943.

1.7 This standard does not cover RPT including those employing Hospital Grade receptacles or Hospital Grade plugs (see 52.1), intended for use with medical equipment. RPT are not suitable for use in Category 2 (General Patient Care) Spaces or Category 1 (Critical Patient Care) Spaces or Patient Care Vicinities of health care facilities.

1.8 These requirements do not cover a cord-and plug-connected product, Health Care Facility Receptacle Assemblies (HCOA), covered by the Outline of Investigation for Cord-and-Plug-Connected Health Care Facility Outlet Assemblies, UL 2930. HCOA are intended as a movable power supply connection for cord-and-plug-connected medical electrical utilization equipment for use in Category 2 (General Patient Care) Spaces or Category 1 (Critical Patient Care) Spaces, including Patient Care Vicinities equipped with Patient Equipment Grounding Points, of health care facilities.

1.9 These requirements do not cover a cord-and-plug-connected component, Special Purpose Relocatable Power Taps (SPRPT), covered by the covered in the Outline of Investigations Special Purpose Relocatable Power Taps, UL 1363A. SPRPT are power distribution components intended to supply power to plug-connected components of a movable equipment assemblies that are rack, table, or pedestal-mounted. SPRPT are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. The SPRPT shall be an integral part of the equipment assembly and permanently attached to the equipment assembly only by those qualified to assemble medical electrical equipment systems compliant with Medical Electrical Equipment – Part 1: General Requirements for Basic Safety and Essential Performance, IEC 60601-1. SPRPT are not suitable for use in Patient Care Vicinities.