Choosing the right motor elevates your performance

Ultra quiet operation - Compact design - High efficiency

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EMERSON. CONSIDER IT SOLVED.™
A motor is defined as a device that converts electrical energy into mechanical work using rotary motion. In elevators, motors of all types are used in various hoisting machine applications to raise and lower the load being transported, to open and close car and landing doors, raise and lower freight elevator landing doors and car gates, in fans that provide ventilation of car enclosures, to operate hydraulic elevator pumps and where required to keep the bottom of the hoistway dry and free of moisture in pit sump pumps as well.

In any given elevator installation, one is likely to find as many as a half dozen or more motors of various types, in numerous configurations and sizes in operation. One can readily recognize the importance of this component in elevator and escalator technology, and therefore, we have included a special section in this month’s issue of ELEVATOR WORLD on motors.

A recent quick analysis of a typical issue of EW indicated that there were over a dozen advertisements provided by companies that made, serviced, repaired or used motors in their products, and within this year’s EW Source, under the categories of motors and those that relate to their manufacture, repair and/or use, 81 companies are listed. With this important elevator component so essential to the elevator industry, we felt it would be very appropriate to dedicate a special section in one of our monthly issues of EW to that part of an elevator system without which the elevator as we know it would not exist.

The following section of this month’s issue provides a good bit of information on various types of elevator industry machines and components and the motors they contain. We feel it is essential reading, and we welcome your comments on any or all of the information included herein.
Delco Elevator Products Ltd. is proud to announce the ‘Torin‘ TGDPM1 ultra compact Machine. With its weight at only 1100lbs. and the ability for it to fit through any standard door opening it truly is the perfect choice for the most demanding of modernization projects. The ‘TGDPM1’ can also be mounted either vertically or horizontally which only adds to its application flexibility. An energy efficient (13HP or 21HP) permanent magnet motor offers energy savings of up to 35% over comparable units. Optional features such as a sheave brake will eliminate the need for a rope gripper which only furthers its benefits while working within the confines of the smallest rooms. Additional options such as machine bed plates, deflector sheaves and isolation rubber sets are available. The ‘TGDPM1’ is fully ASME 17:1 and CSA approved and offers speeds of both 200fpm and 350fpm at 2500lb. capacity. Delco also offers a full line of components and fixtures to suit your needs. Please contact Delco Elevator Products Ltd. today for your specific quotation requests.

Order info:
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**ELECTRICAL MOTOR REPAIR COMPANY, SINCE 1922**

A New Jersey based company committed to providing honest and reliable elevator motor and machine repair on a national level. Complete rewinding and rebuilding of all types of AC & DC motors, armatures, MG sets, escalator gear boxes, IMO pumps, deflector sheaves, brake shoe relining and KONE MRL machines. On site rewinding of large gearless motors is offered. OEM field and brake coils are manufactured and kept in stock for immediate delivery. The machine shop is tailored to the elevator industry which manufactures the industries leading MOD Flexible Coupler that is used on the modernization of geared machines along with custom motor mounting plates to accommodate new AC motors. We also repair and fabricate sleeving for worn bearing housings, bronze and Babbitt bearings, shaft repairs, welding and spray welding. Our field service includes turning and undercutting commutators on most gearless machines, sheave re-profiling and motor maintenance. We are the east coast warehouse for Imperial Electric and stock new MG sets, DC & AC Hoist, and Dry & Submersible Hydro motors that are ready to ship. Our warehouse also stocks many rebuilt motors, MG sets, DC hoist motors, rewound armatures for common motors (geared and gearless), and IMO Pumps.

Leroy-Somer drives for lifts: solutions par excellence for all applications

With more than 40 years’ expertise in the design and industrialisation of motors for lifts, Leroy-Somer offers reliable, innovative and high-performance solutions. Two ranges of gearless motors cover a large range of applications for both new and modernization projects.

The XA range motors cope with requirements up to 2500 kg and 3 m/s with a 2:1 roping arrangement. The “cigar” type design of these ultra-compact lightweight machines makes them easy to install in the lift shaft. The high-efficiency motors with low temperature rise ensure minimal vibration and excellent ride performance. They also offer the option of choosing between 2 sheave diameters in order to optimise the size of the selected machine.

The Z range can take shaft loads of up to 22 Tonnes and can be used on applications up to 5000 kg and 5 m/s with a 2:1 roping arrangement. Leroy-Somer also offers a complete customised solution thanks to mechanical options such as deflection sheaves with chassis or secure electronic systems for emergency operations (Licare).

