


## CERTIFICATE OF ACCREDITATION

1. Name of Certification Body : Korea Electrotechnology Research Institute
2. Registration Number of Corporation : 194222-0000073
3. Address of Corporation : 12, Jeongiui-gil, Seongsan-gu, Changwon-si,  
Gyeongsangnam-do, Republic of Korea
4. Address of Certification Office : 12, Jeongiui-gil, Seongsan-gu, Changwon-si,  
Gyeongsangnam-do, Republic of Korea
5. Field and Scope of Accreditation : described in the accompanying Annex
6. Type of Certification : Scheme type 1a, Scheme type 3
7. Period of Validity : 31 July, 2021 ~ 30 July, 2025
8. Mark of Certification : 

This product body is accredited for product certification systems in accordance with the recognized International Standard ISO/IEC 17065 : 2012.

30 July, 2021.



Administrator,

Korea Accreditation System (KAS)

## ○ Field and Scope of Accreditation (V-check Mark)

## ● Division: 28. Manufacture of electrical equipment

## - Type of Certification: Scheme Type 1a, 3

Group	Class	Products	Category of product	Standard
281 Manufacture of Electric Motors, Generators and Transforming, Distributing and Controlling Apparatus of Electricity	2811 Manufacture of Electric Motors, Generators and Transformers	Transformers	Transmission Transformer	IEC 60076-2:2011 Power transformers – Part2: Temperature rise for Liquid-immersed Transformers
				IEC 60076-3:2018 Power transformers – Part 3: Insulation levels, dielectric tests and external clearances in air
				IEC 60076-5:2006 Power transformers – Part 5: Ability to withstand short circuit
				IEC 60076-1:2011 Power transformers-Part1: General
				ES-6120-0001:2018 154kV Power Transformers
				ES-6120-0003:2018 345kV Single-Phase Auto Transformer
			Distribution Transformer	KS C 4306:2019 Single high voltage cover bushing transformers
				KS C 4314:1998 Anti-pollution type of single bushing pole transformer(22.9 kV)
				KS C 4316:2011 Two bushing type pole transformer
				KS C 4317:2019 Distribution transformers not more than 3MVA
				ES-5950-0016:2016 22.9 kV General Type Pole Transformers
				ES-5950-0012:2016 Amorphous Core Type Pole Transformers
				ES-5950-0013:2016 22.9 kV Anti-pollution Type Pole Transformers
				ES-5950-0018:2017 Load Switching Type Pad Mounted Transformers

Group	Class	Products	Category of product	Standard
				GS-5950-0502:2020 22.9kV Compact Type Pad Mounted Transformers
				IEEE Std C57.12.90:2015 Test code for liquid-immersed distribution, power and regulating transformers
				IEEE Std C57.12.00:2015 IEEE Standard for General Requirements for Liquid-Immersed Distribution, Power, and Regulating Transformers
				GS-5950-0513:2020 High Efficiency Pole Transformer
				GS-5950-0514:2020 High Efficiency Amorphous Pole Transformers
			Dry-type transformers	KS C 4311:2019 Dry-type transformer
				IEC 60076-11:2018 Power transformers-Part11: Dry-type transformers
				IEEE Std C57.12.91:2011 Test code for dry-type distribution and power transformers
				IEEE Std C57.12.01:2020 IEEE Standard General Requirements for Dry-Type Distribution and Power Transformers, Including Those with Solid-Cast and/or Resin Encapsulated Windings
		Instrument transformers	Potential Transformer	KS C 1706:2020 Instrument transformers for testing purpose and used with general instrument
				KS C 1707:2011 Instrument transformers for metering service
				ES-5950-0005:2018 Voltage Transformers
				KEPIC EMB 5100:2015 Instrument transformer

