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Explanatory Note IEC-Certificate

This explanatory note describes how to read the

IEC 61215 and IEC 61730 certificates

for photovoltaic modules made by Kyocera.

The **first 4 certificate pages** do list Kyocera's global PV-module production sites certified according to IEC 61215 and IEC 61730 under the headline "Manufacturing Plant":

- 1. Mie Ise, Japan
- 2. Tianjin, China
- 3. Kadan, Czech Republic
- 4. Tijuana, Mexico

The **certificate pages 5 ff.** do list the Japanese production site (Mie Ise) only under the headline "Manufacturing Plant", while the remarks section in the lower third of the certificate page is referring to the production sites listed in the previous certificate pages:

"For associated factories, refer to the preceding certificate pages"

This means the production sites listed on the first 4 certificate pages are certified for production of all modules listed in the certificate.

Esslingen, September 20th 2012

Simon Schwarz

Assistant Manager Engineering Center

Solar Division



Registration No.: PV 50137353 Page 1 Report No.: 12604646 002

License Holder:

Kyocera Corporation

6 Takeda, Tobadono-cho Fushimi-ku, Kyoto 612-8501 JAPAN

Manufacturing Plant: Kyocera Corporation

Mie Ise Plant

600-10 Shimono-cho

Ise-shi, Mie 516-8510 JAPAN Product:

PV Module

Type: KD130GH-2PU

KD135GH-2PU

KD180GH-2PU

KD205GH-2PU

KD210GH-2PU

KD130GH-2U

KD135GH-2U

KD180GH-2U

KD205GH-2U

KD210GH-2U

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. 12605118 001

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 counting from date of issue.



Certification body

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Dipl.-Ing. S. Hartter

Yokohama, 11 September 2008



Registration No.: PV 50137353

Page 2

Report No.: 12604646 002

License Holder:

Kyocera Corporation

6 Takeda, Tobadono-cho Fushimi-ku, Kyoto

612-8501 JAPAN

Manufacturing Plant:

Kvocera (Tianjin) Solar Energy Co., Ltd.

Tianjin Economic-Technological Development Area

16 XiangAn Road (5th Avenue) Tianjin 300457 P.R. China Product:

PV Module

Type: KD130GH-2PU

KD135GH-2PU

KD180GH-2PU

KD205GH-2PU

KD210GH-2PU

KD130GH-2U

KD135GH-2U

KD180GH-2U

KD205GH-2U

KD210GH-2U

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. 12605119 001

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 counting from date of issue.



Certification body

Ste Htto

Dipl.-Ing. S. Hartter

Yokohama, 11 September 2008



Registration No.: PV 50137353

Page 3

Report No.: 12604646 002

License Holder:

Kyocera Corporation

6 Takeda, Tobadono-cho

Fushimi-ku, Kyoto

612-8501 JAPAN

Manufacturing Plant:

KYOCERA Solar Europe S. R. O.

Kralovsky Vrch 1977

43201 Kadan

Czech Republic

Product:

PV Module

Type: KD130GH-2PU

KD135GH-2PU

KD180GH-2PU

KD205GH-2PU KD210GH-2PU

KD130GH-2U

KD135GH-2U

KD180GH-2U

KD205GH-2U

KD210GH-2U

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. 21207674

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 counting from date of issue.



Certification body

Dipl.-Ing. S. Hartter

Yokohama, 11 September 2008



Registration No.: PV 50137353 Page 4 Report No.: 12604646 002

License Holder:

Kyocera Corporation

6 Takeda, Tobadono-cho Fushimi-ku, Kyoto 612-8501 JAPAN

Manufacturing Plant:

KYOCERA MEXICANA, S.A. DE C.V.

BLVD. BUENA VISTA OTAY No.2055

OTAY UNIVERSIDAD 22427

TIJUANA, B.C. MEXICO

Product:

PV Module

Type: KD130GH-2PU

KD135GH-2PU KD180GH-2PU

KD205GH-2PU

KD210GH-2PU

KD130GH-2U

KD135GH-2U

KD180GH-2U KD205GH-2U

KD210GH-2U

Basis:

X

IEC 61730-1:2004

IEC 61730-2:2004

EN 61730-1:2007

EN 61730-2:2007

"Photovoltaic (PV) module safety qualification"

X

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. 12605186 001.

