MV6 Series Drive Upgrades
Leading next generation technology.
High density, fault tolerant and versatile.

**MV6 SERIES PERFECT FOR RETROFITS**
GE’s low-power medium voltage drive series MV6 now available for Diode Front End (DFE) and Active Front End (AFE) MV drive upgrade offerings for induction motors up to 2MW in all standard induction motor applications (fans, compressors, pumps, conveyors, mills). The multi-level topology provides near sinusoidal voltage & current at all speeds and loads with no additional motor heating. This makes the MV6 ideal for retrofit to existing machines with no power derating and eliminating the need for higher voltage insulation systems or power cables. The MV6 is Arc flash protection certified, includes Unique LED strip to indicate live MV and fully supports upgrade to “ViSoR Connect” for remote monitoring and support.

**AFE – HIGH EFFICIENCY, 4Q OPERATION**
Direct connectivity to supply with PWM rectifier, eliminating the transformer
- IEEE Harmonic compliance & unity power factor
- No transformer losses, efficiency saving of 1.5%
- Compact footprint & reduced weight by design
- VFD efficiency increased to 97.5%
- Inherent regeneration for braking
- Forward and reverse motoring or regeneration

**DFE – 3 WIRE IN, 3 WIRES OUT**
36 pulse DFE with integrated transformer providing
- Reduced installation time & cost
- Input voltage flexibility and power factor greater than 0.95
- Phase shift for harmonic cancellation
- High efficiency with copper windings
- Motor protection for common mode voltage

**VARIABLE FREQUENCY DRIVES (VFD) SYSTEMS TECHNOLOGY**
MV6 technology delivers efficient and flexible control of electric power, featuring:
- DFE and AFE air cooled MV VFD offerings
- Flatpack IGBT’s for high efficiency
- Serial IGBT configuration, optimized for power electronic reliability
- 5-level Nested NPP topology for high power density and performance.
- Film capacitors offering increased lifetime and lower risk
- Front access & modular design for easy maintainability and low cost of spares
- High reliability based on low parts count, high voltage margin and fault tolerant operation
- Constant speed bypass option for safe drive maintenance without process shut down
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**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Power (kW)</th>
<th>Dimensions LXBXH(mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MV6401 DFE</td>
<td>200~780</td>
<td>1550 x 1200 x 2650</td>
</tr>
<tr>
<td>MV6403 DFE</td>
<td>780~2000</td>
<td>2700 x 1200 x 2720</td>
</tr>
<tr>
<td>MV6403 AFE</td>
<td>780~2000</td>
<td>2700 x 1200 x 2720</td>
</tr>
</tbody>
</table>

**STANDARD CONTROL FEATURES**

- HMI Touchscreen drive control & configuration
  - Graphic screen display of key variables
  - Status indication without separate lamps
  - Interface for access to ViSoR monitoring
- Control system toolbox
- Vector control with or without speed sensor
- Critical speed avoidance
- Independent accel/ decel ramp rates
- Flying restart (catch a spinning load)
- Optional LAN connections:
  - Profibus
  - DeviceNet™
  - Modbus

**MV6 SERIES OPTIONS**

- Input switchgear
- GE Multilin – 369/469 motor protection relay
- Sinus filter for motor
- Constant speed bypass
- Synchronous transfer
- Motor heater control
- Encoder interface
- VFD space heaters
- Redundant cooling fan
- N+1 power semiconductor redundancy

**CONTACT US**

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