

# STANDARDS UPDATE NOTICE (SUN) ISSUED: November 20, 2024

### **STANDARD INFORMATION**

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

Standard: UL 414

Standard ID: Metered Sockets [UL 414:2016 Ed.9+R:01Mar2024]

Previous Standard ID: Metered Sockets [UL 414:2016 Ed.9+R:12Jul2023]

#### EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: March 1, 2026

#### 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:**

- Location of conductive parts of meter socket adapters
- Supplements SA and SB heating test updates
- New Moment Test requirements
- New Supplement SC for Meter Socket Adapters with Branch Circuit Connections

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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 <del>lined out</del> below.
Supplement SA	Info	METER SOCKET ADAPTERS
SA2	Info	Construction
SA2.3		Surge protection gaps: A meter socket adapter shall be provided with means to ground the grounding straps of surge gaps on watthour meters. The grounding means shall extend over the area defined in the appropriate envelope designs as covered in the Standard for Physical Aspects of Watt-hour Meters, ANSI C12.10. The straps shall either be bonded to the enclosure or exposed dead metal or connected to grounding straps on the male end of the meter socket adapter. Unless shown in Figures 2 – 10 in the Standard for Physical Aspects of Watt-hour Meters, ANSI C12.10, a meter socket adapter shall not have uninsulated conductors or uninsulated bonded metal parts in areas that may contain meter voltage coils, test links, or other live parts unless recessed or otherwise located to comply with the minimum electrical spacings of Table 8.1 with a meter installed.
SA5A		New section added;  Moment Test
SA5A.1		At the conclusion of the operations in SA5A.2 – SA5A.5, the meter socket and meter socket adapter shall comply with all of the following conditions:  a) There is no permanent distortion or displacement of a meter socket adapter jaw, bus bar, or strap that would affect the intended functioning of the meter socket adapter or reduce an electrical spacing to less than the value specified in Table 8.1; b) A meter socket adapter insulator or support shall not break or crack to such extent that the integrity of the mounting of a live part is impaired; and c) The meter socket adapter enclosure, meter socket test fixture, the junction between the meter socket adapter and meter, the junction between meter socket adapter and meter socket test fixture, or any other part of the enclosure assembly shall not be damaged nor displaced to the extent that a 1/8 inch (3.2 mm) rigid cylindrical probe can be inserted and contact a live part.
SA5A.2		When the meter socket adapter is marked for use with a specific meter socket(s) in SA6.2, the testing shall be performed with each meter socket identified by the marking.



CLAUSE	VERDICT	COMMENT
SA5A.3		When the meter socket adapter is not marked for use with a specific meter socket(s), the testing shall be performed with a representative meter socket type at each continuous current rating as identified by the marking in SA6.3. The meter socket enclosure cover used for the testing shall be of a nominal 0.053 inch (1.35 mm) thick steel or 0.075 inch (1.91 mm) thick aluminum. A meter socket adapter which may be installed in ring and ringless style meter socket types, shall be tested on both types of assemblies. A meter socket adapter which may be installed in meter sockets with spring jaws and lever release type jaws, shall be tested in a meter socket with the spring jaw assemblies.
SA5A.4		The meter socket testing fixture as specified in SA5A.2 or SA5A.3 shall be mounted on a rigid vertical surface in accordance with meter socket manufacturer's instructions, or in normal use when instructions are not provided. The meter socket adapter shall be mounted to the meter socket testing fixture in accordance with the meter socket adapter's installation instructions, or in normal use when instructions are not provided. A commercial or simulated meter shall be installed on the meter socket adapter as intended in normal use. The meter sealing ring provided with meter socket adapter shall be used for securing the meter to the meter socket adapter. The meter sealing ring provided with meter socket shall be used for securing the meter socket adapter to the meter socket, when installed on a ring type meter socket. When the meter sealing ring is not provided as part of the assembly, the meter sealing ring shall be in accordance with Figure 6 in the Requirements for Watthour Meter Sockets, NEMA C12.7.
SA5A.5		A 75 pound force shall be applied on the commercial or simulated meter 2 inches (50.8 mm) outward from the meter socket adapter in a downward direction for a duration of 1 minute. After the removal of the force, compliance to SA5A.1 shall be checked. The testing shall then be repeated with the force applied in the upward direction on the commercial or simulated meter 2 inches (50.8 mm) outward from the meter socket adapter. After the removal of the force, compliance to SA5A.1 shall be checked.
SA7	Info	Instructions
SA7.4		New clause added;  The instructions for meter socket adapters with provisions for conduit connections shall state the following: "Conduit must be securely fastened within 12 inches of the meter socket adapter".



CLAUSE	VERDICT	COMMENT
Supplement SB	Info	METER SOCKET ADAPTERS FOR USE WITH DISTRIBUTED GENERATION EQUIPMENT
SB2	Info	General
SB2.4		Surge protection gaps: A meter socket adapter shall be provided with means to ground the grounding straps of surge gaps on watthour meters. The grounding means shall extend over the area defined in the appropriate envelope designs as covered in the Standard for Physical Aspects of Watt-hour Meters, ANSI C12.10. The straps shall either be bonded to the enclosure or exposed dead metal or connected to grounding straps on the male end of the meter socket adapter. Unless shown in Figures 2 – 10 in the Standard for Physical Aspects of Watt-hour Meters, ANSI C12.10, a meter socket adapter shall not have uninsulated conductors or uninsulated bonded metal parts in areas that may contain meter voltage coils, test links, or other live parts unless recessed or otherwise located to comply with the minimum electrical spacings of Table 8.1 with a meter installed.
SB12	Info	Heating Test
SB12.1	Info	General
SB12.1.7		Components, when provided, shall be energized as intended in normal use while the meter socket and meter socket adapter are carrying the rated continuous current.
SB15	Info	Instructions
SB15.11		New clause added;  The instructions for meter socket adapters with provisions for conduit connections shall state the following: "Conduit must be securely fastened within 12 inches of the meter socket adapter".
		New supplement added;
		METER SOCKET ADAPTERS WITH BRANCH CIRCUIT CONNECTIONS
Supplement SC		These requirements cover meter socket adapters which are intended to supply power to equipment which is not part of the normal load side connection of the meter socket.
		These requirements are to be used in combination with those in Supplement SB, Meter Socket Adapters for Use With Distributed Generation Equipment, for devices that support bi-directional power source connections or other distributed generation equipment that may draw power from the adapter.



CLAUSE	VERDICT	COMMENT
		These requirements cover meter socket adapters with provision for branch circuit connections, protective devices, energy management systems, and other associated devices required for the application.
		The meter socket adapter assembly may be provided with separate partial enclosure segments, that when combined, complete the final enclosed assembly.
		See standard for details.