Group	Class	Products	Category of product	Standard
				IEC 61869-3:2011 Instrument transformers – Part 3: Additional requirements for Inductive voltage transformers
				IEEE Std C57.13:2016 IEEE Standard Requirements for Instrument Transformers
			Current Transformer	ES-5950-0006:2019 Current Transformers
				IEC 61869-2:2012 Instrument transformers – part2: Additional requirements for Current transformers
			Potential/Current Transformer	ES-5950-0004:2018 Combined Voltage Current transformer
				IEC 61869-4:2013 Instrument transformers – Part 4: Additional requirements for combined transformers
	2812 Manufacture of Distribution and Control Apparatuses of Electricity	GIS	Transmission GIS	ES-6110-0002:2019 Gas-Insulated Switchgears of rated voltages 72.5kV and above
				IEC 62271-203:2011 High-voltage switchgear and controlgear-Part203: Gas-insulated metal-enclosed switchgear for rated voltages above 52 kV
			Distribution GIS	ES-6110-0001:2017 25.8kV Gas-Insulated Switchgears
				GS-5925-0128:2017 25.8kV Environment-Friendly Gas or Solid Insulated Switchgear
		Switchgear&Controlgear	Transmission Switchgear&Controlgear	ES-5925-0001:2016 Alternating Current Circuit Breaker
				IEC 62271-100:2017 High-voltage switchgear and controlgear – part 100: Alternating-current circuit-breakers

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			Distribution Switchgear&Controlgear	ES-5925-0002:2016 Gas Insulated Load Break Switches for 25.8 kV Underground Line
				ES-5925-0003:2016 Gas Insulated Load Break Switches for 25.8 kV Overhead Line
				GS-5925-0012:2020 Polymer Insulated Multi-Way Fault Interrupters for 25.8kV Underground Line
				IEC 62505-1:2016 Railway applications-Fixed installations-Particular requirements for AC switchgear-Part1:Circuit-breakers with nominal voltage above 1 kV
				IEC 62271-103:2011 High-voltage switchgear and controlgear-Part103:Switches for rated voltage above 1kV up to and including 52 kV
				IEC 62271-105:2012 High-voltage switchgear and controlgear-part105:Alternating current switch-fuse combinations
				IEC 62271-107:2019 High-voltage switchgear and controlgear-part107:Alternating current fused circuit-switchers for rated voltages above 1 kV up to and including 52 kV
				ES-5925-0004:2020 Eco-designed Epoxy Insulated Load Break Switch for 25.8kV Overhead Line
				ES-5925-0009:2017 Polymer Recloser for Distribution Automation of Overhead Line
				GS-5925-0135:2018 Epoxy Insulated Fault Interrupters for Distribution Automation of 25.8kV Overhead Line

Group	Class	Products	Category of product	Standard
			Low-voltage switchgear & Controlgear	KS C 4613:2019 Circuit-breaker incorporating residual current protection for industrial uses(CBR)
				KS C 8321:2019 Molded-Case Circuit-Breaker for Industrial Uses(MCCB)
				KS C 4620:2018 Low-voltage air circuit-breaker(ACB)
				IEEE Std C37.13:2015 IEEE Standard for Low-Voltage AC Power Circuit Breakers Used in Enclosures
			Switchgear	ES-5925-0002:2016 Gas Insulated Load Break Switches for 25.8 kV Underground Line
				ES-5925-0003:2016 Gas Insulated Load Break Switches for 25.8 kV Overhead Line
				GS-5925-0011:2020 Polymer Insulated Load Break Switches for 25.8kV Underground Line
				GS-5925-0148:2018 Epoxy, SF6 Gas Insulated Load Break Switch with Current Limiting Fuse for 25.8 kV Underground Line
				SPS-KEMC 1126-0585:2010 Auto-sectionalizing Switch
				IEC 62271-111:2019 High voltage switchgear and controlgear-Part 111: Overhead, pad-mounted, dry vault and submersible automatic circuit reclosers and fault interrupters for AC systems up to 38 kV
				IEEE Std C37.74:2014 IEEE Standard Requirements for Subsurface, Vault, and Pad-Mounted Load-Interrupter Switchgear and Fused Load-Interrupter Switchgear for Alternating Current Systems Up to 38kV

Group	Class	Products	Category of product	Standard
			Disconnectors and Earthing Switch	IEEE Std C37.20.3:2013 Metal-enclosed interrupter switchgear
				IEEE Std C37.60:2019 High voltage switchgear and controlgear-Part111:Automatic circuit reclosers and fault interrupters for alternating current systems up to 38 kV
				IEEE Std C37.63:2013 Standard requirements for overhead, pad-mounted, dry-vault and submersible automatic line sectionalizers for AC systems
				ES-6110-0003:2013 Disconnecting Switches
				IEC 62271-102:2018 High-voltage switchgear and controlgear – part102: Alternating current disconnectors and earthing switches
				IEC 62271-108:2020 High-voltage switchgear and controlgear-part108: High-voltage alternating current disconnecting circuit-breakers for rated voltages of 72.5 kV and above
				IEC 62505-2:2016 Railway applications – Fixed installations-Particular requirements for AC switchgear-Part2: Disconnectors, earthing switches and switches with nominal voltage above 1 kV
			Contactor	ES-6110-0017:2016 AC Electromagnetic Contactors for Night thermal storage power service

