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)

SHORT CIRCUIT LABORATORY
CENTRAL POWER RESEARCH INSTITUTE
(Member of STL)
P.B.NO.8066, SADASHIVANAGAR POST OFFICE
SIR C.V.RAMAN ROAD, BANGALORE - 560 080 (INDIA)
Phone: +91 (0) 80 - 23602662 Fax : +91 (0) 80 - 23601213

CPRI

TEST REPORT

Test Report Number	SC09617P **dated:** 4th November, 2009
Name & Address of the Customer	M/s. Krishnaa Energy Private Limited, DP:69, SIDCO Industrial Estate, Thirumudivakkam, Chennai - 600 044
Name & Address of the Manufacturer	M/s. Krishnaa Energy Private Limited, DP:69, SIDCO Industrial Estate, Thirumudivakkam, Chennai - 600 044
Particulars of sample tested	11 kV Current Transformer
Condition of the sample on Receipt	New
Type	Indoor, resin cast
Designation	---
Serial Number	016 / 09
Number of samples tested	One
Date (s) of test (s)	23rd September, 2009
CPRI sample code no(s).	SC09S1824
Particulars of tests conducted	Temperature-Rise
Test in accordance with Standard / specification	Sub-clause 9.7 of IS 2705 (Part 1): 1992 (Reaffirmed 2002)
Sampling plan	Not applicable
Customer's requirement	None
Deviations if any	Nil
Name of the witnessing persons	
Customer's representative	Mr. K. S. Suresh Kumar, Manager - Production
Other than customer's representative	None
Test subcontracted with address of the laboratory	None
Documents constituting this report (In words)	
Number of sheets	Four
Number of oscillograms	Nil
Number of graphs	Nil
Number of photos	Nil
Number of test circuit diagrams	Nil
Number of drawings	One

(Nagananda)
Test Engineer

[redacted]

(B. R. Ravishankar)
Joint Director

AUTHORISED SIGNATORIES

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Description of sample tested (rating as assigned by the manufacturer)

Tested sample	Current Transformer	
Type	Indoor, Resin cast	
Designation	WPL CT	
Serial number	016/09	
Nominal system voltage	11 kV	
Highest system voltage	12 kV	
Rated insulation level	28 kV rms / 75 kV peak	
Frequency	50 Hz	
No. of cores	I	II
Accuracy class	0.5	5P
Rated output-VA	15	15
Rated Transformation Ratio	150/5 A	150/5 A
Accuracy limit factor	---	10
Rated short-time withstand current & peak withstand current	25 kA rms for 3.0 seconds & 62.5 kA peak	

Winding details

Primary	2 Turns of Electrolite Copper strips of size 20 X 1 sq. mm Twelve numbers in parallel (240 sq. mm) covered with Polyester film and Polyester tape
Secondary	
Core 1	60 Turns of 18 SWG Super enamelled Copper conductor - Three numbers in parallel
Core 2	60 Turns of 14 SWG Super enamelled Copper conductor.

Documents attached to this report

Drawing number (s)	KEPL-11RCT-001 SHT. No. 1 OF 1 REV.0

Test Engineer

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T-0010

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Schedule of test

TEMPERATURE-RISE TEST

Test conditions

Ambient temperature : 25.5°C
Test current : 180 A

External Connections

Primary winding : 50 sq. mm. PVC insulated copper conductor of 1.0 metre length
Secondary winding : A burden of 0.6 Ω with unity power factor

Test results

a. Temperature rise of secondary windings (by resistance method):

Parts	Temperature-rise (K)	Limit (K)
Secondary (1S1-1S2)	6.32	80
Secondary (2S1-2S2)	7.30	80

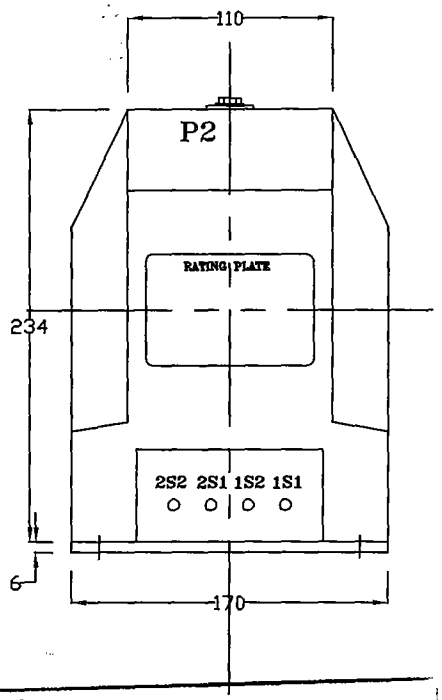
b. Temperature rise in other parts:

