


DECLARATION OF EN50438 FOR IRELAND
APPENDIX B: Type Certification Test Result Sheet
Micro-generator details

MICRO-GENERATOR Type reference: MI-300&MI-350		
Maximum continuous rating: 300W&350W		
Manufacturer: Hoymiles Converter Technology Co.,Ltd	Tel: +86 571 28056101 Fax: +86 571 28056137	Address: No.18 Kangjing Road, Hangzhou, Zhejiang Province, China
Technical file reference No.		

Test house details

Name and address of test house or laboratory	Hoymiles Converter Technology Co.,Ltd and Bureau Veritas LCIE China Company Limited No.18 Kangjing Road, Hangzhou, Zhejiang Province, China and Building 4, No. 518, Xinzhuan Road, Caohejing, Songjiang High-Tech Park, Shanghai, P.R. China
Telephone number	+86 571 28056101
Facsimile number	+86 571 28056137
E-mail address	zhaoqi@hzconverter.com

Test details

Date of test	2020-8-5
Name of test Engineer	zhaoqi
Signature of test Engineer	
Test location if different from above	

POWER QUALITY

Harmonic current emissions (A)								
Maximum permissible harmonic current as per EN 61000-3-2 Class A								
Harmonic	2 nd	3 rd	5 th	7 th	9 th	11 th	13 th	15 th – 39 th
Limit	1,08	2,3	1,14	0,77	0,4	0,33	0,21	0,15x(15/n)
Test value	0,005	0,018	0,014	0,012	0,009	0,006	0,002	0,0018*

* 15th value

Voltage Fluctuations and Flicker				
Maximum permissible voltage fluctuation (expressed as a percentage of nominal voltage at 100 % power) and flicker as per EN 61000-3-3				
	Starting	Stopping	Runing	
Limit	3,3%	3,3%	Pst=1,0	Plt=0,65
Test value	0,0%	0,0%	0,064	0,028

	DC injection			Power factor		
Protection Limit	20 mA, tested at three power levels*			+0.95 –0.95 at three voltage levels		
	5%	50%	100%	210 V	230V	250V
Test value	0,964mA	2,357mA	4,668mA	0,9972	0,9970	0,9966

*indicative values are shown for minimum, medium and maximum power levels.

Under / Over frequency tests

	Under Frequency		Over Frequency	
Parameter	Frequency (Hz)	Time (s)	Frequency (Hz)	Time (s)
Protection limit	48 Hz	0,5 sec	50,5 Hz	0,5 sec
Actual setting	48 Hz	0,46 sec	50,5 Hz	0,46 sec
Trip value	48 Hz	0,483 sec	50,5 Hz	0,485 sec

Under / Over voltage tests (single stage protection)

	Under Voltage		Over Voltage	
Parameter	Voltage (V)	Time (s)	Voltage (V)	Time (s)
Protection limit	207 V	0,5 sec	253 V	0,5 sec
Actual setting	207 V	0,46 sec	253 V	0,46 sec
Trip value	206,4 V	0,487 sec	253,2 V	0,484 sec

LoM test

Method used	Frequency shift		
Output power level*	5%	50%	100%
Trip setting clearance time	0,5 sec	0,5 sec	0,5 sec
Trip value clearance time	0,441 sec	0,435 sec	0,441 sec

*indicative values are shown for minimum, medium and maximum power levels.

Fault level contribution

Because of electronic current control short circuit current is limited to 1.535A for MI-300 and 1.79A for MI-350.