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

Micro-generator details

MICRO-GENERATOR Type reference	GW50KN-MT GW50KBF-MT	GW60KN-MT GW60KBF-MT	GW70KHV-MT	GW75K-MT GW75KBF-MT	GW80K-MT GW80KBF-MT	GW80KHV-MT
Maximum continuous rating	50000W	60000W	70000W	75000W	80000W	80000W
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≤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	0.281	0.560	0.540	0.082	0.041	0.039	0.04	1.07	0.229	0.083	0.154

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	0.20	0.20	0	0.09%	0.65%

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	0.350s	48Hz	0.345s

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	-9.1V	-9.9A
Initial value of aperiodic component	/	100ms	-60.6V	1.7A
Initial symmetrical short-circuit current	/	250ms	-62.2V	9.7A
Decaying (aperiodic) component of short-circuit current	/	500ms	-31.6V	3.7A
Reactance/Resistance ratio of source	/	**Time to trip**	812ms	