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Manufacture Declaration for EN50438:2013

Omnik New Energy Co., Ltd here by confirms that the product lines:

Omniksol-1K-TL2-M
Omniksol-1.5K-TL2-M

Are in conformity with the EN50438:2013 Requirement and contain "Irish Settings" option for the connection of micro-generators in parallel with public low-voltage distribution networks.
The test results are summarized in the **Enclosure 1** of this declaration.

Omnik New Energy Co., Ltd
24 Nov 2017

Chenyang Pei

Chenyang.Pei
(Product manger)

Enclosure 1
Test results sheet

Power quality

Harmonic current emission								
	Maximum permissible harmonic current as per EN61000-3-2 ClassA							
Harmonic	2nd	3rd	5th	7th	9th	11th	13th	15th≤n≤39th
Limit	1.08	2.3	1.14	0.77	0.4	0.33	0.21	0.15[a](15/n)
Test value	0.015	0.081	0.033	0.029	0.004	0.036	0.01	<limit of EN 61000-3-2
a)50% or some other declared value close to the midpoint between minimum and maximum.								

Voltage fluctuations and flicker				
	Maximum permissible voltage fluctuation(express as a percentage of nominal voltage at 100% power) and flicker as per EN 61000-3-3			
	Starting	Stopping	Running	
Limit	3.3%	3.3%	Pst=1.0	Plt=0.65
Test value	＜3.3%	＜3.3%	0.17	0.15

	Power factor		
Protection limit	+0.95-0.95 at three voltage levels		
	210V	230V	250V
Test value	0.9998	0.9996	0.9998

OMNIK NEW ENERGY TECHNOLOGY CO., LTD SUZHOU 320509109362 苏州欧姆尼克新能源科技有限公司

Grid monitoring

Under/ Over frequency

	Under frequency		**Over frequency**	
Parameter	Frequency	Time	Frequency	Time
Protection limit (EN 50438 Annex A)	48Hz	0.5s	50.5Hz	0.5s
Actual setting	48Hz	0.5s	50.5Hz	0.5s
Trip value (test result)	48.01Hz	0.402s	50.49Hz	0.393s

Under / Over voltage

	Under frequency		**Over frequency**	
Parameter	Voltage	Time	Voltage	Time
Protection limit (EN 50438 Annex A)	230V-10%	0.5s	230V+10%	0.5s
Actual setting	207.0V	0.5s	253.0V	0.5s
Trip value(test result)	207.1V	0.399s	252.9V	0.416s

LoM

Output power level a)	Min.	Medium	Max.
Trip setting clearance time	0.5s	0.5s	0.5s
Trip value clearance time	0.125s	0.136s	0.128s
a) Indicative values are shown for minimum, medium and maximum power levels.			

Fault level contribution

Short-circuit current at micro-generator terminals
0.0150kA