

# SERIES GRF

# Government Rotary Filter

The **Series GRF** provides reliable clean power to the most critical mission needs within the USG. The **Series GRF** is offered in many different models to support the diverse applications requested by the secure community. Output voltage and frequency are maintained within specifications by internal control logic.

Under normal operation, the **Series GRF** isolates the critical load from any and all utility transients, brownouts, spikes and anomalies generated upstream of the system. In general it is 100% effective for outages less than approximately 100 msec. The standard **Series GRF** is supplied with a high-efficiency induction motor, an isolation coupling, a synchronous generator with a precision voltage regulator to maintain the output voltage +/- .5%. The absence of brushes and slip rings in both motor and generator allows for virtually maintenance free operation.

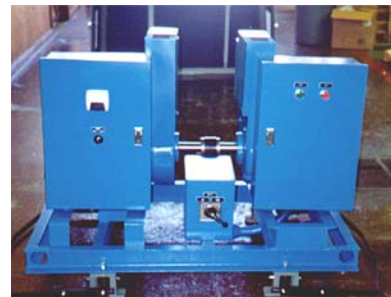


## Standard Equipment Features

- Brushless two bearing induction motor
- Synchronous, brushless generator
- Flexible isolation coupling
- Push-button start-up
- Precision solid-state voltage regulator
- Analog metering and controls
- Input and output circuit breakers
- Synchronous, brushless, generator
- Motor input molded case circuit (CB) breaker with shunt trip
- Generator output molded case circuit (CB) breaker with shunt trip
- Reduced current motor start
- Vibration mounts
- Rigid steel base, welded construction
- Anti-friction bearings throughout
- Control and internal fault monitors
- EMP protection
- Bearing temperature detectors
- Continuous, full load operation

## Optional Features

- Horizontal or Vertical
- Induction Motor or Synchronous Motor
- Seismic 4 isolation model
- Open Frame or Full Enclosure
- Single piece or Split Horizontal Cabinet
- Auto Bypass or Auto Restart
- Custom Assembly for space limitations
- "Turn Key" Installation



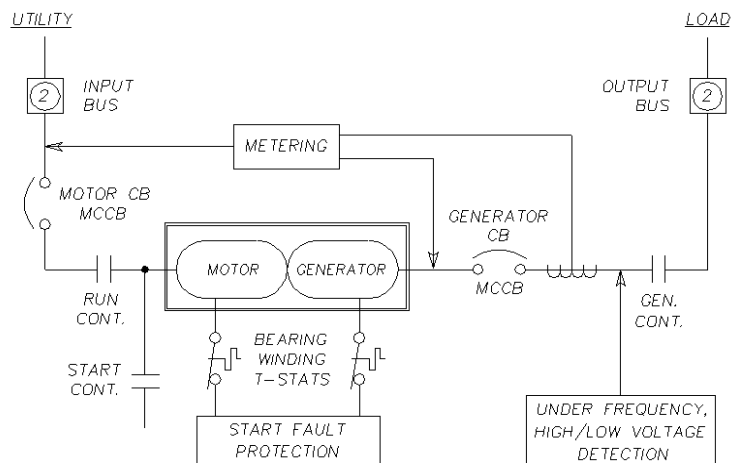
**POWER SYSTEMS**  
& CONTROLS  
THE POWER IS ON!

# System Specifications

\*Note: System performance shown is typical and is dependent upon M-G sizing, options desired, and loading of the system.

INPUT					OUTPUT	
Nominal Voltage Available					Nominal Voltage Available	
➤ @ 50 or 60 Hz		480, 380, 208			➤ @ 50 or 60 Hz	
➤ Phase		3 Phase + Ground				
➤ Frequency Tolerance					➤ Phase	
➤ Magnitude Tolerance					➤ Frequency Regulation	
➤ Continuous		+10%, -20%			➤ Adjustment	
➤ Transient		1500v for 1 ms			➤ Regulation	
Power Factor					➤ Transients	
➤ Induction		.8			➤ Recovery Time	
➤ Synchronous		.8 leading to 1.0			➤ Steady State	
➤ Starting Inrush		< 1.5 x FLA			THD (Total Harmonic Distortion)	
<b>SERIES GRF RATINGS, DIMENSIONS &amp; WEIGHTS</b>					➤ Single	
					➤ Total	
<b>Horizontal</b>					3% Max	
<b>MODEL</b>					➤ 25% Unbalance	
<b>L (IN)</b>					120° +/- 1°	
<b>W (IN)</b>					120° +/- 3°	
<b>H (IN)</b>					Overload Capacity	
<b>W (LBS)</b>					➤ 110%	
5/50/60					➤ 125%	
10/50/60					➤ 150%	
15/12.5					➤ Power Factor	
24/20					0.8	
48/40					<b>ENVIRONMENT</b>	
75/60						
125/100					➤ Temperature	
150/125					➤ MG	
<b>Vertical</b>					➤ Console	
<b>MODEL</b>					➤ Altitude	
<b>L (IN)</b>					➤ Humidity	
<b>W (IN)</b>					➤ Noise Level	
<b>H (IN)</b>					➤ Enclosed	
<b>W (LBS)</b>					65 dBA at 1.5 meters (5 ft)	
5/50/60						
10/50/60						
15/12.5						
24/20						
48/40						
75/60						
125/100						
150/125						

\* Larger Sizes Available, Consult Factory



Power Systems & Controls reserves the right to improve, enhance and modify the features and specifications of its products and services without prior notification.

**POWER SYSTEMS**  
**& CONTROLS**  
**THE POWER IS ON!**