

# 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 direct to turbines and compressors, eliminating the need for gear boxes. Our integrated motor and drive systems offer:

- Higher efficiency
- Lower lifecycle costs
- Reduced energy costs
- Significantly reduced footprint
- Reduced CO<sub>2</sub> emissions

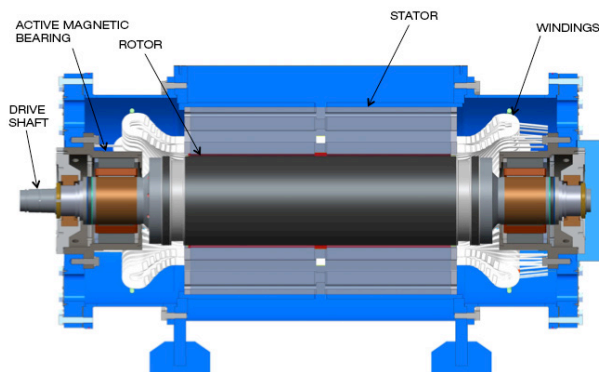
# POWER CONVERSION TECHNOLOGIES

## 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



## APPLICATIONS

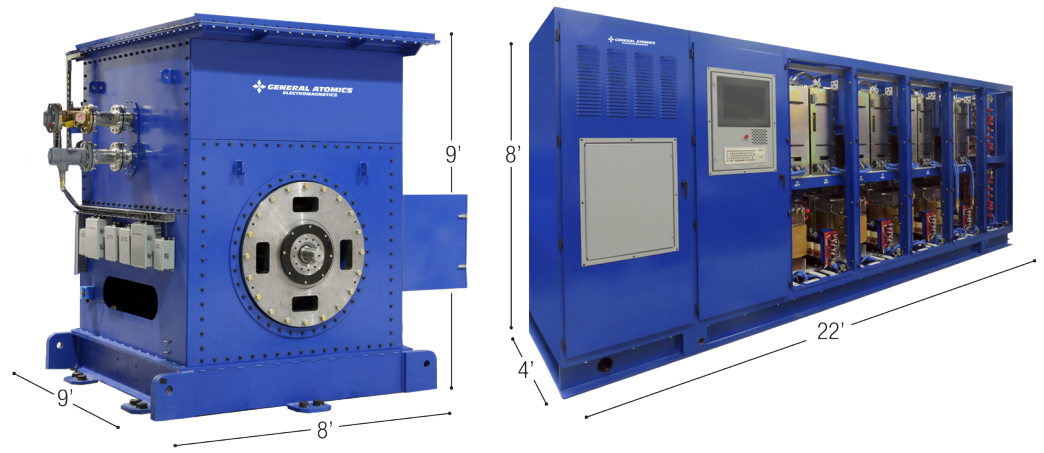
- Turbine Generators
- Compressors
- Power and Propulsion
- Pumps

## INDUSTRIES

- Oil and Gas
- Renewables
- Chemical
- Water and Wastewater

## 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