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 counting from date of issue.



Certification body

Stell

Dipl.-Ing. S. Hartter

Yokohama, 15 October 2008



Registration No.: PV 50137353

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Report No.: 12604646 004

License Holder: Kyocera Corporation6 Takeda, Tobadono-cho
Fushimi-ku, Kyoto

612-8501 JAPAN

Product: PV Module

Addition

Type: KD185GH-2PU KD185GH-2U

Manufacturing Plant: Kyocera Corporation Mie Ise Plant 600-10 Shimono-cho Ise-shi, Mie 516-8510 JAPAN

Basis:

X

IEC 61730-1:2004
IEC 61730-2:2004
EN 61730-1:2007
EN 61730-2:2007

"Photovoltaic (PV) module safety qualification"



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



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.
- For associated factories, refer to the preceding certificate pages.
- Additional type designations see above.

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 for 5 years from the date of issue stated on page 1.



Certification body

Dipl.-Ing. W. Herlitschke

Yokohama, 5 March 2009



Registration No.: PV 50137353

Page 6

Report No.: 12604646 006

License Holder:

Kyocera Corporation

6 Takeda, Tobadono-cho Fushimi-ku, Kyoto 612-8501 JAPAN

Product:

PV Module

Addition

KD140GH-2PU Type:

KD215GH-2PU KD140GH-2U KD215GH-2U

Manufacturing Plant: **Kyocera Corporation** Mie Ise Plant

600-10 Shimono-cho Ise-shi. Mie 516-8510 JAPAN

Basis:



IEC 61730-1:2004

IEC 61730-2:2004

EN 61730-1:2007

EN 61730-2:2007

"Photovoltaic (PV) module safety qualification"



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



Factory Inspection

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

- 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. 21210176.
- For associated factories, refer to the preceding certificate pages.
- Additional type designations see above.

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 for 5 years from the date of issue stated on page 1.



Certification body

Dipl.-Ing. S. Hartter

Yokohama, 22 July 2009



Registration No.: PV 50137353

Page 7

Report No.: 12604646 008

License Holder:

Kyocera Corporation

6 Takeda, Tobadono-cho Fushimi-ku, Kyoto 612-8501 JAPAN Product:

PV Module

Addition

Type:

KDxxxGH-2B

KDxxxGH-2PB

xxx= 225, 230, 235 or 240

Manufacturing Plant: Kyocera Corporation Mie Ise Plant

600-10 Shimono-cho Ise-shi, Mie 516-8510 JAPAN

Basis:



IEC 61730-1:2004

IEC 61730-2:2004

EN 61730-1:2007

EN 61730-2:2007

"Photovoltaic (PV) module safety qualification"



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



Factory Inspection

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

Domarke:

- 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. 12605118.
- For associated factories, refer to the preceding certificate pages.
- Additional type designations see above.

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 for 5 years from the date of issue stated on page 1.



Certification body

In Sett

Dipl.-Ing. S. Hartter

Yokohama, 5 November 2009



Registration No.: PV 50146683

Page 8

Report No.: 21207991 032

License Holder:

Kyocera Corporation

6 Takeda, Tobadono-cho Fushimi-ku, Kyoto 612-8501 JAPAN Product:

PV Module

Addition

Type: KDxxxSX-1PU

xxx = 140, 145, 150 (36 cells)

Manufacturing Plant: Kyocera Corporation

Mie Ise Plant 600-10 Shimono-cho

Ise-shi, Mie 516-8510 JAPAN KDxxxSX-1PB, KDxxxSX-1PBS, KDxxxSX-1FB

KDxxxSX-1FBS, KDxxxSX-1FU, KDxxxSX-1YB KDxxxSX-1YBS, KDxxxSX-1YU

KTxxx-3BD, KTxxx-3AD, KTxxx-3UD

xxx = 130, 132, 133, 135, 140, 145, 150

(36 cells)

Basis:



IEC 61730-1:2004

IEC 61730-2:2004

EN 61730-1:2007

EN 61730-1:2007

"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:

- Additional type designations see above.

