Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Economic Affairs SECO
Swiss Accreditation Service SAS

Based on the Accreditation and Designation Ordinance dated 17 June 1996 and on the advice of the Federal Accreditation Commission, the Swiss Accreditation Service (SAS) grants to

PEHLA Testing Laboratory Baden
Association for High Power
Electrical Testing
Fabrikstrasse 13
5400 Baden

Period of accreditation:
13.10.2021 until 12.10.2026
(1st accreditation: 15.09.1992)

the accreditation as

Testing laboratory for components and installations for energy transmission and energy distribution and simulated environmental testing

International standard:	ISO/IEC 17025:2017
Swiss standard:	SN EN ISO/IEC 17025:2018

3003 Berne, 07.10.2021
Swiss Accreditation Service SAS

Head of SAS
Konrad Flück

SAS is a signatory of the multilateral agreements of the European co-operation for Accreditation (EA) for the fields of testing, calibration, inspection and certification of management systems, certification of personnel and certification of products, processes and services, of the International Accreditation Forum (IAF) for the fields of certification of management systems and certification of products, processes and services and of the International Laboratory Accreditation Cooperation (ILAC) for the fields of testing, calibration and inspection.

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Swiss Accreditation Service SAS

STS Directory

Accreditation number: STS 0012

International standard:	ISO/IEC 17025:2017
Swiss standard:	SN EN ISO/IEC 17025:2018

PEHLA Testing Laboratory Baden
Association for High Power Electrical Testing
Fabrikstrasse 13
5400 Baden

Agency:
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8050 Zürich

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Internet:	www.pehla.com
Initial accreditation:	15.09.1992
Current accreditation:	13.10.2021 to 12.10.2026
Scope of accreditation see:	www.sas.admin.ch (Accredited bodies)

Scope of accreditation as of 13.10.2021

Testing laboratory for components and installations for energy transmission and energy distribution and simulated environmental testing

Group of products or materials, field of activity	Principle of measurement [2] (characteristics, measuring ranges, type of test)	Test methods, remarks (national, international standards, in-house test methods)
Simulated environmental testing		
Electric, electronic and mechanical devices	Degrees of protection provided by enclosures (IP-/ IK-Code)	IEC 60529 IEC 62262 IEC 60068-2-75
	Mechanical Tests	
	Vibration Tests: Shaker vertical max. Force: 19.9 kN Frequency: 5 – 3000 Hz	IEC 60068-2-6, EN 60068-2-6 IEC 60068-2-27, EN 60068-2-27 IEC 60068-2-57, EN 60068-2-57 IEC 60068-2-64, EN 60068-2-64

1) Scope of accreditation type A (fix)
2) Scope of accreditation type B (flexible)
3) Scope of accreditation type C (flexible)

Definition of flexibilty see SAS Document 741

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Accreditation number: STS 0012

Group of products or materials, field of activity	Principle of measurement [2] (characteristics, measuring ranges, type of test)	Test methods, remarks (national, international standards, in-house test methods)
	Climatic Tests	
	Cold and Heat Tests Size inside chamber: 220‘000 l Temperature: -60 °C … +105 °C	IEC 60068-2-1, EN 60068-2-1 IEC 60068-2-2, EN 60068-2-2
	Size inside chamber: 1‘500 l Temperature: -75 °C … +180°C	
	Climatic Tests Size inside chamber: 220‘000 l Humidity: 30 % - 95 % r. H. from 20 °C to 40 °C	IEC 60068-2-30, EN 60068-2-30 IEC 60068-2-38, EN 60068-2-38 IEC 60068-2-78, EN 60068-2-78
	Size inside chamber: 8'000 l Humidity: 10 % - 98 % r. H. from 10 °C to 85 °C	
High-voltage switchgear and controlgear	Common specifications	IEC 62271-1 IEEE C37.100 IEEE C37.100.1
SF_6	Use and handling of sulphur hexafluoride (SF6)	IEC 62271-4
High-voltage switchgear and controlgear - Alternating current circuit-breakers	Dielectric tests Temperature-rise tests Measurement of the resistance of the main circuit Mechanical tests, climatic tests, tightness tests Sound pressure test Short-time current tests Making & Breaking tests Inductive load switching Electrical endurance testing for circuit-breakers above a rated voltage of 52 kV Internal arc tests	IEC 62271-100 IEC 62271-200 IEC 62271-203 IEC 62271-101 IEC 62271-110 IEC 62271-302 IEC 62271-310 IEC/IEEE 62271-37-013 IEEE C37.04 IEEE C37.06 IEEE C37.09 IEEE C37.10 IEEE C37.11 IEEE C37.12 IEEE C37.015 IEEE C37.016 GOST 52565

