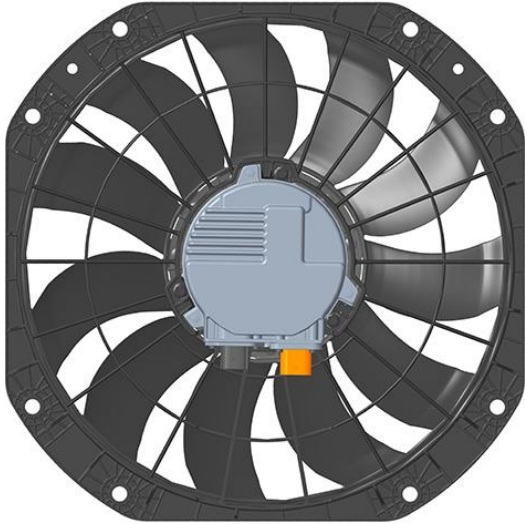


## 2kW AXIAL FAN

### HIGH VOLTAGE ELECTRIC FAN



- High Voltage 2kW output
- Axial-flow fan design
- Brushless DC motor
- High efficiency
- Compact, robust housing
- Wide operating temperature range
- Low acoustic signature
- Smart control electronics
- High ingress protection rating IP6K9K
- Designed for heavy vehicle applications
- Variable speed control via PWM or CAN
- Balanced impeller design for reduced vibration
- Integrated protection

Calatherm introduces its latest high-performance thermal management solution; a 2 kW High-Voltage Axial Fan engineered for demanding cooling applications in low-emission and zero-emission heavy-duty vehicles. Designed around a high-efficiency brushless DC motor, delivering robust airflow performance.

The integrated smart control electronics enable precise modulation of fan speed and torque response, supporting advanced thermal strategies used in battery-electric, hydrogen fuel-cell, and hybrid powertrains.

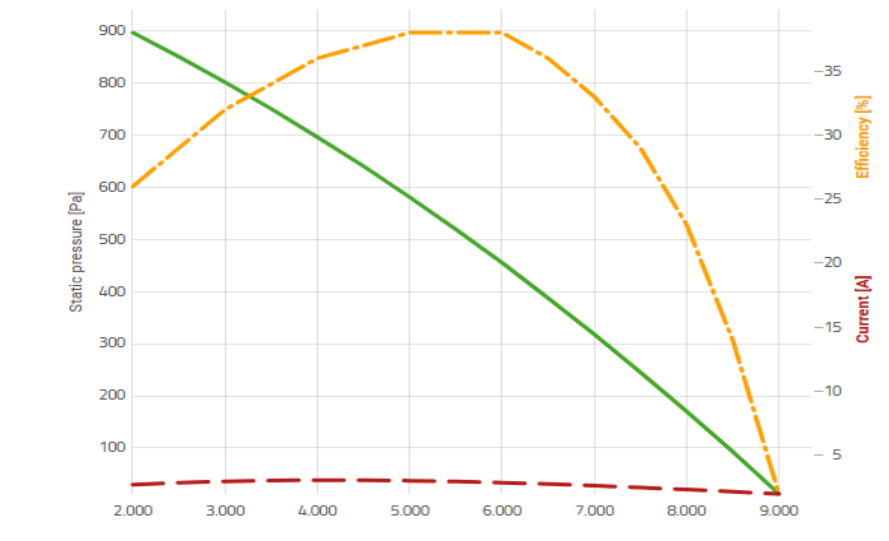
Engineered to meet the environmental, durability, and performance expectations of the heavy vehicle industry including buses, trucks, off-highway, and municipal commercial platforms, where the fan is designed for high voltage architectures and harsh operating conditions. This solution enhances system efficiency, reduces maintenance requirements, and supports OEM sustainability targets.

### BENEFITS

- Enhanced thermal system efficiency through precise speed modulation.
- Improved vehicle range and energy utilisation thanks to high motor efficiency and optimised airflow output
- Extended component longevity due to low-wear brushless DC motor technology.
- Flexible integration with vehicle control units through standard communication interfaces.
- Reduced total cost of ownership through lower maintenance requirements.
- Greater thermal stability for driveline components under high load cycles.
- Supports OEM electrification goals, with high-voltage, low emission, high performance cooling system.

## TECHNICAL SPECIFICATION

HV Power Supply	Nominal voltage	700 VDC
	Operating voltage	450~850 VDC
LV Power Supply	Nominal low voltage	12/24 VDC
Temperature	Operating ambient temperature	-40°C to +85°C
Performance	Nominal power	2,000 W
	Maximum fan speed	3,200 rpm
	Overall module efficiency	45% (motor, fan, shroud)
General	IP classification	IP68 and IP6K9K
	Lifetime hours	Up to 40,000 hours
	Mass	3.8 kg
	Dimensions	505 x 113.5 mm
Airflow	Pressure: 1 Pa = 0.004 inH <sub>2</sub> O, Airflow: 1 m <sup>3</sup> /h = 0.59 cfm	



## OUTLINE DIMENSIONS