- The details of the factory inspection are documented in report no. 12605118.
- For associated manufacturing plants, refer to the preceding certificate page.

- 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 750 VDC.
- The fire test (IEC 61730-2 / MST 23) was not performed.

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 for 5 years from the date of issue stated on page 1.



Certification body

Dipl.-Ing. (FH) J. Taylor

Yokohama, 24 April 2012



Registration No.: PV 50137353

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Report No.: 12604646 012

License Holder:

Kyocera Corporation

6 Takeda, Tobadono-cho Fushimi-ku, Kyoto

612-8501 JAPAN

Manufacturing Plant: **Kyocera Corporation**

Mie Ise Plant

600-10 Shimono-cho

Ise-shi, Mie

516-8510 JAPAN

Product:

PV Module

Addition

Type: 1) KDxxxGH-2JB

2) KDxxxGH-2JB, KDxxxGH-2JBS, KDxxxGH-2JU

3) KDxxxGH-2FB

4) KDxxxGH-2FB, KDxxxGH-2FBS, KDxxxGH-2FU

1) xxx = 215, 220, 225, 230, 235 (60 cells)

2) xxx = 195, 196, 200, 202, 205, 208, 210 (54 cells)

2) xxx = 170, 172, 175, 179, 180, 185 (48 cells)

2) xxx = 128, 130, 133, 135 (36 cells)

3) xxx = 220, 225, 230, 235, 240 (60 cells)

4) xxx = 195, 196, 200, 202, 205, 208, 210, 215 (54 cells)

4) xxx = 172, 175, 179, 180, 185, 190 (48 cells)

4) xxx = 128, 130, 133, 135, 140 (36 cells)

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

 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. 12605118.

- For associated factories, refer to the preceding certificate pages.

- Additional type designations see above.

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 for 5 years from the date of issue stated on page 1.



Certification body

Dipl.-Ing. W. **Herlitschke**

Yokohama, 10 March 2010



Registration No.: PV 50137353

Page 12

Report No.: 12604646 026

License Holder: **Kyocera Corporation**

6 Takeda, Tobadono-cho Fushimi-ku, Kyoto 612-8501 JAPAN

Manufacturing Plant: **Kyocera Corporation** Mie Ise Plant 600-10 Shimono-cho Ise-shi. Mie

516-8510 JAPAN

Product: PV Module

Addition

Type: KDxxxGH-2YB xxx = 225, 230, 235, 240 or 245 (60 cells)

KDxxxGH-2YB, KDxxxGH-2YBS, KDxxxGH-2YU xxx = 195, 196, 200, 202, 205, 208, 210, 215 or 220

(54 cells)

xxx = 172,175, 179, 180, 185 or 190 (48 cells)

xxx = 128, 130, 133, 135 or 140 (36 cells)

Basis:



IEC 61730-1:2004 IEC 61730-2:2004 EN 61730-1:2007 EN 61730-2:2007

"Photovoltaic (PV) module safety qualification"



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



Factory Inspection

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

- 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. 12605118.

- For associated factories, refer to the preceding certificate pages.

Additional type designations see above.

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 for 5 years from the date of issue stated on page 1.



Certification body

Dipl.-Ing. W. Herlitschke

Yokohama, 22 September 2010



Registration No.: PV 50137353

Page 13

Report No.: 12604646 040

License Holder:

Kyocera Corporation

6 Takeda, Tobadono-cho Fushimi-ku, Kyoto

612-8501 JAPAN

Manufacturing Plant:

Kyocera Corporation

Mie Ise Plant

600-10 Shimono-cho

Ise-shi, Mie 516-8510 JAPAN Addition

Product:

PV Module

Type: KDxxxGH-2PB

xxx = 230, 235, 240, 245 or 250 (60 cells)

KDxxxGH-2B

xxx = 230, 235 or 240 (60 cells)

KDxxxGH-2PB, KDxxxGH-2PBS, KDxxxGH-2PU

xxx = 220 or 225 (54 cells)

xxx = 190, 195 or 200 (48 cells)

xxx = 145 or 150 (36 cells)

Basis:



IEC 61730-1:2004

IEC 61730-2:2004

EN 61730-1:2007

EN 61730-2:2007

"Photovoltaic (PV) module safety qualification"



Qualified, IEC 61215

Safety tested, IEC 61730

Periodic Inspection



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.

