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Hot Issue

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ICR-TÜV Rheinland Korea, Signed a MOU for EV Battery Testing & Certification

On May 11, 2022, ICR Ltd. signed a MOU with TÜV Rheinland Korea in the field of batteries for EV(Electric Vehicle) at the Gimpo headquarter in the presence of key stakeholders including Stefan Heuer (Vice President of TÜV Rheinland Mobility Asia Pacific), Frank Juettner (CEO of TÜV Rheinland Korea), Deok-Yong Kim (CEO of ICR Ltd.) and Sang-Woo Sim (Vice President of ICR).



This agreement aims to establish close business cooperation for battery field testing and certification through cooperation based on business expertise between 'ICR' and 'TÜV Rheinland'. We promised to jointly carry out and cooperate with each other on batteries for electric vehicles and related technologies.

ICR-TÜV Rheinland Korea, Signed a MOU for EV Battery Testing & Certification

- ICR, which is building a large-scale mid-to-large battery specialized testing laboratory in Pyeongtaek with the goal of completing it at the end of June this year, is expected to create synergy in the field of testing and certification of batteries for electric vehicles by closely cooperating with TÜV Rheinland, a German testing/certification organization. We will be able to provide one-stop testing and certification services to customers who want to enter overseas markets beyond the domestic market.
- It is expected that ICR and TÜV Rheinland will be able to expand cooperation to other businesses starting with this battery business agreement.

Thank you.

☎ Inquiries Battery Testing Center / Young-Ho Park T. 070-5083-2699 / youngho.park@icrqa.com

System Certification Division

- The ICR System Certification Division has moved to Gasan-dong, Seoul. Since May 23, 2022, Gasan office has conducted work related to ISO management system certification and auditor training. Please refer to the map below for the detailed address of the office in Gasan-dong.
- When the COVID-19 virus ends, ICR plans to conduct the ISO auditor curriculum face-to-face at the Gasan office.

Gasan office

298 Beotkot-ro, Geumcheon-gu, Seoul (Gasan-dong) Room 1501, 15F, Daerung Post Tower 6th Floor TEL : +82-2-6351-9001 FAX : +82-2-6351-9007



System Certification Div. / Hwang, Hyun-Soo T. 070-5083-2660 / hhs@icrqa.com

Addition of electromagnetic testing standards in industrial environments



General

► In February 2021, as the announcement of the electromagnetic compatibility test method (National Radio Research Agency Announcement No. 2021-10, 2021.2.8.) was revised, the existing KN 61000-6-2:2012 was abolished and revised to KS C 9610-6-2:2019

KN 61000-6-2:2012					
Name of immunity test	Test specifications		Units	Basic standards	Performance criterion
Voltage dips	0 1		% residual voltage cycle	KAL (1000 A 11	В
	40 12	70 30	% residual voltage cycle	KN 61000-4-11	С
Voltage interruptions	0 300		% residual voltage cycle	KN 61000-4-11	С



KS C 9610-6-2:2019					
Name of immunity test	Test specifications		Units	Basic standards	Performance criterion
Voltage dips	0 1		% residual voltage cycle	KS C 9610-4-11	В
	40 12	70 30	% residual voltage cycle	IEC 61000-4-34	С
Voltage interruptions	0 300		% residual voltage cycle	KS C 9610-4-11 IEC 61000-4-34	С

Addition of electromagnetic testing standards in industrial environments



Standards for IEC 61000-4-34 have been added for voltage dip and voltage interruptions testing part of electromagnetic immunity testing methods in industrial environments.in industrial environments.

KS C 9610-4-11

This standard applies to electrical and electronic equipment having a rated input current not exceeding 16 A per phase, for connection to 50 Hz or 60 Hz a.c. networks.

IEC 61000-4-34

This standard applies to electrical and electronic equipment having a rated input current exceeding 16 A per phase, for connection to 50 Hz or 60 Hz a.c. networks.

Addition of electromagnetic testing standards in industrial environments



Test Equipment (SAG Generator, Variac)



 ICR proceed with the voltage dip and interruption test by On-site.

T Inquiries

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Partial revision of technical standards for radio equipment for radio stations that can be established without reporting



<Ministry of Science and ICT Notice No. 2022-20>

Part of "Technical Standards for Radio Equipment for Radio Stations That Can Be Established Without Reporting" under Article 45 (Technical Standards) of the Radio Act and Article 19 (Notice of Detailed Standards, etc.) Paragraph 2 of the Radio Equipment Regulations are as follows. Revised and announced.

> March 10, 2022 Minister of Science and Technology Information and Communication

- Some of the technical standards for radio equipment for radio stations that can be established without reporting are amended as follows. Article 12 (4) is newly added as follows.
 - ④ The technical standards for wireless devices for object detection sensors in the 70GHz band must meet the following conditions.

Partial revision of technical standards for radio equipment for radio stations that can be established without reporting



<Ministry of Science and ICT Notice No. 2022-20>

1. Frequency band, power, etc.

frequency band(GHz)	Radiated power (peak power)	Note
76 ~ 81	100 mW or less (Including antenna absolute gain)	Average power density should be less than -16 dBm/MHz

- 2. Frequency tolerance should be within the specified frequency
- 3. Occupied frequency bandwidth should be less than 5GHz
- **4.** Unnecessary firing in the spurious area should be less than the following standard values

frequency	Limit	Reference bandwidth
less than 1 GHz	-36 dBm	100 kHz
1 GHz higher	-30 dBm	1 MHz

Partial revision of technical standards for radio equipment for radio stations that can be established without reporting



<Ministry of Science and ICT Notice No. 2022-20>

5. Secondary radio emission in reception or transmission standby state should be less than the following standard value

frequency	Limit	Reference bandwidth
less than 1 GHz	-54 dBm	100 kHz
1 GHz higher	-47 dBm	1 MHz

6. It is prohibited to use in moving objects such as automobiles, aircraft, ships, and railways.

It must be a device that is installed and operated connected to a power source in a building

7. The manufacturer or seller shall specify the following items on the device or user manual, and inform the user sufficiently. "This device is intended for use in buildings, and if you want to install it within a radius of 2km from the radio astronomical antenna, you must consult with the observatory in advance."

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