Korea Laboratory Accreditation Scheme

CERTIFICATE OF ACCREDITATION

Hyosung Heavy Industries Corporation

Accreditation No. : KT940

Corporation Registration No. : 110111-6770154

Address of Laboratory : (Branch site)171, Yeondeok-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do, Republic of Korea

Date of Initial Accreditation : April 01, 2021

Validity of Accreditation : May 29, 2025 ~ May 28, 2029

Scope of Accreditation : Attached Annex

Date of issue : May 29, 2025

This testing laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to Joint ISO-ILAC-IAF Communiqué).

Kim daejin

Head

Korea Laboratory Accreditation Scheme

No. KT940

03. Electrical Testing

03.003 High-power, high-voltage machinery

Test method	Materials/ Products	Standard designation	Test range	Site	Field testing
IEC 60076-10:2016	High-Power,High-Voltage Machinery	Power transformers Part 10: Determination of sound levels	(25 ~ 140) dB(A)	BS	N
IEC 60076-18:2012	High-Power,High-Voltage Machinery	Power transformer Part 18: Measurement of frequency response	10 V, 10 Hz ~ 2 MHz	BS	N
IEC 60076-1:2011	High-Power,High-Voltage Machinery	Power transformers Part 1: General 11.1.3 Type tests e) Measurement of no-load loss and current at 90 % and 110 % of rated voltage 11.1.4 Special tests b) Winding hot-spot temperature-rise measurements d) Measurement of dissipation factor (tan δ) of the insulation system capacitances h) Measurement of d.c. insulation resistance each winding to earth and between windings l) Measurement of frequency response (Frequency Response Analysis or FRA) 11.2 Measurement of winding resistance 11.3 Measurement of voltage ratio and check of phase displacement 11.4 Measurement of short-circuit impedance and load loss 11.5 Measurement of no-load loss and current 11.6 Measurement of zero-sequence impedance(s) on three-phase transformers 11.7 Tests on on-load tap-changers - Operation test 11.12 Check of core and frame insulation	11.1.3 e) Max. 4 000 A, 100 kV 11.1.4 b) Max. 4 000 A, 100 kV d) P.F : Max. 10 kV, (0 ~ 5) % h) Insulation Resistance : D.C (250 ~ 5 000) V, 10 MΩ ~ 1 TΩ l) SFRA : 10 Hz to 2 MHz 11.2) 1 mΩ ~ 10 Ω 11.3) 1/1 ~ 700/1 (Ratio), Max. 600V (Phase displacement) 11.4) Max. 4 000 A, 100 kV 11.5) Max. 4 000 A, 100 kV 11.6) Max. 4 000 A, 100 kV 11.7) Max. 4 000 A, 1 200 kV 11.12) D.C (250 ~ 5 000) V, 10 MΩ ~ 1 TΩ	BS	N

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Test method	Materials/ Products	Standard designation	Test range	Site	Field testing
IEC 60076-2:2011	High-Power,High-Voltage Machinery	Power transformers Part 2: Temperature rise for liquid-immersed transformers	Max. 4 000 A, 100 kV, 200 ℃	BS	N
IEC 60076-3:2013+AMD1:2018 CSV	High-Power,High-Voltage Machinery	Power transformers Part 3: Insulation levels, dielectric tests and external clearances in air 10 Applied voltage test (AV) 11 Induced voltage tests (IVW and IVPD) 12 Line terminal AC withstand test (LTAC) 13 Lightning impulse tests (LI, LIC, LIN, LIMT) 14 Switching impulse test (SI)	10 Max. 570 kV 11 Max. 1 386 kV, Min. 5 pC 12 Max. 494 kV (P-G) 13 Max. 2 294 kV 14 Max. 1 767kV	BS	N

