

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)

CENTRAL POWER RESEARCH INSTITUTE

TEST REPORT



CPRI

Test Report Number: 415EATDHPL14S0294

Dated: 15.11.2014

Name & Address of the Customer : M/s. Alp Technologies
No. 14 & 15, 14th Cross,
Bhryaveshwara Industrial Estate,
Andrahalli Main Road, Peenya 2nd Stage,
Vishwaneedam Post, Bangalore – 560 091.

Name & Address of the Manufacturer : M/s. Alp Technologies
No. 14 & 15, 14th Cross,
Bhryaveshwara Industrial Estate,
Andrahalli Main Road, Peenya 2nd Stage,
Vishwaneedam Post, Bangalore – 560 091.

Particulars of sample tested

Condition of the sample on Receipt : New
Type : Indoor
Designation : Control Panel
Serial Number : -Nil-
Number of samples tested : One only
Date (s) of Test (s) : 12.11.2014
CPRI sample code no(s) : EATDIP14S0294

Particulars of tests conducted


Test in accordance with Standard / specification : IP 42 Test as per IS/IEC 60947-1:2007 Standard. Clause C 13.2 i.e. IP 42 test as per IS/IEC 60529 Edition 2.2, 2013-08 Standard. Clause 13.2.
Sampling Plan : Not applicable.
Customer's requirement : 1. IP 42 Test as per IS/IEC 60947-1:2007 Standard. Clause C 13.2 i.e. IP 42 test as per IS/IEC 60529 Edition 2.2, 2013-08 Standard. Clause 13.2
2. Only visual observation of entry of water (X2).
Deviations if any : -Nil-

Name of the witnessing persons

Customer's representative : Mr. Venkat Reddy. Y
Other than customer's representatives : None
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. Drawing no: ALP14-9001_IP, REV : 00, Page 01 of 01.


(GUJJALA B. BALARAM)
Test Engineer




(M. SIDDHARTHA BHATT)
Additional Director

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TEST RESULTS:

SL. NO.	PARTICULARS		OBSERVATIONS/VALUES OBTAINED
	TESTS CONDUCTED	REFERENCE CLAUSE	
1.0	IP 4X Test as per IS/IEC 60947-1: 2007 Standard.	Clause C 13.2 i.e. IP 4X test as per IS/IEC 60529 Edition 2.2, 2013-08 Standard. Clause 13.2 Protection against access to hazardous parts – Insertion of Test Probe of 1.0 mm dia.	Rigid steel rod of $\Phi 1.0^{+0.05}$ mm, with edges free from burrs applied with a force of $1N \pm 10\%$ did not penetrate nor pass through any of the openings provided on the Control Panel Enclosure. <u>“Protection provided is satisfactory”</u>
2.0	IP X2 test as per IS/IEC 60947-1:2007 Standard.	Clause C 14.2 i.e. Clause 14.2.2 of IS/IEC 60529 Edition 2.2, 2013-08 Standard Protection against harmful ingress of water – Dripping rain 3 mm per min, 2.5min for each position of 15° tilt for total duration of 10 minutes. Total duration 10 minutes.	1. Few droplets of water found observed on the gland plate of the Incoming chamber inside the Control Panel Enclosure. 2. Few droplets of water found observed in the Control chamber and in the Busbar chamber inside the Control Panel Enclosure.

