

MOTOR CONTROLLER

Single phase 2-wire VCA Drive

Magnetic Innovations' Moving Magnet VCA series are matched with a dedicated motor controller which is able to establish sensorless position control (no external encoder required). Hence only 2 wires are required to power and position control the actuator. The controller is an encoder and drive in one package at the size of a matchbox which can power Moving Magnet VCA's up to 1kW.

Customers are able to program their required motion patterns into the motor controller utilizing a HMI running on a PC. After programming the motor controller one is able to save all data onboard in non-volatile memory and the MI Moving Magnet VCA will operate standalone after power up. Activation and de-activation of the motion pattern is invoked by controlling digital inputs, allowing for simple integration with customer specific applications.

Available motion patterns (executed motion with configurable filter settings to omit high frequent content):

- Sinusoidal point to point movement with specific frequency
- Triangular point to point movement
- Block point to point movement
- Point to point movement

Two configurable analog inputs allow for external analog control of current, position and 2 configurable analog outputs allow for remote monitoring of a variety of parameters (among which position, velocity, temperature, force, etc.).

Features Motor Controller

- No encoder required
- 2-wire actuator control
- 48Vdc, 1kW drive power
- Digital I/O (4+4)
- Configurable Analog inputs (2) & outputs (2)
- Compatible w/all MI Moving Magnet VCA's
- Canbus & Analog interface
- Matchbox size (86,5mm x 55mm x 21mm)
- HMI included

Preliminary information, subject to change without notice

