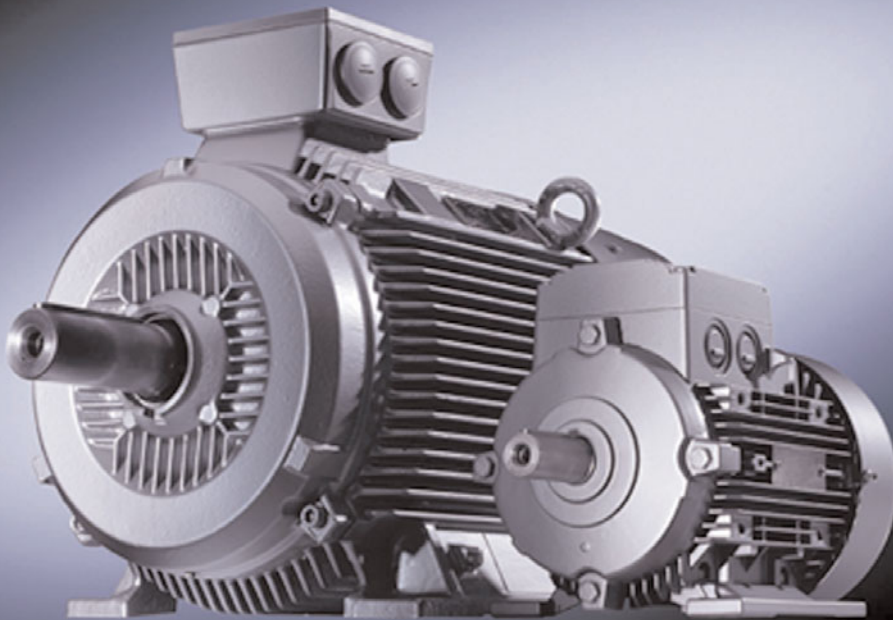


1LG6

General Purpose, Eff1, Cast Iron Frame
TEFC IEC Motors



iec

MOTORS

Siemens 1LG6 IEC motors are ideal for both indoor and outdoor applications and in severe operating atmospheres. These industry workhorses are ideal for use in chemical processing, mining, foundry, pulp and paper, waste management and petro/chemical applications.

Performance Specifications

- 18.5kW to 200kW
- 1.15 service factor, 40°C ambient
- Dual frequency rated
- 3000, 1500, 1000
- 3600, 1800, 1200
- 3 phase, 50 Hz; 230D/400Y V and 60 Hz 460VD
- 3 phase, 50 Hz; 400D/690Y V and 60 Hz 460VD
- Special voltages (50Hz and 60Hz) available
- Increased energy-saving EU efficiency class EFF1
- Meets or exceeds EPAAct efficiency standards (CC 032A)
- Class F insulation, Class B temperature rise
- Continuous duty, suitable for converted fed operation
- CE marked, IEC 60034
- NEMA MG1-12
- UL and CSA marks available
- 180 through 315 frame

1LG6

General Purpose, Cast Iron Frame TEFC IEC Motors

Features for Long Life

Frame and End Shields

Cast iron construction for exceptional heat dissipation and structural integrity. All motors are designed for IP55 (IEC 529), suitable for use in dusty or damp surroundings and ready for use in the tropics (IP56 and IP65 available).

Rotor

A unique offset laminated rotor core design provides improved efficiency, while larger bars and aluminum end rings reduce resistance for lower rotor losses. Each die cast aluminum rotor assembly is dynamically balanced (IEC 60034-14) for extended bearing life.

Stator/Windings

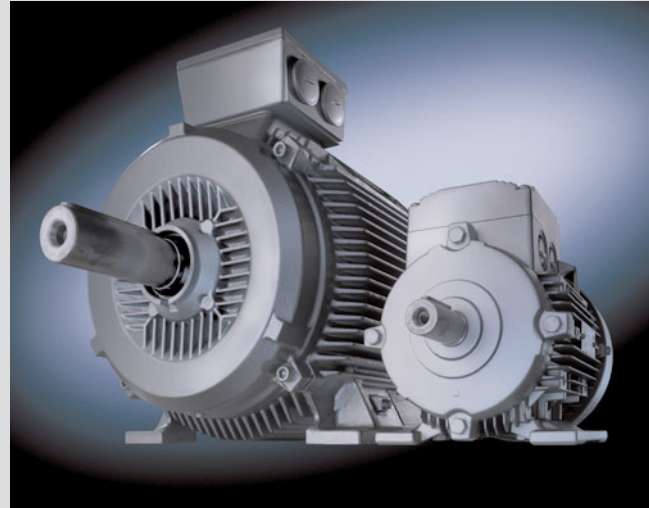
Manufactured with premium electrical-grade steel laminations and the finest copper electrical magnet wire for lower losses and improved efficiencies. A unique stator core design lowers flux density and increases cooling capacity. Large conductor cross-section reduces resistance, also lowering stator losses.

Insulation

The Durgnit® IR 2000 Siemens insulation system comprised high-grade enameled wires and insulating sheet materials combine with solvent-free-impregnating resin. The system ensures a high level of mechanical and electrical strength as well as good serviceability and long motor life. The insulation offers general protection for the windings against corrosive gases, vapors, dust, oil and increased humidity, and resist the normal stresses of vibration. The insulation of the motor is such that they can operate in converted fed operation up to voltage ≤ 500 V.

Cooling

Motors are fitted with a radial-flow fan that functions independently of the direction of rotation (cooling method IC 411 to DIN EN 60034-6). The air is blown from the NDE to the DE. The standard material of the external cooling fans, as well as the fan cowl, is glass-reinforced plastic. This material has been tested and certified for a 20-year lifetime. Metal fans and fan covers are available.



Bearings

Non-regreasable bearings are standard, but optionally available with regreasing devices up to frame size 250 (standard from frame 280 and above). The bearing nominal life is specified by standard calculation (DIN ISO 281) and is achieved or exceeds by 90% if used properly. If the operating conditions are below average, a bearing life of 100,000 (Lh10 hours) can be achieved.

Lubrication

The grease life for pre-lubricated motors is tailored to the bearing life. For re-lubricated bearings, the motors are provided a grease retaining system with the provision that when the grease containing chamber is full of old grease, the grease is then ejected to the outside of the motor. Siemens uses lithium-based grease, Esso Unirex N3 and Shell Alvania G3.

Conduit Box

The top-mounted, cast aluminum-construction terminal box, frame 225 and below (cast iron construction available as an option), and the cast iron-construction terminal box, frame 250 and above, can be ordered to the right or left side of the motor, as well as rotated 90° and 180°.

Corrosion Resistance

Zinc-plated hardware, epoxy enamel paint and aluminum nameplate resist rust and corrosion (stainless steel hardware also available).

Flexible

All Siemens IEC motors are available with a wide variety of options to meet your specific motor needs.