

TEST REPORT

Test Report No. NSC-190226-00009

SHORT-CIRCUIT LABORATORY

Page 1 of 8

Client : Reef Switchboard Manufacturers (Pty) Ltd, 12 Lea Road, Anderbolt, South Africa
Manufacturer : Reef Switchboard Manufacturers (Pty) Ltd, 12 Lea Road, Anderbolt, South Africa
Apparatus : Three-phase low-voltage switchgear and controlgear ASSEMBLY
Designation : RF2000

Ratings assigned by the manufacturer:

Impulse voltage Uimp: 8.5kV
Operational Voltage Ue: Up to 1000 V a.c 1500 V d.c
Short-circuit withstand Icw: 50kA 1s
Rated Current In A: 2500A IP4X
Test Voltage V: 525V + 10% (Conditional short-circuit tests)
Rated Frequency: 50Hz
Other characteristics listed on page 2

The tests have been carried out strictly in accordance with:

IEC 61439-1:2011 Ed. 2 / SANS 61439-1:2011 Ed. 2 and IEC 61439-2:2011 Ed. 2 / SANS 61439-2:2011 Ed. 2
Low-voltage switchgear and controlgear assemblies

Part 1: General rules and Part 2: Power switchgear and controlgear assemblies

Date of test(s): Period including 12 November 2014 to 24 June 2019

THE APPARATUS HAS COMPLIED WITH THE FOLLOWING CLAUSES OF IEC / SANS 61439 SERIES

Part 1:Sub-clause 10.2.2	- Resistance to corrosion	: Severity A & B (See Gerotek Test Report No. 15016 appended)
Part 1:Sub-clause 10.2.5	- Lifting test	1401.0 kg (1.25 x maximum shipping weight- 3 tier assembly)
Part 1:Sub-clause 10.9.3.2	- Impulse withstand voltage test	:8.5 kV
Part 1:Sub-clause 10.10.2.3.5	- Verification of temperature-rise limits-testing with current	:2500A - IP4X
Part 1:Sub-clause 10.11.5	- Verification of short-circuit withstand strength	
	- Main and distribution busbars	:50 kA, 1s; 105 kA peak
	- Protective earth (sub-clause 10.5.3.5) busbars	:30 kA, 1s
	- Functional and Incoming units-Conditional short-circuit tests	:50kA at 525V +10%
Part 1:Sub-clause 10.3	- Internal degree of protection of Assemblies	:IP2X
Part 1:Sub-clause 10.4	- Verification of clearances and creepage distances	:8mm/16mm
Part 1:Sub-clause 10.5.2	- Effective earth continuity	: ≤ 0.1 Ω
Part 1:Sub-clause 10.9.2	- Power frequency withstand voltage test	:2.2kV, 5 s
Part 1:Sub-clause 10.2.3.2	- Verification of resistance of insulating/support materials to abnormal heat (Glow wire test)	:960 °C
Part 2: Sub-clause 8.101	- Internal separation of PSC-ASSEMBLIES by barriers or partitions	
	- Incomer: FORM 3a	- Outgoing functional units :FORM 3b

This report consists of:

Report forms 8
Photograph(s) 4 As listed on page 8
Drawing(s) 15 As listed on page 2

This test report is valid if read in conjunction with SABS Test Report No.: NSC-141103-00001

S.S Mhisi

Manager:Short-Circuit Laboratory
NETFA - SABS Commercial (SOC) Ltd
(Technical Signatory)

J.M Muregu

Test Officer
NETFA - SABS Commercial (SOC) Ltd
Olifantsfontein, 25 June 2019

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The test work relates to this report was performed by SABS Commercial SOC Ltd.
The report and its test results relate only to the specific sample(s) identified herein.
They do not imply SABS approval of the quality and/or performance of the item(s)
In question and the test results do not apply to any similar item that has not been
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Testing Laboratory



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