

Certificate

Registration No.: PV 50160155

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Report No.: 12605859 063

License Holder:

SANYO Electric Co., Ltd.
15-2, Nishiki-Minami-machi
Kaizuka City, Osaka
597-0094, JAPAN

Product:

PV Module

Addition

Type: VBHNxxxSE10, VBHNxxxSE11
(xxx = 225, 230, 235, 240)
VBHN236SE10, VBHH251AE01
VBHNyyySE51, VBHNyyySE52
(yyy = 225, 230, 235)
VBHHzzzAE01, VBHHzzzAE02
VBHHzzzBE09, VBHHzzzBE10
(zzz = 240, 245, 250)

Manufacturing Plant:

SANYO Electric Co., Ltd.
Nishikinohama Factory
15-2, Nishiki-Minami-machi
Kaizuka City, Osaka
597-0094, JAPAN

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.
- The details of the factory inspection are documented in report no. 12606100.
- For associated manufacturing plants, refer to the preceding certificate page.
- Mechanical load at 5400 Pa has been performed for the a. m. VBHN and VBHH series.

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 has a validity of 5 years from the date of issue stated on page 1.



Certification body

Yokohama, 31 January 2012


Dipl.-Ing. M. Geiser

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

Certificate

Registration No.: PV 50160157

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Report No.: 12605859 064

License Holder:
SANYO Electric Co., Ltd.
15-2, Nishiki-Minami-machi
Kaizuka City, Osaka
597-0094, JAPAN

Product:
PV Module

Addition

Manufacturing Plant:
SANYO Electric Co., Ltd.
Nishikinohama Factory
15-2, Nishiki-Minami-machi
Kaizuka City, Osaka
597-0094, JAPAN

Type: VBHNxxxSE10, VBHNxxxSE11
(xxx = 225, 230, 235, 240)
VBHN236SE10, VBHH251AE01
VBHNyyySE51, VBHNyyySE52
(yyy = 225, 230, 235)
VBHHzzzAE01, VBHHzzzAE02
VBHHzzzBE09, VBHHzzzBE10
(zzz = 240, 245, 250)

Basis:

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



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

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

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.
- Additional type designations see above.
- The details of the factory inspection are documented in report no. 12606100.
- For associated manufacturing plants, refer to the preceding certificate page.

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 has a validity of 5 years from the date of issue stated on page 1.



Certification body

Yokohama, 31 January 2012


Dipl.-Ing. M. Geiser

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