- The details of the factory inspection are documented in report no. 12605118.

- For associated factories, refer to the preceding certificate pages.

- Additional type designations see above.

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 for 5 years from the date of issue stated on page 1.



Certification body

Yokohama, 28 January 2011

TUV, TUEV and TUV are registered trademarks. Utilisation and application requires prior approva

Dipl.-Ing. M. Geiser



Registration No.: PV 50137353

Page 16

Report No.: 12604646 055

License Holder:

Kyocera Corporation

6 Takeda, Tobadono-cho Fushimi-ku, Kyoto 612-8501 JAPAN

Manufacturing Plant: Kyocera Corporation

Mie Ise Plant

600-10 Shimono-cho Ise-shi, Mie 516-8510 JAPAN

Product:

PV Module

Addition

Type:

1)KDxxxGH-2JB, 2)KDxxxGH-2JB, KDxxxGH-2JBS, KDxxxGH-2JU 3)KDxxxGH-2FB, 4)KDxxxGH-2FB, KDxxxGH-2FBS, KDxxxGH-2FU 5)KDxxxGH-2YB, 6)KDxxxGH-2YB, KDxxxGH-2YBS, KDxxxGH-2YU 7)KDxxxGH-2P1B, 8)KDxxxGH-2P1U, Power & (cells)-see below 1)215, 220, 225, 230, 235 (60)

2)195, 196, 200, 202, 205, 208, 210 (54)

170, 172, 175, 179, 180, 185 (48), 128, 130, 133, 135 (36)

3) 5)230, 235, 240, 245, 250 (60)

4) 6)195, 196, 200, 202, 205, 208, 210, 215, 220, 225 (54) 172, 175, 179, 180, 185, 190 (48), 128, 130, 133, 135, 140 (36) 7)235, 240, 245, 250 (60), 8)210, 215, 220, 225 (54)

Basis:



IEC 61730-1:2004 IEC 61730-2:2004

EN 61730-1:2007 EN 61730-2:2007

"Photovoltaic (PV) module safety qualification"



Qualified, IEC 61215

- Safety tested, IEC 61730
- Periodic Inspection



Factory Inspection

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

- 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. 12605118.
- For associated factories, refer to the preceding certificate pages.
- Additional type designations see above.

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 for 5 years from the date of issue stated on page 1.

Certification body

Dipl.-Ing. M. Geiser

Yokohama, 21 October 2011



Registration No.: PV 50137353

Page 17

Report No.: 12604646 061

License Holder: Kyocera Corporation6 Takeda, Tobadono-cho
Fushimi-ku, Kyoto

6 Takeda, Tobadono-cho Fushimi-ku, Kyoto 612-8501 JAPAN

Manufacturing Plant: Kyocera Corporation Mie Ise Plant 600-10 Shimono-cho Ise-shi, Mie 516-8510 JAPAN Product: PV Module

Addition

Type: KDxxxGH-2PB, KDxxxGH-4PB, KTxxx-8BC xxx = 300, 305, 310, 315, 320, 325, 330, 335 (80 cells)

Basis:



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

"Photovoltaic (PV) module safety qualification"



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



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.

- The details of the factory inspection are documented in report no. 12605118.

- For associated factories, refer to the preceding certificate pages.

- Additional type designations see above.

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 for 5 years from the date of issue stated on page 1.



