



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

SCHWEITZER ENGINEERING LABORATORIES, INC.<sup>1</sup>

2350 NE Hopkins Ct.

Pullman, WA 99163

Dean Tedesco Phone: 509 332 1890 ext. 101198

[dean\\_tedesco@selinc.com](mailto:dean_tedesco@selinc.com)

ELECTRICAL (EMC)

Valid To: November 30, 2022

Certificate Number: 3354.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following electrical tests on protective relays, substation equipment and devices intended to operate with protective relays and substation equipment at the laboratory location listed above:

**Test:**

**Test Method(s)<sup>1</sup>:**

***Emissions***

Radiated and Conducted

CISPR 11; CISPR 11:2009 + A1:2010;  
EN 55011; EN 55011:2009 + A1:2010;  
CISPR 22; CISPR 22:2008;  
EN 55022; EN 55022:2010 + AC:2011;  
CISPR 32 + Cor1 + Cor2; CISPR 32:2012 + Cor1 + Cor2:2012;  
EN 55032; EN 55032:2012 (*excluding Broadcast Receivers*);  
47 CFR, Part 15 (Subpart B, using ANSI C63.4-2014);  
ICES-003 Issue 6;  
CNS 13438:2006 (*Up to 6 GHz*);  
AS/NZS CISPR 11;  
KN 11; KN 22; KN32 (*excluding broadcast receiver equipment*)

Harmonic Current Emissions

IEC 61000-3-2; IEC 61000-3-2:2014;  
EN 61000-3-2; EN 61000-3-2:2014

Voltage Fluctuations and Flicker

IEC 61000-3-3; IEC 61000-3-3:2013;  
EN 61000-3-3; EN 61000-3-3:2013

***Immunity***

Surge Withstand Capability

IEEE C37.90.1; IEEE C37.90.1:2012

Electrostatic Discharge (ESD)

IEC 61000-4-2; IEC 61000-4-2:2008;  
IEEE C37.90.3; IEEE C37.90.3:2001;  
EN 61000-4-2; EN 61000-4-2:2009

Radiated RF Immunity

IEC 61000-4-3; IEC 61000-4-3:2006 + A1:2007 + A2:2010;  
EN 61000-4-3; EN 61000-4-3:2006 + A1:2008 + A2:2010;  
IEEE C37.90.2; IEEE C37.90.2:2004

Electrical Fast Transient Burst Immunity

IEC 61000-4-4; IEC 61000-4-4:2012;  
EN 61000-4-4; EN 61000-4-4:2012

Surge Immunity

IEC 61000-4-5; IEC 61000-4-5:2005 + Corr:2009;  
EN 61000-4-5; EN 61000-4-5:2006

<b><u>Test:</u></b>	<b><u>Test Method(s)<sup>1</sup>:</u></b>
<b><i>Immunity (cont.)</i></b> Conducted RF Immunity	IEC 61000-4-6; IEC 61000-4-6:2008; EN 61000-4-6; EN 61000-4-6:2009
Power Frequency Magnetic Field	IEC 61000-4-8; IEC 61000-4-8:2009; EN 61000-4-8; EN 61000-4-8:2010
Pulse Magnetic Field	IEC 61000-4-9; IEC 61000-4-9:1993 + A1:2000; EN 61000-4-9; EN 61000-4-9:1993 + A1:2001
Damped Oscillatory Magnetic Field	IEC 61000-4-10; IEC 61000-4-10:1993 + A1:2000; EN 61000-4-10; EN 61000-4-10:1993 + A1:2001
AC Voltage Dips and Interruptions	IEC 61000-4-11; IEC 61000-4-11:2004; EN 61000-4-11; EN 61000-4-11:2004
Ring Wave	IEC 61000-4-12; IEC 61000-4-12:2017; EN 61000-4-12; EN 61000-4-12:2017
Harmonics and Interharmonics	IEC 61000-4-13; IEC 61000-4-13:2002 + A1:2009 + A2:2015; EN 61000-4-13; EN 61000-4-13:2002 + A1:2009 + A2:2016
Power Frequency	IEC 61000-4-16; IEC 61000-4-16:1998 + A2:2009; EN 61000-4-16; EN 61000-4-16:1998 + A2:2011
Ripple on DC Input Power Port	IEC 61000-4-17; IEC 61000-4-17:1999 + A1:2001 + A2:2008; EN 61000-4-17; EN 61000-4-17:1999 + A1:2004 + A2:2009
Slow Damped Oscillatory Wave	IEC 61000-4-18; IEC 61000-4-18:2006 + A1:2010; EN 61000-4-18; EN 61000-4-18:2007 + Corr:2007 + A1:2010
DC Voltage Dips and Interruptions	IEC 61000-4-29; IEC 61000-4-29:2000; EN 61000-4-29; EN 61000-4-29:2000
<b><i>Product Safety</i></b> Insulation Coordination (Dielectric Strength and Impulse)	IEC 60255-5; IEC 60255-5:2000; EN 60255-5; EN 60255-5:2001; IEEE C37.90; IEEE C37.90:2005
Information technology equipment – Safety – Part 1: General requirements	EN/IEC/UL 60950-1; CAN/CSA-C22.2 No.60950-1-07 (excluding Clauses 4.2.8, 4.3.12, 4.3.13, 4.6.2 and 4.7.3.6)
Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements	EN/IEC/UL 61010-1; CAN/CSA-C22.2 No. 61010-1-12 (excluding Clauses 12.2, 12.4 and 13.2.3)
Safety requirements for electrical equipment for measurement, control and laboratory use – Part 2-201: Particular requirements for control equipment	EN/IEC/UL 61010-2-201
Safety of laser products – Part 1: Equipment classification and requirements	EN 60825-1; EN 60825-1:2014; IEC 60825-1; IEC 0825-1:2013
Safety of laser products – Part 2: Safety of optical fiber communication systems (OFCS)	IEC 60825-2; IEC 60825-2:2004 + A1:2006 + A2:2010; EN 60825-2; EN 60825-2:2004 + A1:2007 + A2:2010

