


Your life. Your energy.





## SENEC.Solar 380M.BLK HC G3

When appearances matter, go all black.


SENEC.Solar 380M.BLK HC G3 (Mono): black frame, black backsheet


 **Optimal price-performance ratio**  
Thanks to our parent company EnBW, we are able to offer our customers highly efficient, high-performance solar photovoltaic modules – allowing you to generate big yields in small spaces.

 **The right choice even in snow and stormy weather**  
Our modules are proven to withstand impact from hail stones with diameters of up to 25 mm and speeds of 23 m/s.

 **Innovative cell technology**  
Our modules' PERC half-cell technology improves module output, reduces the risk of microcracks and enhances reliability – ensuring that you get the best results.

 **Reduced shading losses**  
The half-cell technology efficiently reduces the effects of shaded module surfaces and minimises internal mismatch losses.

 **MWT technology**  
We've done away with busbars and created a more attractive solar module. Back contact technology such as MWT also reduces shading within the modules by up to 3 %.

 **A safe and secure investment**  
We offer a 12-year product warranty and 25-year linear performance warranty. Exceptional reliability comes guaranteed thanks to our quality control checks that extend far beyond the scope of the statutory requirements.

 **Outstanding quality certified by TÜV**  
Excellent PID resistance demonstrated in a 288-hour test at 85 °C and 85% relative humidity.

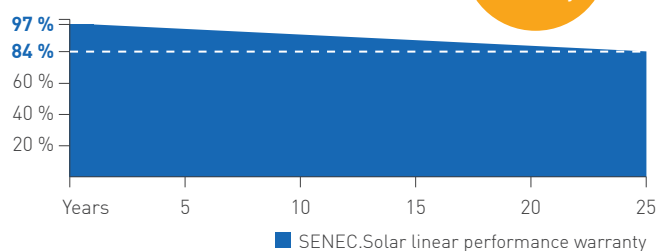
 **Positive power tolerance**  
Positive power tolerance of 0 – +5 W guaranteed.

SENEC PV modules feature high-efficiency, high-performance cells to ensure optimal use of the roof area even in poor weather conditions – allowing you to generate electricity at a lower cost.

The modules are especially durable thanks to extremely high manufacturing standards, resistance to extreme weather conditions and outstanding protection against output losses. This high quality is guaranteed by SENEK's product and performance warranty.

### High performance guaranteed

25-year  
performance  
warranty



### Certifications

IEC 61215:2016, IEC 61730:2016



ID: 4478 0214 0674 9257

SENEC

# Technical data

## General properties

Cell technology	PERC half-cell, monocrystalline
Cell size	166 x 83 mm
Max. weight	21 kg
Module dimensions (W x H x D)	1,805* x 1,035* x 30 mm
Cable length	1,150 mm
Cable core cross-section	4.0 mm <sup>2</sup>
Glass (front)	3.20 mm highly transp., hardened, with AR
Backsheet	Black
Number of bypass diodes	3
Frame	Black, anodised aluminium alloy
Junction box ingress protection	IP68
Connection	MC4-Evo2 (Stäubli)

The colour may vary between the individual cells of a PV module or between individual PV modules; this has no impact on performance.  
\* Tolerance ± 2 mm

## Electrical properties

### Nominal values – standard test conditions (STC)

(light intensity 1,000 W/m<sup>2</sup>, cell temperature 25 °C, air mass [AM] 1.5) Sorted according to P<sub>max</sub> 0 – +5 W

Max. nominal power (P <sub>MAX</sub> /W)*	380
Nominal voltage (V <sub>MPP</sub> /V)	35.7
Nominal current (I <sub>MPP</sub> /A)	10.65
Open-circuit voltage (V <sub>OC</sub> /V)*	43.0
Short circuit current (I <sub>SC</sub> /A)*	11.18
Module efficiency (%)*	20.3

\*P<sub>MAX</sub>, V<sub>OC</sub> tolerance: ± 3.0 %; I<sub>SC</sub> tolerance: ± 4.0 %

### Nominal values – nominal module operating temperature (NMOT)

(light intensity 800 W/m<sup>2</sup>, NMOT, ambient temperature 20 °C; air mass AM 1.5; wind speed 1 m/s)

Max. nominal power (P <sub>MAX</sub> /W)	286
Nominal voltage (V <sub>MPP</sub> /V)	32.9
Nominal current (I <sub>MPP</sub> /A)	8.7
Open-circuit voltage (V <sub>OC</sub> /V)	40.2
Short circuit current (I <sub>SC</sub> /A)	9.08

## Operating conditions

Max. system voltage	1,500 V
Operating temperature	-40 °C to +85 °C
NMOT	43 ± 2 °C
Maximum reverse current	27 A
Max. series fuse	20 A
Max. permissible push/pull load (design load)	3,600/1,600 Pa*
Max. test load (push/pull)	5,400/2,400 Pa*
Protection class	II

\*see the installation manual for further information

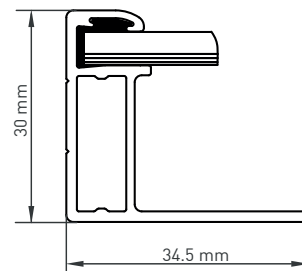
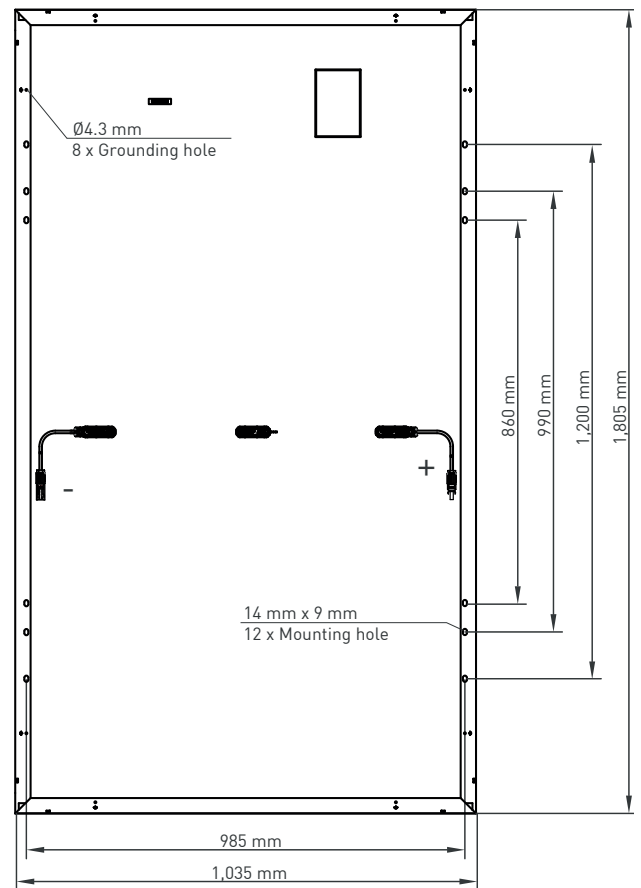
## Temperature coefficients

P <sub>MPP</sub>	-0.36 %/°C
V <sub>OC</sub>	-0.28 %/°C
I <sub>SC</sub>	+0.06 %/°C

## Packaging specifications

Dimensions including pallet (W x H x D)	1,835 x 1,190 x 1,140 mm
Gross weight	750 kg
Max. pallet stacking	1 on 1 (2 – one on top of the other)
Modules per pallet	36

## Technical drawing



## Characteristic curves

