



School Bus Alternators

AL9962SB • AL9963SB



BOSCH

Invented for life

Bosch AL9962SB/AL9963SB School Bus Alternators

Bosch School Bus Alternators are revolutionizing the School Bus industry with high efficiency alternator technology that has delivered maximum charging power through millions of tough stop-and-go miles worldwide. With 200 Amps on-the-road output and 120 Amps at idle (Figure 1), these alternators stand up under all operating conditions. Plus, they're engineered with several innovative features to prevent heat damage and component wear.

Advanced Performance Technology

The Bosch AL9962SB and AL9963SB represent the most advanced school bus charging technology, delivering extreme power and efficiency. The higher charge rate at idle helps maximize battery life by reducing battery deep cycling.

Competitor	Bosch School Bus
145 Amps	200 Amps
62 Amps at idle	120 Amps at idle
55% efficiency	71% efficiency

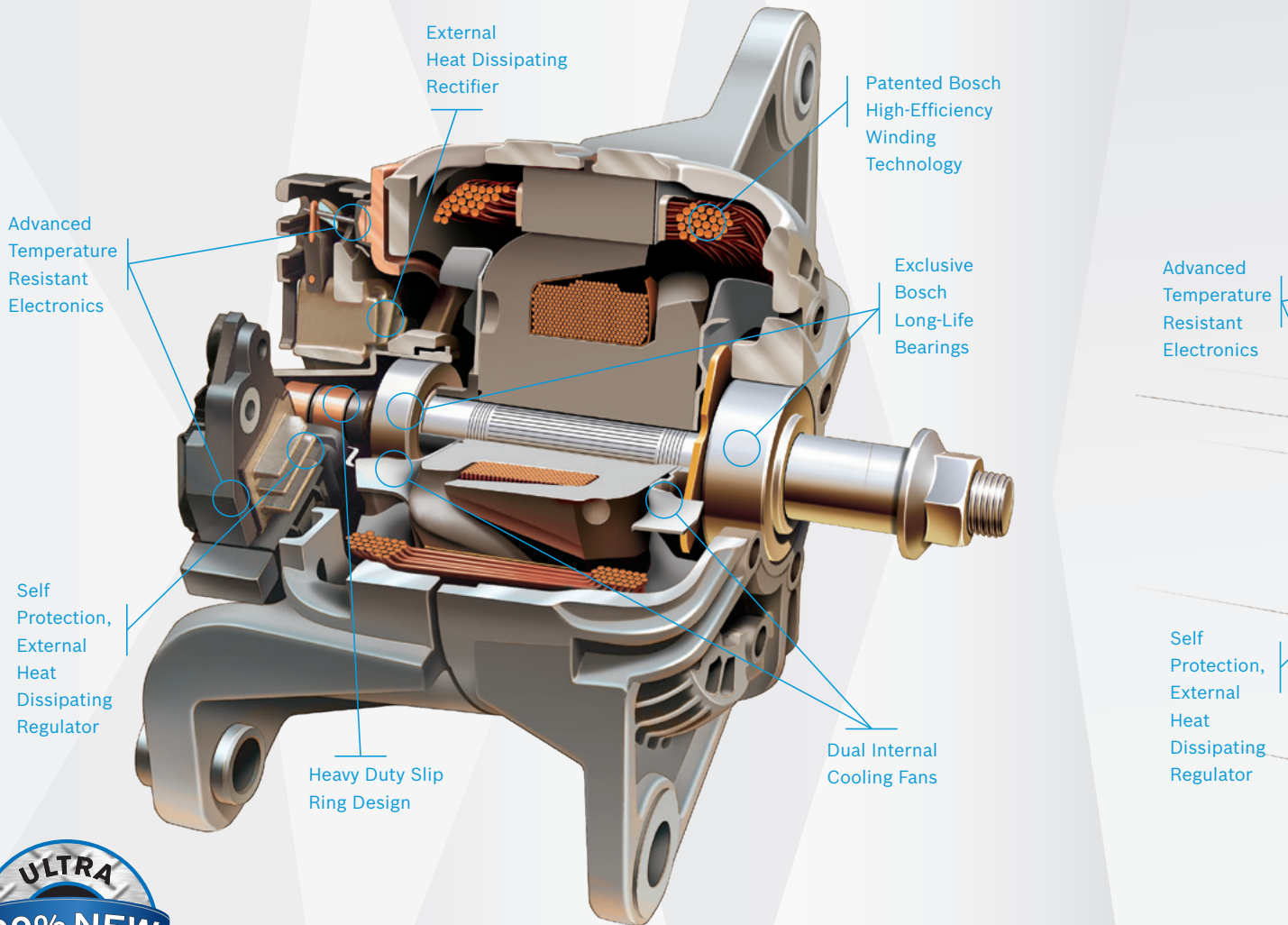
High Temperature Resistance

Bosch School Bus Alternators can really take the heat! At an operating temperature of 80°C (176°F), the Bosch AL9962SB and AL9963SB sustain operating amperage better than competitive units to supply more power for critical electrical systems. They're specifically designed to withstand operating temperatures up to 13% higher than competitive units.