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Test method	Materials/ Products	Standard designation	Test range	Site	Field testing
IEC 60076-6:2007	High-Power,High-Voltage Machinery	Power transformers Part 6: Reactors 7.8.2 Routine tests -measurement of insulation resistance and/or capacitance and dissipation factor (tan δ) of the winding insulation to earth for liquid-immersed reactors -measurement of winding resistance (IEC 60076-1); 7.8.5 Determination of reactance and linearity of reactance 7.8.6 Measurement of loss (routine test, special test) 7.8.7 Measurement of harmonics of the current (special test) 7.8.8 Measurement of zero-sequence reactance on three-phase reactors (special test) 7.8.9 Measurement of mutual reactance on three-phase reactors (special test) 7.8.10.2 Separate source a.c. withstand voltage test (routine test, special test) 7.8.10.3 Induced a.c. withstand voltage test (routine test) 7.8.10.4 Lightning impulse test (routine test) 7.8.10.6 Switching impulse test (type test, routine test) 7.8.12 Measurement of acoustic sound level (type test, special test) 7.8.13 Measurement of vibration (type test) 7.8.14 Temperature rise test (type test)	7.8.2 P.F : Max. 10 kV, (0 ~ 5) % Insulation Resistance : D.C (250 ~ 5 000) V, 10 MΩ ~ 1 TΩ Winding Resistance : 1 mΩ ~ 10 Ω 7.8.5 Max. 500 A, Max. 300 kV 7.8.6 Max. 500 A, Max. 300 kV 7.8.7 Max. 500 A, Max. 300 kV 7.8.8 Max. 4 000 A, 100 kV 7.8.9 Max. 500 A, Max. 300 kV 7.8.10.2 Max. 494 kV 7.8.10.3 Max. 1 386 kV, Min. 5 pC 7.8.10.4 Max. 2 294 kV 7.8.10.6 Max. 1 767 kV 7.8.12 (25 ~ 140) dB(A) 7.8.13 Max 200 mm 7.8.14 Max. 500 A, Max. 300 kV	BS	N

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Test method	Materials/ Products	Standard designation	Test range	Site	Field testing
IEC 62271-100:2017	High-Power,High-Voltage Machinery	High-voltage switchgear and controlgear - Part 100: Alternating-current circuit-breakers 6.2.6.1 Power-frequency voltage tests 6.2.6.2 Lightning impulse voltage tests 6.2.7.1 Power-frequency voltage tests 6.2.7.2 Switching impulse voltage tests 6.2.7.3 Lightning impulse voltage tests 6.4 Measurement of the resistance of the main circuit 6.101 Mechanical and environmental tests 7.1 Dielectric test on the main circuit 7.3 Measurement of the resistance of the main circuit 7.101 Mechanical operation tests	6.2.6.1 Max. 530 kV 6.2.6.2 Max. 1 200 kV 6.2.7.1 Max. 960 kV 6.2.7.2 Max. 1 800 kV 6.2.7.3 Max. 2 400 kV 6.4 10 μΩ ~ 10 mΩ 6.101 Temperature : -50 ℃ ~ +50 ℃, Humidity : (30 ~ 95) % R.H. 7.1 Max. 960 kV 7.3 10 μΩ ~ 10 mΩ 7.101 (10 ~ 10 000) ms	BS	N
IEC 62271-100:2021+AMD1:2024 CSV	High-Power,High-Voltage Machinery	High-voltage switchgear and controlgear - Part 100: Alternating current circuit-breakers 7.2.7.2 Power-frequency voltage tests 7.2.7.3 Lightning impulse voltage tests 7.2.8.2 Power-frequency voltage tests 7.2.8.3 Switching impulse voltage tests 7.2.8.4 Lightning impulse voltage tests 7.4.4 Resistance measurement of contacts and connections in the main circuit as a condition check 7.101 Mechanical and environmental tests 8.2 Dielectric test on the main circuit 8.4 Measurement of the resistance of the main circuit 8.101 Mechanical operation tests	7.2.7.2 Max. 530 kV 7.2.7.3 Max. 1 200 kV 7.2.8.2 Max. 960 kV 7.2.8.3 Max. 1 800 kV 7.2.8.4 Max. 2 400 kV 7.4.4 10 μΩ ~ 10 mΩ 7.101 Temperature : -50 ℃ ~ +50 ℃, Humidity : (30 ~ 95) % R.H. 8.2 Max. 960 kV 8.4 10 μΩ ~ 10 mΩ 8.101 (10 ~ 10 000) ms	BS	N

