



TEST REPORT



Report No. : SGS-R20-2070-EN00
Order No. : DTRC2006001159EN
Applicant : WISE Control Inc.
Address : 2022 Deogyong-dearo, Giheung-gu, Yongin-si, Gyeonggi-do, Korea (17097)
Product : Intrinsic safety and increased safety type thermocouple and resistance temperature detector
Model No. : ETR10 Series (R95X Series)
Date of Test : June 24, 2020. ~ June 25, 2020.
Standard : IEC 60529: 2013
Degrees of protection provided by enclosures (IP65)
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		Technical Manager	
	Name : Jeong, Sang-jin		Name : Koo, Hyung-kun	

※ The above test certificate is the accredited test results by Korea Laboratory Accreditation Scheme, which signed the ILAC-MRA.

July 6, 2020.

SGS Korea Co., Ltd. Dongtan Laboratory

Accredited by KOLAS, Republic of KOREA



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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 | : Intrinsic safety and increased safety type thermocouple
And resistance temperature detector |
| 4) Model | : ETR10 Series (R95X Series) |
| 5) S.N | : Single: R200602528, R200602530
Double: R200602529, R200602531 |
| 6) No. of sample | : 4 EA |

2.2 Photograph



< Single S/N: R200602530 >



< Single S/N: R200602528 >



< Double S/N: R200602531 >



< Double S/N: R200602529 >

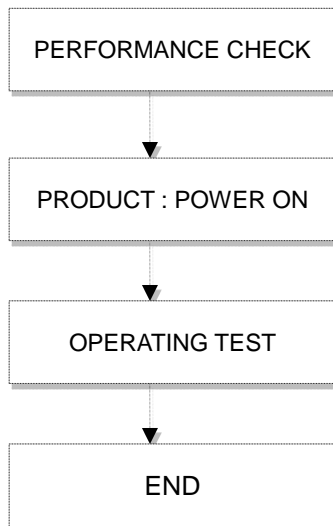


3. Test process

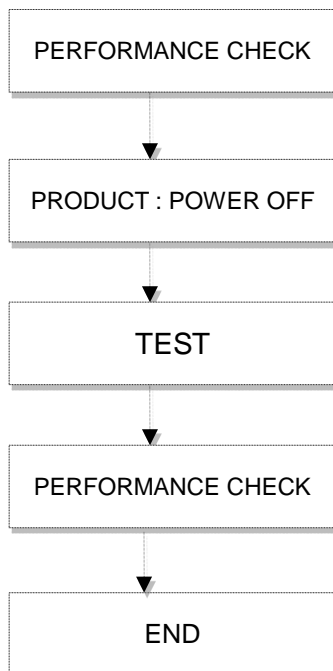
Refer to each test report

(Using one process among next two kinds of process)

3.1 Operating Test



3.2 Non-operating Test



4. Test condition & Test result



4.1 IP6X

Applicant	WISE Control Inc.	Dept. in charge	Reliability Test Team
Product	Intrinsic safety and increased safety type thermocouple and resistance temperature detector	Tester	Jeong, Sang-jin (+82-31-240-6651)
Model	ETR10 Series (R95X Series)	Date	June 24, 2020. ~ June 25, 2020.
Serial No.	Single S/N: R200602530		
Standard	IEC 60529 : 2013 Degrees of protection provided by enclosures	Page	2
Test Location	SGS Korea Co., Ltd. Dongtan Laboratory		

(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	-	-
Temperature controller	HANYOUNG KX9N-SENA	825110	January 21, 2021	SICT
Pressure Transmitter	SENSORTEC KP-21N	1107048	January 23, 2021	SICT
Mass Flow Meter	XFM47	440070-1	January 29, 2021	SICT

(3) Test result

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

(4) Test photograph





4.2 IP6X

Applicant	WISE Control Inc.	Dept. in charge	Reliability Test Team
Product	Intrinsic safety and increased safety type thermocouple and resistance temperature detector	Tester	Jeong, Sang-jin (+82-31-240-6651)
Model	ETR10 Series (R95X Series)	Date	June 25, 2020.
Serial No.	Double S/N: R200602531		
Standard	IEC 60529 : 2013 Degrees of protection provided by enclosures	Page	2
Test Location	SGS Korea Co., Ltd. Dongtan Laboratory		

