

STANDARD INFORMATION

Amendment 1: See updated impact statement in and addition of section 65 that was inadvertently missed in blue below:

If the project requires any changes to the Certification Data Report outside of Section 1, then this SUN applies.

Standard: UL 294

Standard ID: Access Control System Units [UL 294:2023 Ed.8]

Previous Standard ID: Access Control System Units [UL 294:2018 Ed.7+R:08Oct2018]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **May 24, 2025**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: No action is required for currently certified products. If modifications to the product after the effective date require an evaluation and/or testing, then the product must undergo re-evaluation to the new requirements.

Overview of Changes:

- Remote Access requirements
- Software/Firmware Upgrades
- Egress Control Systems Requirements
- Overload and Endurance Test (power supply) updates
- Destructive Attack Test updates

Specific details of new/revise 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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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
12	Info	Enclosure
12.11	Info	Polymeric materials <i>New clause added;</i>
12.11.3		A polymeric enclosure intended for connection to a rigid metallic or nonmetallic conduit system shall comply with the applicable requirements for polymeric enclosure conduit connections in UL 50. <i>New clause added;</i>
12.11.4		The continuity of a conduit system shall be provided by metal-to-metal contact and not rely on a polymeric material. It shall also comply with the requirements for polymeric enclosure bonding in UL 50.
	Info	PERFORMANCE – ALL UNITS
35	Info	Remote access <i>New section added;</i>
		General
35.8		A remotely accessible system is a system that is able to be accessed with a device other than that located at the protected premises. The device can take the form of a smart phone/tablet, an internet-connected device, or any other means of accessing an access control system that is not using the control unit's human interface, albeit a wired and/or wireless keypad, card reader, or other user-accessible interface device located at the protected property. See standard for details.
35.9		Egress control systems <i>New clause added;</i>
35.9.1		Egress control systems that utilize low power radio frequency (RF) technology are subject to all RF tests noted in the Short-Range Radio Frequency (RF) Tests, in UL 2610, as applicable. The associated tags/credentials used for the egress control system are also subject to the RF tests noted, as applicable. Also see 2.5, Exception No. 2.



CLAUSE	VERDICT	COMMENT
		<i>New section added;</i>
35.10		Key management systems Key management systems provide a means of regulating or controlling keys by electrical, electronic and/or mechanical means. Key management systems allow authorized users access to keys upon verification of appropriate credentials.
		Overload Test
49	Info	An access control power supply shall operate as intended following 50 cycles of operation. See standard for details.
		<i>New section added;</i>
		Power supplies
49.3		An access control power supply shall operate as intended following 50 cycles of operation. See standard for details.
50	Info	Endurance Test
50.1	Info	General
		<i>New clause added;</i>
50.1.7		Key management system units shall function as intended when subjected to a 6,000 cycle test.
		<i>New section added;</i>
		Power supplies
50.3		An access control power supply shall operate as intended following the minimum Endurance Test Level. See standard for details.
52	Info	Dielectric Voltage-Withstand Test
		<i>New clause added;</i>
52.8		A printed-wiring board, as specified in 34.2, shall withstand for 1 min without breakdown the application of a dielectric withstand potential between the traces having reduced spacings, in accordance with 52.1, as appropriate.



CLAUSE	VERDICT	COMMENT
		<i>New clause added;</i>
52.9		As specified in 52.8, power-dissipating component parts, electronic devices, and capacitors connected between traces having reduced spacings, are to be removed or disconnected so that the spacings and insulations, rather than these component parts, are subjected to the full dielectric voltage-withstand test potential.
65	Info	Destructive Attack Test
65.1		The provisions of this section shall apply to Level II and Level III and Level IV access control products. Level I access control products shall be exempt from the provisions of this section <u>because either 65.2 is not applicable, or the products are only to be mounted/installed within the controlled / protected / restricted area, as indicated in the product installation instructions.</u>
		The time that the enclosure shall resist attack shall be as follows:
		a) Access Control Destructive Attack Test, Level II: 2 minutes, b) Access Control Destructive Attack Test, Level III: 5 minutes, but shall be reduced to 2 minutes if an audible alarm is activated during the attack. <u>Exception: As applicable, key management system units shall undergo an attack of 5 minutes; no reduction in attack time allowance is considered for the activation of an audible alarm.</u>
65.4		c) Access Control Destructive Attack Test, Level IV: 5 minutes, but shall generate an audible alarm in a maximum of 2 minutes of attack, and the alarm shall not be silenced for another 2 minutes. The time limit, in continuous working minutes, shall include the time necessary to electrically manipulate components to cause the release of the remote locking mechanism in order to gain access into the protected or restricted area. The test time shall start at the moment the attack is initiated on the unit and shall not stop until the maximum time limit is met or if the remote locking mechanism is disengaged causing the door or gate to open.
		<i>New clause added;</i>
65.8		To achieve Attack Test Level III or Level IV, the alarm sounding device shall additionally comply with the requirements in Section 66, Destructive Attack Alarm Test.
66	Info	Destructive Attack Alarm Test
		<i>New clause added;</i>
66.1		The requirements of Section 66 are to be applied to any sounding device deemed critical for proper system operation, as well as for those products achieving Destructive Attack Level III or Level IV, as applicable. Also see 65.8.



CLAUSE	VERDICT	COMMENT
67	Info	Access Control Line Security
67.1	Info	General
		<i>New clause added;</i>
67.1.3		Software/hardware, a firewall, and/or a network intrusion detection system (NIDS) shall be provided as applicable and maintained with the latest updates, as supplied by the manufacturer.