

No. 10157302-INC 20-2037

Issued to:

ABB Power Grids
901 Main Campus Dr
Raleigh, NC 27606
United States of America

For the server product:

CoreTec4 Transformer Condition Monitor
IEC 61850 software version 0.0.5.5b
Model CoreTec4
S/N: 1679030-005

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 3.3, the product's protocol, model and technical issue implementation conformance statements: "Model Implementation Conformance Statement for the IEC61850 interface in ABB CoreTec4 version 0.5.5b", "CoreTec4 0.5.5b IEC 61850 Compliance PICS Rev05" and "CoreTec4 0.5.5b IEC 61850 Compliance TICS Rev05" and the extra information for testing: "CoreTec4 0.5.5b IEC 61850 Compliance PiXIT Rev05".

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 (21/25)	13 Time Synchronization (4/5)
2 Data Sets (3/6)	
5 Unbuffered Reporting (12/18)	

This certificate includes a summary of the test results as carried out at DNV GL in The Netherlands with UniCA 61850 Client Simulator 4.32.01 with test suite 3.31.00 and UniCA 61850 Analyzer 5.34.02. This document has been issued for information purposes only, and the original DNV GL report No. 10157302-INC 20-2030 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 Inc. 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, 20 December, 2019



N.A. Heijker
Business Leader
Interoperability of smart power systems

Issued by:



DNV KEMA is now DNV GL



R. Schimmel
Verification Manager

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

Copyright © DNV GL Netherlands B.V. Arnhem, the Netherlands. All rights reserved. It is prohibited to update or change this certificate in any manner whatsoever, including but not limited to dividing it into parts.



Applicable Test Procedures from the UCA International Users Group Server Device Test Procedures version 3.3

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	AssN3, AssN6, Srv6, Srv7, Srv8, SrvN1e, SrvN1f, SrvN3
2: Data Sets	Dset1, Dset10a, DsetN1ae	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp9, RpN1, RpN2, RpN3, RpN4, RpN8	Rp5, RpN5
13: Time Sync	Tm1, Tm2	Tm3, TmN1