



<b>VDE-AR-N 4105:2018-11</b> <b>Certificate of conformity for generators connected to the low-voltage distribution network</b>		
<b>Manufacturer</b>	Power-One Italy S.p.A. Via S. Giorgio, 642 52028 Terranuova Bracciolini (AR) - Italy	
<b>Type of power generation unit</b>	Grid Tied Solar Inverter	
<b>Assessment values</b>	Max. active power $P_{Emax}$	See Table 1
	Max. apparent power $S_{Emax}$	See Table 1
	Rated voltage	See Table 1
<b>Rated values</b>	Rated current (AC) $I_r$	See Table 1
<b>Rated values</b>	Initial short-circuit AC current	See Table 1
<b>Network connection rule</b>	<p style="text-align: center;"><b>VDE-AR-N 4105:2018-11</b>  <b>“Generators connected to the low-voltage distribution network”</b>                      Technical requirements for connection to and parallel operation with low-voltage distribution networks</p>	
The power generation units listed in Table 1 meets the requirements of VDE-AR-N 4105:2018-11.		
<ul style="list-style-type: none"> <li>- All requirements of VDE-AR-N 4105:2018-11 are fulfilled and have been confirmed via type tests conducted in Power-One Italy S.p.A.</li> <li>- The conformity is ensured for all products with model name and firmware version as listed in Table 1.</li> </ul>		
Terranuova Bracciolini, <b>12.06.2019</b>		
 _____ Alessandro Rossi (R&D Team Manager)		 _____ Claudio Redolfi (Quality & Opex Manager)
This certificate of conformity of two pages shall not be used in parts.		
<p><b>Power-One Italy S.p.A.</b>                      Via San Giorgio, 642 – 52028 Terranuova Bracciolini – Arezzo – Italy                      Web Site: <a href="http://www.abb.com/solarinverters">www.abb.com/solarinverters</a></p>		

Inverter models	Maximum active power $P_{E_{max}}$	Maximum apparent power $S_{E_{max}}$	AC rated voltage	Rated current (AC) $I_r$	Initial short-circuit AC current	Fulfill VDE-AR-N 4105:2018-11 requirements from firmware version
UNO-DM-5.0-TL-PLUS-XYK-JVN-DIP	5,0 kW	5,0 kVA	230 V	22 A	24 A	Not less than 1924A Standard Selection: GERMANY (VDE 4105:2018-11)
UNO-DM-4.6-TL-PLUS-XYK-JVN-DIP	4,6 kW	4,6 kVA	230 V	20 A	22 A	Not less than 1924A Standard Selection: GERMANY (VDE 4105:2018-11)
UNO-DM-4.0-TL-PLUS-XYK-JVN-DIP	4,0 kW	4,0 kVA	230 V	17,2 A	19 A	Not less than 1924A Standard Selection: GERMANY (VDE 4105:2018-11)
UNO-DM-3.3-TL-PLUS-XYK-JVN-DIP	3,3 kW	3,3 kVA	230 V	14,5 A	16 A	Not less than 1924A Standard Selection: GERMANY (VDE 4105:2018-11)
UNO-DM-2.0-TL-PLUS-XYK-JVN-DIP	2,0 kW	2,0 kVA	230 V	10 A	12 A	Not less than 1924A Standard Selection: GERMANY (VDE 4105:2018-11)
UNO-DM-1.2-TL-PLUS-XYK-JVN-DIP	1,2 kW	1,2 kVA	230 V	5,5 A	10 A	Not less than 1924A Standard Selection: GERMANY (VDE 4105:2018-11)

Table 1

Power-One Italy S.p.A. Grid Tied Solar Inverters in compliance with VDE-AR-N 4105:2018-11