UL 1681

STANDARD FOR SAFETY

Wiring Device Configurations

UL Standard for Safety for Wiring Device Configurations, UL 1681

Fourth Edition, Dated April 10, 2012

Summary of Topics

This reaffirmation of ANSI/UL 1681 dated January 30, 2025 is being issued to update the title page to reflect the most recent designation as a Reaffirmed American National Standard (ANS). No technical changes have been made.

Text that has been changed in any manner or impacted by ULSE's electronic publishing system is marked with a vertical line in the margin.

The requirements are substantially in accordance with Proposal(s) on this subject dated November 22, 2024.

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APRIL 10, 2012
(Title Page Reprinted: January 30, 2025)

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UL 1681

Standard for Wiring Device Configurations

Prior to the first edition, the configurations were published in the Standard for Attachment Plugs and Receptacles, UL 498.

First Edition – April, 1991
Second Edition – April, 1996
Third Edition – March, 2003

Fourth Edition

April 10, 2012

This ANSI/UL Standard for Safety consists of the Fourth Edition including revisions through January 30, 2025.

The most recent designation of ANSI/UL 1681 as a Reaffirmed American National Standard (ANS) occurred on January 30, 2025. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

Comments or proposals for revisions on any part of the Standard may be submitted to ULSE at any time. Proposals should be submitted via a Proposal Request in the Collaborative Standards Development System (CSDS) at https://csds.ul.com.

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INTRODUCTION

1 Scope

1.1 These configurations cover attachment plugs, receptacles, cord connectors, some forms of current taps, and flatiron and appliance plugs – all for use in accordance with the National Electrical Code (NEC), ANSI/NFPA-70.

1.2 These configurations do not cover devices rated at more than 200 A or for more than 600 V.

1.3 This standard does not cover devices having NEMA configurations in accordance with Wiring Devices – Dimensional Specifications, ANSI/NEMA WD6.

2 General

2.1 The information given in (a) – (h) applies to each configuration in Sections C1 – C3.

a) All dimensions are in inches.

b) Decimal dimensions without tolerances shall be subject to a ±0.005 inch tolerance.

c) Angular dimensions without tolerances shall be subject to a ±1/2 degree tolerance.

d) Where two values are given for the same dimension, the larger is the maximum value and the smaller the minimum value.

e) Leading edges of plug blades shall be free of burrs and sharp edges.

f) A contour, face dimension, yoke construction, or mounting ears and dimensions for any receptacle construction that is shown depicts an acceptable construction; other constructions may also be acceptable if tested and found to be equivalent.

g) A relationship of contact nibs, recess of contacts, or internal construction in a receptacle that is shown depicts an acceptable construction; other constructions may also be acceptable if tested and found to be equivalent.

h) Terminal Identification shall comply with the following:

1) The grounded terminal shall be identified in the Figures by the letter "W".

2) The grounding terminal shall be identified in the Figures by the letter "G".

3) Other conductors need not be identified, but if they are, the letters "X", "Y", and "Z" shall be used for identification according to the following convention:

i) Viewing the blade end of the plug and proceeding counter-clockwise, starting from the grounding blade (G), or in the absence of a grounding blade, the grounded blade (W), the terminals shall be marked in sequence "X", "Y", and "Z".

ii) Viewing the face end of the receptacle and proceeding clockwise, starting from the grounding contact slot (G), or in the absence of a grounding contact slot, the grounded contact slot (W), the terminals shall be marked in sequence "X", "Y", and "Z".

CONFIGURATIONS

C1 Non-NEMA Plugs and Receptacles

Figure C1.1

Hospital use only 2-pole, 3-wire grounding-type locking devices rated 20 A, 125 V

