

No. 10172107-INC 20-3184

**Issued to:**

ABB Oy, Distribution Solutions  
Muottitie 2 A  
65320 Vaasa  
Finland

**For the server product:**

SSC600  
Smart substation control and protection  
Software version: 1.2.1  
Hardware version: A

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

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

Communication networks and systems for power utility automation

The conformance test has been performed according to IEC 61850-10 Edition 2, the UCA International Users Group Edition 2 Server Test Procedures version 2.0\_rev5 with product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in SSC600, 1MRS758924 revision B", "IEC 61850 Ed2 Model Implementation Conformance Statement (MICS) for SSC600, 1MRS759017 revision B" and "TISSUES Implementation Conformance Statement for the IEC61850 Ed2 interface in SSC600, 1MRS758925 revision A" and the extra information for testing: "Protocol Implementation Extra Information for Testing (PIXIT) for the IEC 61850 interface in SSC600, 1MRS758922 revision B".

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 (25/28)	9a GOOSE Publish (10/13)
2 Data Sets (4/7)	9b GOOSE Subscribe (16/18)
4 Setting Group Selection (4/4)	12a Direct Control (11/17)
4+ Setting Group Definition (12/13)	12d Enhanced SBO Control (19/27)
5 Unbuffered Reporting (19/22)	13 Time Synchronization (6/7)
6 Buffered Reporting (27/32)	14 File Transfer (7/8)

This certificate includes a summary of the test results as carried out at DNV GL in The Netherlands with UniGrid SA Simulator 1.7.1 with test suite 1.1.0 and UniCA 61850 Analyzer 6.40.01. This document has been issued for information purposes only, and the archived DNV GL verification report No. 10172107-INC 20-3186 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. 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, December 7, 2020



**N.A. Heijker**  
Business Leader  
Interoperability of Smart Power Systems

**Issued by:**



**DNV-GL**  
DNV KEMA is now DNV GL



**R. Schimmel**  
Verification Manager

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

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Applicable Test Procedures from the UCA International Users Group Edition 2 Server Test Procedures version 2.0\_rev5

Conformance Block	Mandatory	Conditional
1: Basic Exchange	sAss1, sAss2, sAss3, sAss4, sAssN2, sAssN3, sAssN4, sAssN5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, sSrvN1abcd, sSrvN4	sAssN6, sSrv6, sSrv8, sSrv9, sSrv10, sSrv12, sSrvN1e, sSrvN1f, sSrvN2, sSrvN3
2: Data Sets	sDs1, sDs10a, sDsN1ae	sDs15
4: Setting Group Selection	sSg1, sSg3, sSgN1	sSg11
4+: Setting Group Definition	sSg2, sSg4, sSg6, sSg7, sSg8, sSg10, sSg12, sSgN2, sSgN3, sSgN4, sSgN5	sSg9
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp16, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp8, sRp10, sRp11, sRp12, sRp15, sRpN5
6: Buffered Reporting	sBr1, sBr2, sBr3, sBr4, sBr5, sBr9, sBr14, sBr16, sBr20, sBr21, sBr22, sBr25, sBr26, sBr27, sBr28, sBr29, sBrN1, sBrN2, sBrN3, sBrN4, sBrN5, sBrN8	sBr8, sBr10, sBr11, sBr12, sBr15
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10, sGop11, sGop12	sGop1, sGop6, sGopN1
9b: GOOSE subscribe	sGos1, sGos2, sGos3, sGos5, sGos6a, sGos7, sGos8, sGos9, sGos10, sGos11, sGosN1, sGosN2, sGosN3, sGosN4, sGosN5, sGosN6	
12a: Direct control	sCtl5, sCtl10, sDOns1, sDOns2	sCtl2, sCtl7, sCtl13, sCtl15, sCtl16, sCtl17, sCtl21
12d: Enhanced SBO Control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOes1, sSBOes2, sSBOes6, sSBOes8	sCtl2, sCtl4, sCtl6, sCtl7, sCtl15, sCtl16, sCtl17, sCtl20, sCtl26
13: Time sync	sTm1, sTm2, sTmN1	sTm3, sTm4, sTm5
14: File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	sFt2c, sFtN1c