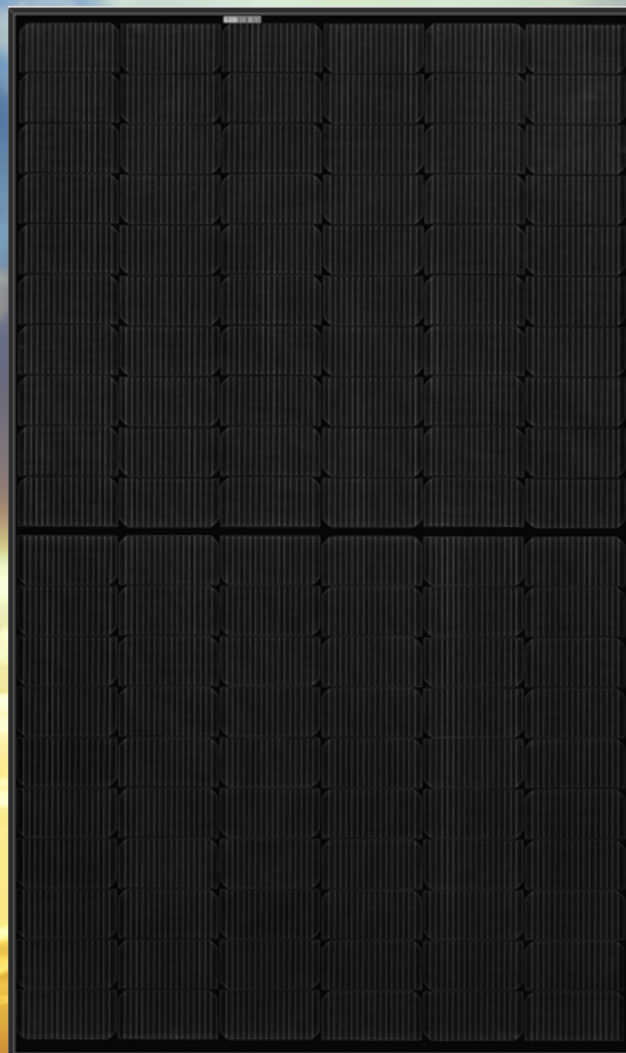


SOLAR'S MOST TRUSTED



# REC ALPHA BLACK SERIES

375 W<sub>p</sub> POWER

20 YEAR PRODUCT WARRANTY

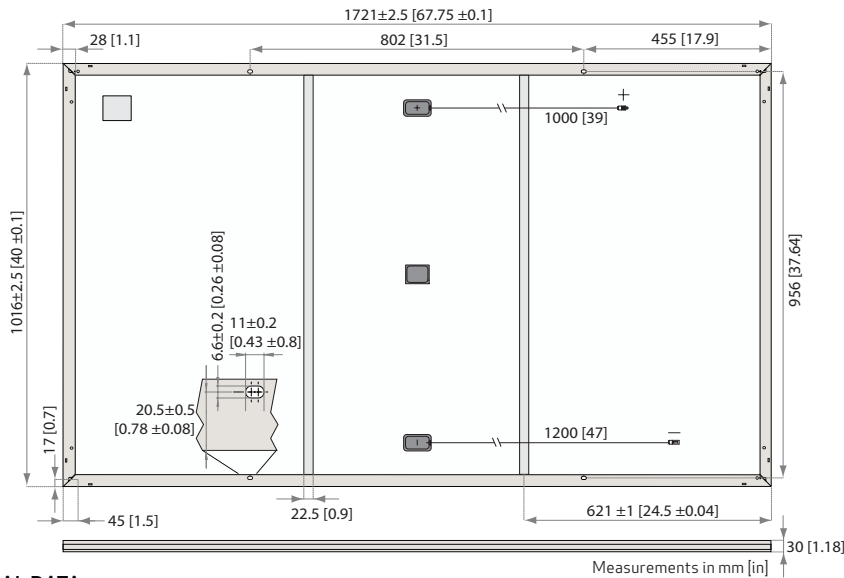
25 YEAR POWER OUTPUT WARRANTY



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

# REC ALPHA BLACK SERIES

## PRODUCT DATASHEET



### 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:	0.13 in (3.2 mm) solar glass with anti-reflection surface treatment	Cable:	12 AWG (4 mm <sup>2</sup> ) PV wire, 39 + 47 in (1 + 1.2 m) in accordance with EN 50618
Backsheet:	Highly resistant polymeric construction	Connectors:	Stäubli MC4PV-KBT4/KST4, 12 AWG (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 10.75 W/sq ft (1000 W/m<sup>2</sup>), temperature 77°F (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 68°F (20°C), windspeed 3.3 ft/s (1 m/s). \*Where xxx indicates the nominal power class (P<sub>MPP</sub>) 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
UL 1703	Fire Type Class 2
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	



### 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:	678 x 40 x 1.2 in (1721 x 1016 x 30 mm)
Area:	18.8 sq ft (1.75 m <sup>2</sup> )
Weight:	43 lbs (19.5 kg)

### MAXIMUM RATINGS

Operational temperature:	-40 ... +85°C
Maximum system voltage:	1000 V
Design load (+): snow	4666 Pa (97.5 lbs/sq ft)*
Maximum test load (+):	7000 Pa (146 lbs/sq ft)*
Design load (-): wind	2666 Pa (55.6 lbs/sq ft)*
Maximum test load (-):	4000 Pa (83.5 lbs/sq ft)*
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

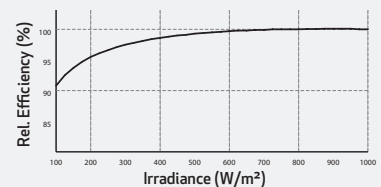
### TEMPERATURE RATINGS\*

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:



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.



Specifications subject to change without notice.

Ref: PW-DS-12-01-Rev-B 08/19