

# Test Verification of Conformity

Verification Number: 105428445CRT-001VOC

On the basis of the tests undertaken, the samples of the below product have been found to comply with the requirements of the referenced standards at the time the tests were carried out. This verification is part of the full test report and should be read in conjunction with it.

Applicant Name & Address:	Tesla, Inc. 3500 Deer Creek Road, Palo Alto, CA 94304
Product Description:	DC Energy Storage System Powerwall 3 Expansion pack is a battery system with 13.5kwh capacity. Powerwall 3 Expansions (1807000-xx-y) can be DC-coupled with additional modules using a factory-made DC harness (1875157-xx-y) and connected to grid by Powerwall 3 (1707000-xx-y) inverter. Up to three Powerwall 3 Expansions can be added for this configuration.
Product:	Energy Expansion
Ratings & Principle Characteristics:	See Appendix 2
Models/Type References:	1807000- followed by two numbers; followed by -; followed by one letter.
Brand Names:	Tesla
Relevant Standard(s) / Specification(s):	See Appendix 1
Verification Issuing Office Name & Address:	Intertek Testing Services NA, Inc. 3933 US Route 11, Cortland, NY 13045 USA
Date of Tests:	2/15/2024 to 4/23/2024
Test Report Number(s):	105428445CRT-001

Additional information in Appendix.

Signature 

**Name: Burl Bhalla**  
**Position: Engineering Team Lead**  
**Date: 1<sup>st</sup> October 2024**

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**Appendix 1: Relevant Standard(s)/Specification(s)**

Energy Storage Systems and Equipment [ANSI/CAN/UL 9540:2023 Ed.3]

Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail (LER) Applications [ANSI/UL 1973:2018 Ed.2]

**Appendix 2: Ratings & Principle Characteristics:**

➤ **Ratings:**

Models	1807000-xx-y
Nominal Battery Energy	13.5kWhr
Battery Type	Li-ion
Protective Class	I
Enclosure Type	Type 3R
Ingress Protection	IP67
Operating Temperature	-20C to 50C
De-rated Temperature	40C to 50C
Mass	110kg
Nominal Voltage	83.7V
Voltage range	52V-92V

➤ **UL 1998 and CSA C22.2#0.8 Evaluation:**

ECU / Board Rev	Software version	Checksum	UL1998, CSA C22.2#0.8 Compliant*	Date of evaluation
HVP / -E	V2	51705DB5	Yes	Apr-19-2024

\*Note: Below safety functions were evaluated during the UL1998 and UL 991 evaluation.

- List of all UL1998 and UL 991 functions are as follow:
  - Overcharge
  - Over-discharge
  - Over Temperature
  - Over current

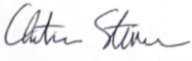

**Appendix 3: List of Tested protection / Support Function:**

**Table 3A: Test List -1**

Test Description	ANSI/CSA/UL 9540 Clause	UL 1973 Clause
Safety Analysis and Control Systems	15	--
Normal Operation test	27	--
Dielectric Voltage-Withstand Test	28	--
Equipment Grounding and Bonding Test	30	--
Insulation Resistance Test	31	--
Wall Mount Fixture/Test	36	--
Outdoors installations subject to moisture exposure	41.2	--
Temperature and Operating Limits Check	--	18
Dielectric Voltage Withstand	--	20
Continuity	--	21
Strain Relief	--	24.4
Push-Back Relief	--	24.5

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#### Appendix 4: Revision Summary

Date / Project	Engineer	Comments
1-Oct-2024	Christian Steiner 	Changed standard from: Energy Storage Systems and Equipment [ANSI/CAN/UL 9540:2020 Ed.2] to: Energy Storage Systems and Equipment [ANSI/CAN/UL 9540:2023 Ed.3]
G105870778	Burl Bhalla 	Changed Product Description from: "DC Energy Storage System" to: "DC Energy Storage System Powerwall 3 Expansion pack is a battery system with 13.5kwh capacity. Powerwall 3 Expansions (1807000-xx-y) can be DC-coupled with additional modules using a factory-made DC harness (1875157-xx-y) and connected to grid by Powerwall 3 (1707000-xx-y) inverter. Up to three Powerwall 3 Expansions can be added for this configuration."

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