



UL 1363

STANDARD FOR SAFETY

Relocatable Power Taps

UL Standard for Safety for Relocatable Power Taps, UL 1363

Sixth Edition, Dated July 13, 2023

Summary of Topics

This new edition of ANSI/UL 1363 dated July 13, 2023 includes the following changes in requirements:

- Update Standards Reference UL 62368-1; [28.1](#) and [B4.1](#)***
- Addition of Requirements Allowing Electronic Installation Instructions; [52.5](#)***

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated March 3, 2023 and June 2, 2023.

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Standard for Relocatable Power Taps

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ANNEX D (informative) – STANDARDS FOR COMPONENTS

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.

1.10 A RPT may employ an integral cord reel for the supply cord and attachment plug. A cord reel provided with pull out receptacle outlets or cord connectors is covered under the Standard for Cord Reels, UL 355.

1.11 These requirements do not cover RPT with work surfaces or surfaces intended to support weight loads other than as specified in [6.16](#) for the storage of hand-held electronic devices and charging equipment such as a cell phone, cell phone charger and the like.

1.12 These requirements cover RPT provided with isolated secondary circuits.

1.13 These requirements cover RPT provided with batteries located in isolated secondary circuits. See UL 1363 Annex [B](#) – Relocatable Power Taps Incorporating Batteries.

1.14 A product that has a battery backup feature or other uninterruptible power supply equipment located in the Primary Circuit shall comply with the applicable requirements in the Standard for Uninterruptible Power Supply Equipment, UL 1778.

1.15 A RPT with three or more receptacle outlets may employ a Light Emitting Diode (LED) Luminaire.

1.16 A cord-and-plug-connected product as described in [1.1](#) for fixed mounting by use of tools to portable or stationary furnishings is covered under the requirements in the Standard for Furniture Power Distribution Units, UL 962A.

1.17 This standard contains the following Annexes:

- a) Annex [A](#) – Extendable Relocatable Power Taps.
- b) Annex [B](#) – Relocatable Power Taps Incorporating Batteries.
- c) Annex [C](#) – Relocatable Power Taps Employing An Integral Thermal Interruption Mechanism.

2 Components

2.1 Except as indicated in [2.2](#), a component of a product covered by this standard shall comply with the requirements for that component. See Annex [D](#) for a list of standards covering components used in the products covered by this standard.

2.2 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.

2.3 A component shall be used in accordance with its rating established for the intended conditions of use.

2.4 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.

2.5 A RPT that incorporates a LED Luminaire and LED components and subassemblies shall comply with the applicable requirements of the Standard for Light Emitting Diode (LED) Equipment for Use in Lighting Products, UL 8750.

3 Units of Measurement

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

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

4 Undated References

4.1 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.

5 Use

5.1 A RPT is intended to be connected to a permanently installed branch circuit receptacle outlet.

5.2 A RPT is not intended to be permanently mounted.

5.3 A RPT is not intended to be series connected (daisy chained) to other RPT or to extension cords.

6 Glossary

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

6.2 ATTACHMENT PLUG – A male contact device for the temporary connection of a flexible cord or cable to a receptacle outlet or cord connector.

6.3 CLASS 2 LEAD – Consists of a factory-made, power-limited cable with a connector at one end. The other end is secured within the housing or enclosure of the RPT. The connector is intended for connection to the Class 2 separable interface.

6.4 CLASS 2 SEPARABLE INTERFACE – A separable component containing Class 2 low-voltage connector(s) only (such as Universal Serial Bus (USB) connector(s)).

6.5 CORD CONNECTOR – A female contact device assembled or molded on flexible cord to allow a detachable electrical connection to an attachment plug.

6.6 ISOLATED SECONDARY CIRCUIT – A circuit derived from an isolating source (such as a transformer, optical isolator, limiting impedance or electro-mechanical relay) and having no direct connection back to the primary circuit (other than through the grounding means). A secondary circuit that has a direct connection back to the primary circuit is considered part of the primary circuit.

