


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

Micro-generator details

MICRO-GENERATOR Type reference	GW3600S-BP	GW5000S-BP
Maximum continuous rating	3600W	5000W
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	0.329	0.221	0.150	0.091	0.061	0.032	0.033	0.117	0.018	0.009	0.021

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	0.07	0.07	0	0.06%	0.15%

Over-/under-frequency tests

Parameter	Over-frequency		Under-frequency	
	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	0.450s	48Hz	0.457s

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

Parameter	Over-voltage		Under-voltage	
	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	0.350s	206V	0.335s

Short-circuit current parameters

Parameter	Symbol	Time after fault	Volts	Amps
Peak short-circuit current	/	20ms	-20.012V	161.482A
Initial value of aperiodic component	/	100ms	-21.621V	-79.724A
Initial symmetrical short-circuit current	/	250ms	-15.188V	-23.442A
Decaying (aperiodic) component of short-circuit current	/	500ms	-13.58V	678mA
Reactance/Resistance ratio of source	/	Time to trip	61ms	