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SANS 60309-1:2012

Edition 3.2 and IEC corr. 1

IEC 60309-1:2012

Edition 4.2 and corr. 1

SOUTH AFRICAN NATIONAL STANDARD

Plugs, socket-outlets and couplers for industrial purposes

Part 1: General requirements

This national standard is the identical implementation of IEC 60309-1:2012 and IEC corrigendum 1, and is adopted with the permission of the International Electrotechnical Commission.

WARNING
This document references other
documents normatively.

SANS 60309-1:2012

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Table of changes

Change No.	Date	Scope
Amdt 1	2005	Amended to include screwless and insulation-piercing terminals, to add general requirements, general notes on test and standard ratings, and to change requirements for marking, for dimensions and for the size of connectable conductors with regard to the provision for earthing.
IEC amdt 1	2012	Amended to update referenced standards, to change the rated operating voltage of 690 V d.c. or a.c. to 1000 V d.c. or a.c., the rated current for accessories with screwless type terminals or insulation piercing terminal to 32 A for series I and 30 A for series II and to add the requirements for terminals and terminations.
IEC corr. 1	2014	Corrected to move "125" to the line above on a current column series I on a table on size for connectable conductors (table 3).

National foreword

This South African standard was approved by National Committee SABS/TC067/SC03, *Electricity distribution systems and components – Electrical accessories*, in accordance with procedures of the SABS Standards Division, in compliance with annex 3 of the WTO/TBT agreement.

This document was approved for publication in September 2016.

This document supersedes SANS 60309-1:2012 (edition 3.2).

Compliance with this document cannot confer immunity from legal obligations.

**IEC 60309-1:1999/AMD1:2005
(Amendment 1 to the fourth edition)**

**Plugs, socket-outlets and couplers for
industrial purposes –**

Part 1: General requirements

CORRIGENDUM 1

Table 3 – Size for connectable conductors

In the "Current A" column, "Series I", move value "125" to the line above, as follows:

Rating of the accessory			Internal connection ^{1) 5)}				External earthing connection if any		
Voltage V	Current A			Flexible cables for plugs and connectors Solid or stranded cables for appliance inlets ²⁾		Solid or stranded cables for socket-outlets ^{2) 6)}		Series I mm ²	Series II AWG/MCM ³⁾
	Series I	Series II	Other ratings	Series I mm ²	Series II AWG/MCM ³⁾	Series I mm ²	Series II AWG/MCM ³⁾		
Not exceeding 50	16	20		4 to 10	12 to 8	4 to 10	12 to 8		
	32	30		4 to 10	12 to 8	4 to 10	12 to 8		
Exceeding 50	16	20	6	0,75 to 1	18 to -	0,75 to 1,5	18 to 16	2,5	14
			10	1 to 1,5	- to 16	1 to 1,5	- to 16	2,5	14
	32	30	25	1 to 2,5	16 to 12	1,5 to 4	16 to 12	6	10
			25	1,5 to 4	16 to 12	2,5 to 6	14 to 10	6	10
	63	60	40	2,5 to 6	14 to 10	2,5 to 10	14 to 8	10	8
			50	4 to 10	12 to 8	4 to 16	12 to 6	10	8
	125	100	80	4 to 10	12 to 8	4 to 16	12 to 6	16	6
			90	6 to 16	10 to 6	6 to 25	10 to 4	25	4
			150	10 to 25	8 to 4	16 to 35	6 to 2	25	4
			160	10 to 25	8 to 4	16 to 35	6 to 2	25	4
250	200	150	16 to 50	6 to 0	25 to 70	4 to 00	25	4	
		160	25 to 70	4 to 00	35 to 95	2 to 000	25	4	
		200	25 to 70	4 to 00	35 to 95	2 to 000	25	4	
			70 to 150	00 to 0000	70 to 185 ⁴⁾	00 to 250	25	4	

- 1) Terminal for pilot conductors, if any, shall allow the connection of conductors having a cross-sectional area of 1 mm².
- 2) Classification of conductors: according to IEC 60228.
- 3) The nominal cross-sectional areas of conductors are given in square millimetres (mm²). AWG/MCM values are considered as equivalent to mm² for the purpose of this standard.
AWG: American Wire Gauge is a system of identifying wires in which the diameters are in geometric progression between size 36 and size 0000.
MCM: Mille Circular Mils denotes circle surface area. 1 MCM = 0,5067 mm².
- 4) 150 mm² for 200 A accessories of series II.
- 5) For ratings other than those above, the cross-sectional area(s) of the conductors may be that specified by the manufacturer.
- 6) For socket-outlets declared for flexible conductors only, these values apply.



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Edition 4.2 2012-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Plugs, socket-outlets and couplers for industrial purposes –
Part 1: General requirements**

**Prises de courant pour usages industriels –
Partie 1: Règles générales**

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