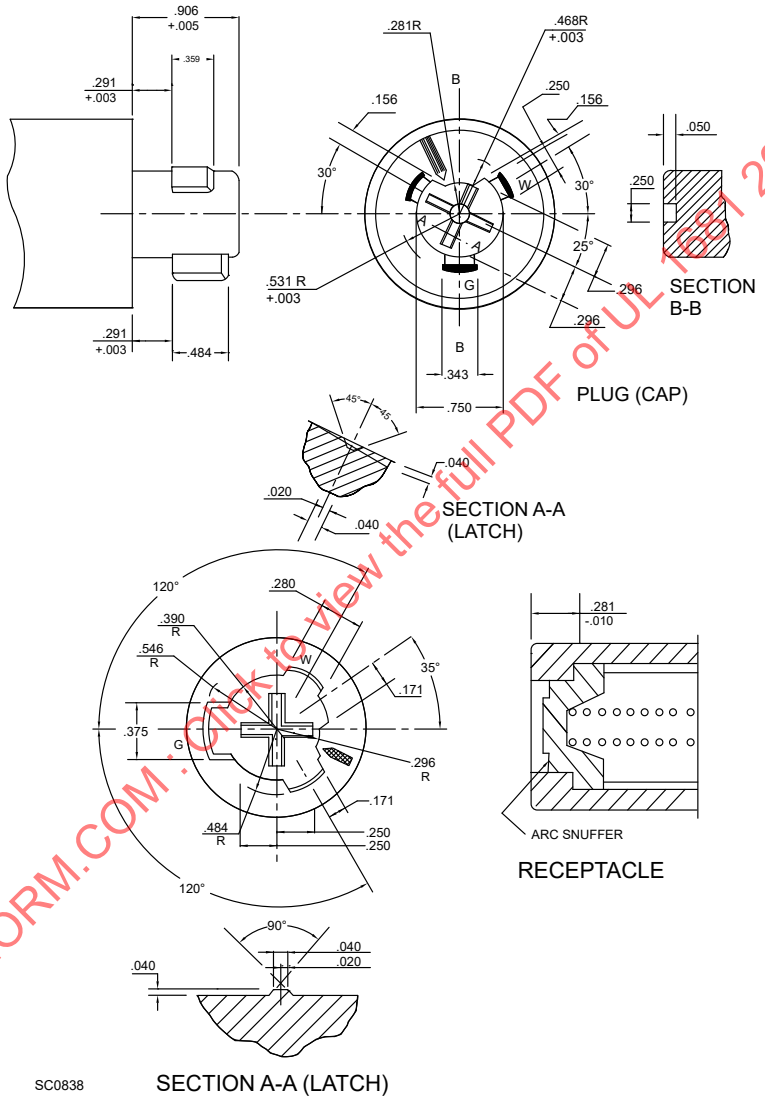


Figure C1.2

3-pole, 3-wire nongrounding-locking devices rated 20 A, 125/250 V

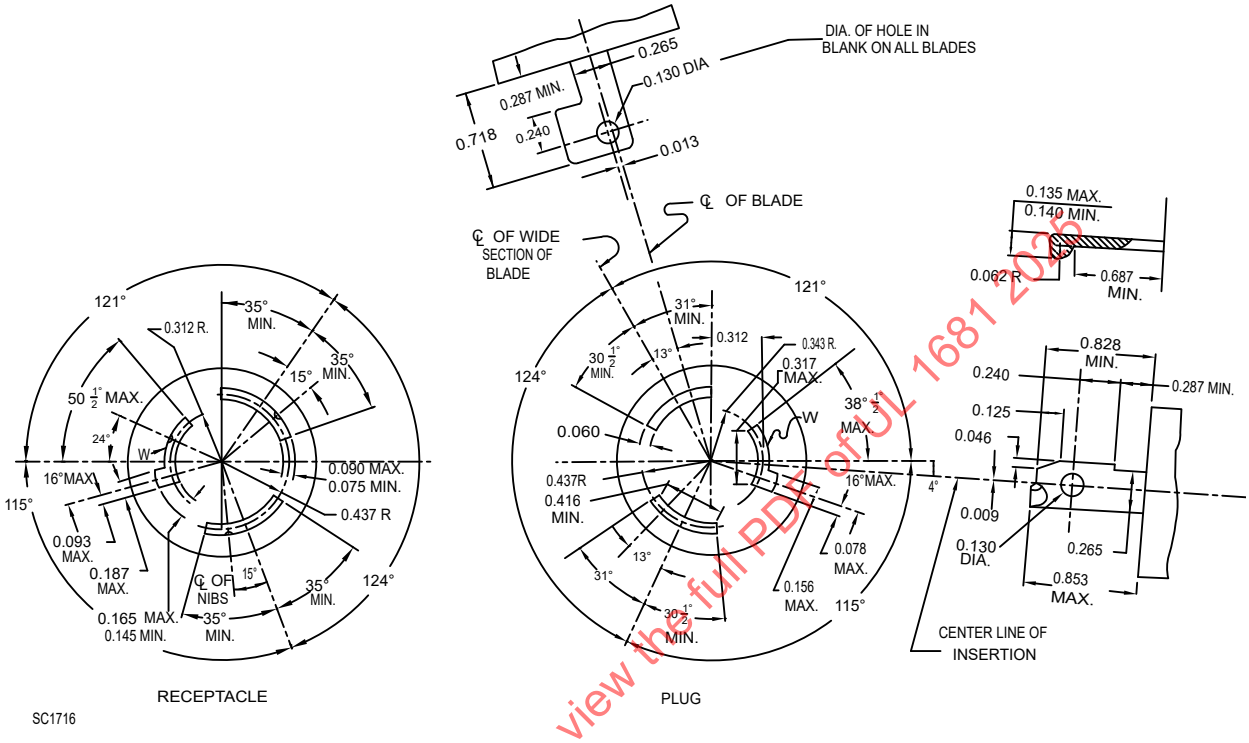
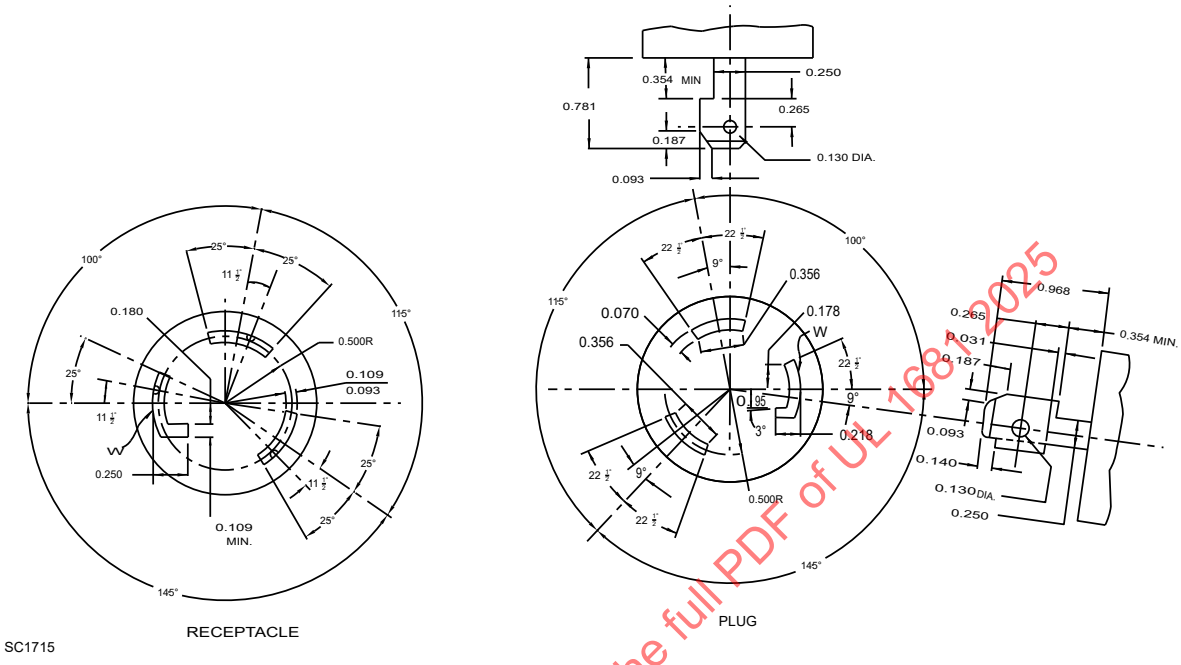


