Certificate of conformity NS protection

Nr: 2015 - 1528

| Manufacturer | Steca Elektronik GmbH |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type of NS protection | Steca-ENS; integrated NS protection |
| Type Power generation unit | StecaGrid 1500, StecaGrid 1500x, StecaGrid 2000, StecaGrid 2000x, StecaGrid 1800, StecaGrid 1800x, StecaGrid 2300, StecaGrid 2500, StecaGrid 2500x, StecaGrid 3010, StecaGrid 3010x, StecaGrid 3000, StecaGrid 3000x, StecaGrid 3600, StecaGrid 3600x, StecaGrid 4200, StecaGrid 4200x |
| Network connection rule | VDE-AR-N 4105 "Power generation system connected to the low-voltage grid" Technical minimum requirements for connection and parallel operation of power generation systems connected to the low-voltage grid |

The network and systems protection mentioned above meets the requirements of VDE-AR-N 4105.

setting values and trip times (disconnection times):

voltage drop protection U<:

184 V. < 200 ms

Rise-in voltage protection U>*:

253 V, < 200 ms

Rise-in voltage protection U>>:

264 V, < 200 ms

Frequency decrease protection f<:

47,5 Hz, < 200 ms

Frequency increase protection f>:

51,5 Hz, < 200 ms

Islanding detection is carried out by means of a frequency shift method

It is hereby confirmed that – except the above mentioned items - the specific requirements of DIN V VDE V 0126-1-1:2006-02 +A1:2011-06 have been tested.

VDE-AR-N 4105 compliance is guaranteed in all inverters with firmware "NET11_ENS_2.9" or higher.

Memmingen, 10.08.2015

Steca Elektronik GmbH

_ppa. Ralf Griepentrog

This certificate of conformity shall not be used in parts.



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^{* 10-}minute running mean value according to DIN EN 50160