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**SANS 10089-2:2017**

Edition 3.1

# **SOUTH AFRICAN NATIONAL STANDARD**

## **The petroleum industry**

### **Part 2: Electrical and other installations in the distribution and marketing sector**

**WARNING**

**This document references other  
documents normatively.**

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**Table of changes**

<b>Change No.</b>	<b>Date</b>	<b>Scope</b>
Amdt 1	2017	Amended to update the foreword, to update referenced standards, to update definitions, to modify the clause on certification requirements for explosion-protected apparatus, to update the information on selection criteria of explosion-protected apparatus, to modify the note to the clause on installation, maintenance, inspection and repair, and to delete the annex on other requirements.

**Foreword**

This South African standard was prepared by National Committee SABS/TC 065, *Explosion prevention*, 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 10089-2:2007 (edition 3).

A vertical line in the margin shows where the text has been technically modified by amendment No. 1.

**This document is referenced in the Mine Health and Safety Act, 1996 (Act No. 29 of 1996), and the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).**

Reference is made in 3.1 and 3.3 to the "relevant national legislation". In South African this means the following:

- a) in terms of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), the Chief Inspector of Occupational Health and Safety of the Department of Labour (Regulator); and
- b) in terms of the Explosives Act, 2003 (Act No. 15 of 2003), the Chief Inspector of Explosives of the Department of Labour (Regulator).

Reference is made in 3.13 to the "relevant national authority". In South Africa this means the Chief Inspector of Mines of the Department of Mineral Resources as defined in the Mine Health and Safety Act, 1996 (Act No. 29 of 1996). **Amdt 1**

SANS 10089 consists of the following parts under the general title *The petroleum industry*:

*Part 1: Storage and distribution of petroleum products in above-ground bulk installations.*

*Part 2: Electrical installations in the distribution and marketing sector.*

*Part 3: The installation of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations.*

| Annexes A, B and C form an integral part of this document.

**Amdt 1**

**Compliance with this document cannot confer immunity from legal obligations.**

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## **The petroleum industry**

### **Part 2:**

### **Electrical and other installations in the distribution and marketing sector**

## **1 Scope**

**1.1** This part of SANS 10089 covers the recommended safe practices in the design, construction, installation and maintenance of electrical, earthing and bonding systems intended to be used in flammable and combustible liquid storage, pumping, distribution and marketing facilities. It is not intended that this standard should apply to refineries or exploration facilities, unless any of these installations are similar to facilities listed above.

**1.2** This part of SANS 10089 does not cover the requirements for flammable dust.

## **2 Normative references**

The following referenced documents are indispensable for the application of this document. All normative documents are subject to revision and, since any reference to a normative document is deemed to be a reference to the latest edition of that document, parties to agreements based on this document are encouraged to take steps to ensure the use of the most recent editions of the normative documents indicated below. Information on currently valid national and international standards can be obtained from the SABS.

API RP 500, *Recommended practice for classification of locations for electrical installations at petroleum facilities classified as class I, division 1 and division 2.*

API 2003, *Recommended practice for Protection against ignitions arising out of static, lightning, and stray currents.*

API STD 610, *Centrifugal pumps for petroleum, petrochemical and natural gas industries.*

IP Code – Part 15, *Model code of safe practice in the petroleum industry – Part 15: Area classification code for installations handling flammable liquids.*

IP Code – Part 21, *Model code of safe practice in the petroleum industry – Part 21: Guidelines for the control of hazards arising from static electricity.*

SANS 1020, *Power-operated dispensing devices for flammable liquid fuels.*

SANS 10086-1, *The installation, inspection and maintenance of equipment used in explosive atmospheres – Part 1: Installations including surface installations on mines.*