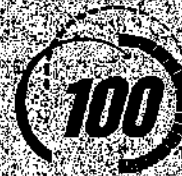


Standard for Safety

UL 1681

Wiring Device Configurations

ISBN 0-7826-0082-0



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April 30, 1998

Standard for

Wiring Device Configurations

UL 1681, Second Edition

Accompanying this transmittal notice is a copy of the Second edition of UL 1681.

THIS EDITION OF THE STANDARD IS NOW IN EFFECT.

Revised and/or additional pages may be issued from time to time.

APRIL 30, 1998

1

UL 1681

Standard for

Wiring Device Configurations

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

First Edition – April, 1991

Second Edition

April 30, 1996

An effective date included as a note immediately following certain requirements is one established by Underwriters Laboratories Inc.

Revisions of this standard will be made by issuing revised or additional pages bearing their date of issue. A UL Standard is current only if it incorporates the most recently adopted revisions, all of which are itemized on the transmittal notice that accompanies the latest published set of revision pages.

ISBN 1-7629-0032-6

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FOREWORD

A. This Standard contains basic requirements for products covered by Underwriters Laboratories Inc. (UL) under its Follow-Up Service for this category within the limitations given below and in the Scope section of this Standard. These requirements are based upon sound engineering principles, research, records of tests and field experience, and an appreciation of the problems of manufacture, installation, and use derived from consultation with and information obtained from manufacturers, users, inspection authorities, and others having specialized experience. They are subject to revision as further experience and investigation may show is necessary or desirable.

B. The observance of the requirements of this Standard by a manufacturer is one of the conditions of the continued coverage of the manufacturer's product.

C. A product which complies with the text of this Standard will not necessarily be judged to comply with the Standard if, when examined and tested, it is found to have other features which impair the level of safety contemplated by these requirements.

D. A product employing materials or having forms of construction differing from those detailed in the requirements of this Standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be judged to comply with the Standard.

E. UL, in performing its functions in accordance with its objectives, does not assume or undertake to discharge any responsibility of the manufacturer or any other party. The opinions and findings of UL represent its professional judgment given with due consideration to the necessary limitations of practical operation and state of the art at the time the Standard is processed. UL shall not be responsible to anyone for the use of or reliance upon this Standard by anyone. UL shall not incur any obligation or liability for damages, including consequential damages, arising out of or in connection with the use, interpretation of, or reliance upon this Standard.

F. Many tests required by the Standards of UL are inherently hazardous and adequate safeguards for personnel and property shall be employed in conducting such tests.

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).

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

1.3 A product that contains features, characteristics, components, materials, or systems new or different from those covered by the requirements in this Standard, and that involves a risk of fire, electric shock, or injury to persons shall be evaluated using the appropriate additional component and end-product requirements as determined necessary to maintain the acceptable level of safety as originally anticipated by the intent of this Standard. A product whose features, characteristics, components, materials, or systems conflict with specific requirements or provisions of this Standard cannot be judged to comply with this Standard. Where considered appropriate, revision of requirements shall be proposed and adopted in conformance with the methods employed for development, revision, and implementation of this Standard.

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 $\pm 1/2$ 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:

