



# Power Conversion Technologies

General Atomics Electromagnetic Systems (GA-EMS) specializes in advancing innovations in direct drive permanent magnet motors and modular adjustable speed drives. Our motors connect directly to turbines and compressors, eliminating the need for gearboxes. Higher efficiency Lower lifecycle costs Reduced energy costs Significantly reduced footprint Reduced CO<sub>2</sub> emissions



ga.com/ems

### APPLICATIONS

**Turbine Generators** 

Compressors

Power and Propulsion

Pumps

## INDUSTRIES

Oil and Gas

Renewables

Chemical

Water and Wastewater

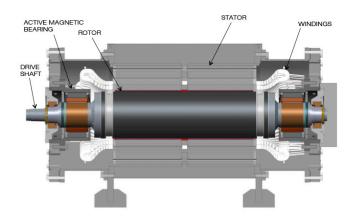
# Power Conversion Technologies

#### **8 MW PERMANENT MAGNET MOTORS**

- High speed direct coupling eliminates gearbox
- · Operational flexibility over extended speed range
- Multiple bearing options

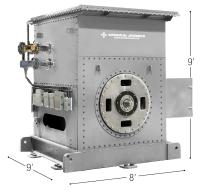
### **8 MW MAGNETIC BEARING**

- 2-3x volume reduction in containment structure
  - » Smaller magnetic gap
  - » Higher power density
  - » Oil-fill bearing option available
- Flexible design to suit different power requirements



### ADJUSTABLE SPEED DRIVES

- · Liquid-cooled for efficient thermal management
- High system availability
- Low maintenance
- Versatile modular design
- Designed for easy paralleling of 2 MW modules to meet specific power needs





**Significantly Reduced Footprint** 



**CONTACT INFORMATION** emspowertech.info@ga.com

SCAN TO LEARN MORE