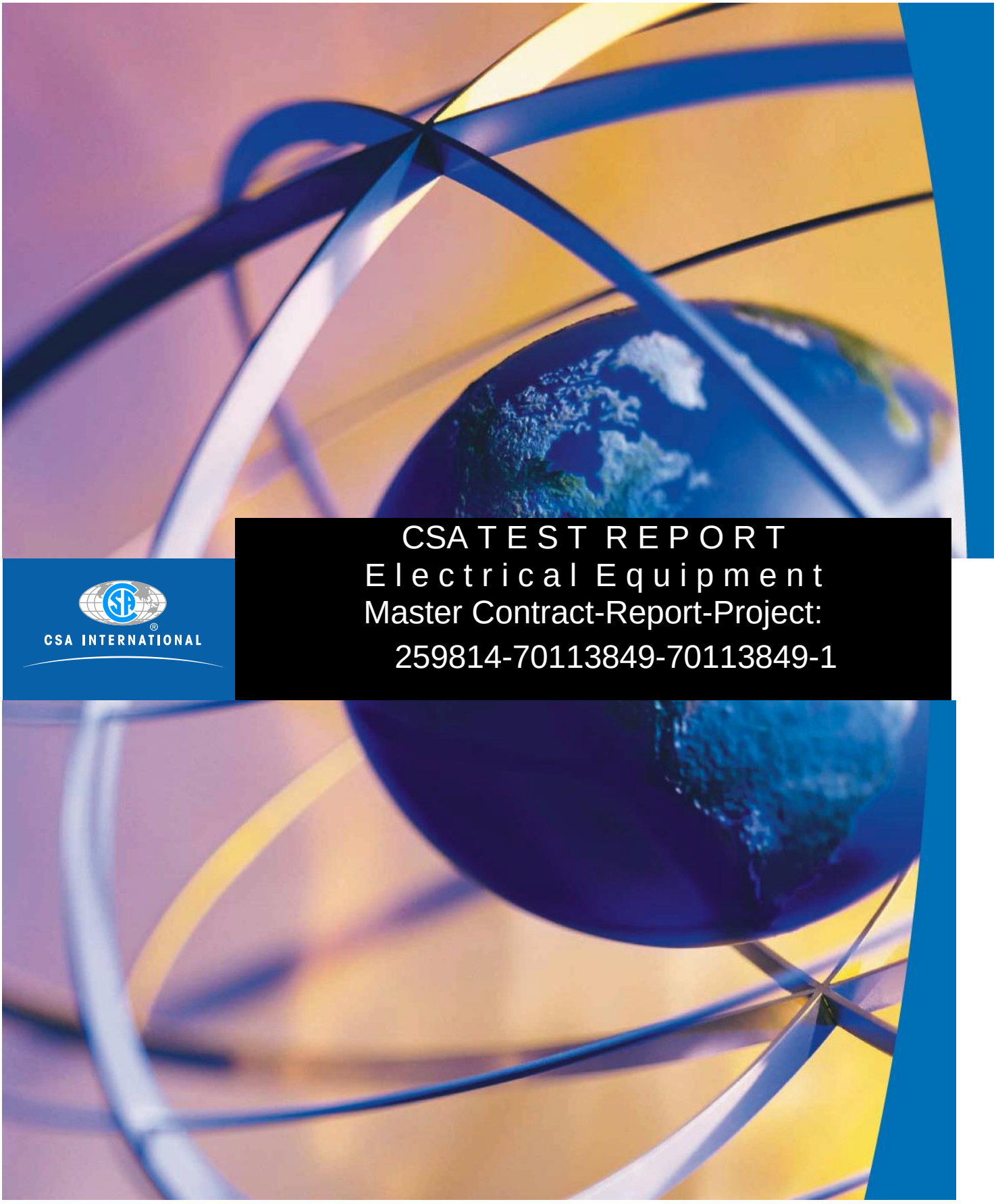


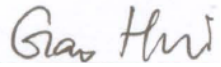
CSA INTERNATIONAL

CSA TEST REPORT
Electrical Equipment
Master Contract-Report-Project:
259814-70113849-70113849-1

Contents …… …..	Refer to Table of Contents for total number of pages (total 11 pages)
Date of issue..... :	March 10, 2017
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 ..... :	(i)DS-2DF6VWXYZ-JKLMN
Manufacturer..... :	Same as applicant
Address..... :	Same as applicant
Rating ..... :	AC 24V, DC 24V or HI-POE.

Copy of marking plate:

HISTORY

Edition 1:	March 10, 2017; CSA Project: 259814-70113849-70113849-1, Shanghai Issued by Tian Feng, Approved by Alvin Kuang	
CB 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.....	CBTL ☐ RMT ☐ SMT ☐ WMTC ☒ TMP ☐	
Test By..... ……	Gao Hui	
Issued By	Feng Tian	
Approved By.....	Alvin Kuang	
Testing Location Address.....	Jiangsu Electronic Information Product Quality Supervision & Inspection Institute No.100 Jinshui Road, WuXi, Jiangsu, P.R.China	

Speed dome
(i)DS-2DF6VWXYZ-JKLMN

Item No.	Enclosure Material	Address of Manufacturer	Sample quantity	Remarks
(i)DS-2DF6VWXYZ-JKLMN	Aluminium alloy	No. 700 Dongliu Road, Binjiang District, Hangzhou 310052, China	1 (1#)	Non-ventilated and no opening

1#

Sample diagram

1.Test Summary

Item	Test Specification	Result
1.Waterproof Test(Hosedown)	**Quantity:** 1 **Test 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 that has a 25 mm inside diameter nozzle that delivers at least 240 L per minute. The nozzle shall be held from 3.0 to 3.5 m from the enclosure, and the spray of water shall be directed at all points of potential water entry such as seams, joints, external operating mechanisms, and such. A seam is the junction of, or the joint between, two pieces. When two covers or doors are adjacent, their common edges shall be considered a single seam. The nozzle shall be moved along each test point one time at a uniform nominal rate of 6 mm/sec. **Test Criterion:** According to the Section 5.7.2, the enclosure shall be considered to have met the requirements if at the conclusion of the test water has not entered the enclosure.	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	PASS

	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:** 1 **Test 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 compressed air supply to the nozzle(s) for atomizing the salt solution shall be free of oil and dirt and shall be maintained between 69 and 172 kPa. The temperature of the salt spray chamber shall be maintained between 33°C and 36°C (92°F and 97°F). The nozzle(s) shall be directed or 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.	PASS

	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 water not warmer than 38°C (100°F) to remove salt deposits from their surface, and 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	2016.12.29-2017.12.28
Salt corrosion chamber	NQ-0250	20148	2016.9.3-2017.9.2
Water jet equipment	RPS	20110212	2016.02.15-2017.02.14

3.Testing photos

Fig.1 sample1#(during waterproof test)

Fig.2 sample1#(after waterproof test)

Fig.3 sample1#(during external icing test)

Fig.4 sample1#(after external icing test)

Fig.5 sample1#(during outdoor corrosion test)

Fig.6 sample1#(after outdoor corrosion test)

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