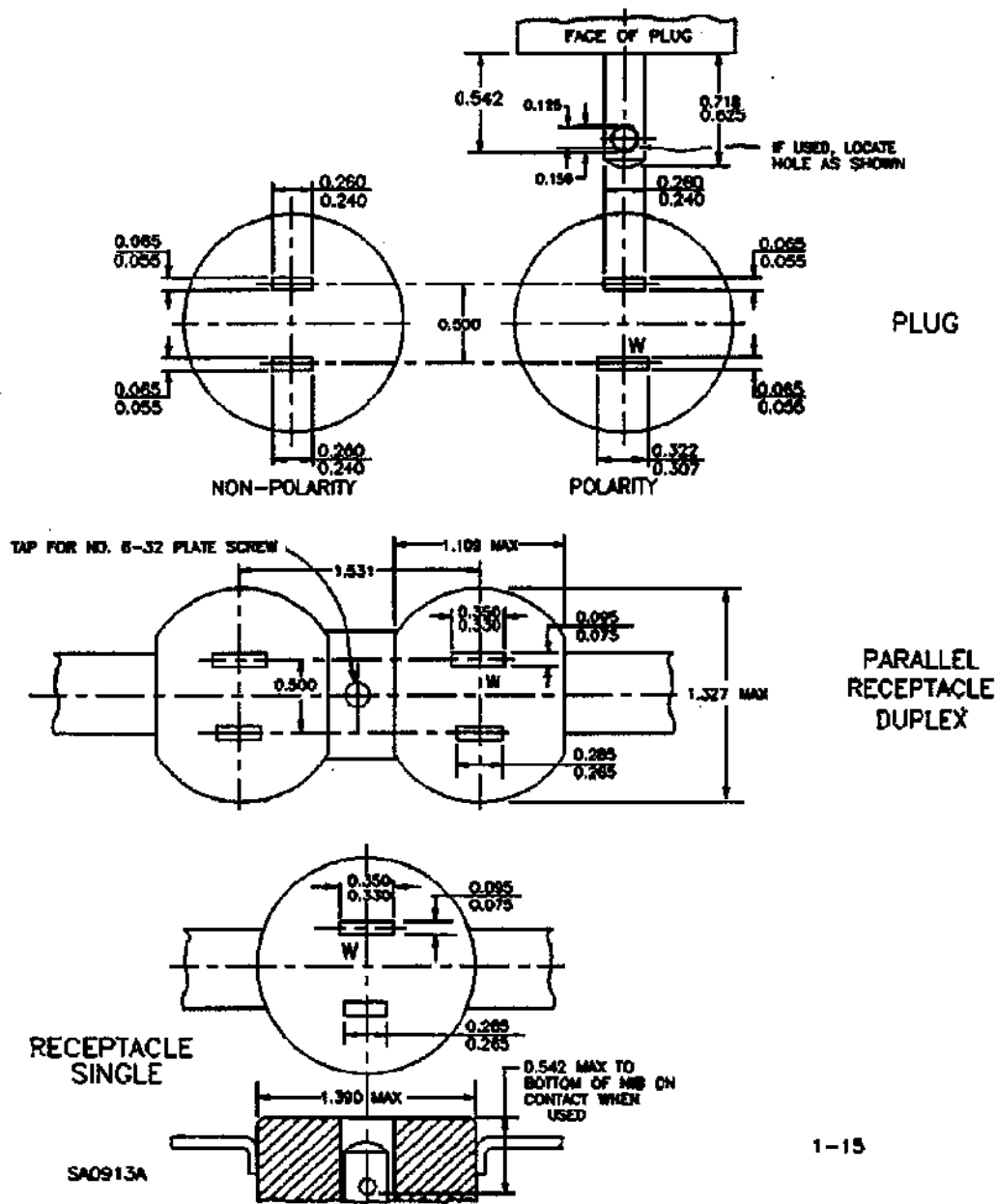
- i) Viewing the blade end of the plug and proceeding counter-clockwise, starting from the grounding blade (G), or in the absence of a grounding blade, the grounded blade (W), the terminals shall be marked in sequence "X", "Y", and "Z".
- ii) Viewing the face end of the receptacle and proceeding clockwise,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

Except for Figures C2.43, C2.44, C3.1 and C3.8 – C3.12, all of the figures in Sections C1 – C3 are reproduced from National Electrical Manufacturers Association publications WD1–1974, General Purpose Wiring Devices, copyright 1974, and WD5–1977, Specific Purpose Wiring Devices, copyright 1977 by the National Electrical Manufacturers Association, copies of which may be purchased from the National Electrical Manufacturers Association, 1300 North 17th Street, Rosslyn, VA 22209.

CONFIGURATIONS

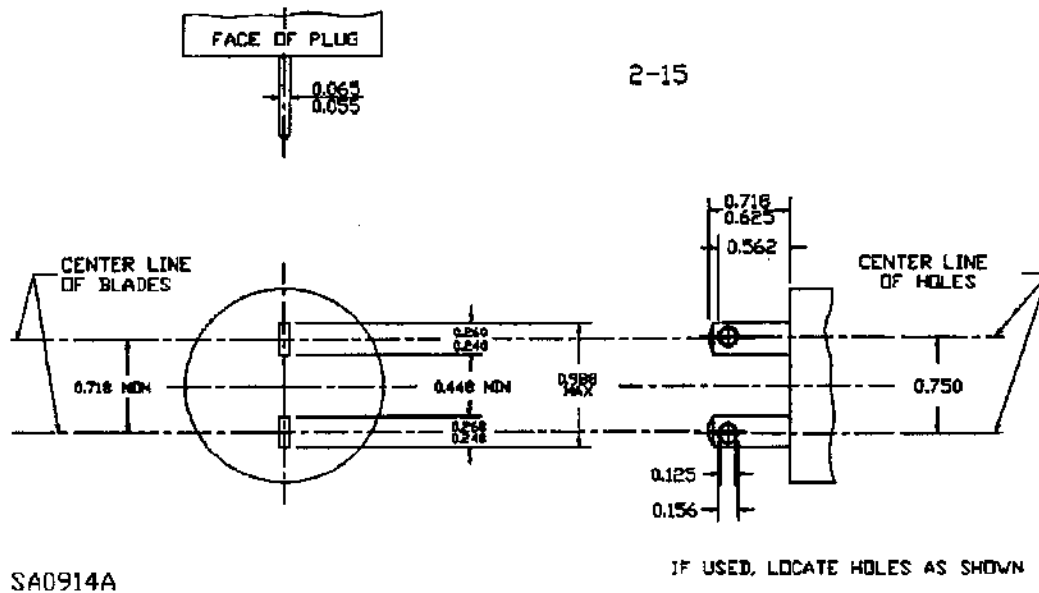
C1 General-Purpose Nonlocking Plugs and Receptacles

Figure C1.1
2-pole, 2-wire devices rated 15 A, 125 V



1-15

Figure C1.2
2-pole, 2-wire plug rated 15 A, 250 V



SA0914A

Figure C1.3
2-pole, 2-wire devices rated 20 A, 250 V