<b><u>Test:</u></b>	<b><u>Test Method(s)<sup>1</sup>:</u></b>
<b><i>Family</i></b>	
Measuring relays and protection equipment – Part 1: General requirements	IEC 60255-1; IEC 60255-1:2009; EN 60255-1; EN 60255-1:2010 KS 60255-1:2014 (excluding clause 6.5)
Measuring relays and protection equipment – Part 26: Electromagnetic compatibility requirements	IEC 60255-26; IEC 60255-26:2013; EN 60255-26; EN 60255-26:2013 + AC:2013 KN 60255-26:2015
Measuring relays and protection equipment – Part 27: Product safety requirements	IEC 60255-27; IEC 60255-27:2013; EN 60255-27; EN 60255-27:2014 KS 60255-27: 2013
Electromagnetic compatibility (EMC) Part 6-4: Generic standards – Immunity standard for industrial environments	KN 61000-6-2 (Annex 18-2)
Electromagnetic compatibility (EMC) Part 6-4: Generic standards – Emission standard for industrial environments	KN 61000-6-4 (Annex 18)
Electromagnetic compatibility for multimedia equipment – Immunity requirements	KN 35, KN35:2015 (excluding broadcast receiver equipment)
Environmental and Testing Requirements for Communications Networking Devices Installed in Electric Power Substations	IEEE 1613; IEEE 1613:2009
Environmental and Testing Requirements for Communications Networking Devices Installed in Transmission and Distribution Facilities	IEEE 1613.1; IEEE 1613.1:2013
Communication Network and Systems for Power Utility Automation: Part 3 General	IEC 61850-3; IEC 61850-3:2013; EN 61850-3; EN 61850-3:2014
<b><i>Function Testing</i></b>	
Burden Testing	IEC 60255-1 Clause 6.10

Testing Activities Performed in Support of FCC Certification in Accordance with 47 Code of Federal Regulations and FCC KDB 974614, Appendix A, Table A.1:

<b>Rule Subpart/Technology</b>	<b>Test Method</b>	<b>Maximum Frequency</b>
Unintentional Radiators Part 15B	ANSI C63.4:2014	26000 MHz

<sup>1</sup>When the date, revision or edition of a test method standard is not identified on the scope of accreditation, the laboratory may use the version that immediately precedes the current version for a period of one year from the date of publication of the standard test method, per part C., Section 1 of A2LA R101 - *General Requirements - Accreditation of ISO-IEC 17025 Laboratories*.



## Accredited Laboratory

A2LA has accredited

**SCHWEITZER ENGINEERING LABORATORIES, INC.**

*Pullman, WA*

for technical competence in the field of

**Electrical Testing**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. 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 dated April 2017).



Presented this 29<sup>th</sup> day of November 2020.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 3354.01  
Valid to November 30, 2022

*For the tests to which this accreditation applies, please refer to the laboratory's electrical Scope of Accreditation.*