Group	Class	Products	Category of product	Standard
				IEC 62271-106:2011 High-voltage switchgear and controlgear - part 106 : Alternating current contactors, contactor-based controllers and motor-starters
			Switch	IEC 62271-109:2019 High-voltage switchgear and controlgear-part109: Alternating-current series capacitor by-pass switches
				IEC 62271-110:2017 High-voltage switchgear and controlgear-part 110:Inductive load switching
				IEEE Std C37.20.4:2013 Indoor AC switches (1kV-38kV) for use in metal-enclosed switchgear
				IEEE C37.30.1:2011 Requirements for AC High-Voltage Air Switches Rated Above 1000 V
		Fuse	Cut out Switch	ES-5920-0002:2015 25.8 kV Cutout Switch
				ES-5920-0004:2012 Fuse links for cut out switch
				ES-5920-0011:2020 25.8 kV Polymer Insulated Cutout Switch
			Power Fuse	IEC 60282-2:2008 High-voltage fuses - Part2: Expulsion fuses
				IEEE Std C37.41:2016 Standard Design Tests for High-Voltage (>1000V) Fuses and Accessories
			Current-Limiting Fuses	KS C 4612:2001 High-voltage current-limiting fuses
			Miniature fuses	IEC 60282-1:2020 High-Voltage Fuses - Part1: Current-Limiting Fuses
				KS C IEC 60127-2:2014 Miniature fuses - Part 2: Cartridge fuse-links
				KS C IEC 60127-3:2015 Miniature fuses - Part 3: Sub-miniature fuse-links



Group	Class	Products	Category of product	Standard
				KS C IEC 60127-4:2012 Miniature fuses - Part 4: Universal modular fuse - links (UMF) - Through-hole and surface mount types
				KS C IEC 60127-5:2016 Miniature fuses - Part 5: Guidelines for quality assessment of miniature fuse-links
				KS C IEC 60127-6:1994 Miniature fuses - Part 6: Fuse-holders for miniature cartridge fuse-links
				ES-5920-0006:2012 Cartridge Fuses for the Protection of Service Lines
				ES-5920-0009:2013 Environmental-friendly wire fuse with Pb-free element
				KC 60127-2:2015 Miniature fuses - Part 2: Cartridge fuse-links
				KC 60127-3:2015 Miniature fuses - Part 3: Sub-miniature fuse-links
				KC 60127-4:2016 Miniature fuses - Part 4: Universal modular fuse - links (UMF) - Through-hole and surface mount types
				KC 60127-6:2015 Miniature fuses - Part 6: Fuse-holders for miniature cartridge fuse-links
				IEC 60127-2:2020 Miniature fuses - Part 2: Cartridge fuse-links
				IEC 60127-3:2020 Miniature fuses - Part 3: Sub-miniature fuse links
				IEC 60127-4:2012 Miniature fuses - Part 4: Universal modular fuse-links (UMF) - Through-hole and surface mount types
				IEC 60127-6:2014 Miniature fuses Part 6: Fuse-holders for miniature fuse-links

Group	Class	Products	Category of product	Standard
				IEC 60269-2:2016 Low-voltage fuses – Part 2: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application) – Examples of standardized systems of fuses A to K
		Metal-enclosed switchgear	High Voltage Metal-enclosed switchgear	KEPIC EEE 3000:2015 metal-clad switchgear
				SPS-KEMC-2101-0609:2016 High-voltage switchgear and controlgear assemblies
				SPS-KEMC 2108-1643:2007 High voltage/low voltage prefabricated substation
				IEC 62271-1:2017 High-voltage switchgear and controlgear – Part 1: Common specifications for alternating current switchgear and controlgear
				IEC 62271-200:2011 High-voltage switchgear and controlgear-Part200:AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV
				IEC 62271-201:2014 High-voltage switchgear and controlgear-Part201:AC insulation-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV
				IEC 62271-205:2008 High-voltage switchgear and controlgear – Part 205: Compact switchgear assemblies for rated voltages above 52 kV

