

Tesla Inc.
3500 Deer Creek Road,
Palo Alto, CA 94304
USA

4th March, 2024

Report Number: US23P05I.003
Project Number: 234214238
Product(s) tested: PV Inverter
Model(s): 1538000-XX-Y

Dear Mr. Viraj Andrabadu/Mehran Zamani/Gaurav Joglekar,

Based on the evaluations undertaken, the model(s) of the below product have been found to comply with the requirements of the referenced specifications at the time the tests were carried out.

Nationally Recognized Testing Laboratory (NRTL)	TUV Rheinland of North America, Inc.
NRTL Issuing Office Address	1279 Quarry Lane, Suite A, Pleasanton, CA 94566
Applicant Name	Tesla, Inc.
Applicant Address	3500 Deer Creek Road, Palo Alto, CA 94304, USA
Model Numbers	1538000-XX-Y (X = 0-9 or A-Z; Y = 0-9 or A-Z)
Software/Firmware Version	1217B43E9B859EAB26ECB10B5FBECC64 dcq8OiBXbQWYnK9UhCAjvl02/py2MZymmWAQYOn8jSc= XE9QHWXKweuR3mB
Standard(s) Tested	UL 1741: Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources, April 20, 2010. Edition 2 [(Supplement SA)+R:15Feb2018], Power Control Systems (PCS), Certification Requirement Decision 3/8/2019. PCS limits defined by NFPA 2020 edition section 705.13
Testing period:	02/02/2023 – 02/26/2023, 2/13/2024
Reference reports:	US23A4HU.001 – 003 and ETL report no 104200172CRT-001

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PVI ratings

Model	1538000-XX-Y (X = 0-9 or A-Z; Y = 0-9 or A-Z)			
Nominal Voltage	240	240	240	240
Rated Output Current	32	24	20.83	15.8
Maximum Output Current	32	24	20.83	15.8
Nominal Frequency (Hz)	60			
Max Continuous Power (kVA)	7.6	5.76	5	3.8
Power Factor Range	0-1	0-1	0-1	0-1
DC Input / Output				
Voltage Range	60-550			
Maximum Current per MPPT	13A			

PCS ratings

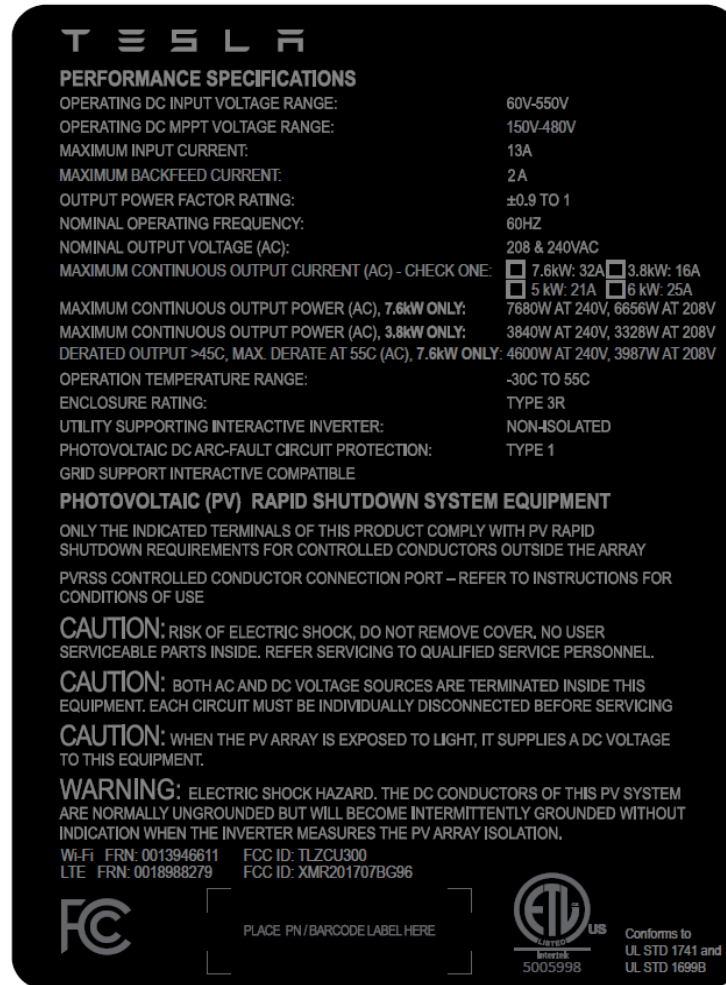
Maximum PCS controlled current	32 A
Maximum Open Loop response time	0.22 seconds
Average Open Loop response time	0.23 seconds
Steady state % power	1% of power stability is achieved in less than 10 seconds
PCS limits defined by NFPA 2020 edition section 705.13	Compliant and tested on 13th February 2023

Test List table

Clause	Test
203.5	Step change in load test
203.6	Step Change in Generation Test
205.5 & 205.6	Startup / Self Check Abnormal Tests & Abnormal Maximum Self-Check Interval Test
205.7	Operating Abnormal Tests

Attachments:

1. System Label for PCS



Thank you for the opportunity to service your product testing needs. Please do not hesitate to contact our engineering or sales team for any questions you may have.

Evaluated by:

Reviewed by:

Himanshu Vaidya

Test Engineer

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Howard Liu

Manager, Power Electronics Segment
– Americas

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Report History	
03/08/2023	US23P05I.001 - Original
03/28/2023	US23P05I.002 - Updated PVI configuration table on page 3 Maximum continuous power from 6kVA to 5.76kVA and Rated output current from 25 A to 24 A.
05/08/2023	US23P05I.002 – added test list
03/04/2024	US23P05I.003 – added “PCS limits defined by NFPA 2020 edition section 705.13”