

CANopen

UL-recognized integrated servo motors

Applied Motion Products increased the acceptance of MDX integrated servo motors into industrial motion control applications with UL-recognition on all models. The products come with CANopen.



(Source: Applied Motion Products)

This UL-certification assures users in the United States and Canada that these motors meet high quality standards for electrical safety. The integrated motors were evaluated according to ANSI/UL standards 1004â€™1 Rotating Electrical Machines, 1004â€™6 Servo and Stepper Motors, and 61800â€™5â€™1 Adjustable Speed Drives. The certifications are noted under UL file number E472271.

MDX motors combine a torque density, inertia servo motor with an on-board drive, and controller. This allâ€™inâ€™one design saves on space, wiring, and cost over conventional servo systems with separate motor and drive components, said the company. There are no cables required to connect the servo drive to the motor because the servo drive is integrated into the motor housing. These factors contribute to the reduction in size of control cabinets and enables installation of servo axes in machinery and equipment.

There are currently ten models available that provide 200 Watts or 400 Watts continuous rated output power and up to 26,6 inâ€™lb (3,0 Nm) peak torque. Multiple communication options include CANopen, Ethernet, and EIAâ€™485. The CANopen models adhere to the motion profiles defined in the CiA 402 standard.

The Ethernet models support Ethernet/IP and Modbus industrial

networking protocols, as well as the company's Serial Command Language (SCL) for streaming of motion commands from devices. The EIAâ€™485 models support Modbus and SCL. All models feature dual-port communications for daisy-chain network connections.

All motors feature stored program execution. Stored programs are created using the company's Q Programming language, a language for generating various kinds of motion, I/O control, and machine sequencing, as well as math functions that enable users to create motion profiles and control algorithms. Two environmental ratings are available on the motors, including IP65 and IP20. The IP65-rated motors include M12 connectors for all connection points. IP20-rated motors feature pluggable connectors.

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