



## Motor-Generator Sets

Frequency Conversion.  
Line Conditioning.

**Nidec**  
All for dreams

**KATO ENGINEERING™**





## Motor-Generator (MG) Sets

Motor-Generator (MG) sets provide load isolation for computers and other sophisticated electrical systems. They can also perform frequency conversion. Starting with the specifications stage, we will work with you to design a Motor-Generator while taking your entire project into consideration, whether it is for you or your customer. We will examine all the variables that a reliable power system demands.

### **KATO™ motor-generators offer many advantages over solid-state systems:**

- Easily maintained by electricians and/or mechanics; no specialist required.
- Low harmonic content on the input and output of the MG set from no load to full linear load.
- Complete electrical isolation.
- High overload capability.
- Simple, rugged construction provides tolerance to voltage sags, spikes and noise, as well as complete isolation input to output.
- Self-ventilated.
- Stationery or portable.
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KATO™ MG sets are built to be reliable and durable and to have a high tolerance to input voltage variations. Another advantage is the separate brushless exciter on the synchronous motor to adjust motor input power factor independently of the generator.

### **CHARACTERISTICS**

- **PANEL:** Designed to NEMA requirements, the panel is usually unit-mounted but can also be free-standing or wall-mounted. The panel will include the motor starter, output circuit breaker, metering, protective relaying, voltage regulator and any other required components.
- **ENCLOSURE:** An open drip-proof enclosure for rotating parts is standard with other enclosure options available.
- **MOTOR/GENERATOR:** Typically a common frame with single-shaft two-bearing horizontal construction for low vibration and ease of maintenance.
- **STATOR:** Built with silicon electrical steel laminations.
- **COILS:** Film insulated copper wire vacuum pressure impregnated with Class H insulation.
- **ROTOR:** Copper wire, impregnated with 100% solids resin.

### **OPTIONS AVAILABLE**

- Automatic paralleling, manually initiated or on load demand.
- Communication through a wide range of protocols and standard interfaces.
- Remote access information.
- Weatherproof enclosures.
- Coastal Insulation Protection (CIP) System.



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