

<b>Lithium battery test summary and supplier inquiry in accordance with sub-section 38.3 of manual of tests and criteria</b>	<b>Datum</b>	03.03.2022
	<b>Revision</b>	1.0
Test report no.: 21PP444-01_0	<b>Seite</b>	1

<b>1</b>	<b>NAME / DESCRIPTION OF THE BATTERY</b>
	BP-LFP-10250S LiFePO4 battery pack

<b>1a</b>	<b>NAME / DESCRIPTION OF THE CELLS INSIDE THE BATTERY</b>
	TB-027070180-FE-25AH LiFePO4 Prismatic cells

The test summary of the cells inside the battery must either be presented or under checkpoint 9 and 9a it must be confirmed that the UN 38.3 test summary for the cells is available.

<b>2</b>	<b>MANUFACTURER OF THE BATTERY</b>	
	Name	Bicker Elektronik GmbH
	Address	Ludwig-Auer-Straße 23, 86609 Donauwörth
	Phone	+49 (0)906 / 70595-0
	E-Mail	info@bicker.de
	Website	https://www.bicker.de

<b>2a</b>	<b>MANUFACTURER OF THE EQUIPMENT (if the battery is contained in equipment)</b>	
	Name	
	Address	
	Phone	
	E-Mail	
	Website	

<b>3</b>	<b>TEST LABORATORY OF BATTERY</b>	
	Name	Kiwa Primara GmbH
	Address	Gewerbestraße 28, 87600 Kaufbeuren
	Phone	+49 (0) 8341 / 99726-0
	E-Mail	de.primara.info@kiwa.com
	Website	www.kiwa.com

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<b>4</b>	<b>ID-NUMBER AND DATE</b>	
	Unique test report identification number	21PP444-01_0
	Date of test report	2022-03-03

## DESCRIPTION OF BATTERY

<b>5</b>	<b>MARK THE TYPE OF BATTERY WITH „✓“</b>	
	Lithium ion battery	✓
	Lithium metal battery	
	Lithium hybrid battery	

<b>6</b>	<b>PARAMETERS</b>	
	Mass in gram (g)	2200
	Lithium ion: Indicate lithium watt-hour rating (Wh)	247
	Lithium metal: Indicate lithium metal content in gram (g)	
	Lithium hybrid: Indicate lithium metal content in gram (g) and watt-hour rating (Wh)	

<b>7</b>	<b>PHYSICAL DESCRIPTION OF BATTERY</b>	
	184.5 mm x 75 mm x 119 mm / 3IFP27/70/180-1	

<b>8</b>	<b>MODEL NUMBER</b>	
	BP-LFP-10250S	

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## TESTS AND RESULTS

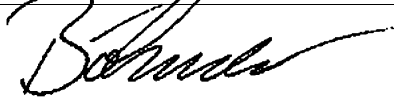
9	LIST OF TESTS CONDUCTED AND RESULT – MARK N/A, PASS OF FAIL WITH AN „✓“	N/A	PASS	FAIL
T1	Altitude Simulation		✓	
T2	Thermal Test		✓	
T3	Vibration		✓	
T4	Shock		✓	
T5	External Short Circuit		✓	
T6	Impact – for cylindrical cells having a diameter of at least 18 mm. See checkpoint 1a and 9a.	✓		
T6	Crush – for prismatic cells, pouch cells, button cells and cylindrical cells having a diameter of less than 18 mm. See checkpoint 1a and 9a.	✓		
T7	Overcharge		✓	
T8	Forced Discharge, only valid for cells. See check point 1a and 9a.	✓		

9a	UN 38.3 TEST CONFIRMATION FOR THE CELLS INSIDE THE BATTERY		
	When no separate document for the cells is provided, this confirms that the cells inside the battery (see checkpoint 1a) have successfully passed the UN 38.3 test. In this case, under checkpoint 9 the T6 and T8 have to be marked as “passed” and here, under 9a, “Cell UN 38.3 Test confirmed”.		
	✓	Cell UN 38.3 Test confirmed	Cell UN 38.3 Test NOT confirmed

10	REFERENCE TO ASSEMBLED BATTERY TESTING REQUIREMENTS
	N/A

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<b>11</b>	<b>REFERENCE TO THE REVISED EDITION OF THE MANUAL OF TESTS AND CRITERIA USED TO AMENDMENTS THERETO</b>
	UN Manual of Tests and Criteria, Part III, Section 38.3, lithium metal and lithium ion batteries (UN ST/SG/AC.10/11/Rev.6, Amendment 1)

Donauwörth, 03.03.2022	
Ort, Datum	<b>Thomas Böhmer</b> Technischer Leiter