Group	Class	Products	Category of product	Standard
				GS-6110-0039:2018 154 kV T/L Protection Panel
				GS-6110-0074:2019 154kV Main Transformer Protection Panel
			Low Voltage Metal-enclosed switchgear	KS C IEC 60439-1:1999 Low-voltage switchgear and controlgear assemblies - Part 1 : Type-tested and partially type-tested assemblies
				KS C IEC 60439-2:2005 Low-voltage switchgear and controlgear assemblies - Part 2 : Particular requirements for busbar trunking systems(busways)
				KS C IEC 60947-1:2014 Low - voltage switchgear and controlgear - Part 1 : General rules
				KS C IEC 60947-2:2016 Low - voltage switchgear and controlgear - Part 2 : Circuit-breakers
				SPS-KEMC 2102-0610:2016 Low-voltage switchgear and controlgear assemblies
				IEC 61439-1:2020 Low-voltage switchgear and controlgear assemblies - Part 1: General rules
				IEC 61439-2:2020 Low-voltage switchgear and controlgear assemblies - Part 2: Power switchgear and controlgear assemblies
				IEC 61439-3:2012 Low-voltage switchgear and controlgear assemblies - Part 3: Distribution boards intended to be operated by ordinary persons (DBO)

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				IEC 61439-4:2012 Low-voltage switchgear and controlgear assemblies - Part 4: Particular requirements for assemblies for construction sites (ACS)
				IEC 61439-5:2014 Low-voltage switchgear and controlgear assemblies - Part 5: Assemblies for power distribution in public networks
				IEC 61439-6:2012 Low-voltage switchgear and controlgear assemblies- Part6 : Busbar trunking systems(busways)
				IEC 62271-202:2014 High-voltage switchgear and controlgear- Part202: High-voltage/low-voltage prefabricated substation
				IEC 60947-1:2020 Low-voltage switchgear and controlgear Part 1: General rules
				IEC 60947-2:2019 Low-Voltage Switchgear and Controlgear - Part 2: Circuit-Breakers
				IEC 60947-3:2020 Low-voltage switchgear and controlgear - Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units
				IEC 60947-4-1:2018 Low-voltage switchgear and controlgear - Part 4-1: Contactors and motor-starters -Electromechanical contactors and motor-starters.
				IEC 60947-5-1:2016 Low-voltage switchgear and controlgear Part 5-1: Control circuit devices and switching elements Electromechanical control circuit devices.

Group	Class	Products	Category of product	Standard
				IEC 60947-6-1:2013 Low-voltage switchgear and controlgear - Part 6-1: Multiple function equipment - Transfer switching equipment
				IEC 60947-6-2:2020 Low-voltage switchgear and controlgear - Part 6-2: Multiple function equipment - Control and protective switching devices (or equipment) (CPS)
				IEC 60947-7-1:2009 Low-voltage switchgear and controlgear - Part 7-1: Ancillary equipment - Terminal blocks for copper conductors
				IEEE Std C37.20.1 :2015 IEEE Standard for Metal-Enclosed Low-Voltage (1000 Vac and below, 3200 Vdc and below) Power Circuit Breaker Switchgear
				IEEE Std C37.20.2:2015 Standard for metal-clad switchgear
			Control Panel	GS-5945-0027:2017 Directional Overcurrent Protection Intelligent Electronic Device
				ES-6110-0011:2016 Underground Low Voltage Distribution Box
				KEPIC EEE 4000:2015 panelboards SPS-KEMC 2104-0612:2002 Electrical board
			Motor Control Panel	KEPIC EEE 1000:2010 Motor control panel
				SPS-KEMC 1108-0567:2007 Motor control center
283 Manufacture of Insulated Wires and Cables Including Insulated Code Sets	2830 Manufacture of Insulated Wires and Cables, Including Insulated Code Sets	Cable and accessories	Transmission Cable and accessories	GS-6145-0031:2017 345 kV/154 kV XLPE Power-Optical Fiber Composite Cables and Accessories
				GS-6145-0032:2017 345 kV/154 kV XLPE Cables and Accessories
				GS-6145-0081:2020 154kV Smooth AL Sheath XLPE Power Cables and Accessories

