

**For a Free Quote:**

Web: **EnergyPal.com/solar**

Call: **1-800-990-3725**

Email: **contact@energypal.com**

# **EnergyPal**

## **Solar Panel Guide Specification Data Sheet**

**Moser Baer Solar Limited  
Max Series 200-245 Lead Free  
CAAP BB 240**

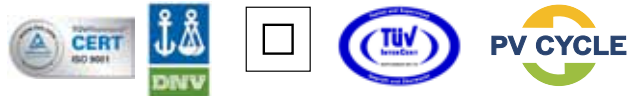
Also available on the web at  
[EnergyPal.com/moser-baer-solar-limited-solar-panels/caap-bb-240](http://EnergyPal.com/moser-baer-solar-limited-solar-panels/caap-bb-240)

# Max Series – Lead Free

Model No: CAAP BB



- ▶ **Recognized for Environmental Management** – Working diligently to create truly sustainable energy solutions taking into consideration the environmental impacts of all stages of the product lifecycle, from raw material sourcing to end-of-life recycling
  - ISO 14001:2004 for environment management
  - SA- 8000 for being socially accountable
  - Sony Green Partner Certification for product environmental management system
  - Golden Peacock Environmental Eco –Innovation Award
  - First in India to receive recognition from the Indian Government for forced air treatment
  - Green Leaf Certified
- ▶ **Module Recycling and Take-back Programme** – Moser Baer Solar has been an active member of PV cycle from the very beginning and championed the recycling and take-back of PV modules
- ▶ **Rigorous Quality Control** – The only solar company in the world to be awarded a 5-star rating for quality systems by TUV two years in a row
- ▶ **Manufacturing Excellence** – Top-of-the-line manufacturing equipment from Europe and Japan backed by in-house reliability testing capabilities
- ▶ **Best-in-class warranty** – Mechanical warranty of 10 years and performance warranty of 12 years at 90% of rated output power and 25 years at 80% of rated output power
- ▶ **Certifications:** IEC 61215 (Edition II), IEC 61730 (Safety Class II), UL (USA & Canada), CE, CEC Listed, JET, MCS, IEC 61701 (Salt mist corrosion test), Ammonia Resistance Test, RoHS Compliant



Member of PV Cycle for voluntary take-back and Recycling Program

Max Series lead-free modules are specifically designed to further reduce the carbon footprint. The modules are in compliance with RoHS directive 2002/95/EC and can be used in a variety of applications suited for residential, commercial and industrial purposes.

# Max Series – Lead Free

Model No: CAAP BB



## ELECTRICAL CHARACTERISTICS

	200W <sub>p</sub>	205W <sub>p</sub>	210W <sub>p</sub>	215W <sub>p</sub>	220W <sub>p</sub>	225W <sub>p</sub>	230W <sub>p</sub>	235W <sub>p</sub>	240W <sub>p</sub>	245W <sub>p</sub>
Maximum Power, P <sub>max</sub> (W)	200	205	210	215	220	225	230	235	240	245
Voltage at Pmax, V <sub>mp</sub> (V)	28.02	28.29	28.58	28.79	29.03	29.27	29.50	29.83	30.16	30.67
Current at Pmax, I <sub>mp</sub> (A)	7.14	7.25	7.35	7.47	7.58	7.69	7.80	7.88	7.96	7.99
Open Circuit Voltage V <sub>oc</sub> (V)	36.05	36.25	36.38	36.50	36.64	36.95	37.25	37.41	37.65	37.77
Short Circuit Current I <sub>sc</sub> (A)	7.95	7.99	8.04	8.07	8.14	8.23	8.34	8.44	8.49	8.55
Temperature Coefficient of P <sub>max</sub> (%/K)	-0.45									
Temperature coefficients of V <sub>oc</sub> (%/K)	-0.35									
Temperature coefficients of I <sub>sc</sub> (%/K)	0.05									
Power Tolerance (%)	± 3									
Maximum System Voltage (IEC/UL) (V DC)	1000/600									
Cells per By-pass Diode (Nos)	20									

- Standard Test Conditions (STC): Irradiance 1000 W/m<sup>2</sup>, Module temperature at 25°C and AM 1.5G Spectrum
- Max Series fuse ratings: 15A
- Operating Temperature (°C): (-)40 to (+)85
- NOCT (Nominal Operating Cell Temperature) (°C) 45.0±2

