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Aktuelle Liste des flexiblen Geltungsbereichs der DAkkS-Akkreditierung auf Grundlage der Anforderung der DAkkS-Regel R-17025-PL (Rev. 1.0)

Current list covered by the flexible scope of accreditation, based on the requirements of DAkkS-Document R-17025-PL (Rev. 1.0)

Ausgabe der folgenden Listen: *Version of the following lists:*	30.06.2026
Ausgabe des letzten Geltungsbereichs der DAkkS-Akkreditierung: *Version of the current DAkkS-scope of accreditiation:*	10.03.2026

Änderungen gegenüber dem letzten Ausgabestand des Geltungsbereichs der DAkkS-Akkreditierung (Anlage zur Urkunde) sind in blauer Schriftfarbe wiedergegeben.
Changes from the current version of DAkkS-scope of accreditiation are shown in blue font color.

Hinweise/*Remarks*:

1. Angegeben sind ausschließlich offizielle Versionen von Dokumenten der Herausgeber (IEC, IEEE, usw.).
   Only official versions of documents published by the respective organizations (IEC, IEEE, etc.) are listed.
2. Im Rahmen der Flexibilisierung des Geltungsbereichs der DAkkS-Akkreditierung können ggf. auch abweichende Ausgabestände von Normen als Grundlage für Prüfungen angewendet werden. Auf Anfrage kann eine entsprechende Detailprüfung erfolgen.
   As part of the flexibilisation of the scope of DAkkS-accreditiation, different editions of standards may also be used as the basis for testing. A detailed review can be conducted upon request.

Prüfbereich: **Hochspannungsschaltgeräte und -anlagen sowie Geräte der elektrischen Energietechnik**
Test range: *High-voltage switch- and controlgear and power engineering equipment*

Abschnitt 1: Prüfverfahren / *section 1: test methods*

No. DAkkS	test methods (tests or types of tests)	reference standard	techn. parameters
High power / current tests			
1	Short-time withstand current and peak withstand current test	IEC 62271-1:2017 cl. 7.6	≤ 270 kA peak
2	Ability to withstand short circuit / Short-circuit current tests / Short-time current tests	IEC 62271-1:2017 cl. 7.6	≤ 100 kA
3	Short-circuit making and breaking tests / Interruption tests / Terminal fault test	IEC 62271-100:2021 cl. 7.107	≤ 1400 kV and ≤ 100 kA
4	Inrush current withstand test / Discharge current test	IEC 62271-100:2021 cl. 7.111	≤ 600 kV
5	Short-line fault tests	IEC 62271-100:2021 cl. 7.109	≤ 1400 kV and ≤ 100 kA
6	Out-of-phase making and breaking tests	IEC 62271-100:2021 cl. 7.110	≤ 1400 kV and ≤ 100 kA
7	By-pass making and insertion tests	IEC 62271-109:2019 cl. 7.103	≤ 1400 kV and ≤ 100 kA
8	Internal arc fault tests / Internal fault test	IEC 62271-203:2022 cl. 7.105	≤ 100 kA
9	Short-circuit tests on arrester	IEC 60099-4:2014 cl. 8.10	≤ 100 kA
10	Capacitive current switching tests	IEC 62271-100:2021 cl. 7.111	≤ 1200 kV
11	Bus-transfer current switching tests	IEC 62271-102:2018 cl. 7.106	≤ 1200 kV
12	Induced current switching tests	IEC 62271-102:2018 cl. 7.107	≤ 1200 kV
13	Inductive load switching tests	IEC 62271-110:2023 cl. 4.4	≤ 1200 kV

