

# AMP SERIES

## Medium Voltage Battery Energy Storage Systems



WORLD CLASS BATTERY ENERGY STORAGE TECHNOLOGY



## 📃 2 MW – 5 MW

AMP Series is EVO Power's Medium Voltage Battery Energy Storage System (BESS) that has been engineered with value, flexibility, and scalability in mind.

The AMP Power Station houses up to two Central Power Conditioning Systems (PCS), Medium Voltage (MV) Transformer, Ring Main Unit (RMU), Auxiliary Power Supply and Metering provisions (FCAS Meter, Generation Meter etc.) - all on a prefabricated skid.

Designed to provide Grid support and Ancillary services such as Frequency Regulation, Black start and various other functions, AMP Series is a 11kV ~ 22kV BESS which is scalable from 2 MW up to 5 MW with various energy storage options.

EVO Power supplies these cost-effective, long-life energy storage solutions with leading warranties, local product and technical support.

#### LOW CAPEX

- Plug & Play skid solution with up to two PCS' for quick onsite installation.
- Aux Power and metering provision included for reduced BOS.

#### **HIGH EFFICIENCY**

- Efficient inverter control with latest generation digital signal processor.
- Liquid-cooled inverter technology offers optimized component usage.

#### **MULTI-MODE**

- Grid-connect applications such as Power smoothing, firming and Time shifting.
- Dynamic grid support with synthetic inertia and Black start capabilities.



#### **Full Liquid Cooled BESS**



# SYSTEM SCHEMATIC





# SINGLE PCS AMP BESS

AMP Power Station	2.0 MVA	2.499 MVA
Model	1218	1219
Inverter Power @ 45 °C <sup>1</sup>	2,000 kVA	2,499 kVA
Current @ 45 °C	1,925 A	2,091 A
Frequency	50 Hz	
THD (Total Harmonic Distortion)	<3%	
Operating efficiency / CEC	98.7% / 98.5%	
Power Factor	1	
Power Factor adjustable	Yes, 0 - 1 (leading / lagging)	
Thermal management	Liquid cooling and forced air cooling	
Transformer Data		
Power <sup>1</sup>	2,000 kVA	2,499 kVA
HV Rated voltage	11 kV ~ 33 kV	
Cooling Type	KNAN (Oil Natural Air Natural – Synthetic oil)	
Vector Group	DY11Y11	
Aux. Transformer Data		
Power	Up to 200 kVA	
MV / LV Voltage	11 kV ~ 33 kV / 400 V	
Cooling Type	KNAN (Oil Natural Air Natural – Synthetic oil)	
RMU		
Rated Voltage	11 kV ~ 33 kV	
Rated Current	630 A	
Rated short Circuit Current	25 kA ~ 36 KA (1Sec)	



Battery Storage (Incremental)	
Cell Chemistry	LFP
Nominal energy <sup>2</sup>	3440.64 kWh (0.5P)
Configuration	10P384S
Thermal management	Liquid cooling
General Data	
Dimensions (AMP Power Station)	10,000 x 2,500 x 1,840 (L x W x H in mm)
Dimensions (Battery Storage)	6,058 × 2,438 × 2,896 (L x W x H in mm)
Weight (AMP Power Station)	< 15,200 kg
Weight (Battery Storage)	< 33000 kg
Degree of Protection	IP54
Ambient temperature	-20 °C to +60 °C
Relative humidity (non-condensing)	0-100% (Outdoor)
Maximum altitude	1,000 m (for installations beyond 1,000 m - please contact EVO Power)
Compliance	IEC 62920, IEC 61000-6-1, IEC 61000-6-2, IEC 61000-6-4, IEC 61000-3-11, IEC 61000-3-12, IEC 62109-1, IEC 62109-2, EN 50178, FCC Part 15, AS3100

Other power ratings available upon request. Please contact EVO Power for further details.
 Other battery capacity / power ratings available upon request. Please contact EVO Power for further details.

All specifications are at 25 °C and rated DC input voltage unless otherwise stated, values may be different at higher or lower temperatures. Please contact EVO Power for the detailed Warranty Statement. Specifications may be updated without notice, please refer to the EVO Power website for the current information.

### AMP SERIES



## DUAL PCS AMP BESS

AMP Power Station	4.0 MVA	4.998 MVA
Model	1220	1221
Inverter Power @ 45 °C 1	4,000 kVA	4,998 kVA
Current @ 45 °C	4,756 A	5,204 A
Frequency	50 Hz	
THD (Total Harmonic Distortion)	<3%	
Operating efficiency / CEC	98.7% / 98.5%	
Power Factor	1	
Power Factor adjustable	Yes, 0 - 1 (leading / lagging)	
Thermal management	Liquid cooling and forced air cooling	
Transformer Data		
Power <sup>1</sup>	4,000 kVA	4,998 kVA
HV Rated voltage	11 kV ~ 33 kV	
Cooling Type	KNAN (Oil Natural Air Natural – Synthetic oil)	
Vector Group	DY11Y11	
Aux. Transformer Data		
Power	Up to 200 kVA	
MV / LV Voltage	11 kV ~ 33 kV / 400 V	
Cooling Type	KNAN (Oil Natural Air Natural – Synthetic oil)	
RMU		
Rated Voltage	11 kV ~ 33 kV	
Rated Current	630 A	
Rated short Circuit Current	25 kA ~ 36 KA (1Sec)	



Battery Storage (Incremental)	
Cell Chemistry	LFP
Nominal energy <sup>2</sup>	3440.64 kWh (0.5P)
Configuration	10P384S
Thermal management	Liquid cooling
General Data	
Dimensions (AMP Power Station)	12,100 x 2,500 x 2,540 (L x W x H in mm)
Dimensions (Battery Storage)	6,058 × 2,438 × 2,896 (L x W x H in mm)
Weight (AMP Power Station)	< 23,200 kg
Weight (Battery Storage)	< 33000 kg
Degree of Protection	IP54
Ambient temperature	-20 °C to +60 °C
Relative humidity (non-condensing)	0-100% (Outdoor)
Maximum altitude	1,000 m (for installations beyond 1,000 m - please contact EVO Power)
Compliance	IEC 62920, IEC 61000-6-1, IEC 61000-6-2, IEC 61000-6-4, IEC 61000-3-11, IEC 61000-3-12, IEC 62109-1, IEC 62109-2, EN 50178, FCC Part 15, AS3100

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