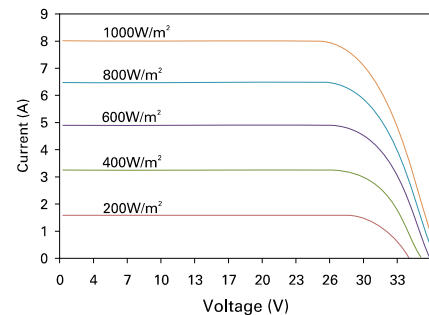
### ENVIRONMENTAL TEST CONDITIONS

- Operating Temperature (temperature cycling range): (-)40°C to (+)85°C for 200 cycles
- Static Load Front and Back (e.g. wind): 50 lbs/ft<sup>2</sup> or 2400 Pa
- Impact Resistance (e.g. hail): 25mm at 23 m/s at 11 impact locations
- Humidity Freeze, Damp Heat: 85°C and 85 % relative humidity for 1000 hours
- Front Loading (e.g. snow): 113 lbs/ft<sup>2</sup> or 5400 Pa

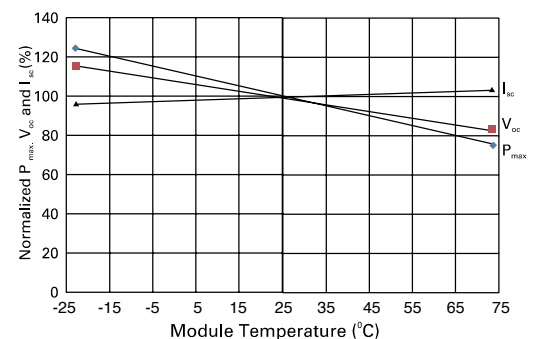
## MECHANICAL CHARACTERISTICS

Number and Arrangement of Cells	156mmx156mm Multicrystalline Silicon Cells, 6x10 configuration
Dimensions (mm)	1661 x 991 x 37
Weight (kgs)	18.7
Frame	Anodized aluminum frame with twin-wall profile
Anodization Thickness	17 µm
Front Glass	High transmission, low iron, tempered and textured glass, 3.2mm
Junction Box	IEC/ UL approved IP65 rated 4 terminal junction box with 3 by-pass diodes (15A, 45V)
Output Cables	USE-2 Solar cables, 4mm <sup>2</sup> cross-section, asymmetric length
Type of Connector	Low resistance, IEC/UL approved (compatible with MC4)
Mounting Holes	Elliptical and 4 nos (9mm x 7mm)
Grounding Hole	Circular and 2 nos (4mm dia) - In accordance with NEC Article 250 (USA) or CEC (Canada)

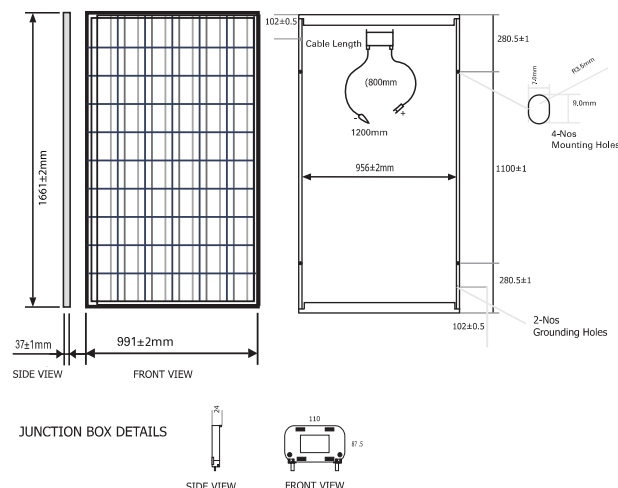
## IV CURVES AT VARIOUS IRRADIANCE LEVELS AT 25°C



## P<sub>max</sub>, V<sub>oc</sub>, I<sub>sc</sub> AS A FUNCTION OF MODULE TEMPERATURE



## ENGINEERING DRAWING



## PACKAGING

Dimensions of Pallets (mm)	1690 X 750 X 1187
Modules/pallet	18
Pallets/40ft HC container	42 (756 modules)
Gross weight per pallet (kgs)	372 KG (Approx)

www.moserbaersolar.com  
Email: pvinfo@moserbaer.in