No. DAkkS	test methods (tests or types of tests)	reference standard	techn. parameters
High voltage tests			
14	Power-frequency voltage test (AC)	IEC 60060-1:2010 cl. 6 IEEE Std. 4:2013 cl. 6	≤ 1200 kV, 50 Hz
15	DC voltage test (DC)	IEC 60060-1:2010 cl. 5 IEEE Std. 4:2013 cl. 7	≤ 1200 kV
16	Lightning impulse voltage test (LI)	IEC 60060-1:2010 cl. 7 IEEE Std. 4:2013 cl. 8	≤ 2,4 MV
17	Lightning impulse voltage test (LI), chopped wave	IEC 60060-1:2010 cl. 7 IEEE Std. 4:2013 cl. 8	≤ 2,4 MV
18	Switching impulse voltage test (SI)	IEC 60060-1:2010 cl. 8 IEEE Std. 4:2013 cl. 8	≤ 1,7 MV
19	Tests with combined and composite voltages (DC, AC, SI, LI)	IEC 60060-1:2010 cl. 9 IEEE Std. 4:2013 cl. 10	≤ 800 kV (DC); ≤ 500 kV (AC); ≤ 1,7 kV (SI); ≤ 2,4 MV (LI)
20	Test under wet conditions (AC / DC / LI / SI)	IEC 60060-1:2010 cl. 4.4 IEEE Std. 4:2013 cl. 11	x
21	Partial discharge measurement (AC / DC)	IEC 60270:2000 cl. 8/11	all above noise level
22	Radio interference voltage measurement	IEC 62271-1:2017 cl. 7.9.1	all above noise level
23	Bus-charging current switching tests on disconnectors	IEC 62271-102:2018 cl. 7.108	≤ 800 kV (AC)
24	short-duration power-frequency voltage withstand tests of auxiliary and control circuits of switchgear and controlgear	IEC 62271-1:2017 cl. 7.10.5	2 kV
25	X-radiation test for vacuum interrupters	IEC 62271-1:2017 cl. 7.11	1 µSv/h bis 1 mSv/h 1 keV to 2 MeV
Mechanical / High temperature tests			
26	Low- and high temperature tests	IEC 62271-100:2021 cl. 7.101.3	-60°C to + 80°C
27	Mechanical endurance/operation test	IEC 62271-100:2021 cl. 7.101.2	x
28	Gas Tightness test	IEC 62271-1:2017 cl. 7.8	x
29	Temperature-rise tests / continuous current tests of the main current path	IEC 62271-1:2017 cl. 7.5	DC ≤ 10kA AC ≤ 10kA (50/60Hz)
30	Resistance measurement of the main current path	IEC 62271-1:2017 cl. 7.5.5	x
31	Continuous current test/temperature rise test of the auxiliary and control circuit	IEC 62271-1:2017 cl. 7.5.3.2	x
32	Test on the power kinematic chain and the position-indicating kinematic chain	IEC 62271-102:2018 cl. 7.105	x
33	Verification of IP coding	IEC 62271-1:2017 cl. 7.7.1	IP 3X, 4X, 5X, 6X, X3, X4, X5
34	Sound level measurement	ISO 3744:2010	x
35	Electrical continuity of earth metallic parts	IEC 62271-1:2017 cl. 7.4.3	x
36	Testing of mechanical interlocking devices	IEC 62271-102:2018 cl. 7.102.6	x
37	Operation under severe ice condition	IEC 62271-100:2021 cl. 7.101.5	x

