

INVERTER'S CONFORMITY CERTIFICATE

Manufacturer: **Power-One Italy S.p.A.**

Model: **PVI-400.0-TL-ZZ** where **ZZ** is the country code designation

Serial Number:

1) 1322144762	4) 1322144764	7) 1314643569	10) 1322144749
2) 1322144763	5) 1322144767	8) 1310434637	11) 1314653568
3) 1322144766	6) 1322144765	9) 1322144693	12) 1322130694

Power-One Italy S.p.A., with registered address in Via San Giorgio, 642, I-52028 Terranuova Bracciolini (AR),

CERTIFIES THAT

The above mentioned inverter is in compliance with the European Directive 2004/108/EC concerning electromagnetic compatibility (EMC). Compliance according to the following standard is met:

EN 61000-6-4; EN 61000-3-12 & EN 61000-6-2

The inverter is also in compliance with the requirements of the European Directive 2006/95/EC according to:

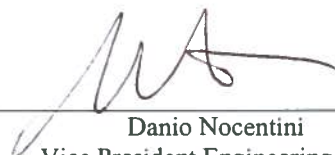
EN 50178; EN 62109-1 & EN 62109-2

Due to the compliance with the requirements of the two above mentioned directives, the inverter is CE marked.

The inverter is in accordance with the standards of Spanish **RD 661/2007** of May 25 and **P.O. 12.3 in accordance with RD 1565/2010 of November 19** on the connection of photovoltaic installations to the Low Voltage grid, and in particular with the following technical conditions:

1. The functions of maximum and minimum frequency protection, maximum and minimum voltage protection to which refers RD 661/2007 are integrated into each module of the inverter unit: connections and disconnections maneuvers are made through a contactor in order to perform an automatic restart of each module once normal conditions of grid supply are reestablished. The above mentioned contactor that implements connection and disconnection of the inverter is software controlled. The software and its settings are not accessible by the user. Moreover the inverter is provided by a main AC magnetic breaker (switch) that may be manually activated. Its state (open/closed) is shown on the inverter display.
2. The inverter includes an internal protection for high and low frequency interconnection respectively set to 51,0 Hz and 48,0 Hz. The maximum and minimum frequency protection will operate within 0,2 seconds as of the out of frequency condition occurs.
At the same time the inverter includes an internal protection for maximum and minimum voltage interconnection respectively set to 1,1 Unom and 0,85 Unom. The maximum and minimum voltage protection will operate within 1,5 seconds as of the out of voltage condition occurred.
The inverter also includes an additional AC overvoltage protection set to 1,15 Unom that operates within 0,2 seconds as of the out of voltage condition occurred.
Any possibility of value adjustment modification by the user and the user-software is not allowed.
3. The time for reconnection after grid fault is set at 3 minutes.
4. It is also certified that if the distribution network to which a photovoltaic plant is connected to, disconnects for any reason, the inverter will not maintain the voltage in the distribution line.
5. The inverter is also able to deliver reactive power according to a power factor regulation within the range 0.95 capacitive to 0.95 inductive.

The present conformity certificate is issued on July 31, 2013



Danio Nocentini
Vice President Engineering
Research & Development

Power-One Italy, S.p.A.