


**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~~ 10kA.

~~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 n o d 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
<b>Test current <i>I</i> kA</b>	<b>Power factor</b>			<b>ms</b>		
	<b>Short-circuit</b>	<b>Operational performance capability</b>	<b>Overload</b>	<b>Short-circuit</b>	<b>Operational performance capability</b>	<b>Overload</b>
$I \leq 10$	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 3.3