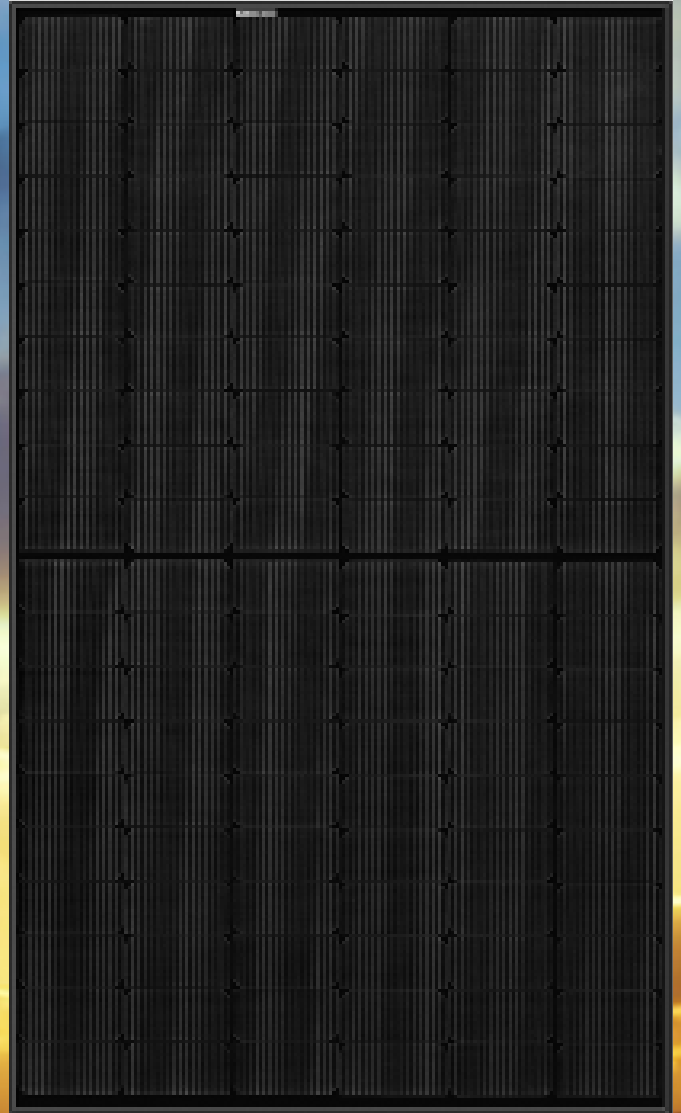


SOLAR'S MOST TRUSTED



# REC ALPHA BLACK SERIES

375 W<sub>P</sub>

POWER

20 YEAR

PRODUCT WARRANTY

25 YEAR

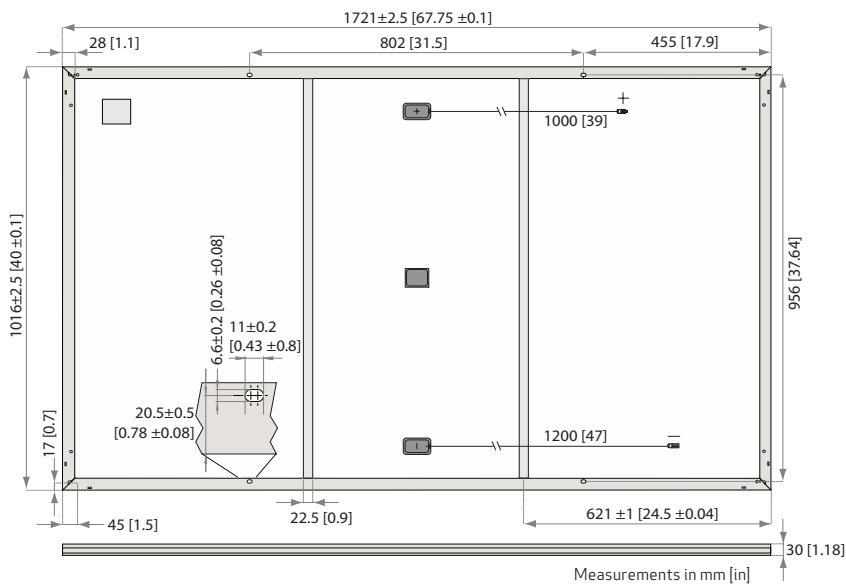
POWER OUTPUT WARRANTY



[recgroup.com/alpha](http://recgroup.com/alpha)

