

## **E-Mobility Solutions for Heavy Duty Commercial and Military Vehicles**

## Your gateaway to zero emission



Among the key components of an EV, the electric motor plays a critical role in determining its performance and efficiency. In recent years, Permanent Magnet Synchronous Motors (PMSM) and their controllers have emerged as the preferred choice for e-mobility applications.

Radial and axial flux PMSM motors are the ideal choice for e-mobility applications because of their high efficiency, power density, variable speed capability, and low maintenance requirements. They are also compatible with a wide range of battery technologies, which makes them flexible and adaptable to different types of EVs.

Maximum Values of 5 F 460 220					
Max. Supply Voltage	800 V. DC	Maximum Torque	2800 Nm.		
Max. Speed	3700 rpm	Maximum Current	750 A.		

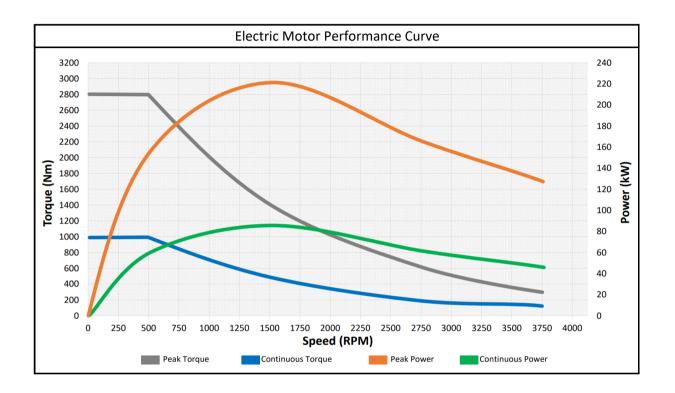
Motor Specs					
Nominal Speed	1500	rpm			
Nominal Torque	700	Nm.			
Nominal Current	250	A.			
Nominal Power	110	kW.			
Peak Power	220	kW.			
Supply Voltage	500-800	V. DC			
Efficiency	96	%			
Number of Phase *	3				
Motor Type	IPM				

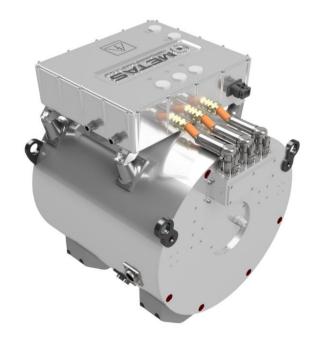
<sup>\* 6 - 12</sup> Phase options available on request

Controller Specs					
Driver Type	Paralled IG	Paralled IGBT			
Continuous Power	220	kW.			
Peak Power	450	kW.			
Swithing Frequency	10	kHz.			
Efficiency	98	%			
Communication *	CANBUS 2.	CANBUS 2.0B-J1939			
	RS 232				
Position Feedback *	Resolver	Resolver			
Connectors *	Terminal B	ох			

<sup>\*</sup> Options available on request

Other System Specs						
Cooling Type	Water / Glycol	Protect	tion Class	IP 67		
Cooling Flow	25 lt./min.	Workin	g Temperature	-40 / +70 °C		
Max. Cooling Liquid	65 °C	Insulati	ion Class	H - 180 °C		
Temperature Sensor	PT 1000	Numbe	er of Poles	12		
Mom. of Inertia	TBD	System	Total Weight	240 kg.		
Mec. Time Constant	TBD	Shaft Ty	ype	Spline / Plain		





Application Fields

Heavy Duty Commercial Vehicles

Heavy Goods Vehicles

Military Armored Vehicles

Electric Axes