Self Protection Regulator

Bosch Regulators equipped with exclusive Bosch self-protection technology automatically begin to reduce amperage output when underhood temperatures exceed 125°C, allowing output to return to normal levels when the temperature drops below 125°C. Competitive units typically fail at temperatures

AL9963SB - J180 mount



above 110°C. This feature allows the alternator to continue to provide needed power while protecting internal components from heat damage.

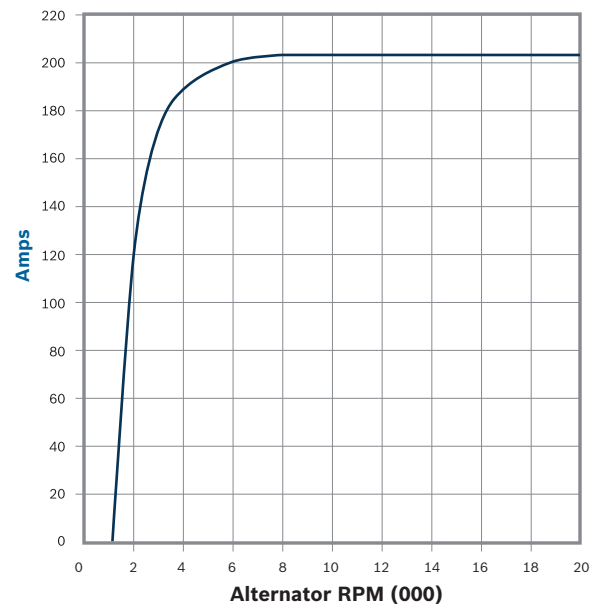
Built for the Long Haul

Bosch 200 Amp School Bus Alternators are designed specifically for the high electrical loads of today's school buses. Their unique ability to replace hundreds of original equipment part numbers makes them ideal for service replacement and upgrades to existing equipment. With only two part numbers replacing over 200 OE SKUs, inventory commitment can be greatly reduced, saving both time and money. Exclusive advanced Bosch technology delivers increased service life and reliability, prolonged battery life and improved fuel economy.

