FMod-IPECMOT 48/10 T2
Datasheet

Compact control device for DC brushed and 3 phases brushless (with hall sensors) motors, 10A repetitive (480W), 8A continuous (380W). 4 quadrants power stage and 32bit PID algorithms for position or speed control using the trapezoid trajectory profile.

The interface is Ethernet (standard).

Simply connect this device to your local (or public) Ethernet network (via Cross cable or switches). It can be remotely controlled (up to several km).

Dimensions

120 x 110 x 34 mm (LxBxH), with DIN rail connector

Power supply

DC [9-48V], max 10A

Configuration interface

Hardware:	**Standard** Ethernet 10BaseT [RJ45]
Protocols:	TCP-IP & UDP + message encapsulation
Software:	Web Server on board, web pages with HTTP

Motion control

Regulator:	**32 bit PID with auto-tuning capability**
Sampling rate:	20 - 2000 Hz (regulation frequency)
Modes:	*- Brake*
	- Free
	- Open Loop
	- Speed Control (with trajectory profile)
	- Position Control (with trajectory profile)
Homing (reference):	10 different homing modes
Limits (end strokes):	2 independently powered inputs, configurable behaviour.
General IOs:	2 IOs, 5V, A/D inputs, digital outputs, general purpose.
Extra features:	**EC motors' Hall sensors can be used as encoders.**
	2 encoders management.
	Active dissipation of the braking energy.
	Phases short-circuited with a relay at power-down.

PWM output

125 kHz or 63 kHz, 4 quadrants management, power-bridge with thermal protection. Filtrering inductor included.

8A continuous, 10A max, motor output power.

Current limitation

Onboard configuration possible (TCP-IP) between 0.1 and 10 A, thus preventing motor overheating and wear.

Limits

2 mechanical, optical or hall sensors (5V) can be connected and configured for different purposes such as homing.

Encoder

5V DC, incremental A+B (+Index) (max 500 kHz) quadrature encoder **with differential lines (RS422 driver).**

Also compliant with non-differential encoders.

Where to find more information

Please download the user's manual from the following address: http://www.fiveco.ch/motor-controlers-products.html

Developed and made in Switzerland

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