



TEST REPORT

Report No. : SGS-R18-0000-EN00
Order No. : TON-R18-2475
Applicant : WISE Control Inc.
Address : 2022 Deogyong-dearo, Giheung-gu, Yongin-si,
Gyeonggi-do, Korea (17097)
Product : Sheathed Thermocouple & RTD
Model No. : R Series(R121, R122, R221, R222) - General Head Type
Date of Test : Aug 22, 2018
Standard : IEC 60529: 2013
Degrees of protection provided by enclosures (IP67)
Test Result : Refer to page 10
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 : Jeong, Sang-jin	Technical Manager Name : Koo, Hyung-kun
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Aug 23, 2018

SGS Korea Co., Ltd. Dongtan Laboratory

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1. Overview

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

2. Product

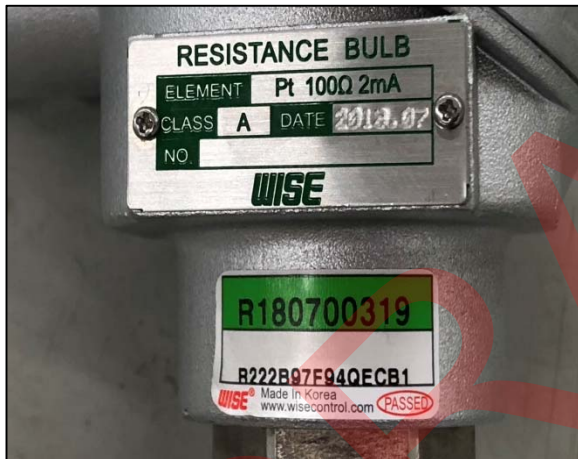
2.1 Description

- | | |
|------------------|--|
| 1) Applicant | : WISE Control Inc. |
| 2) Manufacturer | : WISE Control Inc. |
| 3) Product | : Sheathed Thermocouple & RTD |
| 4) Model | : R Series(R121, R122, R221, R222) - General Head Type |
| 5) S.N | : #1, #2 |
| 6) No. of sample | : 2 EA |

2.2 Photograph



< R Series(R121, R122, R221, R222) - General Head Type #1 >

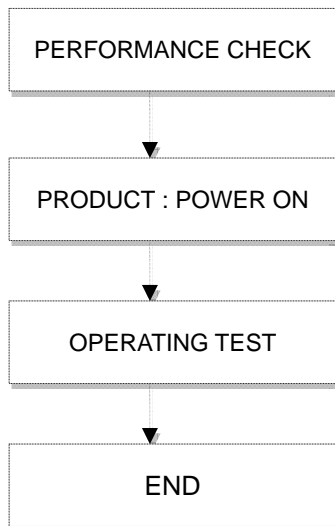


< R Series(R121, R122, R221, R222) - General Head Type #2 >

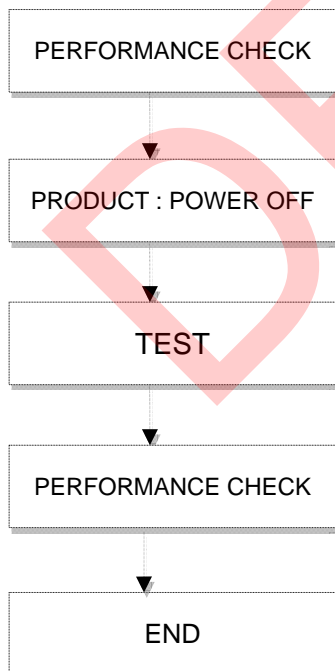


3. Test process

3.1 Operating Test



3.2 Non-operating Test



4. Test condition & Test result



4.1 IPX7

Applicant	WISE Control Inc.	Dept. in charge	Reliability Test Team
Product	Sheathed Thermocouple & RTD	Tester	Jeong, Sang-jin (+82-31-240-6651)
Model	R Series(R121, R122, R221, R222) - General Head Type	Date	Aug 22, 2018.
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 : ①Unpacked 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	-	-	-
straight edge ruler	2 000 mm	12062537-7	Aug 02, 2019	SICT

(3) Test Result

Check item	Test result
- . Confirmation of water resistance	No water penetration was found. (Refer to page 10)



(4) Test photograph





4.2 IP6X

Applicant	WISE Control Inc.	Dept. in charge	Reliability Test Team
Product	Sheathed Thermocouple & RTD	Tester	Jeong, Sang-jin (+82-31-240-6651)
Model	R Series(R121, R122, R221, R222) - General Head Type	Date	Aug 22, 2018.
Serial No.	#2	Page	2
Standard	IEC 60529 : 2013 Degrees of protection provided by enclosures		

(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) Check point : After the test
- 6) Sample quantity : 1 EA

(2) List of used equipment

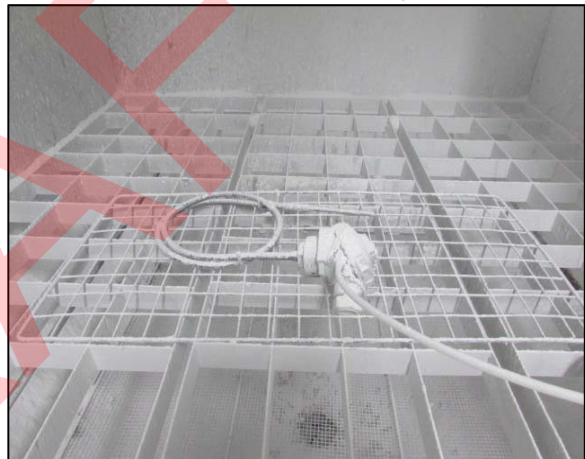
Description	Manufacturer & Model	Serial Number	The due date of next Calibration	Calibration Laboratory
Dust Chamber	Daekyung Engineering DOC-300DSEM	DOC-11-43-10DSEM	N/A	N/A
Temperature controller	HANYOUNG KX9N-SENA	825110	February 23, 2019	SICT
Pressure Transmitter	SENSORTEC KP-21N	1107048	February 28, 2019	SICT
Mass Flow Meter	XFM47	440070-1	Mach 07, 2019	DDHT

(3) Test result

Check item	Test result
-. Confirmation of dust resistance	No dust penetration was found. (Refer to page 10)



(4) Test photograph

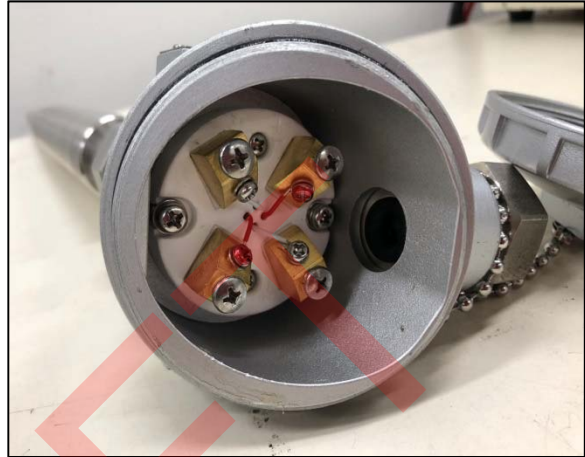




※ Annex 1. Test result photograph



1. IPX7 : No water penetration was found.



2. IP6X : No dust penetration was found.



End.