





TEST REPORT

Report No. : SGS-R17-1258-EN00
Order No. : TON-R17-1928
Applicant : WISE Control Inc.
Address : 2022 Deogyong-dearo, Giheung-gu, Yongin-si, Gyeonggi-do, Korea (17097)
Product : Temperature Sensor with Well
Model No. : R921+A6110
Date of Test : July 25, 2017 ~ July 26, 2017
Standard : IEC 60529: 2013
Degrees of protection provided by enclosures (IP67)(IP66)
Test Result : Refer to page 13
Use of Report : For Quality Control

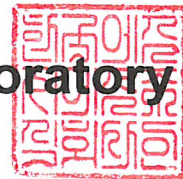
This is certified that the above mentioned products have been tested for the sample provided by client.

Affirmation	Tested by Name : Lee, Hyun-woo 	Technical Manager Name : Jun, Ki-hwan 
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August 9, 2017

SGS Korea Co., Ltd. Dongtan Laboratory



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TQF-510-001_ver6





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Overview

As requested by the client, this test was conducted on test sample according to the test specification presented by the client.

1. Product

1.1 Description

- | | |
|------------------|--------------------------------|
| 1) Applicant | : WISE Control Inc. |
| 2) Manufacturer | : WISE Control Inc. |
| 3) Product | : Temperature Sensor with Well |
| 4) Model | : R921+A6110 |
| 5) S.N | : # 1, # 2, # 3, # 4 |
| 6) No. of sample | : 4 EA |

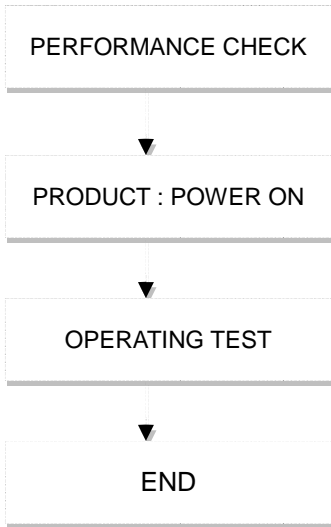
1.2 Photograph



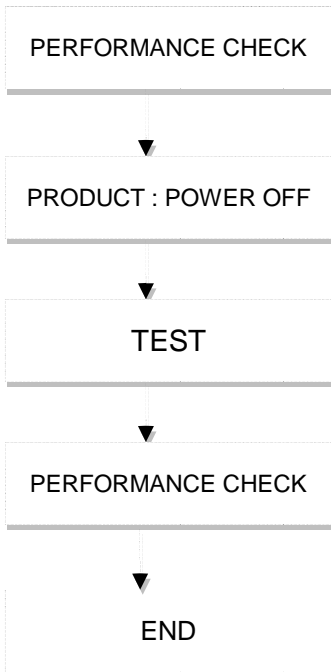


2. Test process

2.1 Operating Test



2.2 Non-operating Test



3. Test condition & Test result



3.1 IPX7

Applicant	WISE Control Inc.	Dept. in charge	Reliability Test Team
Product	Temperature Sensor with Well	Tester	Lee, Hyun-woo (+82-31-240-6614)
Model	R921+A6110	Date	July 25, 2017
Serial No.	# 1		
Standard	IEC 60529 : 2013 Degrees of protection provided by enclosures	Page	2

(1) Test condition

- 1) IP Code : IPX7
- 2) Immersion depth : 1 m (From water surface to the specimen's lower end)
- 3) Test duration : 30 min
- 4) Status of product : ① Unpacked Product ② Non-operation
- 5) No. of sample : 1 EA

(2) List of used equipment

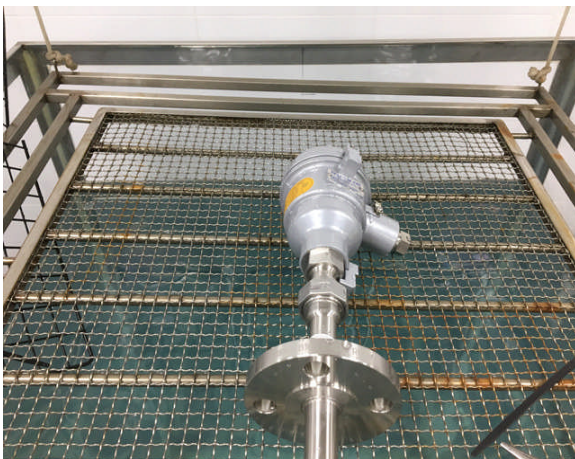
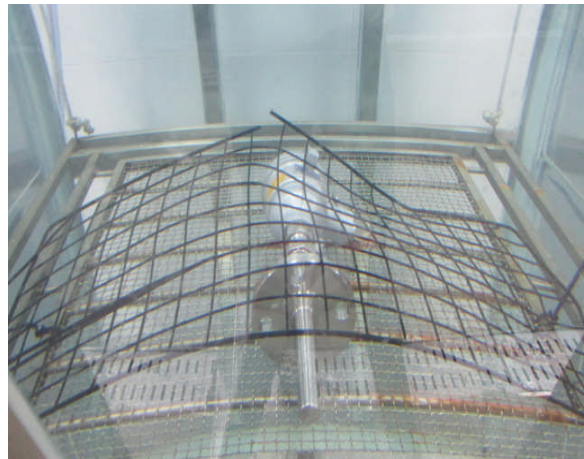
Description	Manufacturer & Model	Serial Number	The due date of next Calibration	Calibration Laboratory
Immersion apparatus	Sejong FA	-	-	-
measuring tape	5.5 m	0816772	August 17, 2018	SICT

