

STANDARD INFORMATION

Amendment 1: See updated effective date in blue below.

Standard: UL 773A / CSA C22.2 No. 284

Standard ID:

Nonindustrial Photoelectric Switches for Lighting Control [UL 773A:2016 Ed.6+R:16Jan2024]

Nonindustrial Photoelectric Switches for Lighting Control [CSA C22.2#284:2016 Ed.1+U1;U2;U3]

Previous Standard ID:

Nonindustrial Photoelectric Switches for Lighting Control [UL 773A:2016 Ed.6+R:26Jun2020]

Nonindustrial Photoelectric Switches For Lighting Control [UL 773A:2016 Ed.6+R:25May2018]

Nonindustrial Photoelectric Switches for Lighting Control [CSA C22.2#284:2016 Ed.1+U1;U2]

Nonindustrial Photoelectric Switches for Lighting Control [CSA C22.2#284:2016 Ed.1+U1]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: ~~January 16, 2026~~ October 24 2026

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 Reports not updated to this version by the effective date above will be withdrawn.

This SUN only applies to products currently certified to the revised versions of the 6th edition of UL 773A / 1st edition of CSA C22.2 No. 284. Products certified to the 6th edition of UL 773A / 1st edition of CSA C22.2 No. 284 with no revision may stay at their current revision unless a change to the product is made.

Overview of Changes:

June 26, 2020:

- Addition of Requirements for Manufacturer's Recommended Field Wiring Terminal Tightening torque

January 16, 2024:

- Requirements for Push-in Type Terminals
- Requirements for field wiring terminals
- Separable Terminal Assembly

Specific details of new/revised 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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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
The following changes reflect the June 26, 2020 / Update 2 revision:		
8	Info	Supply Connections
8.1	Info	Permanently connected units
		<i>New clause added;</i>
8.1.13		A Non Industrial Photoelectric switch employing field wiring terminals shall be provided with the manufacturers recommended terminal tightening torque. These instructions shall appear on the device where visible during installation, on the smallest unit container, or on an information sheet packed in the smallest unit container in accordance with Table 42.1 Ref. 4a.
The following changes reflect the January 16, 2024 / Update 3 revision:		
8	Info	Supply Connections
8.1	Info	Permanently connected units
		<i>New clause added;</i>
8.1.7B		A wire-binding terminal screw of size 8-32 or 10-32 is not required to be tested.
		<i>New clause added;</i>
8.1.12A		A push-in (screwless) terminal shall comply with the performance requirements in Push-In Terminal Test, Clause 34A, and shall be: a) For use with a solid copper conductor; b) For a current-carrying connection only, not for grounding; and c) Marked as indicated in item 28 of Table 42.1.
		<i>New clause added;</i>
8.1.12B		Push-in terminals intended for use on branch circuit wiring shall be designed so that they will permit the use of a solid 14 AWG (2.1 mm ²) conductor but will reject a 12 AWG (3.3 mm ²) or larger solid conductor. The opening provided for the conductor shall reject a No. 48 drill rod, 1.981 ±0.0076 mm (0.076 ±0.0003 inch) in diameter. The rod shall be applied with 22 N (5 lbf). Openings, other than those intended for wire termination, such as wire release openings, shall not permit electrical contact to be made with a 14 AWG (2.1 mm ²) conductor.



CLAUSE	VERDICT	COMMENT
<i>New clause added;</i>		
8.1.12C		A switch employing "push-in" terminations may be provided with a means to release the conductors. Where an opening in the insulating body is provided for such purpose behind the plane of the mounting means, it shall not permit entry of a 14 AWG (2.1 mm ²) solid conductor. The wire release means, if provided, shall be subject to the Push-In Terminal Tests, Clause 34A.
<i>New clause added;</i>		
8.1.12D		A release mechanism shall be located or guarded so that it cannot be unintentionally actuated during installation. The release mechanism may be guarded by recessing, ribs, barriers, or the like.
<i>New clause added;</i>		
8.1.14		A photoelectric switch with a separable terminal assembly employing wiring terminals shall be uniquely keyed to prevent interchangeability of photoelectric switch where the wiring terminal conductor size ampacity is less than the photoelectric switch ampere rating.
<i>New section added;</i>		
Separable terminal assembly		
8.2A		A separable terminal assembly shall consist of permanently attached pins, contacts or tabs capable of receiving the intended photoelectric switch (module) and is provided with either conductor leads or terminals for connection to the branch circuit conductors. See standard for details.
8.2B	Info	Supply wiring leads
<i>New clause added;</i>		
8.2B.1		A photoelectric switch with a separable terminal assembly employing wire leads shall be either solid or stranded copper conductors according to Table 8.1. When the lead size is other than 12 AWG (3.3 mm ²), the separable terminal assembly shall be uniquely keyed to prevent interchangeability of photoelectric switch where the conductor size ampacity is less than the photoelectric switch ampere rating.



CLAUSE	VERDICT	COMMENT
<i>New section added;</i>		
Push-in Terminal Tests		
34A		A push-in (screwless) terminal shall withstand, without pull-out or breakage of the conductor, the application of a straight pull, applied for 1 minute and as further described in: See standard for details.
<i>New section added;</i>		
Push-in Temperature Test		
34B		A push-in (screwless) terminal shall perform with a temperature rise of the attached conductor that shall not exceed 30°C (54°F), based on an ambient temperature of 25°C (77°F), with the terminal connection carrying maximum rated current of the switch. See standard for details.
40	Info	Tests on 120V Devices with Varistors
<i>New clauses added;</i>		
40.4		40.4 Separable terminal assembly – retention of tab connection test
40.5		40.5 Separable terminal assembly – pull test
40.6		40.6 Separable terminal assembly – mold stress relief test
40.7		40.7 Separable terminal assembly – humidity conditioning followed by dielectric test
40.8		40. 8 Separable terminal assembly – short circuit withstand test
40.9		40.9 Separable terminal assembly – latching mechanism test
40.10		40.10 Separable terminal assembly – abnormal overload test
40.11		40.11 Separable terminal assembly - continuity impedance test
See standard for details.		