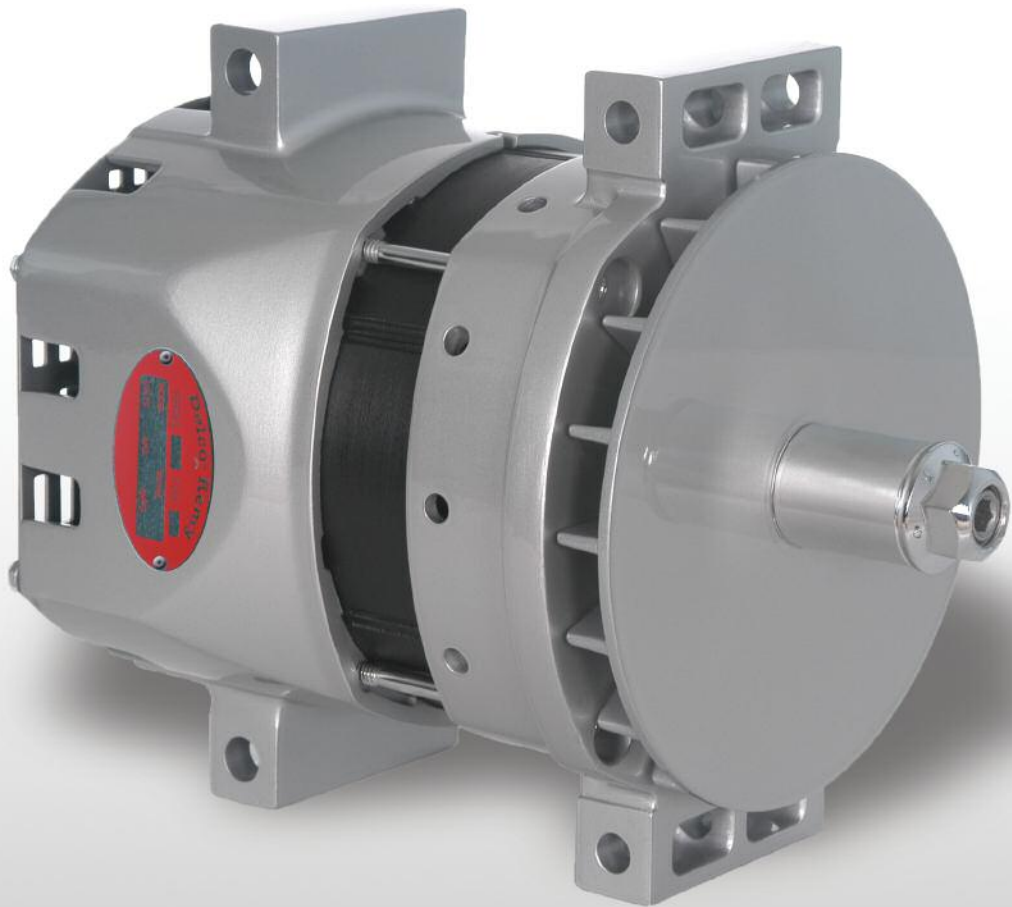


# **4051™**

**Heavy Duty Brushless Alternator  
High Output - 240, 275 and 300 Amps**



# 40SI High Output Alternator

## The Most Efficient Alternator You Can Buy



### High efficiency translates to less engine horsepower requirements, resulting in substantial fuel savings.

Real time operating data was collected on several vehicle applications for the overall vehicle and electrical system. The following chart shows the fuel cost savings over a typical life cycle by increasing the alternator efficiency from 60% to 70%.

