

FAGOR Motion Controller PC-based and multi-axis

Motion Control



Motion Controller

FAGOR Motion controller is a last-generation pc-based controller that offers maximum operating versatility and high-end features, especially its programming protocol IEC 61131-3. Customizing customer's application makes it possible to design very user-friendly systems.

The powerful Motion Controller can handle applications in a great variety of market segments such as handling, packaging, special machinery, graphic arts, paper industry, woodworking industry, food industry, textile industry, glass, marble, automotive, machinery for plastics, rubber, etc.

Configuration



10" Monitor

Touch-Screen Monitor

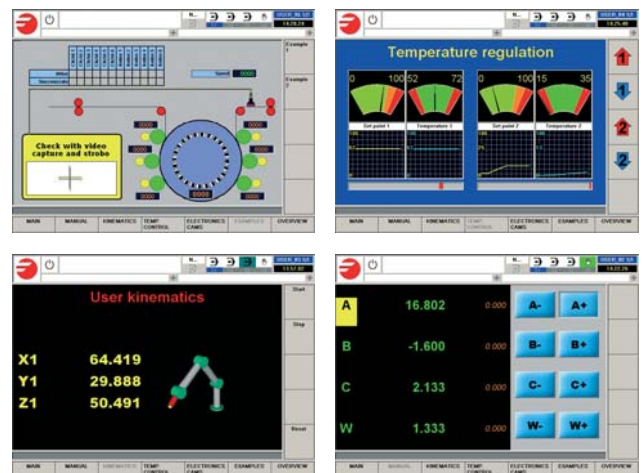
12" Monitor

General Features

Complete Automation Solution

- Powerful CNC based on PC. Compact or modular system with open architecture.
- Optional touch-screen monitors.
- Fully customizable for the user's application.
- Friendly Windows XP embedded interface.
- To control up to 32 axes.
- Easy installation.
- ETHERNET and RS-232 communication.
- Very fast integrated PLC with a block processing time less than 1 millisecond.
- Programming based on the "IEC 61131-3" standard. (Available soon).
- Modules for programming in Equations, in C language and in ladder diagram.
- Application developing interface integrated into the system and easy to integrate applications developed with external tools.
- Remote inputs and outputs through CANopen.
- Fully digital.
- Synchronous and asynchronous motor connection through a SERCOS communication bus.
- High-performance feedback systems.
- Powerful Monitoring and Diagnosis system. Telediagnosis.
- OPC compatible interface.
- Electronic cams.
- Technological package for any application.
- Compatible with intelligent compact or modular servo systems CMC/ MMC/ MCP series.

▼ Examples of easily customizable screen configuration





Connection



Motion Controller

SERCOS



Servo System



FKM motors

CANopen



Remote I/O

IEC 61131-3

(Programming languages for PLC)

FAGOR AUTOMATION assumes the programming standard for its family of Motion Controllers, both in the range of one axis and multi-axis Controllers.

Thus FAGOR AUTOMATION adapts itself to the market demands offering a standard and well spread language.

Five standard programming languages have been defined allowing a wide variety of systems based on this standard.

Two of the languages that have been defined are literal and three are graphic. Also, the FAGOR Motion Controller allows writing programs directly in C language.

Literal:

- Instructions list (IL).
- Structured text (ST).

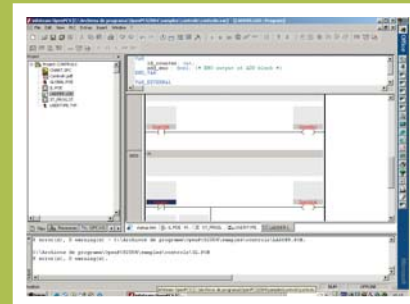
Graphics:

- Ladder (contact) diagram (LD).
- Functional block diagram (FBD)
- Sequential function diagram (SFC)

These programming methods according to the standard, make it possible to control the axes from the Controller quickly and easily both on single axes and in multi-axis systems (thanks to the Motion function blocks defined by PLC Open).

The Motion function blocks for single axes are: MC_Home, MC_MoveAbsolute,

MC_MoveAdditive, MC_MoveVelocity, MC_TouchProbe, MC_AbortTrigger, MC_DigitalCamSwitch, MC_Stop. The Motion function blocks for multi-axis systems are: MC_GearIn, MC_GearOut, MC_CamTableSelect, MC_CamIn, MC_CamOut, MC_Phasing.



Other FAGOR Motion Control products:

- 1 FAGOR servo drive system, CMC-MMC series
- 2 FAGOR servo drive system, MCS-MCP-ACSD series
- 3 FKM axis motors
- 4 FXM axis motors
- 5 FAGOR feedback systems:
 - Absolute linear encoders
 - "Exposed" linear encoders
 - High resolution rotary encoders



Backed by a leading group worldwide (MCC group)

FAGOR AUTOMATION has been manufacturing measuring and control systems for machine-tools and motion controlled automation systems for over 25 years.

FAGOR AUTOMATION exports more than 65% of its total production to the industrialized world through an excellent distribution network in Europe, America and Asia offering unmatched after-sales service.

FAGOR is part of Mondragón Cooperative Corporation, one of the most important European corporations, with more than 160 companies and more than 68,000 employees in three divisions: Financial, Distribution and Industrial (that FAGOR AUTOMATION belongs to).

The industrial division covers a wide range of industrial sectors and it occupies leading positions in all of them.

FAGOR AUTOMATION shall not be held responsible for any printing or transcribing errors in this catalog and reserves the right to make any changes to the characteristics of its products without prior notice.

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ER-073/1994
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Fagor Automation holds the ISO 9001 Quality System Certificate and the CE Certificate for all its products.



Worldwide reliability