

Standard Information

Standard Number: UL 1310

Standard Name: Class 2 Power Units

Standard Edition and Issue Date: 6th Edition Dated August 26, 2011

Date of Revision: December 12, 2014

Date of Previous Revision to Standard: 6th Edition Dated May 30, 2014

Effective Date of New/Revised Requirements

Effective Date (see Schedule below): **December 31, 2015**

Impact, Overview, Fees and Action Required

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revised requirements and which products will require re-evaluation. **NOTE:** Effective immediately, this revised standard will be exclusively used for evaluation of new products unless the Applicant requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.

Overview of Changes: This revision of ANSI/UL 1310 includes the following changes in requirements:

Addition of requirements to address a flush device cover plate with integral power supply with Class 2 output connectors with or without a night light. Specific details of new/revised requirements are found in table below.

Schedule: So that shipping of products with Listing Marks will not be interrupted, an **approximate** schedule has been established to ensure Listing Reports are found compliant by Effective Date:

- April 30, 2015 = 8 Month Report Review – Intertek will review all Reports. Update if compliance is verified or issue Findings Letter/Quote for any re-evaluations needed
- June 30, 2015 = 6 Month Quote Cut-off – Quotes returned for necessary re-evaluations
- November 30, 2015 = 30 Day Warning – Client advised of all non-compliant Reports to be Suspended
- **December 31, 2015** = Effective Date – ATM Suspended for all non-compliant Reports

Fees: An initial review of Listing Report (s) will be covered by a direct billing project and will be invoiced at not more than \$1000 per report.

Client Action Required:

Information – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revised paragraphs noted in the attached or explain why these new/revised requirements do not apply to your product (s).

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



Standards Update Notice (SUN)

Issued: March 23, 2015

Description of New/Revised Technical Requirements

Clause	Verdict	Comment	NC#
81-89	Info	New Sections added; FLUSH DEVICE COVER PLATES WITH INTEGRAL POWER SUPPLY	
81	Info	General	
81.1		The requirements in Sections 81 – 89 apply to a flush device cover plate with integral power supply with Class 2 output connector(s) with or without a night light. These devices shall comply with the applicable requirements of this Standard except as modified by the requirements in Sections 81 – 89.	
81.2		These requirements are applicable to flush-type, parallel blade construction of the ANSI/NEMA 1-15R or 5-15R configurations only. These requirements do not cover products incorporating a flush device cover plate with connection means other than plug blades.	
81.3		These requirements are applicable only to non-metallic flush device cover plates that are intended for indoor use only.	
82	Info	Construction	
82.1		In addition to the construction, performance, and marking requirements contained in this Standard, a flush device cover plate with integral power supply with one or more Class 2 output low-voltage connectors with or without a night light shall comply with the applicable requirements of the Standard for Cover Plates for Flush-Mounted Wiring Devices, UL 514D.	
82.2		The flush device cover plate profile shall not hinder the complete seating of an attachment plug of the type intended for use with the receptacle.	
82.3		A flush device cover plate with integral power supply with one or more Class 2 output low-voltage connectors with a night light shall also comply with the applicable requirements of the Standard for Direct Plug-In Nightlights, UL 1786.	
82.4		The Class 2 low-voltage output connectors of a flush device cover plate with integral power supply with one or more Class 2 output low-voltage connectors with or without a night light shall be insulated and extend beyond the plane of the receptacle mounting yoke and be accessible when the cover plate is installed as intended.	
82.5		The Class 2 low-voltage power supply shall be configured for supply from a single branch circuit receptacle.	
82.6		A flush device cover plate with integral power supply with one or more Class 2 output low-voltage connectors with or without a night light intended for installation requiring the removal of a receptacle cover plate shall comply with the following: a) The device shall be able to be fully inserted in the outlets; and b) The device shall be able to be fully seated against the wall such that the outlet box opening in the wall is completely covered.	



Standards Update Notice (SUN)

Issued: March 23, 2015

Clause	Verdict	Comment	NC#
83	Info	Polymeric Enclosures	
83.1		In addition to the insulating material requirements of the Standard for Cover Plates for Flush-Mounted Wiring Devices, UL 514D, a polymeric material used to enclose the power unit circuitry shall have a flame rating not less than 5V, in accordance with the Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances, UL 94, or comply with the 127 mm Flame Test specified in the Standard for Polymeric Material – Use in Electrical Equipment Evaluations, UL 746C.	
84	Info	Spacings	
84.1		A flush device cover plate with integral power supply with one or more Class 2 output low-voltage connectors shall maintain a minimum of a 1/4 inch (6.35mm) separation of branch circuit wiring and Class 2 connections after installation. Compliance shall be determined by measurement and if required, the Assembly Test in Section 87.	
84.2		Class 2 output low-voltage connectors shall be located as to prevent a line blade of an attachment plug from being improperly inserted into the Class 2 output low-voltage connector (i.e. USB) slot and the line contacts of a receptacle. Compliance shall be determined by inspection and if required, the Assembly Test in Section 87.	
85	Info	Configurations	
85.1		The device shall comply with the cover plate dimensions as specified in Wiring Devices – Dimensional Specifications, NEMA WD 6, intended to accommodate the intended flush-mounted wiring device.	
85.2		The blade portion of the device shall comply with the NEMA 1-15P or 5-15P blade dimensions specified in Wiring Devices – Dimensional Specifications, NEMA WD 6.	
86	Info	Class 2 Output Power Supply Testing	
86.1		For all testing to this Standard, except for the Assembly Test in Section 87, the device is to be energized from a duplex receptacle wired to a source of supply as intended. The duplex receptacle is to be mounted in a non-metallic outlet box test wall according to Figure 86.1. The outlet box is to be mounted in a vertical wall section as follows: a) With plywood or gypsum wallboard surfaces; and b) Loosely filled with fiberglass or equivalent thermal insulation.	
86.2		Under any condition of low voltage output loading, individually or collectively, tests are to be conducted to represent the worst case of: a) No load on the branch circuit receptacle outlet; and b) Full load from the branch circuit receptacle outlet.	



