Certificate of compliance

Product: Grid-tie Photovoltaic Inverters
Model : HPC-250HT, HPC-100HT

Use in accordance with regulations:
Grid-tie Photovoltaic Inverters with three-phase mains surveillance in accordance with DIN V VDE V0126-1-1:2006-02 for photovoltaic systems. The grid-tie photovoltaic inverter with 250KW and 100KW are specially designed products for usage of medium and/or large sized PV power plants.

Applied rules and standards :
DIN V VDE V 0126-1-1 (VDE V 0126-1-1):2006-02 and „Generator at the public low-voltage grid, 4th edition 2001, guideline for connection and parallel operation of generators in the public low-voltage grid" with VDN additions (2005) from the German Electricity Association (VDEW) and Association of network operator (VDN).
Also **Hyundai Heavy Industries Co.** acquired TÜV and CE certificates for European market.

HPC-250HT TÜV Certificate.
Certificate number: R50182008
Date of issue: 27th of May 2010

HPC-250HT CE Certificate
Registration number : AN 50182010 0001
Report number : 13603150 001

HPC-100HT TÜV Certificate
Certificate number: R50173147
Date of issue: 11th of January 2010

HPC-100HT CE Certificate
Registration number : AN 50173148 0001
Report number : 13603149 001

Hyundai Heavy Industries Co. Ltd.
1. Jeonha-dong, Dong-gu Ulsan, Korea

Declaration of Conformity

We declare that following inverter(s) comply with the according regulations of the European Community, especially with those concerning EMC in accordance with 2004/108/EC, low voltage regulation in accordance with 2006/95/EC.

Product : Grid-tie PV Inverter

Models : HPC-250HT, HPC-100HT

Manufacturer's Name : Hyundai Heavy Industries Co. Ltd

Manufacturer's Address : (1) 1. Jeonha-dong, Dong-gu Ulsan, Korea
(2) Hyundai B/D, 140-2, Kye-ding, Jongno-gu, Seoul, Korea

The following regulations are furthermore complied with.

EMC :

Emission : DIN EN 61000-6-3 CISPR 22 : Class B

Immunity : DIN EN 61000-6-2

Safety : DIN EN50178 (VDE160) 1998-04
IEC 62103 (ed.1)

Others : Grid-tie standard:

DIN EN VDE0126-1-1 (2005.5) and following interface protection settings are included:

Parameter	Trip settings	Max. clearance time
Over Voltage	448 VAC	0.2 second
Under Voltage	360 VAC	0.2 second
Floating average voltage	356 VAC	10 minutes
Over Frequency	50.5 Hz	0.2 second
Under Frequency	49.5 Hz	0.2 second

Authorized representative established within the EU(if applicable) :

Company's Name :

Company's Address :

Person responsible for making this declaration

Name surname : Byoung-gwon, Min

Position/Title : Photovoltaic Inverter Ssles Team Leader

Seoul Korea (Place) 14/7/2010 (Date) Byoung-gwon, Min (Company stamp and legal signature)

C E R T I F I C A T E

TÜVRheinland®

of Conformity
Low Voltage Directive 2006/95/EC

Registration No.: AN 50173148 0001

Report No.: 13603149 001

Holder: Hyundai Heavy Industries Co., Ltd.
1,Jeonha-dong, Dong-gu,
Ulsan 682-792
Rep. of Korea

Product: PV-Inverter

Identification:

Type Designation : HPC-100HT

Serial No. : n.a. (Prototype)

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the Licence Holder's disposal.This is to certify that the tested sample is in conformity with all revision of Annex I of Council Directive 2006/95/EC, in its latest amended version, referred to as the Low Voltage Directive. This certificate does not imply assessment of the series-production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex III of the Directive.

Certification Body

TÜV Rheinland Product Safety GmbH TÜVRheinland® Zertifizierungsstelle

Cologne, 11.01.2010

Dipl.-Ing. D. Löffler

TÜV Rheinland Product Safety GmbH - Am Grauen Stein - D-51105 Köln

CE The CE marking may be used if all relevant and effective EC Directives are complied with. CE

Zertifikat *Certificate*

TÜVRheinland®

Zertifikat Nr. *Certificate No.*
R 50173147

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Ihr Zeichen *Client Reference*	**Unser Zeichen** *Our Reference*	**Ausstellungsdatum**	*Date of Issue* (day/mo/yr)
K.H.K.	ZKR3-KIS- 13603149 001	11.01.2010	

Genehmigungsinhaber *License Holder*
Hyundai Heavy Industries Co., Ltd.
1,Jeonha-dong, Dong-gu,
Ulsan 682-792
Rep. of Korea

Fertigungsstätte Manufacturing Plant
Hyundai Heavy Industries Co., Ltd.
1,Jeonha-dong, Dong-gu,
Ulsan 682-792
Rep. of Korea

Prüfzeichen *Test Mark*

www.tuv.com TÜVRheinland ID:2000000000
• BAUART GEPRÜFT
• TYPE APPROVED

Geprüft nach *Tested acc. to*
EN 50178:1997

Zertifiziertes Produkt (Geräteidentifikation) *Certified Product* *(Product Identification)*

Lizenzentgelte - Einheit *License Fee - Unit*

PV-Inverter

Type Designation	: HPC-100HT	6
Input Rating		
MPPT Range	: DC 300-600V	
Max. Voltage	: DC 650V	
Max. Current	: 350A	
Output Rating	: AC 380V 60Hz 100kW 3-Phase 4-Wire	
Class of Equipment	: Class I	
IP-degree	: IP20	

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ANLAGE (Appendix): 1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

Zertifizierungsstelle

TÜVRheinland Product Safety GmbH Zertifizierungsstelle TÜVRheinland®

Dipl.-Ing. D. Löffler

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