



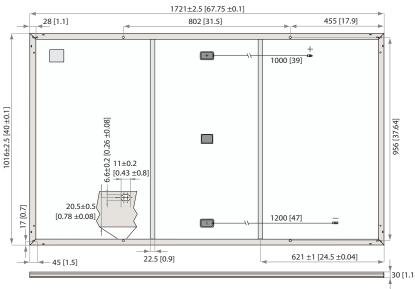
# REC ALPHO BLACK SERIES







# I ALPHA BLACK SERIES RODUCT DATASHEET



Measurements in mm [in]

ELECTRICAL DATA @ STC

### **GENERAL DATA**

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

#### Product Code\*: RECxxxAA Black

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Nominal Power - P <sub>MAX</sub> (Wp)	360	365	370	375
Watt Class Sorting - (W)	-0/+5	-0/+5	-0/+5	-0/+5
Nominal Power Voltage - V <sub>MPP</sub> (V)	37.7	38.0	38.3	38.7
Nominal Power Current - I <sub>MPP</sub> (A)	9.55	9.60	9.66	9.72
Open Circuit Voltage - V <sub>oc</sub> (V)	44.1	44.3	44.5	44.6
Short Circuit Current - I <sub>sc</sub> (A)	10.23	10.26	10.30	10.40
Power Density (W/m²)	205.71	208.57	211.42	214.28
Panel Efficiency (%)	20.6	20.9	21.2	21.4
Values at standard test conditions (STC, air mass AM15 irradiance 1000 W/m² temperature 25°C) based on a production coread with a				

 $Values at standard test conditions (STC: air mass AM 1.5, irradiance 1000 W/m^2, temperature 25^{\circ}C), based on a production spread with a tolerance of P_{MXX}. V_{Cc} & I_{5c} \pm 3\%$  within one watt class. \* Where xxx indicates the nominal power class (P\_{MXX}) at STC above.

PELECTRICAL DATA @ NMOT	Product Code	:RECxxxAA	Black	
Nominal Power - P <sub>MAX</sub> (Wp)	274	278	282	286
Nominal Power Voltage - V <sub>MPP</sub> (V)	35.5	35.8	36.1	36.4
Nominal Power Current - I <sub>MPP</sub> (A)	7.71	7.76	7.80	7.85
Open Circuit Voltage - V <sub>oc</sub> (V)	41.6	41.7	41.9	42.0
Short Circuit Current - I <sub>sc</sub> (A)	8.26	8.29	8.32	8.40

Nominal module operating temperature (NMOT: air mass AM 1.5, irradiance 800 W/m<sup>2</sup>, temperature 20°C, windspeed 1 m/s). \*Where xxx indicates the nominal power class ( $P_{Max}$ ) at STC above.

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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)		
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			
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#### WARRANTY\*

	Standard	REC ProTrust	
Installed by an REC Certified Solar Professional	No	Yes	Yes
System Size	All	≤25 kW	25-500 kW
Product Warranty (yrs)	20	25	25
Power Warranty (yrs)	25	25	25
Labor Warranty (yrs)	0	25	10
Power in Year 1	98%	98%	98%
Annual Degradation	0.25%	0.25%	0.25%
Power in Year 25	92%	92%	92%

See warranty documents for details. Conditions apply.

# MECHANICAL DATA

Dimensions:	1721 x 1016 x 30 mm
Area:	1.75 m²
Weight:	19.5 kg

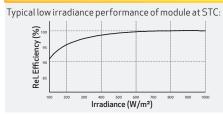
# MAXIMUM RATINGS

Operational temperature:	-40+85°C
Maximum system voltage:	1000 V
Design load (+): snow Maximum test load (+):	4666 Pa (475 kg/m²)⁺ 7000 Pa (713 kg/m²) <sup>*</sup>
Design load (-): wind Maximum test load (-):	2666 Pa (272 kg/m²)⁺ 4000 Pa (407 kg/m²) <sup>*</sup>
Max series fuse rating:	25 A
Max reverse current:	25 A
	ulated using a safety factor of 1.5 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 $V_{oc}$ :	-0.24 %/°C	
Temperature coefficient of I <sub>sc</sub> :	0.04 %/°C	
*The temperature coefficients stated are linear values		

# LOW LIGHT BEHAVIOUR



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



