

Delco Remy

SOLUTIONS



New 35SI - Some Alternators *Can* Stand the Heat

Delco Remy Unveils Heavy Duty Brushless Alternator for Today's Hotter Engine Compartments

It's no secret that today's heavy duty engine compartments are smaller, tighter and hotter. In fact, the introduction of the latest emissions-compliant EGR and ACERT* engines has resulted in a new set of challenges for leading heavy duty component and system manufacturers.

Delco Remy has responded to this challenge through the introduction of the 35SI family of alternators, the first heavy duty alternators engineered specifically to address the increased underhood temperatures encountered in today's commercial vehicles.

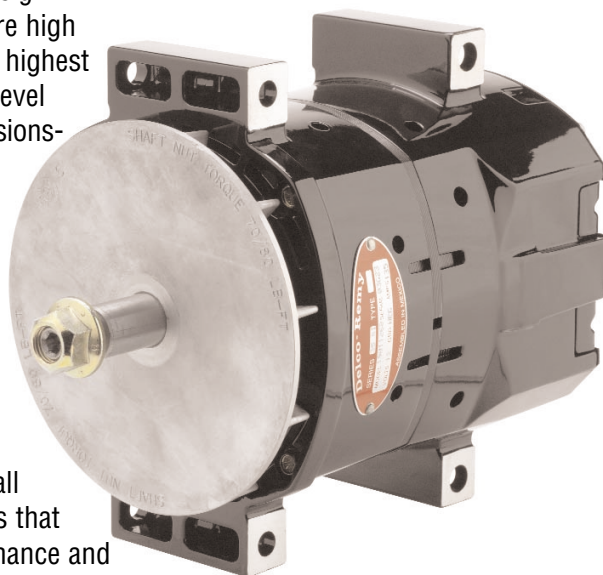
The 35SI, available in 110- and 135-amp models, features design enhancements that ensure high current production at the highest underhood temperature level (105° C) of today's emissions-compliant engines. The rugged 35SI has passed brutal testing at this level for over 2,000 hours at 3,000 RPM, the hottest operating conditions for any heavy duty alternator.

"Our engineers monitor all vehicle technology trends that could impact the performance and

reliability of electrical system components," said Greg Reimmuth, heavy duty product manager for Delco Remy. "The 35SI is a preemptive solution that will help fleets and other vehicle owners ensure unsurpassed alternator life under the most challenging conditions."

The new 35SI alternator features strategically placed radiant casting and back-plate vents to maximize heat transfer. The 35SI also features advanced-design high efficiency stator windings an optimized rotor, and oversized rectifier bridge that result in high output yet reduced heat production.

* ACERT is a registered trademark of Caterpillar, Inc.



Andis Answers

Randy Andis, Delco Remy's director of fleet services, answers your questions about vehicle electrical systems. Contact Randy via e-mail at andis.randy@delcoremy.com.

Q: Why is operating temperature becoming an issue for today's electrical system components?

A: There are a couple of factors driving this issue: First, vehicle OEMs have made significant strides in reducing overall vehicle weight. This has led to smaller, tighter engine compartments that see reduced air flow. Additionally, the development of cleaner, EGR-type diesel engines has resulted in increased underhood temperatures. These engines are extremely efficient and very reliable – but they produce more external heat than their older counterparts. And increased heat can degrade the performance and reliability of conventional alternators.

Q: How does Delco Remy test alternator performance?

A: As the world's leading electrical systems supplier, we have tremendous insight to the real-world performance of alternators, starters and batteries. This enables us, first, to design unique solutions to real in-field performance issues. We then put each of our products through rigorous performance validation. For example, development of the 35SI included having to pass a 2,000-hour high temperature test before being approved for sale.

Technical Toll-Free Hotline: 1-800-372-0222

Remote Sense – Optimal Output Equals Optimal Performance

More Reasons to Rely on New Delco Remy 35SI Alternators



The new Delco Remy 35SI family of alternators includes a broad range of enhanced design specifications to ensure exceptional performance even under today's higher engine-compartment temperatures.