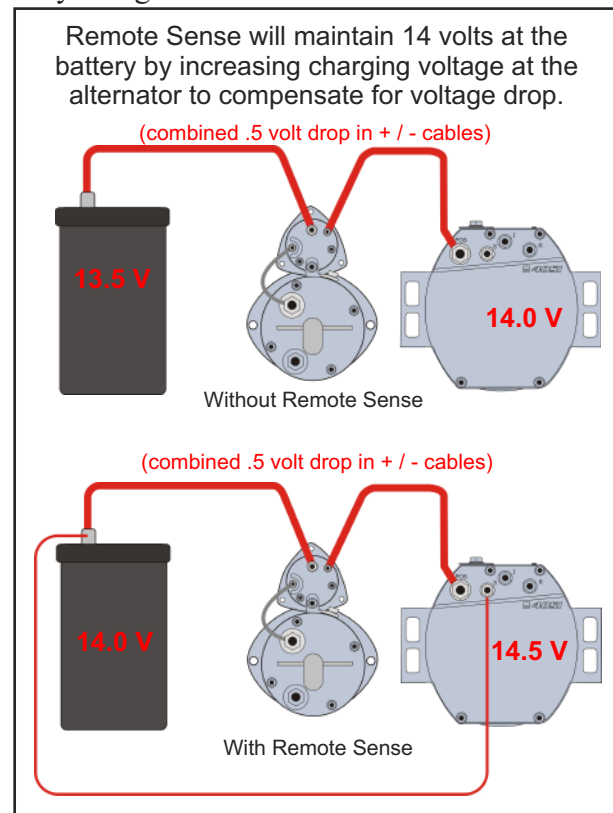
Fuel Savings				
Vehicle Type & Miles Driven	Average Current	Fuel Cost with a 60% Efficient Alternator	Fuel Cost with a 70% Efficient Alternator (40SI Model)	Savings
Line Haul Tractor (500k mi)	84 amps	\$4,534	\$3,778	\$756
City Tractor (350k mi)	40 amps	\$2,235	\$1,863	\$372
School Bus (250k mi)	102 amps	\$9,040	\$7,533	\$1,057

### Remote Sense for Intelligent Battery Management

Due to resistance in battery cables, environmental factors and other conditions, the voltage from the alternator drops by the time it reaches the battery. Just because the alternator is sending 14 volts doesn't mean that the batteries are receiving 14 volts. That's why we've included Remote Sense on all models.

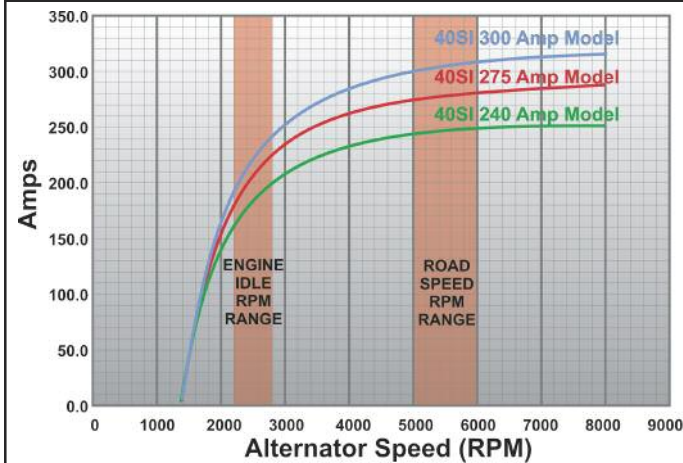
With Remote Sense, a second wire reads the

actual voltage *at the battery*. It signals the alternator to boost its output to compensate for voltage drop ensuring 14 volts *at the battery*. Research has shown that an increase of just 1/2 volt, when needed, can cut the battery charge time in half. At the end of the day, it can make the difference between batteries that are fully charged and those that aren't.



