



TC - 9106

QVC CERT
STANDARDIZING THE WORLD

TEST REPORT

Test Report No: QVC/TR/20220910/001	Page 1 of 6
Issue Date: 10/09/2022	

ULR No:-	TC910622000000031F		
Applicant Name & Address:-	Ace Flow Konzepts Pvt Ltd 68A, New Empire Industrial Estate, Kondivita Lane, J.B.Nagar, Andheri East, Mumbai - 400059		
Test Item:-	Cabinet Panel Cooler		
Identification:-	AIR-CC40-IP54		
Discipline:-	Electrical	Group:-	Environmental Test Facility
Job order no:-	QVC/SAMPLE/220902/001	Date of receipt:-	02/09/2022
Serial no:-	-----		
Testing Laboratory Name & Address:	QVC Certification Services Pvt. Ltd. 2-B, Civil Lines, Yukti business centre, Near Old session court, Ambala City-134003, Haryana, India.		
Test specification:	IEC 60529:2013		
Test Result/ Statement of conformity:	The test item passed the IP 54 as per test specification(s).		
Other Aspects:-	1) This test report contains the 06 pages. 2) The EUT is tested in the condition, it is received by the laboratory.		
<i>Note:- This test report relates to the submitted test sample and list of documents attached. Without permission of the testing laboratory this test report is not permitted to be duplicated in extract.</i>			

Tested by:	Reviewed by:	Approved by / Authorized Signatory:	Issued by:
Naveen Sharma (Testing Engineer)	Ankit Kaushal (Deputy Quality Manager)	Ankit Kaushal (Deputy Quality Manager)	Anil Arora (Quality Manager)
Date: 10/09/2022	Date: 10/09/2022	Date: 10/09/2022	Date: 10/09/2022



QVC Certification Services Pvt. Ltd.

Corporate & Head Office:

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Test Report IEC 60529:2013 Degrees of Protection provided by Enclosures (IP Codes)	
Report Reference No.:	QVC/TR/20220910/001
Date of issue:	10/09/2022
Total number of pages:	06
Testing Location:	<input type="checkbox"/> Onsite <input checked="" type="checkbox"/> At Lab
Testing Location Address:	QVC Certification Services Pvt. Ltd. 2-B, Civil Lines, Yukti business centre, Near Old session court, Ambala City-134003, Haryana, India.
Manufacturer 's Name:	Ace Flow Konzepts Pvt Ltd
Manufacturer's Address	68A, New Empire Industrial Estate, Kondivita Lane, J.B.Nagar, Andheri East, Mumbai - 400059
Test specification:- Standard:	IEC 60529:2013
Test procedure:	Compliance Report
Non-standard test method:	N/A
Test item description:	Cabinet Panel Cooler
Trade Mark:	 ACE FLOW TM Konzepts Pvt. Ltd. Engineered to German Precision
Model/Type reference:	AIR-CC40-IP54
Ratings	Operating Pressure at least 6 Bar, Cooling Capacity: 849 BTU/hr Temperature Range: -10°C to -20°C

Tested by:	Reviewed by:	Approved by / Authorized Signatory:	Issued by:
Naveen Sharma (Testing Engineer)	Ankit Kaushal (Deputy Quality Manager)	Ankit Kaushal (Deputy Quality Manager)	Anil Arora (Quality Manager)
Date: 10/09/2022	Date: 10/09/2022	Date: 10/09/2022	Date: 10/09/2022

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Copy of Marking plate/label: No marking provided in product.

TEST ITEM PARTICULARS.....:	Cabinet Panel Cooler
Sample Received Condition	Physical condition-Good
Classification of installation and use	As per Manufacturer's instructions
Dimension of the Equipment	251mm X Ø 30mm

Table – List of Attachments

Attachments	Attachment description	No of pages in attachment
Attachment-1	Photo-Document	01 (Page No. 6)

General remarks:

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the issuing testing laboratory.

Possible test case verdicts:

- test case does not apply to the test object : N/A

- test object does meet the requirement : P (Pass)

- test object does not meet the requirement : F (Fail)

Testing : See Below

Date of receipt of test item : 02/09/2022

Date(s) of performance of tests : 05/09/2022 to 07/09/2022

Laboratory conditions: See Below

Ambient Temperature: 15 to 35 °C

Ambient Humidity: 45 to 75 % Rh

General Product Information:-

Cabinet Panel Cooler or Vortex Panel Cooler provide a low-cost method of both purging and cooling electrical and electronic control panels.

These Cabinet coolers come in different sizes of Small Cabinet Coolers and Medium Cabinet Coolers. The Medium Cabinet Coolers range from AIR-CC10-IP54 to AIR-CC40-IP54. The dimension of the all the Medium Cabinet Coolers will remain same. Just the size of the Brass Generator inside the Cabinet Cooler changes according to the model. The other all models of Medium Cabinet Cooler will be similar to the model tested above.

