

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) ZSB NGRB Modul ohne Heizung, (2) INR21700M50L, (3) 7S112P Warehouse Next Gen H12

Qualified type P/N [f] (v): 7S84P Warehouse Next Gen H9 (BG22.1) with/without heating

Test report reference (ID) [d]: (1) BU-202100137-B1, (2) BA-4789464439-A-1, (3) KBSWHD3H12_210914

Test report date [e]: (1) 12/10/2021, (2) 29/07/2019, (3) 14/09/2021

Test Laboratory [c]: (1) Batteryuniversity GmbH, Am Sportplatz 30, 63791 Karlstein, Germany,

(2) NO 17 HENGYI RD, NANJING ECONOMICAL & TECHNICAL, DEVELOPMENT ZONE, NANJING, JIANGSU 210038, CHINA

(3) STZ Energieeffiziente Leistungselektronik für elektrische Antriebe und Speicher, Birnbaumweg 18, 63741 Aschaffenburg, Germany

Battery description [f]:

Technology (i): Lithium Ion
Mass (ii): 174 kg
Watt hour rating (iii): 10697 Wh
Physical description (iv): Rechargeable lithium-ion battery assembled with 3 parallel modules composed of 7 serial strings of 28 INR21700M50LT cells in parallel (3P-28P7S).


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, UN ST/SG/AC.10/11/Rev.7

Signatory [j]:

Date: 15/02/2022
Name: Christian Hasenstab
Title: Managing Director
Signature: 

Signatory [j]:

Date: 15/02/2022
Name: Dr. Carsten Harnisch
Title: Managing Director
Signature: 