



# C E R T I F I C A T E

**Certificate No. 14-PPV-0000012/01-M01-TIC**

**WE HEREBY CERTIFY THAT THE PHOTOVOLTAIC MODULES WITH THE MODEL**

**DTXXP(36), DTXXP(48), DTXXP(54), DTXXP(60), DTXXP(72)  
OBO280P(72) (Tested Type)**

**And with Types extended for similarity\*  
- See Annex -**

**OEM APPLICANT & LICENSE HOLDER**

**DORTMUND ENERGY INVESTMENT GROUP CO., LIMITED**

15/b,15/f Cheuk nang Plaza 250 Hennessy Road, HK – CHINA

**IS IN COMPLIANCE WITH THE REQUIREMENTS OF**

**IEC 61215 : 2005**

Crystalline silicon terrestrial photovoltaic (PV) modules – Design qualification and type approval  
&

**IEC 61730-1: 2004 + A1: 2011 / IEC 61730-2: 2004 + A1: 2011\*\***

Photovoltaic (PV) module safety qualification

To be used in plants at a total voltage up to : 1000 Vdc (application Class A)

**AS RESULT OF THE TEST IN OUR APPOINTED LABORATORY**

EA ACCREDITED LABORATORIES N. 0951 & 0086

**REPORT No. TIC-AR13TEST083, TIC-AR13TEST084, TIC-AR13TEST085,  
TIC-AR14TEST050, TIC-1270.0CI0262/13**

**Expiring date 12.02.2019**

*(Providing that the testing basis continues unchanged)*

Notes: (\*) The manufacturer and OEM applicant declare that these products are constructed using the same materials, components and processes as the tested type OBO280P(72). Further details on certified models are reported on the attachment. Technical data, materials and components description are into the indicated test reports. Any changes of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval. The certification is performed on tested model as complete certification, retest performed according to IECCE "Retesting guideline" for similarity with tested type OBO280P(72) with differences cell technology and single test for Visual inspection, maximum power determination, insulation test, hot spot, endurance test and wet leakage current test. (\*\*\*)The fire test (IEC 61730-2 / MST 23) was performed on model OBO280P(72). Fire class C is assessed based on test report no. 1270.0CI0262/13. This certificate is for type approval and based on voluntarily product test. The Manufacturer Inspection is conducted by TÜV INTERCERT on the base of the internal procedures.



DAT-ZE-030/09-00



Bonn, 17.11.2014



*Ing. R. Bolzonaro* *Ing. K. Lindenblatt*

Ing. R. Bolzonaro  
Technical Certifier

Ing. K. Lindenblatt  
Head of Certification Body



# C E R T I F I C A T E

## Annex of

**Certificate No. 14-PPV-0000012/01-M01-TIC**

### THE PHOTOVOLTAIC MODULES WITH THE MODELS

**Types extended for similarity\* with Poly cell technology without need of re-testing**  
(according to IEC61215 "Retesting guideline"):

Type**	Cell Number	Cell size [mm]	Module size [mm]	Power [W]
DTXXP(36)*	36	78x26	310x360x17	From 10 to 12.83
DTXXP(36)*	36	156x26	390x670x17	From 21 to 25.65
DTXXP(36)*	36	156x39	430x670x30/25	From 31.5 to 35
DTXXP(36)*	36	156x52	540x670x35/30	From 42 to 50
DTXXP(36)*	36	156x78	780x670x35/30	From 63 to 75
DTXXP(36)*	36	156x104	1010x670x35/30	From 84 to 90
DTXXP(36)*	36	156x124.8	1200x670x35/30	From 100 to 115
DTXXP(36)*	36	156x156	1480x670x35/30	From 126 to 150
DTXXP(48)*	48	156x156	1320x992x45/40/35	From 170 to 205
DTXXP(54)*	54	156x156	1480x992x45/40/35	From 190 to 231
DTXXP(60)*	60	156x156	1640x992x50/45/40/35	From 210 to 255
DTXXP(72)*	72	156x156	1950x992x50/45	From 255 to 305

**Notes:** (\*)The manufacturer and OEM applicant declare that these products are constructed using the same materials, components and processes as the tested type OBO280P(72). Technical data, materials and components description are into the indicated test reports. Any changes of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval. The certification is performed on tested model as complete certification, retest performed according to IEC61215 "Retesting guideline" for similarity with tested type OBO280P(72) with differences cell technology and single test for Visual inspection, maximum power determination, insulation test, hot spot, endurance test and wet leakage current test.

(\*\*)The fire test (IEC 61730-2 / MST 23) was performed on model OBO280P(72). Fire class C is assessed based on test report no. 1270.0CI0262/13. This certificate is for type approval and based on voluntarily product test. The Manufacturer inspection is conducted by TÜV INTERCERT on the base of the internal procedures. (\*\*\*) X or X or XXX indicate the Power in watt.



Bonn, 17.11.2014

*R. Bolzonaro*  
Ing. R. Bolzonaro  
Technical Certifier

*K. Lindenblatt*  
Ing. K. Lindenblatt  
Head of Certification Body