

### Trusted Bosch Quality

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 Long Haul Commercial Starters 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!



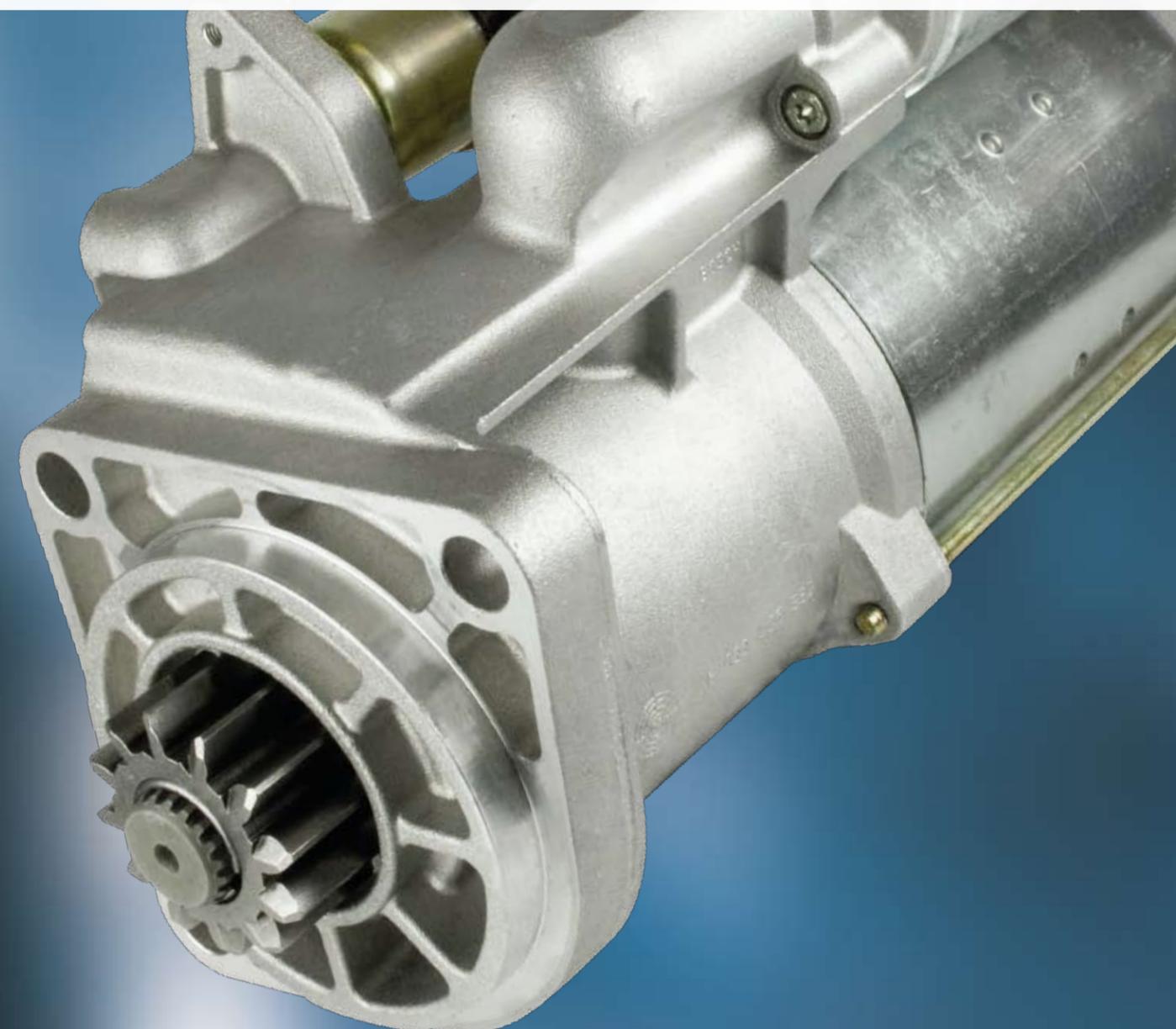
## Long Haul Commercial Starter

Advanced  
Starting  
Technology



**BOSCH**  
Invented for life

Feature	Benefit
Planetary gear reduction system	Increased torque and faster starts
Six pole field windings	Increased power and less sensitivity to a low state of battery charge for more reliable starts
Lower weight and compact size	Easier installation
Internal components protected by o-rings	Increased resistance to moisture, dust and dirt, promoting longer life
Two-stage solenoid	Prevents damage to the engine ring gear and extends the life of the starter pinion gear
Conical solenoid contacts, dual composite "long life" brushes and integral magnetic switch	Quicker starts, increased durability and longer life
Exclusive Bosch armature winding technology	Provides more copper and increases thermal conductivity; increased resistance to heat which extends the life of the unit



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### Bosch Long Haul Commercial Starters

Bosch Long Haul Commercial Starters are engineered with many new technical features specifically designed to outlast and outperform the original equipment starters on some of the toughest service equipment in use today. While previous designs without these latest features provide an average of only 25,000 starts, Bosch Long Haul Commercial Starters are designed for over 50,000 starts! You can trust these Bosch starters to keep commercial equipment up and running for the long haul!

### Advanced Performance Technology

The Bosch SR5065LH represents the latest technology available in commercial vehicle starting systems. It delivers longer life, more power, higher torque and less amp draw than competitive units. Bosch's six pole field windings are less sensitive to a low state of battery charge due to their reduced current draw. This feature is especially important to commercial equipment that sits idle for any period of time, leading to partially discharged batteries.

### More Torque and More Power

Diesel engines by nature are high compression engines requiring greater amounts of torque and power to turn over in all temperature ranges. Bosch Long Haul Commercial Starters utilize a planetary gear reduction system to create more torque for faster starts. The six pole field windings create more power than windings with fewer poles or systems with magnets. With 24 volts and 5.5 kilowatts, the SR5065LH is 27% more powerful than the units it replaces!

### Improved Resistance to the Environment

Internal components are protected from the environment by o-rings which seal off the field housing from the elements. Resistance to moisture, dust and dirt is greatly increased preventing damage to internal electrical and mechanical components.

