



Manufacturer's Declaration

Supplier statement to the Danish "technical regulation 3.2.2 for PV power plants with a power output above 11 kW" (TR 3.2.2), March 2015

- STP 20000TL-30, STP 25000TL-30
- STP 60-10, SHP 75-10
- SC 500CP-10, SC 630CP-10, SC 720CP-10, SC 760CP-10, SC 800CP-10, SC 850CP-10, SC 900CP-10, SC 1000CP-10
- SC-2200-10, SC-2500-EV-10, SC-2750-EV-10, SC-3000-EV-10

SMA inverters described above comply with Technical regulation 3.2.2 with respect to the plant categories B, C and D (section 1.2.18) subject to the fulfillment of the following issues, if applicable:

1. In order to comply with section 7.3 of the Grid Code, the installation of a protocol converter as well as a SMA Power Plant Controller with or without several SMA Cluster Controller is necessary.
2. SMA products comply with all relevant international power quality standards. Some of the requirements regarding Power Quality in chapter 4 refer to the POC. Especially Flicker and Voltage Harmonics strongly depend on the electrical characteristic of the POC. An evaluation of these parameters can hence only be evaluated with knowledge of the POC of the specific project.
3. For categories C and D PV plants: if the utility decides to enforce "delta power constraint", as described in section 5.2.3.2, a Power Plant Controller in combination with a storage solution needs to be installed (SMA "Sunny Central Storage" is recommended).
4. For categories C and D PV plant: if the utility decides to enforce "frequency control", as described in section 5.2.2, a storage solution needs to be installed (SMA "Sunny Central Storage" is recommended). In addition, it must be noted that only one droop for the downward regulation can be set. If more droops are required, then additional components need to be installed.
5. For categories C and D PV plants: if the utility decides to enforce "voltage control", as described in section 5.3.3, a SMA Power Plant Controller with or without several SMA Cluster Controller needs to be installed. A PPC is not necessary if the PV plants are equipped only with STP 60-10 and SHP 75-10.
6. For category D plants, a power factor set point down to 0 (in 1st and 4th quadrants) may be required. Especially in bigger PV plants this might lead to unwanted variation in the AC voltage at the inverter output terminals. A project specific evaluation for this requirement is hence strongly recommended.

Niestetal, 15.11.2018

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