Group	Class	Products	Category of product	Standard
				BDG-DCP-PC-WP-0014-H:2018 500kV MI Cables and Accessories
				BDG2-DCP-PC-WP-0014(R1):2020 Product Certification Plan(500kV MI Cables and Accessories)
				IEC 60840:2020 Power cables with extruded insulation and their accessories for rated voltages above 30 kV(Um=36 kV) up to 150 kV(Um=170 kV) - Test methods and requirements or EPR, HEPR and XLPE insulations
				IEC 62067:2011 Power cables with extruded insulation and their accessories for rated voltages above 150 kV (Um=170 kV) up to 500 kV(Um=550 kV) - Test methods and requirements
				IEEE Std 48:2020 IEEE Standard for Test Procedures and Requirements for Alternating-Current Cable Terminations Used on Shielded Cables Having Laminated Insulation Rated 2.5 kV through 765 kV or Extruded Insulation Rated 2.5 kV through 500 kV
				IEEE Std 404:2012 Extruded and Laminated Dielectric Shielded Cable Joints Rated 2.5 kV to 500 kV
			Distribution Cable and accessories	ES-5935-0009:2019 23 kV CNCV Cable Termination and Joint Kits
				ES-5935-0010:2014 Separable Insulated Elbow Connector For CNCV Cable
				ES-5935-0012:2019 23 kV Aluminium CNCE Cable Termination Kits and Joint Kits

Group	Class	Products	Category of product	Standard
				ES-5935-0013:2014 Separable Insulated Elbow Connector For Aluminium CNCE Cable
				ES-6145-0019:2020 22.9 kV Concentric Neutral Type Crosslinked Polyethylene Insulated Halogen free Polyolefin Jacketed Water-proof Power Cables
				ES-6145-0025:2020 22.9 kV Concentric Neutral Type Water Tree Retardant XLPE Insulated Extruded-to-Fill Polyethylene Jacketed Water-proof Power Cables
				ES-6145-0026:2020 22.9 kV Concentric Neutral Type Water Tree Retardant XLPE Insulated Extruded-to-Fill Polyethylene Jacketed Water-proof Power Aluminium Cables
				ES-6145-0034:2019 22.9kV Concentric Neutral Type Water Tree Retardant XLPE Insulated Halogen free Polyolefin Jacketed Water-proof Power Aluminium Cables
				GS-6145-0078:2010 Aerial Spacer Cable for 22.9 kV
				IEC 60502-2:2014 Power cables with extruded insulation and their accessories for rated voltages from 1 kV(Um=1.2 kV) up to 30 kV(Um=36 kV) - Part2: Cables for rated voltages of 6 kV(Um=7.2 kV) up to 30 kV(Um=36 kV)

Group	Class	Products	Category of product	Standard
				IEC 60502-4:2010 Power cables with extruded insulation and their accessories for rated voltages from 1 kV (Um=1.2 kV) up to 30 kV(Um=36 kV) - Part4: Test requirements on accessories for cables with rated voltages from 6 kV(Um=7.2 kV) up to 30 kV(Um=36 kV)
				IEC 61238-1-1:2018 Compression and mechanical connectors for power cables - Part 1-1: Test methods and requirements for compression and mechanical connectors for power cables for rated voltages up to 1 kV (Um = 1,2 kV) tested on non-insulated conductors
				IEC 61238-1-2:2018 Compression and mechanical connectors for power cables - Part 1-2: Test methods and requirements for insulation piercing connectors for power cables for rated voltages up to 1 kV (Um = 1,2 kV) tested on insulated conductors
				IEC 61238-1-3:2018 Compression and mechanical connectors for power cables - Part 1-3: Test methods and requirements for compression and mechanical connectors for power cables for rated voltages above 1 kV (Um = 1,2 kV) up to 30 kV (Um = 36 kV) tested on non-insulated conductors
				IEEE Std 386:2016 IEEE Standard for Separable Insulated Connector Systems for Power Distribution Systems Rated 2.5kV through 35kV



