



Ningbo Ginlong Technologies Co., Ltd.

CERTIFICATION OF CONFORMITY

Manufacturer: Ningbo Ginlong Technologies Co., Ltd.

No.57 jintong Road, Seafront (Binhai) Industrial park, Xiangshan
Demonstration Industrial
Estate, Xiangshan, Ningbo, Zhejiang, 315712, P.R. China

Product: Automatic disconnection device between a generator and the public low-voltage grid

Model: RHI-3K-48ES, RHI-3.6K-48ES, RHI-5K-48ES

Use in accordance with regulations:

Technical Guidance for Customer Export Limiting Schemes G100 for photovoltaic systems with a single-phase parallel coupling via an inverter in the public mains supply.

Applied rules and standards :

The result according to G100 engineering recommendation.

The safety concept of an aforementioned representative product complies at the time of issue of this certificate of valid safety specifications for the specified use in accordance with G100 recommendations.

Compliant with BSEN 61000-3-2

Certificate Number: GLDQ180507

Date: 2018-05-12

Manufacture Stamp

Date and place

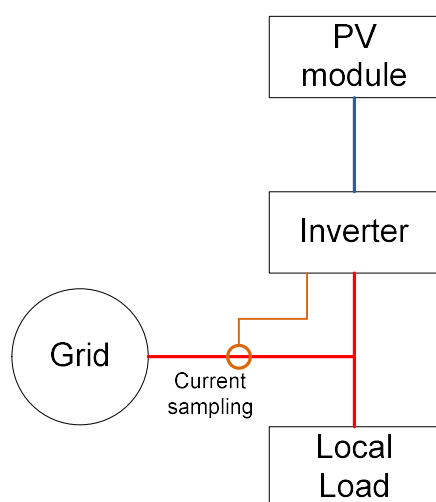
Ningbo

2018-05-12

宁波锦浪新能源科技有限公司
NINGBO GINLONG TECHNOLOGIES CO., LTD.

Zhang Kun

System Connecton Diagram



Setting Protection Test

Requirement	Result	Note
The settings is password protected, and cannot be changed by anyone other than got written agreement of the DNO;	Pass	

CT Fail Safe Test

Method: Set 50% export limit, implement the test before start or in running

Criteria: Fall time is less than 5s, the inverter's output active power is less than set limit. After fail safe test , disconnect AC, the reconnect time delay is fault reconnect time.

No.	Component	Test	Active Power	Response Time	Fall Time	Reconnect time	Pass/Fail	Comments
1	Power Monitoring Unit(PMU)	Remove power supply to PMU inside inverter	2564W	0.1S	0.2S	43S	pass	Fail safe control function integrated inside inverter. Inverter shutdown as well.
2	Remove CT	Remove CT	2545W	0.67S	2.79S	43S	pass	
		Disconnect CT Cable	2550W	0.76S	2.65S	42S	pass	
3	PMU → CU communication cable	Remove CT signal communication inside inverter	2571W	0.89S	2.82S	43S	pass	Fail safe control function integrated inside inverter.
4	Loss of Main power	Disconnect Main power of inverter	2553W	0.1S	0.2S	43S	Pass	

Power Limit Test

Method: Set export limit, implement the test before start, then start the inverter.

Criteria: fall time is less than 5s, the inverter's export active power is less than limit power.

0%export limit [% Inverter Rating]					
Load [% Inverter Rating]	Input	Input supply [% Inverter Rating]			
	Expot/Time	25%	50%	75%	100%
Load [% Inverter Rating]	0%	-12w/2.54S	-19w/3.24S	-19w/2.71S	-27w/2.29S
	25%	NA	82w/3.88S	-10w/3.24S	3w/3.23S
	50%	NA	NA	-19w/3.68S	-15w/3.11S
	75%	NA	NA	NA	37w/3.83S

25%export limit [% Inverter Rating]					
Load [% Inverter Rating]	Input	Input supply [% Inverter Rating]			
	Expot/Time	25%	50%	75%	100%
Load [% Inverter Rating]	0%	NA	-1268w/3.23S	-1288w/2.69S	-1240w/3.31S
	25%	NA	NA	-1259w/2.83S	-1186w/2.73S
	50%	NA	NA	NA	-1174w/3.31S
	75%	NA	NA	NA	NA

50%export limit [% Inverter Rating]					
Load [% Inverter Rating]	Input	Input supply [% Inverter Rating]			
	Expot/Time	25%	50%	75%	100%
Load [% Inverter Rating]	0%	NA	NA	-2574w/3.19S	-2560w/3.84S
	25%	NA	NA	NA	-2483w /2.35S
	50%	NA	NA	NA	NA
	75%	NA	NA	NA	NA

75%export limit [% Inverter Rating]					
Load [% Inverter Rating]	Input	Input supply [% Inverter Rating]			
	Expot/Time	25%	50%	75%	100%
Load [% Inverter Rating]	0%	NA	NA	NA	-3670w/2.84S
	25%	NA	NA	NA	NA
	50%	NA	NA	NA	NA
	75%	NA	NA	NA	NA

Comments

The test result is based on RHI-5K-48ES. All the series of inverters electrical character are the same. So the test result can cover all series.