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Test method	Materials/ Products	Standard designation	Test range	Site	Field testing
IEC 62271-102:2018	High-Power,High-Voltage Machinery	High-voltage switchgear and controlgear - Part 102: Alternating current disconnectors and earthing switches 7.2.7 Tests of disconnectors and earthing switches of Ur ≤ 245 kV - Power-frequency voltage tests, Lightning impulse voltage tests 7.2.8 Test of disconnectors and earthing switches of Ur > 245 kV - Power-frequency voltage tests, Switching impulse voltage tests, Lightning impulse voltage tests 7.4 Resistance measurement 7.104 Low- and high-temperature tests 8.2 Dielectric test on the main circuit 8.4 Measurement of the resistance of the main circuit 8.101 Mechanical operation tests	7.2.7 Power-frequency : Max. 530 kV Lightning impulse : Max. 1 200 kV 7.2.8 Power-frequency : Max. 960 kV Switching impulse : Max. 1 800 kV Lightning impulse : Max. 2 400 kV 7.4 10 μΩ ~ 10 mΩ 7.104 Temperature : -50 ℃ ~ +50 ℃, Humidity : (30 ~ 95) % R.H. 8.2 Max. 960 kV 8.4 10 μΩ ~ 10 mΩ 8.101 (10 ~ 10 000) ms	BS	N
IEC 62271-1:2017+AMD:2021 CSV	High-Power,High-Voltage Machinery	High-voltage switchgear and controlgear - Part 1: Common specifications for alternating current switchgear and controlgear 7.2.7.2 Power-frequency voltage tests 7.2.7.3 Lightning impulse voltage tests 7.2.8.2 Power-frequency voltage tests 7.2.8.3 Switching impulse voltage tests 7.2.8.4 Lightning impulse voltage tests 7.4.4 Resistance measurement of contacts and connections in the main circuit as a condition check 8.2 Dielectric test on the main circuit 8.4 Measurement of the resistance of the main circuit	7.2.7.2 Max. 530 kV 7.2.7.3 Max. 1 200 kV 7.2.8.2 Max. 960 kV 7.2.8.3 Max. 1 800 kV 7.2.8.4 Max. 2 400 kV 7.4.4 10 μΩ ~ 10 mΩ 8.2 Max. 960 kV 8.4 10 μΩ ~ 10 mΩ	BS	N

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Test method	Materials/ Products	Standard designation	Test range	Site	Field testing
IEC 62271-203:2022 CMV	High-Power,High-Voltage Machinery	High-voltage switchgear and controlgear - Part 203: Gas-insulated metal-enclosed switchgear for rated voltages above 52 kV 7.2.7.2 Power-frequency voltage tests 7.2.7.3 Lightning impulse voltage tests 7.2.8.2 Power-frequency voltage tests 7.2.8.3 Switching impulse voltage tests 7.2.8.4 Lightning impulse voltage tests 7.4.4 Resistance measurement of contacts and connections in the main circuit as a condition check 7.102 Mechanical and environmental tests 8.2.101 Power-frequency voltage tests on the main circuit 8.4 Measurement of the resistance of the main circuit 8.102 Mechanical operation tests	7.2.7.2 Max. 530 kV 7.2.7.3 Max. 1 200 kV 7.2.8.2 Max. 960 kV 7.2.8.3 Max. 1 800 kV 7.2.8.4 Max. 2 400 kV 7.4.4 10 μΩ ~ 10 mΩ 7.102 Temperature : -50 ℃ ~ +50 ℃, Humidity : (30 ~ 95) % R.H. 8.2.101 Max. 960 kV 8.4 10 μΩ ~ 10 mΩ 8.102 (10 ~ 10 000) ms	BS	N
IEC 62501:2024 CMV	High-Power,High-Voltage Machinery	Voltage sourced converter (VSC) valves for high-voltage direct current (HVDC) power transmission - Electrical testing 7.3.4 Valve support switching impulse test 7.3.5 Valve support lightning impulse test	7.3.4 Max 1 550 kV 7.3.5 Max 2 100 kV	BS	N

