



Test Report issued under the responsibility of:



**TEST REPORT**  
**IEC 62619**  
**Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for secondary lithium cells and batteries, for use in industrial applications**

Report Number..... : CQES231200064301  
 Date of issue ..... : 2024-02-07  
 Total number of pages ..... : 27 pages



Name of Testing Laboratory preparing the Report ..... : **SGS-CEC New Energy Technology (Chongqing) Co., Ltd.**

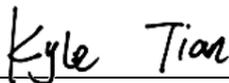
Applicant's name ..... : **RelyEZ Energy Storage Technology Co., Ltd.**  
 Address ..... : **A3603 Building 11A, Shenzhen Bay Science and Technology Ecological Park, No.16 Keji South Road, Nanshan District, Shenzhen, Guangdong, China**

**Test specification:**  
 Standard ..... : IEC 62619:2022  
 Test procedure..... : CB Scheme  
 Non-standard test method..... : N/A

TRF template used ..... : IECEE OD-2020-F1:2022, Ed.1.5  
 Test Report Form No..... : IEC62619B  
 Test Report Form(s) Originator .... : UL Solutions (Demko)  
 Master TRF ..... : Dated 2023-02-24

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<b>Test item description</b> .....	Rechargeable Li-ion Battery System (RelyEZ Rack 418)	
<b>Trademark(s)</b> .....		
<b>Manufacturer</b> .....	Jiangsu RelyEZ Energy Storage Technology Co., Ltd. 130 Tonggang Road, New District, Zhenjiang, Jiangsu, China	
<b>Model/Type reference</b> .....	YXYC-416314-E	
<b>Ratings</b> .....	Nominal voltage: 1331,2 Vd.c. Rated capacity: 314 Ah	
<b>Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):</b>		
<input checked="" type="checkbox"/>	<b>CB Testing Laboratory:</b>	SGS-CEC New Energy Technology (Chongqing) Co., Ltd.
	<b>Testing location/ address</b> .....	Building 13 & 14, No. 1839, Ranjun Road, Shuangfu Street, Jiangjin District, Chongqing, China
	<b>Tested by (name, function, signature)</b> .....	Kyle Tian/ Project Engineer 
	<b>Approved by (name, function, signature)</b> ..	Ryan Hu/ Report Reviewer 
<input type="checkbox"/>	<b>Testing procedure: CTF Stage 1:</b>	N/A
	<b>Testing location/ address</b> .....	
	<b>Tested by (name, function, signature)</b> .....	
	<b>Approved by (name, function, signature)</b> ..	
<input type="checkbox"/>	<b>Testing procedure: CTF Stage 2:</b>	N/A
	<b>Testing location/ address</b> .....	
	<b>Tested by (name + signature)</b> .....	
	<b>Witnessed by (name, function, signature)</b> . :	
	<b>Approved by (name, function, signature)</b> .. :	
<input type="checkbox"/>	<b>Testing procedure: CTF Stage 3:</b>	N/A
<input type="checkbox"/>	<b>Testing procedure: CTF Stage 4:</b>	N/A
	<b>Testing location/ address</b> .....	
	<b>Tested by (name, function, signature)</b> .....	
	<b>Witnessed by (name, function, signature)</b> . :	
	<b>Approved by (name, function, signature)</b> .. :	
	<b>Supervised by (name, function, signature)</b> :	

<p><b>List of Attachments (including a total number of pages in each attachment):</b></p> <p>Attachment 1: 14 pages of Photos;  Attachment 2: 7 pages of Information for safety;  Attachment 3: 1 page of Packaging;  Attachment 4: 2 pages of Product specification;  Attachment 5: 1 page of ISO9001 certificate.</p>	
<p><b>Summary of testing:</b></p> <p>The sample(s) tested complies with the requirements of IEC 62619:2022.</p> <p>Remark:</p> <ol style="list-style-type: none"> <li>1. A High voltage box combined with a battery module (YXYP-52314-E) was selected as typical model. Test results is representative of Rechargeable Li-ion Battery System in this report.</li> <li>2. The component cell (model: LFP71173207/314Ah) was certified according to IEC 62619:2022 by TÜV Rheinland (Ref. Certif. No.: JPTUV-15289, Report No.: CN23YUR9 001);</li> <li>3. The functional safety requirement in clause 8 was evaluated by SGS (Report No.: SHFS2310800034171) according to Annex H of IEC/EN 60730-1: 2013+A1:2015+A2:2020.</li> </ol>	
<p><b>Tests performed (name of test, test clause and date test performed):</b></p> <p><input type="checkbox"/> 7.2.1 External short-circuit test (cell or cell block)</p> <p><input type="checkbox"/> 7.2.2 Impact test (cell or cell block)</p> <p><input checked="" type="checkbox"/> 7.2.3 Drop test (cell or cell block, and battery system)</p> <p><input type="checkbox"/> 7.2.4 Thermal abuse test (cell or cell block)</p> <p><input type="checkbox"/> 7.2.5 Overcharge test (cell or cell block)</p> <p><input type="checkbox"/> 7.2.6 Forced discharge test (cell or cell block)</p> <p><input type="checkbox"/> 7.3.2 Internal short-circuit test (cell)</p> <p><input type="checkbox"/> 7.3.3 Propagation test (battery system)</p> <p><input checked="" type="checkbox"/> 8.2.2 Overcharge control of voltage (battery system)</p> <p><input checked="" type="checkbox"/> 8.2.3 Overcharge control of current (battery system)</p> <p><input checked="" type="checkbox"/> 8.2.4 Overheating control (battery system)</p>	<p><b>Testing location: (CBTL, SPTL, CTF, Subcontractor)</b></p> <p>SGS-CEC New Energy Technology (Chongqing) Co., Ltd.</p> <p>Building 13 &amp; 14, No. 1839, Ranjun Road, Shuangfu Street, Jiangjin District, Chongqing, China</p>
<p><b>Summary of compliance with National Differences (List of countries addressed):</b></p> <p>EU Group Differences, GB</p> <p><input checked="" type="checkbox"/> <b>The product fulfils the requirements of EN IEC 62619: 2022 and BS EN IEC 62619:2022.</b></p>	

**Use of uncertainty of measurement for decisions on conformity (decision rule) :**

No decision rule is specified by the IEC standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty ("simple acceptance" decision rule, previously known as "accuracy method").

Other: ... (to be specified, for example when required by the standard or client, or if national accreditation requirements apply)

**Information on uncertainty of measurement:**

The uncertainties of measurement are calculated by the laboratory based on application of criteria given by OD-5014 for test equipment and application of test methods, decision sheets and operational procedures of IECEE.

IEC Guide 115 provides guidance on the application of measurement uncertainty principles and applying the decision rule when reporting test results within IECEE scheme, noting that the reporting of the measurement uncertainty for measurements is not necessary unless required by the test standard or customer.

Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing.