

IEC 61850 Certificate Level A¹

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Issued to: ABB Switzerland Ltd High Voltage Technology Brown Boveri-Strasse 5 CH-8050 zurich Switzerland

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No. 30913327-Consulting 10-0712

For the 92LE publisher: CP-MUP merging unit for protection Hardware version AD Firmware version 1.0.1.0 Supporting: 3 phase voltage and current Neutral is calculated

The product has not shown to be non-conforming to:

IEC 61850-6, 7-2 and 9-2

Communication networks and systems in substations

The conformance test has been performed according to IEC 61850-10 with 92LE publisher's protocol implementation conformance statement: "CP-MUP PICS PIXIT, 1HC0071175 version AB" and extra information for testing: "CP-MUP PICS PIXIT, 1HC0071175 version AB".

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 as defined in the UCAIUG Test procedures for Sampled Values Publishers according to the "Implementation Guideline for Digital Interface to Instrument Transformers using IEC 61850-9-2" (9-2LE), version 1.1):

11a Sampled Value publish (13/17)	50 Hz with 80 samples per cycle
11a Sampled Value publish (13/17)	60 Hz with 80 samples per cycle

This Certificate includes a summary of the test results as carried out at KEMA in the Netherlands with UniCA 61850 Analyzer 61850 version 4.21.02. The test is based on the UCAIUG "Test procedures for Sampled Values Publishers according to the "Implementation Guideline for Digital Interface to Instrument Transformers using IEC 61850-9-2" (9-2LE), version 1.1". This document has been issued for information purposes only, and the original paper copy of the test report: No. 30913327-Consulting 10-0713 will prevail.

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

Arnhem, 24 March 2010

W. Strabbing Manager Intelligent Network and Communications

Richard Schimmel Senior Test Engineer

1 Level A - Independent Test lab with certified ISO 9000 or ISO 17025 Quality System

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Applicable Test Procedures from the UCAIUG "Test procedures for Sampled Values Publishers according to the "Implementation Guideline for Digital Interface to Instrument Transformers using IEC 61850-9-2" (9-2LE), version 1.1"

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

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