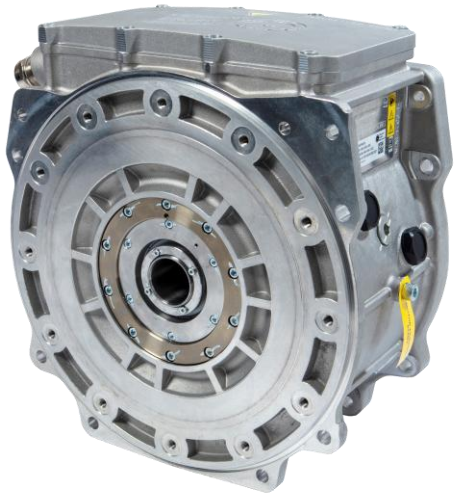
Datasheet 08-2026

HDRM™300

Magnet-free traction motors for CV, Rail and Marine applications

Series Production

The HDRM™300 Series are rare earth magnet-free motors offering market-leading performance, efficiency and sustainability for a range of applications. Using off-the-shelf power electronics, the HDRM™300 motors are a direct replacement for permanent magnet machines.

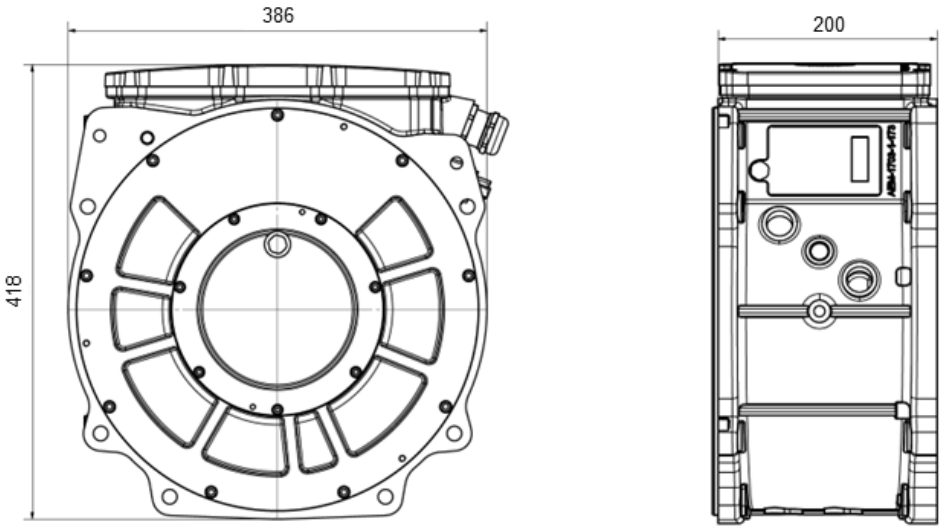


Features

- Peak efficiency >97%.
- Sustainable, magnet-free motor.
- Modular, stackable design for a wide range of applications.
- Robust and maintenance-free with the motor sealed for life.
- Ingress Protection Level IP67.
- Freewheeling capability allowing vehicle to coast when necessary.
- Inverter agnostic.
- No risk of demagnetization, allowing motors to run faster and hotter.
- No back-EMF or short circuit current to ensure safe failure modes.
- No cogging at high speeds for high drive cycle efficiencies.



Dimensions



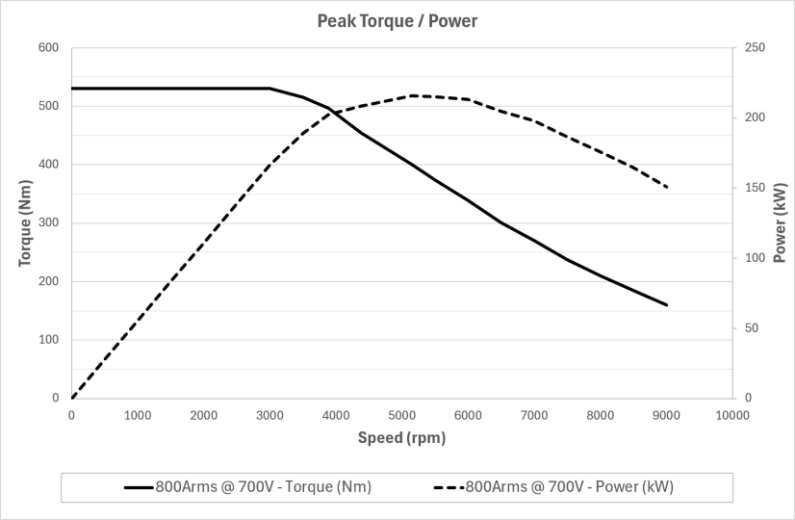
Advanced Electric Machines reserves the right to change or modify product specifications, configurations, or dimensions at any time without notice.

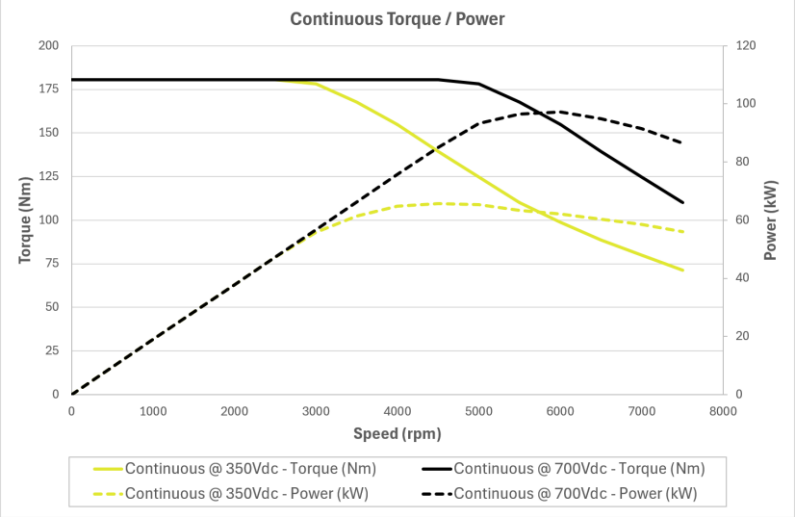
10-11 Teal Farm Way, Washington, NE38 8BG | +44 (0)191 4477 010 | info@advancedelectricmachines.com | **www.advancedelectricmachines.com**

Performance

	HDRM™300
Voltage	300-750Vdc
Peak Power	119kW (350V), 163 kW (525V), 215 kW (700V)
Continuous Power	67 kW (350V), 82 kW (525V), 98 kW (700V)
Peak Torque	540 Nm
Continuous Torque	180 Nm
Max Current for Peak Torque	800Arms
Weight (dry)	83kg
Max. Speed	7,500rpm
Cooling	Water / Glycol

HDRM™ 300





- Performance will vary based on chosen inverter.
- Peak torque/power curves generated using externally validated test data.
- Continuous torque/power curves performance with a continuous current of 240 Arms.
- Maximum operating voltage 750Vdc – performance at this voltage will be greater than represented in the charts.
- Motor performance may vary based on the customer's duty cycle, system integration and operating conditions.
  - Conditions include but not limited to: coolant flow rate, coolant temperature, inverter parameters and mounting arrangement.
  - Customer must validate exact performance in the end application.

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