# Specifications

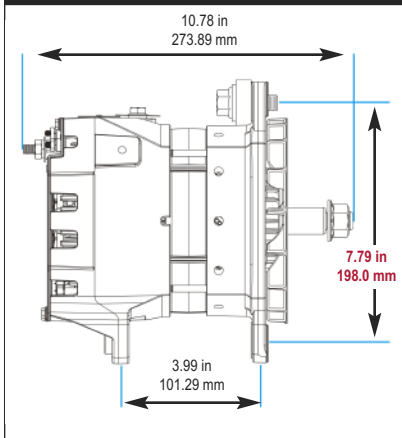
## 40SI 12-Volt Performance Curves



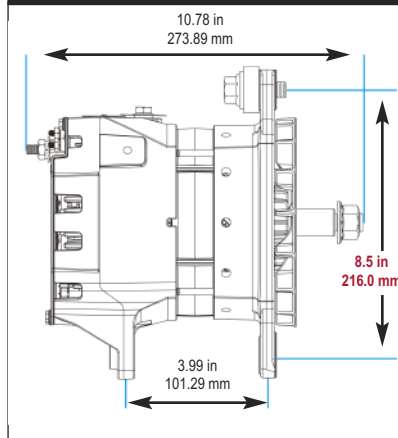
## Delco Remy 40SI Alternator

Design:	Brushless
Performance Output:	12 Volts: 240 Amps (160 Amps at Idle) 12 Volts: 275 Amps (180 Amps at Idle) 12 Volts: 300 Amps (190 Amps at Idle)
Maximum Speed:	8,000 RPM
Rotation:	Clockwise
Temperature Limits:	Low: -40° C (-40° F) High: 125° C (257° F)
Polarity:	Negative Ground
Efficiency:	70%
Weight:	31 lbs (14.1 kg)

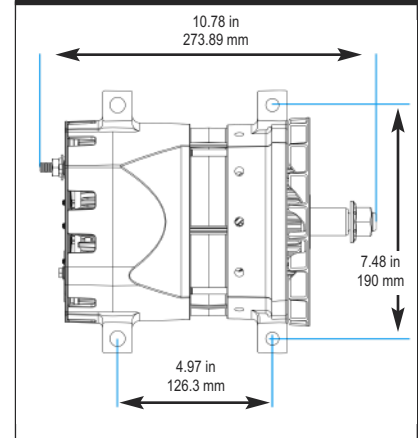
## J180 Short Hinge Mount



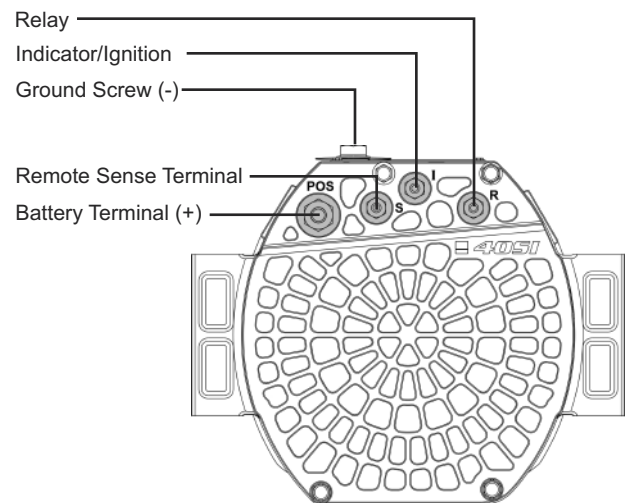
## J180 Long Hinge Mount



## Pad Mount



**INSTALLATION DETAILS.** On the J180 hinge-mount alternators, the difference between the J180 short hinge mount and the J180 long hinge mount is in the distance separating the bolt holes at the front of the alternator. (7.79 inches on the short hinge and 8.5 inches on the long hinge.) Use an accurate ruler or the gauge at the right edge of this page to measure your existing unit.



## Aftermarket Warranty

School Bus	2 Years Unlimited Miles
Truck Emergency Vehicle Shuttle Bus Recreational Vehicle	1 Year Unlimited Miles
Details can be found at <a href="http://www.delcoremy.com">www.delcoremy.com</a>	