6.7 MEANS FOR TEMPORARY MOUNTING – A mounting method that does not require the use of tools for mounting or dismounting the RPT and conceals the head of a screw or other fastener so that it cannot be tightened after the RPT is mounted.

6.8 OVERCURRENT PROTECTION (OCP) DEVICE – A supplementary protection device provided within a RPT that provides overcurrent and short-circuit protection.

6.9 PATIENT CARE SPACE, CATEGORY 1 (CRITICAL CARE) – A health care facility space in which failure of equipment or a system is likely to cause major injury or death of patients, staff, or visitors, as established by health care facility's governing body or its designee.

6.10 PATIENT CARE SPACE, CATEGORY 2 (GENERAL CARE) – A health care facility space in which failure of equipment or a system is likely to cause minor injury of patients, staff, or visitors, as established by health care facility's governing body or its designee.

6.11 PATIENT CARE VICINITY – A health care facility space, within a location intended for the examination and treatment of patients, extending 6 ft (1.8 m) beyond the normal location of the patient bed, chair, table, treadmill, or other device that supports the patient during examination and treatment, and extending vertically to 7 ft 6 in. (2.3 m) above the floor.

6.12 PEDESTAL MOUNTED RPT – A RPT assembly integral to or supported by a column(s) which is in turn provided with a base for stability.

6.13 PORTABLE (Relocatable) – Meets all of the following:

- a) Not secured to the building structure unless provided with a securement means that allows the RPT to be removed without the use of tools, and
- b) Connected electrically to an electrical source of supply with a power supply cord and attachment plug.

6.14 PRIMARY CIRCUIT – A circuit in which the wiring and components are conductively connected to the AC power interface.

6.15 RECEPTACLE OUTLET – A female contact device mounted within an electrical enclosure to allow a detachable electrical connection of an attachment plug.

6.16 RELOCATABLE POWER TAP (RPT) – An electrical enclosure provided with an attached power supply cord and attachment plug for connection to a permanently installed branch circuit receptacle outlet. The electrical enclosure may be provided with one or more receptacle outlets. The RPT may also be provided in any combination of the following configurations:

- a) The electrical enclosure connected to the cord and attachment plug may be supplied with up to six lengths of flexible cord not exceeding 1-1/2 feet in length; each length shall be terminated with a maximum of 3 receptacle outlets within an electrical enclosure or with 3 cord connectors. Refer to [14.1](#) for overload requirements and [16.7](#) for interconnecting cord requirements.
- b) Provided with supplementary overcurrent protection.
- c) Provided with manual or automatic switch(es) such as an integral appliance timer to control all or some of the receptacle outlets.
- d) Provided with indicator lights.
- e) Provided with temporary mounting means.
- f) When provided with three or more receptacle outlets the RPT may be provided with a surge protective device (SPD) or an electromagnetic interference (EMI) filter.
- g) A RPT may employ a storage compartment to store hand-held electronic devices and charging equipment such as a cell phone, cell phone charger, and the like, when these devices are not in use.
- h) A RPT may employ non-electrical decorative features. The decorative features may include various shapes such as rocks, birds and animals, etc.

i) A RPT may employ an integral cord reel for the power supply cord and attachment plug. The cord reel type feature, in addition to the requirements in this standard, shall also comply with the applicable requirements in the Standard for Cord Reels, UL 355.

j) A RPT may employ telephone equipment and communication circuit protectors.

k) A RPT may employ an antenna discharge unit or provide antenna connections for televisions and video products.

l) When provided with three or more receptacle outlets the RPT may be provided with LED (Light Emitting Diode) Luminaire(s).

m) A RPT may be provided with a wireless charging circuit.

n) A RPT may be extendable as specified in UL 1363 Annex [A](#).

o) A RPT may incorporate batteries as specified in UL 1363 Annex [B](#).

p) Provided with an integral Class 2 lead and mating Class 2 separable interface, or an integral power supply with one or more Class 2 output connector(s).

