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C E R T I F I C A T E

Annex 1 of

Certificate No. 09-PPV-0001108/04-TIC

THE PHOTOVOLTAIC MODULES WITH THE MODELS

Tested Type	Cell Number	Cell Size (cm)	Cell Technology	Power [W]
WS-230	60	156 x 156	polycrystalline	230

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

Type	Cell Number	Cell Size (cm)	Power [W]
WS-250*	60	156 x 156	250
WS-240*	60	156 x 156	240
WS-230*	60	156 x 156	230
WS-220*	60	156 x 156	220
WS-210*	60	156 x 156	210
WS-200*	54	156 x 156	200
WS-190*	54	156 x 156	190
WS-180*	54	156 x 156	180
WS-175*	54	156 x 156	175
WS-160*	72	90 x 156	160
WS-150*	72	88 x 156	150
WS-140*	54	156 x 156	140
WS-130*	36	156 x 156	130
WS-125*	36	156 x 156	125

Notes: (*) The manufacturer declares that these products are constructed using the same materials, components and processes as the tested type WS-230. 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 and retest according to IEC61215 "Retesting guideline" for similarity with model WS-210 with differences in cell technology (certificate n° C01 08C330001 and C01 08C330002 released by Eurotest Laboratori in date 31.03.2008 and 31.07.2008). This certificate is for type approval and based on voluntarily product test without Factory Inspection.



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C E R T I F I C A T E

Annex 2 of

Certificate No. 09-PPV-0001108/04-TIC

THE PHOTOVOLTAIC MODULES WITH THE MODELS

**Types extended for similarity* with polycrystalline cell technology
without need of re-testing
(according to IEC 61215 "Retesting guideline"):**

Type	Cell Number	Cell Size (cm)	Power [W]
WS-120*	36	156 x 156	120
WS-115*	36	156 x 156	115
WS-110*	36	130 x 156	110
WS-100*	36	118 x 156	100
WS-90*	36	105 x 156	90
WS-80*	36	92 x 156	80
WS-75*	36	90 x 156	75
WS-70*	36	82 x 156	70
WS-60*	36	72 x 156	60
WS-50*	36	60 x 156	50
WS-40*	36	48 x 156	40
WS-30*	36	36 x 156	30
WS-20*	36	46 x 78	20
WS-10*	36	24 x 78	10

Notes: (*) The manufacturer declares that these products are constructed using the same materials, components and processes as the tested type WS-230. 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 and retest according to IEC 61215 "Retesting guideline" for similarity with model WS-210 with differences in cell technology (certificate n° C01 08C330001 and C01 08C330002 released by Eurotest Laboratori in date 31.03.2008 and 31.07.2008). This certificate is for type approval and based on voluntarily product test without Factory Inspection.



Am Bonner Bogen 2, D-53227 Bonn, 19.10.2009 Dipl.-Ing. F. Sergizareea
TÜV INTERCERT Certification Body

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