







380 WP

**POWER** 

20 YEAR

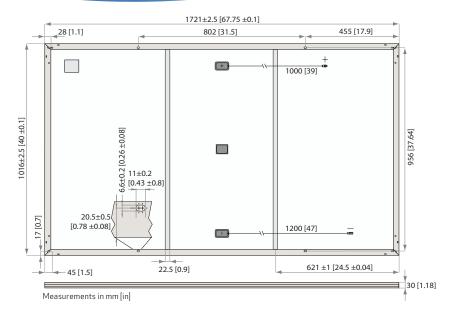
PRODUCT WARRANTY

25 YEAR

POWER OUTPUT WARRANTY



# REC ALPHO 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 inaccordance with IEC 62790
		Cable:	4 mm² solar cable, 1.0 m + 1.2 m in accordance with EN 50618
Glass:	3.2 mm solar glass with anti-reflection surface treatment		
			Stäubli MC4PV-KBT4/KST4(4mm²)
Backsheet:	Highly resistant polymeric construction	Connectors:	in accordance with IEC 62852 IP68 only when connected
Frame:	Anodized aluminum (black)	Origin:	Made in Singapore

ELECTRICAL DATA @ STC		Product Co	de*: RECxxx	κAA	
Nominal Power - P <sub>MPP</sub> (Wp)	360	365	370	375	380
Watt Class Sorting - (W)	-0/+5	-0/+5	-0/+5	-0/+5	-0/+5
Nominal Power Voltage - V <sub>MPP</sub> (V)	37.7	38.0	38.3	38.7	39.0
Nominal Power Current - I <sub>MPP</sub> (A)	9.55	9.60	9.66	9.72	9.76
Open Circuit Voltage - V <sub>oc</sub> (V)	44.1	44.3	44.5	44.6	44.7
Short Circuit Current - I <sub>SC</sub> (A)	10.23	10.26	10.30	10.40	10.46
Panel Efficiency (%)	20.6	20.9	21.2	21.4	21.7

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				
Nominal Power - P <sub>MPP</sub> (Wp)	274	278	282	286	290
Nominal Power Voltage - $V_{MPP}(V)$	35.5	35.8	36.1	36.4	36.7
Nominal Power Current - I <sub>MPP</sub> (A)	7.71	7.76	7.80	7.85	7.88
Open Circuit Voltage - V <sub>oc</sub> (V)	41.6	41.7	41.9	42.0	42.1
Short Circuit Current - I <sub>SC</sub> (A)	8.26	8.29	8.32	8.40	8.45

 $Nominal\ module\ operating\ temperature\ (NMOT:\ air\ mass\ AM\ 1.5,\ irradiance\ 800\ W/m^2,\ temperature\ 20^{\circ}C,\ windspeed\ 1\ m/s).$ \*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	
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











# 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 Maximum test load (+):	4666 Pa (475 kg/m²)† 7000 Pa (713 kg/m²)*
Design load (-): wind Maximum test load (-):	2666 Pa (272 kg/m²)⁺ 4000 Pa (407 kg/m²)*
Max series fuse rating:	25 A
Max reverse current:	25 A
	Calculated using a safety factor of 1.5

 ${\rm *See}\, in stall at ion\, manual\, for\, mounting\, in structions$ 

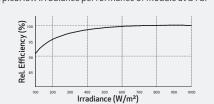
#### TEMPERATURE RATINGS\*

Nominal Module Operating Temperature:	44°C (±2°C)
Temperature coefficient of $P_{MPP}$ :	-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.





