

Certificate

Registration No.: PV 50178778

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Report No.: 12605818 019

License Holder:

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

Product:

PV Module

Addition

Type: HiS-MxxxMF(BK)

(xxx = 190, 193, 195, 198, 200, 203, 205, 208, 210, 213,
215, 218, 220, 223, 225, 228, 230)

HiS-SxxxMF(BK)

(xxx = 190, 193, 195, 198, 200, 203, 205, 208, 210, 213,
215, 218, 220, 223, 225, 228, 230)

HiS-MxxxMG(BK)

(xxx = 203, 205, 208, 210, 213, 215, 218, 220, 223, 225,
228, 230, 233, 235, 238, 240, 243, 245, 248, 250, 253, 255)

HiS-SxxxMG(BK)

(xxx = 220, 223, 225, 228, 230, 233, 235, 238, 240, 243,
245, 248, 250, 253, 255, 258, 260, 263, 265, 267)

Manufacturing Plant:

Hyundai Heavy Industries Co., Ltd.
169, Daejang-ri, Soi-myeon,
Eumseong-kun, Chungcheongbuk-do,
369-872, Rep. of Korea

Basis:

IEC 61215:2005
EN 61215:2005
"Crystalline silicon terrestrial
photovoltaic (PV) modules - Design
qualification and type approval"

Factory Inspection
To document the consistent quality of
the product factory inspections are
performed periodically.



- **Periodic inspection**
- **Qualified, IEC 61215**
- **Safety tested, IEC 61730**

Remarks:

- Additional type designations see above.
- Mechanical load at 5400 Pa has been performed.
- The details of the factory inspection are documented in report no. 21207320.
- Extension to alternative black Backsheet (s) / EVA (s) combination specified in the a. m. report.

Conditions:

The product test is voluntarily according to technical regulations. Any change of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval.

The certificate is valid until 01 September 2014.

Yokohama, 11 July 2011

TÜV Rheinland Japan Ltd. – Yokohama 222-0033, Japan



Certification body


Dipl.-Ing. M. Geiser

Certificate

Registration No.: PV 50178779

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Report No.: 12605818 020

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1, Jeonha-dong,
Dong-gu, Ulsan,
682-792, Rep. of Korea

Manufacturing Plant:

Hyundai Heavy Industries Co., Ltd.
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HiS-SxxxMG(BK)

(xxx = 220, 223, 225, 228, 230, 233, 235, 238, 240, 243,
245, 248, 250, 253, 255, 258, 260, 263, 265, 267)

Basis:

- IEC 61730-1:2004
IEC 61730-2:2004
EN 61730-1:2007
EN 61730-2:2007
"Photovoltaic (PV) module safety
qualification"

- Factory Inspection**
To document the consistent quality of
the product factory inspections are
performed periodically.



- Periodic inspection
- Qualified, IEC 61215
- Safety tested, IEC
61730

Remarks:

- Additional type designations see above.
- IEC EN 61730 consists of part 1 (Requirements for construction) and part 2 (Requirements for testing).
- The above listed PV modules fulfil the requirements of Application Class A (Safety Class II). They may be used in PV plants
at a maximum system voltage (Voc at STC) of up to **1000 VDC**.
- The fire test (IEC 61730-2 / MST 23) was not performed.
- The details of the factory inspection are documented in report no. 21207320.
- Extension to alternative black Backsheet (s) / EVA (s) combination specified in the a. m. report.

Conditions:

The product test is voluntarily according to technical regulations. Any change of the design, materials, components or
processing may require the repetition of some of the qualification tests in order to retain type approval.

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