No. DAkkS	test methods (tests or types of tests)	reference standard	techn. parameters
Surge arrester tests			
38	Power-frequency current test (AC)	IEC60099-4 (2014) cl. 8.8	≤ 800A, 50 Hz
39	Leakage current measurement (AC)	IEC60099-4 (2014) cl. 8.7	≤ 400mA, 50 Hz, 150 Hz
40	DC current test	IEC60099-9 (2014) cl. 9.14	≤ 30 mA
41	Impulse currents	IEC60099-4 (2014) cl. 8.3	1/2 µs ≤ 25 kA; 2/20 µs ≤ 40 kA; 4/10 s ≤ 150 kA; 8/20 µs ≤ 40 kA; 30/60 µs ≤ 3 kA; 200 µs ≤ 40 kA
42	Long duration current	IEC60099-4 (2014) cl. 8.5.2	0.5 ms - 5ms, ≤ 5 kA
43	Residual voltage	IEC60099-4 (2014) cl. 8.3	1/2 µs ≤ 30 kV; 2/20 µs ≤ 50 kV; 4/10 µs ≤ 50 kV; 8/20 µs ≤ 500 kV; 30/60 µs ≤ 50 kV; 200 µs ≤ 20 kV, 0.5 ms - 5 ms, ≤ 20 kV
44	Heat dissipation behaviour verification	IEC60099-4 (2014) cl. 8.6	10°C - 250°C
45	Test to verify long term stability under continuous operating voltage/ Accelerated ageing procedure	IEC60099-4 (2014) cl. 8.4	
46	Repetitive charge transfer withstand / Repeated energy withstand test	IEC60099-4 (2014) cl. 8.5	
47	Operating duty/ Energy withstand and power-frequency voltage stability test (thermal recovery test)	IEC60099-4 (2014) cl. 8.7	
48	Power-frequency voltage versus time	IEC60099-4 (2014) cl. 8.8	
49	Test to verify the dielectric withstand	IEC60099-4 (2014) cl. 8.15	4/10 µs ≤ 150 kA
50	Arrester disconnector/fault indicator	IEC60099-4 (2014) cl. 8.9	
51	Force (tensile test)	IEC61952 (2008) cl. 10.4.2	100 kN to 980 kN
52	Bending moment (Test of the bending moment)	IEC60099-4 (2014) cl. 8.11, cl. 10.8.11	0.06 kNm to 410 kNm
53	Deflection (Test of the bending moment)	IEC60099-4 (2014) cl. 8.11, cl. 10.8.11	up to 500 mm
54	Thermo-mechanical preconditioning (Test of the bending moment)	IEC60099-4 (2014) cl. 10.8.11.3.1	+80 °C to -60 °C, 0.06 kNm to 225 kNm
55	Water immersion test	IEC62217 (2012) cl. 9.2.6	NaCl, up to +100 °C
56	Temperature cycling test	IEC60099-4 (2014) cl. 8.16.2, 8.12.3.1	+80 °C to -60 °C
57	Seal leak rate	IEC60099-4 (2014) cl. 8.13	

