



CENTRAL POWER RESEARCH INSTITUTE

TEST REPORT

CPRI

Test Report Number	: No.43/1/2012-HV/0278/NIEP	Dated: 11-07-2012
Name & Address of the customer	: M/s. NIE Power & Engineering (P) Ltd. No.B-40, KSSIDC, Industrial Estate, Kumbalgodu, Bangalore – 560 074. Ref No.: NIEPE/01	Dated: 06-07-2012
Name & Address of the Manufacturer	: M/s. NIE Power & Engineering (P) Ltd. No.B-40, KSSIDC, Industrial Estate, Kumbalgodu, Bangalore – 560 074.	
Particulars of samples tested		
Condition of the sample on receipt	: New.	
Type	: VD4, Indoor	
Designation	: 11kV, 2000A 40kA IN/OUT type switchgear Panel with earthed metallic shutter.	
Serial Number	: Breaker : 1VYN020111002305 Panel : 468	
Number of samples tested	: One.	
Date(s) of test(s)	: 06-07-2012	
CPRI sample code number	: HVML 2012 S0504	
Particulars of tests conducted	: 1) Lightning Impulse Voltage Withstand Test.	
Test in accordance with standard/ Specification.	: IEC 62271-200/ 2003-11 Ed.1.	
Sampling Plan	: Not Applicable.	
Customer's requirement	: Nil.	
Deviations if any	: Nil.	
Name of the witnessing persons		
Customer's representatives	: Shri. Naveen Kumar – Junior Engineer & Shri. K.Z. Meeran – Design Mechanical.	
Other than client's representatives	: None.	
Test subcontracted with address of the laboratory	: None.	
Documents constituting this report(in words)		
Number of sheets	: Three.	
Number of oscillogram/s	: Forty Four.	
Number of graphs	: Nil.	
Number of photo/s	: Nil.	
Number of test circuit diagrams	: Nil.	
Number of drawings	: Five {Drawing Nos.1) NIE/CPRI/01 Rev. 0. 2) NIE/CPRI/02 Rev. 0 3) NIE/CPRI/03 Rev. 0 4) NIE/CPRI/04 Rev. 0 5) NIE/CPRI/05 Rev. 0.	


(U.R. SHESHAGIRI RAO)
Test Engineer




(Dr. R.S. SHIVAKUMARA ARADHYA)
Additional Director



CPRI

CENTRAL POWER RESEARCH INSTITUTE

TEST REPORT

Test Report No.43/1/2012-HV/0278/NIEP

Date: 11-07-2012

Test Arrangement for the Test

Test Arrangement	Breaker condition	Source connected to	Earth connected to
1	Closed	Rr	Bb, Yy & F
2	Closed	Yy	Rr, Bb & F
3	Closed	Bb	Rr, Yy & F
4	Open	B	R, r, Y, y, b & F
5	Open	Y	R, r, y, B, b & F
6	Open	R	r, Y, y, B, b & F
7	Open	r	R, Y, y, B, b & F
8	Open	y	R, r, Y, B, b & F
9	Open	b	R, r, Y, y, B & F
10	Closed and Drawn out	RYB	ryb & F
11	Closed and Drawn out	ryb	RYB & F


Note: F- Frame

1) Lightning Impulse Voltage Withstand Test

Test Arrangement	Test Voltage kV(Peak) *		Oscillogram No.			
	Positive	Negative	Positive		Negative	
			1 st Shot	15 th Shot	1 st Shot	15 th Shot
1	75	75	2	4	5	6
2	75	75	10	11	8	9
3	75	75	12	13	14	16
4	85	85	20	21	17	19
5	85	85	22	24	25	27
6	85	85	30	31	28	29
7	85	85	33	34	35	36
8	85	85	39	40	37	38
9	85	85	41	42	44	45
10	75	75	48	49	46	47
11	75	75	50	51	52	53

* These voltages are applied under ambient condition which is given below.

Temperature in Degree Celsius			Atmospheric Pressure in mm of Hg.
	Dry Bulb	Wet Bulb	
*	25	20	681


 (U.R. SHESHAGIRI RAO)
 Test Engineer



CPRI

CENTRAL POWER RESEARCH INSTITUTE

TEST REPORT

Test Report No.43/1/2012-HV/0278/NIEP

Date: 11-07-2012

NOTE:

- a) The Test results relate only to the item(s) tested.
- b) Publication or reproduction of the test report /Certificate in any form other than by complete set of the whole test report /Certificate and in the language written is not permitted without the written consent of CPRI.
- c) Any Corrections/erasure invalidates the test Report/Certificate
- d) NABL has Accredited this laboratory as per ISO 17025-2005 standard for the tests carried out.
- e) Any anomaly/discrepancy in the test report /Certificate should be brought to the notice of CPRI within 45 days from the date of issue.
- f) The verification of the sample drawings by CPRI is limited to dimensional checks only wherever possible.

(U.R. SHESHAGIRI RAO)
Test Engineer