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Group of products or materials, field of activity	**Principle of measurement** [2] **(characteristics, measuring ranges, type of test)**	**Test methods, remarks (national, international standards, in-house test methods)**
High-voltage switchgear and controlgear - Alternating current disconnectors and earthing switches	Dielectric tests Temperature-rise tests Measurement of the resistance of the main circuit Mechanical tests, climatic tests, tightness tests Short-time current tests Making tests Induced current tests Bustransfer & buscharging current switching tests Internal arc tests	IEC 62271-102 IEEE C37.30.1 IEEE C37.41 GOST 52726
High-voltage switchgear and controlgear - Switches for rated voltages above 1 kV up to and including 52 kV	Dielectric tests Temperature-rise tests Measurement of the resistance of the main circuit Mechanical tests, climatic tests, tightness tests Short-time current tests Making tests, switching tests Internal arc tests	IEC 62271-103
High-voltage switchgear and controlgear - Alternating current switches for rated voltages of 52 kV and above	Dielectric tests Temperature-rise tests Measurement of the resistance of the main circuit Mechanical tests, climatic tests, tightness tests Short-time current tests Making tests, switching tests Internal arc tests	IEC 62271-104 IEEE C37.30.1 IEEE C37.41
High-voltage switchgear and controlgear - Alternating current switch-fuse combinations for rated voltages above 1 kV up to and including 52 kV	Dielectric tests Temperature-rise tests Measurement of the resistance of the main circuit Mechanical tests, climatic tests, tightness tests Short-time current tests Making tests, switching tests Internal arc tests	IEC 62271-105

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Group of products or materials, field of activity	**Principle of measurement** [2] **(characteristics, measuring ranges, type of test)**	**Test methods, remarks (national, international standards, in-house test methods)**
High-voltage switchgear and controlgear - High-voltage alternating current disconnecting circuit-breakers > 72,5 kV	Dielectric tests Temperature-rise tests Measurement of the resistance of the main circuit Mechanical tests, climatic tests, tightness tests Sound pressure test Short-time current tests Making & Breaking tests Inductive load switching Electrical endurance testing for circuit-breakers above a rated voltage of 52 kV Internal arc tests	IEC 62271-108
High-voltage switchgear and controlgear - AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV	Dielectric tests Temperature-rise tests Measurement of the resistance of the main circuit Mechanical tests, climatic tests, tightness tests Sound pressure test Short-time current tests Internal arc tests	IEC 62271-200 IEEE C37.20.2 IEEE C37.20.3 ANSI C37.54 GOST 1516.3
High-voltage switchgear and controlgear - Gas-insulated metal-enclosed switchgear for rated voltages above 52 kV	Dielectric tests Temperature-rise tests Measurement of the resistance of the main circuit Mechanical tests, climatic tests, tightness tests Sound pressure test Short-time current tests Internal arc tests	IEC 62271-203 IEEE C37.122 GOST 1516.3
High-voltage switchgear and controlgear - Rigid gas-insulated transmission lines for rated voltage above 52 kV	Dielectric tests Temperature-rise tests Measurement of the resistance of the main circuit Mechanical tests, climatic tests, tightness tests Short-time current tests Internal arc tests	IEC 62271-204

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Group of products or materials, field of activity	**Principle of measurement [2] (characteristics, measuring ranges, type of test)**	**Test methods, remarks (national, international standards, in-house test methods)**
High-voltage switchgear and controlgear - Compact switchgear assemblies for rated voltages above 52 kV	Dielectric tests Temperature-rise tests Measurement of the resistance of the main circuit Mechanical tests, climatic tests, tightness tests Short-time current tests Internal arc tests Leakage Measurements	IEC 62271-205
High-voltage switchgear and controlgear	Cable connections for gas-insulated metal-enclosed switchgear for rated voltages above 52 kV – Fluid-filled and extruded insulation cables – Fluid-filled and dry-type cable-terminations	IEC 62271-209
High-voltage switchgear and controlgear - Direct connection between power transformers and gas-insulated metal-enclosed switchgear for rated voltages above 52 kV	Dielectric tests Temperature-rise tests Mechanical tests, climatic tests, tightness tests	IEC 62271-211
Insulated bushings for alternating voltages above 1 000 V Composite hollow insulators – Pressurized and unpressurized insulators for use in electrical equipment with rated voltage greater than 1 000 V Hollow pressurized and unpressurized ceramic and glass insulators for use in electrical equipment with rated voltages greater than 1 000 V	Dielectric tests Temperature-rise tests Mechanical tests, climatic tests, Tightness tests	IEC 60137 IEC 61462 IEC 62155 IEEE C57.19.00 IEEE C57.19.100
Tests on indoor and outdoor post insulators of ceramic material or glass for systems with nominal voltages > 1 kV	Dielectric tests Temperature-rise tests Mechanical tests, climatic tests, Tightness tests	IEC 60168 ANSI C29.1 ANSI C29.11
Shunt Reactors	Dielectric tests Temperature-rise tests Short-time current tests	IEC 60076-6

