

# POPRAWKA do POLSKIEJ NORMY

ICS 91.140.50;

# PN-HD 60364-5-551:2010/AC

lipiec 2012

**Wprowadza** HD 60364-5-551:2010/AC:2010, IDT

**Dotyczy** 

PN-HD 60364-5-551:2010

Instalacje elektryczne niskiego napięcia -- Część 5-55: Dobór i montaż wyposażenia elektrycznego -- Inne wyposażenie -- Sekcja 551: Niskonapięciowe zespoły prądotwórcze

Na wniosek Komitetu Technicznego nr 55

ds. Instalacji Elektrycznych i Ochrony Odgromowej Obiektów Budowlanych

Poprawka do Normy Europejskiej HD 60364-5-551:2010/AC:2010 Low-voltage electrical installations - Part 5-55: Selection and erection of electrical equipment - Other equipment - Clause 551: Low-voltage generating sets

ma status Poprawki do Polskiej Normy

© Copyright by PKN, Warszawa 2012

nr ref. PN-HD 60364-5-551:2010/AC:2012

Wszelkie prawa autorskie zastrzeżone. Żadna część niniejszej publikacji nie może być zwielokrotniana jakąkolwiek techniką bez pisemnej zgody Prezesa Polskiego Komitetu Normalizacyjnego



## Corrigendum to HD 60364-5-551:2010

# English version

# **SNC Germany**

Clause	Special national condition		
551.1 Note	Delete the existing note and replace it by the following additional normative requirement:		
	For low-voltage generating sets, which are connected to the low-voltage grid, the requirements of the distribution system operator shall be considered.		
551.1 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> dash	The requirements in Germany are not limited to the public supply system only, but include all supply systems. Therefore, the word <i>public</i> is deleted in the first, second and third dash.		
551.2.1 Note	The requirements in Germany are not limited to the public supply system only, but include all supply systems. Therefore, the word <i>public</i> is deleted in the note.		
551.2.2 2 <sup>nd</sup> sentence	The requirements in Germany are not limited to the public supply system only, but include all supply systems. Therefore, the word <i>public</i> is deleted in the second sentence.		
551.2.4	Clause 551.2.4 does not apply for Germany.		
551.4.2 Clause and note	551.4.2 including the note is deleted, because the requirement is covered by 551.4.1 for all systems.		
551.4.3.3.1 Note	The requirements in Germany are not limited to the public supply system only, but include all supply systems. Therefore, the word <i>public</i> is deleted in the note.		

## 551.4.3 Additional requirements to 551.4.3

In Germany the following measures are required, when protection by automatic disconnection of supply is provided by:

## a) IT system

In the IT system all exposed-conductive-parts shall be interconnected by a protective conductor. An earth resistance of  $R_A \le 100 \Omega$  is sufficient.

#### b) Protective separation

When protective separation is applied, the following requirements shall be met: The exposed-conductive-parts of the generating set shall be connected to the unearthed equipotential bonding conductor, provided that the generating set is not protective class II equipment or set up with equivalent insulation.

If more than one current-using equipment is connected to the generating set, either item 1 or item 2 of the following requirements shall be apply:

1) If the insulation resistance between active parts and the unearthed equipotential bonding conductor drops below 100  $\Omega$  per V nominal voltage, the circuits of the current-using equipment shall disconnect automatically within 1 s. Limitation of the network extension and adherence of the requirements for automatic disconnection conditions at the occurrence of two faults are not required.

Note The response time should be verified in accordance with DIN EN 61557-8 (VDE 0413-8).

2) The total length of the cables shall be limited, so that the product of nominal voltage in Volt and the total length in meter does not exceed 100 000 provided that also the total length of the cables does not exceed 500 m. The automatic disconnection conditions according to DIN VDE 0100-410 (VDE 0100-410), 411.6 shall be fulfilled.

# **551.5.2** The requirements in Germany are not limited to the public supply system only, but include all supply systems. Therefore, the words "to the public" are deleted in the first sentence.

#### 551.6.1 1<sup>st</sup> sentence

The requirements in Germany are not limited to the public supply system only, but include all supply systems. Therefore, the words "public" are deleted in the first sentence.

The sentence reads now:

Precautions complying with the relevant requirements of IEC 60364-5-53 for isolation shall be taken, so that the generator cannot operate in parallel with other supply systems for the distribution of electrical energy.

#### 551.6.2 Note 1

The requirements in Germany are not limited to the public supply system only, but include all supply systems. Therefore the new wording in Note 1 is:

It can be desirable in TN systems to disconnect the neutral of the installation from the neutral or PEN of the distribution system to avoid disturbances such as induced voltage surges caused by lightning.

#### 551.7 Title

The requirements in Germany are not limited to the public supply system only, but include all supply systems. Therefore the title is changed to:

Additional requirements for installations where the generating set may operate in parallel with other supply sources including the distribution system

### **551.7.2** Clause 551.7.2 does not apply to Germany.

#### 551.7.3 1<sup>st</sup> + 2<sup>nd</sup> sentence

The requirements in Germany are not limited to the public supply system only, but include all supply systems. Therefore the words "to the public" are deleted.

551.7.3 3 <sup>rd</sup> (last) sentence	In Germany, the sentence "Where synchronisation is necessary, the use of automatic synchronising systems which consider frequency, phase and voltage is to be preferred" does not apply and shall be deleted. Instead, the VDE code of practice VDE-Anwendungsregel (FNN) VDE-AR-N 4105, "Erzeugungsanlagen am Niederspannungsnetz" shall be considered.					
551.7.4 1 <sup>st</sup> paragraph	The requirements in Germany are not limited to the public supply system only, but include all supply systems. Therefore the first paragraph of 551.7.4 is as follows:					
	Where a generating set is intended to run in parallel with the system of distribution of electricity, means of automatic switching shall be provided to disconnect the generating set from the distribution system in the event of loss of that supply or deviation of the voltage or frequency at the supply terminals from the values declared for normal supply.					
551.7.4 2 <sup>nd</sup> paragraph	The requirements in Germany are not limited to the public supply system only, but include all supply systems. Therefore the second paragraph of 551.7.4 is as follows:					
	The type of protection and the sensitivity and operating times depend upon the protection of the system for distribution of electricity and the number of generating sets connected and shall be agreed by the distributor.					
551.7.5 1 <sup>st</sup> paragraph	The requirements in Germany are not limited to the public supply system only, but include all supply systems. Therefore the text of 551.7.5 is as follows:					
	Where a generating set is intended to run in parallel with the system for distribution of electricity, means shall be provided to prevent the connection of a generating set from the distribution system in the event of loss of that supply or deviation of the voltage or frequency at the supply terminals from values declared for normal supply.					
551.7.6 1 <sup>st</sup> sentence	The requirements in Germany are not limited to the public supply system only, but include all supply systems. Therefore the 1 <sup>st</sup> sentence of 551.7.6 is as follows:					
	Where a generating set is intended to run in parallel with the system for distribution of electricity, means shall be provided to enable the generating set to be isolated from the distribution system.					
551.8	Clause 551.8 does not apply to Germany, because the requirements are covered by DIN EN 50272-2 (VDE 0510-2).					

December 2010