

Translation

In any case, the german original shall prevail.

Expert committee for electrical engineering
Testing and certification facility
Gustav-Heinemann-Ufer 130, 50968 Cologne, Germany

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Date: 27.04.2011

Certificate of Non-objection 10065 (Test certificate)

Product: Sunny Backup-System

Type: SBU 5000, AS-Box-20

Intended usage: Isolated network-capable inverter system (switchable alternative supply) with automatically regulated change-over switch and self-actuating disconnection device as a safety interface between the isolated network and the low-voltage grid with a TN-C or TT system. An optional motor-operated emergency power generator can be installed, which feeds battery energy into the public power supply grid and whose 3 outer conductors can be coupled during isolated operation.

Test specifications:

DIN V VDE V 0126-1-1:2006-02 "Automatic disconnection device between a grid-parallel generator and the public low-voltage grid"

DIN VDE 0100-410:2007-06 „Low-voltage electrical installations - Protective measures - Protection against electric shock“

DIN VDE 0100-551:1997-08 „Electrical installations of buildings - Low-voltage generation systems“

The safety concept for the product referred to above, as tested in CW 27, 2007 and CW 28, 2010, Az. UB.010.00, and with regard to the safety functions as specified for the system, corresponds to the applicable safety-related requirements for its intended proper usage at the time of certificate issuance.

This Certificate of Non-objection is valid until:

31.12.2015



- Mehlem -
Testing and certification facility supervisor

Appendix to Certificate of Non-objection 10065 SMA Sunny Backup-System SBU 5000, AS-Box-20 from 14.12.2010

Prior to commissioning, it must be clarified with VNB as to whether the „battery energy feed into the public power supply grid“ option may be activated or not.

Monitoring of the DC-feed according to DIN V VDE V 0126-1-1, Section 4.4 and the DC-side residual currents on photovoltaic systems according to Section 4.7.1 does not take place and must be provided for in the external inverters used, as necessary.

Installation requirements for TN-C(s) grid-types:

The building connection to the general power supply is made as a TN-C system; the neutral conductor will not be switched.

The PEN conductor in the TN-C system for the general power supply should be connected to the building with a suitable earthing system (protective earthing).

Protection in the event of indirect physical contact with subordinate consumer devices (TN-S system) takes place by means of automatic shutdown through the use of line circuit breakers, type B16 (or smaller), or residual current protection devices (RCD).

Installation requirements for TT grid-types:

The building connection to the general power supply is made as a TT system; the neutral conductor will be switched.

The neutral conductor for the building installation must be connected to a suitable earthing system via the resistor located in the AS-Box-20.

Connection of the building operating equipment takes place according to TT system specifications.

Protection in the event of indirect physical contact with subordinate consumer devices (TT system) takes place by means of automatic shutdown through the use of residual current protection devices (RCD) with a maximum rated residual current of 0.1A.

Safety functions:

Automatic switching and locking between the general power supply and the emergency power supply system.

Safeguarding in accordance with the REL to ensure that only energy from the corresponding in-house power generation system (e.g. photovoltaic system) will be fed into the electrical supply meter.

Prevention of reverse feeding into the public grid during isolated operation.