

Brushless controller for synchronous permanent magnet motors



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.



	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		
	–5V0+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	(Marking, Printed circuits 10)		



■ References

• MIBL0510 (brushless controller)

For motors up to 10AMP

• MIBL0520 (brushless controller)

For motors up to 20AMP



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

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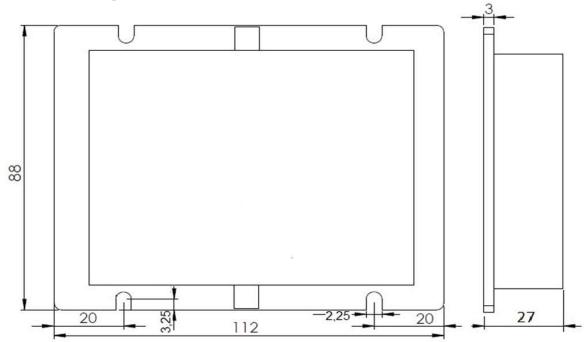
- Self-powered card via USB port
- Intuitive electronic control configuration :
 - ♦ Electromechanical parameters (motors and load) saved in library
 - ♦ Regulation parameters defined by the MMI

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		
	Communication : R\$485		
USB connector	Micro USB–B		

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

Mecanical drawings:





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