

IEC 61850 Certificate Level A¹

No. 10034511-INC 17-2264

Issued to:

ABB Switzerland Ltd.
Bruggerstrasse 72
CH-5400 Baden
Switzerland

For the 92LE publisher:

SAM600 Merging Unit

Module	HW version	S/N
SAM600-TS_1	1.2-TS-DA-P2	PP16200018
SAM600-CT_1	1.2-CT-DA-A	PP16220008
SAM600-VT_1	1.2-VT-DA-H	PP16330052

 Modules firmware version: v1.2
 Product firmware version: v1.2
 Supporting:
 4 phase voltage and current
 Neutral is calculated or measured

The 92LE publisher has not been shown to be non-conforming to:

IEC 61850 First Edition Parts 6, 7-2, and 9-2

Communication networks and systems in substations

The conformance test has been performed according to IEC 61850-10 and the UCA International Users Group "Test Procedures version 1.1 for Sampled Values Publishers according to the "Implementation Guideline for Digital Interface to Instrument Transformers using IEC 61850-9-2 (9-2LE version 2.1)" with TPCL² version 1.0 with 92LE publisher's protocol implementation conformance statement and extra information for testing: "IEC 61850 Conformance Statement ABB SAM600-MU PICS-PIXIT, doc. no. 1KHL516076".

The following IEC 61850 conformance blocks have been tested with a positive result (number of relevant and executed test cases / total number of test cases):

11a Sampled Value publish (15/17)	50 Hz with 80 samples per cycle
11a Sampled Value publish (15/17)	60 Hz with 80 samples per cycle

This certificate includes a summary of the test results as carried out at DNV GL in the Netherlands with UniCA 61850 Analyzer 61850 version 5.26.04. This document has been issued for information purposes only, and the original paper copy of the DNV GL report No. 10034511-INC 17-2263 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV GL by ABB. The manufacturer's production process has not been assessed. This certificate does not imply that DNV GL has approved any product other than the specimen tested.

Arnhem, May 31, 2017



P. Cioci
Business Director
Intelligent Networks and Communication

Issued by:



DNV KEMA is now DNV GL



R. Schimmel
Verification Manager

¹ Level A - Independent test lab with certified ISO 9001 Quality System

² TPCL - Test procedures change list

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Applicable Test Procedures from the UCA International Users Group Test procedures version 1.1 for Sampled Values Publishers according to the "Implementation Guideline for Digital Interface to Instrument Transformers using IEC 61850-9-2 (9-2LE version 2.1)" with TPCL version 1.0.

Conformance Block	Mandatory	Conditional
Configuration	Cnf1, Cnf2, Cnf3, Cnf4, Cnf5, Cnf6, Cnf7, Cnf8	
11a Sampled Value Publishing 50 Hz, 80 samples/cycle	Svp1, Svp2, Svp3, Svp6, Svp10, Svp11, Svp14, Svp15	Svp4, Svp7, Svp8, Svp12, Svp13, Svp16, Svp17
11a Sampled Value Publishing 60Hz, 80 samples/cycle	Svp1, Svp2, Svp3, Svp6, Svp10, Svp11, Svp14, Svp15	Svp4, Svp7, Svp8, Svp12, Svp13, Svp16, Svp17