

in traction™
rEV Motor Range



Discover a motor that's **redefining** possibilities

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Key Features

Optimized Power-to-Weight Ratio: The rEV motor range stands out with its exceptional power-to-weight ratio, setting new standards for efficiency and performance. Whether you're pushing the limits in motorsport, navigating high-end passenger cars, or handling heavy commercial vehicles, the rEV motor delivers power and precision like never before.

Flexible Design for Diverse Applications: Adaptability is at the core of the rEV motor's design. Featuring a flexible length to cater to different applications, the rEV is engineered to seamlessly integrate into a variety of systems. Its adaptability makes it an ideal choice for a range of industries, from high-performance passenger cars to demanding industrial applications.

Optimized for 400 to 800V: The rEV motor range is finely tuned to operate optimally within the 400 to 800V range, ensuring efficiency and performance across various voltage applications. This optimization makes it a versatile solution for electric vehicles, motorsport, and heavy commercial vehicles.

Cutting-Edge Technology: Our commitment to cutting-edge technology is evident in every aspect of the rEV motor range. From its advanced cooling system to its customizable power connection configurations, the rEV embodies innovation, setting new benchmarks for electric propulsion systems.

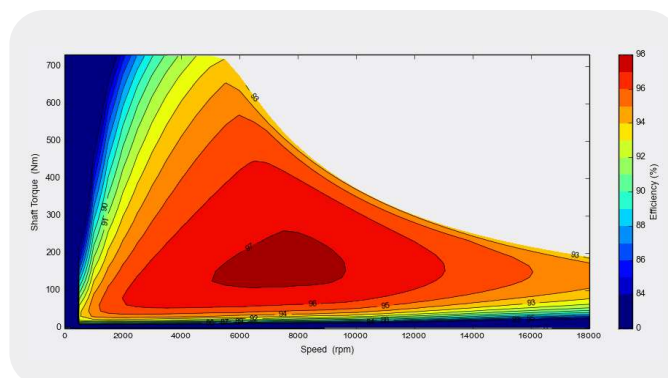
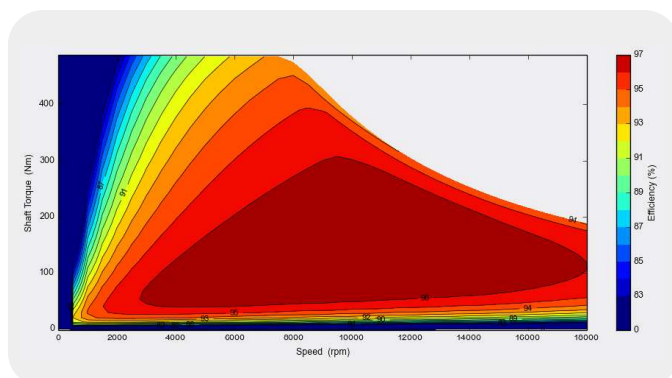
Applications

High-End Passenger Cars: The rEV motor sets a new standard for luxury electric vehicles, emphasizing exceptional performance, reliability, and notably low noise levels. Its advanced design ensures a serene driving experience, making it the ideal choice for high-end passenger cars seeking a blend of performance and quiet sophistication.

Motorsport: In the competitive world of motorsport, the rEV motor shines with unmatched power density and precision engineering. Its advanced design, optimized power-to-weight ratio, and precise control offer professionals a competitive edge on the track, providing superior acceleration and top speeds.

Heavy Commercial Vehicles: The rEV motor is tailored for heavy commercial vehicles, boasting high peak power output, reliability, and efficiency. Its robust power delivery effortlessly handles the demands of transporting heavy loads, ensuring consistent performance. Engineered for durability, the motor contributes to reduced energy consumption and operating costs in heavy-duty applications.

