

Newsletter May, 2022



ICR



Hot Issue

1. Revision of Common technical standards for machinery and equipment
2. Serious Disaster Punishment Act and ISO 45001 Occupational health and safety management system

3. Ministry of Science and ICT Notice No. 2022-13



Revision of Common technical standards for machinery and equipment (electromagnetic)

- 10 November, 2021, the common technical standards for machinery and equipment were revised.
We inform the revised part of the announcement on 1 January, 2017.

- **S2-W-5**

- ▶ It is a technical standard established to prevent industrial accidents by preventing malfunction of various industrial facilities installed in the workplace due to electromagnetic interference.
- ▶ In order to obtain the S mark and KCs certification, the common technical standards (Electromagnetic) (S2-W-5) for machinery and equipment must be satisfied.



<S 마크>



<KCs 마크>



Revision of Common technical standards for machinery and equipment (electromagnetic)

▣ Revisions

▶ Standards number & Rename standards

Before the revision		
1	KS C IEC 61000-4-2	Electrostatic discharge immunity
2	KS C IEC 61000-4-3	Radiated, radio-frequency, electromagnetic field immunity
3	KS C IEC 61000-4-4	Electrical fast transient/burst immunity
4	KS C IEC 61000-4-5	Surge immunity
5	KS C IEC 61000-4-6	Immunity to conducted disturbances, induced by radio-frequency fields
6	KS C IEC 61000-4-11	Voltage dips, short interruptions and voltage variations immunity



After the revision		
1	KS C 9610-4-2	Electrostatic discharge immunity
2	KS C 9610-4-3	Radiated, radio-frequency, electromagnetic field immunity
3	KS C 9610-4-4	Electrical fast transient/burst immunity
4	KS C 9610-4-5	Surge immunity
5	KS C 9610-4-6	Immunity to conducted disturbances, induced by radio-frequency fields
6	KS C 9610-4-11	Voltage dips, short interruptions and voltage variations immunity



Revision of Common technical standards for machinery and equipment (electromagnetic)

■ Revision of test criterion

▶ Test criterion for DC power ports have been enhanced.

Before the revision				
	Test item	Applied port	Test criterion	Performance criterion
Immunity for industrial environments	Surge immunity	AC power port	±2 kV (Line-PE) ±1 kV (Line-Line)	B
		DC power port	±0.5 kV (Line-PE) ±0.5 kV (Line-Line)	
		Signal port	±1 kV (Line-PE)	
Immunity for residential, commercial and light-industrial environments	Surge immunity	AC power port	±2 kV (Line-PE) ±1 kV (Line-Line)	B
		DC power port	±0.5 kV (Line-PE) ±0.5 kV (Line-Line)	



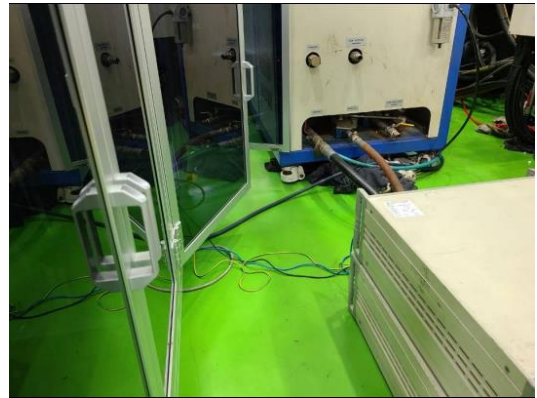
After the revision				
	Test item	Applied port	Test criterion	Performance criterion
Immunity for industrial environments	Surge immunity	AC power port	±2 kV (Line-PE) ±1 kV (Line-Line)	B
		DC power port	±1 kV (Line-PE) ±0.5 kV (Line-Line)	
		Signal port	±1 kV (Line-PE)	
Immunity for residential, commercial and light-industrial environments	Surge immunity	AC power port	±2 kV (Line-PE) ±1 kV (Line-Line)	B
		DC power port	±1 kV (Line-PE) ±0.5 kV (Line-Line)	

Revision of Common technical standards for machinery and equipment (electromagnetic)

■ Equipment photo & Test photo



<Equipment photo>



<Test photo>

- The ICR has equipment for the revised surge immunity test, so we can testing of DC power and testing of AC power.
- We can also be field tested **Fixed-installation equipment used in industrial environments.**

 **Inquiries**

Industrial Safety Center / Yang Dae-song
T. 070-5083-2658 / yds@icrqa.com

Serious Disaster Punishment Act and ISO 45001 Occupational health and safety management system



■ What is the Serious Disaster Punishment Act?

Operation of projects or business establishments, public facilities and public transportation;
Safety/health while handling raw materials or products that are harmful to the human body
The employer who caused the loss of life in violation of the obligation to take action;
It is a bill that stipulates the punishment of management managers, public officials, and corporations.
The law passed the National Assembly on January 8, 2021, where the term "serious disaster" is
It means "serious industrial accidents" and "serious civil disasters".

■ What is ISO 45001 Occupational health and Safety Management System?

ISO 45001 refers to the injury of workers related to the organization's work (work) and To prevent disease and provide a safe and healthy workplace, Enable improvement of the organization's health and safety performance.

Serious Disaster Punishment Act and ISO 45001 Occupational health and safety management system



■ ISO 45001 Certification Effect

Quantitative assessment of enterprise risks from the perspective of safety and health Therefore, the workplace safety and health are kept under the control of the CEO Manage effectively, reduce risk of accidents and loss of work Reduction of accident compensation, improvement of productivity and quality, and welfare of workers It can contribute to improvement and so on.

- The Serious Disaster Punishment Act has been implemented, and there are many inquiries about ISO 45001 Occupational health and safety management system certification through ICR.

For detailed certification procedures and effects of ISO 45001, please call the ICR System Certification Division.

 **Inquiries**

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

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



<Ministry of Science and ICT Notice No. 2022-13>

- 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 30, 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. Subparagraphs (c) through (g) of Article 7.5.2 are replaced with items (d) through (h), respectively. In the same heading, item C is newly added as follows..

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



<Ministry of Science and ICT Notice No. 2022-13>

- ▶ (c) Notwithstanding items A and B, the frequency band of wireless devices used only in the subway, power density including absolute antenna gain, etc.

frequency band (MHz)	Occupied frequency bandwidth	Power Density Including Antenna Absolute Gain	note
5925~6425	160MHz Below	2dBm/MHz Below	<ul style="list-style-type: none">※ The power density including the absolute gain of the antenna should be an average value.※ Limited to devices installed and operated by being connected to the power source in subway cars, or devices communicating with this device

 **Inquiries**

EMC&RF Test Center / Son, Min-Gi
T. 070-5081-0023 / thsalsrl@icrqa.com