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Group of products or materials, field of activity	**Principle of measurement [2] (characteristics, measuring ranges, type of test)**	**Test methods, remarks (national, international standards, in-house test methods)**
Power transformers	Guide to the lightning impulse and switching impulse testing – Power transformers and reactors Ability to withstand short circuit	IEC 60076-1 IEC 60076-3 IEC 60076-4 IEC 60076-5 IEC 60076-11
Line traps for a.c. power systems	Dielectric tests Temperature-rise tests Short-time current tests	IEC 60353
Instrument transformers	Dielectric tests Partial discharge measurements Short-time current tests Temperature-rise tests Accuracy measurements Mechanical tests, climatic tests, Tightness tests	IEC 60044-7 IEC 60044-8 IEC 61869-1 IEC 61869-2 IEC 61869-3 IEC 61869-4 IEC 61869-5 IEC 61869-6 IEC 61869-9 IEEE C57.13
Surge arresters - Metal-oxide surge arresters without gaps for a.c. systems	Dielectric tests Tightness tests Pressure relief test	IEC 60099-4 IEC 60099-8 IEC 60099-9 IEEE C62.11 GOST R 52725
Grading capacitors for high-voltage alternating current circuit-breakers	Dielectric tests Temperature-rise tests Short-time current tests Mechanical tests, climatic tests, Tightness tests	IEC 62146-1
High-voltage fuses	Current-limiting fuses	IEC 60282-1 IEC 60282-2
Thyristor valves for high voltage direct current (HVDC) power transmission	Dielectric tests	IEC 60700-1
Low-voltage fuses	Supplementary requirements for fuse-links for the protection of semiconductor devices	IEC 60269-1 IEC 60269-4
Railway applications - Fixed installations - Particular requirements for alternating current switchgear	Dielectric tests Temperature-rise tests Measurement of the resistance of the main circuit Mechanical tests, climatic tests Short-time current tests Internal arc tests Making tests	EN 50152-1 EN 50152-2

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Group of products or materials, field of activity	**Principle of measurement** [2] **(characteristics, measuring ranges, type of test)**	**Test methods, remarks (national, international standards, in-house test methods)**
Railway applications - Electric equipment for rolling stock	Dielectric tests Temperature-rise tests Measurement of the resistance of the main circuit Mechanical tests, climatic tests Short-time current tests Making tests	EN 60077-1 EN 60077-2 EN 60077-4
High-voltage test techniques High-voltage switchgear and controlgear	Dielectric tests	IEC 60060-1, IEC 60060-2 IEEE 4 IEC 61180
	Tightness tests Partial discharge measurements Measurement of sound pressure levels	IEC 62271-1 IEC 60168 IEC 60270 IEC/IEEE 62271-37-082
	Measurement of the resistance of circuits	IEC 62271-1 IEC 62271-203
	Temperature rise tests	IEC 62271-1 IEC 62271-100 IEC 62271-102 IEC 62271-103 IEC 62271-104 IEC 62271-200 IEC 62271-201 IEC 62271-203
	Radio interference voltage (RIV) tests	IEC 62271-1 IEC 60437 CISPR 16-1-1 CISPR 18-2
	Mechanical tests	IEC 62271-100 IEC 62271-102 IEC 62271-103 IEC 62271-104 IEC 62271-200 IEC 62271-105 IEC 62271-201 IEC 62271-203
	Power tests	IEC 62271-100
	Electrical endurance testing	IEC 62271-310

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Group of products or materials, field of activity	Principle of measurement [2] (characteristics, measuring ranges, type of test)	Test methods, remarks (national, international standards, in-house test methods)
	Switching tests	IEC 62271-100 IEC 62271-103 IEC 62271-104 IEC 62271-105 IEC 62271-106 IEC 62271-102 IEC 62271-110
	Synthetic testing	IEC 62271-101 IEEE C37.081 IEEE C37.081A IEEE C37.083
	Internal arc tests	IEC 62271-203 IEC 62271-201 IEC 62271-200
	Short-time current tests	IEC 62271-1 IEC 60353
	Climatic tests	IEC 62271-100 IEC 62271-102 IEC 62271-203
	Accuracy measurements	IEC 60044-7 IEC 60044-8 IEC 61869-1 IEC 61869-2 IEC 61869-3 IEC 61869-4 IEC 61869-5 IEC 61869-6 IEC 61869-9 IEEE C57.13

In case of contradictions in the language versions of the directories, the German version shall apply.

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