



LV8 – High Performance Modular Drive for Industrial Applications

Designed for variable speed and a wide power range.

LV8 - High Performance Application

Power Conversions' LV8 is the drive choice for a wide range of industrial applications. It can significantly cut energy costs and lowers grid disturbances with a reduced environmental impact. With its active front end (AFE) variant and regenerative capability, the LV8 drives are designed for variable speed and a power range from 250 kVA up to 4 MVA. GE offers the LV8 low-voltage converter in an air-cooled or water-cooled version. The water-cooled variant features a more compact design that requires no additional costs or equipment for room air conditioning.

Diversity to meet customer requirements

For more than 20 years GE's Power Conversion Business is delivering equipment being used for testing automobiles and automobile components. The newly modified LV8 drive has been widely used for test bench applications. The successful testing of future technologies in E-drives with LV8 test bench systems provides comprehensive, reliable and relevant measuring results for alternative drives.

Grinding mill operations require high currents during starting and running, when driven by wound rotor induction motors, resulting in high operational costs. Therefore, our Slip Energy Recovery (SER) – based on LV8 drive – improves energy efficiency and lowers operating costs in grinding mill operations.

High performance & flexibility

- Modular design
- Adaptable to the most varied special requirements
- High efficiency
- Advanced control structures for line converter, induction motors and permanent magnet synchronous motors

Thanks to its modular design, the LV8 can be very easily adjusted to customer demands such as specific power ratings and dimensions. It is designed for input voltages from 400 V to 690 V and handles dynamically adaptable pulse frequencies of up to 12kHz. These characteristics allow the converter to supply an almost sinusoidal motor voltage. When paired with a suitable filter, the LV8 converter also is well-suited for drive-revamping applications because it permits the continued use of existing machines not designed for converter operation. Thanks to its high output frequencies, the LV8 also is the option of EtherCAT choice for dynamic high-speed applications.





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Ease of servicing & high availability

- IGBT technology that can withstand alternating loads
- Long-life foil capacitors
- Ease of servicing

The separate implementation of the capacitor, power and fan modules means that every part can be replaced simply and quickly. Because of their low weight and compact design, the components can be handled by a single person.

The LV8 uses high-quality and particularly long-life components, such as IGBT modules with a high alternating load withstand capability and more than 75 percent less wear than standard solutions. This makes the converter attractive for applications that need maximum availability and high performance

Customized options

The LV8 can be fitted with additional options to meet special requirements:

- Suitable for 50 Hz and 60 Hz
- AC voltage range 400V - 690V

- Forced air cooled or liquid cooled design
- Pulse frequencies up to 12 kHz
- Protection classes IP23 to IP54
- Safety functions SS1 and STO with PL e
- Options for EMC C2 & EMC ILA
- Braking chopper

Minimizing risk, maximizing productivity

Power Conversion services include all support for utilities and farm operators to protect assets, keep critical processes running, minimize risk and maximize productivity.

We deliver original equipment spares around the world as well as repair, refurbish and upgrade customer systems with the latest technology. We offer risk protection through performance-based contracts based on our system experience and sophisticated application calculations. Through advanced digital platforms, we deliver expert onsite and remote emergency 24/7 support, interventions and planned maintenance customized to meet unique customer requirements.

