



THREE-PHASE POWER CONVERSION SYSTEM

The wind – unpredictable and erratically fluctuating – is a challenge to harness. Magnetek's three-phase utility-interconnected commercial wind power converter efficiently tames the energy produced by large wind turbines and delivers it to the grid.

E-FORCE Wind Converters are designed for easy, quick installations and low maintenance, resulting in less down time and repairs so you reap the savings.

Harvest more energy by maximizing the full potential of your wind turbine, reduce installation costs by leveraging E-FORCE's unique thermal management system, and minimize service calls by utilizing our highly reliable and modular design. Install E-FORCE Wind Converters in your turbine system and you'll be sure to harvest more green.

HIGH PERFORMANCE REDEFINED

Magnetek's E-FORCE Wind Converter offers peak efficiencies of over 97.5% when operating at full power, harvesting more energy from your wind turbine. This converter provides less than 5% total current distortion and uses a highly efficient space vector switching technique engineered exclusively by Magnetek.

BENEFITS

- High power density in compact, modular design
- Optimized thermal management system
- Full scale converter systems for synchronous permanent magnet generators
- Controls are digital signal processor (DSP) based with sophisticated real time pre- and post-event data logging
- Air- and water-cooled heat sink options
- Space vector control
- Highly dynamic control response
- High voltage IGBT modules for reliable operation
- Polypropylene capacitors
- Front access and compact modularized subassemblies
- Grid code requirements
- Seismic Zone 4 structural design
- Optional outdoor enclosure design

RIDE-THROUGH CAPABILITY

Our modular E-FORCE Wind Converter remains on-line and rides through utility transient conditions, providing seamless performance of your wind turbine once normal voltage levels resume.

RIDE-THROUGH DATA

VOLTAGE LIMITS	TIME DELAY BEFORE DROP OUT
100% of Nominal to 110%	Nominal Operation
100% through 120%	5 Seconds
120% through 130%	0.5 Seconds
130% and Above	Instantaneous
100% of Nominal to 90%	Nominal Operation
90% through 10%	3 Seconds
10% and Below	150 milliseconds

SPECIFICATIONS

Voltage Output 3-Phase, 690 VAC

Frequency 50/60 Hz

Enclosure NEMA 1, IP 23 outdoor rating
(Optional NEMA 4, IP 65)

Ambient Temperature -40° C to 50° C

Utility ride-through capability (See chart above)

Air-cooled and water-cooled heat sink offerings

Power section rated at 625 kW output

Scalable (n+1) redundancy to 5MW

Dimensions 82.9" W (2235.2mm) x 88.4" H (2245.4mm) x 30.2" D (767.1mm)

Weight 5400 lbs. (2454.5 kg)

5 year warranty



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