Figure C1.3

3-pole, 3-wire nongrounding-locking devices rated 30 A, 125/250 V



RECEPTACLE PLUG

SC1715

Figure C1.4

4-pole, 4-wire nongrounding-locking devices rated 20 A, 120/208 V 3-phase wye

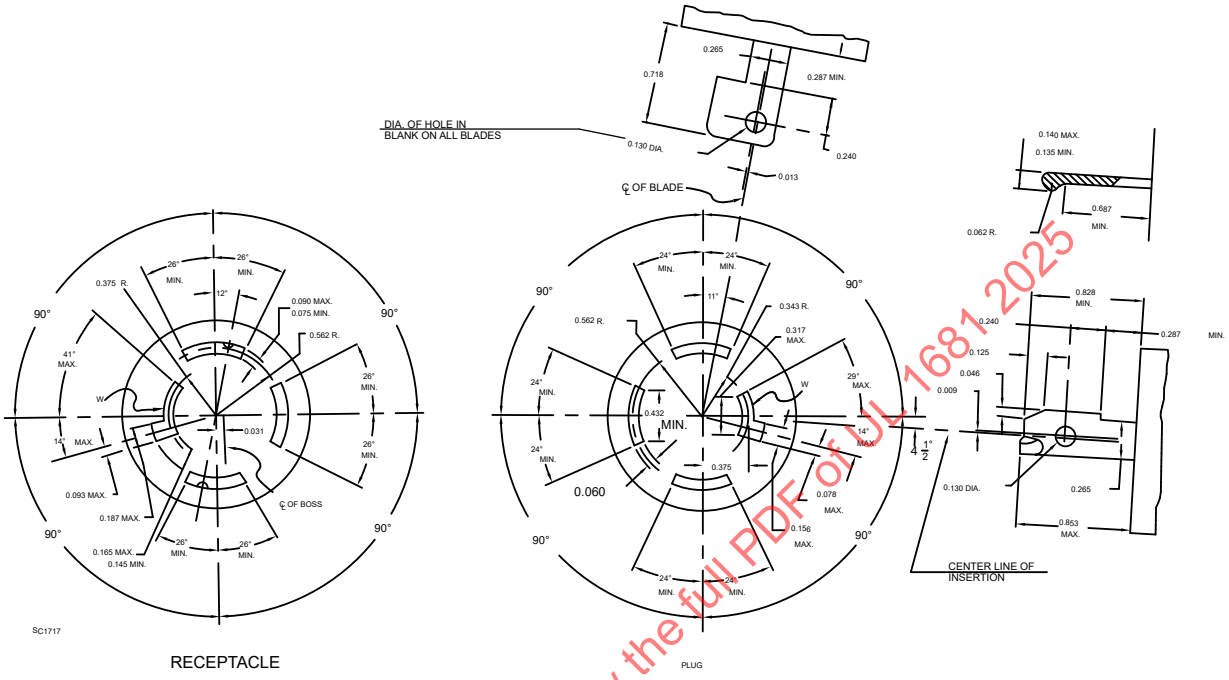


Figure C1.5

4-pole, 4-wire nongrounding-locking devices rated 30 A, 120/208 V 3-phase wye