

STATEMENT OF COMPLIANCE BEST PRACTICE GUIDE

for Battery Storage Equipment - Electrical Safety Requirements

1. Type of battery storage equipment

The Home Storage series *LBS-48110-S15-CB80* is a 48VDC 110Ah 5.3kWh lithium battery using Lithium Iron Phosphate Prismatic Cells. The battery is managed, controlled and protected by an internal Battery Management System (BMS). There is also an integrated double-pole Noark circuit breaker with high amperage M8 threaded terminals for robust electrical connections to the loads and chargers. All protected by a strong aluminium outer enclosure which delivers a safe, lightweight and powerful unit.

2. Details of the Best Practice Guide - Battery Storage Equipment (BPG BSE) method chosen and standards applied.

Method 1 of the Best Practice Guide – Battery Storage Equipment Electrical Safety Requirements has been chosen to demonstrate the compliance of the *LBS-48110-S15-CB80* battery. This method mandates compliance with:

- IEC 62619:2017 Secondary cells and batteries containing alkaline or other non-acid electrolytes: The HS series *LBS-48110-S15-CB80* battery is certified compliant with TUV Rheinland Australia Pty Ltd (Heidelberg West, VIC 3081), and the Lithium Iron Phosphate Prismatic Cell is also certified compliant with IEC 62619 by TUV SUD (Germany).
- AS/NZS 62368.1:2018 Audio/video, information and communication technology equipment Safety requirements: Testing and evaluation of the HS series *LBS-48110-S15-CB80* battery against AS/NZS 60368.1:2018 have been undertaken by ACT NZ Limited Trading as Auckland Lab & Brisbane Test Lab (Brisbane, QLD 4108). A Certificate of Suitability has been issued by TUV Rheinland Australia Pty Ltd (Heidelberg West, VIC 3081).

- UL 1973:2013 batteries for use in light electrical rail applications and stationary applications – Section 5.8.13 Software:

The HS series *LBS-48110-S15-CB80* battery does not contain any components in the Battery Management System (BMS) involving software; hence software updates are not required. Instead, it uses analogue electronics and trip points set in hardware for the control of load and/or charger disconnections in the event of an over-current, over-voltage, under-voltage, or over-temperature fault event. Furthermore, the HS series *LBS-48110-S15-CB80* battery relies upon an integrated Double-pole Noark circuit breaker for additional safety protection in the unlikely event of a solid-state circuit failure on the BMS. As such, the *LBS-48110-S15-CB80* battery adequately meets the conditions.

Declaration of compliance

Based on assessment tests undertaken by nationally and internationally recognised test laboratories, and certificates issued by nationally and internationally recognised authorities.

I, Vi Tran (BEng/ MEng - EE, MIEAust), Engineering Manager at Lithium Battery Storage Pty Ltd, hereby declare the LBS-48110-S15-CB80 battery to be compliant to Best Practice Guide for Battery Storage Equipment – Electrical Safety Requirements – Version 1 – Battery equipment – Method 1 mandatory requirements.

Vi Tran

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