6.17 RISK OF FIRE – A risk of fire is considered to exist at any two points in a circuit where:

a) The open circuit voltage is more than 30 Vrms (42.4 V peak) and the energy available to the circuit under any condition of load including short circuit, results in a current of 8 A or more after 1 minute of operation; or

b) A power of more than 15 watts can be delivered into an external resistor connected between the two points.

6.18 SUPPLEMENTARY PROTECTOR – A manually resettable device designed to open the circuit automatically on a predetermined value of time versus current or voltage within an appliance or other electrical equipment. It is permitted to be provided with a manual means for opening or closing the circuit.

CONSTRUCTION

7 General

7.1 Only materials that are suitable for the particular use shall be used in a RPT.

7.2 If a RPT employs a decorative or ancillary feature, such as a LED Luminaire, a rock, bird or animal, or a storage compartment, it shall be designed so that the addition of the decorative feature part(s) does not:

a) Interfere with the function or temporary mounting means described in Section [11](#), Temporary Mounting Means;

b) Interfere with turning the power "on" or "off" using the switch provided on the RPT; or

c) Interfere with an attachment plug from fully seating in the outlet slot(s) of the RPT.

7.3 The base or column of a pedestal mounted RPT is not considered an electrical enclosure if the only electrical component within the base or column is a power supply cord and contains no splices.

7.4 The base or column of a pedestal mounted RPT is considered an electrical enclosure when electrical components other than specified in [7.3](#) are placed within the base or column.

7.5 A RPT that incorporates devices such as an integral appliance timer to control all or some of the receptacles shall comply with the Standard for Clock-Operated Switches, UL 917 or the Standard for Solid-State Controls for Appliances, UL 244A. Compliance with the Standard for Automatic Electrical Controls – Part 1: General Requirements, UL 60730-1, and/or the applicable Part 2 standard from the UL 60730 series fulfills the UL 244A requirements.

7.6 Products that employ timer(s) as specified in [7.3](#) shall be marked as specified in [51.20](#) to warn the user of the possible hazards.

7.7 A RPT that employs an integral cord reel for the power supply cord shall comply with the requirements in this standard and shall also comply with the applicable requirements in the Standard for Cord Reels, UL 355.

7.8 Telephone equipment and communication circuit protectors included in a RPT shall comply with the requirements in the Standard for Information Technology Equipment – Safety – Part 1: General Requirements, UL 60950-1 or the Standard for Audio/Video Information and Communication Technology Equipment – Part 1: Safety Requirements, UL 62368-1 and the requirements in the Standard for Secondary Protectors for Communications Circuits, UL 497A.

7.9 A RPT that incorporates an antenna discharge unit or provides antenna connections to a television, a high-voltage video product, or antenna shall comply with the applicable requirements in the Standard for Antenna-Discharge Units, UL 452, and the Standard for Audio-Video Products and Accessories, UL 1492 or the Standard for Audio, Video, and Similar Electronic Apparatus – Safety Requirements, UL 60065, or the Standard for Audio/Video Information and Communication Technology Equipment – Part 1: Safety Requirements, UL 62368-1.

7.10 A cord and plug connected RPT with three or more receptacle outlets that employs an electromagnetic interference filter shall also comply with the Standard for Electromagnetic Interference Filters, UL 1283.

7.11 A cord and plug connected RPT with three or more receptacle outlets that employs a surge protective device shall also comply with the Standard for Surge Protective Devices, UL 1449, for SPD Type 3.

8 Enclosure

8.1 General

8.1.1 The enclosure shall be formed and assembled so that it has the strength and rigidity required to resist the abuses to which it is subjected, without resulting in a risk of fire, electric shock, or injury to persons, due to total or partial collapse with resulting reduction of spacings, loosening or displacement of parts or other serious defects.

8.1.2 The enclosure shall not have any openings or knockouts that are capable of being used for permanent mounting or connection to a permanent wiring system. See Temporary Mounting Means, Section [11](#).

