



# **TEST REPORT**

 Test Report No:
 QVC/TR/20220910/002
 Page 1 of 6

 Issue Date:
 10/09/2022

ULR No:-	TC910622000000032F			
Applicant Name &	Ace Flow Konzepts Pvt Ltd			
Address:-	68A, New Empire Industrial Est	68A, New Empire Industrial Estate, Kondivita Lane,		
	J.B.Nagar, Andheri East, Mumb	J.B.Nagar, Andheri East, Mumbai - 400059		
Test Item:-	Cabinet Panel Cooler			
Identification:-	AIR-CC140-IP66			
Discipline:-	Electrical	Group:-	Environmental Test Facility	
Job order no:-	QVC/SAMPLE/220902/002	Date of receipt:-	02/09/2022	
Serial no:-				
Testing Laboratory Name &	QVC Certification Services Pvt.	Ltd.		
Address:	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	The test item passed the IP 66 as per test specification(s).			
conformity:				
Other Aspects:-	<ol> <li>This test report contain</li> </ol>	is the 06 pages.		
	2) The EUT is tested in the	e condition, it is receive	ed by the laboratory.	
Note:- This test report relates	to the submitted test sample and li	st of documents attache	d. Without permission of the	
testing laboratory this test re	port is not permitted to be duplicate	ed in extract.		

Tested by:	Reviewed by:	Approved by / Authorized Signatory:	Issued by:
Novem hours	Marchel	avo s	
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







Test Report No: QVC/TR/20220910/002	IEC 60529:2013		Page 2 of 6	
		Issue Date:	10/09/2022	

**Test Report** IEC 60529:2013 Degrees of Protection provided by Enclosures (IP Codes) Report Reference No.: QVC/TR/20220910/002 Date of issue: 10/09/2022 Total number of pages: 06 Testing Location: Onsite At Lab QVC Certification Services Pvt. Ltd. Testing Location Address: 2-B, Civil Lines, Yukti business centre, Near Old session court, Ambala City-134003, Haryana, India. Manufacturer 's Name: Ace Flow Konzepts Pvt Ltd 68A, New Empire Industrial Estate, Kondivita Lane, Manufacturer's Address J.B.Nagar, Andheri East, Mumbai - 400059 Test specification:-Standard: IEC 60529:2013 Test procedure: Compliance Report Non-standard test method: N/A Cabinet Panel Cooler Test item description: Trade Mark: Engineered to German Precision AIR-CC140-IP66 Model/Type reference: Operating Pressure atleast 6 bar Cooling Capacity: 849 BTU/hr Ratings

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

Temperature Range: -10°C to -20 °C





Test Report No: QVC/TR/20220910/002 IEC 60529:2013

Page 3 of 6

Issue Date:

10/09/2022

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 Attachm	nents			
Attachments	Attachment descrip	ption	No of pages in attachment	
Attachment-1	Photo-Documer	nt	01 (Page No. 6 )	
General remarks:				
	ted in this report relate only to	_		
This report shall not be	e reproduced, except in full, wit	thout the written	approval of the issuing testing laboratory.	
Possible test case verd	licts:			
- test case does not ap	ply to the test object :	N/A		
- test object does meet the requirement :		P (Pass)	P (Pass)	
- test object does not r	neet the requirement :	F (Fail)		
Testing :		See Below	V	
Date of receipt of test	item :	02/09/202	22	
Date(s) of performance	e of tests :	05/09/202	22 to 07/09/2022	
Laboratory conditions		See Below	V	
Ambient Temperature		15 to 35°	С	
Ambient Humidity:		45 to 75 9	% Rh	
Canada Draduct Inford	tion.			

## **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-CC110-IP66 to AIR-CC140-IP66. 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 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)	1m³, 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):- Nil

**QVC Certification Services Pvt. Ltd.** 





Test Report No: QVC/TR/20220910/002

IEC 60529:2013

Page 4 of 6

Issue Date: 10/09/2022

Clause	Requirement-Test	Result	Verdict
12	Test for protection against access to hazardous parts indicated by the first characteristic numeral.	Tested for IP6X (Protection against hazardous live parts)	Р
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.	Р
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 IP6X. Probe (1mm dia & 100mm length)	Р
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.	Р
13	Tests for protection against solid foreign objects indicated by the first characteristic numeral.	Tested for IP6X (Tested for protection against solid foreign objects)	Р
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	Р
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 6 (IP6X)	Р
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		N/A
	accumulated in a quantity or location such that, as with any other kind of dust, it could interfere with the correct operation of the equipment or impair safety.	Certific	in Services Pv.

**QVC Certification Services Pvt. Ltd.** 





Test Report No: QVC/TR/20220910/002

IEC 60529:2013

Page 5 of 6

Issue Date: 10/09/2022

Clause	Requirement-Test	Result	Verdict
13.6	Special Conditions for first	characteristic numeral 6	Р
13.6.1	Test condition for first characteristic numeral 6	Enclosure Category 2, Test duration: 8hrs	Р
13.6.2	Acceptance Conditions for first numeral 6: The protection is satisfactory, if no dust is observable inside the enclosure after the test	No dust particle or traces are found inside the EUT after the test.	P
14	Test for protection against water indicated by the second characteristic numeral	Tested for IPX6 (Water spray with jet hose nozzle)	Р
14.1	Test means and the main test conditions as per table 8 of IEC 60529:2013	See below	Р
14.2	Test Conditions	See Cl. 14.2.6	-
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		N/A
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	Tested with water jet hose nozzle with water delivery rate 100 L/min.  Test Duration: 3 min  Jet Nozzle Dia: 12.5mm	Р
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	Р





Test Report No: QVC/TR/20220910/002

IEC 60529:2013

Page 6 of 6

Issue Date: 10/09/2022

## **Attachment No.1:**

# **PHOTOGRAPHS:**



**Equipment Under Test (EUT)** 

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

