

TEST REPORT

Applicant : EVOLVE ENERGY GROUP CO., LIMITED
Address : RM 702, 7/F FU FAI COMM CTR 27 HILLIER ST SHEUNG WAN, HK

Report No : 190912147GZU-003 **Issue Date** : 08 Oct., 2019

Sample Description


Name of Sample : Solar Grid-tied Inverter
Model Number : EVVO 10000TLG23P, EVVO 12000TLG23P, EVVO 15000TLG23P
Quantity of Sample(s) : 1
Date of Receival : 12 Sep., 2019
Date of test Conducted : 12 Sep., 2019 – 18 Sep., 2019

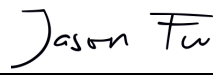
Test

Test Requested : IP65
Test Method : Refer to IEC/EN 62109-1:2010 clause 6.3
Test Observation: : See appendix test condition for details
Test Conclusion: : **Pass**
Other information : --
Remark :

- This test report is only for evaluation of the specified standard clauses listed in Test Requested.
- When determine the test result, measurement uncertainty has been considered.

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Tested by:

Tommy Zhong
Technical Manager

Approved by:

Jason Fu
Technical Team Leader

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This report is based on the report 190411091GZU-004, dated 18 Jun., 2019 and changes the applicant, trade mark and model name to apply for a new certificate.

The model EVVO 10000TLG23P, EVVO 12000TLG23P, EVVO 15000TLG23P in this report are same as the model SOFAR 10000TL-G2, SOFAR 12000TL-G2, SOFAR 15000TL-G2 respectively in the report 190411091GZU-004, except the model name and the trade Mark.

Rating:

Model	EVVO 10000TLG23P	EVVO 12000TLG23P	EVVO 15000TLG23P
Max.PV voltage	1000 d.c.V		
PV MPPT voltage range	160-960 d.c.V		
Max.input current	21 /11 d.c.A		
PV Isc	30/15 d.c.A		
Max.output power	10000W	12000W	15000W
Max.apparent power	11000VA	13200VA	16500VA
Nominal output voltage	3/N/PE, 230 /400 a.c.V		
Max.output current	3×16.5 a.c.A	3×20.0 a.c.A	3×24.0 a.c.A
Nominal output Frequency	50 Hz		
Power factor range	0.8Leading – 0.8 lagging		
Inverter technology	Non-isolated		
Safety level	Class I		
Ingress Protection	IP 65		
Operation Ambient Temperature	-25°C - +60°C		
Software Version	V0.21		

Model differences:

The model EVVO 10000TLG23P, EVVO 12000TLG23P, EVVO 15000TLG23P are completely identical, except output power derating in software.

The only differences on hardware between the models EVVO 10000TLG23P, EVVO 12000TLG23P and EVVO 15000TLG23P are below:

- 1.The main output inductor is NPS226060*2+NPF226060*2, 2.0Φ*2P /37Ts L=756μH for model EVVO 15000TLG23P while it's NPS226060*2+NPF226060*1, 2.0Φ*2P*42Ts L=0.73mH for model EVVO 10000TLG23P, EVVO 12000TLG23P.

Other than special notes, typical model EVVO 15000TLG23P is used as representative for testing in this report.

Appendix test condition:

Number	Test items	Test condition	Test result
<u>1</u>	IP6X	The enclosure under test is supported inside the test chamber and the pressure inside the enclosure is maintained below the surrounding atmospheric pressure by a vacuum pump, The suction connection shall be made to a hole specially provided for the test.	No deposit of dust is observable inside the enclosure.
<u>2</u>	IPX5	Internal diameter of the nozzle: 6.3 mm Delivery rate: 12.5 L/min Core of the substantial stream: circle of approximately 40 mm diameter at 2.5 m distance from nozzle Test duration: 3 min Distance from nozzle to enclosure surface: between 2.5 m and 3 m.	No water inside the enclosure

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Appendix Photos:

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Overview



Bottom view

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Appendix Photos:

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Checked after test finish

*****End of report*****