



## *SOLON Black 280/09*

High efficiency and output – monocrystalline solar modules.

- › Recognized SOLON quality
- › High-performance modules with excellent efficiency
- › Highly efficient cell technologies provided by leading manufacturers
- › Optimal output over decades with very good low light response
- › 25 year SOLON performance guarantee

# SOLON Black 280/09 (M250/6+/01)

## Technical details:

- Highly efficient monocrystalline solar module
- Module efficiency of up to 14.8 %
- Very good low light response
- 4 mm solar glass and twin-wall frame profile for highest load capacity
- Optimal heat dissipation technology

## SOLON advantages:

- 25 year SOLON performance guarantee
- Individual and professional consulting and support by our SOLON service team and international distribution partners
- On time deliveries
- Certified quality products (UL listed)
- Extensive manufacturing and development experience

## Electrical specifications – typical

| Capacity rating* (± 3 %) | Pn              | 290 Wp  | 280 Wp  | 270 Wp  | 260 Wp  | 250 Wp  |
|--------------------------|-----------------|---------|---------|---------|---------|---------|
| Module efficiency        |                 | 14.79 % | 14.28 % | 13.77 % | 13.26 % | 12.75 % |
| Rated voltage            | U <sub>mp</sub> | 35.10 V | 34.40 V | 33.60 V | 33.00 V | 32.50 V |
| Rated current            | I <sub>mp</sub> | 8.25 A  | 8.15 V  | 8.05 A  | 7.90 A  | 7.70 A  |
| Open circuit voltage     | U <sub>oc</sub> | 43.10 V | 42.50 V | 41.50 V | 41.00 V | 40.50 V |
| Short circuit current    | I <sub>sc</sub> | 9.10 A  | 8.95 A  | 8.75 A  | 8.65 A  | 8.30 A  |

*The above values are effective for irradiation of 1,000 W/m<sup>2</sup>, AM 1.5, and a cell temperature of 25 °C (standard test conditions). They are subject to production tolerances. The modules can be delivered with their characteristic data for the detailed system configuration.*

## Temperature coefficient

|                             |           |
|-----------------------------|-----------|
| Tk of open circuit voltage  | -0.33 %/K |
| Tk of short circuit current | 0.03 %/K  |
| Tk of power                 | -0.43 %/K |

## Mechanical specification

|                    |   |
|--------------------|---|
| Dimensions (HxWxD) | 1,980 x 1,000 x 42 mm   |
| Weight             | 28,5 kg   |
| Junction box       | 1 Tyco junction box with bypass diodes v  |
| Cable              | Solar cable, length 1,100 mm, 4 mm <sup>2</sup> , connectors prefabricated with Tyco plug |
| Front glass        | White toughened safety glass, 4 mm  |
| Solar cells        | 72 pcs. monocrystalline 3 BB Si 6.2" (156 mm x 156 mm)                                    |
| Cell encapsulation | EVA (Ethylene-Vinyl-Acetate)  |
| Back site          | White composite film  |
| Frame              | Anodised aluminium frame with twin-wall profile and drainage holes                        |

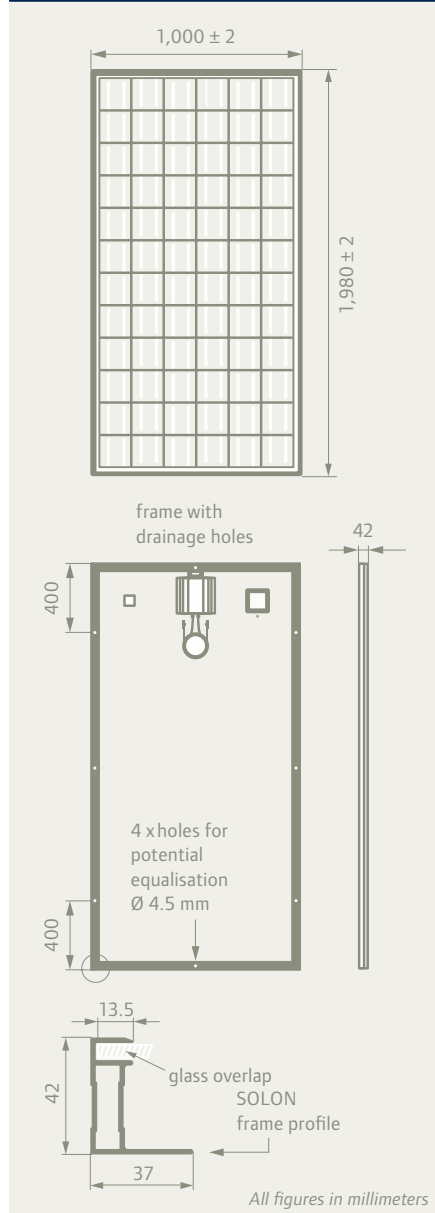
## Operating conditions

|                               |  |
|-------------------------------|--|
| Temperature range             | -40 °C to + 85 °C  |
| Maximum system voltage        | 600 V  |
| Maximum surface load capacity | Tested up to 5,400 Pa according to IEC 61215 (advanced test) |
| Resistance against hail       | Maximum diameter of 28 mm with impact speed of 86 km/h       |

## Guarantees and certifications

|                            |  |
|----------------------------|--|
| Product warranty           | 2 years  |
| Performance guarantee      | Guaranteed output of 90% for 10 years and 80% for 25 years |
| Approvals and certificates | UL listed, CEC registered                                  |

## Dimensions



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We are glad to inform you personally as well.