



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

KEMA-POWERTEST LLC
4379 County Line Road
Chalfont, PA 18914
Frank Cielo Phone: 215-822-4280
email: frank.cielo@kema.com

ELECTRICAL

Valid To: December 31, 2024

Certificate Number: 0553.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on circuit breakers, transformers, switches, switchgear, fuses, surge suppressors, MCCs, reactors, and related electrical power equipment:

<u>Test Type/Test Capabilities</u> ^{1,2:}	<u>Test Method(s)</u> ^{3,4:}
Load-Switching	IEEE Std 1247-2005, sub-clause 8.3.2.1;
	IEEE Std C37.74-2014, sub-clause 6.7.5.4;
	IEEE Std C37.09-2018, sub-clause 4.9
Loop-Switching	IEEE Std 1247-2005, sub-clause 8.3.2.2;
	IEEE Std C37.74-2014, sub-clause 6.7.5.5
Cable-Charging Switching	IEEE Std 1247-2005, sub-clause 8.3.2.3;
	IEEE Std C37.74-2014, sub-clause 6.7.5.6;
	IEEE Std C37.60-2018, sub-clause 7.101.4.4;
	IEC 62271-111, 2019, sub-clause 7.101.4.4;
Line-Charging Switching	IEEE Std C37.09-2018, sub-clause 4.10; Cor1-2021
	IEEE Std 1247-2005, sub-clause 8.3.2.4;
	IEEE Std C37.60-2018, sub-clause 7.101.4.3;
	IEC 62271-111, 2019, sub-clause 7.101.4.3;
	IEEE Std C37.09-2018, sub-clause 4.10; Cor1-2021

<u>Test Type/Test Capabilities</u> ^{1,2} :	<u>Test Method(s)</u> ^{3,4} :
Peak-Withstand Current	IEEE Std 1247-2005, sub-clause 8.4.2;
	IEEE Std C37.74-2014, sub-clause 6.7.4.3;
	IEEE Std C37.60-2018, sub-clause 7.6;
	IEC 62271-111, 2019, sub-clause 7.6;
	IEEE Std C37.09-2018, sub-clause 4.8.5.3;
	IEEE Std C57.16-2011, sub-clause 10.4;
	IEEE Std C57.15-2017, sub-clause 9.11;
	IEC 62271-200, 2021, sub-clause 7.6;
	IEC 60502-4, 2010
Short-Time (Symmetrical) Withstand Current	IEEE Std 1247-2005, sub-clause 8.4.3;
	IEEE Std C37.74-2014, sub-clause 6.7.4.5;
	IEEE Std C37.60-2018, sub-clause 7.6;
	IEC 62271-111, 2019, sub-clause 7.6;
	IEEE C37.66-2021 sub-clause 6.3;
	IEC 60502-4, 2010 (Table 8);
	IEEE Std C37.09-2018, sub-clause 4.8.5.3;
	IEEE Std C57.16-2011, sub-clause 10.3;
	IEEE Std C57.15-2017, sub-clause 9.11;
	IEC 62271-200, 2021, sub-clause 7.6
Fault-Making Current	IEEE Std 1247-2005, sub-clause 8.5;
	IEEE Std C37.74-2014, sub-clause 6.7.4.6;
	IEEE Std C37.60-2018, sub-clause 7.102;
	IEC 62271-111, 2019, sub-clause 7.102;
	IEEE Std C37.09-2018, sub-clause 4.8.5.2
Lightning-Impulse Withstand Voltage	IEEE Std 1247-2005, sub-clause 8.1.2;
	IEEE Std C37.74-2014, sub-clause 6.7.2.5;
	IEEE Std C37.60-2018, sub-clause 7.2.7.3;
	IEC 62271-111, 2019, sub-clause 7.2.7.3;
	IEC 60502-4, 2010 (Table 8);
	IEEE Std C37.09-2018, sub-clause 4.5.5;
	IEEE Std C57.15-2017, sub-clause 9.7.2;
	IEC 62271-200, 2011, sub-clause 6.2.6.2
Power-Frequency Withstand Voltage (Dry)	IEEE Std 1247-2005, sub-clause 8.1.1;
	IEEE Std C37.74-2014, sub-clause 6.7.2.4;
	IEEE Std C37.60-2018, sub-clause 7.2.7.2;
	IEC 60502-4;
	IEC 62271-111, 2012, sub-clause 6.2.6.1;
	IEEE Std C37.09-2018, sub-clause 4.5.4.1;
	IEC 62271-200, 2011, sub-clause 6.2.6.1

<u>Test Type/Test Capabilities</u> ^{1, 2:}	<u>Test Method(s)</u> ^{3, 4:}
Continuous Current (Temperature Rise)	IEEE Std 1247-2005, sub-clause 8.2;
	IEEE Std C37.74-2014, sub-clause 6.7.3;
	IEEE Std C37.60-2018, sub-clause 7.5;
	IEC 62271-111, 2019, sub-clause 7.5;
	IEC 60502-4, 2010 (Table 8);
	IEEE Std C57.15-2017, sub-clause 9.10.2.3.2;
	IEC 62271-200, 2021, sub-clause 7.5
Thermal Runaway	IEEE Std C37.74-2014, sub-clause 6.7.6
Interrupting Current	IEEE Std C37.60-2018, sub-clause 7.103;
	IEC 62271-111, 2019, sub-clause 7.103;
	IEEE Std C37.09-2018, sub-clause 4.8; Cor1-2021;
	IEEE Std C37.41-2008, sub-clause 6
Capacitor Switching Current	IEEE Std C37.09-2018, sub-clause 4.10
Resistance Measurements	IEEE Std C57.15-2017, sub-clause 9.2;
	IEC 62271-200, 2021, sub-clause 7.4
Polarity Test	IEEE Std C57.15-2017, sub-clause 9.3
Ratio Tests	IEEE Std C57.15-2017, sub-clause 9.4
No-Load Losses and Excitation Current	IEEE Std C57.15-2017, sub-clause 9.5
Load Losses and Impedance Voltage	IEEE Std C57.15-2017, sub-clause 9.6
Applied-Voltage	IEEE Std C57.15-2017, sub-clause 9.7.4
Induced-Voltage	IEEE Std C57.15-2017, sub-clause 9.7.5
Insulation Resistance	IEEE Std C57.15-2017, sub-clause 9.7.7
Internal Arc Test	IEC 62271-200, 2021, sub-clause 7.105
Short Circuit Tests	IEEE C62.11-2020, Section 8.15;
	IEC 60099-4, 2014, Sections 8.10 and 10.8.10

Facility Capabilities ^{1,2}: Voltage parameters: 0-900 kV, Current parameters: 0-230 kA rms

¹ Available voltage & current may vary based on the test type.

² Additional voltage and/or current can be made available if needed.

³ When the date, edition, version, etc. is not identified in the scope of accreditation, laboratories may use the version that immediately precedes the current version for a period of one year from the date of publication of the standard measurement method, per part C., Section 1 of A2LA *R101 - General Requirements-Accreditation of ISO-IEC 17025 Laboratories*.

⁴ Customer specific test methods utilizing any combination of facility and test equipment used for the methods listed above.