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Test method	Materials/ Products	Standard designation	Test range	Site	Field testing
IEC 62927:2017+AMD 1:2023 CSV	High-Power,High-Voltage Machinery	Voltage sourced converter (VSC) valves for static synchronous compensator (STATCOM) - Electrical testing 6.4 Maximum continuous operating duty test 6.5 Maximum temporary overload operating duty test 6.6 Minimum start voltage test 7.3.2 Valve support AC voltage test 7.3.3 Valve support lightning impulse test 8.4.1 MVU AC voltage test 8.4.3 MVU lightning impulse test 9.4.1.2 Valve AC voltage test 9.4.2 Valve switching impulse test 10. IGBT overcurrent turn-off test 13.5.1 Visual Inspection 13.5.2 Connection check 13.5.3 Voltage-grading circuit check 13.5.4 Control, protection and monitoring circuit checks 13.5.5 Voltage withstand check 13.5.6 Turn-on/turn-off check 13.5.7 Pressure test	6.4 Max. 12 kV, 1 500 A 6.5 Max. 1 500 A 6.6 Min. 4.8 kV 7.3.2 Max. 50 kV 7.3.3 Max 2 100 kV 8.4.1 Max. 100 kV 8.4.3 Max. 1 500 kV 9.4.1.2 Max. 20 kV 9.4.2 Max 1 550 kV 10 Max. 12 kV 13.5.7 Max. 0.9 MPa	BS	N

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Test method	Materials/ Products	Standard designation	Test range	Site	Field testing
IEEE C37.09-2018/Cor1-2021	High-Power,High-Voltage Machinery	IEEE Standard Test Procedures for AC High-Voltage Circuit Breakers with Rated Maximum Voltage Above 1000 V - Corrigendum 1 4.4.7 Measurement of the resistance of the main circuit 4.5.4.1 Power-frequency withstand voltage tests - Dry tests procedure 4.5.5 Full-wave lightning impulse withstand voltage tests 4.5.8 Switching impulse voltage withstand tests 4.13 Mechanical endurance and environmental tests 5.11 Mechanical operation tests 5.12 Timing tests 5.14 Electrical resistance of current path test 5.15 Power-frequency withstand voltage tests on major insulation components	4.4.7 10 μΩ ~ 10 mΩ 4.5.4.1 Max. 960 kV 4.5.5 Max. 2 400 kV 4.5.8 Max. 1 800 kV 4.13 Temperature : -50 ℃ ~ +50 ℃, Humidity : (30 ~ 95) % R.H. 5.11 (20 ~ 300) V 5.12 (10 ~ 10 000) ms 5.14 10 μΩ ~ 10 mΩ 5.15 Max. 960 kV	BS	N
IEEE Std C37.100.1-2018	High-Power,High-Voltage Machinery	IEEE Standard of Common Requirements for High Voltage Power Switchgear Rated Above 1000 V 7.3.7.2 Power-frequency voltage tests 7.3.7.3 Lightning impulse voltage tests 7.3.8.2 Power-frequency voltage tests 7.3.8.3 Switching impulse voltage tests 7.3.8.4 Lightning impulse voltage tests 7.5.1 Measurement of the resistance of circuits - main circuit 8.2 Dielectric test on the main circuit 8.4 Measurement of the resistance of the main circuit	7.3.7.2 Max. 530 kV 7.3.7.3 Max. 1 200 kV 7.3.8.2 Max. 960 kV 7.3.8.3 Max. 1 800 kV 7.3.8.4 Max. 2 400 kV 7.5.1 10 μΩ ~ 10 mΩ 8.2 Max. 960 kV 8.4 10 μΩ ~ 10 mΩ	BS	N

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Test method	Materials/ Products	Standard designation	Test range	Site	Field testing
IEEE Std C37.122-2021	High-Power,High-Voltage Machinery	IEEE Standard for High Voltage Gas-Insulated Substations Rated Above 52 kV 7.2.7.2 Power-frequency voltage tests 7.2.7.3 Lightning impulse voltage tests 7.2.8.2 Power-frequency voltage tests 7.2.8.3 Switching impulse voltage tests 7.2.8.4 Lightning impulse voltage tests 7.4 Measurement of resistance of circuits 7.11 Mechanical and environmental tests 8.2.1 Power-frequency withstand voltage test 8.4 Measurement of the resistance of the main circuit 8.7 Mechanical operation tests	7.2.7.2 Max. 530 kV 7.2.7.3 Max. 1 200 kV 7.2.8.2 Max. 960 kV 7.2.8.3 Max. 1 800 kV 7.2.8.4 Max. 2 400 kV 7.4. 10 μΩ ~ 10 mΩ 7.11 Temperature : -50 ℃ ~ +50 ℃, Humidity : (30 ~ 95) % R.H. 8.2.1 Max. 960 kV 8.4 10 μΩ ~ 10 mΩ 8.7 (10 ~ 10 000) ms	BS	N
IEEE Std C57.12.00-2015	High-Power,High-Voltage Machinery	IEEE Standard for General Requirement for Liquid-Immersed Distribution, Power, and Regulating Transformers 5.11 Temperature-rise and loading conditions Table 17 Core insulation resistance	5.11 Max. 4 000 A, 100 kV, 200 ℃ Table 17 D.C (250 ~ 5 000) V, 10 MΩ ~ 1 TΩ	BS	N
IEEE Std C57.12.00™-2021	High-Power,High-Voltage Machinery	IEEE Standard for General Requirement for Liquid-Immersed Distribution, Power, and Regulating Transformers 5.11 Temperature-rise and loading conditions Table 17 Core insulation resistance	5.11 Max. 4 000 A, 100 kV, 200 ℃ Table 17 D.C (250 ~ 5 000) V, 10 MΩ ~ 1 TΩ	BS	N