8.1.3 An opening in an enclosure shall have such size and shape – or shall be so covered by screening or barrier or by an expanded, perforated, or louvered panel – that a test rod having a maximum diameter of 1/16 in (1.6 mm) shall be prevented from contacting live parts.

8.1.4 A keyhole slot, notch, or similar means for temporary mounting, when provided, shall be located so that the supporting screws or the like cannot damage any electrical insulation or reduce spacings to live parts.

8.1.5 A barrier that covers a mounting hole and thereby forms part of the required enclosure shall be subjected to the Mounting Hole Barrier Tests, Section [36](#).

8.1.6 A part which forms the decorative feature of a RPT shall be for ornamental purposes only and not serve as an enclosure or insulation of live parts.

8.1.7 A RPT employing a decorative feature that encapsulates the RPT or surrounds the enclosure of the RPT, shall be constructed in such a manner that all marking requirements identified in Section [51](#), Details, shall remain visible when the decorative feature is installed.

8.1.8 Enclosure parts shall be secured together by a positive means. Press fit alone is not considered a positive means of securement.

8.2 Metallic

8.2.1 A metal enclosure of a RPT shall have a minimum thickness in accordance with [Table 8.1](#).

Table 8.1
Minimum Thicknesses of Enclosure Metal

Metal	At small, flat unreinforced surfaces and at surfaces of a shape or size to provide adequate mechanical strength,		At relatively larger unreinforced flat surfaces,	
	in	(mm)	in	(mm)
Die-cast metal	3/64	(1.2)	5/64	(2.0)
Cast malleable iron	1/16	(1.6)	3/32	(2.4)
Other cast metal	3/32	(2.4)	1/8	(3.2)
Uncoated sheet steel	0.026	(0.66)	0.026	(0.66)
Galvanized sheet steel	0.029	(0.74)	0.029	(0.74)
Nonferrous sheet metal	0.036	(0.91)	0.036	(0.91)

8.3 Nonmetallic

8.3.1 A polymeric enclosure shall comply with the flammability requirements in the Standard for Polymeric Materials – Use in Electrical Equipment Evaluations, UL 746C, for non-attended, non-intermittent duty portable equipment.

8.3.2 The enclosure shall comply with the strain relief, impact, crush and mold stress-relief test requirements of Sections [37](#), [38](#), [39](#) and [43](#) respectively, of this standard.

8.3.3 A RPT that employs a decorative feature or storage compartment which is constructed of polymeric material shall comply with the flammability requirements for an enclosure material as identified in the Standard for Polymeric Material – Use in Electrical Equipment Evaluations, UL 746C, for non-attended, non-intermittent duty portable equipment.

9 Mechanical Assembly

9.1 A RPT shall be formed and assembled so as to reduce the risk of contact with any sharp edges, fins, burrs or the like that are capable of increasing the risk of injury to persons, or abrade the insulation on conductors or otherwise damage wires.

9.2 A switch, a lampholder, a power-supply cord and its strain-relief bushing, receptacle, or similar component shall be mounted securely and, except as noted in [9.3](#) and [9.4](#), shall be restrained from turning. See [9.5](#).

9.3 The requirement that a switch be restrained from turning is capable of being waived when all of the following conditions are met:

- a) The switch is to be of the plunger or other type whose actuator does not tend to rotate when operated (the actuator of a toggle or rocker switch is considered to be subject to forces that tend to turn the switch during operation of the switch).
- b) The means of mounting the switch makes it unlikely that operation of the switch loosens it.
- c) The spacings are not to be reduced below the minimum acceptable values when the switch rotates.

9.4 A lampholder of a type in which the lamp is not intended to be replaced, such as a neon pilot or indicator light in which the lamp is sealed in a nonremovable jewel, is not required to be restrained from turning when the rotation is not capable of reducing spacings below the minimum acceptable values.

