

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

Micro-generator details

MICRO-GENERATOR Type reference	GW4000-DT	GW5000-DT	GW6000-DT	GW8000-DT
Maximum continuous rating	4000W	5000W	6000W	8000W
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			
HarmonicOrder n	3	5	7	9	11	13	$15 \leq n \leq 39$	2	4	6	$8 \leq n \leq 40$
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	0.084	0.039	0.051	0.015	0.034	0.048	0.013	0.096	0.156	0.036	0.077

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	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	0.360s	48Hz	0.412s

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	0.357s	206V	0.434s

Short-circuit current parameters

Parameter	Symbol	Time after fault	Volts	Amps
Peak short-circuit current	/	20ms	9.6V	308mA
Initial value of aperiodic component	/	100ms	9.6V	161mA
Initial symmetrical short-circuit current	/	250ms	9.3V	116mA
Decaying (aperiodic) component of short-circuit current	/	500ms	9.1V	113mA
Reactance/Resistance ratio of source	/	Time to trip	720 μ s	