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Test method	Materials/ Products	Standard designation	Test range	Site	Field testing
IEEE Std C57.12.90-2015	High-Power,High-Voltage Machinery	IEEE Standard Test Code for Liquid-Immersed Distribution, Power, and Regulating Transformers 5 Resistance measurements 6 Polarity and phase-relation tests 7 Ratio tests 8 No-load losses and excitation current 9 Load losses and impedance voltage 9.5 Zero-phase-sequence impedance 10.2 Switching impulse test procedures 10.3 Lightning impulse test procedures 10.6 Applied voltage tests 10.8 Induced-voltage test for Class II power transformers 10.9 Partial discharge measurement 10.10 Insulation power-factor tests 10.11 Insulation resistance tests 11 Temperature-rise tests 13 Audible sound emissions	5 1 mΩ ~ 10 Ω 6 Max. 600 V (Phase displacement) 7 1/1 ~ 700/1 (Ratio) 8 Max. 4 000 A, 100 kV 9 Max. 4 000 A, 100 kV 9.5 Max. 4 000 A, 100 kV 10.2 Max. 1 700 kV 10.3 Max. 2 255 kV 10.6 Max. 494 kV 10.8 Max. 885 kV (P-G) 10.9 Min. 5 pC 10.10 Max. 10 kV, (0 ~ 5) % 10.11 D.C (250 ~ 5 000) V, 10 MΩ ~ 1 TΩ 11 Max. 4 000 A, 100 kV, 200 ℃ 13 (25 ~ 140) dB(A)	BS	N

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Test method	Materials/ Products	Standard designation	Test range	Site	Field testing
IEEE Std C57.12.90™-2021	High-Power,High-Voltage Machinery	IEEE Standard Test Code for Liquid-Immersed Distribution, Power, and Regulating Transformers 5 Resistance measurements 6 Polarity and phase-relation tests 7 Ratio tests 8 No-load losses and excitation current 9 Load losses and impedance voltage 9.5 Zero-phase-sequence impedance 10.2 Switching impulse test procedures 10.3 Lightning impulse test procedures 10.6 Applied voltage tests 10.8 Induced-voltage test for Class II power transformers 10.9 Partial discharge measurement 10.10 Insulation power-factor tests 10.11 Insulation resistance tests 11 Temperature-rise tests 13 Audible sound emissions	5 1 mΩ ~ 10 Ω 6 Max. 600 V (Phase displacement) 7 1/1 ~ 700/1 (Ratio) 8 Max. 4 000 A, 100 kV 9 Max. 4 000 A, 100 kV 9.5 Max. 4 000 A, 100 kV 10.2 Max. 1 700 kV 10.3 Max. 2 255 kV 10.6 Max. 494 kV 10.8 Max. 885 kV (P-G) 10.9 Min. 5 pC 10.10 Max. 10 kV, (0 ~ 5) % 10.11 D.C (250 ~ 5 000) V, 10 MΩ ~ 1 TΩ 11 Max. 4 000 A, 100 kV, 200 ℃ 13 (25 ~ 140) dB(A)	BS	N