9.5 The means by which the turning specified in [9.2](#) is prevented is to include more than friction between surfaces. For example, a lockwasher, properly applied, is not prohibited from being used as a means to restrain turning of a device having a single-hole mounting means.

9.6 A base and column or sections of columns of a pedestal mounted RPT that does not form an electrical enclosure may be disassembled for shipment. When disassembled for shipment all the following shall apply:

- a) When disassembled there shall be no sharp edges exposed to conductors, cords or to the user. A method for determining sharp edges is the standard for Tests for Sharpness of Edges on Equipment, UL 1439.
- b) Assembly shall not require cutting or drilling. Assembly shall not subject conductors, cords or splices to damage.
- c) A pedestal mounted RPT not completely assembled when shipped shall be provided with assembly instructions.

9.7 A pedestal mounted RPT shall comply with the Impact Tests, Section [38](#), the Stability Test, Section [41](#) and the Tipover Test, Section [42](#).

Exception: The tip over test need not be performed if the overall height of the pedestal mounted RPT is lower than 3 ft (0.91 m).

9.8 The power supply cord shall enter the pedestal within 1 ft (305 mm) of the floor or base.

10 Accessibility of Live Parts

10.1 The electrical parts of a RPT that do not require use of a tool for access shall be located or enclosed so that persons are protected against inadvertent contact with uninsulated live parts and film-coated magnet wire.

Exception: Connectors and contacts supplied by an isolated secondary circuit meeting Class 2 or Limited Power Circuit (LPS) power levels may be accessible to the user.

10.2 An opening in the enclosure of a RPT is not prohibited when an uninsulated live part or film-coated magnet wire is not capable of being contacted by the probe shown in [Figure 10.1](#). The probe shall be applied to any depth that the opening permits, and shall be rotated or angled before, during, and after insertion through the opening to any position that is required to examine the enclosure. The probe shall be applied in any possible configuration; and, when required, the configuration shall be changed after insertion through the opening.

10.3 The probe shall be used as a measuring instrument to evaluate the accessibility provided by an opening, and not as an instrument to evaluate the strength of a material; it shall be applied with the minimum force required to determine accessibility.

[illegible]

11 Temporary Mounting Means

11.1 A RPT may be provided with a means for temporary mounting. A tool shall not be required to dismount a RPT.

11.2 A means for temporary mounting shall provide for secure positioning that requires a positive, deliberate action by the user to dismount it.

11.3 A keyhole slot, notch, or similar means for temporary mounting, shall be located so that the screw head, nail head, hook, or other supporting device is not accessible for further securing of the RPT once it is mounted.

Exception: A temporary mounting means that does not comply with the above requirement is capable of being used when investigated for the purpose.

11.4 When a temporary mounting means is provided, installation instructions shall be furnished with the product. When the mounting means requires special hardware, to comply with the requirements in the Adequacy of Mounting Test, Section [40](#), or [11.1](#) – [11.3](#), the hardware shall be provided with the product.

Exception: Installation instructions are not required to be furnished when it is determined that the mounting means is obvious.

11.5 The temporary mounting means shall comply with the requirements in [8.1.4](#) and Sections [36](#) and [40](#).

11.6 An RPT intended to be mounted on a desk or similar furnishing surface shall comply with the requirements in [16.5](#) and Section [44](#), Spill Test.

12 Corrosion Protection

12.1 Iron and steel parts or other parts not inherently corrosion resistant shall be protected against corrosion by painting, enameling, galvanizing, plating, or other equivalent means.

Exception: Minor parts of iron or steel, such as washers, screws and the like that are not in the grounding conductor path are not required to comply with this requirement.

13 Insulating Materials

13.1 A barrier or integral part, such as an insulating washer or bushing, and a base or support for the mounting of live parts, shall be of a moisture-resistant material that will not be damaged by the temperature and stresses to which it will be subjected under conditions of actual use.

