



IEC 61850 Certificate

Level A¹

No. D 089191 0035 Rev. 00

Issued to:

Schneider Electric Industries SAS 35 rue Joseph Monier 92500 Rueil Malmaison France For the client system:

Easergy MiCOM P643
Transformer Protection Relay
Firmware Version: B7

Issued by:

TÜV SÜD CERTIFICATION AND TESTING (CHINA) CO., LTD SHANGHAI BRANCH TESTING CENTER No.1999, Duhui Road, Minhang District, Shanghai, 201 108, People's Republic of China

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 2.0.5 with product's protocol, model and technical issue implementation conformance statements: "P64x_EN_PC_Hc3_B7_LM_Ed.2", "P64x_EN_MC_Hc3_B7_M_Ed.2", "P64x_EN_TC_Hc3_B7_LM_Ed.2" and product's extra information for testing: "P64x_EN_PX_Hc3_B7_LM_Ed.2".

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

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1	Basic Exchange (21/26)	9a	GOOSE Publish (12/13)
2	Data Sets (4/7)	9b	GOOSE Subscribe (19/20)
4	Setting Group Selection (4/4)	12a	Direct Control (7/19)
5	Unbuffered Reporting (21/23)	12b	SBO Control (14/28)
6	Buffered Reporting (31/33)	12c	Enhanced Direct Control (9/21)
		12d	Enhanced SBO Control (15/29)
		13	Time Synchronization (6/7)
		14	File Transfer (7/8)

This Certificate includes a summary of the test results as carried out at Shanghai in P.R. China with SimFlex Client Simulator Edition 2 version 3.17 with test suite version 2.0.5 and Wireshark version 3.6.2. This document has been issued for information purposes only, and the original paper copy of the TÜV SÜD Certification and Testing (China) Co., Ltd Shanghai Branch Testing Center report: No. 705002105104-00 will prevail.

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

Shanghai, March 25, 2022

Cong WANG

Yifan WANG Test Engineer

Lan WANG

Technical Certifier

¹ Level A - Independent Test lab with certified ISO/IEC 17025 Quality System



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Applicable Test Procedures from the UCA International Users Group Edition 2 Server Test Procedures version 2.0.5

Conformance Block	Mandatory	Conditional
1: Basic Exchange	sAss1, sAss2, sAss3, sAss4, sAssN2, sAssN3, sAssN4, sAssN5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, sSrv8, sSrvN1abcdf, sSrvN4	sAssN6, sSrv6, sSrv12, sSrvN1e, sSrvN3
2: Data Sets	sDs1, sDs10a, sDsN1ae	sDs15
4: Setting Group Selection	sSg1, sSg3, sSgN1	sSg11
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp16, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp8, sRp10, sRp11, sRp12, sRp13, sRp15, sRp17, 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, sBr13, sBr15, sBr17, sBr23, sBr24
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10, sGop11, sGop12	sGop1, sGop5, sGop6, sGopN1, sGopN2
9b: GOOSE subscribe	sGos1, sGos2, sGos3, sGos5, sGos6a, sGos7, sGos8, sGos9, sGos10, sGos11, sGos12, sGosN1, sGosN2, sGosN3, sGosN4, sGosN5, sGosN6	sGos6b, sGos13
12a: Direct control	sCtl5, sCtl10, sDOns1, sDOns2	sCtl13, sCtl15, sCtl16
12b: SBO control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOns1, sSBOns2, sSBOns6	sCtl4, sCtl6, sCtl15, sCtl16, sCtl27
12c: Enhanced Direct Control	sCtl5, sCtl10, sDOes1, sDOes2	sCtl13, sCtl14, sCtl15, sCtl16, sCtl26
12d: Enhanced SBO control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOes1, sSBOes2, sSBOes6, sSBOes8	sCtl4, sCtl6, sCtl15, sCtl16, sCtl26
13: Time sync	sTm1, sTm2, sTmN1	sTm3, sTm4, sTm5
14: File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	sFt2c, sFtN1c