System optimization to match most demanding customer requirements

HIGH QUALITY PRODUCT LINES

Cutting-edge power electronics technology and decades of process expertise come together in GE’s medium Voltage Source Inverters (VSI) portfolio.

Our Variable Speed Drives Systems (VSDS) are used for a wide range of industrial applications, where energy efficiency, reliability and safety are key customer expectations.

Whatever the industry our customers are operating in - onshore and offshore O&G, renewables, power generation, marine propulsion, water, metals, or mining - we provide solutions engineered to meet the most demanding requirements in terms of power cycling, low-speed application, power range, harmonic constraints, or precise torque control.

PRODUCT RANGE

MV Drives Product Map

Our MV drive family is composed of VSI and Current Source Inverters (CSI). It offers a wide power range at various voltages to cover a large variety of applications.

GE Advantage

- One of the industry’s highest power densities, up to 1.4MVA/m³ for water-cooled range
- Outstanding efficiency, up to 99.1% for DFE applications
- High reliability thanks to low component count
- Installed base: 15GW+, 1700+ units
**VSI TECHNOLOGY DESCRIPTION**

**PRODUCT PORTFOLIO**

**MV7000**
- Optimized for system configurations
- Easy customization
- UL/CSA compatible, field evaluation on request
- Multi-level system configuration

**MV7000 FLAT PACK (FP)**
- 3-Level inverters
- HV Flat Pack IGBT
- Air- or water-cooled

**MV7000 PRESS PACK (PP)**
- 3- or 5-Level inverters
- HV Press Pack IGBT
- Water-cooled

**KEY FEATURES**
- **Air-cooled (AC):** Easy installation and maintenance
- **Water-cooled (WC):** Compact and reduced heat losses through air
- **HV Flat Pack IGBT:**
  - HV Flat Pack integrated components
  - Very compact, especially in lower power range
  - Low part count for high reliability
- **HV Press Pack IGBT:**
  - High robustness for demanding systems (low speed, cycling,...)
  - Low part count
  - Real **N+1 hot redundancy** thanks to GE’s specific expertise on Press Pack IGBT
- **Multi-level configuration:**
  - Reduced stress on motors
  - Simplified filters

**MV6000**
- Available as standard configurations with options
- Very compact
- UL/CSA certified for 4.16kV
- 5-Level inverters
- HV Flat Pack IGBT
- Air-cooled

**PRODUCT DIFFERENTIATION**

<table>
<thead>
<tr>
<th>PRESS PACK COMPONENTS</th>
<th>HV IGBT MODULES</th>
<th>SMALL POWER HV IGBT MODULES</th>
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| • Low speed high torque  
  • Process load cycles  
  • High availability (N+1 for 4.16kV and more) | • Suitable for quadratic torque application  
  • Modular for system optimization | • Compact  
  • Reduced use of output filters  
  • Integrated transformers |
| **WATER COOLED**  
  • High power density for large power  
  • Easy to evacuate losses | **MV7000-PP-WC**  
  Base configurations optimizable, customizable on request | **MV7000-PP-WC Standard configurations, customizable on request** |
| **AIR COOLED**  
  • Easy installation  
  • Compact for low power | **MV6000-PP-AC**  
  Base configurations optimizable, customizable on request | **MV6**  
  Standard configurations |

**CONTACT US**
www.gepowerconversion.com/sales-contact

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GEA33493 - Medium Voltage Variable Speed Drive Systems