

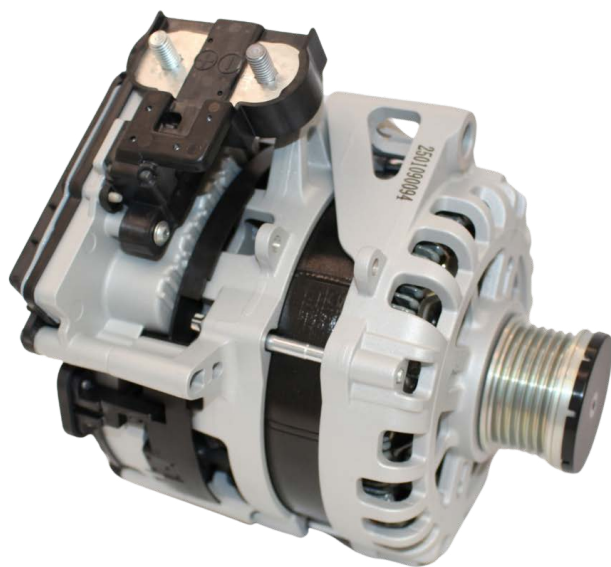
51V 6,500W PowerFit Alternator

SmartPower Series Alternators



CAT # 85-303-48-6R

Complies with the 2023 Mercedes Sprinter Body & Guidelines (BEG) requirements.



Power Output

Idle: 2,000W at 650* RPM

Cruise: 6,500W at 1500* RPM+

KEY BENEFITS

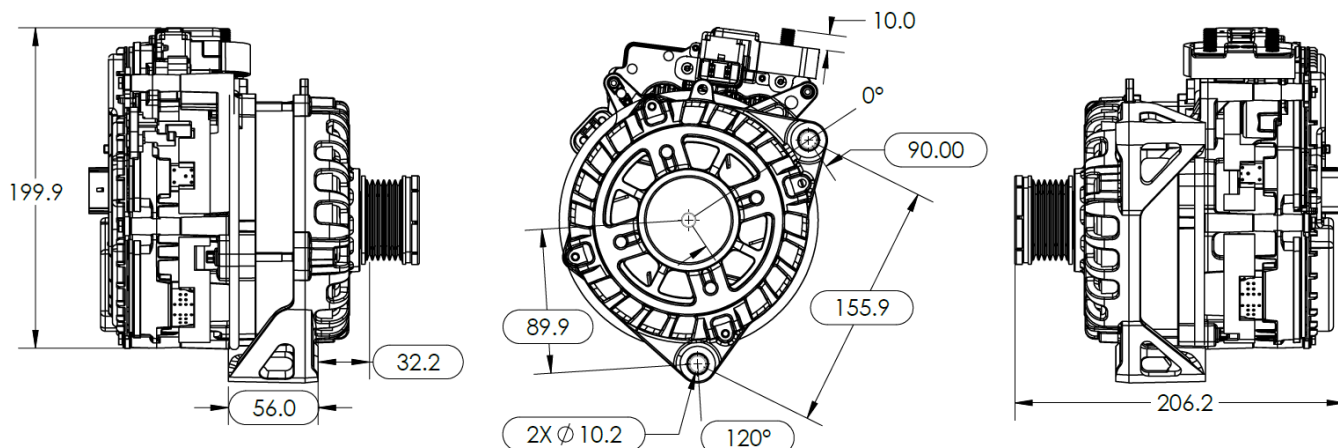
- + **Charge at Idle:** Efficiently charges the battery while vehicle is stationary
- + **Smooth Running:** Uncompromised vehicle drivability and longer accessory belt life
- + **No Programming Required & Simplified Installation:** Lithionics BMS directly controls the alternator

Reliable Power, Unmatched Safety

The PowerFit is an inverter-based generator that replaces outdated alternators by utilizing MOSFET technology in place of unreliable diodes. The PowerFit features rectangular hair-pin stator winding resulting in greater power output and improved efficiency. Experience reliability, safety, and efficiency with fast-charging capabilities.

DIMENSIONS

Size (L x W x H)	7.9"x 6.1" x 8.1"	199.9mm x 155.9mm x 206.5mm
Weight	≤16.1lbs	7.2kg



*650 refers to engine RPM on a test Mercedes 4-cylinder chassis

*1500 refers to engine RPM on a test Mercedes 4-cylinder chassis

Application Note: Compatible with Battery Management System (BMS) V9 and later. Not supported on CS200, BMS V8, or earlier versions.

SPECIFICATIONS

MECHANICAL

Bracket Mount	Mercedes Benz N62
Power Terminals	2x M8x 1.25 (torque nuts to 19Nm +2.5Nm)
Recommended Ring Terminal	1/0 AWG 5/16" (Quick Cable 5955E)
Fans	Dual Cooling Fans
Pulley	50mm O.D., 6-groove, freewheeling pulley
Housing Material	Magnesium
Weight	≤16.1 lbs (7.2kg), typically 15.8;bs (7.16kg)

ELECTRICAL

Regulation	Internal, requires RV-C CANbus
Recommended Wire Gauge	1/0 AWG
Recommended Fuse Size	150A
Stator Wiring	Hair-pin Rectangular Winding
Efficiency	Up to 85%
Operating Temperature Range	-30°C to 105°C
Operating Voltage Range	40.0V to 57.6V
Protocol Data Communication	RV-C CANbus
Low Voltage Connector	8-pin, Molex MX64 Series
Low Voltage Connector Parts	
Housing	Molex 0314049110 or 0314049100
Pin Plug	TE 1456538-1 (for unpopulated wires)
Contacts	TE 2035170-2 or 2035170-1

ACCESSORY LIST

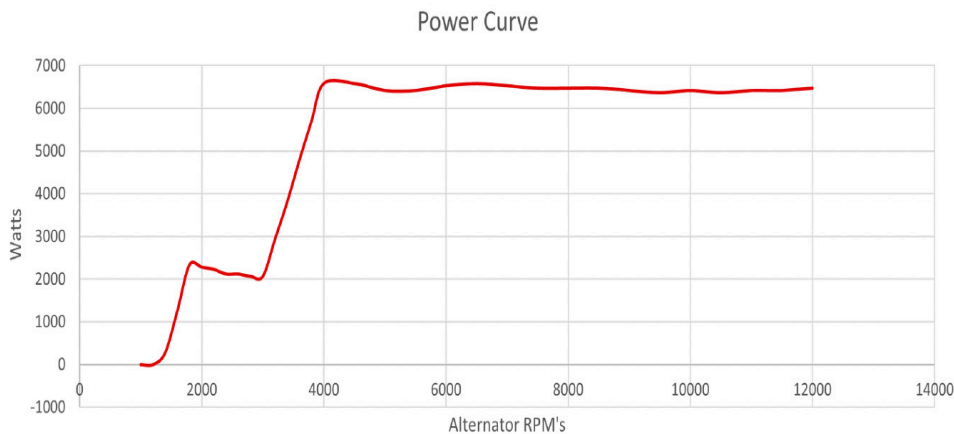
Brackets:

Mercedes N62

Dodge Promaster LBKTADP

Volta System Controller: 57-01-100

The system controller enables seamless integration between the smart alternator and any Volta system by RV-C CANbus communication.



Powering Innovation.

Discover the right lithium replacement system for you. Reach out to Lithionics' expert support team to find your perfect power solution.

DS-024