

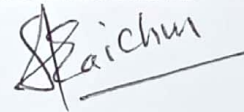
**TEST REPORT****for Ingress Protection (IP42) Test carried out on**
GREEN POWER CONTROL PANEL**Customer:****AVIN ENGI - TECH LLP**

6/ Sai Prasad, Y.T. Road,

Dahisar (W), Mumbai - 400068.

Test Report No: E-2381**Discipline:** Electrical Testing**Group:** Environmental Test Facility**ULR No.:** TC574319000123972F**Description of the Product:**

Product Name	Dimensions (mm)	Drawing Number
Green Power Control Panel	400 x 450 x 270	GREEN-001 sheet no. 01 of 01 Rev. 02 dated 05.11.2019

Date: 16th December 2019**For ELCA LABORATORIES****Authorised Signatory**
Kartik Iyer / Shriram Raichur
C.E. O. / Dy. Technical Manager (Elec.)



Continuation Sheet of Test report No: E-2381

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1.0 GENERAL TEST DESCRIPTION

This Report presents the result of the Ingress Protection Test performed on Green Power Control Panel Sample submitted by M/s. AVIN Engi-Tech LLP. Sample is identified as E-2381

Customer Challan No.: ELCA requisition slip dated 10.12.2019.

Description of the Product:

Product Name	Dimensions (mm)	Drawing Number
Green Power Control Panel	400 x 450 x 270	GREEN-001 sheet no. 01 of 01 Rev. 02 dated 05.11.2019

NOTE: Sample was tested for IP42 as received condition from customer (MCB slot was covered with tape).

All tests were carried out as per customer's requirements derived from the following standards.

APPLIED STANDARD: -

1. IEC 60529:2013

Degrees of Protection provided by enclosures (IP Code)

- a) Tests for protection of person against access to hazardous parts (First Numeral: 4) as per Table No. 6 and Clause No. 12.2
- b) Tests for protection against solid foreign object (First Numeral: 4) as per Table No. 7 and Clause No. 13.2
- c) Tests for protection against Water (Second Numeral: 2) as per Table No. 8 and clause No. 14.2.2

Acceptance conditions:

- a) Tests for protection of person against access to hazardous parts as per Clause No. 12.3
- b) Tests for protection against solid foreign object as per Clause No. 13.3
- c) Tests for protection against Water as per Clause No. 14.3


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2.0 TEST DATA

Test Laboratory	ELCA LABORATORIES, Location-2: Plot No.: Gen-62, TTC Industrial Area, MIDC, Mahape, Navi Mumbai - 400710.
Test Date	a) Test for protection of person against access to hazardous parts on 14 th September 2019 b) Test for protection against solid foreign object on 14 th September 2019 c) Test for protection against Water on 14 th September 2019
Tested By	Mr. Hemant Ghare
ELCA ID No.	E-2381

3.0 ENVIRONMENT CONDITIONS

Tests have been performed in a controlled laboratory environment, where the environmental conditions are maintained within the applicable ranges as follows.

Ambient Temperature	15°C - 35°C
Relative Humidity air	25% - 75%
Air pressure	86 kPa to 106 kPa (860 mbar to 1 060 mbar)

4.0 TEST CONDITIONS

Degrees of protection against Access to hazardous parts as per table 6 and for solid foreign object table 7

The sample was tested for protection against Access to hazardous parts and solid foreign object:

Equipment Used	Rigid Steel Rod of 1.0 mm dia. Object Probe
Equipment ID	IPD/04
IP code	First Characteristic numeral: 4



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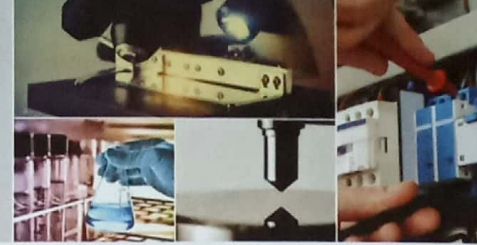
Degrees of protection against water as per Table 8

The sample was tested for water test as per following conditions:

Equipment Used	Drip Box
Delivery rate / Water Flow Rate	3 mm/min.
Distance from Nozzle to sample	200 mm
Duration of test	2.5 minutes for each position of tilt (total duration was 10 minutes)
IP code	Second Characteristic numeral: 2

The sample during the test for protection of person against access to hazardous parts and solid foreign object was as follows:



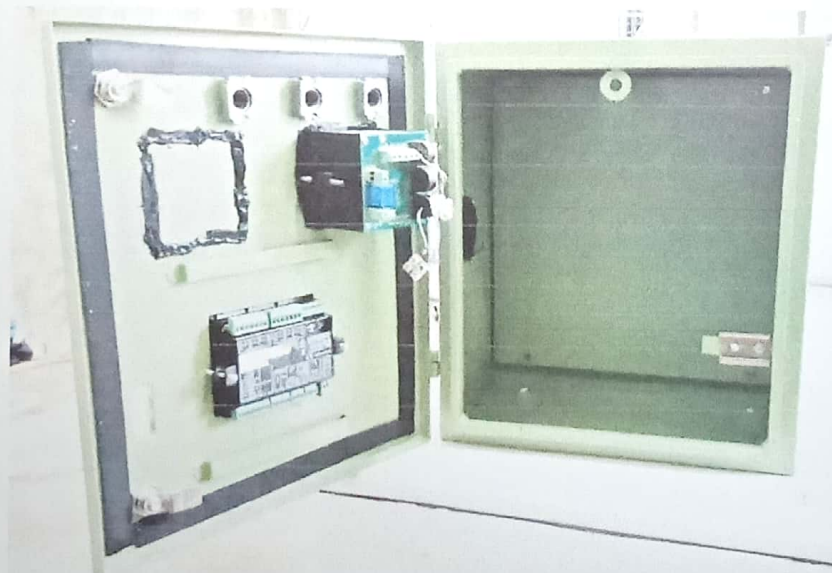


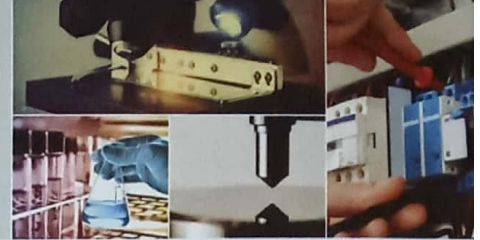
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The sample during the test of protection against water as seen as follows:



The sample after test protection against dust and water was seen as follows:





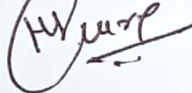
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The IP test procedure is based on IEC 60529 (Degrees of Protection provided by enclosures (IP Code). After the completion of each test sample was visually inspect.

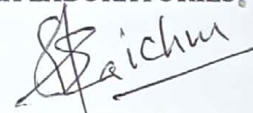
5.0 TEST RESULT: -

Name of test	Observations after test
Tests for protection of person against access to hazardous parts (Probe Test)	Full diameter of probe did not pass through any opening.
Tests for protection against solid foreign objects	Full diameter of probe did not pass through any opening.
Tests for protection against Water	No water was observed inside the sample.
Result: The sample satisfies the test requirements of IP42 as per IEC 60529:2013.	

-----END-----OF-----REPORT-----

Checked By: 

For ELCA LABORATORIES.



Authorised Signatory
Kartik Iyer / Shriram Raichur
C.E. O. / Dy. Technical Manager (Elec.)