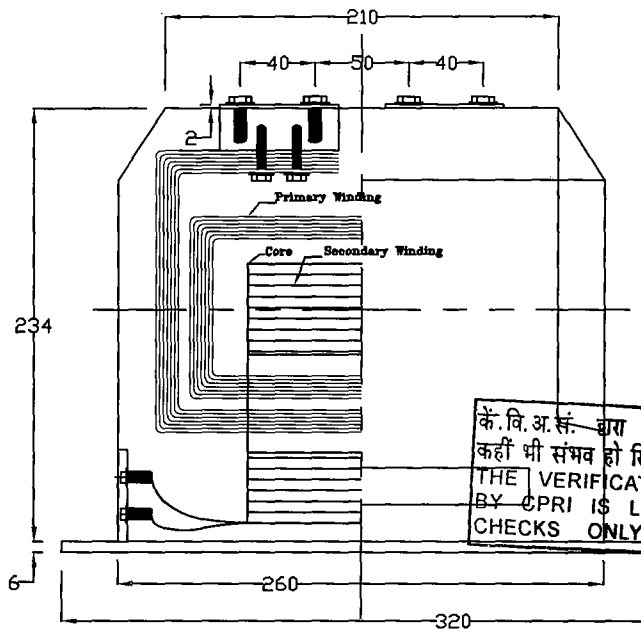
Ambient temperature: 26.7°C

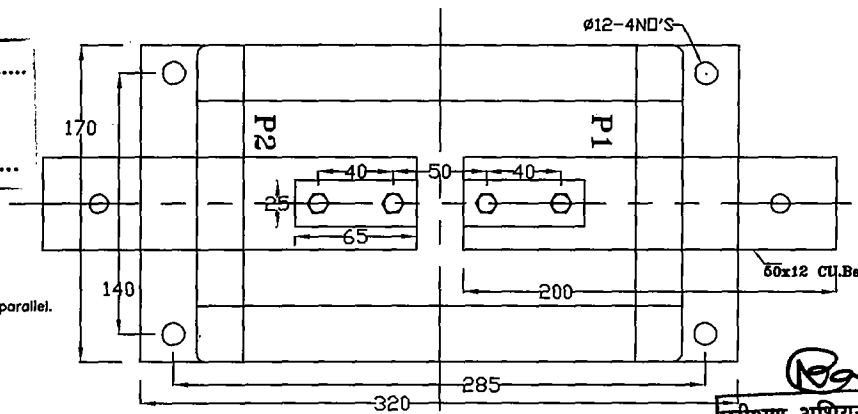
Parts	Temperature-rise (K)	Limit (K)
Primary terminal (P1)	8.2	80
Primary terminal (P2)	9.2	80
Secondary terminal (1S1)	3.3	80
Secondary terminal (1S2)	2.4	80
Secondary terminal (2S1)	3.7	80
Secondary terminal (2S2)	3.3	80
Body	3.3	--

Remarks: The sample tested complies with the sub-clause of the standard referred to.

Test Engineer







TECHNICAL DETAILS

Epoxy Resin Cast, Post Type, Current Transformer,
Indoor Panel Mounting, Class B

Primary Current	:	150 A
Secondary Current	:	5–5A
Insulation level	:	12/28/75 KVp
Frequency	:	50 Hz
1 Thermal (Short time Rating):		25 kA / 3 sec
1 Dynamic	:	2.5 Times
REF – Standard	:	IS2705 Part I & II

RATING PLATE

CURRENT TRANSFORMER

RATIO	: 150 / 5–5A	BURDEN	:
SYSTEM VOLTAGE	: 11 KV	CORE I	: 15 VA/CL 0.5
ILV	: 12/28/75	CORE II	: 15 VA/CL 5p10
STR	: 25 KA/ 3 SEC	FREQ,	: 50 Hz
SL.NO.	: 016/09	IS2705/1992/IEC 60044–1	

MFD.BY : KRISHNAA ENERGY PVT LTD., CHENNAI – 44

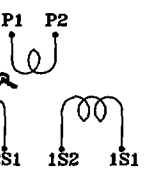
रिपोर्ट क्रमांक.....
से संबंधित दस्तावेज
Document Pertaining to
Report No:..SC09617P.....

WINDING DETAIL'S:

Primary Winding :–
2 – Turns 20x1 (240Sq.mm) Electrolite Copper strip 12 in parallel. Covered with Polyester Film & Polyester Tape

Secondary Windings:–
Metering :– 60 Turns, 18 swg 3 in Parallel Super Enomeled Copper Conductor.
Protection :– 60 Turns, 14 swg single Parallel Super Enameled Copper Conductor.

CONNECTION DIAGRAM



Nagarajan
परीक्षण अभियन्ता / Test Engineer
ल.प. प्रयोगशाला / S. C. LAB
सी. पी. आर. आई. / CPRI
बेंगलूर / Bangalore

TYPE: INDOOR RESIN CAST		QTY: –		ALL DIMENSION ARE IN mm			TITLE: 11 KV WOUND PRIMARY CURRENT TRANSFORMER
0			BJM	K.S.S.K	K.S.S.K		21/9/09
REV.	DATE	DESCRIPTION	DRAWN	CHD.	APPD.	SIGN	DATE.
CUSTOMER : –							

MFG BY: Krishna

KRISHNAA ENERGY PRIVATE LIMITED.,
DP:69, SIDCO Industrial Estate, Thirumudivakkam, Chennai–44
www.krishnaenergy.net

Alliance Partner of Schneider Electric for MV Components Integration

SCALE : NTS

SHT.No.	DRAWING No.
1 OF 1	KEPL–11RCT–001

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T-0010

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NOTE

a) This is not a certificate of rating. A certificate of rating is not issued as only limited tests as requested by the customer were carried out.
b) The test results relate only to the item(s) tested.
c) 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 approval of CPRI.
d) Corrections / erasings invalidate the test report.
e) Any anomaly / discrepancy in the test report should be brought to our notice within 45 days from the date of issue.

Additional Information:
CPRI issues following types of reports/certificates:

Test Report:
The test report contains the record of the values of test parameters as obtained during testing, the physical condition of the sample during / after the test(s) and copy of oscillogram(s). Test report is issued when partial tests are performed as against the complete test requirement for proving specific ratings.

Sealed Certificate:
The sealed certificate is issued, on request and payment of the prescribed charges thereof only when the sample of particular type and rating has satisfactorily passed all the specified tests in compliance with the condition stipulated in a published National / International standard.

CPRI issues the following type test certificates based generally on STL Guidelines:

I. Type test certificate of Short Circuit Performance.
II. Type test certificate of Switching Performance.
III. Type test certificate of Temperature Rise Performance.
IV. Type test certificate of Dielectric Performance.
V. Type test certificate of complete type test.

Test Engineer