**NOTE:** When the Remote Sense terminal is not connected, the alternator operates and regulates voltage normally.

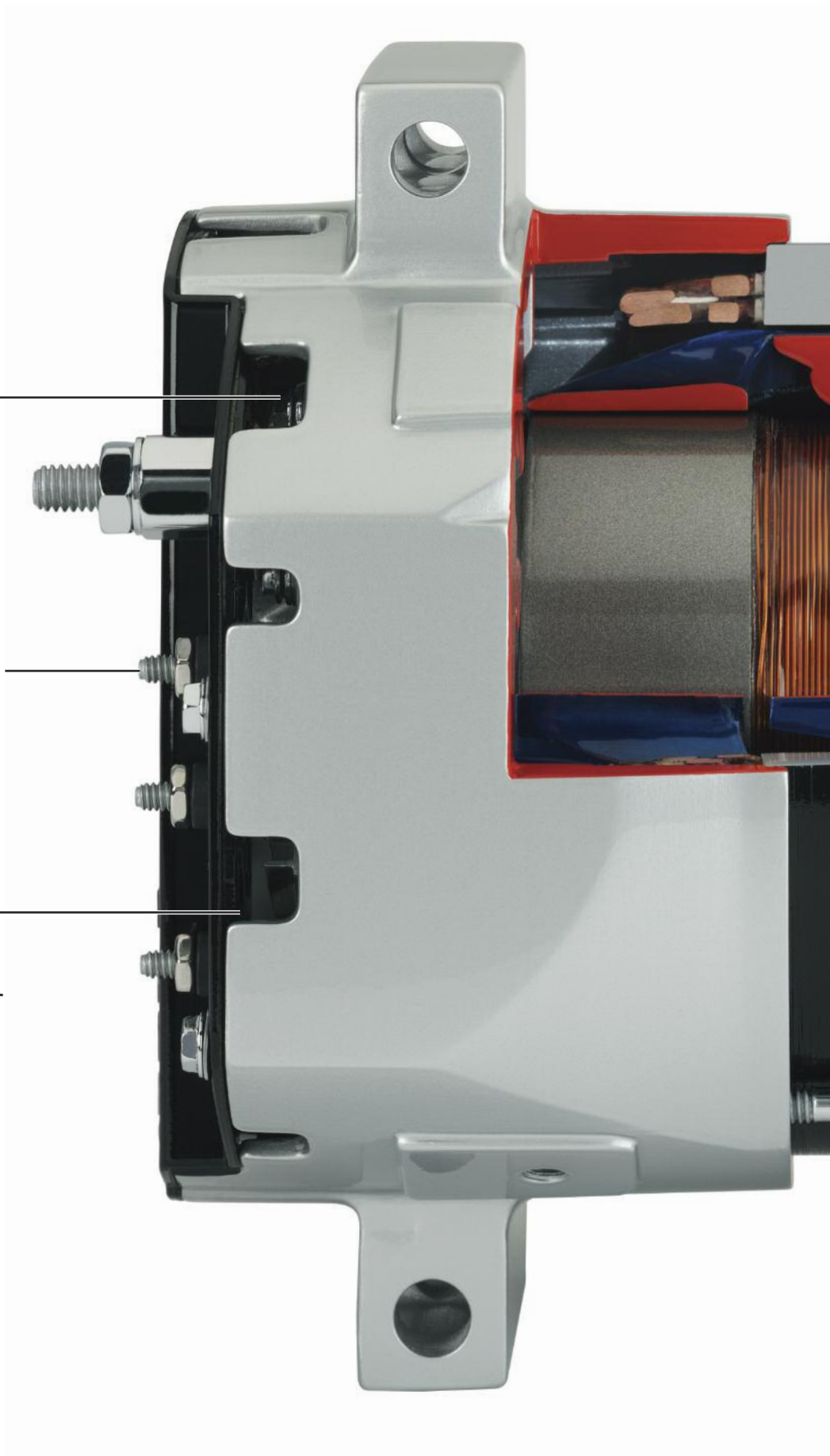
J180 Long Hinge Mount Distance Between Bolt-Hole Centers 8.50 in (216.0 mm)  
J180 Short Hinge Mount Distance Between Bolt-Hole Centers 7.79 in (198.0 mm)

