

## STANDARD INFORMATION

**Standard:** UL 414

**Standard ID:** Metered Sockets [UL 414:2025 Ed.10]

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

## EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

**Effective Date:** **September 9, 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 Reports not updated to this version by the effective date above will be withdrawn.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:

- Removable Housing Members
- Electronic Marking and Instructions
- Power Control System for Load Control

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown <del>lined-out</del> below.</i>
Annex B	Info	<b>METER SOCKET ADAPTERS FOR USE WITH DISTRIBUTED GENERATION EQUIPMENT</b>
B6	Info	<b>Spacings</b>
B6.3		<p>Spacings on printed wiring boards shall comply with the requirements of UL 840, with the considerations described in (a) through (f):</p> <p>a) The meter socket adapter shall be considered to be in a pollution degree 3 environment except as noted in (e) and (f);</p> <p>b) The meter socket adapter is considered to be operating in an Overvoltage Category of OVC IV. A surge protective device incorporated in a printed wiring board design may be investigated to reduce the Overvoltage Category in portions of the circuit protected the overvoltage controls;</p> <p><u>c) A printed wiring board that complies with the requirements in UL 796, provides a Comparative Tracking Index (CTI) of 100;</u></p> <p><u>d) A printed wiring board that complies with the requirements for Direct Support in UL 796 provides a CTI of 175;</u></p> <p><u>e) A conformal coating may be used to create a microenvironment of pollution degree 1 for creepage distances under the coating when applied using a combination of a specific ANSI industrial laminate and a thickness that has been investigated in accordance with UL 746C; and</u></p> <p><u>f) A solder resist coating may be used to create a microenvironment of pollution degree 2 for creepage distances between printed wiring board traces under the coating.</u></p>
		<b><i>New clause added;</i></b>
B6.6		<p>Clearances on the printed wiring board shall comply with Section 10, Spacings, by direct measurement or by the equivalence method as described in UL 840.</p> <p>Exception: The Controlled Overvoltage Method from UL 840 may be used when devices are provided to control overvoltage for each energy source feeding the circuit.</p>
		<b><i>New clause added;</i></b>
B6.7		<p>Clearances on the printed wiring board shall be measured through insulating materials unless found to comply with Section 11, Barriers.</p>



CLAUSE	VERDICT	COMMENT
B7	Info	<b>Wiring Connections</b>
B7.1	Info	<b>External connections to power circuits</b>
		<i>New clause added;</i>
B7.1.7		A separate compartment in accordance with the Exception specified in B7.1.3 may be provided as a separate enclosure connected by flexible conduit not longer than 6 feet (1.83 m).
		<i>New clause added;</i>
B7.1.8		When external circuits are intended to be connected directly to the meter socket adapter through mating connectors, a disconnecting means shall be provided to isolate the utility source from the mating connectors prior to connection or disconnection. The disconnecting means shall be interlocked with the connectors to prevent connecting or disconnecting of the connectors unless the disconnecting means is open. Interlocking is not required if marked in accordance with SB14.23.
B7.1.9		Mating connections specified in B7.1.8 shall have provision for the application of a seal or lock by the serving utility.
B7.1.10		When mating connections are provided in accordance with B7.1.8, live parts shall be located to prevent inadvertent contact by persons while installing or servicing the meter socket adapter.
B13	Info	<b>Short-Circuit Current Test</b>
B13.3	Info	<b>Sample preparation</b>
		<i>New clause added;</i>
B13.3.2		A commercially-available watthour meter with a class rating not less than the continuous current rating of the meter socket adapter is to be in place during the short circuit test.
		<i>New clause added;</i>
B13.3.3		The meter socket enclosure is to be connected through a 30-ampere, non-time delay type cartridge fuse to the line lead of the pole least likely to arc to the enclosure. This connection is to be made on the load side of the limiting impedance by a 10 AWG (5.3 mm <sup>2</sup> ) copper wire 4 – 6 feet (1.2 – 1.8 m) long.
		<i>New clause added;</i>
B13.3.4		The length of the supply conductors to the meter socket shall not exceed 1.2 m (4 feet) per terminal. The length of the load conductors on the meter socket shall not exceed 1.2 m (4 feet) per terminal. The length of the conductors on the distributed generation shall not exceed 1.2 m (4 feet) per terminal. The wire is to have an ampacity as shown in Table 9.1 based on the 75 °C (167 °F) insulation nearest to but not less than the rating of the meter socket or distributed generation circuit. The terminals are to be tightened to the torque specified by the meter socket



