Issue 10-2026

HDRM™150TC

Lightweight & powerful motor/generator for light commercial vehicles

Series Production

The HDRM™150 Series are rare earth magnet-free motors developed in response to customer demand for a lightweight, freewheeling motor to drive light commercial vehicles and trailer-driven systems. A uniquely recyclable option is in development using patented aluminium windings.



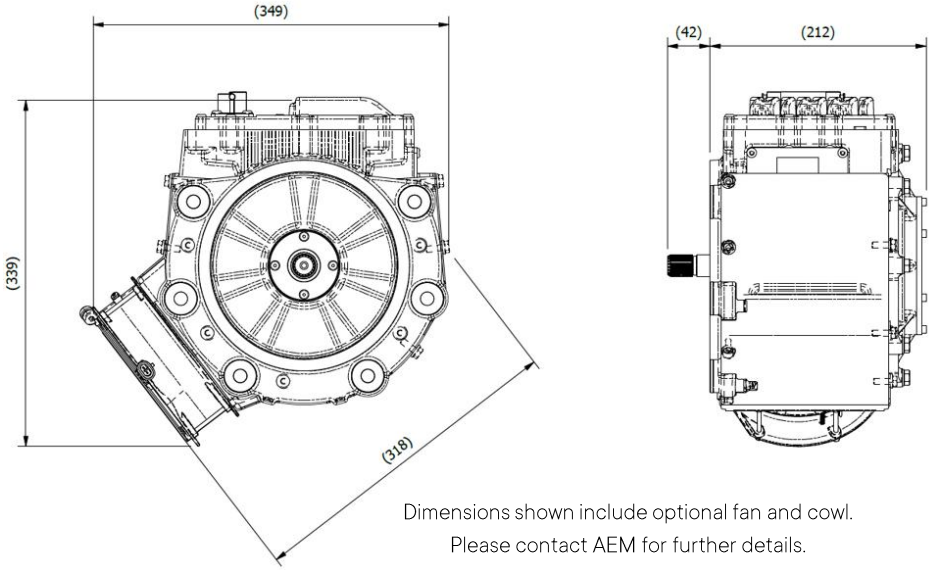
Features

- Sustainable, magnet-free motor with recyclable option.
- Ingress Protection level IP6K9K[1].
- 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.
- Compressed windings to reduce mass and enhance continuous performance.
- Aluminium compressed windings in development to produce uniquely recyclable motor.
- Air-cooled for simplicity.
- Available with or without fan and cowling.

[1]Subject to system mounting interface and seal.



Dimensions



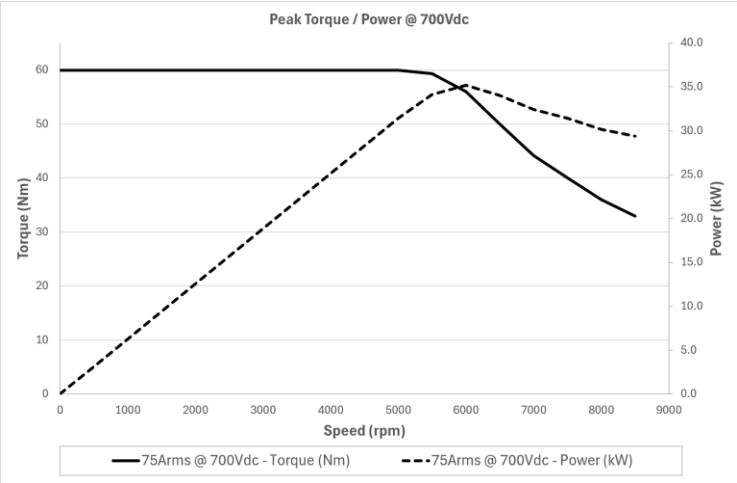
Dimensions shown include optional fan and cowl.
Please contact AEM for further details.

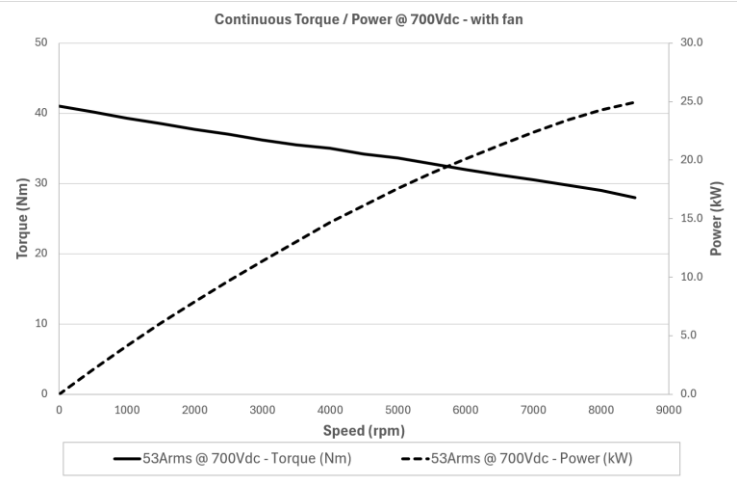
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Performance

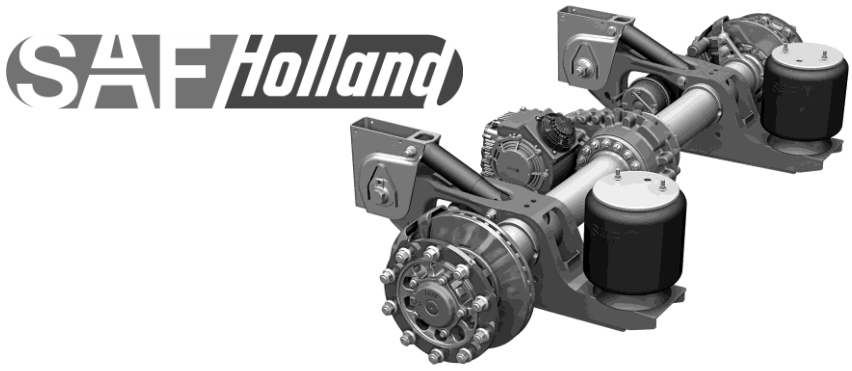
	HDRM™150 Air-Cooled
Voltage	300-750Vdc
Peak Power	35 kW (at 6,000rpm, 700Vdc)
Continuous Power	25 kW
Peak Torque	60 Nm*
Continuous Torque (S1-60)	41 Nm
Max Current for Peak Torque	75Arms
Weight (Motor only / with fan & cowl)	28.15kg / 30.5kg
Max. Speed	8,400rpm
Cooling	Air

HDRM™ 150 Air-Cooled





Trusted by SAF Holland for their TRAKr trailer axle



- Peak power may vary based on chosen inverter.
- Torque/power curves generated using test data at 700Vdc with a maximum current of 75Arms.
- *Boost current of 140Arms achieves up to 90Nm.
- Continuous torque/speed/power curves generated using test data at 700Vdc with fan/cowl fitted and operating.
- 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 and operating conditions.
    - Conditions include but not limited to: air flow rate, ambient temperature, inverter parameters and mounting arrangement.
    - Customer must validate exact performance in the end application.

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

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