

Explore our Technologies

High Voltage eFan System

from BorgWarner



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BorgWarner offers a complete 800 V system solution consisting of Cooling Fan, Electric Motor and Inverter.

HV eFan System for BEV/FCEV-Truck cooling systems for highest cooling requirement uphill and with full load.

Designed to cool components such as the fuel cell, traction motor, electric brake, or the battery pack in battery-electric or fuel-cell commercial vehicles. However, the products are also suitable for supplying power to PTO drives or for use in off-highway applications.

The product portfolio consists of two performance levels to meet global customer requirements:

- High-Power (~160 Nm at 2350 rpm)
- Low-Power (~40 Nm at 2600 rpm)

Technical Features

- High torque and efficiency at low noise fan operating speeds up to 3000 rpm
- Rated operating voltage range 550 V to 850 V DC
- Fully encapsulated design to meet IPx6 and IP6k9k requirements
- Coolant cooled components for ease of implementation and stable operation
- Scalable electric motor platforms with a power range from 6 kW to over 40 kW
- Modular System solution with external or attached inverter
- Customer specific connectors can be used

System Benefits

- Series proven fan portfolio with best-in-class performance and low noise level
- Compact & flexible design for installation in challenging installation spaces
- Highly efficient and robust HV E-Motors
- Customized inverter developed according to ASPICE/ Functional Safety (ISO 26262)

Specifications

	LOW-POWER	HIGH-POWER
Segment	Medium / Heavy Duty	Heavy Duty
Torque	40 Nm @ 2600 rpm	160 Nm @ 2350 rpm
Power	10 kW	40 kW
Voltage	550 – 850 V	550 – 850 V
Fan D	450 – 813 mm	650 – 864mm
E-Motor	Radial Flux Type	Axial Flux Type
Inverter	Attached / Remote	Remote
Cooling	Liquid	Liquid



High Voltage
Low-Power eFan

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Find out more about our High Voltage eFan here!

borgwarner.com

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