

起动机和发电机

博世高效型发电机 – 节省油耗，降低二氧化碳排放

Starter Motors and Generators

Efficiency Line generators – reduced fuel consumption, less CO₂ output



BOSCH

博世 科技成就生活之美



产品介绍

Product description

由于大气污染立法日益严格和持续上涨的油价，消费者对清洁、经济的车型需求日益增加。高效型发电机（EL）不仅注重高性能，还尤其注重效率的提高。其高效率可使二氧化碳排放减少达2%，这不仅使驾驶员和环境受益，同时也是汽车厂商的重要卖点。

Stricter legislation on clean air together with unstable fuel prices tending upward are increasing the demand for clean, economical automobiles. So the development of our Efficiency Line generators (EL) concentrated not only on high performance but above all on increased efficiency. The result: a new, extremely efficient generation of generators with a particularly high degree of efficiency permitting reductions in fuel consumption as well as CO₂ output of up to 2% – good for motorists, good for the environment and an important sales argument for vehicle manufacturers.

效能增加，油耗减少

Increased efficiency, reduced fuel consumption

发电机效率越高，发电机工作越高效，产生电能所需的油耗也更少。通过进一步优化的电气布置，如果选用高效二极管和同步整流器，高效型发电机效率可达77%或者80%(VDA标准)。

The greater the efficiency, the more effective the generator and the less fuel required for generating electrical energy. Thanks to their further improved electrical layout, this generation of generators achieves a very high degree of efficiency up to – if an optional high efficiency diode (HED) or synchronous active rectifier (SAR) from Bosch is used – 77% or 80% (according to VDA).

满足各种输出需求的经济、清洁的解决方案

The economical, clean solution for all output ranges

与上一代产品相比，这些发电机的性能得到进一步提高，尤其是在发动机低转速条件下的输出。我们的高效型发电机有3种规格，输出范围覆盖130安培到210安培。因此，高效型发电机可广泛应用在各种车型，提供稳定的电源。

By comparison with their predecessors, the output of these generators has been further increased, especially at low engine speeds. Our EL series is available in three sizes. These cover a output range from 130 to 210 Ampere (at 6,000 rpm). EL generators are thus suitable for reliably supplying the widest possible range of vehicle electrical systems with energy.

车辆应用更舒适、更灵活

Greater comfort and additional flexibility for application engineering

高效型发电机工作时候噪音低，可以使用多功能调节器和带通讯功能的LIN调节器。另一个优点是，设计紧凑，工作环境温度可达125 °C，可以在发动机舱内灵活安装。

EL generators are quiet in operation and can be supplied with multi-function regulators (MFR) or regulators with a communication interface such as LIN, for instance. Yet another convincing feature is their compact design and their heat resistance to temperatures of up to 125 °C. Different mounting situations within the engine compartment are thus no problem.

低噪音

Extremely low noise levels

降低车内噪音对于整车尤其是高端车型非常重要。5相绕组技术可以有效降低电磁噪音, 尤其是在发动机低速时, 如挂空档。

Reducing the noise transmitted to the interior of the vehicle is a particularly important concern especially in the high-end segment. Here too, the use of a five-phase technology significantly reduces induced magnetic noise, especially when the engine is running at low speed, for instance with the gears in neutral.

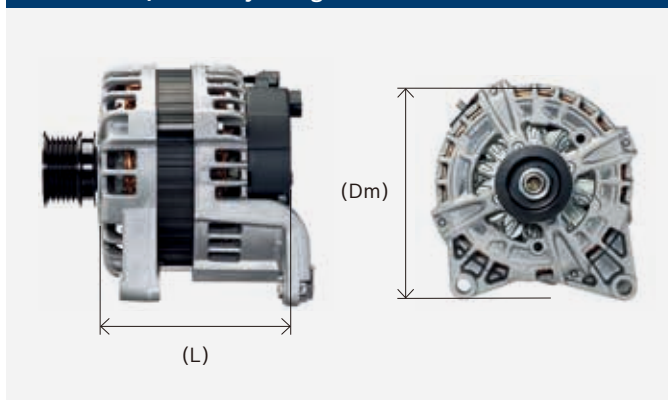
全球通用

Worldwide availability

随着汽车市场全球化程度进一步加深, 高效型发电机在欧洲、中国和南非生产。各地区分公司负责产品的本地应用。因此, 博世不仅向全球客户提供高质量的产品, 同时也可满足不同市场的特殊需求。

Following the further advancing globalization of the automotive market, the EL generator is manufactured in 3 regions of the world: Europe, China and South Africa. Similarly, the complete application is made by the Bosch associates in the region locally. This approach enables Bosch to offer high-quality products to customers throughout the world that meet the highest quality standards and at the same time can be adapted to the needs and requests of specific regional markets.

高效型发电机/Efficiency Line generator



14 V 技术数据 Technical data of 14 Volt version	下限/from	上限/to
转速为1,800 rpm时的额定电流 (A) Rated current at 1,800 rpm (A)	70	150
转速为6,000 rpm时的额定电流 (A) Rated current at 6,000 rpm (A)	130	250
效率, VDA (%) Efficiency, VDA (%)	70	80
最高3,500 rpm下的电磁噪声 (dB) Magnetic noise (dB) up to 3,500 rpm	64	72
10,000 rpm下的气动噪声 (dB) Aerodynamic noise (dB) at 10,000 rpm	92	94
不带皮带轮的长度 (L) (mm) Length (L) without belt pulley (mm)	120.5	138
不带螺栓的直径 (Dm) (mm) Diameter (Dm) without bolts (mm)	140	148
不带皮带轮的重量 (kg) Weight without belt pulley (kg)	5.6	7.4
转动惯量 kg/cm ² , 无皮带轮 Inertia (kg/cm ² , without belt pulley)	25	38

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