## Certificate of conformity NS protection

Nr: 2015 - 1520

Signed copy No. 1

Manufacturer	Steca Elektronik GmbH
Type of NS protection	Steca-ENS; integrated NS protection
Type Power generation unit	Turbo 3P1, Turbo 3P2
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 3-phase-voltage-monitoring.

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 "Net13\_ENS\_APP\_0\_26\_0.upd" or higher.

Memmingen, 08.04.2015 Steca Elektronik GmbH

\_ppa. Ralf Griepentrog

This certificate of conformity shall not be used in parts.

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<sup>\* 10-</sup>minute running mean value according to DIN EN 50160