MPV.SYSTEM150 MODULAR SOLAR AND FUEL CELL INVERTER

Inverters for Grid Connected Applications

75 kW to 150 kW

- Wide DC voltage range
- Three-phase, transformer-less, inverter in a modular design
- Supports from 1 to 10 inverter modules



INDUSTRY-LEADING EFFICIENCY

AEG Power Solutions introduces the new Modular Inverter System with leading-edge power electronics in a transformerless, modular design. Inverter modules are turned on as needed to match the power available and therefore run at optimal efficiency. This module optimization, coupled with advanced inverter design and no transformer losses, yields efficiencies of up to 97%. The MPV.System is available in a 75 and 150 kW power category. It represents a unique modular system design which allows the support of up to 10 identical power modules.

ADVANCED CONTROL & COMMUNICATIONS

The control algorithm is designed to meet the latest requirements for fast response to dynamic changes.

Monitoring and power plant integration is achieved via Modbus over TCP communication. Web server and datalogging are integrated into the inverter. Advanced operator controls are supported.

SMALL, LIGHTWEIGHT & FLEXIBLE

The footprint of fully loaded MPV.System takes minimum space and provides highest power density performance. For

installation, simply place the cabinet assembly and add the number of inverter modules that you need. If the system capacity grows or the customer wants to expand, just insert additional inverter modules when you need them.

RELIABILITY & SERVICEABILITY

The MPV.System is designed for a 20-year life indoors or outdoors. If one inverter module should fail, the remaining modules will continue normal operations. The impact of such loss would be a reduction of the total system output power from the effected units contribution only. Typically, this would have an impact only at the peak operation cycle. In the event that service would be required, the power modules can be easily removed and replaced via plug and play and the drawer design. This design approach ensures highest serviceability, fast reaction times and therefore highest uptime.

POWER IS OUR BUSINESS

With more than 60 years of experience in power supply systems and solutions for power plants, AEG Power Solutions offers a comprehensive range of services aimed at securing maximum yields for your application. These services include contractual solutions with service guarantees and high inverter availability.



MPV.SYSTEM150 TECHNICAL DATA



	CE	UL
DC INPUT		
DC voltage range (full power)	300 - 600 VDC	
DC voltage range (extended)	240 - 600 VDC*	
Max. DC current	530 A	
AC OUTPUT		
Nom. AC output power	125 kW	150 kW
AC output voltage	400 VAC L-L, +10% / -12%, Wye, no neutral connection required	480 VAC L-L, +10% / -12%, Wye, no neutral connection required
AC output current	182 A	
Nominal frequency	50 Hz ± 3 Hz	60 Hz ± 3 Hz
Total harmonic distortion	< 3%	
GENERAL DATA		
Peak efficiency	97.0 %	
Standby losses	< 60 W	
Operating temperature (full power range)	-20 to 50 °C	-4 to 140 °F
Relative humidity	095 % (non condensing)	
Enclosure type	IP 24 D	NEMA 3R (indoor/outdoor)
Altitude above sea level	2000 m (output de-rated above)	6550 Ft (output de-rated above)
Dimensions ($W \times H \times D$)	1980 x 710 x 864 mm	78 x 28 x 34 inches
Weight	458 kg	1009 lbs
Standards	CE compliant	Agency certified to UL 1741, FCC Part 15
Grid Codes	-	IEEE 1547
SAFETY		
Ground fault protection	Internal GFDI (Ground Fault Detection/Interrupter)	
Surge protection	AC and DC, Type 2	
AC and DC disconnects	Yes (integrated)	
COMMUNICATION & CONTROL		
Display operating unit	Graphical LCD with keypad	
Connections and protocol	Ethernet or Modbus over TCP	
Performance monitoring and datalogging	Standard: Integrated web server, Remote monitor application, on-board storage for up to 20 years	

* derating required

For further information please refer to our website:

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