



# GEORATOR

## Frequency Convertors

Louis Allis, a WorldWide Electric Company, manufactures and supplies Georator Power Frequency Convertors and Permanent Magnet Generators for industrial, military, aerospace, and municipal applications. Classified as **rotary type Motor-Generator Sets, Solid-State Electronic Frequency Convertors, and Brushless Permanent Magnet Generators**, Georator products are available in standard sizes, phases, and input and output frequencies. With decades of application knowledge, the Louis Allis-Georator team of power frequency experts can also specify and build custom units for unique application requirements.

### Product Applications

Georator products provide a stable and undistorted voltage and frequency power source to help manufacturers and laboratories test their electrical products at alternative voltages and frequencies so they can export their equipment for use in various international power systems. In addition, Georator products are often used at airports and ports of call to provide clean 400 hertz power for ground operations and equipment testing. Permanent magnet generators are used as part of exciter systems in both radar and semiconductor manufacturing applications, whether military or commercial in nature.

### Core Competencies

- **Standardized Products** - proven, standardized product options with high availability and short lead times.
- **Custom Products** - design, manufacture, and build generator sets for custom applications utilizing standardized products.
- **Quality Design and Manufacture** - expertly engineered, precisely manufactured, and rigidly tested to deliver performance requirements effectively and efficiently.
- **Power Conversion System Design and Engineering** - extensive application experience with standard and custom solutions.
- **Fabrication** - full fabrication capabilities in a ISO 9001 certified manufacturing facility for custom modification of stators, rotors, flanges, frames, shaft, belt and pulley systems, mounting and lifting options.

### INDUSTRIES

- Aerospace and Military
- Universities & Research Facilities
- Government, Municipal & Health
- Manufacturing

### DIFFERENTIATORS

- Low-cost, affordable power source
- Operate on less power
- Create continuous power
- Environmentally friendly
- Highly efficient products
- Better load management
- Reliable - low maintenance
- Quiet, lightweight and portable

### PAST PERFORMANCE

- **United Space Alliance** - Supplied frequency convertors to support USA's operations for NASA Space Shuttle mission launches.
- **U.S. Coast Guard (USCG)** - Supplied large (500 KVA) frequency convertors for 60 Hertz ships to handle shore power supplies.
- **VT Halter Marine** - Supplied rotary frequency convertors/generators to the U.S. Navy for light attack vessels destined for the Egyptian Navy.
- **Leonardo DRS** - Provided 27 permanent magnet converter sets to the U.S. Navy for pre-packaged radar systems.

Web: [louisallis.com](http://louisallis.com)

Sales: 205-590-2986

## Rotary, Permanent-Magnet Frequency Convertors

### Series 30

Motor and alternator are combined horizontally in a single-housing with Power Ratings: 150 VA to 3 KVA



### Series 36

Stand-alone brushless alternator can be connected to an existing motor with Power Ratings: 0.15 to 15 KVA



### Series 33

Motor and alternator are combined vertically in a single-housing with Power Ratings: 2.5 to 20 KVA



### Series 39

Voltage regulator and alternator are combined vertically in a single housing with Power Ratings: 3 to 18.75 KVA



### Series 38

Brushless rotators and stator spare parts for use in Permanent Magnet Alternators.

### Technical Specifications of all PMG Products

- Up to 400 Hz Output
- 1500 to 3600 RPM
- Alternator: Permanent magnet excitation
- Motor: Induction
- Waveform: THD less than 4%
- Typical 10+ Year Life Expectancy

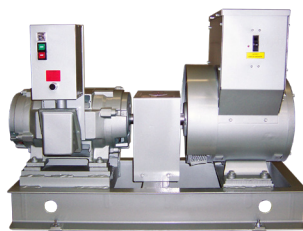
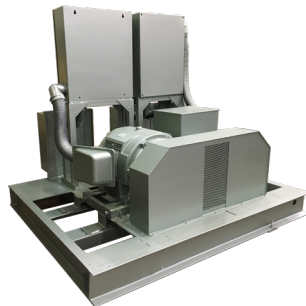
## Motor Generator Sets - Rotary Frequency Convertors

Louis Allis manufactures and supplies Georator belt-driven and inline motor generator (MG) sets. Standard designs, including a motor starter, motor, breaker, and generator mounted to a compact skid, are available with short-lead times.

### Technical Specifications

- 50 to 60 Hz, 60 to 50 Hz designs
- Power ratings: 10 - 5000 KVA
- Complete electrical isolation from harmonics, spikes.
- Premium efficiency induction motor
- Synchronous generator w/voltage regulator
- Precise frequency regulation (+/-1%)
- Waveform: THD < 5%

We can also provide custom designs for your specific requirements, such as common shaft mounted (inline) sets, horizontal or vertical. If you are a contractor or buyer interested in MG sets but you are not sure what you need, our expert engineers are here to guide you through the specifying process.



## Solid State Frequency Convertors

Solid State Frequency Convertors convert incoming A.C. power into D.C. power (rectifier stage) and then convert the D.C. power into the required A.C. frequency and voltage. Static frequency convertors are inherently quiet, which makes them ideal for office and laboratory environments. Standard options are available in 1 - 20 kVA outputs in both single and three phase 50-60 hertz configurations. Three-phase and larger units are available upon request.



### Technical Specifications

- Compatible with generator input
- Equipped with DC cold start function.
- Standard with check diodes to avoid affecting the DC panel.
- Standard input/output isolation transformers to achieve complete isolation of AC and DC sides
- Voltage In +/-25% and Voltage Out +/-15%
- Suitable for use with Resistive, Capacitive, Inductive and Non-linear loads.
- Galvanic Isolation input to output.

CAGE Code: 91723 | DUNS Number: 003093200 | NAICS Codes: 335312 & 333611

## Connect with Louis Allis



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