13.2 An insulating material is to be investigated with regard to its acceptability for the application in accordance with the Standard for Polymeric Materials – Use in Electrical Equipment Evaluations, UL 746C. Materials, such as mica, ceramic, or some molded compounds are capable of being used as the sole support of live parts. When it is required to investigate a material to determine its acceptability, consideration is to be given to such factors as its mechanical strength, resistance to ignition sources, dielectric strength, insulation resistance, and heat-resistant properties in both the aged and unaged conditions, the degree to which it is enclosed, and any other features affecting the risk of fire and electric shock.

13.3 Vulcanized fiber, industrial laminates, polymeric films or similar materials are capable of being used for insulating bushings, washers, separators, and barriers, but not as sole support for uninsulated live parts. Hard rubber is not to be used.

Exception: Industrial laminates that have been investigated for the purpose are capable of being used as sole support for uninsulated live parts.

14 Power-Supply Cord

14.1 General

14.1.1 The power-supply cord shall be of the grounding type and shall employ one of the following flexible cord Types: SJ, SJE, SJO, SJT, SJTO, or equivalent.

Exception: SPT-3 is not prohibited from being used on a RPT rated 15 A or less when marked in accordance with [51.11](#).

14.1.2 A detachable power-supply cord shall not be used.

14.1.3 The minimum conductor size of the power-supply cord shall be as indicated in [Table 14.1](#).

Table 14.1
Guide to Construction and Performance Requirements for RPTs

RPT rating (A)	Minimum power cord size (AWG)	Number of receptacles	Supplementary OCP required? ^a (A)		Supplementary OCP rating ^a (A)	Temperature test load (A)	Minimum internal wiring size ^b (AWG)
				When LED ^h Luminaire or wireless charging circuits are incorporated			
20	12	<6	NO	YES	20 ^c	20	12
20	12	≥6	YES	YES	20	20	12
15	14	<4	NO	YES	15 ^c	15	14
15	14	≥4	YES ^g	YES	15	15	14
<15	14	<4	NO	YES	15 ^{c,d}	15 ^{e,f}	14
<15	14	≥4	YES	YES	15 ^d	OCP ^f	14

^a OCP shall not trip when the RPT is operated at the RPT marked rated current.

^b Smaller AWG is not prohibited from being used when an OCP is provided and the results of the Temperature Test (Section [30](#)), the Fault Current Test (Section [34](#)), and the Overcurrent Test (Section [35](#)) comply with the requirements of those tests using the smaller AWG wire. Isolated secondary conductors shall also comply with Sections [20](#) and [24](#).

^c When provided with an OCP.

^d Maximum rating. An OCP rated less than 15 A and not less than the RPT rating complies with the intent of this requirement. See note (a) above.

^e Test is capable of being conducted at OCP rating when provided.

^f When the OCP rating is greater than the RPT rating, conduct the Temperature Test at the OCP rating. The OCP is not prohibited from being bypassed when nuisance tripping occurs. See [30.3](#).

^g An OCP is not required for a 15 A RPT with four receptacles as long as:

a) Internal wiring is 12 AWG;

b) The power-supply cord is 12 AWG;

Table 14.1 Continued on Next Page

Table 14.1 Continued

RPT rating (A)	Minimum power cord size (AWG)	Number of receptacles	Supplementary OCP required? ^a (A)		Supplementary OCP rating ^a (A)	Temperature test load (A)	Minimum internal wiring size ^b (AWG)
				When LED ^h Luminaire or wireless charging circuits are incorporated			
c) All other components are evaluated for use at 20 A; and d) The Temperature Test load is 20 A.							
^h A RPT incorporating an LED Luminaire or a wireless charging circuit shall be provided with supplementary OCP as shown in the column "Supplementary OCP ratings (A)" The RPT shall also be provided with instructions as indicated in 52.4 .							

14.1.4 The length of a power-supply cord – as measured from the outside surface of the enclosure of the RPT to the plane of the face of the attachment plug – shall not exceed 25 ft (7.62 m) nor be less than 1.5 ft (0.46 m).