# 40SI High Output Alternator

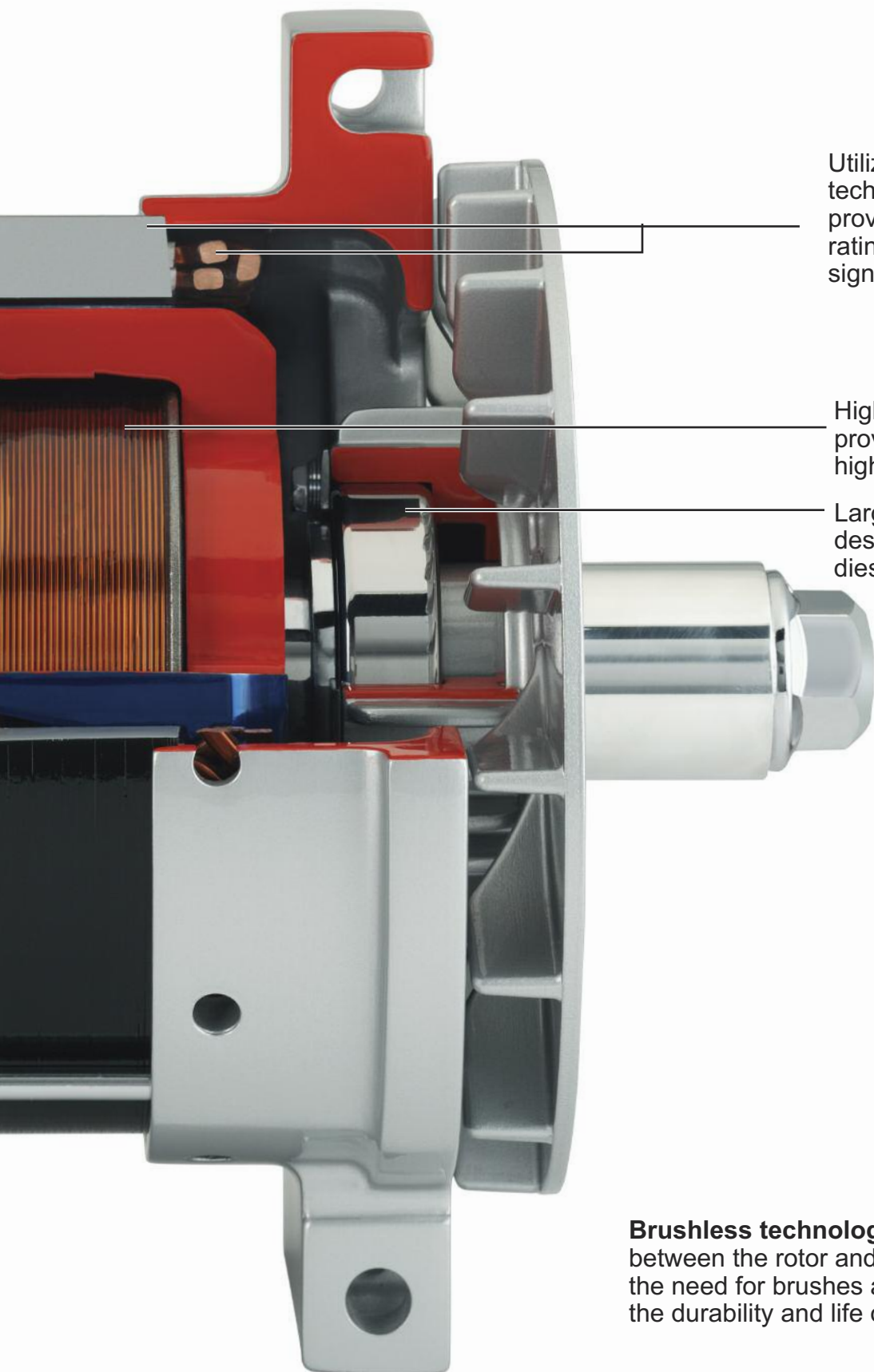
Technologically advanced internal self-excite, auto-start regulator ensures alternator charging at low engine RPM at vehicle start, when you need the performance the most.

Remote Sense terminal, when connected, can improve battery charge time up to 50%.

High temperature internal electronic package includes 12 diodes with an unsurpassed 80 amp rating each for superior durability.







Utilizing Remy's hybrid motor technology, the stator design provides the highest efficiency rating in its class, resulting in significant fuel savings.