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		<p>manufacturer. Line and load wires may enter the enclosure through 24 inches (610 mm) or shorter lengths of conduit. External power circuits that are connected directly to the meter socket adapter shall use the flexible conduit type specified by the manufacturer for the installation. There is to be no bracing of the cable inside the meter socket enclosure or field installed cable inside of the adapter unless the construction includes instructions for such bracing. The provision for bracing may or may not be provided as part of the meter socket or meter socket adapter. Bracing hardware not provided as part of the meter socket or meter socket adapter shall be available to the installer. A cable may be braced external to the enclosure.</p> <p>Exception No. 1: The length of the supply conductors may exceed 4 feet per phase if the excess length is included in the test circuit calibration as covered in the Exception to B13.2.1.</p> <p>Exception No. 2: Copper wire is to be used at any termination point marked for use with copper wire only.</p>
B15		<p><b><i>New section added;</i></b></p> <p><b>Electronic Access to Information in lieu of Optional Product Markings</b></p>
B15.1		<p>Information required by B14.9, B14.10, B14.12, B14.13, and B14.17 shall be permitted to be made available electronically as an alternative to, or in addition to, being provided on the product.</p>
B15.2		<p>When information is only made available electronically, the product shall be marked with the following text: "ATTENTION: Refer to additional information" or the international graphic symbols No. 0434B and No. 3500 of ISO 7000 (Figures 1 and 2 respectively).</p>
B15.3		<p>The text or symbols in B15.2 shall be followed by:</p> <ul style="list-style-type: none"><li>a) A URL that shall take the installer/operator directly to an internet page containing the information; or</li><li>b) A cross-media format, such as a QR code, barcode, or near-field communications (NFC) that takes the installer/operator directly to the information.</li></ul>
B17		<p><b><i>New section added;</i></b></p> <p><b>Electronic Access to Installation Instructions</b></p> <p>Operation manuals and instructions in Section B16, Instructions, other than those required to be on the product, shall be permitted to be made available electronically as an alternative to, or in addition to, being provided with the product.</p> <p>See standard for details.</p>



CLAUSE	VERDICT	COMMENT
Annex C	Info	<b>METER SOCKET ADAPTERS WITH BRANCH CIRCUIT CONNECTIONS</b>
C12	Info	<b>Service Equipment</b> <i>New section added;</i>  <b>Disconnecting means</b>  C12.3 Meter socket adapters shall be constructed so that all ungrounded load conductors, other than circuits powered through the normal load side connection circuits of the meter socket adapter, are able to be disconnected from the source of supply by the operation of one disconnecting means.  See standard for details. <i>New section added;</i>  <b>Neutral disconnect</b>  12.4 In a device having provision for the connection of a grounded service conductor, the disconnecting means referred to in C12.3 shall simultaneously interrupt all grounded and ungrounded conductors, or other means shall be provided for disconnecting the grounded service conductor.  See standard for details.
C14	Info	<b>Markings</b> <i>New clause added;</i>  C14.13 Assemblies with branch circuits with a mating connection which are not interlocked to prevent connecting or disconnecting of the connectors under load in accordance with SC7.1.11 shall be marked with the following or equivalent: "WARNING: Risk of Electric Shock. Disconnect all sources prior to removing this module." This marking shall be located on the exterior surface of the removable housing where it will be visible to persons while installing or servicing the meter socket adapter. <i>New section added;</i>  <b>Electronic Access to Information in lieu of Optional Product Markings</b>  C15 Information required by C14.6, C14.7, C14.9, C14.11, and C14.12 shall be permitted to be made available electronically as an alternative to, or in addition to, being provided on the product.  See standard for details.



CLAUSE	VERDICT	COMMENT
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*New section added;*

**Electronic Access to Installation Instructions**

C17

Operation manuals and instructions in Section C16, Instructions, other than those required to be on the product, shall be permitted to be made available electronically as an alternative to, or in addition to, being provided with the product.

See standard for details.

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