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Report No.: 21203171

## License Holder: SolarWorld AG

Kurt-Schumacher-Straße 12-14 53113 Bonn Germany

## Manufacturing Plant: Solar Factory GmbH

Ferdinand-Reich-Straße 1 09599 Freiberg Germany

### Product:

## **PV Modules**

Types: SolarWorld module SW xxx poly (½ / ¾ ), SolarWorld module SW xxx mono (½ / ¾ ), SolarWorld laminate SW xxx poly (½ / ¾ ), SolarWorld laminate SW xxx mono (½ / ¾ ), SolarWorld module SW xxx Compact poly

Where xxx stands for power values up to 230 (Wp)

#### Basis:



TÜV Spec TZE/2.572.09
"Safety Class II Test on
Photovoltaic (PV) Modules"

### Factory Inspection

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

#### Remarks:

The above mentioned PV module may be used in PV plants at a maximum system voltage (Voc at STC) of up to 1000 VDC. The module types have been developed from the PV module types xxxxxx (report no.: 21201396-1).

The modules consist of front glass / EVA / cells / EVA / backsheet foil (TPT), potted Solar Factory junction box with bypass diodes, fix connected cable MC FlexSol 4mm² with MC connectors PV-KST/KBT, anodized Aluminium-frame. Differences: Electrical rating, mono- or multicrystalline cells (125 x 125) mm, dimension, (others see report 21203171B).

#### 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 only valid in conjunction with proof of the suitability of the modules in accordance with IEC 61215 (or similar procedure). The certificate has a validity of 3 years counting from the date of issue, provided that the testing basis remains unchanged.

Renewable Energies

Dipl.-Ing. W. Vaaßen

Cologne, 16. August 2005



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Report No.: 21203171

## License Holder: SolarWorld AG

Kurt-Schumacher-Straße 12-14 53113 Bonn Germany

## Manufacturing Plant: Gällivare PhotoVoltaic AB

Företagscentrum Hus 60 98228 Gällivare Sweden

## Product:

## **PV Modules**

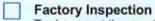
Types: SolarWorld module SW xxx poly (½ / ¾ ), SolarWorld module SW xxx mono (½ / ¾ ), SolarWorld laminate SW xxx poly (½ / ¾ ), SolarWorld laminate SW xxx mono (½ / ¾ ), SolarWorld module SW xxx Compact poly

Where xxx stands for power values up to 230 (Wp)

#### Basis:



TÜV Spec TZE/2.572.09
"Safety Class II Test on
Photovoltaic (PV) Modules"



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### Remarks:

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The modules consist of front glass / EVA / cells / EVA / backsheet foil (TPT), potted Solar Factory junction box with bypass diodes, fix connected cable MC FlexSol 4mm² with MC connectors PV-KST/KBT, anodized Aluminium-frame. Differences: Electrical rating, mono- or multicrystalline cells (125 x 125) mm, dimension, (others see report 21203171B).

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Renewable Energies

Dipl.-Ing. W. Vaaßen

Cologne, 16. August 2005



Registration No.: Q 60012423

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Report No.: 21203167

License Holder: SolarWorld AG

Kurt-Schumacher-Straße 12-14 53113 Bonn Germany Product: PV Modules

SolarWorld module SW xxx poly (½ / ¾ ), SolarWorld module SW xxx mono (½ / ¾ ), SolarWorld laminate SW xxx poly (½ / ¾ ), SolarWorld laminate SW xxx mono (½ / ¾ ), SolarWorld module SW xxx Compact poly

Manufacturing Plant: Solar Factory GmbH

Ferdinand-Reich-Straße 1 09599 Freiberg Germany Where xxx stands for power values up to 230 (Wp)

### Basis:



IEC 61215: 04.1993

"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.

Remarks:

Conditions:

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

The certificate has a validity of 3 years counting from date of issue.

Certification bod

Dr. F. Gossen

Cologne, 16. August 2005

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Cologne



Registration No.: 60012423

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Report No.: 21203167

License Holder: SolarWorld AG

Kurt-Schumacher-Straße 12-14 53113 Bonn Germany

Product: PV Modules

SolarWorld module SW xxx poly (1/2 / 3/4 ), SolarWorld module SW xxx mono (1/2 / 3/4 ), SolarWorld laminate SW xxx poly (1/2 / 3/4 ), SolarWorld laminate SW xxx mono (1/2 / 3/4 ), SolarWorld module SW xxx Compact poly

Where xxx stands for power values up to 230 (Wp)

Manufacturing Plant: Gällivare PhotoVoltaic AB

Företagscentrum Hus 60 98228 Gällivare Sweden

### Basis:



IEC 61215: 04.1993

"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.

Remarks:

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

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Dr. F. Gossen

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Cologne, 16. August 2005

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Cologne