



CPRI

CENTRAL POWER RESEARCH INSTITUTE  
SWITCHGEAR TESTING & DEVELOPMENT STATION  
GOVINDPURA, BHOPAL - 462 023, INDIA  
Phone : +91(0)755 2586682 Fax : +91 (0)755 2587774



NABL ACCREDITED  
LABORATORY  
Certificate No- T-0011

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TEST REPORT

Test Report No : 2006/STL/679 Dated : 12 JAN 2007

Name and Address of the Customer : M/s Vikas Control & Switchgear,  
GI-20, Udyog Vihar, Sukher  
Udaipur (Raj.)

Name and Address of the Manufacturer : M/s Vikas Control & Switchgear,  
GI-20, Udyog Vihar, Sukher  
Udaipur (Raj.)

Particulars of Sample(s) Tested : 415V, 1200A, L.T. Panel

Condition of sample(s) on receipt : New  
Type : PCC/MCC  
Designation : NIL  
Serial Number(s) : NIL  
Number of Sample(s) Tested : One  
Date(s) of Test(s) : 11/12/2006  
CPRI sample code number(s) : STDSST206S1318  
Sealing of the sample if any : No

Particulars of test(s) conducted : Verification of Temperature Rise Limits.

Test(s) in accordance with Standard/specification : IS:8623 (Part-1), 1993 and customer's requirement.  
Sampling Plan : NIL  
Customer's Requirement : Temperature rise limits on busbar joint 70°C  
Deviations, if any : NIL

Name of the witnessing persons :  
Customer's Representatives : Mr. P.K. Geetey, Representative  
Mr. Dilip Soni, Representative  
Other than Customer's Representatives : NIL

Test subcontracted with name and address of the laboratory : NONE

Documents constituting this report (in words)  
No. of Sheet(s) : SIX  
No. of Oscillogram(s) : NIL  
No. of Graph(s) : NIL  
No. of Photograph(s) : NIL  
No. of Test Circuit Diagram(s) : NIL  
No. of drawing(s) : TWO

(R. S. PANDEY)  
TEST ENGINEER

(R.A. DESHPANDE)  
JOINT DIRECTOR

AUTHORISED SIGNATORY



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**SUMMARY OF TEST**

1. Test conducted : Verification of Temperature Rise Limits.
2. Rating for which tested : 1200A, 50Hz, 3-phase
3. DOCUMENTS CONSTITUTING THIS REPORT :
  - 3.1 Supplementary test report : NIL
  - 3.2 Oscillogram No(s) : NIL
  - 3.3 Drawing of the equipment tested : VCS/CPRI/03, VCS/CPRI/04
  - 3.4 Test circuit drawing No(s). : NIL
  - 3.5 Photograph No(s). : NIL

  
(R. S. Pandey)  
TEST ENGINEER



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**DESCRIPTION OF THE SAMPLE TESTED**  
(As assigned by the manufacturer)

Sample	:	LT Panel
Rated voltage (Volts)	:	415
Rated current (Amps)	:	1200
Frequency (Hz)	:	50
Insulation level (Volts)	:	660
No. of phases	:	3
No. of poles	:	4
Dimensions of the sample (mm)	:	2350x1250x1000
Rated short time current (kArms/kAp)	:	-

  
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SCHEDULE OF TESTS

Test Conducted : Verification of temperature rise limits

Condition of the Sample : New

Date of Test : 11/12/06

Starting Time(Hrs.) : 12.15

Shut down time(Hrs.) : 17.15

Test current (A) : 1200

Frequency (Hz) : 50

Phase : 3

Avg ambient Temperature at shut down : 25.7

Arrangement of thermocouple locations : As per Customer drawing Number VCS/CPRI/03

Thermocouple		Maximum Temperature (degC)	
Locations	Numbers	Recorded	Rise
As per drawing	1	56.8	31.1
As per drawing	2	62.7	37.0
As per drawing	3	64.1	38.4
As per drawing	4	50.6	24.9
As per drawing	5	53.5	27.8
As per drawing	6	52.2	26.5
As per drawing	7	47.0	21.3
As per drawing	8	49.4	23.7

  
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SCHEDULE OF TESTS

As per drawing	9	46.7	21.0
As per drawing	10	45.6	19.9
As per drawing	11	47.5	21.8
As per drawing	12	44.2	18.5
As per drawing	13	48.5	22.8
As per drawing	14	50.7	25.0
As per drawing	15	49.0	23.3
As per drawing	16	27.5	1.8

Observation

- : 1) The temperature rise obtained was within the limits as specified in the standard.  
2) Sample withstood high voltage power frequency test at 2.5kVrms for one minute as per standard.

**CONCLUSION** : The test results indicate that the sample tested complies with the requirements of the clause 8.2.1 of the standard IS 8623 (Part-1), 1993

  
(R. S. Pandey)  
TEST ENGINEER