Abschnitt 2: Normen / *section 2: standards*			
testing field	standard / Version	title of standard	test range / restrictions (No. test method)
General			
Allgemein / General	IEC 62271-1:2017	High-voltage switchgear and controlgear - Part 1: Common specifications for alternating current switchgear and controlgear	1, 14, 16, 18, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31, 33, 35, 36, 37
Allgemein / General	IEC 62271-1 AMD 1:2021	High-voltage switchgear and controlgear – Part 1: Common specifications for alternating current switchgear and controlgear; Amendment 1	14, 16, 18, 20, 21, 22, 25
Allgemein / General	IEC/TS 62271-5:2024	High-voltage switchgear and controlgear - Part 5: Common specifications for direct current switchgear and controlgear	1, 15, 16, 18, 21, 22, 24, 25, 28, 29, 30, 33
Allgemein / General	IEEE Std C37.100.1:2018	IEEE Standard of Common Requirements for High Voltage Power Switchgear Rated Above 1000 V	1, 14, 16, 18, 20, 21, 22, 25, 27, 28, 29, 30, 31, 33
Allgemein / General	GOST 1516.3-96	Electrical equipment for a.c. voltages from 1 to 750 kV - Requirements for electric strength of insulation	14, 16, 17, 18, 20, 21, 24
Circuit-breakers			
Leistungsschalter / Circuit-breakers	IEC 62271-100:2021	High-voltage switchgear and controlgear – Part 100: Alternating-current circuit-breakers	1, 3, 5, 6, 7, 10, 14, 16, 18, 20, 21, 22, 25, 26, 27, 28, 29, 30, 31, 33, 35, 37
Leistungsschalter / Circuit-breakers	IEC 62271-100:2021-12 Corrigendum 1:2021	High-voltage switchgear and controlgear – Part 100: Alternating-current circuit-breakers	1, 3, 5, 6, 7, 10, 14, 16, 18, 20, 21, 22, 25, 26, 27, 28, 29, 30, 31, 33, 35, 37
Leistungsschalter / Circuit-breakers	IEC 62271-100:2021 Corrigendum 2: 2022-07	High-voltage switchgear and controlgear – Part 100: Alternating-current circuit-breakers	1, 3, 5, 6, 7, 10, 14, 16, 18, 20, 21, 22, 25, 26, 27, 28, 29, 30, 31, 33, 35, 37
Leistungsschalter / Circuit-breakers	IEC 62271-100:2021 Corrigendum 3: 2024-01	High-voltage switchgear and controlgear – Part 100: Alternating-current circuit-breakers	1, 3, 5, 6, 7, 10, 14, 16, 18, 20, 21, 22, 25, 26, 27, 28, 29, 30, 31, 33, 35, 37
Leistungsschalter / Circuit-breakers	IEC 62271-100:2021 IEC 62271-100 AMD1: 2024	High-voltage switchgear and controlgear - Part 100: Alternating-current circuit-breakers; Amendment 1	1, 3, 5, 6, 7, 10, 14, 16, 18, 20, 21, 22, 25, 26, 27, 28, 29, 30, 31, 33, 35, 37
Leistungsschalter / Circuit-breakers	IEC 62271-101:2021	High-voltage switchgear and controlgear - Part 101: Synthetic testing	3, 5, 6, 10
Leistungsschalter / Circuit-breakers	IEC 62271-101:2021 Corrigendum 1: 2021-10	High-voltage switchgear and controlgear - Part 101: Synthetic testing	3, 5, 6, 10
Leistungsschalter / Circuit-breakers	IEC 62271-108:2020	High-voltage switchgear and controlgear - Part 108: High-voltage alternating current disconnecting circuit-breakers for rated voltages of 72,5 kV and above	1, 3, 5, 6, 10, 14, 16, 18, 20, 21, 22, 25, 26, 27, 28, 29, 30, 35
Leistungsschalter / Circuit-breakers	IEC 62271-110:2023	High-voltage switchgear and controlgear - Part 110: Inductive load switching	13
Leistungsschalter / Circuit-breakers	IEC 62271-111:2019 IEEE C 37.60:2019	High-voltage switchgear and controlgear - Part 111: Automatic circuit reclosers for alternating current systems up to and including 38 kV	14, 16, 18, 20, 21, 22, 26, 27, 28, 29, 30, 35
Leistungsschalter / Circuit-breakers	IEC/TS 62271-313:2025	High-voltage switchgear and controlgear - Part 313: Direct current circuit-breakers	26, 27, 28, 29, 30, 31, 33, 35, 37
Leistungsschalter / Circuit-breakers	DIN EN 50152-1:2013 VDE 0115-320-1:2013 BS EN 50152-1:2012+A1:2013 DIN EN 50152-1/A1:2014 VDE 0115-320-1/A1:2014	Railway applications. Fixed installations. Particular requirements for alternating current switchgear. Circuit-breakers with nominal voltage above 1 kV	26
Leistungsschalter / Circuit-breakers	IEC/TR 62271-302:2010	High-voltage switchgear and controlgear - Part 302: Alternating current circuit-breakers with intentionally non-simultaneous pole operation	1, 3, 5, 6, 10, 14, 16, 18, 20, 21, 22, 26, 27, 28, 29, 30, 35
Leistungsschalter / Circuit-breakers	IEC/TR 62271-310:2008	High-voltage switchgear and controlgear - Part 310: Electrical endurance testing for circuit-breakers a rated voltage 52 kV	3, 5, 10
Leistungsschalter / Circuit-breakers	IEEE C37.04:2018	IEEE Standard for Ratings and Requirements for AC High-Voltage Circuit Breakers with Rated Maximum Voltage Above 1000 V	14, 16, 17, 18, 20, 21, 22, 26, 27, 28, 29, 30, 35
Leistungsschalter / Circuit-breakers	IEEE Std C37.09:2018	IEEE Standard Test Procedures for AC High-Voltage Circuit Breakers with Rated Maximum Voltage Above 1000 V	3, 5, 6, 7, 10, 13, 14, 16, 17, 18, 20, 21, 22, 26, 27, 28, 29, 30, 35

