



# IEC 61850 Certificate Level A<sup>1</sup>

No. 74104760-MOC/INC 13-3584 rev2

Issued to:  
Alstom Grid  
Parc Eurêka – 81, rue Euclide  
34000 Montpellier  
France

For the server product:  
C264  
Modular Substation Controller  
61850 software version V5.1.0



The server product has not 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 Device Test Procedures version 2.3 with TPCL<sup>2</sup> version 1.7, the product's protocol, model and technical issue implementation conformance statements: "DCS C264 Protocol Implementation Conformance Statement (PICS), issue D", "DCS C264 IEC 61850 MICS, issue C" and "DCS C264 Tissue Implementation Conformance Statement testing (TICS), issue A" and the extra information for testing: "DCS C264 Protocol implementation extra information for testing (PIXIT), issue F".

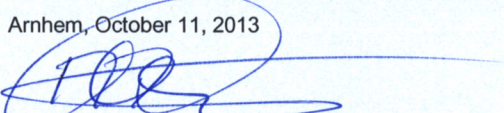
The following IEC 61850 conformance blocks have been tested with a positive result (number of relevant and executed test cases / total number of test cases):

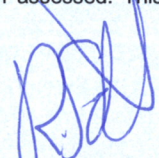
|    |                              |     |                                |
|----|------------------------------|-----|--------------------------------|
| 1  | Basic Exchange (20/24)       | 12a | Direct Control (6/12)          |
| 2  | Data Sets (3/6)              | 12c | Enhanced Direct Control (6/13) |
| 5  | Unbuffered Reporting (14/19) | 12d | Enhanced SBO Control (11/19)   |
| 6  | Buffered Reporting (17/21)   | 13  | Time Synchronization (3/5)     |
| 9a | GOOSE Publish (9/13)         | 14  | File Transfer (4/7)            |
| 9b | GOOSE Subscribe (10/11)      |     |                                |

This certificate includes a summary of the test results as carried out at Alstom Grid in Montpellier with UniCA 61850 Client simulator 4.27.04 with test suite 3.27.00 and UniCA 61850 Analyzer 5.27.04. This document has been issued for information purposes only, and the original paper copy of the KEMA report No. 74104760-MOC/INC 13-3583 will prevail.

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

Arnhem, October 11, 2013

  
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<sup>1</sup> Level A - Independent test lab with certified ISO 9001 Quality System

<sup>2</sup> TPCL - Test procedures change list





Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 2.3 with TPCL version 1.7

| Conformance Block            | Mandatory  | Conditional                             |
|------------------------------|--|---|
| 1: Basic Exchange            | Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5<br>Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4 | Srv6, Srv7, Srv8, SrvN1e, SrvN1f, SrvN3 |
| 2: Data Sets                 | Dset1, Dset10a, DsetN1ae   |   |
| 5: Unbuffered Reporting      | Rp1, Rp2, Rp3, Rp4, Rp7, Rp10, Rp12<br>RpN1, RpN2, RpN3, RpN4                                  | Rp5, Rp8, RpN6                          |
| 6: Buffered Reporting        | Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12, Br14<br>BrN1, BrN2, BrN3, BrN4, BrN5                  | Br5, Br10, BrN6                         |
| 9a: GOOSE publish            | Gop2, Gop3, Gop4, Gop7, Gop9, Gop10a   | Gop1, Gop6, GopN1                       |
| 9b: GOOSE subscribe          | Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6                                    | Gos1b                                   |
| 12a: Direct control          | CtlN3, CtlN8<br>DOs1   | Ctl7, Dons3, CtlN11                     |
| 12c: Enhanced Direct Control | CtlN3, CtlN8<br>DOes2, DOes5   | Ctl7, CtlN11                            |
| 12d: Enhanced SBO control    | Ctl3, CtlN1, CtlN2, CtlN3, CtlN4, CtlN9<br>SBOes1, SBOes2, SBOes3                              | Ctl7, CtlN11                            |
| 13: Time sync                | Tm1, Tm2, TmN1   |   |
| 14: File transfer            | Ft1, Ft2ab, Ft4, FtN1ab  |   |