

Design, Selection and Installation Code for Explosion-proof Electrical Equipment

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### Korea Gas Safety Code

This code is the detailed standards established by the Gas Technical Standards Committee in accordance with Article 22-2 of "High-Pressure Gas Safety Control Act", Article 45 of "Safety Control and Business of Liquefied Petroleum Gas Act" and Article 17-5 of "Urban Gas Business Act", Article 48 of "Hydrogen Economy Promotion and Hydrogen Safety Management Act". Since conformity to this Code is deemed to conform to the laws and regulations above, this Code must be observed.

This English version of KGS Code is an informal translation from its Korean original version. Only the Korean version of the KGS Code is officially effective since it has been authorized by the Gas Technical Standards Committee (KGS Code Committee). The secretariat of the Committee reserves the right to revise the English version whenever translation errors are found.

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## **Table of Content**

1.	General Matters	1
	1.1. Scope of Application	1
	1.2. Effectiveness of Application	1
	1.3. Approval of Other Standards	2
	1.4. Terms and Definitions	2
	1.5. Application of Standard (No Content)	7
	1.6. Interim Measures	7
2.	Common Standard	7
	2.1. Basic Principles	7
	2.1.1. Installation of Electrical Equipment under General Environment	7
	2.1.2. Installation of Electrical Equipment under Special Environment	8
	2.2. Documentation	8
	2.2.1. Matters related to Installation Location	9
	2.2.2. Matters related to installed Equipment	9
	2.2.3. Matters related to Installation	9
	2.3. Pre-use Check	9
	2.4. Warranty of Electrical Equipment Suitability	10
	2.4.1. Electrical Equipment that has acquired Safety Certification	10
	2.4.2. Electrical Equipment that has not acquired Safety Certification	10
	2.4.3. Reused Electrical Equipment	10
	2.5. Qualification for Designers, Selectors, and Installers	11
3.	Selection of Electrical Equipment	11
	3.1. Information required for Selection	11
	3.2. Hazardous Area	12
	3.3. Relation between EPL and Hazardous Area	12
	3.4. Selection of Equipment based on EPL	12
	3.4.1. General Matters (No Content)	13
	3.4.2. Relation between EPL and Explosion-Proof Structure	13
	3.4.3. Electrical Equipment used in an Area where EPL Ga is required	14
	3.4.4. Electrical Equipment used in an Area where EPL Gb is required	14
	3.4.5. Electrical Equipment used in an Area where EPL Gc is required	15
	3.5. Selection of Equipment based on Electrical Equipment Group	15
	3.6. Selection of Equipment based on Ignition Temperature of Gas and	Ambient
	Temperature	16

	3.7. Selection of Energy Radiation Equipment	17
	3.8. Selection of Ultrasonic Electrical Equipment	18
	3.9. Selection of Electrical Equipment for which External Effect is taken into account.	19
	3.10. Selection of Mobile, Portable and Wearable Electrical Equipment	21
	3.11. Selection of Rotating Electric Machine	22
	3.12. Selection of Luminaire	26
	3.13. Selection of Plug and Socket (Socket Outlet)	26
	3.14. Selection of Battery	26
	3.15. Selection of RFID Tag	27
	3.16. Selection of Gas Detector	28
4.	Prevention of Dangerous (Ignitable) Sparks from being generated	28
	4.1. Materials containing a light metal	28
	4.2. Danger of Live Parts	29
	4.3. Danger of External and Exposed Conductive Parts	29
	4.4. Equipotentiality	31
	4.5. Static Electricity	33
	4.6. Lightning Protection	35
	4.7. Electromagnetic Emission	36
	4.8. Electrolytic Protection of Metal Parts	37
	4.9. Ignition by Optical Radiation	37
5.	Protection from Electricity	37
6.	Shutoff of Power and Electrical Separation	
7.	Cable and Wiring System	39
8.	Cable Entry System and Blanking Element	47
9.	Rotating Electric Machine	53
10.	Luminaires	62
	Electric heating systems	
12.	Additional Requirements for Explosion-proof Structure "d" – Flameproof Enclosure	66
	Additional Requirements for Explosion-proof Structure "e" – Increased Safety	
	Additional Requirements for Explosion-proof Structure "i" – Intrinsic Safety	
	Additional Requirements for Explosion-proof Structure "p" – Pressurization	
	Additional Requirements for Explosion-proof Structure "n" – Non-incendive	
	Additional Requirements for Explosion-proof Structure "o" – Oil immersion	
	Additional Requirements for Explosion-proof Structure "q" – Powder Filling	
	Additional Requirements for Explosion-proof Structure "m" – Mold Mold	
20.	Additional Requirements for Explosion-proof Structure "op" – Optical Radiation	105

### Korea Gas Safety Code

Contents

Appendix A Knowledge, Skill, and Capability of Explosion-proofing Wo	ork Supervisor, Explosion-
proofing Worker, and Explosion-proof Installations Designer	106
Appendix B Pre-use Inspection – Detailed Inspection Items by 1	Type of Explosion-proof
Structure	110

# Design, Selection, and Installation Code for Explosion-proof Electrical Equipment

#### 1. General Matters

### 1.1. Scope of Application

This standard applies to the design, selection, installation, and pre-use inspection of the electrical equipment that falls under all of the following standards among the electrical equipment installed in gas facilities subject to application of 「High-pressure Gas Safety Control Act」(hereinafter referred to as the "High-pressure Gas Act"), the 「Safety Control and Business of Liquefied Petroleum Gas Act」 (hereinafter referred to as the "LP Gas Act"), and the Urban Gas Business Act (hereinafter referred to as the "Urban Gas Act").

- (1) Electrical equipment installed in combustible gas facilities. However, the electrical equipment installed in the facilities which handle pyrophoric gases or combustible mist and the electrical equipment installed in the facilities used for medical purposes are excluded.
- (2) Electrical equipment used under the standard atmospheric pressure condition (Temperature ranging from –20 °C to 60 °C, absolute pressure ranging from 80 kPa to 110 kPa and standard oxygen concentration of 21 %)
- (3) Fixed, mobile, portable, or wearable electrical equipment.

#### 1.2. Effectiveness of Application

**1.2.1** This standard has been approved by the Minister of Trade, Industry and Energy (Notification of the Ministry of Trade, Industry and Energy, No. 2022-641, August 30, 2022) after undergoing the deliberation/resolution of the Gas Technical Standard Committee (Agenda no. 2022-6, July 15, 2022) in accordance with Article 33-2 of the High-pressure Gas Act pursuant to Article 22-2, Paragraph 2 of the High-pressure Gas Act, Article 45, Paragraph 2 of LP Gas Act, and Article 17-5, Paragraph 2 of the Urban Gas Act, and has an effect as a detailed standard pursuant to Article 22-2, Paragraph 1 of the High-pressure Gas Act, Article 45, Paragraph 1 of the LP Gas Act, and Article 17-5, Paragraph 1 of the Urban Gas Act.