

IEC 61850 Certificate Level A¹

No. 10202705-INC 20-2382

Issued to:

ELVAC a.s. Hasičská 930/53 700 30 Ostrava - Hrabůvka Czech Republic

For the client system:

RTU7M

Modular Control System Software version: 205.13

Hardware:

Module: S/N: Version: PWRIC-230 PWR_4_7_A 67247 COMIO-PC3 COMIO5_1_1 550442 FSW2 ESW2_1_1 110218

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 for power utility automation

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 1.1.2 with product's protocol, model and technical issue implementation conformance statements and the extra information for testing: "RTU7M IEC 61850 Implementation Document, revision 4, April 2020".

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 (14/24)	12a Direct Control (6/9)
2 Data Sets (4/10)	12b SBO Control (7/11)
2+ Data Set Definition (3/8)	12c Enhanced Direct Control (6/9)
5 Unbuffered Reporting (20/24)	12d Enhanced SBO Control (7/11)
6 Buffered Reporting (23/28)	13 Time Synchronization (3/4)

This certificate includes a summary of the test results as carried out at DNV GL in The Netherlands with UniCA 61850 IED simulator 6.1.31 and UniCA 61850 Analyzer 5.34.02. This document has been issued for information purposes only, and the archived copy of the DNV GL verification report No. 10202705-INC 20-2381 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV GL by ELVAC. 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, June 10, 2020

N.A. Heijker Business Leader

Interoperability of Smart Power Systems

Issued by:



DNV KEMA is now DNV GL

Verification Manager

¹ 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 1.1.2

Conformance Block	Mandatory	Conditional
1: Basic Exchange	cAss1, cAss2, cAss3, cAssN1, cAssN4, cAssN5, cAssN6	cAssN7, cSrv1, cSrv2, cSrv3, cSrv10, cSrvN1, cSrvN5
2: Data Sets		cDs2, cDs5, cDs6, cDsN1b
2+: Data Set Definition		cDs11, cDs14, cDsN10b
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, cBr32, cBrN1
12a: Direct Control	cCtl4, cCtl5, cDOns1, cDOns2	cCtl1, cCtl2
12b: SBO Control	cCtl4, cCtl5, cSBOns1, cSBOns2, cSBOns3	cCtl1, cCtl2
12c: Enhanced Direct Control	cCtl4, cCtl5, cDOes1, cDOes2	cCtl1, cCtl2
12d: Enhanced SBO Control	cCtl4, cCtl5, cSBOes1, cSBOes2, cSBOes3	cCtl1, cCtl2
13: Time Synchronization	cTm1, cTmN1	cTm2