

Active Magnetic Bearing Drive AMBD

New Generation Fluid Magnetic Solution

- Wide input voltage range: Wide DC power input to apply with the current terminals of 230 / 460 V inverters
- Lower implementation costs: Leverages Delta's inverter feature of power regeneration from deceleration, no need for UPS
- Magnetic bearing 5-axis control: Independent front and rear radial bearing control to reduce vibration and enhance magnetic suspension control accuracy. Independent axial position control to detect shaft elongation and avoid collisions caused by excessive temperature
- High control accuracy: Compliant with the ISO 14839-2 Zone A standard. The bearing vibration displacement is less than 30% of the maximum vibration displacement
- Supports external temperature sensors: Available for 6 sets of motor and magnetic bearing temperature protection
- Peak power up to 3 kW: Suitable for magnetic bearing motors up to 500 kW to perform magnetic suspension control

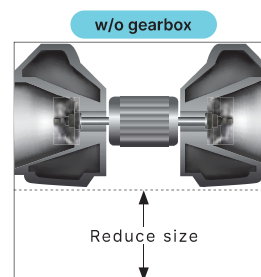


Magnetic bearing construction avoids traditional friction loss and maintenance issues and is the best choice for high flow, pressure and efficiency in high speed fluid applications. Compared with traditional centrifugal ice machines, it can save energy by more than 30%

Ball Bearing



High-Speed Magnetic Bearing



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| <ul style="list-style-type: none"> • High-speed impossible. The limit rotation speed is about 8,000 rpm • High speed (7,000~8,000 rpm) needs to be equipped with oil or water cooling equipment, and mechanical system needs a gearbox | <ul style="list-style-type: none"> • Advantage: Low friction coefficient, smaller rotor inertia, longer life than traditional bearings, high system rigidity, anti-compressor surge shock • Disadvantage: Parameter adjustment, higher price, extra sensors installation |
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Peak Power Range		1.5kW	3.0kW
VFD-DD	Input Voltage	250 ~ 600 V _{DC}	
	Rated Output Voltage	6 Arms	10 Arms

Applications

Magnetic bearing chillers, Magnetic bearing turbo blowers, Micro gas turbines, Flywheel energy storage systems