IEC 61850 Certificate Level A[1]

Issued to:

ABB SACE
A division of ABB S.p.A.
Via Pescaria 5
24123 Bergamo
Italy

For the server product:

Ekip Touch with Ekip Com IEC61850
Protection and control Relay
Ekip Com IEC61850 Software version: 03.02
Ekip Com IEC61850 Hardware version: 00.00
Ekip Com IEC61850 S/N: 748000140520W001

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

IEC 61850 First Edition Parts 6, 7-1, 7-2, 7-3, 7-4 and 8-1

Communication networks and systems in substations

The conformance test has been performed according to IEC 61850-10, the UCA International Users Group Server Device Test Procedures version 3.04, the product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement (PICS) for Ekip Com IEC 61850 v1.8", "Model Implementation Conformance Statement (MICS) for Ekip Com IEC 61850 v1.10" and "Tissues Implementation Conformance Statement (TICS) for Ekip Com IEC 61850 v1.2" and the extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for Ekip Com IEC 61850 v1.13".

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):

1	Basic Exchange (20/24)	9a	GOOSE Publish (10/12)
2	Data Sets (3/6)	9b	GOOSE Subscribe (10/11)
5	Unbuffered Reporting (13/18)	12c	Enhanced Direct Control (5/13)
		13	Time Synchronization (4/5)

This certificate includes a summary of the test results as carried out at ABB SACE in Italy with UniCA 61850 Client Simulator 4.32.2 with test suite 3.31.00 and UniCA 61850 Analyzer 5.31.00. This document has been issued for information purposes only, and the original paper copy of the DNV GL report No. 10074265-INC 18-2052 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 SACE. 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, January 18, 2018

G. Webber
Business Leader
Interoperability of Smart Grids

Issued by:

DNV·GL

DNV KEMA is now DNV GL

R. Schimmel
Verification Manager

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

Applicable Test Procedures from the UCA International Users Group Server Device Test Procedures version 3.04

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	AssN3, AssN6, Srv6, Srv8, SrvN1e, SrvN1f, SrvN3
2: Data Sets	Dset1, Dset10a, DsetN1ae	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp9, RpN1, RpN2, RpN3, RpN4, RpN8	Rp8, Rp11, Rp12
9a: GOOSE Publish	Gop2, Gop3, Gop4, Gop9, Gop10a	Gop1, Gop6, Gop7, GopN1, GopN2
9b: GOOSE Subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	Gos1b
12c: Enhanced Direct Control	CtlN3, DOes2, DOes5	CtlN8, CtlN11
13: Time Sync	Tm1, Tm2	TmN1, TmN2