Group	Class	Products	Category of product	Standard
			Low-Voltage Cable and accessories	ES-5935-0008:2014 Underground cable connection-kit for Low-voltage
				ES-6145-0018:2013 Polyvinyl Chloride Insulated and Sheathed Control Cable
				IEC 60502-1:2009 Power cables with extruded insulation and their accessories for rated voltages from 1 kV(Um=1.2 kV) up to 30 kV(Um=36 kV) - Part1: Cables for rated voltages of 1 kV(Um=1.2 kV) and 3 kV(Um=3.6 kV)
		Electric wire and line equipments	Wire	KS C 3104:2019 Hard-drawn copper stranded conductors
				ES-6145-0001:2009 Galvanized Steel Wire Stands
				ES-6145-0005:2019 Aluminium Stranded Conductors Steel Reinforced
				ES-6145-0006:2019 ACSR/AW-OC for 22.9 kV-Y
				ES-6145-0007:2009 ACSR Outdoor Cross-linked Polyethylene Insulated Wires for 6.6 kV
				ES-6145-0012:2019 Concentric-Lay-Stranded Aluminium Clad Steel
				ES-6145-0013:2014 Out Door Weather Proof Polyvinyl Chloride Insulated Wires
				ES-6145-0014:2014 Polyvinyl Chloride Insulated Drop Wires
				ES-6145-0017:2012 22.9 kV and 6.6 kV Drop Wires for pole Transformers
				ES-6145-0020:2019 Concentric-Lay-Stranded Aluminum Conductors Aluminum-Clad Steel Reinforced

Group	Class	Products	Category of product	Standard
				ES-6145-0021:2019 Tracking retardant aluminum stranded conductor aluminum clad steel reinforced outdoor cable (ACSR/AW-TR/OC)
				ES-6145-0022:2014 OC-W Cable
				ES-6145-0024:2019 Thermal-resistant Aluminum-alloy Conductors Steel Reinforced
				GS-6145-0080:2019 ACSR/AW polyvinyl chlorides insulated outdoor weather-proof wires(ACSR/AW-OW)
				IEC 62271-204:2011 High-voltage switchgear and controlgear-part204:Rigid gas-insulated transmission lines for rated voltage above 52 kV
				IEEE Std C37.23:2015 IEEE Standard for Metal-Enclosed Bus
			Line equipments	KS C 3117:2014 Deadend clamp and bolt type connector for aluminium
				ES-5975-0052:2017 345 kV Spacer Damper
				ES-5975-0053:2014 Hardwares of Insulator String for 154 kV Transmission Line
				ES-5975-0055:2020 Hardwares of Insulator String for 345 kV Transmission Line
				ES-5975-0068:2014 Hold on swing a jumper support String for 154 kV Transmission Line
				ES-5999-0011:2014 Arcing Horn for 154 kV Transmission Line
				GS-5975-0046:2020 Hardware and accessories for aerial bundled cable

Group	Class	Products	Category of product	Standard
				GS-5975-0056:2009 765kV Hardwares of Insulator string for 765 kV transmission line
				GS-5975-0057:2009 Hardwares of Assembly Jumper set for 765 kV Transmission Line
		Bushings and Insulators	Insulators	ES-5970-0003:2016 Line Post Type Insulators
				ES-5970-0006:2016 Ball and socket type suspension insulators for distribution
				ES-5970-0007:2019 250mm Ball and Socket Type Suspension Insulators
				ES-5970-0008:2019 Ball and Socket Type Suspension Insulators For EHV
				ES-5970-0013:2017 Polymer Suspension Insulators
				ES-5970-0017:2017 Polymer Anti-contamination Coupling Insulators
				ES-5970-0019:2017 Polymer Linepost Type Insulators
				ES-6110-0007:2016 Testing method for insulation in GIS of rated voltages 170 kV and above
				KRS-PW-0014-15(R):2015 Long Rod Insulator(Polymer Type for Electric-railway Application T-m)
				KRS-PW-0015-18(R):2018 Long Rod Insulator(Polymer Type for Electric-railway Application N-a)
				KRS-PW-0016-15(R):2015 Suspension Insulator(Polymer Type for Electric-railway Application T-s)
				KRS-PW-0056-19(R):2019 Polymeric composite insulator for feeder supporting in tunnel /HSL
				KRS-PW-0057-16R:2016 Polymeric composite insulator for suspension /HSL