(3) Test Result

Check item	Test result
-. Confirmation of water resistance	No water penetration was found. (Refer to page 13)



(4) Test photograph





3.2 IPX6

Applicant	WISE Control Inc.	Dept. in charge	Reliability Test Team
Product	Temperature Sensor with Well	Tester	Lee, Hyun-woo (+82-31-240-6614)
Model	R921+A6110	Date	July 25, 2017
Serial No.	# 2		
Standard	IEC 60529 : 2013 Degrees of protection provided by enclosures	Page	2

(1) Test condition

- 1) IP code : IPX6
- 2) Delivery rate : 100 L/min \pm 5 %
- 3) Displacement : From the nozzle to sample's surface (2.5 ~ 3) m
- 4) Test time : Total 3 min
- 5) Test point : Total 2 point (Refer to Test photograph)
- 6) Status of product : ① Unpacked product ② Non-operation
- 7) Sample quantity : 1 EA

(2) List of used equipment

Description	Manufacturer & Model	Serial Number	The due date of next Calibration	Calibration Laboratory
Turbine Flowmeter	Blancett 110-875	082905362	March 20, 2018	SICT
COUNTER/TIMER	AUTONIC FX4S	9K104835	March 13, 2018	SICT

(3) Test result

Check item	Test result
- . Confirmation of water resistance	No water penetration was found. (Refer to page 13)



(4) Test photograph





3.3 IP6X

Applicant	WISE Control Inc.	Dept. in charge	Reliability Test Team
Product	Temperature Sensor with Well	Tester	Lee, Hyun-woo (+82-31-240-6614)
Model	R921+A6110	Date	July 25, 2017
Serial No.	# 3		
Standard	IEC 60529 : 2013 Degrees of protection provided by enclosures	Page	2

(1) Test condition

- 1) IP code : IP6X
- 2) Test time : 8 h
- 3) Decompression : Maximum depression of 2 kPa (20 mbar)
- 4) Status of product : ① Unpacked product ② Non-operation
- 5) Sample quantity : 1 EA

(2) List of used equipment

Description	Manufacturer & Model	Serial Number	The due date of next Calibration	Calibration Laboratory
Dust Chamber	Daeyung Engineering DOC-300DSEM	DOC-11-43-10DSEM	N/A	N/A
Temperature controller	HANYOUNG KX9N-SENA	825110	February 23, 2018	SICT
Pressure Transmitter	SENORTEC KP-21N	1107048	February 26, 2018	SICT
Mass Flow Meter	XFM47	440070-1	April 25, 2018	DDHT

(3) Test result

Check item	Test result
- . Confirmation of dust resistance	No dust penetration was found. (Refer to page 13)



(4) Test photograph





3.4 IP6X

Applicant	WISE Control Inc.	Dept. in charge	Reliability Test Team
Product	Temperature Sensor with Well	Tester	Lee, Hyun-woo (+82-31-240-6614)
Model	R921+A6110	Date	July 26, 2017
Serial No.	# 4		
Standard	IEC 60529 : 2013 Degrees of protection provided by enclosures	Page	2

(1) Test condition

- 1) IP code : IP6X
- 2) Test time : 8 h
- 3) Decompression : Maximum depression of 2 kPa (20 mbar)
- 4) Status of product : ① Unpacked product ② Non-operation
- 5) Sample quantity : 1 EA