Characteristics



Electrical Specification	Unit	
Motor / Generator Type		3-Phase Radial Synchronous Flux Permanent Magnet Motor/Generator
Applications		Automotive Motorsport, Off-Highway, Motorcycle, Passenger Vehicle, Commercial Vehicle, Rail, Marine and Power Generation
Max DC Voltage (Motor)	VDC	850
Maximum Phase Current (Motor)	Arms	700
Rotor Position Sensor		Resolver

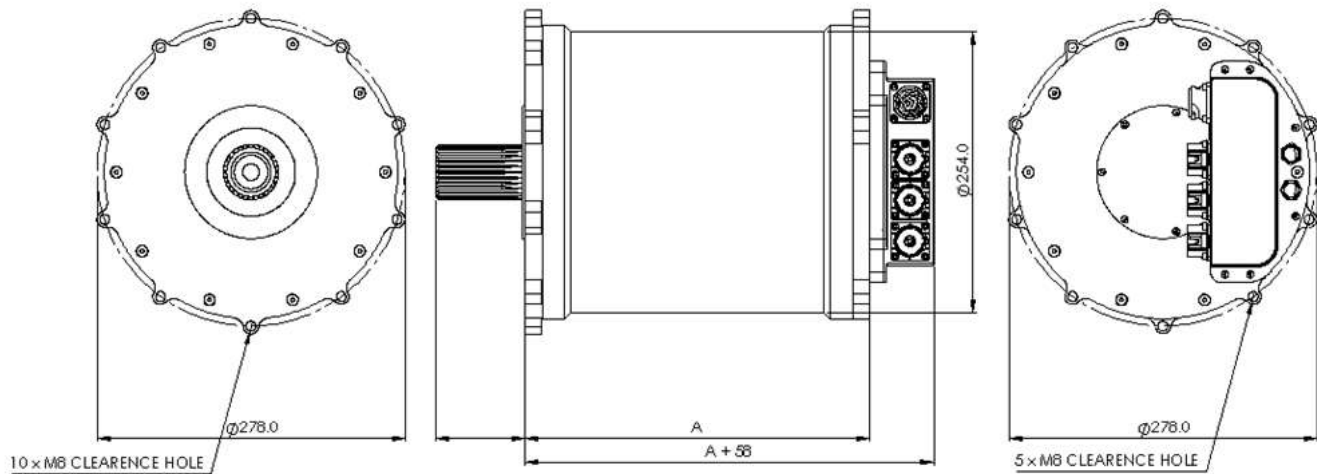
Performance Specification	Unit	rEV235-3U-WN200	rEV235-5U-WN200
Peak Torque (for 10s)	Nm	488	715
Peak Power (for 10s)	kw	400	400
Continuous Torque (30 min)	Nm	215	308
Continuous Power (30 min)	kw	224	225
Torque Density Peak	Nm/kg	15	15
Power Density Peak	kW/kg	13	9

Mechanical Specification	Unit	rEV235-3U-WN200	rEV235-5U-WN200
Cross section dimension	mm	ø260	
Package Length (excluding splined shaft)	mm	245	300
Mass	kg	32	47
Maximum speed	rpm	18,000	
Axial/Radial Shaft Load	N	100 N axial 200 N radial	
Shaft Output		External Spline, Internal Spline, Plain Shaft or Single Keyways	
Ingress Protection	IP	IP67	
Motor Connection Type		Powerlok Connectors	
Cogging Torque	Nm	<2.5%	

Thermal Specification	Unit	rEV235-3U-WN200	rEV235-5U-WN200
Cooling method		Liquid cool, 50% Ethylene Glycol	
Coolant Inlet Temperature	°C	-10 to +75	
Coolant Inlet Pressure	bar (guage)	0.5 - 3.0	
Coolant Pressure drop across motor	barG a 10l/min	O.B	
Maximum stator winding temperature	°C	180	
De-rate stator winding temperature	°C	165	
Temperature sensor	-	PT1000	
Ambient Temperature	°C	-20 to 45	

NOTE: 1) Mass: excludes cables or coolant tubes, 2) Peak Values are simulated using 800VDC and 650Arms, 3) Continuous values are simulated using 800 VDC, 70 C Inlet Temperature and 10 Lpm coolant flow rate, 4) Data for lower voltages and current levels are available upon request.

Mechanical Overview



Explore inetictraction.com to design your drive system with multiple configurations, matched controllers and gearboxes.