

ISBN 978-0-626-28108-3

SANS 1619:2015

Edition 2.4

SOUTH AFRICAN NATIONAL STANDARD

Small power distribution units (ready-boards) for single-phase 230 V service connections

WARNING

**This document references other
documents normatively.**

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Table of changes

Change No.	Date	Scope
Amdt 1	2008	Amended to update the introductory clause to normative references, to update referenced standards and definitions, and to remove references to a compulsory specification.
Amdt 2	2009	Amended to update referenced standards and to introduce new requirements for socket-outlets.
Amdt 3	2011	Amended to update a referenced standard, to introduce new requirements for socket-outlets and circuit-breakers and to update an annex on the installation of SPDs to align with the latest edition of SANS 10142-1.
Amdt 4	2015	Amended to update referenced standards.

Foreword

This South African standard was approved by National Committee SABS/TC 067/SC 02, *Electricity distribution systems and components – Low-voltage switchgear*, in accordance with procedures of the SABS Standards Division, in compliance with annex 3 of the WTO/TBT agreement.

This standard was originally prepared on behalf of the Electricity Suppliers Liaison Committee (ESLC) and issued as NRS 019:1992. In 1994, the National Committee for Low-voltage Switchgear accepted the text of NRS 019 as suitable for use as a national standard.

This document was approved for publication in March 2015.

This document supersedes SANS 1619:2011 (edition 2.3).

A vertical line in the margin shows where the text has been technically modified by amendment No. 4.

Annexes C and D form an integral part of this standard. Annexes A and B are for information only.

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1 Scope

1.1 This standard specifies requirements for distribution boxes that are ready-wired with socket-outlets, with or without a permanently wired luminaire. The boxes are intended for single-phase 230 V service connections for direct connection to the terminals of an electricity dispenser or meter, and for use either in a dwelling or installed in a waterproof enclosure. This type of distribution box is called a small power distribution unit (SPDU), and it is primarily intended for use in low-cost housing. It is also commonly known as a "ready-board".

1.2 Two types of SPDU are covered by this standard, i.e.

- a) a basic, non-extendible type of SPDU, and
- b) an extendible type of SPDU, with facilities to allow for the connection of permanently wired circuits.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced documents (including any amendments) applies. Information on currently valid national and international standards can be obtained from the SABS Standards Division. **Amdt 1**

IEC 60068-2-75, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests.*

IEC 60695-2-12, *Fire hazard testing – Part 2-12: Glowing/hot-wire based test methods – Glow-wire flammability index (GWFI) test method for materials.*

SANS 164-0, *Plug and socket-outlet systems for household and similar purposes for use in South Africa – Part 0: General and safety requirements.* **Amdt 2**

SANS 164-1, *Plug and socket-outlet systems for household and similar purposes for use in South Africa – Part 1: Conventional system, 16 A 250 V a.c.*

SANS 164-2, *Plug and socket-outlet systems for household and similar purposes for use in South Africa – Part 2: IEC system, 16 A 250 V a.c.* **Amdt 2**

SANS 279/ISO 1518, *Paints and varnishes – Scratch test.* **Amdt 1**

SANS 556-1, *Low-voltage switchgear – Part 1: Circuit-breakers.* **Amdt 3**