(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

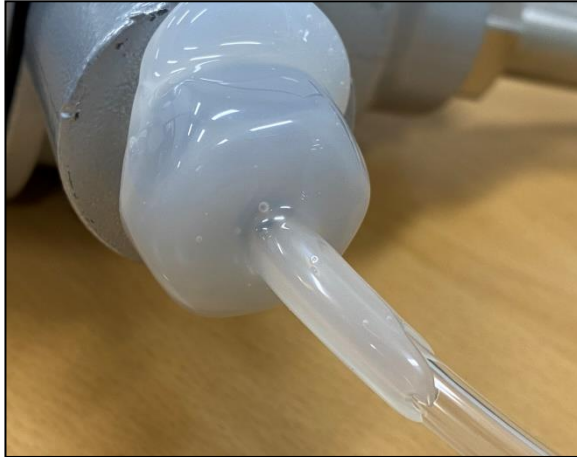
(2) List of used equipment

Description	Manufacturer & Model	Serial Number	The due date of next Calibration	Calibration Laboratory
Dust Chamber	Daekyung Engineering DOC-300DSEM	DOC-11-43-10DSEM	-	-
Temperature controller	HANYOUNG KX9N-SENA	825110	January 21, 2021	SICT
Pressure Transmitter	SENSORTEC KP-21N	1107048	January 23, 2021	SICT
Mass Flow Meter	XFM47	440070-1	January 29, 2021	SICT

(3) Test result

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

(4) Test photograp





4.3 IPX5

Applicant	WISE Control Inc.	Dept. in charge	Reliability Test Team
Product	Intrinsic safety and increased safety type thermocouple and resistance temperature detector	Tester	Jun, Ki-hwan (+82-31-831-2016)
Model	ETR10 Series (R95X Series)	Date	June 25, 2020.
Serial No.	Single S/N: R200602528 Double S/N: R200602529		
Standard	IEC 60529 : 2013 Degrees of protection provided by enclosures	Page	3
Test Location	SGS Korea Co., Ltd. Dongtan Laboratory		

(1) Test condition

- 1) IP code : IPX5
- 2) Delivery rate : 12.5 L/min \pm 5 %
- 3) Displacement : From the nozzle to sample's surface (2.5 ~ 3) m
- 4) Test time : Total 3 min (30 sec per each side)
- 5) Test point : Total 6 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	January 15, 2021.	SICT
Stop watch	HS-3	14031774-2	February 28, 2022.	SICT
Tape measure	5.5 m	816772	August 21, 2020	SICT

(3) Test result

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

(4) Test photograph

- Single S/N: R200602528



- Double S/N: R200602529





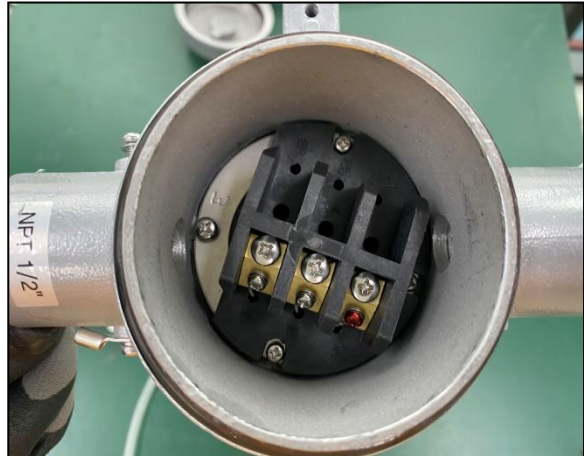
※ Annex 1. Visual inspection data

1. IP6X : No dust penetration was found.

-. Single S/N: R200602530



-. Double S/N: R200602531





2. IPX5 : No Water penetration was found.

- Single S/N: R200602528



- Double S/N: R200602529



END.