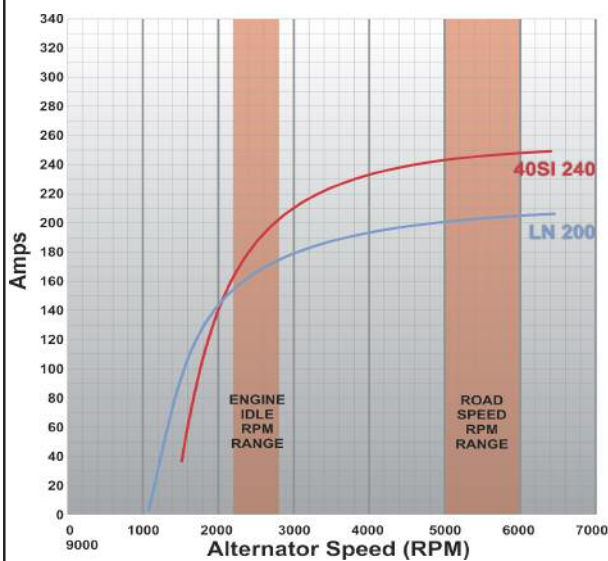
High copper fill field coil provides maximum low and high RPM performance.

Large heavy duty bearing designed for the toughest diesel applications.

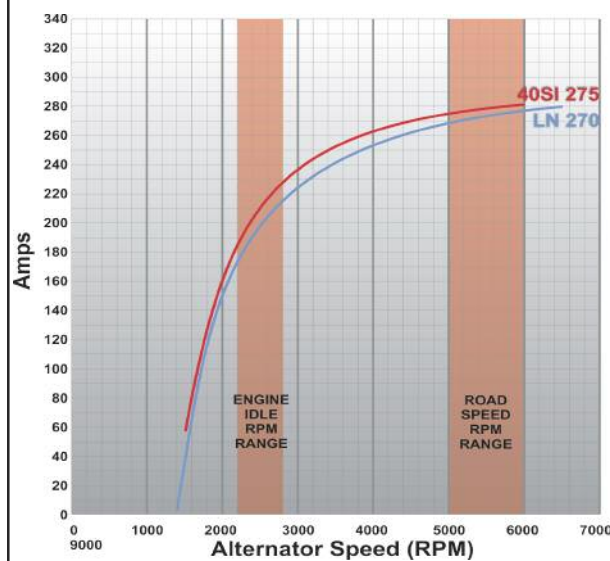
**Brushless technology** transfers magnetic fields between the rotor and stator air-gap eliminating the need for brushes and dramatically increasing the durability and life of the alternator.

# Competitive Comparison

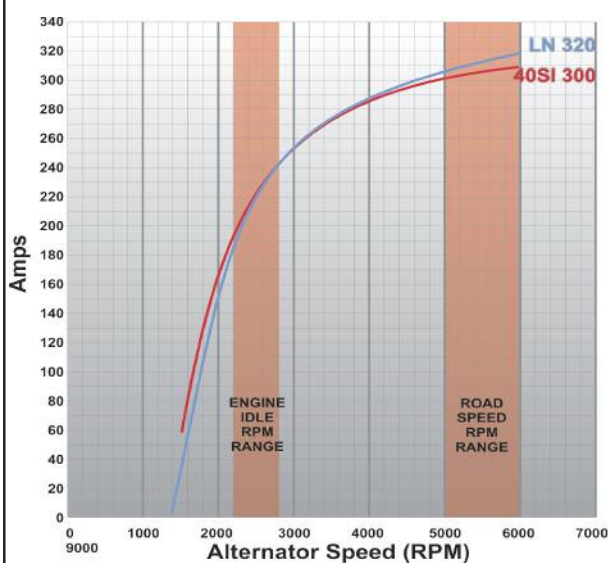
40SI 240 Amp vs. LN 200 Amp



40SI 275 Amp vs. LN 270 Amp



40SI 300 Amp vs. LN 320 Amp



## Brushless Advantage

The brushless design of the 40SI transfers magnetic fields between the rotor and stator air-gap without brushes. By eliminating the brushes, which wear over time, the service life and durability of the alternator are dramatically increased, which means that it will continue to save fuel for you year after year.

