

IEC 62716:2013

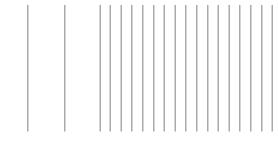
Ammonia corrosion testing of photovoltaic (PV) modules Confirmation of test results

Ref.:	10036/2020-40524				
Applicant:	LG Electronics Inc. 168, Suchul-daero, Gumi-si, Gyeongsangbuk-do, 730-903, South Korea				
Product:	Crystalline Silicon Photovoltaic (PV)-Modules				
Туре:	A) LGXXXN2W-E6 B) LGXXXN2W-E6.AW5 C) LGXXXN2T-E6 D) LGXXXN1C-E6 E) LGXXXN1W-E6 F) LGXXXN1W-E6 G) LGXXXN1T-E6 XXX in the type replace the power in Watt and can be any number				
	between: $430 - 470$ for A), B), $420 - 440$ for C), $355 - 390$ for D), E), $350 - 380$ for F) and $345 - 365$ for G).				
Manufacturer:	LG Electronics Inc.				
Standard:	IEC 62716:2013				
Test conditions:	As given in IEC 62716:2013				
1st test section:	Testing time	8 h			
	NH ₃ Concentration:	6667 ppm			
	Chamber temperature:	60°C			
	Rel. humidity:	100%			
2nd test section:	Testing time	16 h			
	NH ₃ Concentration:	0 ppm			
	Chamber temperature:	25°C			
	Rel. humidity:	36 %			
Total testing time		480 h (20 cycles)			

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Pass criteria						
	Visual inspection:		No findings which may affect safety.			
	Power degradation:		<5 %			
	Dry Insulation:		>40 MΩm²			
	Wet insulation:		>40 MΩm²			
	Bonding	path resistance:	<0,1 N	ΙΩ		
	Bypass	diode functionality	/ test:	Bypass diodes shall remain functional		
Summary of test result	ts:					
Visual inspection:		No findings which affect safety.				
Maximum power degradation:		allowed measured	<5 % 0,92 %			
The measured degradation is below the allowed degradation.						
Dry insulation resistance:		required measured	≥18,2 MΩ min. 999 MΩ			
The measured dry insula	ation resi	stance is above th	ne limit.			
Wet insulation resistance:		required	≥18,2	MΩ		

The measured wet insulation resistance is above the limit.

Bonding path resistance:	required	<0,1 MΩ
	measured	<0,01 MΩ

The measured resistance is below the limit.

Bypass diode functionality test: Bypass diodes remain functional

The complete test results and the related bills of materials are given in the Test Reports No. TRPVM-2020-40524-1 and TRPVM-2020-40525-1.

measured

VDE Renewables GmbH

- Sato

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Thomas Hartmann

min. 999 MΩ