

Letter of Attestation

Document: 70185960

Master Contract: 259814

Project: 70185960

Date Issued: 2018-7-9

Issued to: Hangzhou Hikvision Digital Technology Co., Ltd. No.555 Qianmo Road, Binjiang District, Hangzhou 310052, China

Attention: Benliang Chen

CSA Group, Certification and Testing hereby confirms that it has completed an evaluation of: Speed Dome, Model DS-2DE7232IW-AE, DS-2DE7225IW-AE and DS-2DE7ABCDE-VWXYZ

CSA Group, Certification and Testing hereby attests that the products identified above and described in test report 259814-70185960 dated July 9, 2018 complies with the following tests, to the extent applicable:

> Waterproof Test (Hosedown) External Icing Test Outdoor Corrosion Protection Test of NEMA 250-2014 Enclosures for Electrical Equipment (1000 Volts Maximum)

> > Issued by:

Tracy Geng

THIS LETTER OF ATTESTATION DOES NOT AUTHORIZE THE USE OF THE CSA MARK ON THE SUBJECT PRODUCTS.

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Descriptive Report and Test Results

MASTER CONTRACT: 259814 REPORT: 70185960 PROJECT: 70185960

Edition 1: July 9, 2018; CSA Project: 259814-70185960, Shanghai Issued by Tracy Geng, Approved by Alvin Kuang			
CB Testing Laboratory:	B Testing Laboratory: CSA INTERNATIONAL		
	CCIC-CSA International Certification Co., Ltd. Shanghai Branch		
Address:	1st Floor, Building 4, Qilai Industrial City, 889 Yishan Road, Shanghai, 200233 China		
Testing location/procedure:		IT 🗌 WMTC 🖂 TMP 🗌	
Test By	Xi Kai		
		Xi Ka:	
Issued By	Tracy Geng		
		Trongen	
Approved By	Alvin Kuang		
		Sentrus	
Testing Location Address. :	Jiangsu Electronic Information Product Quality Supervision & Inspection Institute		
	No.100 Jinshui Road, WuXi, Jiangsu, P.R.China		

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Date of issue:	April 16 – April 25, 2018
Applicant	Hangzhou Hikvision Digital Technology Co., Ltd.
Address	No.555 Qianmo Road, Binjiang District, Hangzhou 310052, China
Standard	NEMA 250-2014 Enclosures for Electrical Equipment(1000 Volts Maximum).
Test report Originator	CSA.
Test procedure:	WMTC
Non-standard test method:	N/A
Type of test object:	Speed Dome
Trademark:	HIKVISION
Model/type reference:	DS-2DE7232IW-AE, DS-2DE7225IW-AE and DS-2DE7ABCDE-VWXYZ
Manufacturer:	Same as applicant
Address	Same as applicant
Rating:	24Vac 50/60Hz, 2.2A, Hi-PoE 42.5-57Vdc, 1.41A.

Summary of testing:

From the result of our tests on the submitted samples, we conclude that the comply with the requirements of the standard.

All the tests were conducted on Model DS-2DE7232IW-AE and only most unfavorable data was recorded. All the models are identical except the model name.



HISTORY

Item No.	Enclosure Material	Address of Manufacturer	Sample quantity	Remarks
DS-2DE7232IW-AE	ADC12	No.555 Qianmo Road, Binjiang District, Hangzhou 310052, China		Non-ventilated and no opening

1. Test Summary

Item	Test Specification		
1.Waterproof Test(Hosedown)	Quantity:1Test Condition: The test method is described in NEMA 250-2014. According to the Section 5.7.1, the enclosure and its external mechanisms shall be subjected to a stream of water from a hose 	PASS	
2.External Icing Test	Quantity: 1 Test Condition: The test method is described in NEMA 250-2014. According to the Section 5.6.1, the enclosure shall be mounted in a room which can be cooled to -7° C. A metal test bar that is 25.4 mm in diameter by 600 mm long shall be mounted in a horizontal position in a location where it will receive the same general water spray as the enclosure under test. Provisions shall be made for spraying the entire enclosure from above with water at an angle of approximately 45 degrees from vertical. The water shall be between 0°C and 3°C. The room temperature shall be lowered to 35°F. The spray of water shall be started and continued for at least one hour, maintaining the room temperature between 1°C and 3°C. At the end of this time, the room temperature shall be lowered to between -7° C and -3° C while continuing the water spray. (The rate of change in the room temperature is not critical and shall be whatever is obtainable within the given range, with the cooling means employed.) The water spray shall be controlled so as to cause ice to build up on the bar at a rate of approximately 6.35 mm/hour and shall be continued until 20 mm of ice has formed on the top surface of the bar. The spray shall then be		

	discontinued, but the room temperature shall be maintained between -7°C and -3°C for 3 hours to assure that all parts of the enclosure and ice coatings have been equalized to a constant temperature. Test Criterion: According to the Section 5.6.2, Types 4X enclosure shall be considered to have met the requirements if at the conclusion of the test the enclosures are found to be undamaged after the ice has melted.	
3.Outdoor Corrosion protection Test	Quantity:1Test Condition:The test method is described in NEMA 250-2014.According the Section 5.8, 5.9 and 5.10, the sample shall be subjected to the test describe below, The test apparatus shall consist of a fog chamber, a salt-solution reservoir, a supply of compressed air, atomizing nozzles, support for the enclosure, provision for heating the chamber, and means of control. It shall not permit drops of solution that accumulate on the ceiling or cover of the chamber to fall on the enclosure being tested, shall not permit drops of solution that fall from the enclosure to be returned to the solution reservoir for re-spraying, and shall be constructed of materials that will not affect the corrosiveness of the fog.The salt solution shall be prepared by dissolving 5 parts by weight of salt in 95 parts by weight of either distilled water or water containing not more than 200 parts per million of total solids. The salt shall be sodium chloride that is substantially free of nickel and copper and that contains, when dry, not more than 0.1 percent of sodium iodide and not more than 0.3 percent of total impurities.The temperature of the salt spray chamber shall be maintained between 69 and 172 kPa.The temperature of the salt spray chamber shall be maintained between for baffled so that none of the spray can impinge directly on the enclosure being tested.The chamber shall be closed and the spray operated continuously except for the short daily interruption necessary to inspect, rearrange, or remove the test specimens, to check and replenish the solution in the reservoir, and to make necessary recordings.The test shall be conducted continuously for 200 hours. At the end of the test, the specimens shall be removed from the chamber and washed in clean running w	PASS

then dried immediately. Corrosion products, other than rust, shall be permitted to be removed by light brushing if required, to observe the condition of the underlying stratum.	
Test Criterion: According to the Section 5.10.1, an enclosure shall be considered to have met the requirements of this test if upon completion it does not show pitting, cracking.	

2.Test Equipments

Name	Mode/Type	Serial No.	Cal.
Humidity test chamber	PHV1614-DW	09102801	2017.12.29-2018.12.28
Salt corrosion chamber	BCX4000	26812	2017.10.16-2018.10.15
Water jet equipment	RPS	20110212	2018.02.15-2019.02.14

3.Testing photos



Fig.1 sample1#(during waterproof test)



Fig.2 sample1#(during external icing test)



Fig.3 sample1#(after external icing test)



Fig.4 sample1#(during outdoor corrosion test)



Fig.5 sample1#(After outdoor corrosion test)

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