

ISBN 978-0-626-34134-3

SANS 164-4:2017

Edition 1.3

SOUTH AFRICAN NATIONAL STANDARD

**Plug and socket-outlet systems for household
and similar purposes for use in South Africa**

Part 4: Dedicated system, 16 A 250 V a.c.

WARNING

**This document references other
documents normatively.**

SANS 164-4:2017
Edition 1.3

Table of changes

Change No.	Date	Scope
Amdt 1	2007	Amended to clarify definitions and drawings, and to include maximum lengths of sleeves on plug pins.
Amdt 2	2013	Amended to move a referenced standard from the bibliography to the normative references clause, to state the phasing out period, to restrict the dimensions in standard sheets 4-1-1, 4-1-2, 4-1-3, 4-2-1, 4-2-2, 4-2-3 and in the annex on the gauges, and to add requirements for the multi-pin gauge.
Amdt 3	2017	Amended to introduce tolerances on standard sheets 4-1-1, 4-1-2 and 4-1-3, and to replace the word "maximum" with "minimum" on the explanation of reference numbers on standards sheets 4-2-1, 4-2-2 and 4-2-3 on reference number 2 where a dimension of 9,5 mm min. is specified on all drawings.

Foreword

This South African standard was prepared by National Committee SABS TC 067/SC 03, *Electricity distribution systems and components – Electrical accessories*, in accordance with procedures of the SABS, in compliance with annex 3 of the WTO/TBT agreement.

This document was approved for publication in March 2017.

This document supersedes SANS 164-4:2013 (edition 1.2).

A vertical line in the margin shows where the text has been technically modified by amendment No. 3.

Over the next five years SANS 164-4 will be superseded by SANS 164-2 as the applicable standard for the conventional plug and socket-outlet system in South Africa. During the same period, a dedicated system will be incorporated into SANS 164-2 which will then supersede SANS 164-4. Amdt 2

SANS 164 consists of the following parts, under the general title *Plug and socket-outlet systems for household and similar purposes for use in South Africa*:

Part 0: General and safety requirements.

Part 1: Conventional system, 16 A 250 V a.c.

Part 2: IEC system, 16 A 250 V a.c.

Part 3: Conventional system, 6 A 250 V a.c.

Part 4: Dedicated system, 16 A 250 V a.c.

Part 5: Two-pole, non-rewirable plugs, 2,5 A 250 V a.c., with cord, for connection of class II equipment.

Part 6: Two-pole systems, 16 A 250 V a.c., for connection of class II equipment.

Annexes A, B, C, D, E and F form an integral part of this document.

This document, by reference in SANS 164-0, is referenced in the *Compulsory specification for plugs, socket-outlets and socket-outlet adaptors*, as published by Government Notice No. R. 1075 (Government Gazette 33763) of 19 November 2010.

Compliance with this document cannot confer immunity from legal obligations.

Introduction

This document provides dimensions for safe, compact and practical plugs and socket-outlets to be used in applications of dedicated supply systems where the general principle is that a dedicated plug can be admitted into a non-dedicated socket-outlet, but a non-dedicated plug cannot be admitted into a dedicated socket-outlet.

SANS 164-4:2017

Edition 1.3

Contents

	Page
Foreword	
Introduction	
1 Scope	3
2 Normative references	3
3 Definitions	3
4 Requirements	4
Annex A (normative) Gauge for distance from engagement face to current-carrying contact tubes of socket-outlets	13
Annex B (normative) Gauge for distance from engagement face to point of first contact with current-carrying contacts of socket-outlets (no contact gauge)	14
Annex C (normative) Gauge for distance from engagement face to point of first contact with current-carrying contacts of socket-outlets (contact gauge)	15
Annex D (normative) Gauges for proving that it is not possible to make connection between a pin of a plug and a current-carrying contact of a socket-outlet while any other current-carrying pin is accessible	16
Annex E (normative) Gauge for proving that, during insertion of a plug, the earth pin makes a connection before either of the current-carrying pins, and that, during plug withdrawal, both current-carrying pins break connection before the earth pin	19
Annex F (normative) "GO" gauges for plugs and socket-outlets.....	21
Bibliography	23

Plug and socket-outlet systems for household and similar purposes for use in South Africa

Part 4:

Dedicated system, 16 A 250 V a.c.

1 Scope

This part of SANS 164 covers the rating and dimensions of the 16 A dedicated plug and socket-outlet system for the connection of equipment to a dedicated supply system, having a nominal voltage of 250 V a.c in household and similar applications in South Africa.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of SANS 164. All standards are subject to revision and, since any reference to a standard is deemed to be a reference to the latest edition of that standard, parties to agreements based on this part of SANS 164 are encouraged to take steps to ensure the use of the most recent editions of the standards indicated below. Information on currently valid national and international standards can be obtained from the SABS.

SANS 164-0, *Plug and socket-outlet systems for household and similar purposes for use in South Africa – Part 0: General and safety requirements.*

SANS 60884-1/IEC 60884-1, *Plugs and socket-outlets for household and similar purposes – Part 1: General requirements.* **Amdt 2**

3 Definitions

For the purposes of this part of SANS 164, the definitions given in SANS 164-1 and the following apply.

3.1

dedicated plug

accessory that has pins designed to engage with the contacts of a socket-outlet of both the same dedicated type and the conventional type **Amdt 1**

3.2

dedicated socket-outlet

accessory that has contacts designed to engage with the pins of a dedicated plug of the same type, but specifically designed not to engage with the pins of a conventional (non-dedicated) plug **Amdt 1**