



IEC 61850 Certificate Level A¹

No. 2023PUCA000002

Issued to:

HangZhou Deruida Electric Co., Ltd.
Room 214, floor 2, building 1, No.11, Liangzhan Road,
Renhe street, Yuhang District, Hangzhou City, Zhejiang
Province, China

For the product:

CPD100 DC Traction Power Systems Control
and Protection Relays
software version: 1020 0001

Issued by: **KETOP** 开普

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 2.0.6 with product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement (PICS) for CPD100 DC Traction Power Systems Control and Protection Relays", "Model Implementation Conformance Statement (MICS) for CPD100 DC Traction Power Systems Control and Protection Relays", "TISSUES Implementation Conformance Statement (TICS) for the IEC 61850 Ed2 interface in CPD100 DC Traction Power Systems Control and Protection Relays" and product's extra information for testing: "Protocol Implementation extra Information for Testing (PIXIT) for CPD100 DC Traction Power Systems Control and Protection Relays".

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):

9a GOOSE Publish (13/13)	13 Time Synchronization (3/7)
9b GOOSE Subscribe(21/21)	

This certificate includes a summary of the test results as carried out at Xuchang KETOP Testing Research Institute Co.,Ltd in Xuchang, China with UniGrid Substation Automation V2.1.0 with test suite V2.0.6 and UniCA 61850 Analyzer V6.41.0.0, UniCASim 61850 GOOSE V2.27.01, This document has been issued for information purposes only, and the original paper copy of the KETOP Lab report: No. JW230127-Protocol will prevail.

The test have been carried out on one single specimen of the product as referred above and submitted to KETOP Lab by HangZhou Deruida Electric Co., ltd. The manufacturer's production process has not been assessed. This certificate does not imply that KETOP Lab has approved ANY product other than the specimen tested.

Xuchang, Mar 21th, 2023

He Chun
Director of PRTC Department

Liu Desen
Test Engineer

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

This certificate is issued in accordance with the laboratory accreditation requirements of the UCA International Users Group. This certificate shall only be reproduced in full and with the express permission of KETOP lab.

China KETOP Lab (Xuchang KETOP Testing Research Institute Co.,Ltd)
National Quality Inspection & Testing Center For Relay Protection And Automation Equipment
No. 17 Shangde Road , Xuchang, Henan Province, China P.C.461000
T +86 374 3212841 F +86 374 3212775 www.ketop.cn



Applicable Test Procedures from the UCA International Users Group Conformance Test Procedures for Server Devices with IEC 61850-8-1 Edition 2 Interface Revision 2.0.6

Conformance Block	Mandatory	Conditional
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10, sGop11, sGop12	sGop1, sGop2b, sGop5; sGop6, sGopN1, sGopN2
9b: GOOSE Subscribe	sGos1, sGos2, sGos3, sGos5, sGos6a, sGos7, sGos8, sGos9, sGos10, sGos11, sGos12, sGos23, sGosN1, sGosN2, sGosN3, sGosN4, sGosN5, sGosN6	sGos4, sGos6b, sGos13
13 Time sync	sTm1, sTm2, sTmN1	

This certificate is issued in accordance with the laboratory accreditation requirements of the UCA International Users Group. This certificate shall only be reproduced in full and with the express permission of KETOP lab.

China KETOP Lab (Xuchang KETOP Testing Research Institute Co.,Ltd)
National Quality Inspection & Testing Center For Relay Protection And Automation Equipment

No. 17 Shangde Road , Xuchang, Henan Province, China P.C.461000
 T +86 374 3212841 F +86 374 3212775 www.ketop.cn