

CPRI

TEST REPORT



Central Power Research Institute

(A Govt. of India Society)

**P.B.No. 8066, Sadashivanagar Post Office,
Sir C.V. Raman Road,
Bangalore - 560 080 (INDIA)**



CPRI

**ELECTRICAL APPLIANCES TECHNOLOGY DIVISION
CENTRAL POWER RESEARCH INSTITUTE**

P.B.NO.8066, SADASHIVANAGAR P.O.
SIR. C.V.RAMAN ROAD, BANGALORE - 560 080, INDIA.
Telefax : + 91 - 080 - 23604572 Fax : +91 (0) 80 - 23601213



NABL Accredited
Laboratory
Certificate No. T-0010

Sheet 1 of 3

TEST REPORT

Test Report Number:453EATDSC09S1826

Dated: 16.11.2009

Name & Address of the Customer : M/s. KRISHNAA ENERGEY PRIVATE LTD.,
184/2, SIDCO Industrial Estate,
Thirumudivakkam, Chennai – 600 044

Name & Address of the Manufacturer : M/s. KRISHNAA ENERGEY PRIVATE LTD.,
184/2, SIDCO Industrial Estate,
Thirumudivakkam, Chennai – 600 044

Particulars of sample tested

Condition of the sample on Receipt : New (Load break switch & Bus bars mounted inside the panel)
Type : KEPL (Outdoor)
Designation : Load Break Switch Panel (11kV, 1250Amps)
Serial Number : -Nil-
Number of samples tested : One only
Date (s) of Test (s) : 12.11.2009 & 13.11.2009 -
CPRI sample code no(s) : SC09S1826

Particulars of tests conducted


Test in accordance with Standard / specification : IP 55 Tests as per IS 12063:1987 (Reaffirmed 2004)
Sampling Plan : Not applicable
Customer's requirement : 1. IP 55 Tests as per IS 12063:1987 (Reaffirmed 2004)
2. Insulation Resistance test at 1000V DC and
3. Power Frequency High Voltage Test at 28kV AC before IP 5X test & 80% of 28kV AC i.e., 22.4kV AC after IP 5X & IP X5 tests - to be applied for one minute between all bus bars (R, Y, B) terminals shorted together and panel body (earthed); to be conducted before and after IP test.
Deviations if any : -Nil-

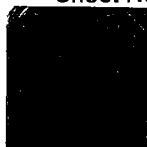
Name of the witnessing persons

Customer's representative : Mr. P. Ramachandran & Mr. M. Venkatesan
Other than customer's representatives : -Nil-
Test subcontracted with address of the laboratory : None

Documents constituting this report (In words)

Number of sheets : Three Only
Number of oscillograms : -Nil-
Number of graphs : -Nil-
Number of photos : -Nil-
Number of test circuit diagrams : -Nil-
Number of drawings : One only. Drg. No. KELBS 03-001, Rev. 0, Sheet No. 1 of 1.


(V. SURESH)
TEST ENGINEER




(A. R. RAVIKUMAR)
ENGINEERING OFFICER Gr. 5

AUTHORISED SIGNATORIES



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Sheet 2 of 3

Test Report Number: 453EATDSC09S1826

Dated:16.11.2009

TEST RESULTS:

SL. NO.	PARTICULARS		OBSERVATIONS/VALUES OBTAINED		
	TESTS CONDUCTED	REFERENCE CLAUSE			
1.0	IP 5X Category 2 test as per IS 12063:1987 (Reaffirmed 2004)	Protection against ingress of solid foreign objects - Dust Test - Clause 7.5 (a).	1. Thick layer of dust found on the bottom plate inside the Load Break Switch Panel. 2. Thin layer of dust found on the bus bars, LBS lever & insulator surfaces inside the Load Break Switch Panel.		
2.0	IP X5 test as per IS 12063:1987 (Reaffirmed 2004)	Protection against ingress of water - Clause 8.5.	1. Considerable amount of water found accumulated on the bottom plate inside the Load Break Switch Panel. 2. Drops of water found on the inner surfaces of side cover LHS & rear bottom door inside the Load Break Switch Panel.		
3.0	Electrical Tests Conducted		Before IP 5X test	After IP 5X test / Before IP X5 test	After IP X5 test
3.1	Insulation Resistance Test at 1000V DC applied for one minute between all bus bars terminals (R, Y, B) shorted together and panel body (earthed).		7.97 GΩ	29.6 GΩ	24.1 GΩ
3.2	Power Frequency High Voltage Test at 28 kV AC before IP 5X test & 80% of 28kV AC i.e., 22.4kVAC after IP 5X & IP X5 tests, applied for one minute between all bus bar terminals (R, Y, B) shorted together and panel body (earthed).		Withstood 28kV AC	Withstood 22.4kV AC	Withstood 22.4kV AC

Compliance Note: The "Load Break Switch Panel" sample submitted for IP 55 Tests complies with the requirement of the tests as per IS 12063:1987 (Reaffirmed 2004) standard.

