# Test Report



## Korea Marine Equipment Research Institute

24–20, Noksansandan 335–ro, Gangseo–gu, Busan 46754, Republic of Korea

Tel +82-51-400-5200, Fax +82-51-400-5210

Report No. :

KOMERI-0314-23T3097(E)





http://www.komeri.re.kr

## 1. Applicant

- Company Name : SEGIBIZ CO., LTD
- o Address : (46989) 32, Saebyeoksijang-ro, Sasang-Gu Busan, Korea

## 2. Equipment under Test

- Name of Product : Aluminum Push Button Boxes
- Model : SG-CB-0001
- o Serial No. ∶-
- 3. Test Standards : KS C IEC 60529:2013 Degrees of protection provided by enclosures (IP CODE)
- 4. Test Period : 2023, 11, 08 ~ 2023, 11, 09
- 5. Test Site : Permanent Testing Lab □ On Site Testing (Address : 24-20, Noksansandan 335-ro, Gangseo-gu, Busan 46754, Republic of Korea)
- 6. Test Result : Conformity(IP65)

Note 1 The information of the sample(s) in this test report is provided by the applicant. And you can check website (www.g4bgo.kr) to verify the authenticity of the certificate. Note 2 The result shown in this test report are only limited in to the samples provided by the applicant and do not guarantee the quality of all products of the applicant. Note 3 This test report shall be used only within the purpose of its defined use and shall not be used for public relation, advertisement and lawsuit.

	5			Technical Manager		
Affirmation	Name :	Sang-Jin LEE	DAN)	Name : Myeong-Gwan HAN		

This test report is the accredited test results by Korea Laboratory Accreditation Scheme, which signed the ILAC-MRA and related to KS Q ISO/IEC 17025 and KOLAS accreditation.

Date of issue : 2023. 11. 28.

Accredited by KOLAS, Republic of KOREA

The President of Korea Marine Equipment Research Institute Institute









Report No. :

KOMERI-0314-23T3097(E)



24-20, Noksansandan 335-ro, Gangseo-gu, Busan 46754, Republic of Korea Tel +82-51-400-5200, Fax +82-51-400-5210

http://www.komeri.re.kr

## GENERAL

Test condition	Status	Note
opened without the use of a key or tool	🗌 Yes 🗹 No	
be used additional material for degrees of protection	🗌 Yes 🗸 No	
not exceeded a rated voltage of 72.5 kV	🗸 Yes 🗌 No	
be charged or operated during the test	🗌 Yes 🗹 No	

## SPEICAL NOTE

• None

#### NOTE 1) The recommended atmospheric conditions during the tests

Temperature : (15  $\sim$  35) °C, Humidity : (25  $\sim$  75) % R.H., Atmospheric pressure : (86  $\sim$  106) kPa

#### NOTE 2) EUT installation

Unless otherwise specified in a relevant product standard, the test samples for each test shall be a clean and new condition, with all parts in place and mounted in the manner stated by the manufacturer.

#### NOTE 3) Empty enclosures

If the enclosure is tested without equipment inside, detailed requirements shall be indicated by the enclosure manufacturer in his instructions for the arrangement and spacing of hazardous parts or parts which might be affected by the penetration of foreign objects or water.

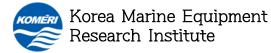
The manufacturer of the final assembly shall ensure that after the electrical equipment is enclosed the enclosure meets the declared degree of protection of the final product



1ERI-Lab-P-7,8-02(2)

Page(2) / Pages(6)





Report No. :

KOMERI-0314-23T3097(E)



24-20, Noksansandan 335-ro, Gangseo-gu, Busan 46754, Republic of Korea Tel +82-51-400-5200, Fax +82-51-400-5210

http://www.komeri.re.kr

# 1. IP TEST

## 11 TEST STANDARD

 $\cdot$  KS C IEC 60529:2013 Degrees of protection provided by enclosures (IP CODE)

1.2 TEST RESULTS (\*Refer to ATTACHMENT II for detailed test results)

Table 1–1 Protection	of persons	against access	to	hazardous par	ts
	or persons	ayamst access	ω	nazaruous par	ີເລ

Test item	Criterion	Result
	• Test wire shall not fully penetrate and adequate clearance shall be kept. • A diameter of the test wire : $\phi$ 1.0 mm • Test force : (1 ± 0.1) N	Test wire did not fully penetrate and adequate clearance was kept

