

120 Cells - VE460PV



Power range: 380 Wp



Positive tolerance: from 0 to +3 Wp



Reduced weight: optimization of raw materials



Thermal characteristics: NOCT 45°C



Frame

anodised standard aluminium



Fire resistance:

class of reaction to fire 1 (UNI 9177)



Warranty:

12 year against manufacturing defects



Cell:

9BB "Half Cut" Monocristallina, 166x83mm

Specifications

- Use of tempered glass anti-glare with low iron content and high quality for optimum light collection.
- Anodised aluminium frame 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 = 45°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 | VE4 | 60PV |
|-------------------------------------|------|------|
| • Length | 1755 | mm |
| • Width | 1038 | mm |
| Height | 35 | mm |
| Weight | 19,5 | kg |
| Glass thickness | 3,2 | mm |

System certifications

- Corporate Quality Management EN ISO 9001:2015
- Environmental Management EN ISO 14001:2015
- Management of Health and Safety at the Workplace BS/OHSAS 18001:2007
- Certificates issued by ASACERT Assessment & Certification

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 Extra EU"
- EC Directives: EMC 2004/108/EC; 2006/95/EC low Voltage

Guarantees

- 12 year warranty against manufacturing defects*
- 30 year linear warranty to 85% of the maximum declared power*

*If used and installed according to technical and operational instructions.

The Company reserves the right to make changes to product specifications.

This data sheet corresponds to the requirements of Standard EN50380.

Rel.1 04/2021











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Behavior in standard test conditions STC*

| Power class (maximum value) | \mathbf{P}_{max} | 380 Wp |
|-----------------------------|--------------------|---------|
| Efficiency | η | 20,85 % |
| Open-circuit voltage | V _{oc} | 41,30 V |
| Short-circuit current | I _{sc} | 11,69 A |
| Maximum power voltage | V_{mp} | 34,80 V |
| Current at maximum power | I _{mp} | 10,92 A |

^{*} Note - Under standard conditions: Irradiation 1000 W/mq - Module temperature = 25° C - Air mass AM 1,5 Measurement tolerance solar simulator class A (- / + 3%)

| Materials used | |
|------------------|---------------------------|
| Cells per module | 120 |
| Cell type | 9BB Monocrystalline PERC |
| Cell size | 166 mm x 83 mm |
| Front side | Tempered glass (EN 12150) |

| Parameters for optimal integration into the system | | |
|--|---------------|--|
| Maximum system voltage class II | 1500 V | |
| Load capacity of reverse current | 20 A | |
| High snow loads (standard IEC 61215) | max 5,4 kN/m² | |
| Number of bypass diodes | 3 | |

| Thermal characteristics | | |
|-------------------------|-------------|--|
| NOCT** | 45 +/-2°C | |
| TC I _{sc} | 0,048 %/°C | |
| TC U _{oc} | -0,270 %/°C | |
| TC P _{mpp} | -0,350 %/°C | |

| 0/+3 W |
|---------------------|
| IP67/IP68 |
| MC4 |
| 4mm² - Length 0,35m |
| |

^{**}Note - Under NOCT conditions: Irradiation 800 W/mq - Module temperature = 45° C - Air mass AM 1,5





