

सी पी आर आई  
भारत

**CPRI  
INDIA**

परीक्षण रिपोर्ट  
TEST REPORT



**CENTRAL POWER RESEARCH INSTITUTE  
(MEMBER OF STL)**



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**TEST REPORT**

<b>Test Report Number</b>	S2150736	<b>Date :</b>
<b>Name &amp; address of the Customer</b>	M/s Power Engineering & Services Unit No.358, Opp. Bharat Serums Ltd., Behind Durga Hotel, CP Talao, Road No.27 Wagle Indl.Estate, Thane-400 604	<b>03 SEP 2015</b>
<b>Name &amp; address of the Manufacturer</b>	M/s Power Engineering & Services Unit No.358, Opp. Bharat Serums Ltd., Behind Durga Hotel, CP Talao, Road No.27 Wagle Indl.Estate, Thane-400 604	
<b>Particulars of sample tested</b>	415V, 4000A, PCC LT Panel	
<b>Condition of sample on Receipt</b>	New	
<b>Type</b>	Indoor	
<b>Designation</b>	Nil	
<b>Serial number</b>	PES/SCT/01/2015	
<b>Number of samples tested</b>	One	
<b>Date(s) of Test(s)</b>	19 <sup>th</sup> August 2015	
<b>CPRI sample code no.</b>	STDSSST215S0797	
<b>Particulars of tests conducted</b>	Verification of the short circuit withstand strength	
<b>Test in accordance with</b>	As per clause 8.2.3 of IS: 8623 (Part -1) 1993	
<b>Sampling plan</b>	Not applicable	
<b>Customer's requirement</b>	Nil	
<b>Deviations if any</b>	Nil.	
<b>Name of the Witnessing persons</b>		
Customer's representative	Shri Udaybhan Yadav	
Other than Customer's representatives	Nil	
Test subcontracted with	None	
address of the laboratory		
<b>Documents constituting this report (in words)</b>		
Number of sheets	Five	
Number of oscillograms	Two	
Number of graphs	Nil	
Number of photos	One	
Number of Test circuit diagrams	Two	
Number of drawings	Three	

  
(SAUMITRA PATHAK)  
TEST ENGINEER



  
(ANUPAM AWASTHI)  
JOINT DIRECTOR

Sheet 1 of 5

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**TEST REPORT**

Test Report Number S2150736

Date : 03 SEP 2015

**Summary of test**

Test conducted	Verification of the short circuit withstand strength
Rating for which tested	70 kArms for 1.0 second with initial peak of 154 kA
Documents constituting this report	
Oscillogram number	S2150736. S02, S04
Photograph numbers	P-1
Test circuit diagram number	OLTS/TCD-STC-01 & OLTS/TCD-STC-02
Drawing number	PES/TESTING/01 Sheet 1 of 3 PES/TESTING/01 Sheet 2 of 3 PES/TESTING/01 Sheet 3 of 3

  
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**TEST REPORT**

Test Report Number S2150736

Date : 03 SEP 2015

**Ratings assigned by manufacturer**

Test sample	PCC LT Panel
Type	Indoor
Designation	Nil
Serial number	PES/SCT/01/2015
Rated operational voltage	415 V
Rated current	4000 A
Rated insulation voltage	660 V
Rated frequency	50 Hz
Number of phases	Three phase + Neutral
Rated short-time current	70 kArms for 1.0 second with initial peak of 154 kA

  
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**TEST REPORT**

Test Report Number S2150736

Date : 03 SEP 2015

**Verification of the short circuit withstand strength (cl. 8.2.3)**

**Test conditions:**

Condition of the sample : New  
 No. of phases : Three & Neutral  
 Source frequency : 50Hz.  
 Transformer neutral & short circuit point : See test circuit diagram no. OLTS/TCD-STC-01 for three phase test and OLTS/TCD-STC-02 for single phase test  
 Safety parameter : The sample was insulated from earth and connected to neutral of the supply via a fuse of 0.1 mm diameter copper wire 50 mm long in series with a resistor limiting the fault current to 100A

**Test results:**

Oscillogram Number	Peak kA	RMS in kA			Duration (seconds)	Equivalent current in kArms for 1 second
		I <sub>r</sub>	I <sub>y</sub>	I <sub>b</sub>		
Three phase STC test on main circuit busbars of HBB+VBB (Peak in Y-phase) Test circuit diagram: OLTS/TCD-STC-01						
S2150736.S02	157.84	71.17	70.77	70.48	1.0	71.17
Single phase STC test on neutral & nearest phase of main circuit busbar of HBB +VBB Test circuit diagram: OLTS/TCD-STC-02						
S2150736.S04	89.01	43.12			1.0	43.12

**Observations:**

During test : No abnormality.  
 After test : No abnormality. Fine wire fuse Intact. All busbars & supports found intact.  
 Remarks : After short circuit test the sample withstood HV test at 2.5 kVrms for one minute as per standard.

**Conclusion :** The test results indicate that the sample tested complies with the requirement of cl. 8.2.3 of the standard.

  
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Date: 03 SEP 2015

**Note**

- a) The test results relate only to the item(s) tested.
- b) Publication or reproduction of this test report/ certificate 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 invalidates this test report/certificate.
- d) NABL has Accredited this laboratory as per ISO 17025-2005 standard , vide certificate No.T-0011 for the tests carried out..
- e) The verification of the sample drawings by CPRI is limited to dimensional checks only wherever possible.
- f) Any anomaly/discrepancy in the test report/Certificate should be brought to the notice of CPRI within 45 days from the date of issue.
- g) CPRI issues two kinds of documents:

Test Report:

The test report will contain the record of the values of test parameters as obtained during testing, the physical condition of the apparatus during testing, the physical condition of the apparatus during/after the test(s), copy(ies) of Oscillogram(s), record of supplementary test(s) if any conducted but no certification on the performance of the apparatus tested

Type test Certificate:

The test certificate is issued, on request and payment of the prescribed charges only when the apparatus of particular type and rating has satisfactorily passed all the specified tests in compliance with condition stipulated in a published National/International Standards.

- h) All Documents constituting this test report/certificate are stitched together with a continuous silk thread/ribbon, the two ends of which have been brought over the front sheet of this test report/certificate and sealed with a CPRI logo printed paper sticker/embossed.

  
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