## 40SI Target Markets

The 40SI alternator is one of the first of the new generation of Delco Remy high-efficiency alternators. Everything about it is designed for high output, high efficiency and long life, from the brushless design to the high temperature ratings. It's perfectly suited to the following applications:

- School Buses
- Shuttle Buses
- Emergency Vehicles
- Refuse Trucks
- Utility Work Trucks
- RVs
- Line Haul with Anti-Idling Systems

	40SI	Leece Neville
Design	Brushless	Brush
Maximum Speed	8,000 RPM	8,000 RPM
Temperature Rating	125°C	110°C
Average Efficiency	70%	60%
Weight	31 lbs (14.1 kg)	32 lbs (14.4 kg)
Stator Diameter	152 mm	167 mm
Length	260 mm	272 mm
Remote Sense	Yes	No



# Cross Reference

## Competitive Interchange Data

Mounting	Delco Remy Model	Delco Remy Part #	Output	Leece-Neville Part #	Leece-Neville Sales #	Output
Pad	40SI	8600338	240	BLP2332GH	BLP2332GH	185
				BLP2334GH	BLP2334GH	185
				A0014940PA	4940PA	200
				A0014948PA	4948PA	200
				A00149551PGH	4951PGH	200
				A0014958PA	4958PA	220
				A0014959PA	4959PA	220
Replaces all Delco Remy Pad Mount Styles						
J180 Short Hinge	40SI	8600339	240			
Replaces all Delco Remy J-180 Mounting Styles						
J180 Long Hinge	40SI	8600390	240	A0014850AA	4850AA	200
				A0014860AA	4860AA	200
				A0014860JB	4860JB	200
				A0014861JB	4861JB	200
				A0014863JB	4863JB	200
				A0014868JGH	4868JGH	200
				A0014884JB	4884JB	200
				A0014885JB	4885JB	220
				A0014887JB	4887JB	220
				A0014852AA	4852AA	240
				A0014869JB	4869JB	245
				A0014873JB	4873JB	245
				A00114854AA	4854AA	250
				Pad	40SI	8600094
A0014944PA	4944PA	270				
A0014947PA	4947PA	270				
A0014949PA	4949PA	270				
A00114949GH	4949GH	270				
A0014975PAA	4975PAA	270				
Replaces all Delco Remy Pad Mount Styles						
J180 Short Hinge	40SI	8600279	275			
Replaces all Delco Remy J-180 Mounting Styles						
J180 Long Hinge	40SI	8600280	275	A0014856AA	4856AA	270
				A0014867JB	4867JB	270
				A0014867JGH	4867JGH	270
				A0014870AA	4870AA	270
				A0014870JB	4870JB	270
				A0014871JB	4871JB	270
				A0014872AA	4872AA	270
				A0014872JB	4872JB	270
				A0014944PA	4942PA	270
				A0014947PA	4947PA	270
				A0014949PA	4949PA	270
				A0014949PGH	4949PGH	270
				A0014975PAA	4975PAA	270
Pad	40SI	8600298	300	A0014962PA	4962PA	320
				A0014962PAH	4962PAH	320
				A0014966PAA	4966PAA	320
Replaces all Delco Remy Pad Mount Styles						
J180 Short Hinge	40SI	8600299	300			
Replaces all Delco Remy J-180 Mounting Styles						
J180 Long Hinge	40SI	8600300	300	A0014890AA	4890AA	320
				A0014890JB	4860JB	320
				A0014892AA	4892AA	320



Remy International Inc., headquartered in Pendleton, Indiana, is a leading manufacturer, remanufacturer and distributor of Delco Remy brand heavy-duty systems and Remy brand starters, alternators and hybrid power technology.

**[www.delcoremy.com](http://www.delcoremy.com)**



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**[www.delcoremy.com](http://www.delcoremy.com)**

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