Group	Class	Products	Category of product	Standard
				IEC 62217:2012 Polymeric HV insulators for indoor and outdoor use - General definitions, test methods and acceptance criteria
				IEC 60383-1:1993 Insulators for overhead lines with a nominal voltage above 1 000 V-part1: Ceramic or glass insulator units for AC systems-definitions, test methods and acceptance criteria
				IEC 61109:2008 Insulators for overhead lines - Composite suspension and tension insulators for a.c. systems with a nominal voltage greater than 1 000 V - Definitions, test methods and acceptance criteria
				IEC 61467:2008 Insulators for overhead lines - Insulator strings and sets for lines with a nominal voltage greater than 1 000 V - AC power arc tests
				IEC 61952:2008 Insulators for overhead lines - Composite line post insulators for A.C. systems with a nominal voltage greater than 1 000 V - Definitions, test methods and acceptance criteria
				ANSI/NEMA C29.2B:2013 Insulators-Wet-process porcelain and toughened glass-Transmission Suspension type
				CEA LWIWG-01:1996 Dead-end/Suspension Composite Insulator for Overhead Distribution Lines
				CEA LWIWG-02:1996 Linepost composite insulator for overhead distribution lines

Group	Class	Products	Category of product	Standard
			Bushings	KS C 4307:2013 Pole transformer bushings
				KS C 4315:1998 A bushing for anti-pollution type of single bushing pole transformer(22.9 kV)
				ES-5970-0009:2012 A bushing for anti-pollution type of single bushing pole transformer(22.9 kV)
				ES-5970-0025:2012 Polymer Bushing for 22.9 kV pole Transformer
				ES-5970-0026:2018 Polymer low-voltage Bushing for pole Transformer
				IEC 60137:2017 Insulated bushings for alternating voltages above 1 000 V
				IEEE Std C57.19.00:2004 General requirements and test procedure for power apparatus bushings
			Voltage Monitoring Apparatus	SPS-KOEMA 0221-1231:2012 Epoxy Mold Insulator type Voltage Detector
				SPS-KOEMA 0222-1232:2012 Cable(Wire) and Busbar Bonding type Voltage Detector
		Surge Arrestors, Surge Protective Devices	Surge arresters	ES-5920-0012:2016 Polymer housed lightening arrester with lead wire
				IEC 60099-4:2014 Surge arresters-part4:Metal-oxidesurge arresters without gaps for a.c. systems
			Low-voltage surge protective devices	KS C IEC 61643-11:2012 Low-voltage surge protective devices - Part 11: Surge protective devices connected to low-voltage power systems - Requirements and test methods

Group	Class	Products	Category of product	Standard
				KS C IEC 61643-21:2012 Low voltage surge protective devices - Part 21: Surge protective devices connected to telecommunications and signalling networks - Performance requirements and testing methods
				IEC 61643-11:2011 Low-voltage surge protective devices - Part 11: Surge protective devices connected to low-voltage power systems - Requirements and test methods
				IEC 61643-21:2012 Low-voltage surge protective devices - Part 21: Surge protective devices connected to telecommunications and signaling networks - Performance requirements and testing methods
289 Manufacture of Other Electrical Equipment	2890 Manufacture of Other Electrical Equipment	Measuring relays and protection equipment	Relays	KS C IEC 60255-21-1:1988 Electrical relays - Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment - Section One: Vibration tests (sinusoidal)
				KS C IEC 60255-21-2:1988 Electrical relays - Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment - Section Two: Shock and bump tests
				KS C IEC 60255-21-3:1993 Electrical relays - Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment - Section Three: Seismic tests

Group	Class	Products	Category of product	Standard
				KS C IEC 60255-26:2013 Measuring relays and protection equipment - Part 26: Electromagnetic compatibility requirements
				KS C IEC 60255-27:2013 Measuring relays and protection equipment - Part 27: Product safety requirements
				ES-5945-0001:2017 Overcurrent Relays
				ES-5945-0002:2017 Overcurrent Relays with Reclosing
				ES-5945-0003:2013 Over Voltage Relays
				ES-5945-0004:2013 Under Voltage Relays
				ES-5945-0005:2012 Negative Phase Sequence Relays
				ES-5945-0006:2017 Directional over-current relays
				ES-5945-0007:2008 Selective Ground Relays
				ES-5945-0008:2008 Current Ratio Differential Relays
				ES-5945-0009:2008 Reclosing Relays
				SPS-KEMC 1120-0579:2019 Digital Protective Relay
				SPS-KOEMA 0211-1229:2019 Digital selective grounding relay
				IEC 60255-1:2009 Measuring relays and protection equipment - Part 1: Common requirements
				IEC 60255-121:2014 Measuring relays and protection equipment - Part 121: Functional requirements for distance protection
				IEC 60255-127:2010 Measuring relays and protection equipment - Part 127: Functional requirements for over/under voltage protection