testing field	standard / Version	title of standard	test range / restrictions (No. test method)
Leistungsschalter / Circuit-breakers	GOST R 52565-2006	Alternating-current circuit-breakers for voltages from 3 to 750 kV. General specifications	1, 3, 5, 6, 10, 12, 14, 16, 18, 20, 21, 22, 26, 27, 28, 29, 30, 35
Leistungsschalter / Circuit-breakers	IEC 62146-1:2013 IEC 62146-1 AMD1:2016	Grading capacitors for high-voltage alternating current circuit-breakers - Part 1: General	14, 16, 17, 18, 21, 22
Disconnectors and earthing switches			
Trenn- und Erdungsschalter / Disconnectors and earthing switches	IEC 62271-102:2018 IEC 62271-102 AMD1:2022	High-voltage switchgear and controlgear - Part 102: Alternating current disconnectors and earthing switches	14, 16, 18, 20, 21, 22, 23, 25, 26, 27, 28, 29, 30, 31, 32, 33, 35, 36, 37
Trenn- und Erdungsschalter / Disconnectors and earthing switches	IEC/TS 62271-314:2024	High-voltage switchgear and controlgear. Direct current disconnectors and earthing switches	1, 10, 15, 16, 18, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31, 33, 35, 37
Trenn- und Erdungsschalter / Disconnectors and earthing switches	GOST R 52726-2007	Alternating current disconnectors and earthing switches for voltage above 1 kV and operating mechanisms for them. General specifications	1, 14, 16, 18, 20, 21, 22, 26, 27, 28, 29, 30, 31, 35
further Switches			
weitere Schaltgeräte / further Switches	IEC 62271-109:2019	High-voltage switchgear and controlgear - Part 109: Alternating-current series capacitor by-pass switches	1, 4, 14, 16, 18, 20, 21, 22, 25, 26, 27, 28, 29, 30, 35
weitere Schaltgeräte / further Switches	IEC/TS 62271-315:2025	High-voltage switchgear and controlgear - Part 315: Direct current (DC) transfer switches	1, 15, 16, 18, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31, 33, 35, 37
weitere Schaltgeräte / further Switches	IEC/TS 62271-316:2025	High-voltage switchgear and controlgear - Part 316: Direct current by-pass switches and paralleling switches	1, 15, 16, 18, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31, 33, 35, 37
Switchgear and controlgear			
Schaltanlagen / Switchgear and controlgear	IEC 62271-203:2022	High-voltage switchgear and controlgear - Part 203: Gas-insulated metal-enclosed switchgear for rated voltages above 52 kV	1, 8, 14, 16, 18, 20, 21, 22, 25, 26, 27, 28, 29, 30, 31, 32, 35, 36, 37
Schaltanlagen / Switchgear and controlgear	IEC 62271-205:2008	High-voltage switchgear and controlgear - Part 205: Compact switchgear assemblies for rated voltages above 52 kV	1, 14, 16, 18, 20, 21, 22, 25, 26, 27, 28, 29, 30, 35, 37
Schaltanlagen / Switchgear and controlgear	IEC 62271-211:2024	High-voltage switchgear and controlgear - Part 211: Direct connection between power transformers and gas-insulated metal-enclosed switchgear for rated voltages above 52 kV	28
Schaltanlagen / Switchgear and controlgear	IEC/TS 62271-318:2024	High-voltage switchgear and controlgear. DC gas-insulated metal-enclosed switchgear for rated voltages including and above 100 kV	1, 15, 16, 18, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31, 33, 35, 37
Schaltanlagen / Switchgear and controlgear	IEEE Std C37.122:2021	IEEE Standard for High-Voltage Gas-Insulated Substations Rated Above 52 kV	1, 3, 8, 11, 12, 14, 16, 18, 20, 21, 22, 23, 27, 28, 29, 30, 31, 32, 33, 36
Schaltanlagen / Switchgear and controlgear	IEEE Std C37.122.1:2014	IEEE Guide for Gas-Insulated Substations Rated Above 52 kV	27, 28, 29, 30, 31, 32, 33, 36
Schaltanlagen / Switchgear and controlgear	GOST R 54828-2011	Gas-insulated metal-enclosed switchgear for nominal voltages above 110 kV. General technical specification	1, 8, 11, 12, 14, 16, 18, 20, 21, 22, 26, 27, 28, 29, 30, 35
Surge arresters			
Überspannungsschutzgeräte / Surge arresters	IEC 60099-4:2014	Surge arresters - Part 4: Metal-oxide surge arresters without gaps for a.c. systems	9, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57
Überspannungsschutzgeräte / Surge arresters	IEEE Std C62.11:2020	IEEE Standard for Metal-Oxide Surge Arresters for AC Power Circuits (>1 kV)	9
Überspannungsschutzgeräte / Surge arresters	GOST R 52725-2007	Surge arresters for a.c. electrical installations for voltage from 3 kV to 750kV. General specifications	1, 3, 11, 12
Transmission lines			
Übertragungsleitungen / Transmission lines	IEC 62271-204:2022	High-voltage switchgear and controlgear - Part 204: Rigid gas-insulated transmission lines for rated voltage above 52 kV	1, 8, 14, 16, 18, 20, 21, 22, 25
Übertragungsleitungen / Transmission lines	IEC 60143-2:2012 IEC 60143-2 AMD1:2021	Series capacitors for power systems - Part 2: Protective equipment for series capacitor banks	43, 45, 46, 47