LIST OF INSTRUMENTS USED IN TESTING:

S. No.	Instrument Name	Range & L.C
1	Dust Chamber (6X)	1m ³ , Talcum Powder, Conforms to IEC 60529:2013
2	Water jet hose nozzle (X6) (Jet Nozzle Dia: 12.5mm)	Water delivery rate: 100 L/min
3	Test Probe with Force Gauge	Test Probe Dia: 1mm & Length: 100mm Force Applied: 1 N

Additional information(s):- N/A

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Clause	Requirement-Test	Result	Verdict
12	Test for protection against access to hazardous parts indicated by the first characteristic numeral.	Tested for IP5X (Protection against hazardous live parts)	P
12.1	Access probes to test the protection of person against access to hazardous parts as per table 6 of IEC 60529:2013	As EUT does not contain any electrical connection or part, hence no chance of occurrence of electrical hazard.	P
12.2	The access probe is pushed or inserted through any openings of the enclosure with the force specified in table 6 of IEC 60529:2013	Tested with 1N force, for IP5X. Probe (1mm dia & 100mm length)	P
12.3	The protection is satisfactory, if adequate clearance is kept between the access probe and hazardous parts.	As EUT does not contain any electrical connection or part, hence no chance of occurrence of electrical hazard.	P
13	Tests for protection against solid foreign objects indicated by the first characteristic numeral.	Tested for IP5X (Tested for protection against solid foreign objects)	P
13.1	Test means and the main test conditions as per table 7 of IEC 60529:2013	Talcum powder is used which is pass through a square meshed sieve the nominal wire dia of 50µm & nominal width of a gap between wire 75 µm. Dust particle size: < 75 µm	P
13.2	The object probe is pushed against any openings of the enclosure with the force specified in table 7.		N/A
13.3	Acceptance Criteria of Numerals 1, 2, 3, 4: Protection is satisfactory if the full diameter of the probe specified in table 7 does not pass through any opening.		N/A
13.4	Dust test for first characteristic numeral 5 & 6	Dust test is performed as per first numeral 5 (IP5X) Test condition: Enclosure Category 2, Test duration: 8hrs	P
13.5	Special conditions for first characteristic numeral 5		N/A
13.5.1	Test condition for first characteristic numeral 5		N/A
13.5.2	Acceptance conditions for first characteristic numeral 5: The protection is found satisfactorily if, on inspection, talcum powder has not accumulated in a quantity or location such that, as with any other kind of dust, it	No dust particle or traces are found inside the EUT after the test.	P

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Clause	Requirement-Test	Result	Verdict
	could interfere with the correct operation of the equipment or impair safety.		
13.6	Special Conditions for first characteristic numeral 6		N/A
13.6.1	Test condition for first characteristic numeral 6		N/A
13.6.2	Acceptance Conditions for first numeral 6: The protection is satisfactory, if no dust is observable inside the enclosure after the test		N/A
14	Test for protection against water indicated by the second characteristic numeral	Tested for IPX4	P
14.1	Test means and the main test conditions as per table 8 of IEC 60529:2013	See below	P
14.2	Test Conditions	See Cl. 14.2.4	-
14.2.1	Drip box, Enclosure on turntable		N/A
14.2.2	Drip box, Enclosure in 4 fixed positions of 15' tilt		N/A
14.2.3	Oscillating tube or spray nozzle, 60° from vertical		N/A
14.2.4	Oscillating tube or spray nozzle, 180° from vertical	Test procedure as per Fig 4 Water pressure: 50kPa to 150kPa. Test duration: 10 min	P
14.2.5	6.3-mm nozzle, tested with a spraying nozzle, distance 2.5 m to 3 m, water flow rate 12.5 L/min		N/A
14.2.6	12.5 -mm nozzle, tested with a spraying nozzle, distance 2.5 m to 3 m, water flow rate 100 L/min		N/A
14.2.7	Temporary immersion between 0.15m and 1m	--	N/A
14.2.8	Continuous immersion subject to agreement		N/A
14.3	After testing in accordance with requirements of 14.2.1 to 14.2.8, the enclosure shall be inspected for ingress of water.	No ingress of water traces or droplet are found inside the EUT after the test	P



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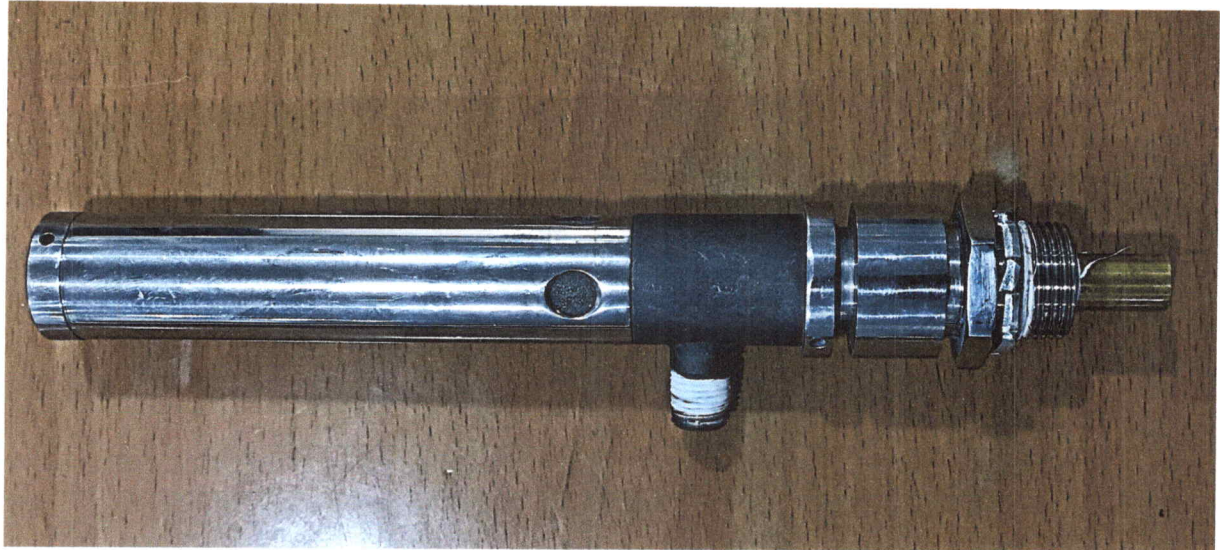
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Attachment No.1:

PHOTOGRAPHS:



Equipment Under Test (EUT)

***** END OF TEST REPORT*****



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