

STANDARD INFORMATION

Standard: UL 1699

Standard ID: Arc-fault Circuit-interrupters [UL 1699:2025 Ed.4]

Previous Standard ID: Arc-fault Circuit-interrupters [UL 1699:2017 Ed.3+R:26Sep2023]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **November 17, 2027**

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 Reports not updated to this version by the effective date above will be withdrawn.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: Expanded EMC requirements. 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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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.



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CLAUSE	VERDICT	COMMENT
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined-out below.</i>
44	Info	Resistance to Environmental Noise Test
44.3	Info	Radiated electromagnetic field immunity
44.3.1		IEC 61000-4-3 is to be the test measurement reference. The frequency range to be evaluated is to be from 80 MHz to <u>6</u> 1 GHz. The exposure is to be level 2 <u>3</u> , <u>10</u> V/m modulated with 80 % AM modulation at 1 kHz. The protective device shall not false trip when exposed to these fields. The frequencies to be used encompass the standard broadcast frequency ranges for commercial and amateur ("ham") radio and television. The step size for the test frequency ranges is to be 1 % of fundamental. In addition, the device should be exposed to radiated electromagnetic fields that simulate those generated by digital radio telephones (commonly known as "cell phones"). This test consists of exposure to 3 <u>10</u> V/m field using a 200 Hz digital modulation technique with a 50 % duty cycle on one frequency between 895 MHz and 905 MHz. Other frequency ranges that are used in the United States are to be considered.
44.6	Info	Immunity to conducted disturbances, induced by RF fields
44.6.1		The test method described in IEC 61000-4-6 are to be followed. The representative product is to be subjected to a conducted disturbance at 3 <u>10</u> V over a frequency range of 150 kHz to 80 MHz.