## Table 1-2 Protection against solid foreign objects

Test item	Criterion	Result
IP6X	<ul> <li>Ingress of dust is totally prevented.</li> <li>Test depression : -2 kPa(20 mbar)</li> <li>Test druation : 8 hours</li> </ul>	Ingress of dust was totally prevented

## Table 1-3 Protection against water

Test item	Criterion	Result
	<ul> <li>Flow rate : (12.5 ± 0.625) L/min</li> <li>Distance from nozzle to enclsoure surface : 2.5 m ~ 3.0 m</li> <li>Test direction : all practicable directions</li> </ul>	
	<ul> <li>Test duration : 3 min.</li> <li>After test, the enclosure shall be inspected for ingress of water.</li> </ul>	
IPX5	<ul> <li>* In general, if any water has entered, it shall not</li> <li>• be sufficient to interfere with the correct operation of the equipment or impair safety</li> <li>• deposit on insulation parts where it could lead to tracking along the creepage distances</li> <li>• accumulate near the cable end or enter the cable if any</li> <li>• If the enclosure is provided with drain-holes, it should be proved by inspection that any water which enters does not accumulate and that it drains away without doing any harm to the equipment.</li> <li>• For enclosures without drain-holes, the relevant product standard shall specify the acceptance conditions if water can accumulate to reach live parts.</li> </ul>	Water did not penetrate into the enclosure

st the water temperature should not differ by more than 5 K from the temperature of the EUT



Page(3) / Pages(6)





Report No. :

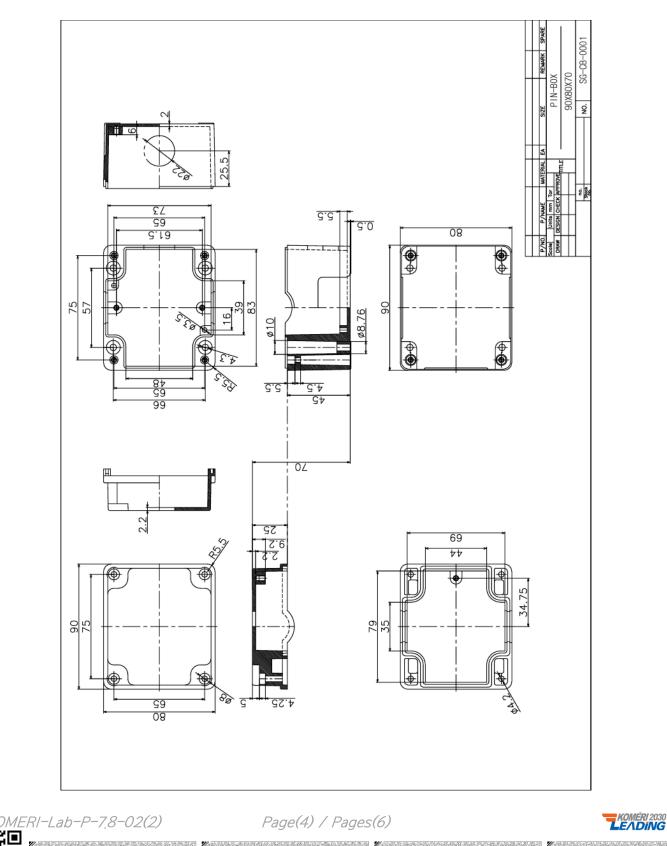
KOMERI-0314-23T3097(E)



24-20, Noksansandan 335-ro, Gangseo-gu, Busan 46754, Republic of Korea Tel +82-51-400-5200, Fax +82-51-400-5210

http://www.komeri.re.kr

# ATTACHMENT I. DRAWING





Report No. :

KOMERI-0314-23T3097(E)

http://www.komeri.re.kr



24-20, Noksansandan 335-ro, Gangseo-gu, Busan 46754, Republic of Korea Tel +82-51-400-5200, Fax +82-51-400-5210

# ATTACHMENT II. TEST RESULT



Page(5) / Pages(6)



**LEADING** 



Report No. :

KOMERI-0314-23T3097(E)



24-20, Noksansandan 335-ro, Gangseo-gu, Busan 46754, Republic of Korea Tel +82-51-400-5200, Fax +82-51-400-5210

http://www.komeri.re.kr

## ■ ATTACHMENT III. EQUIPMENT UNDER TEST



-The end-



<u>OMERI-Lab-P-7,8-02(2)</u>

Page(6) / Pages(6)

