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Test Report

Verified Code:116075

Report No.:H202308280713-05EN-G2

Customer: ProTech CO., LTD.

Address: No. 18, Baoying Road, Dawang High-Tech District, Zhaoqing, Guangdong

SINORA HARD SHELL CASE Sample Name:

Sample Model: SIN-04233-27BK

Receive Sample Date:

Sep.20,2023

Test Date: Sep.20,2023 ~ oct.11,2023

Reference

According to ISO 20653:2013 IP67 Document:

Test Result: Meet the requirement

Li Xingchang Reviewed by Yuan Zong Zhang Huaming Prepared by Approved by

GRG METROLOGY & TEST GROUP CO., LTD.

Issued Date: 2023/11/29

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Statement

- 1. The report is invalid without "special seal for inspection and testing"; some copies are invalid; The report is invalid if it is altered or missing; The report is invalid without the signature of the person who prepared, reviewed and approved it.
- 2. The sample information is provided by the client and responsible for its authenticity; The content of the report is only valid for the samples sent this time.
- 3. When there are reports in both Chinese and English, the Chinese version will prevail when the language problems are inconsistent.
- 4. If there is any objection concerning the report, please inform us within 15 days from the date of receiving the report.
- 5. This report H202308280713-05EN-G2 is the modification of the report H202308280713-05EN-G1
 On the basis of the original report, modify the first page test basis from "ISO 20653:2013" to "ISO 20653:2013 IP67" to replace the report H202308280713-05EN-G1 The previous reports H202308280713-05EN and H202308280713-05EN-G1 are invalid.



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	☑Commissioning Test	. □Rutine tes	st □R&D test		
Test type	□PV □DV □ECV		A Rab test		
Sample Source	☑Commissioned units send sample ☐Others:				
Sample	Model	Quantity	Sample No.	Test No.	
SINORA HARD SHELL CASE	SIN-04233-27BK	1 pc	/	H202308280713-0005	
Sample Components and Accessories	Components: /	Ad	ccessories: /		
Test with packaging or not	□Yes, Outer Packing ☑No				
Sample quality before test	☐ Conformity Product ☐ Non-conformity Product ☐ Prototype ☐ Others				
Abnormal condition of sample before test	No Abnormalities				
Environmental requirements	Temperature: 15.0°C~35.0°C Relative Humidity: 25%~75% Atmospheric pressure: 86kPa~106kPa				
Test Address	Shenzhen Laboratory: No. 10, Dafu Industrial Zone, Kukeng Community, Guanlan Street, Longhua District, Shenzhen				



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1 IP6X

1.1 Test Condition

According to ISO 20653:2013.

- 1.1.1 Before the test: Check the appearance of sample.
- 1.1.2 Dustproof test:
- 1.1.2.1 Degrees of protection against access: use a metal probe with a diameter of 1.0mm to detect the shell of the tested product with a force of $1N \pm 0.1N$.
- 1.1.2.2 Degrees of protection against foreign objects: fix the tested product in the test box and carry out the test according to the items in Table 1-1.
 - 1.1.3 After the test: Check the appearance of the sample.

Table 1-1 Dustproof test conditions

Test dust	Dosage of dust	Test time
Arizona powder	2kg/m ³	6s blowing dust, 15min standing, this is a cycle, running 20 cycles

1.2 Sample Information

Sample information is shown in Table 1-2.

Table 1-2 Sample Information

Sample Name	Sample Model	Quantity	Test No.
SINORA HARD SHELL CASE	SIN-04233-27BK	1 pc	H202308280713-0005

1.3 Test Requirements

According to ISO 20653:2013.

The rigid test wire (diameter 1.0 mm)shall not penetrate, and dust shall not penetrate.



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1.4 Test Result

The test result are shown in Table 1-3.

Table 1-3 Test Result

Test No.	Test Results	Conclusion
H202308280713-0005	The 1mm metal probe did not enter the sample shell, and no dust entered the inside of the subject after the test	Meet the requirement

1.5 Test Photos





Fig.1-1 Sample appearance inspection before test

Fig.1-2 Sample appearance inspection after test



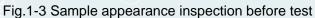




Fig.1-4 Sample unpacking inspection after test



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Fig.1-6 Test sample placement

----- The following blanks -----



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2 IPX7

2.1 Test Condition

According to ISO 20653:2013.

- 2.1.1 Before the test: Check the appearance of sample.
- 2.1.2 Waterproof test: Fix the sample in the dipping tank and test according to the conditions listed in Table 2-1.
 - 2.1.3 After the test: Check the appearance of the sample.

Table 2-1 Waterproof test conditions

Distance between the highest point of the box body and the water surface	Test time
1000mm	Soak 30min

2.2 Sample Information

Sample information is shown in Table 2-2.

Table 2-2 Sample Information

Sample Name	Sample Model	Quantity	Test No.
SINORA HARD SHELL CASE	SIN-04233-27BK	1 pc	H202308280713-0005

2.3 Test Requirements

According to ISO 20653:2013.

Water shall not penetrate in a quantity causing harmful effects or impair performance if the enclosure is immersed in water tempo-rarily under specified pressure and time conditions.

2.4 Test Result

The test result are shown in Table 2-3.



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Table 2-3 Test Result

Test No.	Test Results	Conclusion
H202308280713-0005	There is no water in the sample after the test	Meet the requirement

2.5 Test Photos





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3 Test Instrument & Equipment

List of instruments for testing equipment					
No.	Testing item	Equipment	Туре	Serial No.	Calibration valid date
1		Dust test chamber	GT1321	GT20170703001	2023-01-07~2024-01-06
1 Dustproof test (IP6X)	Dustpiouriest (IFOX)	IP4X test sonde	CX-T4D	CX1807237	2023-03-23~2024-03-22
2	Waterproof test (IPX7)	Water tank	/	1	1
2		Steel rule	0~1000mm	2482515	2023-03-22~2024-03-21

----- End of Report -----