### Lower Weight and Compact Size

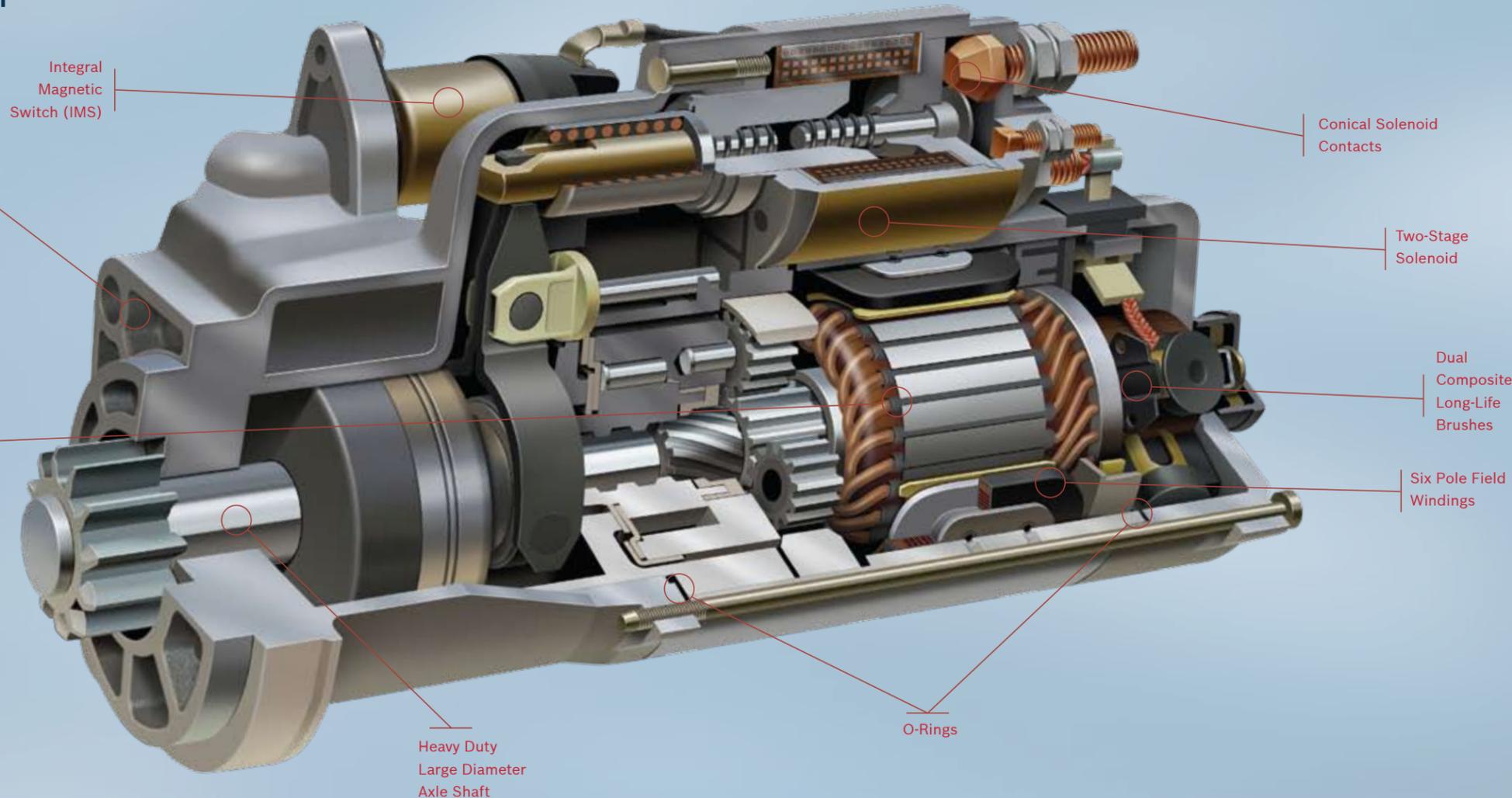
Due to the open drive end design and the use of a planetary gear reduction drive system, the size and weight of the starter are decreased. This results in a unit that is easier to install in tight engine compartments, and the reduced weight reduces fatigue on installers. At only 9 kg (21 lbs.), this unit is 38% lighter than comparable units.

### Built for the Long Haul

Bosch Long Haul Commercial Starters are designed specifically for severe duty commercial applications. They deliver the durability, longevity and high power critical to keeping commercial equipment up and running, productive and profitable.



### SR5065LH Commercial Starter



**Exclusive Bosch Armature Winding Technology** with stamped rods and 3.15mm round wire provides more copper than competitive units. More copper increases thermal conductivity, which provides more resistance to heat and extends the life of the unit.

**Conical Solenoid Contacts** create a greater magnetic force between contact faces, which decreases "contact bouncing". When contacts bounce, arcing occurs which decreases the life of the contacts and the starter itself. Since the conical contacts create a greater magnetic force, there is more pressure behind the entire gear engagement process resulting in more positive, quicker starts.

**Dual Composite (Lead Free) Long Life Brushes** create better surface contact, resulting in less heat and lower current draw. The lower heat and lower draw result in longer life and quicker starts.

**Two-Stage Solenoid** provides a "soft start" by not allowing the pinion gear to rotate until the pinion is at least 80% engaged with the ring gear. Better engagement allows the starter pinion gear to last longer and prevents costly damage to the engine ring gear.

**Heavy Duty Large Diameter Axle Shaft** reduces flexing and ensures that the pinion gear stays concentric with the ring gear during engine start-up. Precise concentricity during gear engagement ensures faster starts and reduces milling or grinding of both the starter pinion and the flywheel.

**Integral Magnetic Switch (IMS)** ensures the starter will disengage with the engine when sustained operation is reached. Preventing the starter from functioning during engine operation protects the heavy duty overrunning clutch and pinion gear and results in long life.

**Six Pole Field Windings** create more power than windings with fewer poles or systems with magnets.

**O-rings** seal internal components from the environment and provide resistance to moisture, dust and dirt, preventing damage to internal electrical and mechanical components.

**Open Drive End** eliminates drive end failure and prevents the drive gear from seizing on the shaft.