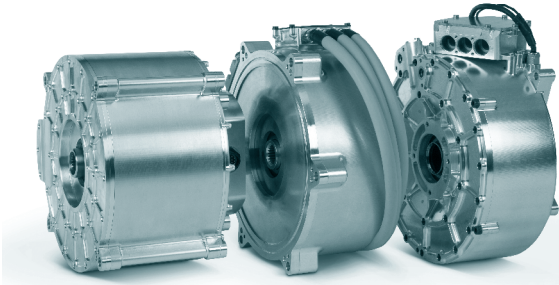


High Torque SPM Motor Generator Units

SPM 242-76-4630 MGU



The SPM 242 MGU family of electric motors deliver world leading power density and efficiency realised by a combination of advanced electromagnetic design, high conductivity encapsulation and our unique precision liquid cooling system.

Suitable for hybrid and electric vehicles in automotive, motorsport, aerospace and off high-way, the current platform of radial flux electric motors are a combination of technologies which have been developed and validated through R&D so that they can be applied with high confidence to new projects.

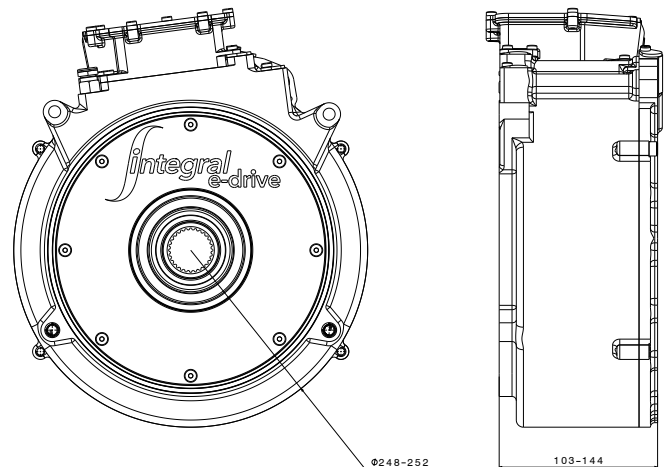
Using an Advanced Intelligent Design (AID) tool-set core technology can be configured to deliver fully customisable motors to meet precise client performance and package requirements with high confidence and within tight timescales.

Key Features

- Extremely compact and robust structure
- Highest power density available in market
- Highest efficiency throughout the operation range in the market
- Liquid cooled with plain water or water/glycol mixture
- High ingress protection rating
- Suitable for applications across automotive, motorsport, aero space and off-highway

Specifications (up to)

Power (peak)	450kW (3 seconds), 350 kW
Continuous Power	260kW
Torque	500Nm peak
Max. speed	19,000 rev/min
Max. efficiency	>98.6%
Max. coolant inlet temp	110°C
Min. coolant flow rate	8-15 L/min
Ambient air temp	-40°C to 140°C
Ingress protection	Typically IP67 & IP69K
Vibration (radial / axial)	20g/20g
Peak winding temp	190°C (materials rated @ 220°C)
Overall length	102-144 mm (excluding connections)
Outside diameter	248-252 mm
Rotor inertia	Typically 0.022Kg.m ²
Mass	16.5-28.8Kg



DIMENSIONS DEPEND ON FINAL DESIGN OF MOTOR

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