Test Engineer



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Sheet 3 of 3

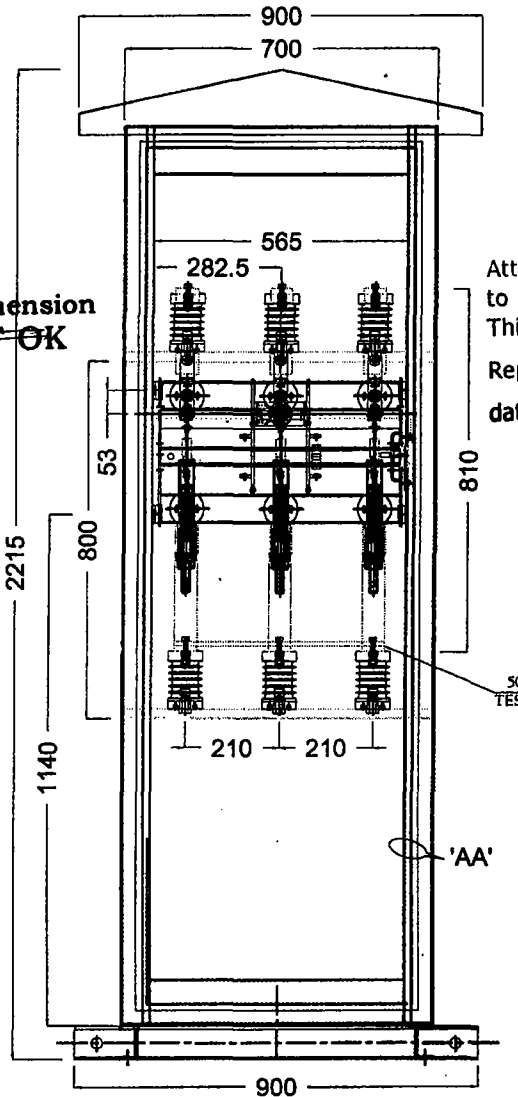
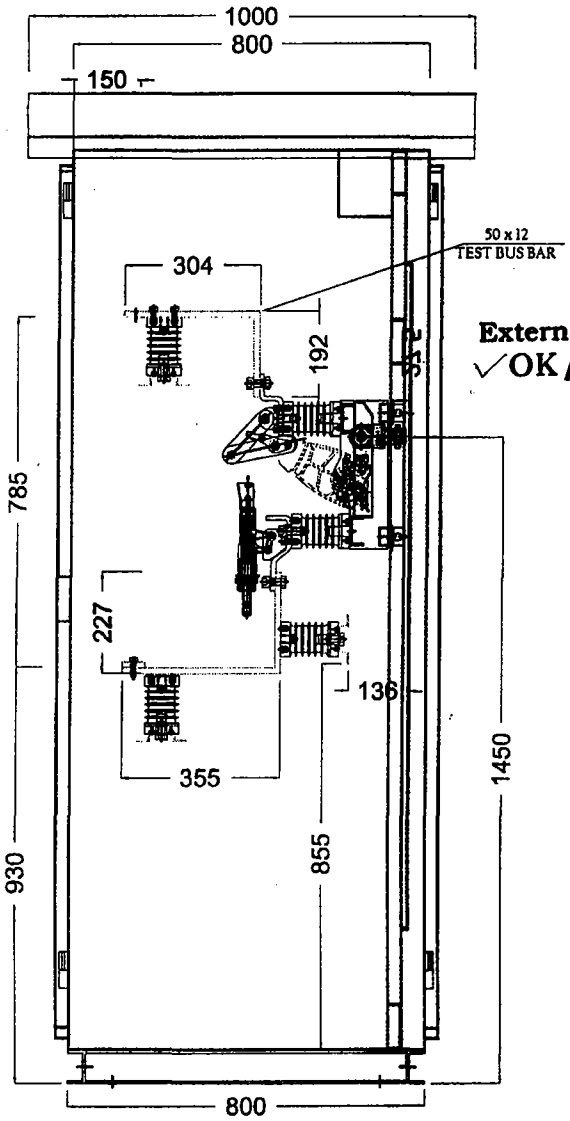
Test Report Number: 453EATDSC09S1826

Dated: 16.11.2009

NOTE

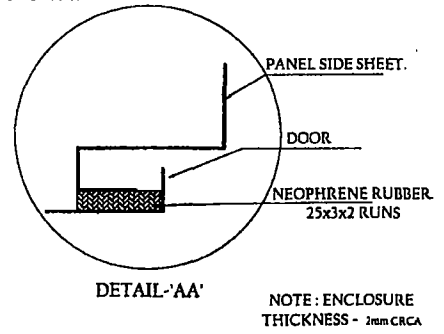
- a) The test results relate only to the item(s) tested.
- b) Publication or reproduction of this report in any form other than by complete set of the whole report and in the language written is not permitted without the written consent of CPRI.
- c) Any correction / erasure invalidate this test report / certificate.
- d) Any anomaly / discrepancy in the test report / certificate should be brought to our notice within 45 days from the date of issue.
- e) The verification of the sample drawings by CPRI is limited to dimensional checks only wherever possible.


Test Engineer





External Dimension
✓ OK / NOT OK

Attestation of this drawing is limited to the checking of Dimensions only. This Drawing pertains to the Test Report No. 453.E.P.T.D.S.C.09.51826 dated.....16.11.2009.....



Engineering Officer
CRTL / CPRI
Bangalore

MATERIAL : MS SHEET (2MM THICK)		QTY: 1NO.		ALL DIMENSIONS ARE IN mm		DESCRIPTION: LOAD BREAK SWITCH PANEL		RATING : 11KV,1250A		SHEET.No.	
FINISH: NATURAL		TOL : ± 5MM		TYPE : KEPL (OUTDOOR)		MFG BY:		SCALE : N.T.S.		01 OF 01	
						KRISHNAA ENERGY PVT LTD., DP: 69, SIDCO Industrial Estate, Thirumudivakkam, Chennai-44 www.krishnaenergy.net		 		DRAWING NO:	
0		BJM		P.R PG		S.N		13/11/09		KELBS 03-001	
REV.	DATE	REMARKS	DRAWN	CHD.	APPD.	DATE.	FILE NAME: F:\L B S\CPRI\MANF	CUSTOMER :		REF.No:	
1											

THE POLICY OF KRISHNAA ENERGY IS CONTINUAL IMPROVEMENT & DEVELOPMENT.