

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

**Issued to:**

Schneider Electric  
35 Rue Joseph Monier  
92500 Rueil-Malmaison  
France

**For the client system:**

EcoStruxure Power Operation  
Edge control software for managing critical facilities  
Software version 2021  
Driver version: 1.7.8  
Oracle VM Virtualbox with Windows server 2019 Standard

The client system 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 in substations

The conformance test has been performed according to IEC 61850-10 Edition 2, the UCA International Users Group Edition 2 Client Conformance Test Procedures version 1.2 with client system's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in Power Operation 2021 July 20th, 2021 Power Operation 2021 Driver version 1.7.8", "Model Implementation Conformance Statement for the IEC 61850 Client Interface in Power Operation 2021 July 20th, 2021 Power Operation 2021 Driver version 1.7.8" and "TISSUES Implementation Conformance Statement for the IEC 61850 Edition 2 Client Interface in Power Operation v2021 July 20th, 2021 Power Operation 2021 Driver version 1.7.8" and product's extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 Client interface in Power Operation 2021 July 20th, 2021 Power Operation 2021 Driver version 1.7.8".


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 (21/24)	12a Direct Control (7/9)
2 Data Sets (6/10)	12b SBO Control (9/11)
5 Unbuffered Reporting (20/24)	12c Enhanced Direct Control (7/9)
6 Buffered Reporting (22/28)	12d Enhanced SBO Control (9/11)
	14 File Transfer (3/8)

This certificate includes a summary of the test results as carried out at DNV in The Netherlands with UniCA 61850 IED Simulator version 6.1.31 and UniCA 61850 Analyzer 6.40.01. This document has been issued for information purposes only, and the archived DNV verification report No. 10027444-INC 21-3159 rev 1 will prevail.

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

Arnhem, July 22, 2021



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

**Issued by:**




**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 Client Conformance Test Procedures version 1.2

Conformance Block	Mandatory	Conditional
1: Basic Exchange	cAss1, cAss2, cAss3, cAssN1, cAssN4, cAssN5, cAssN6	cAssN7 cSrv1, cSrv2, cSrv3, cSrv4, cSrv5, cSrv6, cSrv7, cSrv10, cSrvN1, cSrvN3, cSrvN4, cSrvN5, cSrvN6
2: Data Sets		cDs1, cDs2, cDs5, cDs6, cDsN1a, cDsN1b
5: Unbuffered Reporting	cRp3, cRp4, cRp5, cRp8, cRp9, cRp10, cRp11, cRp13a, cRp14, cRp15, cRp19, cRpN2, cRpN5, cRpN6	cRp1, cRp2, cRp7, cRp16, cRp18, cRpN1
6: Buffered Reporting	cBr3, cBr4, cBr5, cBr8, cBr9, cBr10, cBr11, cBr13a, cBr14, cBr15, cBr19, cBr30, cBr31, cBrN2, cBrN5, cBrN6	cBr1, cBr2, cBr7, cBr16, cBr18, cBrN1
12a: Direct Control	cCtl4, cCtl5, cDOns1, cDOns2	cCtl1, cCtl2, cCtl3
12b: SBO Control	cCtl4, cCtl5, cSBOns1, cSBOns2, cSBOns3	cCtl1, cCtl2, cCtl3, cSBOns4
12c: Enhanced Direct Control	cCtl4, cCtl5, cDOes1, cDOes2	cCtl1, cCtl2, cCtl3
12d: Enhanced SBO Control	cCtl4, cCtl5, cSBOes1, cSBOes2, cSBOes3	cCtl1, cCtl2, cCtl3, cSBOes4
14: File transfer	cFt1, cFt3, cFtN1	