TEST REPORT

Applicant name and address	:	**Hitachi Hi-Rel Power Electronics Pvt. Ltd.** SM 3 & 4, Sanand – II GIDC, Industrial Estate, Boll Village, Sanand – 382 110, Gujarat, India.
Report No	:	191012014GZU-002
Issue Date	:	21 Nov., 2019

Sample Description

Name of Sample	:	Solar Grid Tied Inverter
Model Number	:	Hiverter Si-4.4K, Hiverter Si-5.5K, Hiverter Si-6.6K, Hiverter Si-8.8K, Hiverter Si-11K, Hiverter Si-12K
Quantity of Sample(s)	:	1
Date of Receival	:	12 Oct., 2019
Date of test Conducted	:	21 Nov., 2019

Test

Test Requested	:	IP65
Test Method	:	Refer to IEC 60529:2001-02(Ed.2.1) clause 13 and clause 14
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 original report 170418010GZU-002, dated 24 April 2017 and changes the applicant, trade mark, product name and model name to apply for a new certificate.

The model Hiverter Si-4.4K, Hiverter Si-5.5K, Hiverter Si-6.6K, Hiverter Si-8.8K, Hiverter Si-11K, Hiverter Si-12K in this report are same as the model SOFAR 4.4KTL-X, SOFAR 5.5KTL-X, SOFAR 6.6KTL-X, SOFAR 8.8KTL-X,SOFAR 11KTL-X, SOFAR 12KTL-X respectively in the report 170418010GZU-002, except the product name, model name and the trade Mark.

Electrical Rating:

Maximum d.c. input voltage: 1000 Vdc

Input voltage range: 160-960 Vdc

MPPT voltage range (full Load): 190-850 V (for Hiverter Si-4.4K); 240-850 V (for Hiverter Si-5.5K); 290-850 V (for Hiverter Si-6.6K); 380-850 V (for Hiverter Si-8.8K); 480-850 V (for Hiverter Si-11K); 575-850 V (for Hiverter Si-12K);

Max. input current: 2×11 A

Nominal output voltage: 3/N/PE230V/400Vac

Max. output current: 3×6.4 A (for Hiverter Si-4.4K); 3×8.0 A (for Hiverter Si-5.5K); 3×9.6 A (for Hiverter Si-6.6K); 3×12.8A (for Hiverter Si-8.8K); 3×15.9 A (for Hiverter Si-11K); 3×19.1 A (for Hiverter Si-12K);

Nominal frequency: 50 Hz

Max. output power: 4400VA (for Hiverter Si-4.4K); 5500VA (for Hiverter Si-5.5K); 6600VA (for Hiverter Si-6.6K); 8800VA (for Hiverter Si-8.8K); 11000VA (for Hiverter Si-11K); 13200VA (for Hiverter Si-12K)

Ingress protection: IP65

Operating temperature range: -25～+60℃

Other than special notes, the model Hiverter Si-12K used as representative for testing.

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Appendix test condition:

Number	Test items	Test condition	Test result
1	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.
2	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: Report No.: 191012014GZU-002

Overall view before test

Bottom view before test

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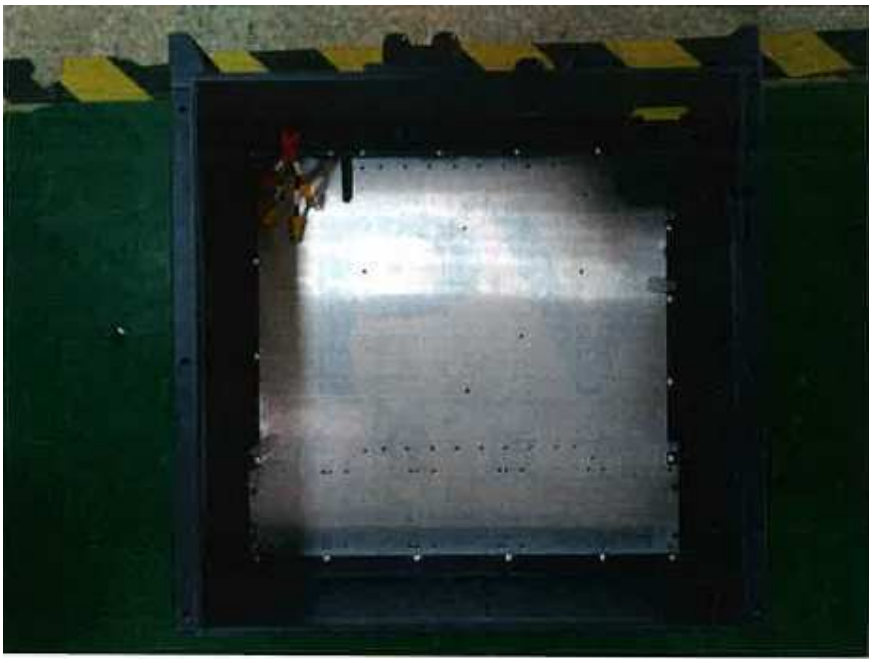

Checked after test

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

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