

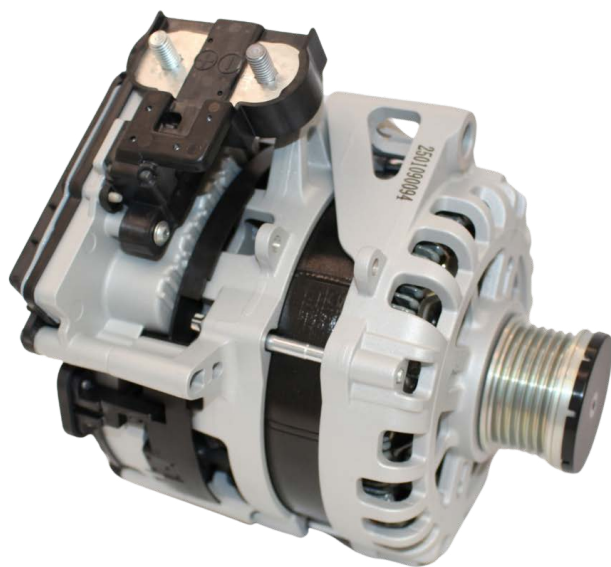
# 51V 6,500W PowerFit Alternator

## 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

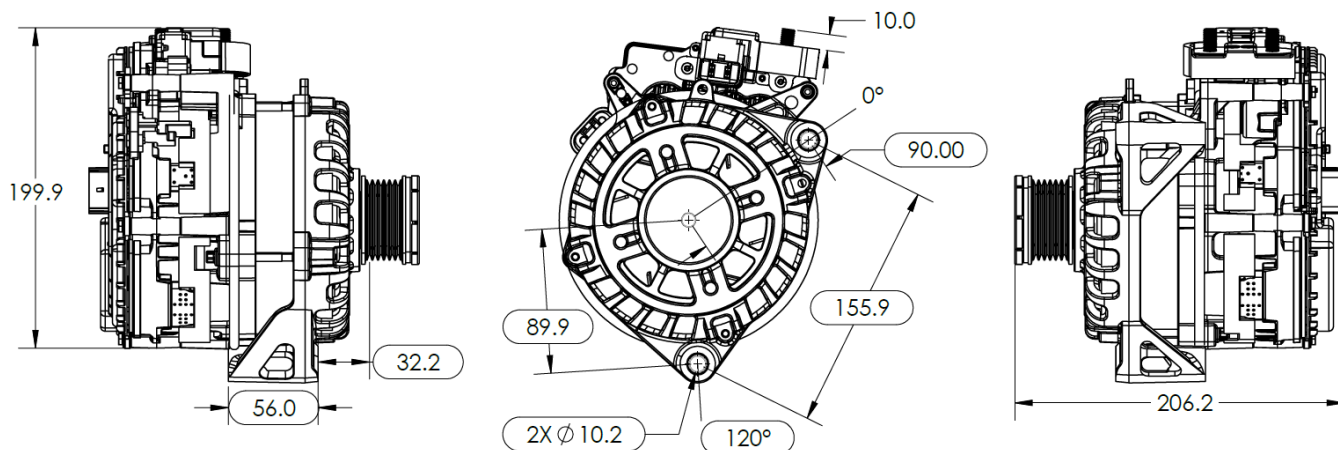
- + **Charge at Idle:** Efficiently charges the battery while vehicle is stationary
- + **Smooth Running:** Uncompromised vehicle drivability and longer accessory belt life
- + **No Programming Required & Simplified Installation:** Lithionics BMS directly controls the alternator

### 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The PowerFit is an inverter-based generator that replaces outdated alternators by utilizing MOSFET technology in place of unreliable diodes.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

## 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

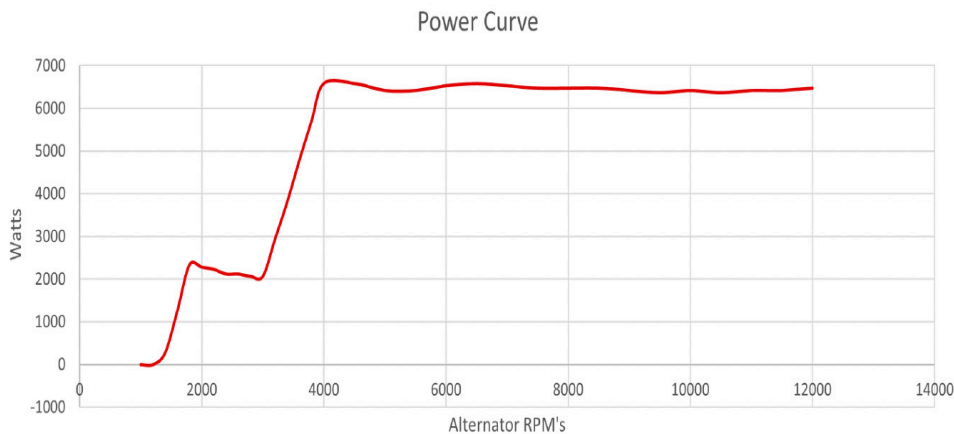
#### Brackets:

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