

Brushless controller for synchronous permanent magnet motors



Description:

MIBLs are compact power controllers/variators (drivers) intended for the control of electronically commutated (brushless) motors.

These controllers can control motors from ten Watts to several hundred Watts in the 4 quadrants. Positioning and phase switching is ensured by hall effect sensors.

The controllers are highly adaptive to your needs, by their configuration capacity accessible by a software suite. Thus MIBLs are perfectly suited to perform variable speed, positioning or torque control.

Communication and fieldbus protocols are based on industrial standards: RS485, USB, Analog control. To facilitate implementation, the IHM_MIBL software suite allows easy configuration.

Axis control is done by analog command or by digital bus, for motor control in Voltage (V), in Torque (I), or in Speed.



Technical specifications:

	MIBL
Power supply	20-50 V
Motor current	MIBL0510 : from 0 to 10 AMPERES MIBL0520 : from 0 to 20 AMPERES
Logic inputs	Energy, Direction (optoisolated) Limits & home
Differential analog control	Absolute mode 0 to 5V or signed mode -5V...0...+5V
Logic outputs	Optoisolated : Fault and Speed
Encoder supply voltage	+5 VDC, max. 50 mA
Display	1 LED dual color
Protections and control	Motor overcurrent, temperature, Undervoltage, overvoltage, Encoder feedback fault
Communication	USB/RS485
Dimensions	120 x 90 x 30 mm
Weight	210g
Certifications	CE Marking, Printed circuits



References

- MIBL0510 (brushless controller)
For motors up to 10AMP
- MIBL0520 (brushless controller)
For motors up to 20AMP




Features

- > Voltage(V), torque(I), speed(N) control
- > Optimized current management.
- > Communication and configuration by RS485 or USB
- > Simplified analog or digital control
- > Motor and system settings
- > Control registers

Easy Setup:

- Self-powered card via USB port
- Intuitive electronic control configuration :
 - ◇ Electromechanical parameters (motors and load) saved in library
 - ◇ Regulation parameters defined by the MMI

Electrical interfaces:

FRONT FACE	
Power connector	5.08mm 3 pôles
	+Valim, 0V, GND 
Control connector	3.5mm 16 poles
	Inputs: energy, direction, stop, analog
	Outputs : fault, speed
USB connector	Communication : RS485
USB connector	Micro USB-B

REAR SIDE	
Motor connector	5.08mm 9 pôles
	motor power
	hall sensor
	+5V, 0V, GND

Mecanical drawings:

