

CPRI

TEST REPORT



Central Power Research Institute

(A Govt. of India Society,
P.B. No. 8066, Sadashivanagar, S.P.O.
Prof. Sir. C.V. Raman Road,
Bangalore - 560 080



CPRI

**HIGH VOLTAGE DIVISION
CENTRAL POWER RESEARCH INSTITUTE**

P.B. NO. 8066, SADHASHIVNAGAR SUB P.O.
Prof. SIR. C.V. RAMAN ROAD, BANGALORE - 560 080, INDIA.
Phone : +91 (0)80-23601917 Fax : +91 (0)80-23601917



**NABL Accredited
Laboratory**
Certificate No. T-0010
Sheet 1 of 3

MEMBER STL

TEST REPORT

Test Report Number : No.43/1/2010-HV/7915/KEPL
Name & Address of the Customer : M/s. Krishna Energy Pvt Ltd.,
DP:69, Sidco Industrial Estate,
Thirumudivakkam, Chennai-600 044.
Ref No.: Nil
Dated: 26-04-2010.
Dated: 19-04-2010.

Name & Address of the Manufacturer : M/s. Krishna Energy Pvt Ltd.,
DP:69, Sidco Industrial Estate,
Thirumudivakkam, Chennai-600 044.

Particulars of Sample tested.
Condition of sample on Receipt. : New.
Type : Outdoor.
Designation : 33kV, 800A, 3Φ Double Break Isolator.

Serial No. : Nil.
Number of samples tested : One Set.
Date(s) of Test(s) : 22-04-2010 & 23-04-2010.
CPRI Sample Code No. : SC 10 S0792.

Particulars of tests conducted : 1. Lightning Impulse Voltage Withstand Test.
2. Power Frequency Voltage Withstand Test (Dry).
3. Power Frequency Voltage Withstand Test (Wet).

Test in accordance with standard/Specification. : IS 9921((part II)/1982,(part-IV)/1985) Both RA 2007

Sampling plan : Not Applicable.
Customer's requirement : Power Frequency Voltage Withstand test using single source only.

Deviations if any : Nil.

Name of the witnessing persons
Customer's representatives : Mr. D.Ramachandran (R.D.Manager).
Other than Customer's representatives : None.
Test/subcontracted with : None.
Address of the laboratory. : None.

Documents constituting this report (In words).
Number of Sheets : Three.
Number of oscillogram/s : Nil.
Number of graphs : Nil.
Number of photo/s : Nil.
Number of Test Circuit Diagrams : Nil.
Number of Drawings : Two. {Drawing No. 1) KEISO-33-001
2) KEISO-33-002}.

(K.R.DASHARATHI)
Test Engineer



(P. V. VASUDEVAN NAMBU DIRI)
Additional Director

AUTHORISED SIGNATORIES



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Test Report No.43/1/2010-HV/7915/KEPL

Dated: 26-04-2010.

Test Arrangement for the Lightning Impulse Voltage Withstand Test & Power frequency Voltage Withstand Test (Dry) & (Wet):-

Table with 5 columns: Test Arrangement, Isolator Position, H.V. connected to, Earth connected to, Isolated Terminals. Rows 1-6.

1. Lightning Impulse Voltage Withstand Test

Table with 5 columns: Test Arrangement, No of Shots, Test Voltage KV (Peak) * (Positive/Negative Polarity), Remarks. Rows 1-6.

2. Power Frequency Voltage Withstand Test (Dry)

Table with 3 columns: Test Arrangement, Test Voltage in kV (rms)\$, Remarks. Rows 1, 2, 5, 6.

3. Power Frequency Voltage Withstand Test (Wet)

Table with 3 columns: Test Arrangement, Test Voltage in kV (rms) \$, Remarks. Rows 1, 2, 5, 6.

*, \$ These voltages were applied under ambient conditions which are given below.

Table with 3 columns: Temperature in Degree Celsius (Dry Bulb, Wet Bulb), Atmospheric Pressure in mm of Hg. Row 1.

(K.R.DASHARATHI)
Test Engineer



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Test Report No.43/1/2010-HV/7915/KEPL

