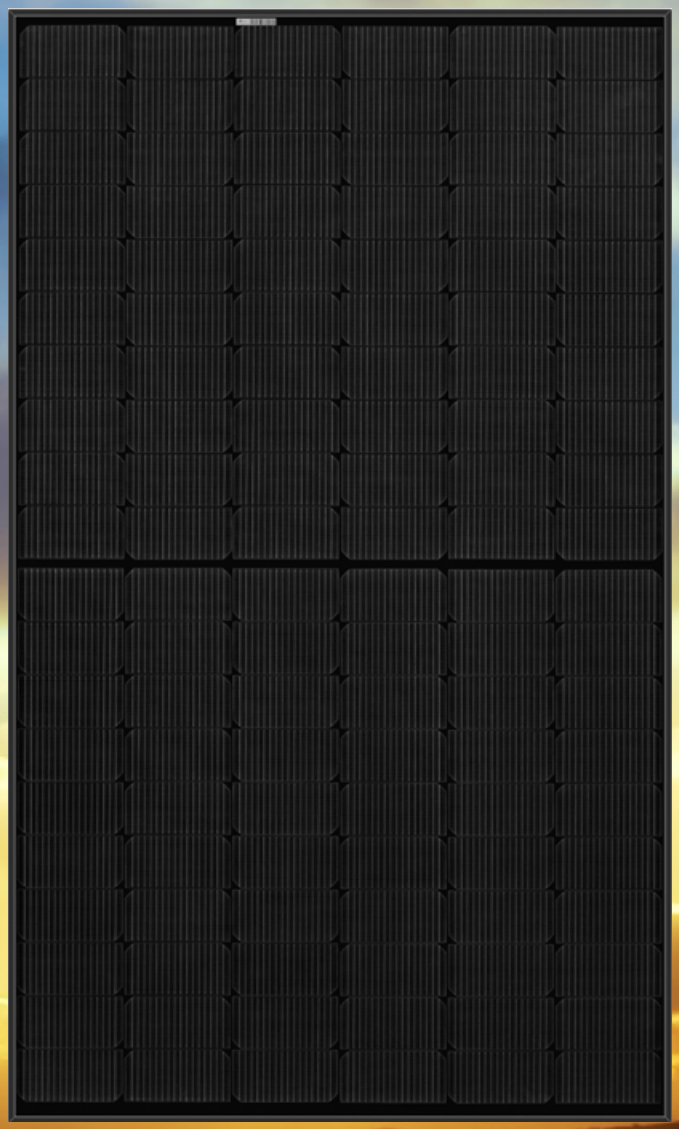
SOLAR'S MOST TRUSTED

REC



# REC ALPHα BLACK SERIES

375 $W_P$ POWER

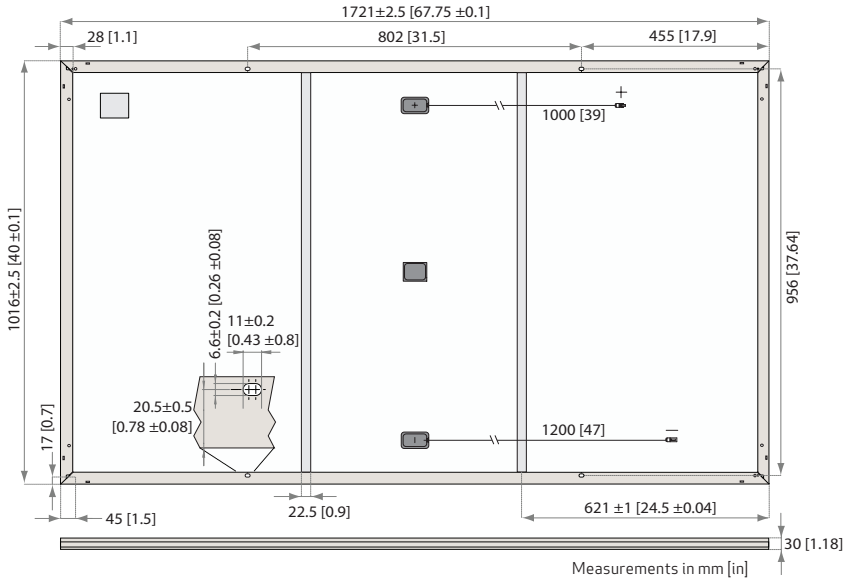
20 YEAR PRODUCT WARRANTY

25 YEAR POWER OUTPUT WARRANTY

α

recgroup.com/alpha

# REC ALPHα BLACK SERIES
## PRODUCT DATASHEET




## GENERAL DATA

| | | | |
|---|---|---|---|
| Cell type: | 120 half-cut cells with REC heterojunction cell technology 6 strings of 20 cells in series | Junction box: | 3-part, 3 bypass diodes, IP67 rated in accordance with IEC 62790 |
| Glass: | 3.2 mm solar glass with anti-reflection surface treatment | Cable: | 4 mm² solar cable, 1.0 m + 1.2 m in accordance with EN 50618 |
| Backsheet: | Highly resistant polymeric construction | Connectors: | Stäubli MC4 PV-KBT4/KST4 (4 mm²) in accordance with IEC 62852 IP68 only when connected |
| Frame: | Anodized aluminum (black) | Origin: | Made in Singapore |