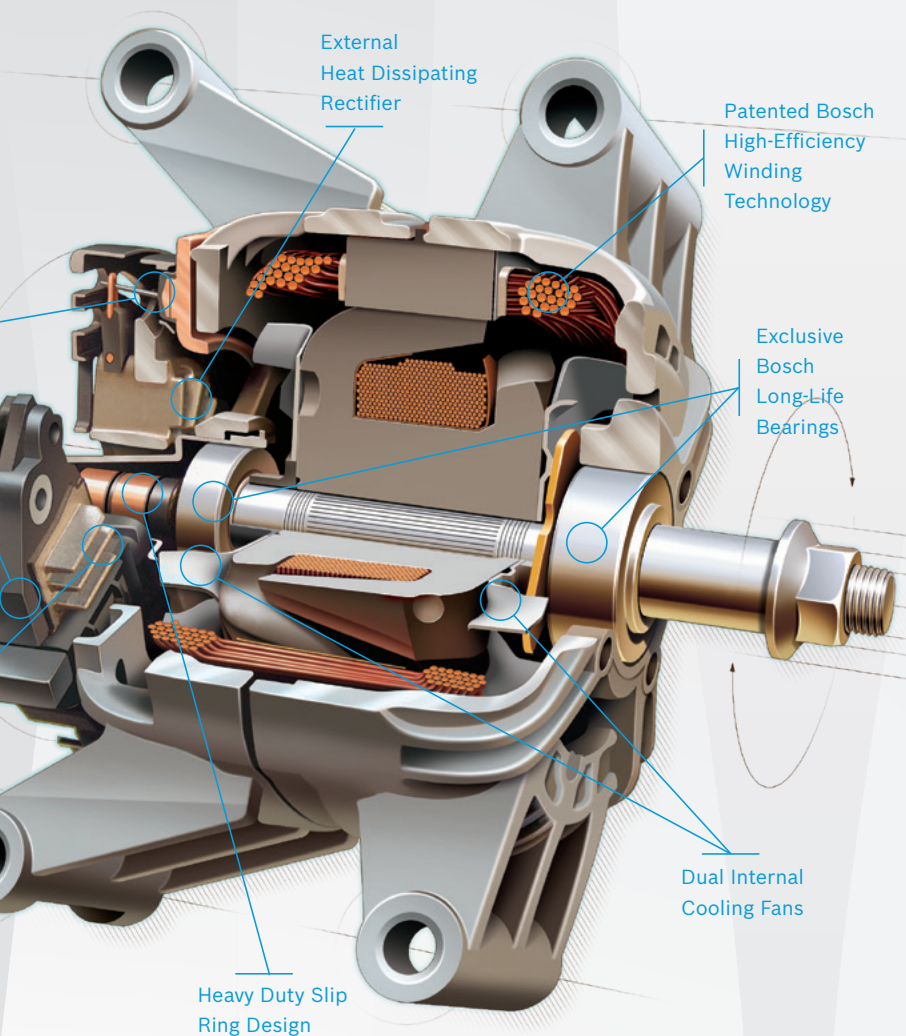
2-Year Warranty

Bosch backs the AL9962SB and AL9963SB with a 24 month/200,000 mile warranty.

Output Curve (Figure 1)



AL9962SB - pad mount



Self Protection, External Heat Dissipating Regulator is mounted directly in the cool-air intake stream. Its position, combined with the regulator's heat sink design, allows the alternator to run cooler and dissipate heat quicker than internally-mounted regulators. Exclusive Bosch self-protection technology automatically begins to reduce amperage output when underhood temperatures exceed 125°C allowing amperage output to return to normal when the temperature drops below 125°C.

External Heat Dissipating Rectifier, utilizing Bosch best-in-class press fit diodes, is also mounted in the cool-air intake stream providing the same cooling features as the regulator.

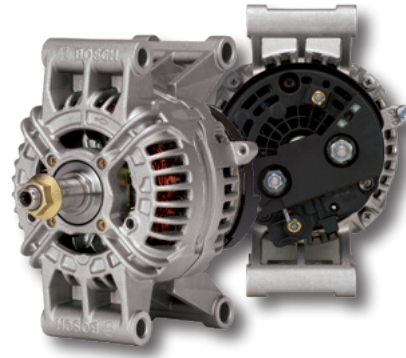
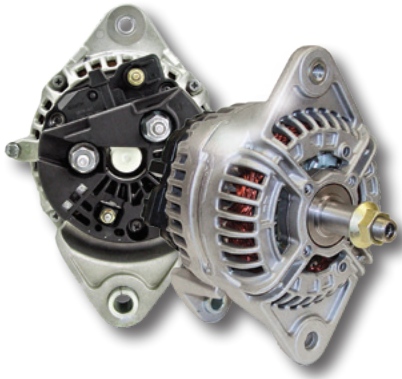
Advanced Temperature-Resistant Electronics, like the integrated-circuit regulator and high-amperage rectifier, are designed and manufactured by Bosch to meet the needs of the most demanding school bus applications.

Dual Internal Cooling Fans optimize the amount of cooling air being pulled through the unit. Air is drawn in from both the front and the rear of the alternator forcing heat out through the vents circling the housing.

Exclusive Bosch Long-Life Bearing Technology couples special heat-treated, long life steel bearings with heat-resistant lubricant to withstand heat and wear for miles of reliable service.

Patented Bosch High-Efficiency Winding Technology uses 30% more copper than competitive units for increased efficiency, resulting in fuel savings.

Heavy Duty Slip Ring Technology significantly diminishes wear on the brushes for longer service life and greater reliability.



Trusted Bosch Quality

As the world's largest alternator manufacturer, Bosch has been a major supplier of new alternators and starters to OE vehicle manufacturers since 1913, and is also a highly regarded supplier of both new and remanufactured units for the aftermarket. Recognized worldwide as a leader in innovative automotive and heavy duty technology, Bosch takes pride in its quality reputation and works continuously to advance its standards of excellence. All Bosch School Bus Alternators are built to stringent precision and performance criteria, and are 100% factory tested to ensure superior reliability and performance over the long haul. You can trust Bosch to deliver!

Feature	Benefit
200 Amp operating output and higher output at engine idle	Increases battery life for maximum power under all vehicle conditions
Temperature and vibration-resistant materials and components	Unmatched reliability over longer service life
Exclusive Bosch self protection voltage regulator	Protects internal components from excessive heat
Dual internal cooling fans, and externally-mounted rectifier and regulator	Virtually eliminates heat damage, promoting long life
Exclusive Bosch long-life bearing technology	Reliable performance and increased service life
Advanced, high-efficiency design and operation	Increases fuel economy
2 part numbers with unique terminal configuration	Replaces over 200 OE part numbers
24 month/200,000 mile warranty	Best-in-class warranty



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