An expert in specifying rotating machines, Leroy-Somer offers in addition gearless drives with its Z and XA ranges. In combination with Unidrive SP drives and their software dedicated to lift applications, Leroy-Somer provides a technical sales package which takes account of all the customers’ data and requirements: customised advice and guaranteed performance.

**LEROY-SOMER**

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ELMO SRL has more than 50 years qualified experience into the specified field of submersible electric motors for hydraulic elevators.

PRODUCT RANGE -
- Three-phase motors: ranges 1.5÷77 kW 50 Hz, 1.8÷92 kW 60 Hz.
- Single phase motors: ranges 1.2÷6 kW 50 Hz, 1.5÷7.4 kW 60 Hz.
- On request, CSA approved motor can be supplied.
- Motor with/without flywheel: suitable to be connected to all screw-pumps manufactured in Italy, Europe and USA.

QUALITY - The Quality System is conform to UNI EN ISO 9001:2008: Certification for the Design, Production, Trade of three phases, single phase electrical motors and accessories for hydraulic lifting systems.
RELIABILITY - The approach to the product reliability is, strategically wise, the one of continuously improving the project and the manufacturing process.
MARKET - 40% for domestic market / 60% all over the world.

HIWIN CORPORATION - GEARLESS TRACTION MACHINES
The HIWIN TMR-ELE-01 and TMR-ELE-02 series are the most popular gearless traction machines for driving private home elevators. We supply the most compact machine in the industry for 950 lbs and 1,400 lbs duty load elevators and speeds up to 80 ft/min., for traction rope or chain driven elevators. Our machines are powered by permanent magnet servo motors derived from our extensive experience in the semi conductor and machine tool markets. With a large number of machines installed on elevators and zero call back as of February 2012 we established ourselves as the highest quality supplier at the lowest cost.
Our products are CE and UL certified and comply to A17.1 and EN81 Elevator safety codes. Single brake and double brakes version are available. Our products are also used for commercial elevators up to 1,600 kg duty loads and speeds up to 2.5 m/s. Technical support is available from HIWIN centers in Chicago – USA, Offenburg – Germany and Taichung – Taiwan.

World Renown Motor and MG Set Repairs & Service
As a trusted service provider to the elevator industry with over 25 years of experience, Renown Electric Motors proudly offers 24/7/365 service through our state of the art repair facility offering complete remanufacturing and machine shop capabilities. We have the engineering expertise and production capacity to remanufacture all major AC & DC motors and MG sets up to 5000 hp. We maintain a large inventory of wire to rewind motors and manufacture field coils 24 hours a day eliminating downtime. Our extensive parts inventory includes brushes, brush holders, Brush springs, field coils, bearings and commutators. Our wide ranging inventories of remanufactured and surplus motors and MG sets are available to offer quick turnaround to reduce downtime. Renown's commitment to customer service extends beyond the reaches of our shop offering on-site commutator undercutting and stoning, predictive maintenance, on-site laser alignment, balancing, vibration analysis, infrared thermography, oil analysis and non-destructive testing.

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Leroy-Somer Licare Module: A Cost-Effective Solution for a Safe Rescue

Leroy-Somer Licare module allows the evacuation of a lift in the event of unavailability or failure of the main control system. Supplied by a 24V 7Ah battery, the module is fully independent and does not require an UPS System. The Licare module can operate even if the lift control system, the inverter or the encoder has failed.

After that authorization (“key switch”) and start signal have been given by the operator, the car will move in successive stages until it reaches the next floor. The Licare module controls the opening of the brakes and checks motor speed, brakes status and cabin direction.

The Licare module is a cost effective solution to guarantee a safe rescue.

World Renown Motor Parts & Services

As a trusted service provider to the elevator industry with over 25 years of experience, Renown Electric Motors & Repair proudly offers an extensive parts inventory includes brushes, brush holders, brush springs, field coils, bearings, commutators and submersible pumps. Our wide ranging inventories of remanufactured and surplus motors and MG sets are available to offer quick turnaround to reduce downtime. Renown’s commitment to customer service extends beyond the reaches of our shop offering on-site commutator undercutting and stoning, predictive maintenance, on-site laser alignment, balancing, vibration analysis, infrared thermography, oil analysis and non destructive testing. Call today to learn how our years of elevator trade expertise can help keep your motors and generators running smoothly.

Renown Electric Motors and Repair also offer. 24/7/365 service through our state of the art repair facility offering complete remanufacturing and machine shop capabilities. We have the engineering expertise and production capacity to remanufacture all major AC & DC motors and MG sets up to 5000 hp.