Group	Class	Products	Category of product	Standard
				IEC 60255-149:2013 Measuring relays and protection equipment - Part 149: Functional requirements for thermal electrical relays
				IEC 60255-151:2009 Measuring relays and protection equipment - Part 151: Functional requirements for over/under current protection
				IEC 60255-21-1:1988 Electrical relays - Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment - Section One: Vibration tests (sinusoidal)
				IEC 60255-21-2:1988 Electrical relays - Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment - Section Two: Shock and bump tests
				IEC 60255-21-3:1993 Electrical relays - Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment - Section 3: Seismic tests
				IEC 60255-26:2013 Measuring relays and protection equipment - Part 26: Electromagnetic compatibility requirements
				IEC 60255-27:2013 Measuring relays and protection equipment - Part 27: Product safety requirements
				IEEE std C37.90.2:2004 IEEE Standard for Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers



Group	Class	Products	Category of product	Standard
				IEEE std C37.90.3:2001 IEEE Standard electrostatic discharge tests for protective relays
				IEEE std C37.90:2005 IEEE Standard for Relays and Relay Systems Associated with Electric Power Apparatus
				JIS C 4609:1990 Directional Ground Relay Set for 6.6 kV Consumer
				JEC 2500:2010 Standard Of The Japanese Electrotechnical Committee Protective Relays For Electric Power Systems
				JEC 2510:1989 Standard Of The Japanese Electrotechnical Committee Overcurrent Relays
				JEC 2511:1995 Standard Of The Japanese Electrotechnical Committee Voltage Relays
				JEC 2512:2002 Directional ground relay
				JEC 2515:2005 Ratio differential relay for electrical apparatus
				JEC 2516:2000 Standard Of The Japanese Electrotechnical Committee Digital Type Distance Relays
				JEC 2517:2002 Directional ground relay
		Power Electronics	Power Electronics Equipment	IEC 62501:2017 Voltage sourced converter(VSC) valves for high-voltage direct current(HVDC) power transmission-Electrical testing
		Cells and batteries	Secondary cells and batteries	IEC 60622:2002 Secondary cells and batteries containing alkaline or other non-acid electrolytes-Sealed nickel-cadmium prismatic rechargeable single cells

Group	Class	Products	Category of product	Standard
				IEC 60623:2017 Secondary cells and batteries containing alkaline or other non-acid electrolytes-Vented nickel-cadmium prismatic rechargeable single cells
				IEC 61951-1:2017 Secondary cells and batteries containing alkaline or other non-acid electrolytes-Secondary sealed cells and batteries for portable applications-Part1:Nickel-Cadmium
				IEC 61951-2:2017 Secondary cells and batteries containing alkaline or other nonacid electrolytes-Secondary sealed cells and batteries for portable applications-Part2: Nickel-metalhydride
				IEC 62259:2003 Secondary cells and batteries containing alkaline or other non-acid electrolytes-Nickel-cadmiumprismatic secondary single cells with partial gas recombination
				UL 1642:2020 Safety Lithium Batteries
				UL 2054:2004 Safety Household and Commercial Batteries
			Storage battery	KS C 8504:2015 Lead-acid batteries for automobiles
				KS C 8505:2008 Stationary lead-acid batteries
				KS C 8510:2018 Lead-acid batteries for motorcycles
				KS C 8511:2018 Lead-acid batteries for motor train
				KS C 8518:2018 Stationary sealed lead-acid batteries(valve regulated types)

Group	Class	Products	Category of product	Standard
		Reactor	Reactor	KS C 4804:1981 Discharge coils for high voltage power capacitors
				KS C 4806:1975 Series reactors for high voltage power capacitors
				IEC 60076-6:2007 Power transformers - Part 6: Reactors
		Other Low-voltage Equipment	Photovoltaic inverters	IEC 62116:2014 Test procedure of islanding prevention measures for utility-interconnected photovoltaic inverters

End.