(2) List of used equipment

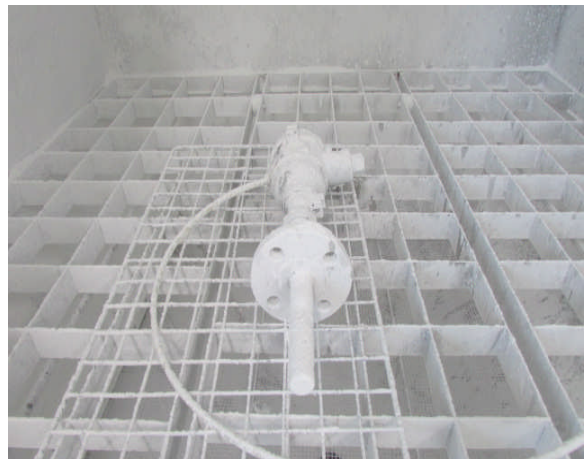
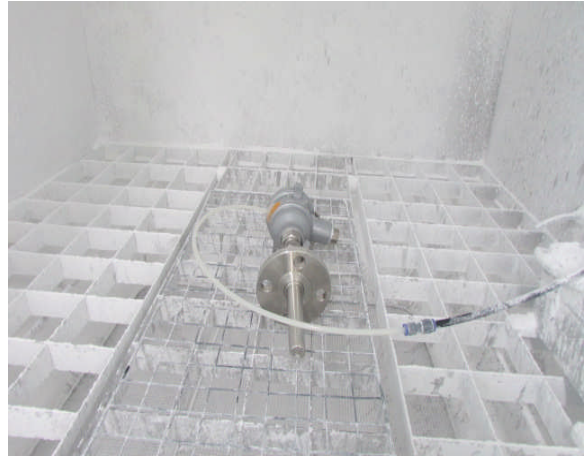
Description	Manufacturer & Model	Serial Number	The due date of next Calibration	Calibration Laboratory
Dust Chamber	Daekyung Engineering DOC-300DSEM	DOC-11-43-10DSEM	N/A	N/A
Temperature controller	HANYOUNG KX9N-SENA	825110	February 23, 2018	SICT
Pressure Transmitter	SENORTEC KP-21N	1107048	February 26, 2018	SICT
Mass Flow Meter	XFM47	440070-1	April 25, 2018	DDHT

(3) Test result

Check item	Test result
- . Confirmation of dust resistance	No dust penetration was found. (Refer to page 13)



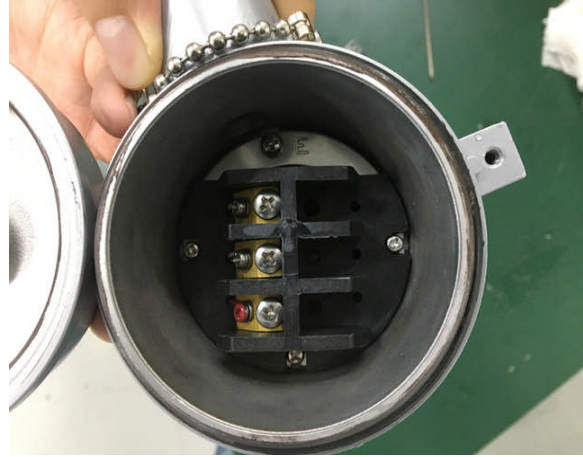
(4) Test photograph



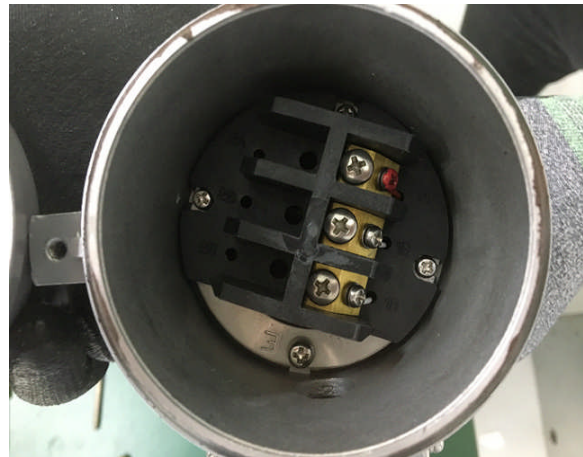


※ Annex 1. Test result photograph

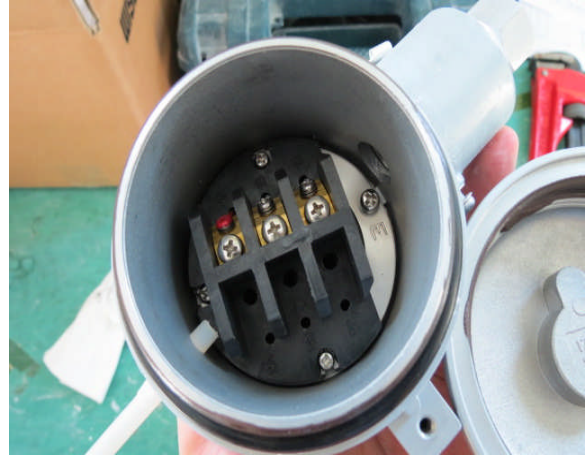
1) IPX7 : No water penetration was found.



2) IPX6 : No water penetration was found.



3) IP6X : No dust penetration was found.



4) IP6X : No dust penetration was found.

