Ref. PVS-100-TL(Power-One_VDE-AR-N 4105 Form G3_EN) Rev. 2018-02-07.docx

VDE-AR-N 4105 Certificate of conformity for the NS protection integrated in the inverters	
Manufacturer	Power-One Italy S.p.A. Via S. Giorgio, 642 52028 Terranuova Bracciolini (AR) - Italy
Type of NS protection	Relay contacts
Integrated NS protection assigned to power generation unit type	Relay
Network connection rule	**VDE-AR-N 4105** **"Power generation systems connected to the low-voltage network"** Technical minimum requirements for connection and parallel operation of power generation systems connected to the low-voltage network

The network and system protection integrated in the power generation units listed in Table 1 meets the requirements of VDE-AR-N 4105.

The setting values and disconnection times (total break times) of the protective functions are as follows:

Voltage drop protection U < :	184 V	< 200 ms
Rise-in-voltage protection U > (*):	253 V	< 200 ms
Rise-in-voltage protection U >>:	264.5 V	< 200 ms
Frequency decrease protection f <:	47.5 Hz	< 200 ms
Frequency increase protection f >:	51.5 Hz	< 200 ms

(*) moving 10-minute average protection according EN 50160

- All requirements of VDE-AR-N 4105 are fulfilled and have been confirmed via type tests conducted in Power One and witnessed by an accredited certification institute.
- The conformity is ensured for all products with model name and firmware version as listed in Table 1.

Terranuova Bracciolini, **2018 February 07**

Gianfranco Iannuzzi
(Coordinator Product Safety)

This certificate of conformity of two pages shall not be used in parts.

Power-One Italy S.p.a.
Via San Giorgio, 642 – 52028 Terranuova Bracciolini – Arezzo – Italy
Web Site: www.abb.com/solarinverters

Power-One Italy S.p.A.
A member of the ABB Group

Capitale Sociale € 22.000.000 int. vers
C.C.I.A.A. Arezzo n. 101220
Reg. Imp. e Cod. Fisc. 09286180154
Partita I.V.A. 01574720510

52028 Terranuova Bracciolini (AR)
Via S. Giorgio, 642
Phone: +39 055 91951
Fax: +39 055 9737614

Inverter models	Maximum active power P_{Emax}	Maximum apparent power S_{Emax}	AC reference voltage (Line to Line)	Fulfill VDE-AR-N 4105 requirements from firmware version
PVS-100-TL	100.0 kW	100.0 kVA	400 V	Not less than 1749F (Standard Selection: VDE 4105)

Table 1
Power-One Grid Tied Solar Inverters in compliance with VDE-AR-N 4105.