(Signature)
Test Engineer

CENTRAL POWER RESEARCH INSTITUTE



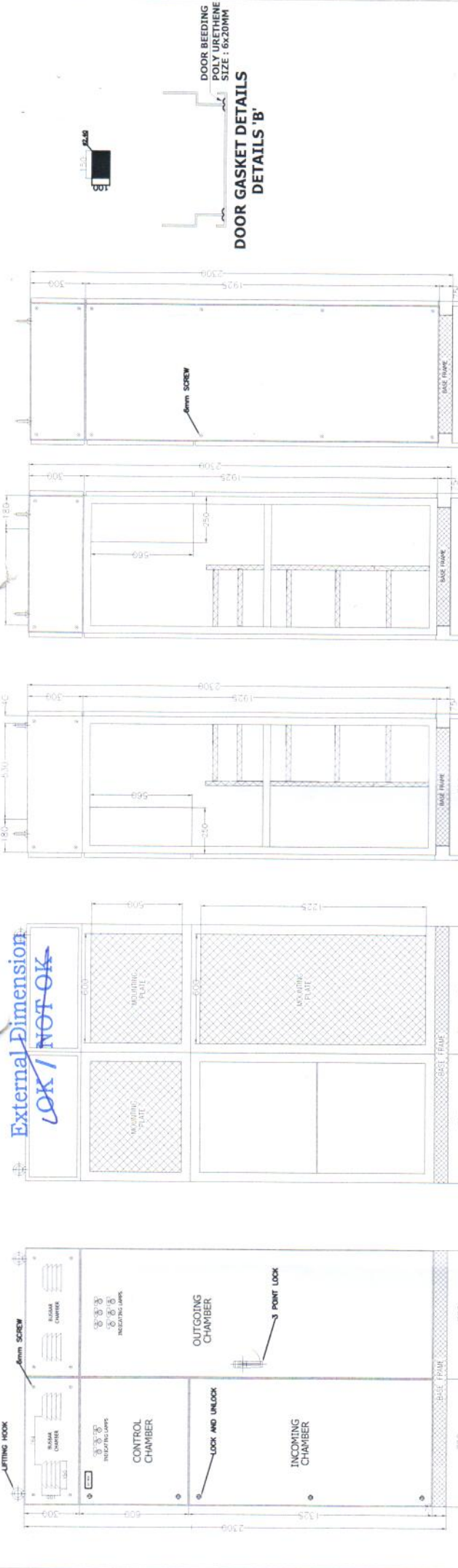
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NOTE

- 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) NABL has accredited this laboratory as per ISO/IEC 17025: 2005 standard vide certificate No. T - 0010. for the tests conducted.
- e) Any anomaly / discrepancy in the test report / certificate should be brought to our notice 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.


Test Engineer



Attestation of this drawing is limited to the drawing of the drawing only. This Drawing pertains to the test Report No. 4105/EATD/HP/14/SO294 dated 15/11/2014

TEST CONDUCTED

IP-42 TEST FOR CONTROL PANEL AS PER IS/IEC 60947-1
(INGRESS PROTECTION TEST AS PER IEC)

GENERAL NOTES

1. NAME : CONTROL PANEL
2. CONSTRUCTION : CRCA SHEET STEEL FOLDED/WELDED.
3. SHEET STEEL THICKNESS:
 - a). BASE FRAME : ISMC 75 WITH BLACK PAINT.
 - b). LOAD BEARING MEMBERS - 2.0mm.
 - c). DOORS AND OTHERS - 2mm.
 - d). PARTITIONS : 1.6mm.
 - e). GLAND PLATE : 3mm.
4. IP
 - a). PROTECTION : IP42
5. PAINT / FINISH: POWDER COATED
 - a). EXTERIOR : RAL7032/TEXTURE FINISH
 - b). INTERIOR : RAL7032/TEXTURE FINISH
 - c). BASE FRAME : BLACK/PAINT
6. VOLTAGE AND FREQUENCY:
 - a). RATED VOLTAGE : 690V +/-10%,3Ph,3Wire
 - b). RATED FREQUENCY : 50Hz +/- 3%,
7. GASKET : 20X6MM NEOPRENE GASKET .
8. DOOR BEEDING : POLY URETHENE 20X6mm
9. TYPE : INDOOR
10. GLAND PLATE GASKET DETAILS : 25x3mm NEOPRENE GASKET
11. BUSBAR SUPPORTS FOR INCOMING AND BUSBAR CHAMBER: 80x20mm