

Regione Basilicata



Comune di Craco



Provincia di Matera

**PROGETTO PER LA REALIZZAZIONE
DI UN PARCO FOTOVOLTAICO PER LA PRODUZIONE DI ENERGIA ELETTRICA,
DELLE OPERE CONNESSE E DELLE INFRASTRUTTURE INDISPENSABILI
Località S.Eligio - Comune di Craco (MT)**

PROGETTO DEFINITIVO

A12.b.3
Schemi funzionali dei singoli pannelli

Proponente



Rinnovabili Sud Due
Via Della Chimica, 103 - 85100 Potenza (PZ)

Formato

A4

Scala

-

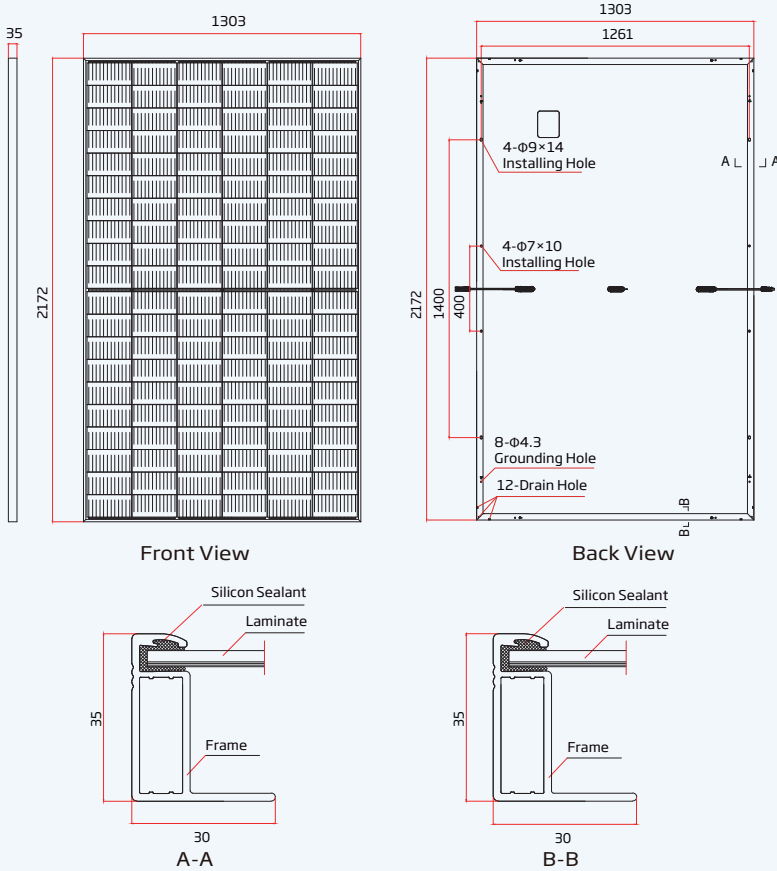
Progettista

- Ing. Gaetano Cirone
- Ing. Domenico Bisaccia
- Ing. Adele Oliveto
- Geol. Emanuele Bonanno

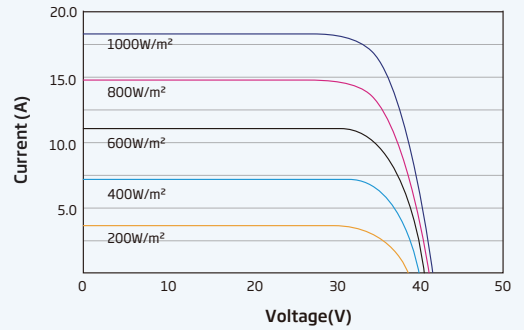


Revisione	Descrizione	Data	Preparato	Controllato	Approvato
00	Prima emissione		Ing. A. Oliveto	Ing. D. Bisaccia	Ing. G. Cirone

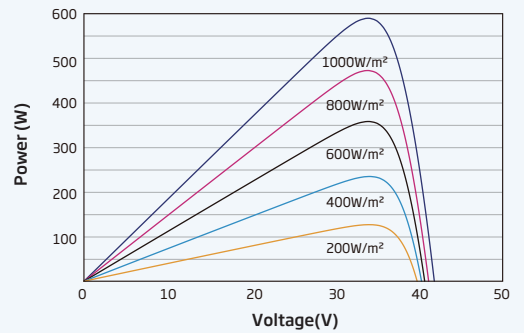
DIMENSIONS OF PV MODULE(mm)



I-V CURVES OF PV MODULE(585 W)



P-V CURVES OF PV MODULE(585W)



ELECTRICAL DATA (STC)

Peak Power Watts-P _{MAX} (Wp)*	585	590	595	600	605
Power Tolerance-P _{MAX} (W)			0 ~ +5		
Maximum Power Voltage-V _{MPP} (V)	33.8	34.0	34.2	34.4	34.6
Maximum Power Current-I _{MPP} (A)	17.31	17.35	17.40	17.44	17.49
Open Circuit Voltage-V _{OC} (V)	40.9	41.1	41.3	41.5	41.7
Short Circuit Current-I _{SC} (A)	18.37	18.42	18.47	18.52	18.57
Module Efficiency η _m (%)	20.7	20.8	21.0	21.2	21.4

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: ±3%.

ELECTRICAL DATA (NOCT)

Maximum Power-P _{MAX} (Wp)	443	447	451	454	458
Maximum Power Voltage-V _{MPP} (V)	31.5	31.7	31.9	32.0	32.2
Maximum Power Current-I _{MPP} (A)	14.05	14.09	14.13	14.18	14.22
Open Circuit Voltage-V _{OC} (V)	38.5	38.7	38.9	39.1	39.3
Short Circuit Current-I _{SC} (A)	14.81	14.85	14.88	14.92	14.96

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Monocrystalline
No. of cells	120 cells
Module Dimensions	2172×1303×35 mm (85.51×51.30×1.38 inches)
Weight	30.9 kg (68.1 lb)
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant material	EVA/POE
Backsheet	White
Frame	35mm(1.38 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm ² (0.006 inches ²), Portrait: 280/280 mm(11.02/11.02 inches) Length can be customized
Connector	MC4 EV02 / TS4*

*Please refer to regional datasheet for specified connector.

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of P _{MAX}	-0.34%/°C
Temperature Coefficient of V _{OC}	-0.25%/°C
Temperature Coefficient of I _{SC}	0.04%/°C

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC) 1500V DC (UL)
Max Series Fuse Rating	30A

WARRANTY

12 year Product Workmanship Warranty
25 year Power Warranty
2% first year degradation
0.55% Annual Power Attenuation

PACKAGING CONFIGURATION

Modules per box: 31 pieces
Modules per 40' container: 527 pieces