

Enphase Energy, Inc.
47281 Bayside Pkwy.
Fremont, CA 94538
USA

CERTIFICATE OF CONFORMITY
DECLARACION DE CONFORMIDAD

ENPHASE ENERGY
Pettelaarpark 84 (2nd floor)
5216 PP 's-Hertogenbosch
The Netherlands

SUPPLIER STATEMENT
SPAIN SETTINGS

DECLARACIÓN DEL FABRICANTE
CONFIGURACIÓN PARA ESPAÑA

The undersigned hereby declares that Enphase Energy designated photovoltaic microinverters:

El abajo firmante declara que los microinversores fotovoltaicos de Enphase Energy señalados a continuación:

IQ7-60-X-Y-INT
IQ7PLUS-72-X-Y-INT
IQ7A-72-X-Y-INT
IQ7X-96-X-Y-INT
IQ7-B1200-LN-I-INT01-RV0 (ACB 1.5)

IQ7-60-X-Y-INT
IQ7PLUS-72-X-Y-INT
IQ7A-72-X-Y-INT
IQ7X-96-X-Y-INT
IQ7-B1200-LN-I-INT01-RV0 (ACB 1.5)

Are configurable according to the following:

Son configurables de acuerdo con los siguientes:

- **RD 1663/2000**, regulating connection of photovoltaic installations to the low voltage grid.
- **RD 661/2007**, regulation electricity production through a special feed-in tariff scheme.
- **RD 1699/2011**, regulating grid connection of small capacity electricity production plants.
- **RD 413/2014**, regulating the activity of electricity production from renewable energy, cogeneration and waste.

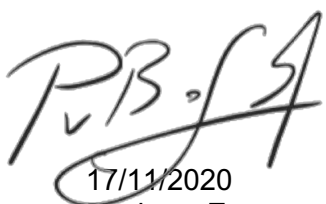
- **RD 1663/2000**, sobre conexión de instalaciones fotovoltaicas a la red de baja tensión.
- **RD 661/2007**, por el que se regula la actividad de producción de energía eléctrica en régimen especial.
- **RD 1699/2011**, por el que se regula la conexión a red de instalaciones de producción de energía eléctrica de pequeña potencia.
- **RD 413/2014**, por el que se regula la actividad de producción de energía eléctrica a partir de fuentes de energía renovables, cogeneración y residuos.

This supplier statement is supplemented by the following relevant appendices:

Esta declaración del fabricante se complementa con los siguientes apéndices correspondientes:

- Supplier-specific parameters table according to regulations in force
- CE statement of conformity
- VDE Certification according to EN 62109-1:2010-07 and EN 62109-2:2011-09

- Tabla de parámetros específicos acorde con la normativa vigente
- Declaración de Conformidad CE
- Certificado VDE de acuerdo con la normativa EN 62109-1:2010-07 y EN 62109-2:2011-09


Date : 17/11/2020
Company: Enphase Energy
Name: Peter van Berkel
Position: GM Enphase Energy EMEA

Parameter Name		Value
GRID SPECIFICATION		
Reference voltage		230.0 V
Nominal frequency		50.00 Hz
VOLTAGE LIMITS		
Over voltage disconnect	Time	Magnitude
Limit (fast)	200 ms	264.50 V
Limit (slow)	1,500 ms	253.00 V
Average over voltage		253.00 V
Under voltage disconnect	Time	Magnitude
Limit	1,500 ms	195.50 V
Reconnect voltage	Magnitude	
High	253.00 V	
Low	195.50 V	
FREQUENCY LIMITS		
Over frequency disconnect	Time	Magnitude
Limit	500 ms	51.00 Hz
Under frequency disconnect	Time	Magnitude
Limit	3,000 ms	48.00 Hz
Reconnect frequency	Magnitude	
High	50.05 Hz	
Low	48.05 Hz	
RECONNECT		
Start / Reconnect time		60 s

Anti-islanding reconnect time (short)		60 s
Anti-islanding reconnect time (long)		60 s
Apply limits after voltage trip		Yes
Apply limits after frequency trip		Yes
Apply limits after anti-islanding trip		Yes
Apply limits after rate of change of frequency trip		No
Apply limits after vector shift trip		No
RAMP RATES		
Soft-start ramp rate		0.17 %/s
DC CURRENT INJECTION		
DC current injection mode		Fast
ISLANDING DETECTION		
Islanding detection enabled		Yes
OVER FREQUENCY POWER LIMIT		
Start frequency		50.20 Hz
Ramp down rate		40.00 %/Hz
Hysteresis		No
Ramp up frequency (max)		50.20 Hz
Ramp up frequency (min)		47.50 Hz
Ramp up delay time		0.0 s
Ramp up rate		0.170 %/s
Ramp up rate (low)		0.170 %/s
POWER EXPORT LIMITING		
Export limit type		Aggregate
Hard limit enabled		Yes
Communication loss time limit		120,000 ms
Export limit	Threshold	Response time
Soft limit	0.0 W	10000 ms
Hard limit	0.0 W	