



IEC 61850 Certificate Level A¹

Page 1/2

No. 30720575 -Consulting 07-2063

Issued to:
ABB Oy
Distribution Automation
Muottitie 2 A
FI-65101 Vaasa
Finland

For the product:
REX521 with SPA-ZC 402 V2.1



The product has not shown to be non-conforming to:
IEC 61850-6, 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 with product's protocol, model and technical issue implementation conformance statements: "IEC61850 Conformance Statement for REX521 and SPA-ZC 402 version 1.0" and "IEC 61850 Tissues Conformance Statement for REX521 and SPA-ZC 402 version 1.0", and extra information for testing (PIXIT) "IEC 61850 Protocol Implementation extra Information for Testing (PIXIT) for REX521 and SPA-ZC 402 version 1.0".

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 UCA International Users Group Device Test procedures v1.1):

1 Basic Exchange (16/23)	6 Buffered Reports (12/15)
2 Data Sets (2/5)	12a Direct Control (4/11)
5 Unbuffered Reports (9/13)	13 Time Synchronization (3/4)

This Certificate includes a summary of the test results as carried out at KEMA in Arnhem, the Netherlands with UniCasim 61850 version 3.16.00 with test suite 3.16.03 and UniCA 61850 analyzer 4.16.00 and UniCasim GOOSE v2.14.02 with test suite 2.12.05. The test is based on the UCA International Users Group Device Test Procedures version 1.1. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 30720575-Consulting 07-2064 will prevail.

The test have been carried out on one single specimen of the products 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, October 18, 2007

S.J.L.M. Janssen
Managing Director KEMA Consulting

R. Schimmel
Certification manager

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

Copyright © KEMA Nederland B.V., Arnhem, the Netherlands. All rights reserved. Please note that any electronic version of this KEMA certificate is provided to KEMA's customer for convenience purposes only. It is prohibited to update or change it in any manner whatsoever, including but not limited to dividing it into parts. In case of a conflict between the electronic version and the original version, the original paper version issued by KEMA will prevail.



International
Usersgroup

Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 1.1

1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5, Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	Srv6, Srv8
2: Data Sets	Dset1, DsetN1ae	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7, RpN1, RpN2, RpN3, RpN4	
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, BrN1, BrN2, BrN3, BrN4, BrN5	
12a: Direct Control	CltN3, CltIN8, DOns1, DOns3	
13: Time sync	Tm1, Tm2, TmN1	