## ELECTRICAL DATA @ STC

| Product Code*: RECxxxAA Black | | | | | |
|---|---|---|---|---|---|
| Nominal Power - $P_{MPP}$ (Wp) | 355 | 360 | 365 | 370 | 375 |
| Watt Class Sorting - (W) | -0/+5 | -0/+5 | -0/+5 | -0/+5 | -0/+5 |
| Nominal Power Voltage - $V_{MPP}$ (V) | 37.4 | 37.7 | 38.0 | 38.3 | 38.7 |
| Nominal Power Current - $I_{MPP}$ (A) | 9.50 | 9.55 | 9.60 | 9.66 | 9.72 |
| Open Circuit Voltage - $V_{OC}$ (V) | 44.0 | 44.1 | 44.3 | 44.5 | 44.6 |
| Short Circuit Current - $I_{SC}$ (A) | 10.19 | 10.23 | 10.26 | 10.30 | 10.40 |
| Panel Efficiency (%) | 20.3 | 20.6 | 20.9 | 21.2 | 21.4 |

Values at standard test conditions (STC: air mass AM 1.5, irradiance 1000 W/m², temperature 25°C), based on a production spread with a tolerance of $V_{OC}$ & $I_{SC}$ ±3% within one watt class. * Where xxx indicates the nominal power class ($P_{MPP}$) at STC above.

## ELECTRICAL DATA @ NMOT

| Product Code*: RECxxxAA Black | | | | | |
|---|---|---|---|---|---|
| Nominal Power - $P_{MPP}$ (Wp) | 270 | 274 | 278 | 282 | 286 |
| Nominal Power Voltage - $V_{MPP}$ (V) | 35.2 | 35.5 | 35.8 | 36.1 | 36.4 |
| Nominal Power Current - $I_{MPP}$ (A) | 7.67 | 7.71 | 7.76 | 7.80 | 7.85 |
| Open Circuit Voltage - $V_{OC}$ (V) | 41.4 | 41.6 | 41.7 | 41.9 | 42.0 |
| Short Circuit Current - $I_{SC}$ (A) | 8.23 | 8.26 | 8.29 | 8.32 | 8.40 |

Nominal module operating temperature (NMOT: air mass AM 1.5, irradiance 800 W/m², temperature 20°C, windspeed 1 m/s).
*Where xxx indicates the nominal power class ($P_{MPP}$) at STC above.

## CERTIFICATIONS

| | |
|---|---|
| IEC 61215:2016, IEC 61730:2016, UL 1703, UL 61730 | |
| IEC 62804 | PID |
| IEC 61701 | Salt Mist |
| IEC 62716 | Ammonia Resistance |
| ISO 11925-2 | Ignitability (Class E) |
| UNI 8457/9174 | Ignitability (Class 1) |
| IEC 62782 | Dynamic Mechanical Load |
| IEC 61215-2:2016 | Hailstone (35mm) |
| AS4040.2 NCC 2016 | Cyclic Wind Load |
| ISO 14001:2004, ISO 9001:2015, OHSAS 18001:2007 | |

take-e-way WEEE-compliant recycling scheme

## WARRANTY

20 year product warranty
25 year linear power output warranty
Maximum annual power degression of 0.25% p.a.
Guarantees 92% of power after 25 years
See warranty conditions for further details.

## MECHANICAL DATA

| | |
|---|---|
| Dimensions: | 1721 x 1016 x 30 mm |
| Area: | 1,75 m² |
| Weight: | 19,5 kg |

## MAXIMUM RATINGS

| | |
|---|---|
| Operational temperature: | -40 ... +85°C |
| Maximum system voltage: | 1000 V |
| Design load (+): snow<br>Maximum test load (+): | 4666 Pa (475 kg/m²)+<br>7000 Pa (713 kg/m²)* |
| Design load (-): wind<br>Maximum test load (-): | 2666 Pa (272 kg/m²)+<br>4000 Pa (407 kg/m²)* |
| Max series fuse rating: | 25 A |
| Max reverse current: | 25 A |

+ Calculated using a safety factor of 1.5
* See installation manual for mounting instructions

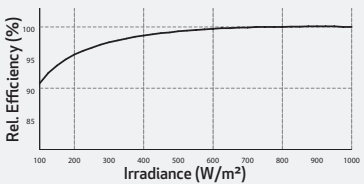
## TEMPERATURE RATINGS*

| | |
|---|---|
| Nominal Module Operating Temperature: | 44°C (±2°C) |
| Temperature coefficient of $P_{MPP}$: | -0.26 %/°C |
| Temperature coefficient of $V_{OC}$: | -0.24 %/°C |
| Temperature coefficient of $I_{SC}$: | 0.04 %/°C |

*The temperature coefficients stated are linear values

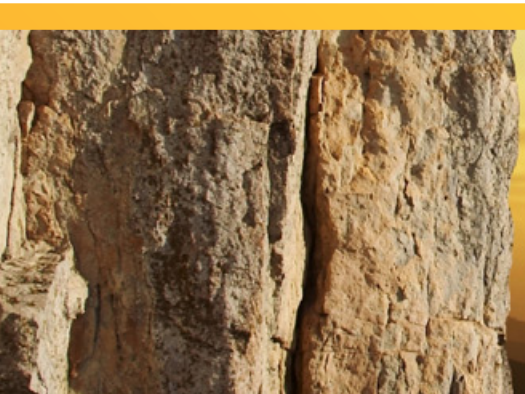
## LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:




Specifications subject to change without notice.

Ref: PM-DS-12-01-Rev- B 08.19



Founded in Norway in 1996, REC is a leading vertically integrated solar energy company. Through integrated manufacturing from silicon to wafers, cells, high-quality panels and extending to solar solutions, REC provides the world with a reliable source of clean energy. REC's renowned product quality is supported by the lowest warranty claims rate in the industry. REC is a Bluestar Elkem company with headquarters in Norway and operational headquarters in Singapore. REC employs around 2,000 people worldwide, producing 1.5 GW of solar panels annually.

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