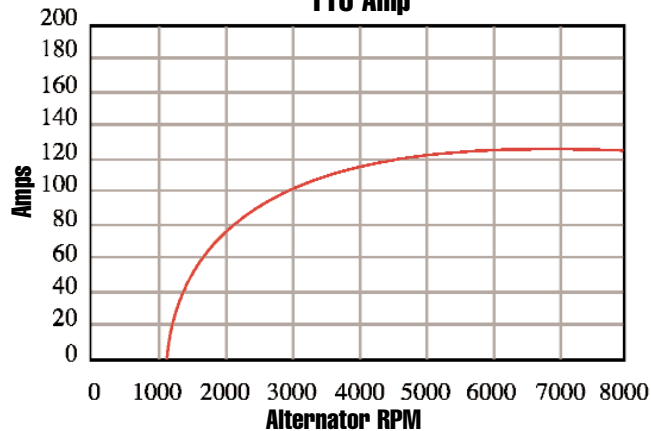
Delco Remy also offers the premium feature "Remote Sense" technology option on the 35SI. Remote Sense enables the alternator to automatically adjust voltage output based on the voltage measured at the battery terminals.

If, for example, the alternator senses that less-than-ideal current is reaching the batteries (possibly due to voltage drop in the cable, improper wiring or a loose connection), it will automatically increase output to compensate for the loss.

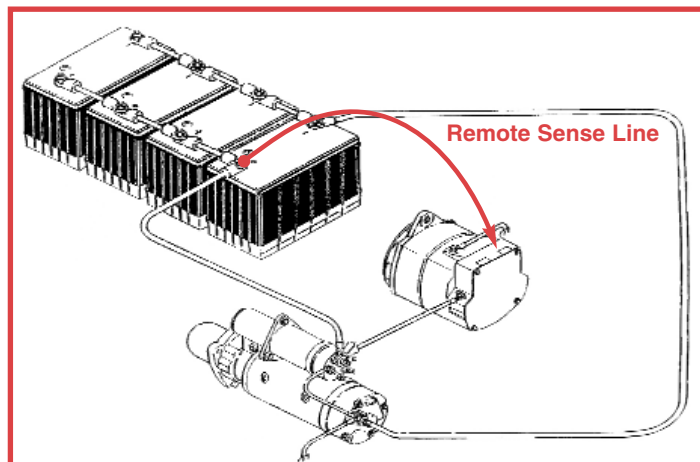
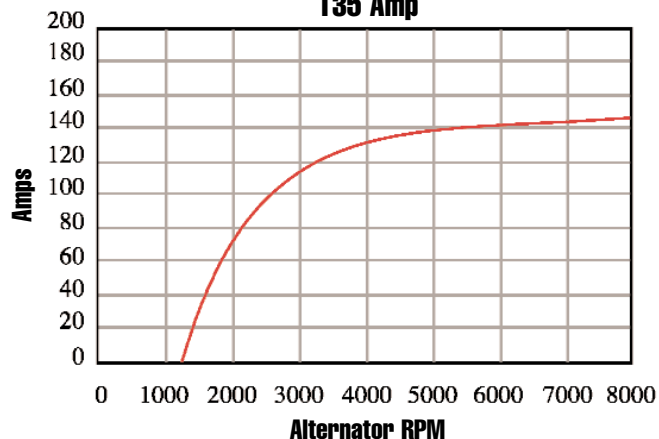
This important feature operates through a separate circuit that connects to the alternator's fourth terminal. The Remote Sense feature also can be found on Delco Remy 33SI and 34SI alternators.

Thanks to this advanced technology, you can expect an optimized system that produces fewer jump starts and battery charging issues, reduced maintenance expense and extends battery life.

**35SI Charging System Performance
110 Amp**



**35SI Charging System Performance
135 Amp**



As seen here, the Remote Sense feature provides a direct circuit from the alternator to the vehicle's batteries, ensuring highly accurate voltage readings and enhanced electrical system reliability.