Technologically Advanced ACPM machines from the Imperial Electric Company

With over one hundred years of experience in electrodynamic devices, Imperial Electric can supply you with a complete line of high-performance motors and drive systems to keep your products in motion, and performing to specifications. Imperial Electric products include AC and DC elevator motors, geared traction machines, and industry leading ACPM Gearless Machines—which provide unusually low speed, high torque operation and consume up to 40% less power than traditional asynchronous motors. Imperial Electric gearless AC machines are also quieter than the competition and are nearly maintenance free. Known for durability and reliability, Imperial Electric gearless AC machines use rugged cast iron frames protecting a totally enclosed, self-cooling motor. Machine brake and sheave assemblies are removable and replaceable, features that will provide cost savings over long years of service. With the introduction of gearless AC machines to complement industry-leading gearless DC machines, Imperial Electric boasts the most comprehensive gearless machine line in the elevator industry. Imperial Electric is part of Kinetek, a global manufacturing enterprise that provides custom engineered control, motor and drive system solutions for world class customers in the elevator/escalator, commercial floor care, material handling/aerial lift, commercial food equipment, golf car/utility vehicle, renewable energy and medical markets.
Leroy-Somer Boosters for Brakes Supply

Leroy-Somer CDF6 and CDF9 modules are boosters used for the supply of one or several brakes. From an AC power supply, the modules will supply the brakes in two stages:

A one second voltage time is applied on the electromagnets of the brake to ensure a fast response time.

Then the voltage is reduced sufficiently to ensure the brake to stay on position and to reduce the heating of the coils.

Easy to fit in the electrical cabinet thanks to its Din rail, the modules are also available for a wide voltage range (220V to 480V).

G-500 BY ALBERTO SASSI S.p.A.

The Gearless range produced by Alberto Sassi is growing up! Beside G-200 (static load 1600kg), G-300 (SL 2500kg) and G-400 (SL 2500 – 3000 – 4500kg) the new model G-500 type T1 and T2 is now available.

This is a permanent magnet machine (gearless) made up by an aluminum casing allowing better heat dissipation and reduced overall weight despite the big dimension. G-500 has a maximum static load of 7600kg and is suitable for installation with high duty loads as well for modernizations. The sheaves range of G-500 T1 & T2 is extremely wide (from 360mm till 600mm ); the same versatility is valid for control frequencies (from 5 up to 38Hz) and obtainable cabin speeds ( for example: 0.63 – 1.00 – 1.60 – 2.50 m/s) G-500 is also equipped with a brake complying with the A3 amendment , and on request can be accessorized with hand release lever. Among the various optional components there are fans suitable for extremely high duty cycles.

For further information, please contact our offices or visit our web site: www.sassi.it where you can find the updated documentation related to G-500.

World Renown Machine Room Guarding Solutions

As a trusted service provider to the elevator industry with over 25 years of experience, Renown Electric Motors & Repair proudly offers Machine Room Guarding solutions to suit your specific application and legislative requirements. Global and Component guarding solutions come complete with installation instructions, labels, engineering report, manuals and safety review check list to ensure proper installation and use. Renown offers simple guidelines for site survey and engineering support if required. Our global and component guarding solutions have been installed by every major elevator manufacturer and service provider and are the standard for many. Call today for a free estimate and learn how Renown Electric’s Machine Room Guarding Solutions can make your facilities safer with strict adherence to local building codes.

Renown Electric Motors and Repair also offer, 24/7/365 service through our state of the art repair facility offering complete remanufacturing and machine shop capabilities. We have the engineering expertise and production capacity to remanufacture all major AC & DC motors and MG sets up to 5000 hp. Our wide ranging inventories of remanufactured and surplus motors and MG sets are available to offer quick turnaround to reduce downtime. Renown’s commitment to customer service extends beyond the reaches of our shop offering on-site commutator undercutting andstoning, predictive maintenance, on-site laser alignment, balancing, vibration analysis, infrared thermography, oil analysis and non destructive testing.
Complete range of motors and generators
Large inventory of new and remanufactured MG sets, AC/DC motors and submersible pumps.

24/7 Service
Complete shop and field services for rewind and overhaul of motors, gearboxes and MG sets.

Motor & Generator Parts
Extensive inventory of new parts including brushes, brush holders, springs, brake coils, armatures and field coils.

Machine Guarding
Global and component guarding to meet workplace legislation complete with engineers reports and manuals.

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