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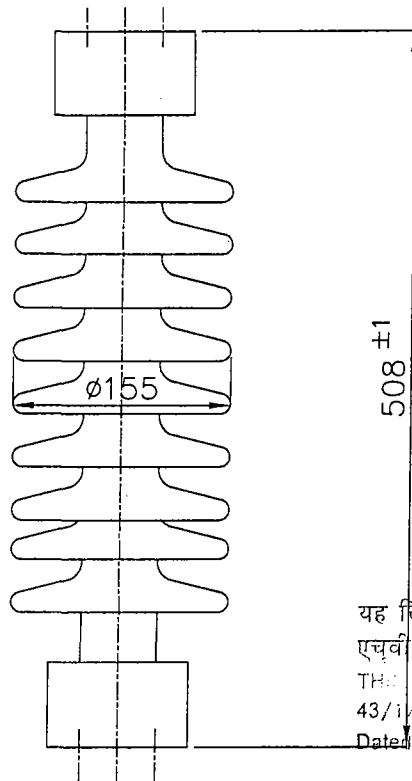
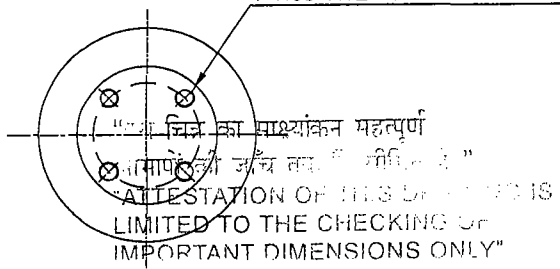
Dated: 26-04-2010.

NOTE:

- a) The test results relate only to the items 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 Corrections/erasures invalidate this test report/certificate.
- d) Any anomaly/discrepancy in this 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.

(K.R.DASHARATHI)
Test Engineer

4 Nos M12 TAP ON 76 P.C.D



GUARANTEED TECHNICAL PARTICULARS

GENERAL:

1. STANDARD APPLICABLE : IS: 2544 - 1973/ IEC :60168-2001
2. TYPE OF INSULATOR .SOLIDCORE POST TYPE
3. NO. OF UNITS PER STACK ONE
4. MIN.NOM.CREEPAGE DISTANCE MM 900
5. SHED PROFILES CONFORMS TO IEC : 815-1986
6. FERROUS PARTS HOT DIP.GALVANISED AS PER IS: 2633-1986/ IEC:60168-2001.
7. COLOUR OF GLAZE : BROWN

MECHANICAL VALUES :

1. ULTIMATE CANTILEVER STRENGTH KN 6
2. ULTIMATE TORSIONAL STRENGTH KN.M 2.5
3. ULTIMATE TENSILE STRENGTH KN 80
4. ULTIMATE COMPRESSION STRENGTH KN 100

ELECTRICAL VALUES :

1. NOMINAL SYSTEM VOLTAGE KV(rms) 33
2. HIGHEST SYSTEM VOLTAGE KV(rms) 36
3. DRY POWER FREQUENCY WITHSTAND VOLTAGE KV(rms) 85
4. WET POWER FREQUENCY WITHSTAND VOLTAGE KV(rms) 75
5. LIGHTNING IMPULSE WITHSTAND VOLTAGE (DRY)
+VE/-VE (1.2 / 50 μ SEC. WAVE) KV(peak) 200
6. DRY POWER FREQUENCY FLASHOVER VOLTAGE KV(rms) 100
7. WET POWER FREQUENCY FLASHOVER VOLTAGE KV(rms) 85
8. IMPULSE FLASHOVER VOLTAGE
(1.2 / 50 μ SEC. +VE/-VE WAVE) KV(rms) 235
9. VISIBLE (CORONA EXTINCTION) VOLTAGE KV(rms) >27

