

STANDARD INFORMATION

Standard: UL 1472 / CSA C22.2 No. 184.1

Standard ID:

Solid-State Dimming Controls [UL 1472:2015 Ed.2+R:12Jul2022]

Solid-State Dimming Controls [CSA C22.2#184.1:2015 Ed.2+U1;U2;U3]

Previous Standard ID:

Solid-State Dimming Controls [UL 1472:2015 Ed.2+R:31Jul2020]

Solid-State Dimming Controls: [CSA C22.2#184.1:2015 Ed.2+U1;U2]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **July 12, 2024**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

Overview of Changes: Addition of requirements for dimmers with separable terminal assembly construction. Specific details of new/updated requirements are found in table below.

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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.



STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
4	Info	Construction
4.5	Info	Current-carrying parts
4.5.3	Info	Current-carrying parts
		<i>New clause added;</i>
4.5.3.6		A dimmer with a separable terminal assembly employing wiring terminals shall be uniquely keyed to prevent interchangeability of dimmers where the wiring terminal conductor size ampacity is less than the dimmer ampere rating.
		<i>New section added;</i>
		Separable terminal assembly
4.5.3.6.1		A separable terminal assembly shall consist of permanently attached pins, contacts or tabs capable of receiving the intended dimmer (module) and is provided with either conductor leads or terminals for connection to the branch circuit conductors. See standard for details.
4.5.4	Info	Supply wiring leads
		<i>New clause added;</i>
4.5.4.3		A dimmer with a separable terminal assembly employing wire leads shall utilize either solid or stranded copper conductors according to Table 5. When the lead size is other than 12 AWG (3.3 mm ²) or larger, the separable terminal assembly shall be uniquely keyed to prevent interchangeability of dimmers where the conductor size ampacity is less than the dimmer ampere rating.
5.17	Info	Separable terminal assembly – retention of tab connection test
		<i>New clause added;</i>
5.17.1		Six representative terminals shall be removed from their enclosure. Once removed, each individual terminal and lead assembly shall be inserted and attached to the dimmer as intended. The dimmer shall be supported on a steel plate with the individual terminals projecting downward. A static force of 2.2 N (0.5 lbf) shall be applied to individual terminals for one minute in a direction tending to remove the individual terminal from the tab on the dimmer. There shall be no displacement more than 2 mm (0.079 in) for each individual lead terminal and blade tab.



CLAUSE	VERDICT	COMMENT
		Exception: A separable terminal assembly having a pin construction where the pin is formed in a shape that provides a self-retaining locking feature is not required to be subjected to this test.
5.18	Info	Separable terminal assembly – pull test <i>New clause added;</i>
5.18.1		Six representative dimmers employing a separable terminal assembly shall have their latching or locking features defeated from either the connector or the body of the dimmer. The separable terminal assembly shall then be inserted and attached to the dimmer as intended, but without the locking feature. The dimmer shall be supported on a steel plate with the separable terminal assembly connector projecting downward. A static force of 13.3 N (3 lbf) shall be applied to all conductors simultaneously for one minute in a direction tending to remove the separable terminal assembly connector from the body of the dimmer. There shall be no displacement more than 2 mm (0.079 in) of the separable terminal assembly connector from the back of the dimmer body. <i>New section added;</i>
5.19		Separable terminal assembly – mold stress relief test After the temperature conditioning specified in Clause 5.19.2, a separable terminal assembly shall not warp, shrink or result in any of the following: See standard for details. <i>New section added;</i>
5.20		Separable terminal assembly – humidity conditioning followed by dielectric test Six representative dimmers, including their disconnected separable terminal assemblies, shall be placed in an environmental chamber and conditioned in sequence as follows: See standard for details. <i>New section added;</i>
5.21		Separable terminal assembly – short circuit withstand test For a dimmer employing a separable terminal assembly, when tested as described in Clauses 5.21.2 – 5.21.6, the grounding/bonding path shall retain its integrity as demonstrated by a continuity check between the separable terminal grounding/bonding lead and a metallic wall plate installed as intended. See standard for details.



CLAUSE	VERDICT	COMMENT
		<i>New section added;</i>
5.22		Separable terminal assembly – latching mechanism test The latching mechanism used to secure a separable terminal assembly to a dimmer shall be subjected to the conditions as specified in Clauses 5.22.2 – 5.22.5. See standard for details.
