



WITTENSTEIN

cyber motor

cyber[®] power motor AML
fan-cooled brushless servo motors

dynamic
low inertia
easily modified



cyber[®] power motor AML

Dynamic fan-cooled motors (6 poles)

WITTENSTEIN fan cooled cyber[®] power motors AML (6 poles) with separate ventilation are designed for highly dynamic servo applications that require a wide speed range and variable load. Motors with separate ventilation are most often used when higher power density is required and a liquid-cooled option is not suitable. The continuous torque and power output capabilities of the cyber[®] power motors AML are up to 1.5 times greater than those of its naturally cooled variant, the cyber[®] power motors AM, while their sizes are almost the same. The cyber[®] power motors AML offers one of the largest power ranges in the industry, with standard models delivering continuous stall torque values from 1.72 to 194 Nm [15.2 1,716 lb/in].

The modular design of the cyber[®] power motors AML supports a variety of custom options. In addition, WITTENSTEIN cyber motor can provide fully customized solutions. For special applications, the standard design of the cyber[®] power motor AML (which features separate ventilation) can be modified so that cooling fans are mounted directly onto the motor shaft. Other customized solutions include winding systems and special insulation options for different intermediate circuit voltages (12 V, 24 V, 48 V, 330 V, 560 V and 700 V_{DC}) as well as for a wide range of different voltage constants (from about 1 to 500 V min. / 1,000). For high speed applications, WITTENSTEIN cyber motor offers special rotors with double or triple bandages. We can also customize active lengths and develop special mechanical designs for the flange, shaft end and bearings, for applications requiring higher radial and axial forces. Our motors can be engineered to meet even the toughest environmental requirements (higher temperature; hazardous or harsh environment), have increased IP ratings and be equipped with a variety of available encoder options to meet all our customer needs.

Features

- High torque and speed capability
- Compact design
- High efficiency
- High quality production
- High precision assembly
- Long life and high operational reliability

Benefits

- Highly customizable
- Low inertia
- High acceleration in transient conditions
- Rugged structure
- Minimal maintenance needs
- High power density
- Different winding options available

Specifications

Dimensions	Measuring Unit	cyber [®] power motor AML
Continuous Stall Torque M°	Nm [lb-in]	1.72–194 [15.2–1,716]
Peak Torque M_{max}	Nm [lb-in]	5.3–430 [46.9–3,805]
Rated Speed n_N	min ⁻¹ (rpm)	0–10,000
Rated Power P_N	kW [hp]	0.43–29.9 [0.577–40.1]
Rated Torque M_N	Nm [lb-ft]	1.64–186 [14.5–1,645]
Moment of Inertia J	kg m ² [lb-in sec ² x 10 ⁻⁴]	0.72–430 [6.4–3,805]
Position Transducer	Standard / Optional	Resolver / Encoder
Temperature Monitoring	N/A	PTC, PT1000, Thermoswitch
Brake	N/A	Optional
Rated Bus Voltage V_{DC}	V	300/560 (or customizable)
Certificate / Marks	N/A	CE
Cooling	N/A	Fan Cooling



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