

ABB motion control drives MicroFlex brushless AC servo drive



The MicroFlex AC servo drive provides a cost effective, high performance solution. It incorporates features such as analog or step and direction control and digital filters to help reduce resonance within the machine.

The MicroFlex can operate from 105 to 250 V AC single or three phase supply and is available in multiple current/power ratings.

MicroFlex is ideally matched to ABB's brushless range of high performance rotary servo motors and linear motors.



Digital AC servo drive

The MicroFlex digital servo drive provides high performance motor control. It uses 16 kHz space vector modulation (SVM) and 62.5µs current loop update. This ensures optimal current regulations and dynamic performance for today's demanding applications. Setup is simple using Mint workbench with integrated wizards, auto-tuning and intuitive diagnostics features.

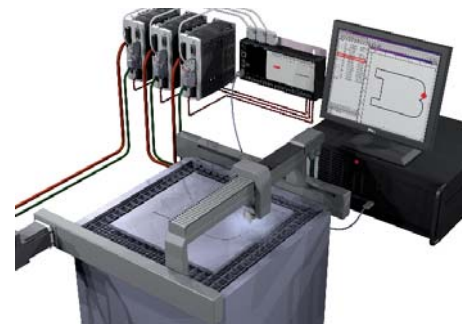
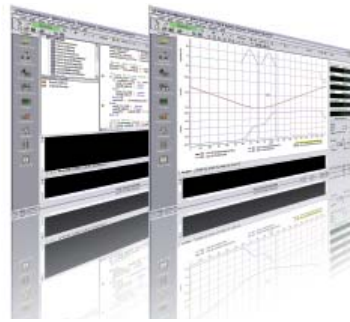
Flexible and compact package

MicroFlex is available in 3, 6 and 9A versions (with 200% overload) and supply from 105 through 250 V AC single or three phase. All ratings share the same dimensions, making panel design simple for different application demands. Accessories include a foot-mount EMC filter which is available for space saving installation.

Motor feedback options

MicroFlex can accept an analog demand or an integrated TTL step and direction inputs, which makes MicroFlex the ideal package for stepper drive upgrade in both new and retrofit applications. Incremental encoder with Halls, synchronous serial interface (SSI) or Resolver feedback are supported and an encoder output interface provides feedback to a motion controller or PLC.





Flexible motion solutions

Our motion control solutions include human-machine interfaces (HMI), programmable logic controllers (PLC), safety technology. The solutions extend to multi-axis motion controllers, high performance servo drives, rotary servo motors and linear motors. All of which integrate to provide complete machine control solutions.

PC tool offers simple and intuitive commissioning

Mint Workbench PC tool offers fast and simple setup, commissioning and monitoring in a single software tool. In addition to a step-by-step configuration wizard, oscilloscope graphing, parameter view/edit/compare it also includes motion programming, integrated help and a tool to package a single concise email to streamline technical support when you need it.

Motion technology made easy

MicroFlex servo drives combined with our motion control products and servo motors are used in a wide variety of applications. These include laser and water-jet cutting, glue-laying, labelling, packaging and cut-to-length applications. Our focus on ease of use is evident in our simple software tools, streamlined drive commissioning and motion programming to simplify engineering of simple to advanced applications.

AC servo - 1 or 3 phase

- 105 to 250 V AC 50/60Hz
- AC servo motors, rotary and linear
- 3, 6 and 9 A rms with 200% for 3 s
- One IP20 frame size: 180 x 80 x 157 mm (H x W x D)/1.5 kg
- Fanless operation < 4 A rms @40 °C
- Space saving footprint EMC filter to meet IEC 61800-3 category 2

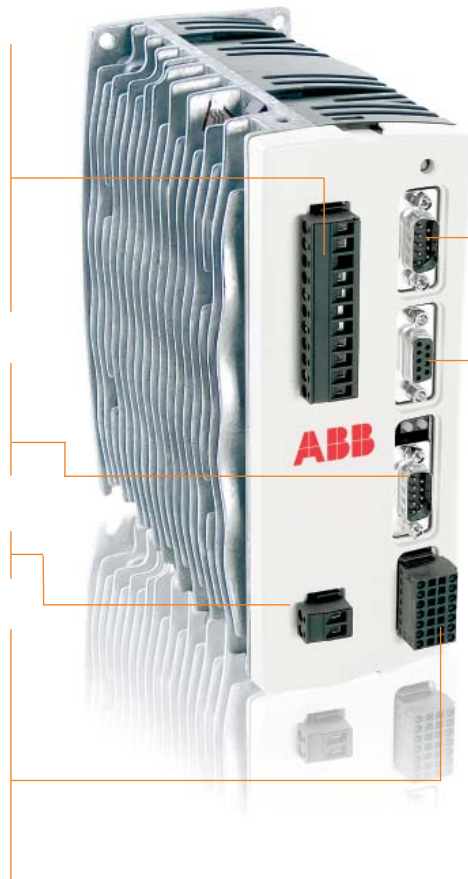
Motor feedback

- Incremental encoders with/without Halls
- Absolute single turn SSI encoders
- Resolver option as shown
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24 V DC PSU supply to maintain position and communications

I/O digital and analog

- 1 x drive enable input
- 1 x digital input
- 1 x status output
- 1 x analog input, velocity or torque command ±10 V 12-bit
- Dedicated TTL step and direction inputs (1 MHz max)



Serial communications

- RS232 or RS485 options for PC configuration tools
- HMI communication

Simulated encoder output

- Used for position feedback to a motion controller 5 V TTL A,B,Z differential line driver

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