testing field	standard / Version	title of standard	test range / restrictions (No. test method)
Instrument transformers			
Strom- und Spannungswandler / Instrument transformers	IEC 61869-1:2023	Instrument transformers - Part 1: General requirements	1, 4, 8
Strom- und Spannungswandler / Instrument transformers	IEC 61869-2:2012	Instrument transformers - Part 2: Additional requirements for current transformers	1, 4, 8
Insulators, Bushings			
Isolierkörper, Durchführungen / Insulators, Bushings	IEC/IEEE 65700-19-03: 2025	Bushings for DC application	29
High-voltage test techniques			
Hochspannungsprüftechnik / High-voltage test techniques	IEC 60060-1:2010	High-voltage test techniques - Part 1: General definitions and test requirements	14, 15, 16, 17, 18, 19, 20
Allgemein / General	IEEE 4:2013	IEEE Standard for High-Voltage Testing Techniques	14, 15, 16, 17, 18
Hochspannungsprüftechnik / High-voltage test techniques	GOST 1516.2:1997	Electrical Equipment and electrical installations designed for alternating voltage of 3 kV and higher	14, 15, 16, 17, 18
Hochspannungsprüftechnik / High-voltage test techniques	IEC 60270:2000 IEC 60270 AMD1:2015	High-voltage test techniques - Partial discharge measurements	21
Mechanical testings, environment- and guardtesting			
Mechanische Prüfungen, Umwelt- und Schutzprüfungen / Mechanical testings, environment- and guardtesting	IEC 60068-2-14:2023	Environmental testing - Part 2-14: Tests - Test N: Change of temperature	56
Mechanische Prüfungen, Umwelt- und Schutzprüfungen / Mechanical testings, environment- and guardtesting	IEC 60068-2-17:2023	Environmental testing - Part 2-17: Tests - Test Q: Sealing	57
Mechanische Prüfungen, Umwelt- und Schutzprüfungen / Mechanical testings, environment- and guardtesting	IEC 60529:1989 IEC 60529 AMD1:1999 IEC 60529 AMD2:2013	Degrees of protection provided by enclosures (IP code)	33
Mechanische Prüfungen, Umwelt- und Schutzprüfungen / Mechanical testings, environment- and guardtesting	ISO 3744:2010	Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Engineering methods for an essentially free field over a reflecting plane	26, 34
Mechanische Prüfungen, Umwelt- und Schutzprüfungen / Mechanical testings, environment- and guardtesting	DIN 45635-1:1984	Measurement of noise emitted by machines; airborne noise emission; enveloping surface method; basic method, divided into 3 grades of accuracy	34
Mechanische Prüfungen, Umwelt- und Schutzprüfungen / Mechanical testings, environment- and guardtesting	DIN 45635-12:1978	Measurement of noise emitted by machines; Airborne noise measurement, enveloping surface method; Electrical switchgear and control gear	34
Mechanische Prüfungen, Umwelt- und Schutzprüfungen / Mechanical testings, environment- and guardtesting	IEC/IEEE 62271-37-082:2012 IEEE 62271-37-082:2012 CORRIGENDUM 1:2014	High-voltage switchgear and controlgear - Part 37-082: Standard practice for the measurement of sound pressure levels on alternating current circuit-breakers	29