14.1.5 A power-supply cord shall have a voltage rating not less than the rated voltage of the RPT and have an ampacity not less than the current rating of the RPT.

14.1.6 The power-supply cord shall not include a through-cord switch.

14.2 Class 2 lead

14.2.1 A Class 2 lead may be one of the following types:

- a) Type CL2 cable in accordance with the Standard for Power-Limited Circuit Cables, UL 13.
- b) An appliance wiring material with a maximum length of 10 feet (3.5 m), minimum of 26 AWG, rated minimum VW-1 flammability and minimum 300 V, in accordance with the Standard for Appliance Wiring Material, UL 758.

14.2.2 One end of a Class 2 lead shall be either molded-on or permanently attached to the RPT housing or enclosure. Where the Class 2 leads pass into the interior of the RPT housing or enclosure, the power-limited cable shall be separated in accordance with [24.1](#) from AC power circuit conductors and from conductive parts energized by AC power circuits.

14.2.3 The other end of a Class 2 lead shall terminate in a connector capable of being inserted into the mating connector of the Class 2 separable interface.

14.2.4 Permanently attached can be achieved by crimping, welding, riveting, or equivalent to render the connector non-rewireable.

14.3 Bushings

14.3.1 Where the power-supply cord passes through an opening in the enclosure, a smooth, well-rounded surface shall be provided to protect the cord from damage.

15 Strain Relief

15.1 Strain relief shall be provided so that a mechanical stress on a power-supply cord, cord connector, flexible cord, or Class 2 lead is not transmitted to terminals, splices, or interior wiring. See Strain Relief Test, Section [37](#).

15.2 The strain relief means shall not damage the insulation or cord jacket. The normal compressive deformation inherent in providing strain relief is not considered to be damage.

16 Receptacles

16.1 The receptacle outlets of a RPT shall have a current rating of 15 or 20 A and a voltage rating of 125 or 250 V. The contact components of a receptacle shall have a voltage and current rating equal to that of the attachment plug on the power-supply cord.

Exception: A 15 A receptacle is not prohibited from being used with a RPT rated 20 A with a 20 A attachment plug.

16.2 All of the receptacle outlets of a RPT shall have the same current rating and shall be of the grounding type. They are not prohibited from being of the same or different slot configurations (locking and non-locking) or employing a spring-actuated latching mechanism for locking a mated attachment plug in place after the blades have been inserted into the female contacts.

16.3 The receptacle outlets of a RPT shall comply with the applicable requirements in the Standard for Attachment Plugs and Receptacles, UL 498 and shall comply with the requirements of the Grounding Contact Test in UL 498.

16.4 The receptacle outlets of a RPT that also incorporates terminals for coaxial cable (TV/CATV) connection shall be marked in accordance with [51.10](#).

16.5 An RPT intended to be mounted on a desk or similar furnishing surface shall be covered or otherwise protected from spillage while not in use and shall comply with the Spill Test, Section [44](#).

Exception: When the intended use of the RPT is for it to be mounted above the furnishing surface and oriented such that spilled liquid on the furnishing surface cannot enter any part of the RPT, these requirements do not apply.

16.6 The receptacle outlets of an RPT shall be wired in one of the following methods:

- a) Always On (Unswitched) – all receptacles on the RPT energized when the RPT is plugged into a receptacle; or
- b) Switched – all receptacles switched via one or more switches; or
- c) Partially switched – combination of one or more switched and one or more always on (unswitched) receptacles. The "always on" (unswitched) receptacles are energized at all times when the RPT is plugged into a receptacle.

16.7 The cord connectors that is employed in an RPT shall be molded-on or assembled-on to the flexible cord. The cord connector shall be the grounding type and shall comply with the requirements in the Standard for Attachment Plugs and Receptacles, UL 498 or the Standard for Cord Sets and Power Supply Cords, UL 817. The flexible cord employed shall be of the type as specified in [14.1.1](#) and shall have the conductor size, voltage and current rating as specify in [Table 14.1](#) and [14.1.5](#).