

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

No. SchneiderElectric\_Easergy\_P5V20\_V01\_Ed2

Issued to:

Schneider Electric Industries SAS 35 rue Joseph Monier, 92500 Rueil-Maimaison, France

## For the server product:

Easergy P5V20 Voltage Protection Relay Software version: V01

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 1.0 with TPCL² 1.2.6 with product's protocol, model and technical issue implementation conformance statements: Schneider Electric Easergy P5 IEC61850 Server Conformance Statement Ed2: Chapter 2 PICS, Schneider Electric Easergy P5 IEC61850 Server Conformance Statement Ed2: Chapter 3 MICS, Schneider Electric Easergy P5 IEC61850 Server Conformance Statement Ed2: Chapter 5 TICS and product's extra information for testing: Schneider Electric Easergy P5 IEC61850 Server Conformance Statement Ed2: Chapter 4 PIXIT.

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	(23	/26)

2 Data Sets (4/7)

2+ Data Set Definition (24/24)

4 Setting Group Selection (4/4)

5 Unbuffered Reports (21/21)

6 Buffered Reports (30/30)

9a GOOSE Publish (13/13)

9b GOOSE Subscribe (12/14)

12a Direct Control (6/18)

12b SBO Control (12/27)

12c Enhanced Direct Control (8/20)

12d Enhanced SBO Control (13/28)

13 Time Synchronization (4/7)

This Certificate includes a summary of the test results as carried out at Schneider Electric IEC61850 lab in China with UniCASim 61850 client simulator 4.31.02 with test suite v4.32.03 and UniCA Analyzer 5.31.00. This document has been issued for information purposes only, and the original paper copy of the Schneider Electric IEC61850 lab report: No. SchneiderElectric\_Easergy\_P5V20\_V01\_Ed2\_RPT will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to Schneider Electric IEC61850 lab by Schneider Electric. The manufacturer's production process has not been assessed. This certificate does not imply that Schneider Electric IEC61850 lab has certified or approved any product other than the specimen tested

Shanghai, April 10, 2019

辽晓辉

Xiaohui WANG Ver&Val Section Manager Issued by:



介春熟

Chunyan YU IEC61850 Test Engineer

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<sup>&</sup>lt;sup>1</sup> Level B \_ Tester lab with certified ISO 9001 Quality System

<sup>&</sup>lt;sup>2</sup> Test Procedure Change List



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Applicable Test Procedures from the UCA International Users Group Edition 2 Server Test Procedures version 1.0 with TPCL 1.2.6

sAssNi sSrvN2 2: Data Sets sDs1, 2+: Data Set Definition sDs2, s sDs9, s	sAss2, sAss3, sAssN2, sAssN3, sAssN4, 5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, labcd, sSrvN4 sDs10a, sDsN1ae sDs3, sDs4, sDs5, sDs6, sDs7, sDs8, sDs11, sDs13, sDs14, sDsN1cd, sDsN2, , sDsN4, sDsN5, sDsN6, sDsN7, sDsN8,	sAssN6, sSrv6, sSrv8, sSrv9, sSrv10, sSrv12, sSrvN1e, sSrvN1f, sSrvN3 sDs15 sDs12, sDsN11, sDsN12
sSrvN3 2: Data Sets sDs1, 2+: Data Set Definition sDs2, s	sDs10a, sDsN1ae sDs3, sDs4, sDs5, sDs6, sDs7, sDs8, sDs11, sDs13, sDs14, sDsN1cd, sDsN2,	sSrvN1f, sSrvN3 sDs15
2: Data Sets sDs1, 2+: Data Set Definition sDs2, s sDs9, s	sDs10a, sDsN1ae sDs3, sDs4, sDs5, sDs6, sDs7, sDs8, sDs11, sDs13, sDs14, sDsN1cd, sDsN2,	sDs15
2+: Data Set Definition SDs2, s	sDs3, sDs4, sDs5, sDs6, sDs7, sDs8, sDs11, sDs13, sDs14, sDsN1cd, sDsN2,	
sDs9,	sDs11, sDs13, sDs14, sDsN1cd, sDsN2,	sDs12, sDsN11, sDsN12
sDsN3	, sDsN4, sDsN5, sDsN6, sDsN7, sDsN8,	i
sDsN9	, sDsN10	
4: Setting Group Selection sSg1, s	sSg3, sSgN1	sSg11
5: Unbuffered Reporting sRp1,	sRp2, sRp3, sRp4, sRp5, sRp9, sRp14,	sRp6, sRp7, sRp8, sRp10,
sRp15	, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp11, sRp12, sRp13,
		sRpN5
6: Buffered Reporting sBr1, s	Br2, sBr3, sBr4, sBr5, sBr9, sBr14,	sBr6, sBr7, sBr8, sBr10,
sBr15,	sBr20, sBr21, sBr22, sBr25, sBr26,	sBr11, sBr12, sBr13, sBr23,
sBr27,	sBr28, sBrN1, sBrN2, sBrN3, sBrN4,	sBr24
sBrN5	, sBrN8	
9a: GOOSE publish sGop2	a, sGop3, sGop4, sGop9, sGop10,	sGop1, sGop2b, sGop5,
sGop1	1	sGop6, sGop7, sGopN1,
		sGopN2
9b: GOOSE subscribe sGos1	, sGos2, sGos3, sGos5, sGos6a,	
	, sGosN1, sGosN2, sGosN3, sGosN4,	
	I5, sGosN6	
·	sCtl10, sDOns1, sDOns2	sCtl13, sCtl16
	sCtl8, sCtl9, sCtl10, sCtl11, sCtl25,	sCtl6, sCtl16, sCtl27
	s1, sSBOns2, sSBOns6	
12c: Enhanced Direct control sCtl5,	sCtl10, sDOes1, sDOes2	sCtl13, sCtl14, sCtl16,
		sCtl26
12d: Enhanced SBO control sCtl5,	sCtl8, sCtl9, sCtl10, sCtl11, sCtl25,	sCtl6, sCtl16, sCtl26
sSBOe	1, sSBOe2, sSBOes6, sSBOes8	
13: Time sync sTm1,	, sTm2, sTmN1	sTmN2