



Test Report issued under the responsibility of:



TEST REPORT IEC 61851-23 Electric vehicle conductive charging system – Part 23: DC electric vehicle charging station	
Report Number.:	CN26WETG 001
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Name of Testing Laboratory preparing the Report.....:	TÜV Rheinland (Shanghai) Co., Ltd.
Applicant's name.....:	JIANGXI RUIHUA INTELLIGENT TECHNOLOGY CO., LTD.
Address	Ruihua Intelligent Industrial Park, Smart Manufacturing Town, Ruichang City, Jiu jiang City, 332200 Jiangxi, P.R. China
Test specification:	
Standard	IEC 61851-23:2014/COR1:2016 for use in conjunction with IEC 61851-1:2010
Test procedure	CB Scheme
Non-standard test method.....:	N/A
Test Report Form No.....:	IEC61851_23B
Test Report Form(s) Originator.....:	TÜV SÜD Product Service Ltd.
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Test item description	EV DC charging station	
Trade Mark		
Manufacturer	Same as applicant	
Model/Type reference	RHDCaK-b-EU a can be 1) 60, 70, 80, 90, 100, 110, 120, 130, 140, 150 or 160 2) 180, 190, 200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300, 310, 320, 330, 340, 350, 360, 370, 380, 390 or 400 b can be 1) ZJ7 or ZJ7/02 2) ZJ2 or ZJ2/02	
Ratings	For model RHDC400K-ZJ2-EU: Input: 400VAC±15%, 50/60Hz, 3P+N+PE Output: 200-1000VDC, 350A Max., 400kW Max., CCS2*2 See the copy of marking plate for details.	
Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
☒ CB Testing Laboratory:	TÜV Rheinland (Shanghai) Co., Ltd.	
Testing location/ address	No.177, Lane 777 West Guangzhong Road, Jing'an District, Shanghai, China	
Tested by (name, function, signature)	Carlos Jin / Project Engineer	<i>Carlos Jin</i>
Approved by (name, function, signature) ...	David Chen / Authorizer	<i>David Chen</i>
Testing procedure: CTF Stage 1:		
Testing location/ address		
Tested by (name, function, signature)		
Approved by (name, function, signature) ...		
Testing procedure: CTF Stage 2:		
Testing location/ address		
Tested by (name + signature)		
Witnessed by (name, function, signature) .:		
Approved by (name, function, signature) ...		
Testing procedure: CTF Stage 3:		
Testing procedure: CTF Stage 4:		
Testing location/ address		
Tested by (name, function, signature)		
Witnessed by (name, function, signature) .:		
Approved by (name, function, signature) ...		
Supervised by (name, function, signature) :		

List of Attachments (including a total number of pages in each attachment):

- Attachment 1: Additional test data (1 pages)
- Attachment 2: Photo Documentation (44 pages)

Summary of testing:**Tests performed (name of test and test clause):**

1. Model RHDC400K-ZJ2-EU was subjected to full test and was found to comply with the requirements of IEC 61851-23:2014.

2. Tests performed (test clause and name of test from IEC 61851-23:2014):

Clause	Test	End date
6.4.3.1	Verification that the vehicle is properly connected	2026-08-14
6.4.3.2	Protective conductor continuity checking	2026-06-23
6.4.3.3	Energization of the system	2026-06-23
6.4.3.4	De-energization of the system	2026-06-23
6.4.3.101	DC supply for EV	2026-08-05
6.4.3.102	Measuring current and voltage	2026-08-05
6.4.3.105	Compatibility assessment	2026-06-23
6.4.3.106	Insulation test before charging	2026-06-17
6.4.3.107	Protection against overvoltage at the battery	2026-06-23
6.4.3.109	Control circuit supply integrity	2026-06-17
6.4.3.110	Short circuit test before charging	2026-06-16
6.4.3.111	User initiated shutdown	2026-06-23

Testing location:

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6.4.3.112	Overload protection for parallel conductors (conditional function)	2026-06-15	
6.4.3.113	Protection against temporary overvoltage	2026-06-15	
6.4.3.114	Emergency shutdown	2026-06-23	
7.2.2	Accessibility of live parts	2026-05-27	
7.2.3.1	Disconnection of EV	2026-06-24	
7.2.3.2	Disconnection of d.c. EV charging station	2026-06-24	
7.3	Fault protection	2026-06-15	
7.5.103	Protective conductor dimension cross sectional area	2026-05-21	
11.4.1	Dielectric Withstand Voltage	2026-08-29	
11.4.2	Impulse dielectric withstand	2026-08-29	
11.5	Insulation Resistance	2026-06-24	
11.6	Clearances and creepage distances	2026-05-22	
11.7	Leakage – Touch Current	2026-06-24	
11.8.2	Ambient air temperature	2026-06-27	
11.8.3	Ambient humidity	2026-06-24	
11.9	Permissible Surface Temperature	2026-07-30	
11.10	Environmental Conditions	2026-07-30	
11.11.2	Mechanical Impact	2026-05-25	
11.15.2	Durability test for marking	2026-05-25	
101.1.1	Emergency switching	2026-05-21	

101.1.2	IP degrees for ingress of objects	2026-08-12	
101.1.3	Storage means of the cable assembly and vehicle connector	2026-05-21	
101.1.4	Stability	2026-08-10	
101.2.1.1	Rated outputs and maximum output power	2026-08-05	
101.2.1.2.1	Output current regulation in CCC	2026-08-05	
101.2.1.2.2	Output voltage regulation in CVC	2026-08-05	
101.2.1.3	Control delay of charging current in CCC	2026-08-04	
101.2.1.4	Descending rate of charging current	2026-08-31	
101.2.1.5	Periodic and random deviation (current ripple)	2026-08-05	
101.2.1.6	Periodic and random deviation (voltage ripple in CVC)	2026-08-05	
101.2.1.7	Load dump	2026-08-31	
101.2.2	Effective earth continuity between the enclosure and the external protective circuit	2026-08-07	
CC.2.1	Proximity resistor	2026-08-14	
CC.3.2	Normal start up	2026-08-14	
CC.3.3	Normal shutdown	2026-08-14	
CC.3.4	DC supply initiated emergency shutdown	2026-08-31	
CC.3.5	EV initiated emergency shutdown	2026-08-14	
CC.4.1	IT (isolated terra) system requirements	2026-06-17	
CC.4.2	Temperature monitoring	2026-07-30	

CC.4.6	Voltage check at initialization	2026-08-14
CC.4.7	DC EV charging station maximum output Y capacitance	2026-08-03
CC.5.1	Pre-charging	2026-08-05
CC.6.1	Turn on inrush current (d.c. side)	2026-08-05
CC.6.2	Protection against overvoltage of battery	2026-06-15
CC.6.3	Requirements for load dump	2026-08-31
CC.6.4	DC output current regulation	2026-08-05

3. Model RHDC160K-ZJ7-EU was subjected to full test and was found to comply with the requirements of IEC 61851-23:2014.

4. Tests performed (test clause and name of test from IEC 61851-23:2014):

Clause	Test	End date
11.4.1	Dielectric Withstand Voltage	2026-08-29
11.4.2	Impulse dielectric withstand	2026-08-29
11.6	Clearances and creepage distances	2026-05-22
11.9	Permissible Surface Temperature	2026-07-30
101.1.2	IP degrees for ingress of objects	2026-08-12

Other models can be covered by above tests.

Summary of compliance with National Differences (List of countries addressed):

No EU Group differences.

☒ **The product fulfils the requirements of EN 61851-23:2014.**