Certification body

Dipl.-Ing. M. Geiser

Yokohama, 06 December 2011



Registration No.: PV 50137353

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Report No.: 12604646 069

License Holder:

Kyocera Corporation

6 Takeda, Tobadono-cho Fushimi-ku, Kyoto

612-8501 JAPAN

Manufacturing Plant: Kyocera Corporation

Mie Ise Plant

600-10 Shimono-cho

Ise-shi, Mie

516-8510 JAPAN

Product:

PV Module

Addition

Type: KDxxxGH-4FB, KDxxxGH-4YB

xxx = 230, 235, 240, 245, 250 (60 cells)

xxx = 202, 205, 208, 210, 215, 220, 225 (54 cells)

xxx = 172, 175, 179, 180, 185, 190, 195, 200 (48 cells)

xxx = 128, 130, 133, 135, 140, 145, 150 (36 cells)

KDxxxGH-4FBS, KDxxxGH-4FU, KDxxxGH-4PU,

KDxxxGH-4YBS, KDxxxGH-4YU

xxx = 202, 205, 208, 210, 215, 220, 225 (54 cells)

xxx = 172, 175, 179, 180, 185, 190, 195, 200 (48 cells)

xxx = 128, 130, 133, 135, 140, 145, 150 (36 cells)

KDxxxGH-4PB, xxx = 230, 235, 240, 245, 250 (60 cells)

KDxxxGH-4P1B, xxx = 235, 240, 245, 250 (60 cells)

KDxxxGH-4P1U, xxx = 210, 215, 220, 225 (54 cells)

Basis:



IEC 61730-1:2004

IEC 61730-2:2004

EN 61730-1:2007

EN 61730-2:2007

"Photovoltaic (PV) module safety

qualification"



Qualified, IEC 61215

Safety tested, IEC 61730

Periodic Inspection



Factory Inspection

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

Domarke:

- 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. 12605118.
- For associated factories, refer to the preceding certificate pages.
- Additional type designations see above.

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 for 5 years from the date of issue stated on page 1.

TÜVRheinland

Certification body

Dipl.-Ing. M. Geiser

Yokohama, 20 January 2012

TÜV, TUEV and TUV are registered trademarks. Utilisation and application requires prior approval.



Registration No.: PV 50137353

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Report No.: 12604646 075

License Holder: **Kyocera Corporation** 6 Takeda, Tobadono-cho Fushimi-ku, Kyoto 612-8501 JAPAN

Manufacturing Plant: **Kyocera Corporation** Mie Ise Plant 600-10 Shimono-cho Ise-shi. Mie 516-8510 JAPAN

Product: PV Module

Addition Type: KDxxxGH-2PB2, KDxxxGH-2FB2 KDxxxGH-2YB2, KDxxxGH-4PB2 KDxxxGH-4FB2, KDxxxGH-4YB2 xxx = 250, 245, 240, 235, 230 (60 cells) xxx = 225, 220, 215, 210, 208, 205, 202 xxx = 200, 195, 190, 185, 180, 179, 175, 172 (48 cells) xxx = 150, 145, 140, 135, 133, 130, 128 (36 cells) KDxxxGH-2P1B2, KDxxxGH-4P1B2 xxx = 250, 245, 240, 235 (60 cells) xxx = 225, 220, 215, 210 (54 cells)

Basis:

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



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



Factory Inspection

IEC 61730-1:2004

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

- 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. 12605118.

For associated factories, refer to the preceding certificate pages.

Additional type designations see above.

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 for 5 years from the date of issue stated on page 1.

Yokohama, 15 March 2012

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



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Fushimi-ku, Kyoto 612-8501 JAPAN

Manufacturing Plant: Kyocera Corporation Mie Ise Plant 600-10 Shimono-cho Ise-shi, Mie 516-8510 JAPAN

Product:

PV Module Addition

Type: KDxxxGH-2FB, KDxxxGH-4FB KDxxxGH-2YB, KDxxxGH-4YB

xxx = 300, 305, 310, 315, 320, 325, 330, 335 (80 cells)

KTxxx-6FC xxx = 250, 245, 240, 235, 230 (60 cells) KTxxx-5FC

xxx = 225, 220, 215, 210, 208, 205, 202 (54 cells)

KTxxx-4FC

xxx = 200, 195, 190, 185, 180, 179, 175, 172 (48 cells)

KTxxx-3FC

xxx = 150, 145, 140, 135, 133, 130, 128 (36 cells)

Basis:



IEC 61730-1:2004 IEC 61730-2:2004 EN 61730-1:2007 EN 61730-2:2007

"Photovoltaic (PV) module safety qualification"



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



Factory Inspection

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

- 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.

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