

Declaration of Conformity to EN 50549-1:2019 With Irish Deviations According to EN50438

Micro-generator details

MICRO-GENERATOR Type reference	GW1000-NS	GW1500-NS	GW2000-NS	GW2500-NS	GW3000-NS
Maximum continuous rating	1000W	1500W	2000W	2500W	3000W
Manufacturer	JIANGSU GOODWE POWER SUPPLY TECHNOLOGY CO.,LTD.				
Address	No.90 Zijin Rd., New District, Suzhou, 215011, China				
Tel	+86 512 6239 7998				
E-mail address	service@goodwe.com				
Reference standard No.	BS EN 50438:2013,EN 50549-1:2019				
Date	09/23/2020				
SIGNATURE					

Power quality

Harmonic current emission											
	Maximum permissible harmonic current as per EN 61000-3-2, Class A										
	Odd harmonics							Even harmonics			
Harmonic Order n	3	5	7	9	11	13	15≤n≤39	2	4	6	8≤n≤40
Limit	2.30	1.14	0.77	0.4	0.33	0.21	0.15(15/n)	1.08	0.43	0.3	0.23(8/n)
Test value	0.038	0.022	0.023	0.022	0.021	0.020	0.013	0.087	0.017	0.011	0.007

Voltage fluctuations and flicker					
	Maximum permissible flicker and voltage fluctuation as per En 61000-3-3				
Value	P_{st}	P_{lt}	$d(t) - 500ms$	d_c	d_{max}
Limit	1.0	0.65	3.3%	3.3%	4%
Test value	0.165	0.147	0	0	0

Over-/under-frequency tests

	Over-frequency		Under-frequency	
Parameter	Frequency	Disconnection time	Frequency	Disconnection time
Protection limit (FROM Table 4 or Annex A)	50.5Hz	0.5s	48Hz	0.5s
Actual setting (as applied to interface protection)	50.5Hz	0.44s	48Hz	0.44s
Trip value(test result)	50.6Hz	0.440s	48Hz	0.431s

Over-/under-voltage tests (single stage protection)

	Over-voltage		Under-voltage	
Parameter	Voltage	Disconnection time	Voltage	Disconnection time
Protection limit (from Table 4 or Annex A)	253V	0.5s	207V	0.5s
Actual setting (as applied to interface protection)	253V	0.44s	207V	0.44s
Trip value(test result)	254V	0.316s	206V	0.335s

Short-circuit current parameters

Parameter	Symbol	Time after fault	Volts	Amps
Peak short-circuit current	/	20ms	10.2V	0.27A
Initial value of aperiodic component	/	100ms	10.5V	0.31A
Initial symmetrical short-circuit current	/	250ms	10.1V	0.51A
Decaying (aperiodic) component of short-circuit current	/	500ms	11.2V	0.38A
Reactance/Resistance ratio of source	/	Time to trip	0.68ms	