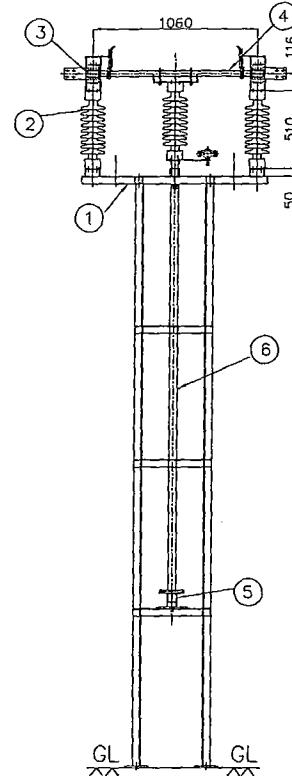
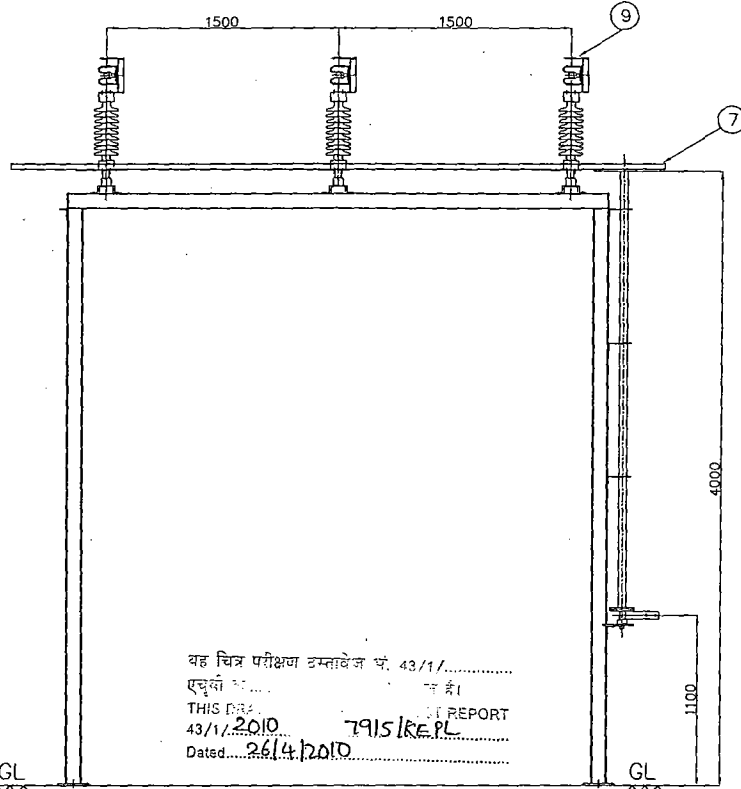
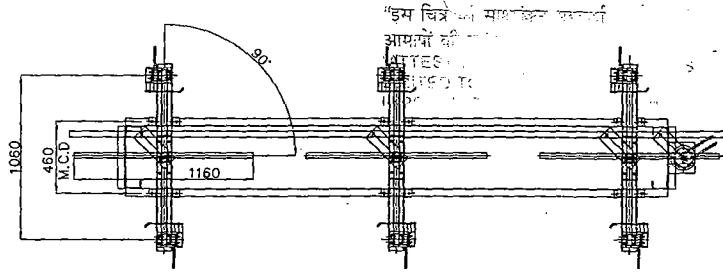
यह चित्र परीक्षण दस्तावेज सं. 43/1/.....
 एचवी.स.
 THE FOLLOWING PERFORMANCE REPORT
 43/1/2010-HV/7915/KEPL
 Date: 26/4/2010

[Signature]
 इंजीनियरिंग ऑफिस
 ENGINEERING OFFICER
 सी पी आर डाय/CPRI
 बेंगलूर/BANGALORE-560 0

3Nos/POLE		ALL DIMENSION ARE IN mm				DESCRIPTION: 33KV SOLIDCORE POST INSULATOR		SCALE : NTS	
0		JMR	PR	SN	12.2.10	MFG BY: KRISHNAA ENERGY PRIVATE LIMITED.,			
REV.	DATE	DESCRIPTION	DRAWN	CHD.	APPD.	SIGN	DATE.	DP: 69, SIDCO Industrial Estate, Thirumudivakkam, Chennai-44	
CUSTOMER : M/s.						www.krishnaenergy.net		SHT.No.	
P.O.REF :		CONSULTANT :				JOB REF:		DRAWING No.	
								KEISO-33-002	

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33kv

NOTE:

1. ALL FERROUS PARTS ARE HOT DIP GALVANISED
2. CONTACT ENDS ARE SILVER PLATED
3. TOLERANCE OF DIMENSION $\pm 5\%$
4. SHORT TIME CURRENT RATING 25 KA/3SEC
5. APPLICABLE STANDARD IS 9921 PART-1 TO 5
6. ROTATING STOOL BASE HAVING 1 No. THRUST BEARING & WITH GREASE NIPPLE

ENGINEERING OFFICER
 श्री जी आर आई/CPRI
 बंगलूरु/BANGALORE-560 080

SL.NO	DESCRIPTION
9	FIXED CONTACT ARCING HORN $\phi 10$ M.S ROD
8	MOVING CONTACT ARCING HORN $\phi 10$ M.S ROD
7	TANDEM PIPE FOR MAIN NB32 G.I. PIPE
6	DOWN OPTG. PIPE FOR MAIN NB40 G.I.PIPE
5	MANUAL OPTG. MECH.
4	ASSY.OF MOVING BLADE H.D.H.C OD38xID31.8
3	ASSY.OF MAIN FIXED CONTACT H.D.H.C 25x5mm THK 4Nos/PHASE
2	11KV SOLID CORE POST INSULATOR
1	ASSY.OF BASE

ALL DIMENSION ARE IN mm

DESCRIPTION: G.A OF 33KV/800A DOUBLE BREAK ISOLATOR

SCALE : NTS

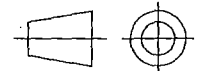
MFG BY:



KRISHNAA ENERGY PRIVATE LIMITED.,

DP: 69, SIDCO Industrial Estate, Thirumudivakkam, Chennai-44

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REV.	DATE	DESCRIPTION	DRAWN	CHD.	APPD.	SIGN	DATE.
0			JMR	PR	SN		12.2.10

CUSTOMER : M/s.

P.O.REF :

CONSULTANT :

JOB REF:

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