STANDARDS UPDATE NOTICE (SUN)
ISSUED: March 3, 2022

STANDARD INFORMATION

Standard: UL 1699
Standard ID: Arc-fault Circuit-interrupters [UL 1699:2017 Ed.3+R:17Nov2020]
Previous Standard ID: Arc-fault Circuit-interrupters [UL 1699:2017 Ed.3+R:29Jul2019]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **November 17, 2022**

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.

Overview of Changes: Changes for LCDI Shield Monitor Interrupter (SM/I). 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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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
		Additions to existing requirements are <u>underlined</u> and deletions are shown ~~lined out~~ below.
Supplement SB	Info	**LEAKAGE-CURRENT DETECTOR-INTERRUPTERS (LCDIs)**
SB6	Info	**Test Circuit**
SB6.1		An LCDI shall be provided with a supervisory circuit that will allow for periodic, convenient testing of the ability of the device to trip by way of leakage current <u>introduced at the end length of the LCDI shielded cord to verify shield integrity</u>. The current employed by the supervisory circuit shall be sufficient to cause tripping at 85 percent of rated voltage, provided that at rated voltage the current shall not exceed 9 mA. Compliance shall be determined by conducting the LCDI Supervisory Circuit Test of Section SB9.
SB6A		***New clause added;*** **LCDI Shield Monitor Interrupter (SM/I)** An LCDI employing a shielded power supply cord or shielded cord set shall monitor shield continuity. In the event the shield continuity does not exist when an attempt is made to start using the equipment, the device shall not energize current to its load terminals and shall interrupt the circuit under conditions where the shield is lost during operation. See LCDI Shield Monitor Interrupter (SM/I) Test, Section SB9A.
SB9A		***New section added;*** **LCDI Shield Monitor Interrupter (SM/I) Test**
SB9A.1		To demonstrate that an LCDI meets the requirements of SB6A.1, the tests described in SB9A.2 and SB9A.3 are to be conducted. At the conclusion of the tests, each representative LCDI shall: a) Interrupt the circuit within a period of 0.5 seconds; b) Not permit power to be applied to the circuit each time the reset is operated when reset is attempted; and c) Provide a positive visual and/or audible indication.
SB9A.2		A representative LCDI shall be correctly connected to the rated line voltage and allowed to stabilize. A closed switch is placed in series with the shield. The reset button shall be operated to allow the LCDI to be in the “ON” state. The switch is then opened to simulate an open shield condition during normal operation.

CLAUSE	VERDICT	COMMENT
SB9A.3		The test in SB9A.2 is repeated except the test button on a representative LCDI shall be operated to allow the LCDI to be in the “OFF” state. With the switch in the open state in series with the shield to simulate a damaged shield, the reset button on the LCDI is then pressed.
SB9A.4		For LCDI power supply cords employing a shield over each individual current carrying conductor, the two tests in SB9A.2 and SB9A.3 shall be conducted on each shield. Each shield shall meet the requirements of SB9A.1.