

Certificate

Registration No.: PV 60022498

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Report No.: 21209955-1

License Holder:

Sanyo Electric Co Ltd.
15-2, Nishiki-minami-cho
Kaizuka City
Osaka 597-0094
Japan

Manufacturing Plant:

Sanyo Electric Co., Ltd.
Nishikinohama Factory
15-2, Nishiki, Minami-Machi
Kaizuka City
Osaka 579-0094
Japan

Product:

PV Module

Types:

HIP-215NKHEX; HIP-215NKHEX-2;
HIP-210NKHEX; HIP-210NKHEX-2;
HIP-205NKHEX; HIP-205NKHEX-2;
HIP-200NKHEX; HIP-200NKHEX-2;
HIP-195NKHEX; HIP-195NKHEX-2;
HIP-215NKHEX-SSE; HIP-215NKHEX-ZH;
HIP-210NKHEX-SSE; HIP-210NKHEX-ZH;
HIP-205NKHEX-SSE; HIP-205NKHEX-ZH;
HIP-200NKHEX-SSE; HIP-200NKHEX-ZH;
HIP-195NKHEX-SSE; HIP-195NKHEX-ZH.

Last digit (x) stands for:

- 4 = using conventional junction box, all cells are set the other way around as HIP-205NKHE1
- 5 = using new junction box, all cells are set the same way as HIP-205NKHE1
- 6 = using new junction box, all cells are set the other way as HIP-205NKHE1

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.



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

Remarks:

- 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. 21210100.

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 27 August 2013.

Cologne, 27 August 2008



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License Holder:

Sanyo Electric Co Ltd.
15-2, Nishiki-minami-cho
Kaizuka City
Osaka 597-0094
Japan

Manufacturing Plant:

Sanyo Electric Co., Ltd.
Tokyo Plant
1-1-1, Sakara, Oizumi-Machi, Ora-Gun
Gumna-ken 370-0596
Japan

Product:

PV Module
Types:

HIP-215NKHE_x; HIP-215NKHE_x-2;
HIP-210NKHE_x; HIP-210NKHE_x-2;
HIP-205NKHE_x; HIP-205NKHE_x-2;
HIP-200NKHE_x; HIP-200NKHE_x-2;
HIP-195NKHE_x; HIP-195NKHE_x-2;
HIP-215NKHE_x-SSE; HIP-215NKHE_x-ZH;
HIP-210NKHE_x-SSE; HIP-210NKHE_x-ZH;
HIP-205NKHE_x-SSE; HIP-205NKHE_x-ZH;
HIP-200NKHE_x-SSE; HIP-200NKHE_x-ZH;
HIP-195NKHE_x-SSE; HIP-195NKHE_x-ZH.

Last digit (x) stands for:

- 4 = using conventional junction box, all cells are set the other way around as HIP-205NKHE1
- 5 = using new junction box, all cells are set the same way as HIP-205NKHE1
- 6 = using new junction box, all cells are set the other way as HIP-205NKHE1

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.



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

Remarks:

- 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. 21209324.

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 27 August 2013.

Cologne, 27 August 2008


Certification body
Dipl.-Ing. M. Adrian

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Registration No.: PV 60022498

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Report No.: 21209955-1

License Holder:

Sanyo Electric Co Ltd.
15-2, Nishiki-minami-cho
Kaizuka City
Osaka 597-0094
Japan

Manufacturing Plant:

Sanyo Hungary Kft.
Ipari park
2510 Dorog
Hungary

Product:

PV Module
Types:

HIP-215NKHEX; HIP-215NKHEX-2;
HIP-210NKHEX; HIP-210NKHEX-2;
HIP-205NKHEX; HIP-205NKHEX-2;
HIP-200NKHEX; HIP-200NKHEX-2;
HIP-195NKHEX; HIP-195NKHEX-2;
HIP-215NKHEX-SSE; HIP-215NKHEX-ZH;
HIP-210NKHEX-SSE; HIP-210NKHEX-ZH;
HIP-205NKHEX-SSE; HIP-205NKHEX-ZH;
HIP-200NKHEX-SSE; HIP-200NKHEX-ZH;
HIP-195NKHEX-SSE; HIP-195NKHEX-ZH.

Last digit (x) stands for:

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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.



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

Remarks:

- 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. 21208174.

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 27 August 2013.

Cologne, 27 August 2008



Dipl.-Ing. M. Adrian