Standards Update Notice (SUN)

Issued: March 23, 2015

Clause	Verdict	Comment	NC#
87	Info	Assembly Test	
87.1		<p>A flush device cover plate with integral power supply with one or more Class 2 output low-voltage connectors with or without a night light shall comply with all of the following:</p> <p>a) Maintain a minimum of a 1/4 inch (6.35 mm) separation of branch circuit wiring and Class 2 connections;</p> <p>b) Not permit contact to be made between the probes shown in Figure 16.1, Figure 16.2, or Figure 16.4 and any live part through the Class 2 output connectors or through any opening or joint surrounding the installed device; and</p> <p>c) Not permit contact to be made between the Class 2 output connector and receptacle line contacts with a NEMA 1-15P attachment plug.</p>	
87.2		<p>The device is to be checked for compliance with 87.1(a). Following assembly of the test setup shown in Figure 86.1, the device is to be checked for compliance with 87.1(b). The probes of Figure 16.1, Figure 16.2, or Figure 16.4 are to be applied to any opening or joint surrounding the Class 2 output and through the Class 2 output connector slot openings with a force of 8 ounces (2.2 N) in attempt to contact live parts. A suitable indicating device (such as an ohmmeter, battery-and-buzzer combination, or similar device) is to be connected between the probe and the wiring terminal of the receptacle to determine whether contact is made. The probes are to be inserted in the Class 2 output connector slot opening successively in three directions in any orientation that may permit access to contact live parts. The probes are to be applied for approximately 5 seconds in each of the three directions. During each application, the probes are not to be moved or rotated and are to be withdrawn when moving from one direction to the next.</p>	
87.3		<p>The same representative assembly as described in 87.2 is to be checked for compliance with 87.1(c), using a NEMA 1-15P polarized attachment plug. One blade is to be inserted into the slot openings of the Class 2 output connector and the other blade into the slot openings of the receptacle contacts with a force of 10 pounds (45 N) in an attempt to contact live parts. A suitable indicating device (such as an ohmmeter, battery-and-buzzer combination, or similar device) is to be connected between the Class 2 output connector and the contacts of the receptacle to determine whether contact is made. The attachment plug is to be manipulated in any direction or orientation that may permit access to contact live parts. The attachment plug is to be applied for approximately 5 seconds in each direction.</p>	



Standards Update Notice (SUN)

Issued: March 23, 2015

Clause	Verdict	Comment	NC#
88	Info	Installation Instructions	
88.1		Installation instructions shall appear on the device, on the smallest unit container, or on a separate instruction sheet provided with each device. If the installation instructions are provided on the smallest unit container or on a separate sheet, they shall be attached to the device in such a manner that they are unable to become detached during normal conditions of handling and storage prior to initial installation or usage. The use of an individual carton, blister pack, or equivalent securing of the device to the instructions, meets the intent of the requirement. However, friction attachment shall not be employed.	
88.2		A device intended for installation with receptacle cover plate or cover plate screw removed shall be provided with detailed installation instructions to enable proper installation of the device with the cover plate removed. The inclusion of a pictorial representation is optional.	
88.3		A device intended for installation over receptacle cover plates of specific dimensions shall be provided with installation instructions that describe the maximum overall dimensions of the receptacle cover plate with which the device is intended to be used.	
88.4		A device having blade spacing not in accordance with the Standard for Current Taps and Adapters, UL 498A, Figure 9.1 – Blade and Contact Spacing, shall be provided with installation instructions that specify, by catalog number or equivalent designation, the receptacles with which the device is to be used.	
88.5		Instructions shall include information to alert the user that a single branch circuit shall supply the device. The instructions shall include a pictorial or photograph illustrating proper installation.	
89	Info	Markings	
89.1		The output Class 2 connectors shall be marked as being “Class 2” and marked with the output electrical rating. These markings shall be permanently marked and visible after installation.	
		CUSTOMERS PLEASE NOTE: This Table and column “Verdict” can be used in determining how your current or future production is or will be in compliance with new/revised requirements.	