
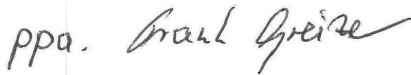


<h2>Certificate of Compliance - Power Generation Unit</h2>		
Manufacturer	SMA Solar Technology AG	
Type of power generation unit	See table 1	
Rated values	Max. active power $P_{E_{max}}$	See table 1
	Max. apparent power $S_{E_{max}}$	See table 1
	Rated voltage	See table 1
Grid connection rule	VDE-AR-N 4105:2011-08 "Power Generation Systems Connected to the Low-voltage Distribution Network" Technical minimum requirements for the connection to and parallel operation with low-voltage distribution networks	
The power generation units listed in table 1 meet the requirements of VDE-AR-N 4105.		
<ul style="list-style-type: none"> • It is hereby confirmed that the specific requirements of VDE-AR-N 4105 have been tested. • VDE-AR-N 4105 compliance is guaranteed in all SMA inverters listed in table 1, as of the respective firmware version. 		
<p>Niestetal, 19 November 2012 SMA Solar Technology AG  ppa. Frank Greizer (Vice President MPT PD)</p>		

VDE-AR-N 4105 Certificate of Compliance for Power Generation Units

Inverter type	As of firmware version	Max. active power P_{Emax}	Max. apparent power S_{Emax}	Rated voltage V_n	Rated current I_r	Reactive power	Short-circuit current I_k''
SB 1200/WB1200	4.00	1.2 kW	1.2 kVA	230 V	5.2 A		0.0064 kA
SB 1700/WB 1700	4.00	1.7 kW	1.7 kVA	230 V	6.7 A		0.0078 kA
SB 1300TL-10	4.00	1.3 kW	1.3 kVA	230 V	5.7 A		0.0079 kA
SB 1600TL-10	4.00	1.6 kW	1.6 kVA	230 V	7.0 A		0.0084 kA
SB 2100TL	4.00	2.1 kW	2.1 kVA	230 V	8.5 A		0.0099 kA
SB 2000HF-30	2.30	2 kW	2 kVA	230 V	8.7 A		0.0170 kA
SB 2500HF-30	2.30	2.5 kW	2.5 kVA	230 V	10.9 A		0.0170 kA
SB 3000HF-30	2.30	3 kW	3 kVA	230 V	13.1 A		0.0170 kA
SB 2500/WB 2500	4.00	2.5 kW	2.5 kVA	230 V	10.0 A		0.0113 kA
SB 3000/WB 3000	4.00	3 kW	3 kVA	230 V	12.0 A		0.0134 kA
SB 2500TLST-21	2.00	2.5 kW	2.5 kVA	230 V	10.9 A	x	0.0170 kA
SB 3000TLST-21	2.00	3 kW	3 kVA	230 V	13.1 A	x	0.0170 kA
SB 3000TL-21/WB 3000TL-21	1.50	3 kW	3 kVA	230 V	13.0 A	x	0.0170 kA
SB 3600TL-21/WB 3600TL-21	2.10	3.68 kW	3.68 kVA	230 V	16 A	x	0.019 kA
SB 4000TL-21/WB 4000TL-21	1.50	4 kW	4 kVA	230 V	17.4 A	x	0.0212 kA
SB 5000TL-21/WB 5000TL-21	1.50	4.6 kW	4.6 kVA	230 V	20.0 A	x	0.0240 kA
SB 3300-11/WB 3300-11	1.00	3.6 kW	3.6 kVA	230 V	14.5 A	x	0.0156 kA
SB 3800-11/WB 3800-11	1.00	3.8 kW	3.8 kVA	230 V	16.5 A	x	0.0198 kA
SMC 4600A-11	1.00	4.6 kW	4.6 kVA	230 V	20.0 A	x	0.0240 kA
SMC 5000A-11/WB 5000A-11	1.00	5.5 kW	5.5 kVA	230 V	21.7 A	x	0.0262 kA
SMC 6000A-11/WB 6000A-11	1.00	6 kW	6 kVA	230 V	26.0 A	x	0.0290 kA
SMC 7000HV-11	2.10	7 kW	7 kVA	230 V	28.9 A	x	0.0346 kA
SMC 9000TLRP-10	2.05	9 kW	9 kVA	230 V	40.0 A	x	0.0580 kA
SMC 10000TLRP-10	2.05	10 kW	10 kVA	230 V	44.0 A	x	0.0580 kA
SMC 11000TLRP-10	2.05	11 kW	11 kVA	230 V	48.0 A	x	0.0580 kA
STP 5000TL-20*/WTP 5000TL-20	2.01	5 kW	5 kVA	230/400 V	7.3 A	x	0.008 kA
STP 6000TL-20*/WTP 6000TL-20	2.01	6 kW	6 kVA	230/400 V	8.7 A	x	0.010 kA
STP 7000TL-20*/WTP 7000TL-20	2.01	7 kW	7 kVA	230/400 V	10.2 A	x	0.012 kA
STP 8000TL-20*/WTP 8000TL-20	2.01	8 kW	8 kVA	230/400 V	11.6 A	x	0.014 kA
STP 9000TL-20*/WTP 9000TL-20	2.01	9 kW	9 kVA	230/400 V	13.1 A	x	0.016 kA
STP 8000TL-10*	2.31	8 kW	8 kVA	230/400 V	11.6 A	x	0.0354 kA
STP 10000TL-10*	2.31	10 kW	10 kVA	230/400 V	14.5 A	x	0.0354 kA
STP 12000TL-10*	2.31	12 kW	12 kVA	230/400 V	17.4 A	x	0.0354 kA
STP 15000TL-10*	2.31	15 kW	15 kVA	230/400 V	21.7 A	x	0.0354 kA
STP 17000TL-10*	2.31	17 kW	17 kVA	230/400 V	24.6 A	x	0.0354 kA
STP 15000TLEE-10*	1.00	15 kW	15 kVA	230/400 V	21.7 A	x	0.0354 kA
STP 20000TLEE-10	1.00	20 kW	20 kVA	230/400 V	29.0 A	x	0.0354 kA
STP 15000TLHE-10*	1.00	15 kW	15 kVA	230/400 V	21.7 A	x	0.0354 kA
STP 20000TLHE-10*	1.00	20 kW	20 kVA	230/400 V	29.0 A	x	0.0354 kA

Table 1: SMA inverters compliant with VDE-AR-N 4105

* SMA Sunny Tripower inverters are three-phase power generation units that feed in symmetrically on all three line conductors during feed-in operation.

Information on Form F.2 - Power generation plant datasheet (VDE-AR-N 4105):

- See the table above for details on power generation units relating to P_{Emax} , S_{Emax} , U_n , I_r and I_k'' .
- Start current I_g does not apply for inverters/electric energy converters.
- The above mentioned power generation units are automatic electric energy converters with a pulse frequency of 16 kHz.

Information on application note § 6 Par. 2 EEG 2012 (issued by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and the Federal Ministry of Economics and Technology):

The above mentioned inverters are "one-man ready", as they can be regulated by remote control via optional components.