# REC ALPHA BLACK SERIES

## PRODUCT DATASHEET



### 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 I)
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	
	takeaway FOR AN EASY WAY take-e-way WEEE-compliant recycling scheme

### WARRANTY

20 year product warranty  
25 year linear power output warranty  
Maximum annual power degradation 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 m <sup>2</sup>
Weight:	19,5 kg

### MAXIMUM RATINGS

Operational temperature:	-40 ... +85°C
Maximum system voltage:	1000 V
Design load (+): snow	4666 Pa (475 kg/m <sup>2</sup> )*
Maximum test load (+):	7000 Pa (713 kg/m <sup>2</sup> )*
Design load (-): wind	2666 Pa (272 kg/m <sup>2</sup> )*
Maximum test load (-):	4000 Pa (407 kg/m <sup>2</sup> )*
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

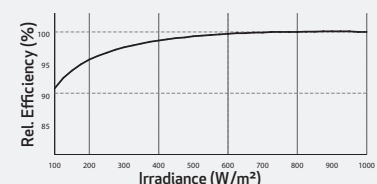
### TEMPERATURE RATINGS\*

Nominal Module Operating Temperature:	44°C (±2°C)
Temperature coefficient of P <sub>MPP</sub> :	-0.26 %/°C
Temperature coefficient of V <sub>OC</sub> :	-0.24 %/°C
Temperature coefficient of I <sub>SC</sub> :	0.04 %/°C

\*The temperature coefficients stated are linear values

### LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:



### 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 mm <sup>2</sup> 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 mm <sup>2</sup> ) in accordance with IEC 62852 IP68 only when connected
Frame:	Anodized aluminum (black)	Origin:	Made in Singapore

### ELECTRICAL DATA @ STC

#### Product Code\*: RECxxxAA Black

	355	360	365	370	375
Nominal Power - P <sub>MPP</sub> (Wp)	355	360	365	370	375
Watt Class Sorting - (W)	-0/+5	-0/+5	-0/+5	-0/+5	-0/+5
Nominal Power Voltage - V <sub>MPP</sub> (V)	37.4	37.7	38.0	38.3	38.7
Nominal Power Current - I <sub>MPP</sub> (A)	9.50	9.55	9.60	9.66	9.72
Open Circuit Voltage - V <sub>OC</sub> (V)	44.0	44.1	44.3	44.5	44.6
Short Circuit Current - I <sub>SC</sub> (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 AM1.5, irradiance 1000 W/m<sup>2</sup>, temperature 25°C), based on a production spread with a tolerance of V<sub>OC</sub> & I<sub>SC</sub> ±3% within one watt class. \*Where xxx indicates the nominal power class (P<sub>MPP</sub>) at STC above.

### ELECTRICAL DATA @ NMOT

#### Product Code\*: RECxxxAA Black

	270	274	278	282	286
Nominal Power - P <sub>MPP</sub> (Wp)	270	274	278	282	286
Nominal Power Voltage - V <sub>MPP</sub> (V)	35.2	35.5	35.8	36.1	36.4
Nominal Power Current - I <sub>MPP</sub> (A)	7.67	7.71	7.76	7.80	7.85
Open Circuit Voltage - V <sub>OC</sub> (V)	41.4	41.6	41.7	41.9	42.0
Short Circuit Current - I <sub>SC</sub> (A)	8.23	8.26	8.29	8.32	8.40

Nominal module operating temperature (NMOT: air mass AM1.5, irradiance 800 W/m<sup>2</sup>, temperature 20°C, windspeed 1 m/s). \*Where xxx indicates the nominal power class (P<sub>MPP</sub>) at STC above.

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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