Series 200 PV Ecoplus

VE272PV Poly Black

MANUFACTURERS OF PHOTOVOLTAIC MODULES. SERIES 200

System certifications

- Corporate Quality Management EN ISO 9001:2008
- Environmental Management EN ISO 14001:2004
- Management of Health and Safety at the Workplace BS/OHSAS 18001:2007
- Certificates issued by TUV Rheinland ID:9105069414

Product certifications

- IEC 61215:2005
- EN 61730-1/-2:2007
- Class of reaction to fire I (UNI 9177)
- Safety class II
- Factory Inspection
- Production "made in EU"
- EC Directives: EMC 2004/108/EC; 2006/95/EC low Voltage
- Disposal and recycling at end-of-life of modules: adherence to COBAT

Guarantees

- 10 year warranty against manufacturing defects*
- 10 year warranty on 90% of the maximum declared power*
- 25 year warranty on 80% of the maximum declared power*

*If used and installed according to technical and operational instructions. V-energy reserves the right to make changes to product specifications. This data sheet corresponds to the requirements of Standard EN50380. Rel. 4 08/2014

Maximum power up to 300 Wp

Specifications

- Use of tempered glass anti-glare with low iron content and high quality for optimum light collection.
- Aluminum frame in black which provides solidity and sturdiness to withstand constant loads and climatic stresses such as snow and ice with applied pressure max 5,4kN/m²
- NOCT = 44,5°C
- Temperature range from -40°C a 85°C
- Mechanical load on surface max 550 kg/m²
- Hail impact resistance ø 25mm a 86 km/h

Measures	VE272PV Ecoplus Poly Black	
• Length	1979	mm
• Width	998	mm
• Height	45	mm (on request 35 mm)
• Weight	26,5	kg
• Frame	Aluminum frame in black	
• Glass thickness	4,0	mm

V-energy solar solutions

MADE IN ITALY

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Behavior in standard test conditions STC*

Power class (maximum value)	P_{max}	280 Wp	285 Wp	290 Wp	295 Wp	300 Wp
Efficiency	η	14,18 %	14,43 %	14,68 %	14,94 %	15,19 %
Open-circuit voltage	V_{oc}	45,01 V	45,14 V	45,27 V	45,58 V	45,77 V
Short-circuit current	I_{sc}	8,51 A	8,56 A	8,61 A	8,73 A	8,81 A
Maximum power voltage	V_{mp}	35,24 V	35,38 V	35,54 V	35,69 V	35,94 V
Current at maximum power	I_{mp}	7,96 A	8,06 A	8,16 A	8,27 A	8,35 A

* Note - Under standard conditions: Irradiation 1000 W/mq - Module temperature = 25°C - Air mass AM 1,5
Measurement tolerance solar simulator class A (- / + 2%) in accordance with IEC 60904-9

NOCT conditions behavior**

Power class (maximum value)	P_{max}	203,7 Wp	207,1 Wp	210,8 Wp	214,3 Wp	218,2 Wp
Open-circuit voltage	V_{oc}	40,74 V	40,87 V	40,99 V	41,18 V	41,45 V
Short-circuit current	I_{sc}	6,41 A	6,46 A	6,49 A	6,58 A	6,64 A
Maximum power voltage	V_{mp}	33,18 V	33,46 V	33,83 V	33,96 V	34,2 V
Current at maximum power	I_{mp}	6,14 A	6,19 A	6,23 A	6,31 A	6,38 A

**Note - Under NOCT conditions: Irradiation 800 W/mq - Module temperature = 44,5°C - Air mass AM 1,5

Materials used

Cells per module	72
Cell type	3BB Polycrystalline
Cell size	156 mm x 156 mm
Front side	Anti-glare tempered glass (EN 12150)

Thermal characteristics

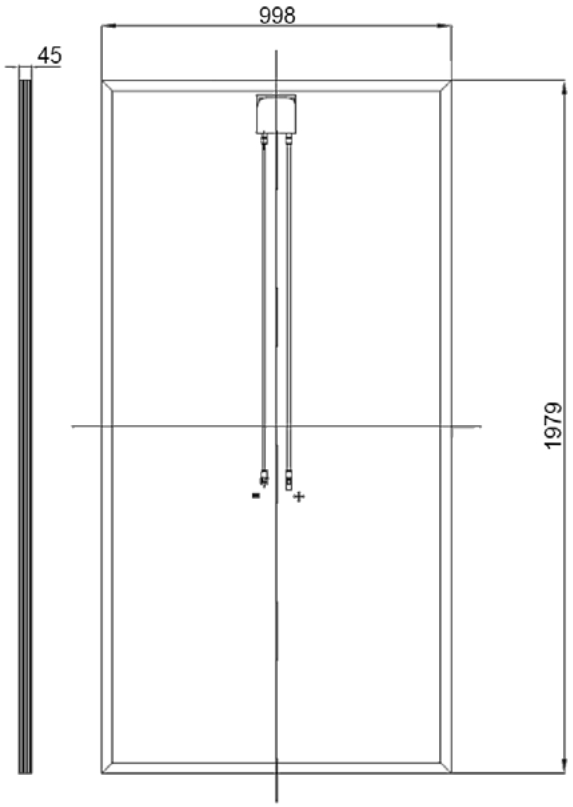
NOCT	44,5 +/-2°C
TC I_{sc}	3,425 mA/°C
TC U_{oc}	-0,138 V/°C
TC P_{mpp}	-0,43 %/°C

Parameters for optimal integration into the system

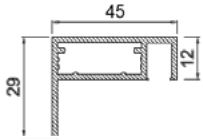
Maximum system voltage class II	1000 V
Load capacity of reverse current	15 A
High snow loads (standard IEC 61215)	max 5,4 kN/m²
Number of bypass diodes	3

More Info

Sorting tolerance P_{max}	0/+4,99 W
Type of protection (IP)	IP65
Connector	MC4
Cable	Solar cable 4mm² - Length 1m



SEZIONE A - A'



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