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Test method	Materials/ Products	Standard designation	Test range	Site	Field testing
IEEE Std C57.21-2008	High-Power,High-Voltage Machinery	IEEE Standard Requirements, Terminology, and Test Code for Shunt Reactors Rated Over 500 kVA 3.4.1 impedance 3.4.2 total losses 7 Losses and impedance 7.2.3 Zero-sequence impedance 8 Temperature rise 9.1.1 General h) insulation resistance 9.1.2 Applied-voltage test 9.1.3.1 Low-frequency overvoltage test for oil-immersed shunt reactors 9.1.4 Lightning impulse test 9.1.5 Insulation power factor test 9.2.4 Switching impulse test 10.1 General-Measurement of mutual reactance on three-phase reactors 10.2.4 Conversion of resistance measurements 10.3.10 Insulation power factor tests 10.5 Temperature-rise tests 10.6 Audible-sound-level test 10.7 Vibration tests on oil-immersed shunt reactors	3.4.1 Max. 500 A, Max. 300 kV 3.4.2 Max. 500 A, Max. 300 kV 7 Max. 500 A, Max. 300 kV 7.2.3 Max. 4 000 A, 100 kV 8 Max. 500 A, Max. 300 kV 9.1.1.h D.C (250 ~ 5 000) V, 10 MΩ ~ 1 TΩ 9.1.2 Max. 494 kV 9.1.3.1 Max. 885 kV (P-G), Min 0.1 pC 9.1.4 Max. 2 255 kV 9.1.5 Max. 10 kV, (0 ~ 5) % 9.2.4 Max. 1 700 kV 10.1 Max. 500 A, Max. 300 kV 10.2.4 1 mΩ ~ 10 Ω 10.3.10 Max. 10 kV, (0 ~ 5) % 10.5 Max. 500 A, Max. 300 kV, 200 ℃ 10.6 25 ~ 140 dB(A) 10.7 Max 200 μm	BS	N

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Test method	Materials/ Products	Standard designation	Test range	Site	Field testing
IEEE Std C57.21™-2021	High-Power,High-Voltage Machinery	IEEE Standard Requirements, Terminology, and Test Code for Shunt Reactors Rated Over 500 kVA 3.4 impedance and total losses 7 Losses and impedance 7.2.3 Zero-sequence impedance 8 Temperature rise 9.1.1 General h) insulation resistance 9.1.2 Applied-voltage test 9.1.3.1 Low-frequency overvoltage test for liquid-immersed shunt reactors 9.1.4 Lightning impulse test 9.1.5 Insulation power factor test 9.2.4 Switching impulse test 10.1 General-Measurement of mutual reactance on three-phase reactors 10.2.4 Conversion of resistance measurements 10.3.10 Insulation power factor tests 10.5 Temperature-rise tests 10.6 Audible sound emission and testing of shunt reactors 10.7 Vibration tests on liquid-immersed shunt reactors	3.4 Max. 500 A, Max. 300 kV 7 Max. 500 A, Max. 300 kV 7.2.3 Max. 4 000 A, 100 kV 8 Max. 500 A, Max. 300 kV 9.1.1.h D.C (250 ~ 5 000) V, 10 MΩ ~ 1 TΩ 9.1.2 Max. 494 kV 9.1.3.1 Max. 885 kV (P-G), Min 0.1 pC 9.1.4 Max. 2 255 kV 9.1.5 Max. 10 kV, (0 ~ 5) % 9.2.4 Max. 1 700 kV 10.1 Max. 500 A, Max. 300 kV 10.2.4 1 mΩ ~ 10 Ω 10.3.10 Max. 10 kV, (0 ~ 5) % 10.5 Max. 500 A, Max. 300 kV, 200 ℃ 10.6 25 ~ 140 dB(A) 10.7 Max 200 μm	BS	N

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Test method	Materials/ Products	Standard designation	Test range	Site	Field testing
KS C IEC 60076-1:2011	High-Power,High-Voltage Machinery	Power transformers Part 1: General 11.2 Measurement of winding resistance 11.3 Measurement of voltage ratio and check of phase displacement 11.4 Measurement of short-circuit impedance and load loss 11.5 Measurement of no-load loss and current 11.6 Measurement of zero-sequence impedance(s) on three-phase transformers 11.7 Tests on on-load tap-changers - Operation test 11.12 Check of core and frame insulation	11.2 1 mΩ ~ 10 Ω 11.3 1/1 ~ 700/1 (Ratio), Max. 600 V (Phase displacement) 11.4 Max. 4 000 A, 100 kV 11.5 Max. 4 000 A, 100 kV 11.6 Max. 4 000 A, 100 kV 11.7 Max. 4 000 A, 1 200 kV 11.12 D.C (250 ~ 5 000) V, 10 MΩ ~ 1 TΩ	BS	N

End.