

Power your aircraft to new heights

**Now...
MORE POWERFUL
than ever!**



MAGiDRIVE™ Integrated Motor | Controller

Integrating MAGicALL's field proven high efficiency and light weight electric motor technology with the most advanced digital power electronics and controls in the industry results in an unrivaled electric power plant for the most demanding aerospace applications.

40+ Nm/kg
Specific Torque

95%+
Combined Efficiency

500 kW
Power Range

Easy as...FLY!

The highly integrated MAGiDRIVE™ enables you to focus on aircraft design rather than spend time integrating motors and controllers. Do not accept compromises with sub-optimal motor/controller integration!



Advantages

- Integration of the highest performance electric machines and power electronics in the industry
- Unparalleled reliability and ease of use (we do the integration and optimization for you)...Easy as FLY!
- Rugged in-runner design with low vibration and environmental ratings up to IP67
- Air cooling for both motor and controller
- Minimized cable weight and power loss and dramatically reduced EMI
- Tightly integrated high bandwidth feedback and health monitoring
- Fully digital sinusoidal vector control provides highest efficiency and lowest DC bus ripple
- Highly customizable mounting, prop hub, and interface options

Major advancements in powertrain performance and reliability, never before possible, are realized in MAGiDRIVE™ through exacting optimization of motor and controller together as a system.



**Innovative Magnetics
to Power your Products**



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Available Features

- Fully bi-directional four-quadrant operation (motor and generator in both directions)
- DC bus voltages ranging from 24V to 800V (depending on model)
- Communications options including CAN, RS485, PWM, Ethernet, ARINC 429, and more
- Control modes including Torque, Speed, Power, Position Hold, and more
- Hollow shafts for variable pitch mechanisms and pitot tubes
- Integrated temperature, vibration, and health monitoring
- Integrated Electronic Circuit Breaker
- Redundant power supply and communications

MAGiDRIVE™ products are currently available in sizes from 4" to 24" diameter, with torque capability up to 5000 Nm and power levels up to 500 kW.

MODEL	6	12	20	40	75	150	300	500
TORQUE RANGE, Nm	4 - 18	9 - 48	20 - 100	45 - 200	90 - 500	200 - 1200	470 - 2400	950 - 5000
POWER, kW (short duration)	6	12	20	40	75	150	300	500
POWER, kW (continuous)	5	10	16	32	60	120	240	400
SPEED, RPM (maximum)	8,000	7,000	6,200	5,500	5,000	4,200	3,600	3,200
WEIGHT RANGE, kg	0.70 - 1.5	1.5 - 3.0	3.0 - 6.0	5.0 - 10.0	9.0 - 19.5	16.0 - 35.0	30.0 - 60.0	50.0 - 100
EFFICIENCY, % (typical)	90.5	91.5	92.0	92.5	93.5	94.5	95.5	96.0
DIAMETER, inch (typical)	4.5	6.0	7.5	9.0	11.5	15.0	19.0	24.0
LENGTH RANGE, inch	2.5 - 3.5	3.0 - 4.2	3.5 - 5.0	4.0 - 5.8	4.5 - 6.5	5.5 - 7.5	6.0 - 8.0	7.0 - 10.0

Contact us today and let us show you how MAGiDRIVE™ can power your products to new heights!