


No. 1011

21 October 2005

STANDARDS ACT, 1993**WITHDRAWAL AND REPLACEMENT OF THE COMPULSORY SPECIFICATION FOR CORD SETS AND CORD EXTENSION SETS**

I, Mandisi Mpahlwa Minister of Trade and Industry, hereby under Section 22(1)(a)(1) of the Standards Act, 1993 (Act No. 29 of 1993), and on the recommendation of the Council of the South African Bureau of Standards, withdraw the compulsory specification for cord sets and cord extension sets and replace it with the compulsory specification as set out in the Schedule, with effect from the date 2 months after the date of publication of this notice.


M Mpahlwa
Minister of Trade and Industry

SCHEDULE

COMPULSORY SPECIFICATION FOR CORD SETS AND CORD EXTENSION SETS

1 Scope

This specification covers cord sets and cord extension sets that have a maximum current rating not exceeding **16 A** and that are intended for use with electrical installations that operate at a single-phase voltage not exceeding **250 V**.

2 Definitions

For the purposes of this specification, the following definitions apply:

2.1 cord extension set: An assembly that consists of a flexible cord fitted with a plug and with one or more socket-outlets and that can incorporate a switch or switches, a circuit-breaker, an earth leakage unit, or a thermal over-current unit, or a combination of these.

2.2 cord set: An assembly that consists of a flexible cord fitted with a plug and with an appliance connector, and that is intended to connect an electrical appliance or equipment to the electrical supply.

3 Requirements

3.1 Components

3.1.1 The cord of a cord set or cord extension set shall comply with the requirements of the relevant of the following subclauses of **SABS 1574, *Electric cables B Flexible cords***, as published by Government Notice 1851 (Government Gazette **No. 16840**), dated 1 December 1995:

- B 4.2.1 Conductor material;
- B 4.2.2.1 Insulation material;
- B 4.2.3 Core identification;
- B 4.2.5.1 Protective covering;
- B 4.2.5.3 Overall diameters limits;
- B 4.3 Special requirements for heat-resistant flexible cords;
- B 4.4.2 Voltage withstand test (5 min test);
- B 4.5.1 Flexing test;
- B 4.5.8 Flexing test for extensible leads; and

B 6.2 Marking of cords.

3.1.2 The plug of a cord set or cord extension set shall be of the non-rewirable type and shall comply with the relevant requirements of SABS IEC 884-1, *Plugs and socket-outlets for household and similar purposes B Part 7: General requirements*, as published by Government Notice 1084 (Government Gazette No. 17287) dated 5 July 1996.

3.1.3 ~~The plug shall comply with the dimensions of standard sheet 2-2 of SABS 164-1, *Plugs and socket-outlets for household and similar purposes B National modifications of international requirements B Part 1: Conventional system*, as published by Government Notice No. 411 (Government Gazette No. 18761) dated 27 March 1998; or~~

~~standard sheet 4 of SABS 164-2, *Plugs and socket-outlets for household and similar purposes B Part 2: National adaptation of IEC worldwide system (16 A 250 V)*, as published by Government Notice No. 411 (Government Gazette No. 18761) dated 27 March 1998; or~~

for cord sets only, standard sheet 7 of the said SABS 164-2.

3.1.4 The appliance connector of a cord set shall be of the non-rewirable type and shall comply with the relevant requirements of SABS IEC 320-1, *Appliance couplers for household and similar general purposes B Part 7: General requirements*, as published by Government Notice 1084 (Government Gazette No. 17287) dated 5 July 1996.

3.1.5 The socket-outlet(s) of a cord extension set shall be of the increased protection type and shall comply with the relevant requirements of SABS IEC 884-1.

3.1.6 A switched socket-outlet shall comply with the relevant requirements of SABS IEC 884-2-3, *Plugs and socket-outlets for household and similar purposes B Part 2-3: Particular requirements for switched socket-outlets without interlock for fixed installations*, as published by Government Notice 841 (Government Gazette No. 17194) dated 24 May 1996.

3.1.7 A circuit-breaker included in a cord extension set shall comply with the relevant requirements of SABS IEC 934, *Circuit-breakers for equipment (CBE)*, as published by Government Notice 841 (Government Gazette No. 17194) dated 24 May 1996; or with SABS 156 *Moulded case circuit-breakers*, as published by Government Notice 463 (Government Gazette No. 8303) dated 9 July 1982.

3.1.8 An earth leakage unit included in a cord extension set shall comply with the relevant requirements of SABS 767-2, *Earth leakage protection units B Part 2: Single-phase, portable units*, as published by Government Notice 1851 (Government Gazette No. 16840) dated 1 December 1995.

3.1.9 A thermal over current unit included in a cord extension set shall operate within 50 min at a current of (140 ∇ 2,5)% of the rated current of the set, and shall operate within 3 min at a current of (200 ∇ 2,5)% of the rated current. After these checks, there shall be no visible damage to the conductor insulation or any other damage that will impair the future use of the set.

3.2 Ratings

3.2.1 The rated voltage of the flexible cord and of the appliance connector or the socket-outlets of a set shall be not less than the rated voltage of the plug.

3.2.2 The rated current of the plug of a cord set shall be not less than the rated current of the flexible cord and the appliance connector.

3.2.3 The voltage and current ratings of the set shall not exceed the lowest ratings of any of the components of the set. The voltage and current ratings of the set shall be clearly marked on at least **one** of the components of a non-rewirable set.

3.2.3 The length of the cord of a cord extension set shall, for a given cross-sectional area and a given current rating, not exceed the relevant value given in table. 1.

1	2	3
Nominal cross-sectional area mm ²	Current rating A	
	10	16
1,5 2,5 4	Maximum length of cord m	
	25	B
	35	20
	65	40
4	100	65

3.3 Continuity and polarity

3.3.1 The continuity of polarity between plug-pins and corresponding connector contacts or socket-outlet contacts shall be maintained correctly.

3.3.2 A two-core flexible cord in a cord extension set shall only be connected to (a) non-rewirable socket-outlet(s) that will not accept a plug With earth connection.

3.4 Over current protection

3.4.1 A cord extension set that has more than two socket-outlets shall have one of the following means of protection:

- a trip-free circuit-breaker;
- a trip-free earth-leakage unit; or
- a thermal over current unit.

3.4.2 Fuses shall not be used as a means of over current protection.

3.5 Reeling or coiling devices

3.5.1 A reeling or coiling device that is fitted with a three-core cord shall have all non-current-carrying accessible metal parts securely connected to the earthing terminal of the socket-outlet(s) or to a separate earthing terminal.

3.5.2 A reeling or coiling device that is fitted with a two-core cord shall be double insulated.

3.5.3 A reeling or coiling device shall be provided with an acceptable means of cord anchorage for providing strain relief at the connections to each accessory.

3.5.4 A reeling or coiling device shall be legibly marked with the words "DO NOT OPERATE UNLESS CORD IS FULLY UNREELED".