



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.

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

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





MV6 Series Drive Upgrades

Leading next generation technology.
High density, fault tolerant and versatile.

TECHNICAL DATA

Model	Power (kW)	Dimensions LXBXH(mm)
MV6401 DFE	200~780	1550 x 1200 x 2650
MV6403 DFE	780~2000	2700 x 1200 x 2720
MV6403 AFE	780~2000	2700 x 1200 x 2720



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

services.powerconversion@ge.com