

No. 118


10 February 2006

## STANDARDS ACT, 1993

PROPOSED AMENDMENT OF THE COMPULSORY  
SPECIFICATION FOR CIRCUIT BREAKERS

It is hereby made known under section 22 (3) of the Standards Act, 1993 (Act No. 29 of 1993), that the Minister of Trade and Industry intends to amend the compulsory specification for Circuit Breakers as published by Government Notice No. 1090 in Government Gazette No. 20461 of 17 September 1999 as set out in the attached schedule.

Any person who wishes to object to the intention of the Minister to thus amend the compulsory specification concerned, shall lodge their objection in writing with the President, South African Bureau of Standards, Private Bag X191, Pretoria, 0001, on or before the date two (2) months after publication of this notice.

  
M Mphahlela  
Minister of Trade and Industry

# Proposed amendment

## SCHEDULE

### Compulsory specification for circuit breakers

#### 1 Scope

1.1 This specification covers circuit breakers with moulded cases, the main contacts of which are intended to be connected to circuits with rated voltages not exceeding 1000 V ac or 1500 V dc., rated currents not exceeding 125A and a rated short circuit breaking capacity not exceeding 10 kA.

1.2 This specification does not cover circuit breakers for equipment covered by SANS 60934:2000, nor circuit breakers incorporating residual current protection (earth leakage protection).

#### 2 Definition

For the purpose of this specification the following definition applies:

**Circuit breaker:** A mechanical switching device, capable of making, carrying and breaking currents under normal circuit conditions and also making, carrying for a specified time, and breaking currents under specified abnormal circuit conditions such as a short circuit or an earth fault.

#### 3 Requirements

3.1 A circuit breaker shall be safe and shall function safely and correctly during normal and abnormal circuit conditions.

Compliance with this requirement shall be proved by compliance with the requirements of either

3.2 SANS 556-1 *Low-voltage switchgear, Part 1- Circuit breakers* as published in Government Notice 39 of 28 January 2005 (Government Gazette 27179).

Or alternatively, for the period up to 31 December 2009:

3.3 SANS 60947-2 / IEC 60947-2:1995, *Low-voltage switchgear and controlgear – Part 2: Circuit-breakers*, as published by Government Notice No. 411 of 27 March 1998, as modified in 3.3.1 and 3.3.2

3.3.1 The power-frequency recovery voltage, as given in 8.3.2.2.6 and 8.3.3.4 (table 13) of the said SANS 60947-2:1995, for a circuit-breaker with a maximum operational voltage of 220/380 V a.c. to 240/415 V a.c. (inclusive), shall be 252/436 V a.c.

## 3.3.2

**Table 11 — Values of power factors and time constants corresponding to test currents**

1	2	3	4	5	6	7
Test current <i>I</i> kA	Power factor			Time constant ms		
	Short-circuit	Operational performance capability	Overload	Short-circuit	Operational performance capability	Overload
$I \leq 10$	0,45 - 0,5	0,8	0,45 - 0,5	5	2	2,5

Note: After 31 December 2010 all circuit breakers fall within the requirements of all the abovementioned shall comply with the requirements of SANS 556-1 as mentioned in 3.2