

## UN 38.3 Test Summary

Lithium Battery Test Summary in Accordance with Sub-section 38.3 of the UN Manual of Tests and Criteria (Part III, subsection 38.3.5)

**Manufacturer [a], [b]:**

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**Tested P/N [f](v):** (1) WEB 19, (2) 2P5S-202Ah, (3) LP54173207, (4) Lithium-Ionen-Batterie/48V/404Ah

**Qualified type P/N [f] (v):** BG 2.7 Still

**Test report reference (ID) [d]:** (1) WC20200825U03, (2) WC20200825U01, (3) QDLS20200622U01,  
(4) KBS/WNE/48/2021/07/01

**Test report date [e]:** (1) 29/10/2020, (2) 29/10/2020, (3) 23/07/2020, (4) 21/06/2021-09/07/2021

**Test Laboratory [c]:** (1-3) Gouangzhou MCM Certification & Testing Co., Ltd.

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(4) STZ Energieeffiziente Leistungselektronik für elektrische Antriebe und  
Speicher

Birnbaumweg 18, 63741 Aschaffenburg, Germany

**Battery description [f]:**

Technology (i): Lithium Ion  
Mass (ii): 840 kg  
Watt hour rating (iii): 19300 Wh  
Physical description (iv): Rechargeable lithium-ion battery assembled with 3 serial modules  
composed of 5 serial strings of 2 LP54173207 cells in parallel (3S-2P5S).

**List of Tests conducted [g]:**

T.1 Altitude simulation:	Passed	T.5 External short circuit:	Passed
T.2 Thermal Test:	Passed	T.6 Impact/Crush:	Passed
T.3 Vibration:	Passed	T.7 Overcharge:	N/A
T.4 Shock:	Passed	T.8 Forced discharge:	Passed

**Reference to assembled battery testing requirements [h]:** Assembly of batteries 38.3.3 (g)

**Applied standard [i]:** UN ST/SG/AC.10/11/Rev.6, Amend.1

**Signatory [j]:**

Date: 24/11/2021  
Name: Christian Hasenstab  
Title: Managing Director  
Signature: 

**Signatory [j]:**

Date: 24/11/2021  
Name: Dr. Carsten Harnisch  
Title: Managing Director  
Signature: 